

Government of Rajasthan
Directorate of Medical Education
चिकित्सा शिक्षा भवन, गोविन्द मार्ग, जयपुर-302004
Email id: dme.generalcell@RAJASTHAN.GOV.IN

क्रमांक:— प.02()/DME/GEN/2024/06850 /

दिनांक:—

1. प्रधानाचार्य एवं नियंत्रक,
मेडिकल कॉलेज, जयपुर/अजमेर/जोधपुर/कोटा/
बीकानेर/उदयपुर/आर.यू.एच.एस. जयपुर।
2. रजिस्ट्रार,
राजस्थान स्वास्थ्य विज्ञान विश्वविद्यालय जयपुर।
3. प्रधानाचार्य मेडिकल कॉलेज भरतपुर/भीलवाडा/
झालावाड/बाडमेर/डुंगरपुर/चुरू/सीकर/
पाली/सिरोही/धौलपुर/चित्तौड़गढ़/श्रीगंगानगर/
अलवर/बूंदी/करौली/हनुमानगढ़/दौसा/झुंझुनू/
बांसवाडा/बारा/सवाईमाधोपुर/नागौर।

विषय:— श्रीमान संयुक्त शासन सचिव, गृह (ग्रुप-5) विभाग द्वारा मानक संचालन प्रक्रिया (एसओपी) दिनांक 20.03.2025 निर्धारित करने के संबंध में।

संदर्भ:— श्रीमान संयुक्त शासन सचिव, गृह (ग्रुप-5) विभाग के पत्र क्रमांक 5736 दिनांक 24.03.2025 के क्रम में।

उपरोक्त विषयान्तर्गत संदर्भित मानक संचालन प्रक्रिया कि छायाप्रति संलग्न कर लेख है कि कई बार रोगी के परिचालक/परिजन रोगी के ईलाज के दौरान आधी-अधूरी सूचनाओं के आधार पर चिकित्सक/चिकित्साकर्मियों के विरुद्ध आपराधिक प्रकरण दर्ज करवा देते हैं। ऐसी स्थिति में चिकित्सक/चिकित्साकर्मियों को मानसिक रूप से उत्पीड़ित होना पड़ता है एवं उनके कार्यस्थल पर असामान्य स्थिति उत्पन्न हो जाती है। जिससे उनकी कार्यक्षमता एवं प्रतिष्ठा पर प्रतिकूल प्रभाव पड़ने की संभावना बनी रहती है।

ऐसे प्रकरणों के संबंध में श्रीमान अतिरिक्त मुख्य सचिव, गृह (ग्रुप-5) विभाग ने माननीय उच्चतम न्यायालय, नई दिल्ली द्वारा Suo Moto Writ Criminal No. 2/2024 In RE Alleged Rape and Murder Incident of a Trainee Doctor in R G Kar Medical College and Hospital & Related Issues में पारित आदेश के परिपेक्ष्य में केन्द्र सरकार द्वारा गठित नेशनल टास्क फोर्स (N.T.F.) द्वारा की गई अनुशंसा के मध्यनजर पूर्व में जारी समसंख्यक मानक संचालन प्रक्रिया दिनांक 29.05.2025 को अधिष्ठित करते हुये नई मानक संचालन प्रक्रिया (S.O.P.) निर्धारित की है, जो कि कार्यस्थल पर असामान्य स्थिति उत्पन्न होने पर उक्तानुसार कार्यवाही हेतु पालनार्थ प्रेषित है।

संलग्न:—उपरोक्तानुसार

Signature Not Verified

Digitally signed by Raj Lal Gurjar
Designation : Deputy Director
Date: 2025.04.15 18:50:35 IST
Reason: Approved



राजस्थान सरकार
गृह (ग्रुप-5) विभाग

क्रमांक: प.9(14)गृह-5/2022

जयपुर दिनांक:-20.03.2025

मानक संचालन प्रक्रिया
(Standard Operating Procedure)

यत् यह राज्य सरकार के ध्यान में आया है कि कई बार रोगी के परिचायक/परिजन, रोगी के इलाज के दौरान आधी-अधूरी सूचनाओं के आधार पर चिकित्सक/चिकित्साकर्मियों के विरुद्ध आपराधिक प्रकरण दर्ज करवा देते हैं। ऐसी स्थिति में चिकित्सक/चिकित्साकर्मियों को मानसिक रूप से उत्पीड़ित होना पड़ता है एवं उनके कार्यस्थल पर असामान्य स्थिति उत्पन्न हो जाती है, जिससे उनकी कार्यक्षमता एवं प्रतिष्ठा पर प्रतिकूल प्रभाव पड़ने की संभावना बनी रहती है।

माननीय उच्चतम न्यायालय, नई दिल्ली द्वारा Suo Moto Writ Criminal No. 2/2024 IN RE Alleged Rape and Murder Incident of a Trainee Doctor in R G Kar Medical College and Hospital & Related Issues में पारित आदेश के परिप्रेक्ष्य में केन्द्र सरकार द्वारा गठित नेशनल टास्क फोर्स (N.T.F.) द्वारा की गई अनुशंसा के मध्यनजर पूर्व में जारी समसंख्यक मानक संचालन प्रक्रिया दिनांक 29.05.2022 को अधिष्ठित करते हुए, निम्न मानक संचालन प्रक्रिया (S.O.P.) निर्धारित की जाती है:-

A. Health Care Establishment की सुरक्षा के सम्बन्ध में :-

1. यह कि चिकित्सा एवं स्वास्थ्य विभाग एवं चिकित्सा शिक्षा विभाग के द्वारा ऐसे बड़े संस्थान एवं विशिष्ट स्वास्थ्य सेवाएँ संस्थान जिनमें सुरक्षा की आवश्यकता प्रतीत होती है को चिह्नित किया जावेगा तथा उसके उपरान्त उक्त संस्थान द्वारा अपने संबंधित पुलिस स्टेशन के साथ समन्वय रखा जावेगा। संबंधित पुलिस स्टेशन के थानाधिकारी का यह कर्तव्य होगा कि वह ऐसे संस्थान में नियमित रूप से पैट्रोलिंग करेंगे एवं उस पर सुरक्षा के संबंध में निगरानी रखेंगे।
2. यह कि संस्थान के नोडल प्राधिकारी द्वारा हिंसा की सूचना प्राप्त होने के 6 घंटों के भीतर प्रथम सूचना रिपोर्ट दर्ज करवाई जानी अनिवार्य होगी।
3. यह कि राज्य के किसी पुलिस थाने में उक्त संस्थानों में हिंसा/अपराध के सम्बन्ध में घटित घटना के सन्दर्भ में कोई सूचना प्राप्त होती है तो थानाधिकारी का यह कर्तव्य होगा कि वह,-
 - a. तुरन्त परिवाद या प्रथम सूचना रिपोर्ट, जो विधि के अनुरूप हो, दर्ज करेगा;
 - b. ऐसा संस्थान पुलिस थाने की स्थानीय सीमा के भीतर स्थित नहीं है, तो ऐसी अवस्था में जीरो एफआईआर दर्ज करेगा एवं उसे सम्बन्धित पुलिस थाने को अग्रेषित करेगा;
 - c. ऐसे प्रकरणों में त्वरित गति से कार्यवाही करते हुए, आवश्यक सुरक्षात्मक उपाय करेगा एवं यथाशीघ्र अनुसंधान किया जाएगा;
4. यह कि ऐसी घटनाओं के सम्बन्ध में, ऐसे प्रकरण राजस्थान चिकित्सा परिचर्या सेवाकर्मी और चिकित्सा परिचर्या सेवा संस्था (हिंसा और सम्पत्ति के नुकसान का निवारण) अधिनियम, 2008 एवं भारतीय न्याय संहिता, 2023 व अन्य प्रभावी विधि के अन्तर्गत दर्ज किए जाए;

5. यह कि संस्थान द्वारा पेश परिवाद/प्रथम सूचना रिपोर्ट CCTNS (क्राइम एंड क्रिमिनल ट्रैकिंग नेटवर्क एंड सिस्टम)/ICJS (इंटर-ऑपरेबल क्रिमिनल जस्टिस सिस्टम) पर दर्ज की जाए;
6. यह कि जिला स्तर पर पुलिस उपायुक्त/पुलिस अधीक्षक एवं राज्य स्तर पर अतिरिक्त महानिदेशक पुलिस (अपराध) द्वारा नामित अधिकारी, ऐसे प्रकरणों का पर्यवेक्षण करेंगे;
7. यह कि चिकित्सक/चिकित्साकर्मी के परिवाद/सूचना पर शीघ्र कार्यवाही की जाए एवं आवश्यकता होने पर उनकी व उनकी सम्पत्ति की सुरक्षा के लिए विधि अनुरूप त्वरित कार्यवाही की जाये।
8. यह कि सम्बन्धित थाना प्रभारी, ऐसे प्रकरणों में त्वरित कार्यवाही करते हुए, दोषियों की पहचान सुनिश्चित कर, नियमानुसार गिरफ्तारी की कार्यवाही करेंगे।

B. चिकित्सक/चिकित्साकर्मियों के विरुद्ध सूचना/परिवाद के सम्बन्ध में :-

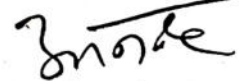
1. यह कि राजस्थान चिकित्सा परिचर्या सेवाकर्मी और चिकित्सा परिचर्या सेवा संस्था (हिंसा और सम्पत्ति के नुकसान का निवारण) अधिनियम, 2008 में परिभाषित किसी चिकित्सक/चिकित्साकर्मी द्वारा कार्य निष्पादन के दौरान की गई चिकित्सकीय उपेक्षा के अभियोग की सूचना/परिवाद पुलिस थाने के प्रभारी अधिकारी को प्राप्त होने पर, वह सूचना/परिवाद को रोजनामचे में अंकित करेगा और यदि सूचना/परिवाद चिकित्सकीय उपेक्षा के कारण मृत्यु से सम्बन्धित है, तो प्रथमतः भारतीय नागरिक सुरक्षा संहिता, 2023 (2023 का अधिनियम संख्या 46) की धारा 194 में कार्यवाही करते हुए, ऐसी स्थिति में पोस्टमार्टम की वीडियोग्राफी आवश्यक रूप से करवाई जाए।
2. यह कि अगर ऐसा प्रकरण भारतीय न्याय संहिता, 2023 की धारा 106. उपेक्षा द्वारा मृत्यु कारित करना, की परिभाषा में आता है तो ऐसी अवस्था में भारतीय नागरिक सुरक्षा संहिता, 2023 की धारा 173 की उप-धारा (3) के अन्तर्गत 14 दिवस के भीतर प्रारम्भिक जाँच पूर्ण की जाएगी। प्राथमिक जाँच के दौरान, इस सम्बन्ध में स्वतंत्र व निष्पक्ष राय, यथास्थिति चिकित्सक/चिकित्सक मण्डल से प्राप्त करेगा। यह भी सुनिश्चित किया जाएगा कि अन्वेषण की कार्यवाही करने के लिए प्रथम दृष्टया साक्ष्य विद्यमान हैं, तो ऐसी अवस्था में ही प्रथम सूचना रिपोर्ट दर्ज की जाए।
3. यह कि पुलिस थाने के भारसाधक अधिकारी के लिए यह आज्ञापक है कि वह चिकित्सकीय उपेक्षा की शिकायत पर प्राथमिक जाँच करें एवं जाँच के दौरान वह अभियोग के सम्बन्ध में स्वतंत्र व निष्पक्ष राय यथास्थिति चिकित्सक/चिकित्सक मंडल से प्राप्त करेगा।
4. यह कि पुलिस थाने के प्रभारी अधिकारी द्वारा प्राचार्य, चिकित्सा महाविद्यालय/मुख्य चिकित्सा अधिकारी को राय प्राप्त करने हेतु प्रार्थना किये जाने पर, उनका यह दायित्व होगा कि वह यथाशीघ्र अधिकतम तीन दिवस में राय हेतु यथास्थिति चिकित्सक को नामित/चिकित्सक मण्डल का गठन किया जाएगा। किसी व्यक्ति की चिकित्सकीय उपेक्षा से मृत्यु या घोर उपहति होने की दशा में चिकित्सक मंडल का गठन अनिवार्य होगा। चिकित्सक मण्डल में प्रश्नगत अभियोग से सम्बन्धित विषय के विशेषज्ञ को आवश्यक रूप से सम्मिलित किया जाए।

5. यह कि चिकित्सक/चिकित्सक मंडल का यह दायित्व होगा कि यदि प्रकरण चिकित्सकीय उपेक्षा से सम्बन्धित है, तो वह बिना किसी भेदभाव के उपेक्षा साधारण या घोर हो, के सम्बन्ध में स्वतंत्र व निष्पक्ष राय उन्हें नामित किए जाने के पन्द्रह दिवस की अवधि में प्रदान करेंगे।
6. यह कि उक्त समयावधि में पन्द्रह दिवस की अभिवृद्धि प्राचार्य, चिकित्सा महाविद्यालय/मुख्य चिकित्सा अधिकारी द्वारा अभिलिखित कारणों के आधार पर कर सकेंगे। समयावधि में अभिवृद्धि की सूचना संबंधित पुलिस अधीक्षक को प्रेषित करते हुए, यह तथ्य राज्य सरकार के ध्यान में भी लाया जाएगा।
7. यह कि अनुसंधान के उपरान्त न्यायालय में यथास्थिति आरोप-पत्र के साथ भारतीय नागरिक सुरक्षा संहिता, 2023 की धारा 218 के अन्तर्गत सक्षम स्तर से अभियोजन स्वीकृति प्राप्त कर पेश की जाए।
8. यह कि किसी चिकित्सक/चिकित्साकर्मी को घोर चिकित्सकीय उपेक्षा के प्रकरणों में अगर गिरफ्तार किया जाना आवश्यक हो, तो इस सम्बन्ध में पुलिस थाने का भारसाधक अधिकारी सम्बन्धित पुलिस अधीक्षक/पुलिस उपायुक्त से आज्ञा प्राप्त करेगा।
9. यह कि संस्थान/चिकित्सक/चिकित्साकर्मी की सूचना पर, पुलिस तुरन्त Health Care Establishment पर पहुँचकर, उपस्थित भीड़ को मौके से उठावेंगे और मरीज की मृत्यु होने की स्थिति में ऐसे शव के सम्बन्ध में विधि द्वारा निर्धारित कार्यवाही करते हुए, शव को परिजन आदि को सुपुर्द करने की कार्यवाही करेंगे।
10. यह कि थाने का भारसाधक अधिकारी/अनुसंधान अधिकारी/चिकित्सक रोगी के उपचार का व्याख्यात्मक विवरण (explanatory note) तैयार करेंगे एवं दस्तावेज कब्जे में लेंगे।

C. जीवन सुरक्षा एवं संवाद :-

1. Health Care Establishment के चिकित्सक/चिकित्साकर्मी, रोगी एवं उसके परिजन के साथ उचित संवाद स्थापित करे, जिसमें रोगी एवं परिजन को, उसके उपचार के सम्बन्ध में पूर्ण जानकारी उपलब्ध करवाए;
2. चिकित्सक/चिकित्साकर्मीयों के कार्य की प्रकृति व जनसाधारण के जीवन की सुरक्षा को ध्यान में रखते हुए उनसे यह अपेक्षा की जाती है कि वे किसी भी अप्रिय घटना के घटित होने पर या अपनी किसी मांग को मनवाने के लिए अपने कार्य का बहिष्कार नहीं करेंगे तथा विधि के अनुरूप अपनी बात/मांग राज्य सरकार के समक्ष रखेंगे।

आज्ञा से,



(आनन्द कुमार)

अतिरिक्त मुख्य सचिव, गृह

प्रतिलिपि: निम्नांकित को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है:-

1. प्रमुख शासन सचिव, चिकित्सा एवं स्वास्थ्य विभाग, राजस्थान।
2. शासन सचिव, चिकित्सा शिक्षा विभाग, राजस्थान।



(अविधल चतुर्वेदी)

विशिष्ट शासन सचिव, गृह

प्रतिलिपि: निम्नांकित को सूचनार्थ एवं आवश्यक कार्यवाही सुनिश्चित करने हेतु प्रेषित है:-

1. महानिदेशक पुलिस, राजस्थान, जयपुर।
2. अतिरिक्त महानिदेशक पुलिस (अपराध शाखा) राजस्थान, जयपुर।
3. अतिरिक्त महानिदेशक पुलिस (सिविल राईट्स) राजस्थान, जयपुर।
4. समस्त संभागीय आयुक्त, राजस्थान।
5. पुलिस आयुक्त, जयपुर/जोधपुर।
6. समस्त महानिरीक्षक रेन्ज, राजस्थान।
7. समस्त जिला मजिस्ट्रेट/समस्त पुलिस अधीक्षक/पुलिस उपायुक्त, राजस्थान।
8. अधीक्षक/प्रिन्सीपल, समस्त मेडिकल कॉलेज, राजस्थान।
9. निदेशक, चिकित्सा एवं स्वास्थ्य सेवाएँ, राजस्थान, जयपुर को प्रेषित कर लेख है कि उक्त एसओपी की प्रति सम्बन्धित को प्रेषित करें।
10. अध्यक्ष, भारतीय चिकित्सा परिषद।



विशिष्ट शासन सचिव, गृह



I. On Custodial Deaths/Rapes



Letter to all Chief Secretaries on the reporting of custodial deaths within 24 hours.

No. 66/SG/NHRC/93

**National Human Rights Commission
Sardar Patel Bhavan
New Delhi**

14 December, 1993

From: **R.V. Pillai**
Secretary General

To: Chief Secretaries of all States
and Union Territories

Sir/Madam,

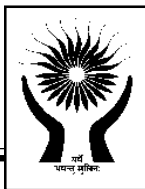
The National Human Rights Commission at its meeting held on the 6th instant discussed the problems of custodial deaths and custodial rapes. In view of the rising number of incidents and reported attempts to suppress or present a different picture of these incidents with the lapse of time, the Commission has taken a view that a direction should be issued forthwith to the District Magistrates and Superintendents of Police of every district that they should report to the Secretary General of the Commission about such incidents within 24 hours of occurrence or of these officers having come to know about such incidents. Failure to report promptly would give rise to presumption that there was an attempt to suppress the incident.

2. It is accordingly requested that the District Magistrates/Superintendents of Police may be given suitable instructions in this regard so as to ensure prompt communication of incidents of custodial deaths/custodial rapes to the undersigned.

Yours faithfully,

Sd/-

(R.V. Pillai)



Letter to all Chief Secretaries clarifying that not only deaths in police custody but also deaths in judicial custody be reported.

R. V. Pillai
Secretary General

F.No. 40/3/95-LD
राष्ट्रीय मानव अधिकार आयोग
National Human Rights Commission

June 21, 1995

To

Chief Secretaries of all States and
Union Territories

Sir/Madam,

Vide letter No.66/SG/NHRC/93 dt. December 14, 1993, you were requested to give suitable instructions to DMs/SPs to ensure prompt communication of incidents of custodial deaths/custodial rapes.

2. A perusal of the reports received from DMs/SPs in pursuance of the above mentioned communication reveals that reports are received in the Commission from some of the States, only on deaths in police custody. The objective of the Commission is to collect information in respect of custodial deaths in police as well as judicial custody. May I, therefore, request you to have instructions sent to all concerned to see that deaths in judicial custody are also reported to the Commission within the time frame indicated in my letter of December 14, 1993 ?

Yours faithfully,

Sd/-

(R. V. Pillai)



Letter to Chief Ministers of States on the video filming of post-mortem examinations in cases of custodial deaths.

Justice Ranganath Misra
Chairperson

August 10, 1995

My dear Chief Minister,

The National Human Rights Commission soon after its constitution in October, 1993, called upon the law and order agencies at the district level throughout the country to report matters relating to custodial death and custodial rape within 24 hours of occurrence. Since then ordinarily reports of such incidents have been coming to the Commission through the official district agencies. The Commission is deeply disturbed over the rising incidents of death in police lock-up and jails. Scrutiny of the reports in respect of all these custodial deaths by the Commission very often shows that the post-mortem in many cases has not been done properly. Usually the reports are drawn up casually and do not at all help in the forming of an opinion as to the cause of death. The Commission has formed an impression that a systematic attempt is being made to suppress the truth and the report is merely the police version of the incident.

The post-mortem report was intended to be the most valuable record and considerable importance was being placed on this document in drawing conclusions about the death.

The Commission is of a prima-facie view that the local doctor succumbs to police pressure which leads to distortion of the facts. The Commission would like that all post-mortem examinations done in respect of deaths in police custody and in jails should be video-filmed and cassettes be sent to the Commission along with the post-mortem report. The Commission is alive to the fact that the process of video-filming will involve extra cost but you would agree that human life is more valuable than the cost of video-filming and such occasions should be very limited.

We would be happy if you would be good enough to immediately sensitise the higher officials in your state police to introduce video-filming of post mortem examination with effect from 1st October, 1995.

We look forward for your response within three weeks.

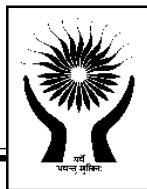
With regards,

Yours sincerely,

Sd/-

(Ranganath Misra)

To
Chief Ministers of all States, Pondicherry & the National Capital Territory of Delhi/
Governors of those States under the President's rule.



Letter to Chief Ministers/Administrators of all States/Union Territories with a request to adopt the Model Autopsy form and the additional procedure for inquest.

Justice M.N. Venkatachaliah

Chairperson

(Former Chief Justice of India)

No. NHRC/ID/PM/96/57

राष्ट्रीय मानव अधिकार आयोग

National Human Rights Commission

March 27, 1997

Dear Chief Minister,

May I invite your kind attention to a matter which NHRC considers of some moment in its steps to deal with custodial deaths? The Commission on the 14th December, 1993 had issued a general circular requiring all the District Magistrates and the Superintendents of Police to report to the Commission, incidents relating to custodial deaths and rapes within 24 hours of their occurrence. A number of instances have come to the Commission's notice where the post-mortem reports appear to be doctored due to influence/pressure to protect the interest of the police/jail officials. In some cases it was found that the post-mortem examination was not carried out properly and in others, inordinate delays in their writing or collecting. As there is hardly any outside independent evidence in cases of custodial violence, the fate of the cases would depend entirely on the observations recorded and the opinion given by the doctor in the post-mortem report. If post-mortem examination is not thoroughly done or manipulated to suit vested interests, then the offender cannot be brought to book and this would result in travesty of justice and serious violation of human rights in custody would go on with impunity.

With a view to preventing such frauds, the Commission recommended to all the States to video-film the post-mortem examination and send the cassettes to the Commission.

It was felt that the Autopsy Report forms now in use in the various States, are not comprehensive and, therefore, do not serve the purpose and also give scope for doubt and manipulation. The Commission, therefore, decided to revise the autopsy-form to plug the loopholes and to make it more incisive and purposeful.

The Commission, after ascertaining the views of the States and discussing with the experts in the field and taking into consideration, though not entirely adopting, the U.N. Model Autopsy protocol, has prepared a Model Autopsy form enclosed as Annexure-I.

In this connection, it was felt that some incidental improvements are also called for in regard to the conduct of inquests. For proper assessment of "Time since death"



or 'the time of death', determination of temperature changes and development of Rigor Mortis at the time of first examination at the scene is essential. This can conveniently be done by following some easily understandable and implementable procedure. The procedure to be followed by those in charge of inquest, is indicated in Annexure-II to this letter. This is a small but important addition to the inquest procedure.

The Commission recommends your Government to prescribe the Model Autopsy Form (Annexure-I) and the additional procedure for inquest as indicated in Annexure-II, to be followed in your State with immediate effect.

I shall look forward to your kind and favourable response.

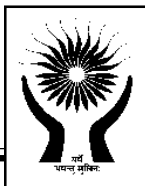
Yours sincerely,

Sd/-

(M.N. Venkatachaliah)

To

Chief Ministers of all States/Union Territories.



ANNEXURE-I

MODEL POST-MORTEM REPORT FORM

(Read carefully the instructions at Appendix 'A')

NAME OF INSTITUTION _____

Post Mortem Report No. _____ Date _____

Conducted by Dr. _____

Date & Time of receipt of the body
and Inquest papers for Autopsy _____

Date & Time of commencement of Autopsy _____

Time of completion of Autopsy _____

Date & Time of examination of the dead body
at Inquest (as per Inquest Report) _____

Name & Address of the person _____
video recording the Autopsy _____

Note: The tape should be duly sealed, signed and dated and sent to the National Human Rights Commission, Sardar Patel Bhawan, Sansad Marg, New Delhi.

CASE PARTICULARS

1. (a) Name of deceased and as entered
in the Jail or Police record _____
(b) S/O, D/O, W/O _____
(c) Address : _____
2. Age (Approx) : _____ yrs; Sex : Male/Female
3. Body brought by (Name and rank of Police officials)
(i) _____
(ii) _____
of Police Station _____



4. Identified by (Names & addresses of relatives/persons acquainted)

(i) _____

(ii) _____

IF HOSPITAL DEAD BODIES - (particulars as per hospital records)

Date & Time of Admission in Hospital _____

Date & Time of Death in Hospital _____

Central Registration No. of Hospital _____

SCHEDULE OF OBSERVATIONS

(A) GENERAL

(1) Height _____ cms. (2) Weight _____ Kgs.

(3) Physique - (a) lean/ medium / obese

(b) Well built/average built/poor built/emaciated

(4) Identification features (if body is unidentified)

(i) _____

(ii) _____

(iii) Finger prints be taken on separate sheet and attached by the doctor.

(5) Description of clothes worn - important features:

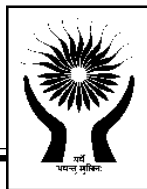
(6) Post-mortem Changes :

(a) As seen during inquest

- Whether rigor mortis present _____

- Temperature (Rectal) _____

- Others _____



(b) As seen at Autopsy -

(7) (a) External general appearance -

(b) State of eyes

(c) Natural orifices

(B) EXTERNAL INJURIES:

(Mention Type, Shape, Length x Breadth & Depth of each injury and its relation to important body landmark. Indicate which injuries are fresh and which are old and their duration.)

Instructions :-



- (i) Injuries be given serial number and mark similarly on the diagrams attached.
(ii) In stab injuries, mention angles, margins and direction inside body. (iii) In fire arm injuries, mention about effects of fire also.

C) INTERNAL EXAMINATION

1. HEAD

- (a) Scalp findings
- (b) Skull (Describe fractures here & show them on body diagram enclosed)
- (c) Meninges, meningeal spaces & Cerebral vessels
(Hemorrhage & its locations, abnormal smell etc. be noted)
- (d) Brain findings & Wt. (Wt. _____ gms.)
- (e) Orbital, nasal & aural cavities - findings.

2. NECK

- Mouth, Tongue & Pharynx
- Larynx & Vocal cords
- Condition of neck tissues
- Thyroid & other cartilage conditions
- Trachea

3. CHEST

- Ribs and Chest wall
- Oesophagus
- Trachea & Bronchial Tree



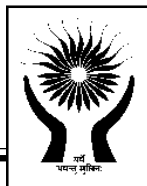
5. SPINAL COLUMN & SPINAL CORD (To be opened where indicated)

OPINION

- i) Probable time since death (keep all factors including observations at inquest)
- ii) Cause & manner of death- The cause of death to the best of my knowledge and belief is :-
 - (a) Immediate cause -
 - (b) Due to -
 - (c) Which of the injuries are ante-mortem/post-mortem and duration if ante-mortem ?
 - (d) Manner of causation of injuries
 - (e) Whether injuries (individually or collectively) are sufficient to cause death in ordinary course of nature or not ?
- iii) Any other

SPECIMENS COLLECTED & HANDED OVER (Please tick)

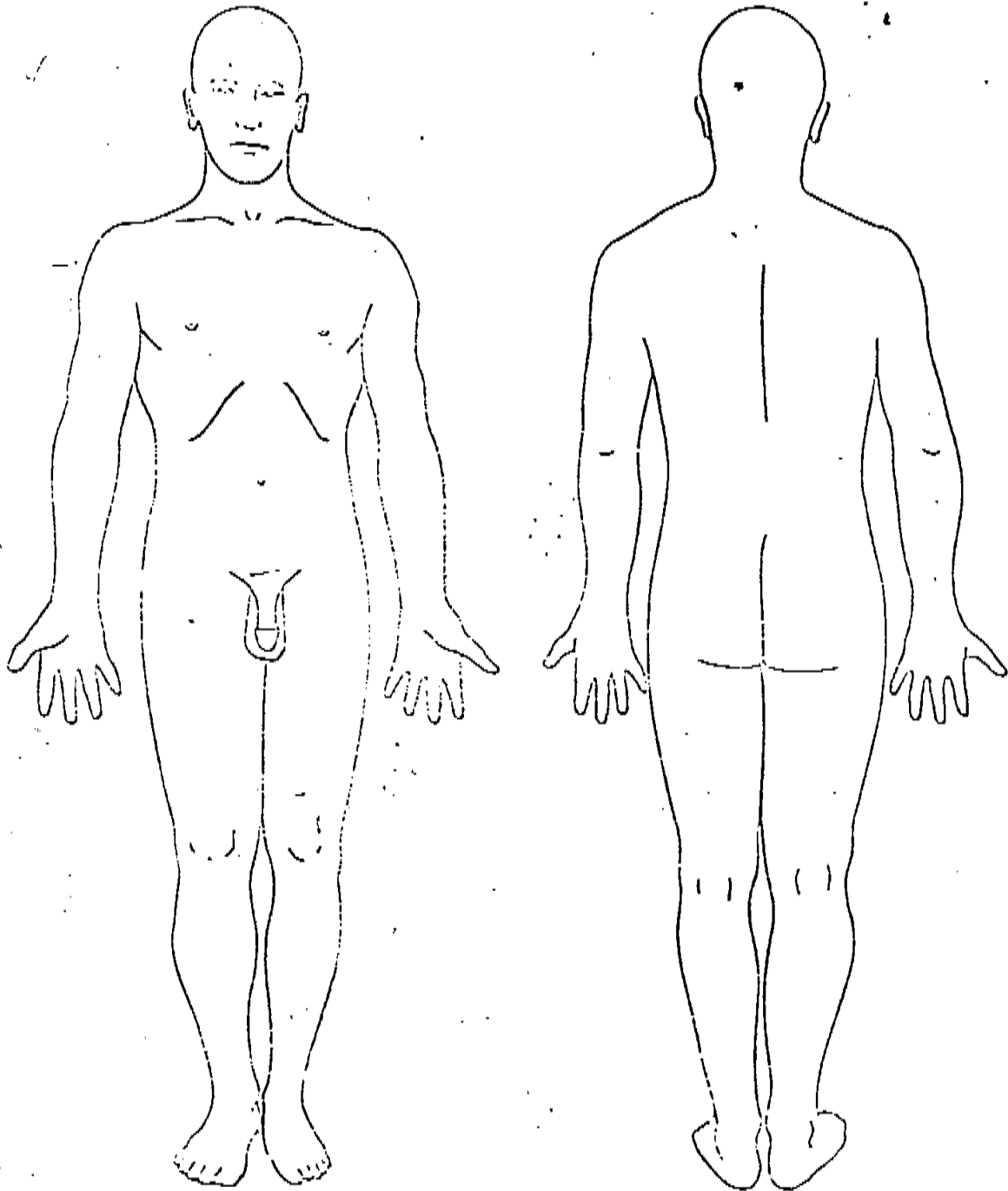
- a) Viscera (Stomach with contents, small intestine with contents, sample of liver, kidney (one half of each), spleen, sample of blood on gauze piece (dried), any other viscera, preservative used)
- b) Clothes
- c) Photographs (Video cassettes in case of custody deaths), finger prints etc)
- d) Foreign body (like bullet, ligature etc.)
- e) Sample of preservative in cases of poisoning.



- f) Sample of seal
- g) Inquest papers (mention total number & initial them)
- h) Slides from vagina, semen or any other material

PM report in original, ____ inquest papers, dead body, clothings and other articles (mention there) duly sealed (Nos. ____) handed over to police official _____ No. _____ of PS _____ whose signatures are herewith.

Signature : _____
 Name of Medical Officer _____
 (in block letters) _____
 Designation _____
 SEAL

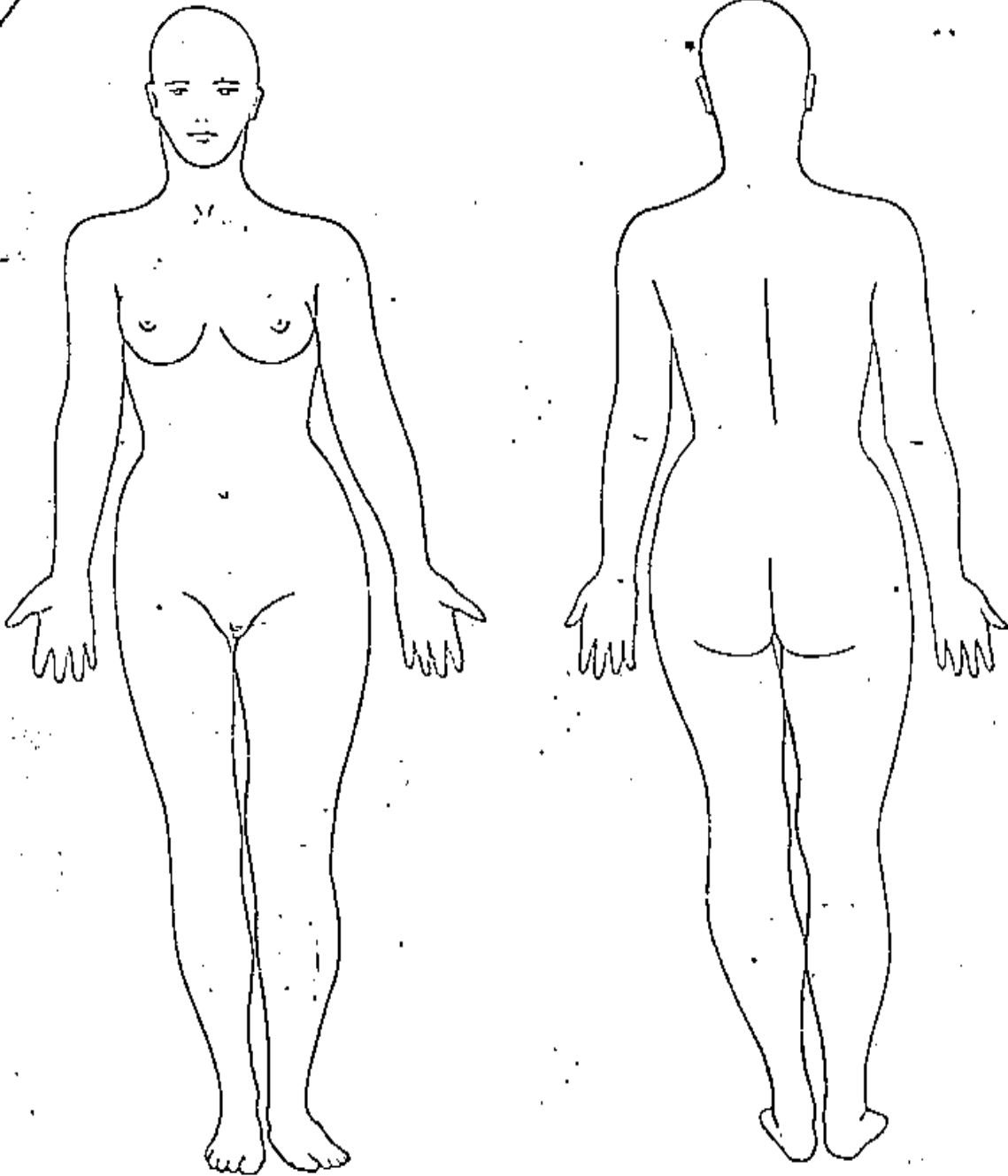
**Full Body: Male-Anterior and Posterior Views (Ventral and Dorsal)**

Name _____ Case No. _____

Date _____



Full Body: Female-Anterior and Posterior Views

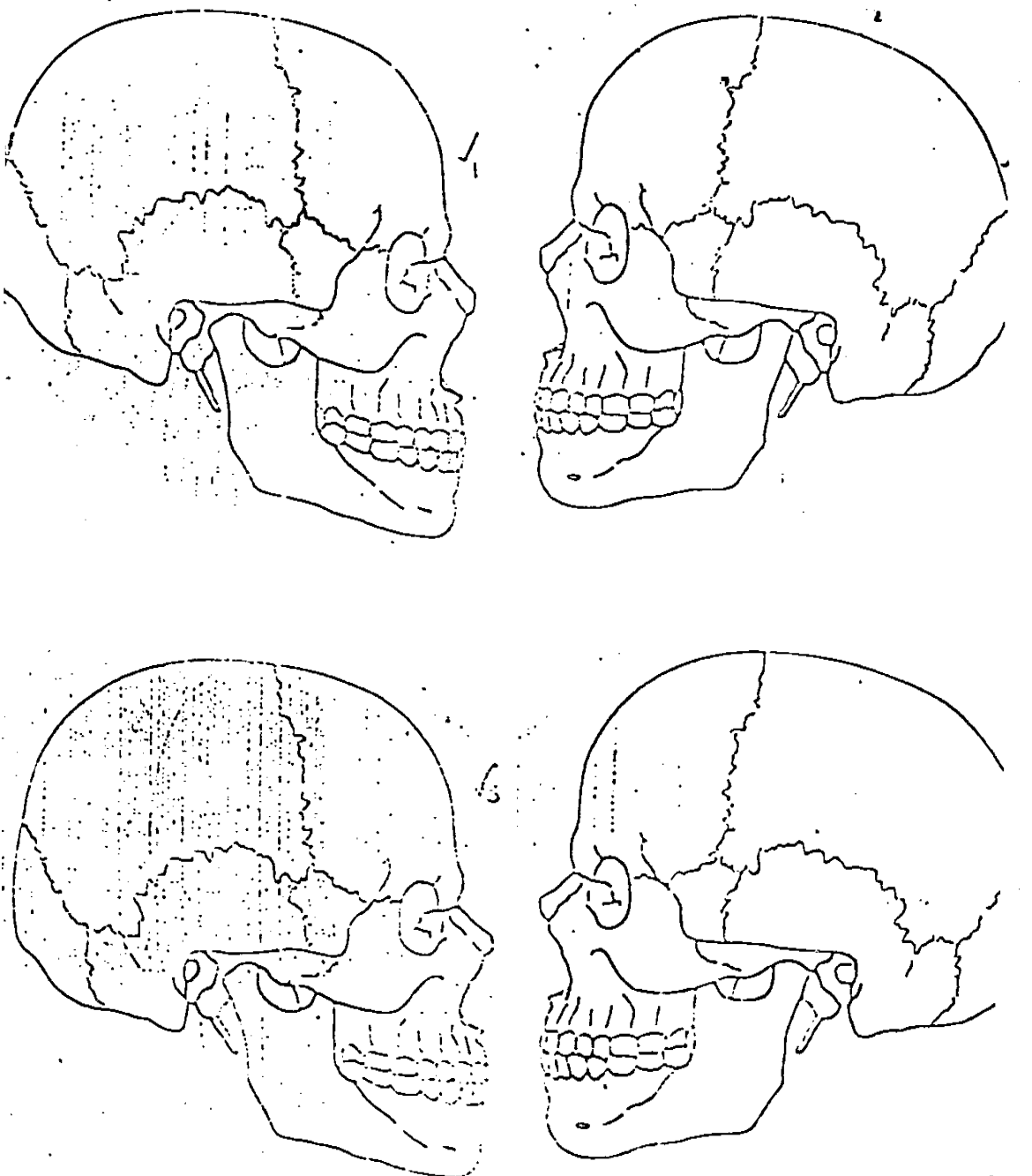


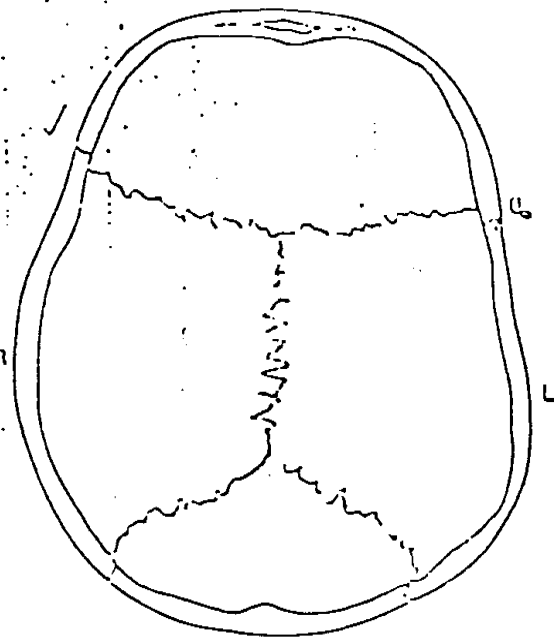
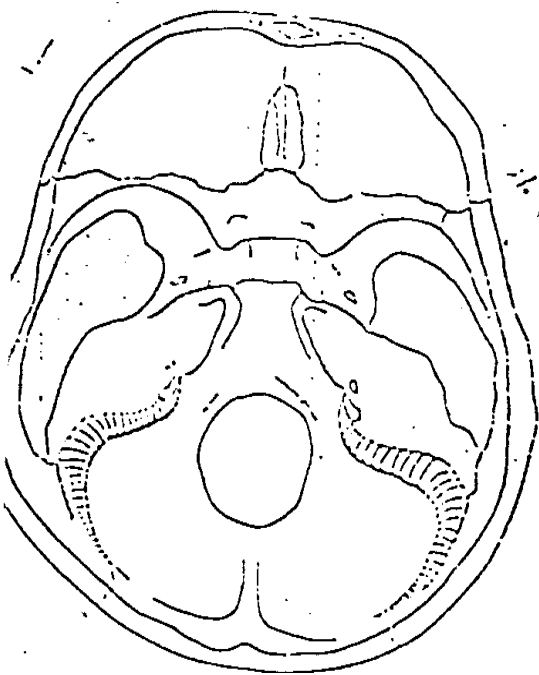
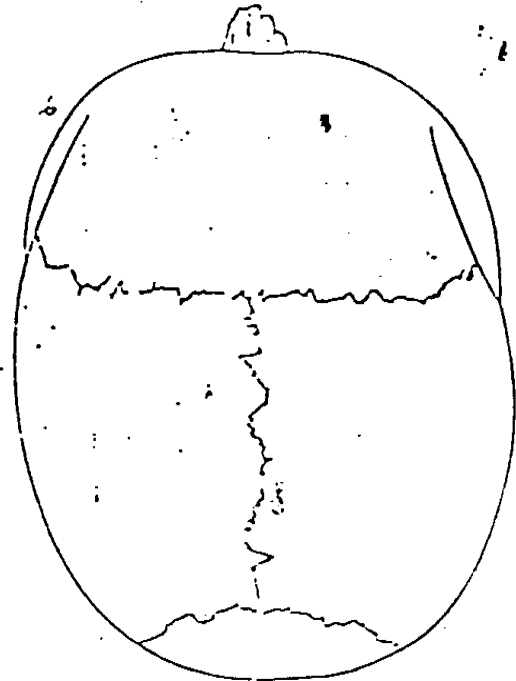
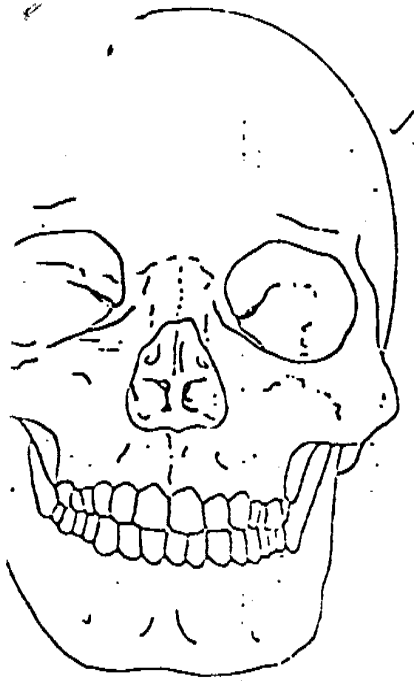
Name _____ Case No. _____

Date _____



Head - Surface and Skeletal Anatomy : Lateral view





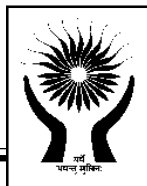
Inner View of Skull



APPENDIX - 'A'

Instructions to be Followed Carefully for Detention or Torture.

Torture technique	Physical findings
Beating	
1. General	Scars, Bruises, Lacerations. Multiple fractures at different stages of healing, especially in unusual locations, which have not been medically treated.
2. To the soles of the feet, or fractures of the bones of the feet.	Haemorrhage in the soft tissues of the soles of the feet and ankles. Aseptic necrosis.
3. With the palms on both ears simultaneously.	Ruptured or scarred tympanic membranes. Injuries to external ear.
4. On the abdomen, while lying on a table with the upper half of the body unsupported ("operating table").	Bruises on the abdomen. Back injuries. Ruptured abdominal viscera.
5. To the head.	Cerebral cortical atrophy, Scars, Skull fractures, Bruises.
Haematomas.	
Suspension	
6. By the wrists.	Bruises or scars about the wrists. Joint injuries.
7. By the arms or neck.	Bruises or scars at the site of binding. Prominent lividity in the lower extremities.
8. By the ankles.	Bruises or scars about the ankles. Joint injuries.
9. Head down, from a horizontal pole placed under the knees with the wrists bound to the "Jack".	Bruises or scars on the anterior forearms and backs of the knees. Marks on wrists and ankles.



Torture technique	Physical findings
Near Suffocation.	
10. Forced immersion of head in often contaminated “wet submarine”.	Faecal material or other debris in the mouth, pharynx, trachea, esophagus or lungs, Intrathoracic petechiae, Intra-thoracic petechiae.
11. Tying of a plastic bag over the head (“dry submarine”).	Intro-thoracic petechiae.
Sexual abuse.	
12 Sexual abuse	Sexually transmitted diseases, pregnancy, injuries to breasts, external genitalia, vagina, anus or rectum.
Forced posture	
13 Prolonged standing.	Dependent edema, Petechiae in extremities.
14. Forced straddling of a bar (“saw horse”).	Perineal or scrotal haematomas.
Electric shock	
15 Cattle prod.	Burns: appearance depends on the age of the injury. Immediately: red spots, vesicles, and/or black exudate. Within a few weeks: circular, reddish, macular scars. At several months: small, white, reddish or brown spots resembling telangiectasias.
16 Wires connected to a source of electricity.	
17. Heated metal skewer inserted into the anus.	Peri-anal or rectal burns.
Miscellaneous	
18 Dehydration	Vitreous humor electrolyte abnormalities.
19 Animal bites (spiders, insects, rats, mice, dogs)	Bite marks.



Annexure II

Additional Inquest Procedure

In order to help in proper assessment of 'Time Since Death', determination of temperature changes and development of Rigor Mortis at the time of first examination at the scene is essential. This can be attained in the present system of inquest by examining the dead body at the scene scientifically for these two parameters either by a medical officer or a trained Police officer.

Essential requirement for determining Temperature Changes & Rigor Mortis:

The procedure is simple and can be learnt by any police officer if he is trained properly at the Police Training institution by a medical officer. This procedure includes:

- (i) Taking of 'Rectal Temperature' at the first examination of the body at the scene itself while conducting the inquest. A simple Rectal Thermometre can be inserted in the anus of the dead body. After waiting for 3 to 5 minutes temperature should be read. The temperature so read should be mentioned in the inquest report as also the time of its recording.
- (ii) Similarly for determining 'Rigor Mortis', i.e., stiffening of the muscles, the Police officer should bend the limbs and see whether there is any stiffness in them. The observations about stiffness be mentioned as also the time in the inquest report. These observations would be helpful to the doctors conducting post-mortem examination.



Letter to all Home Secretaries regarding the revised instructions to be followed while sending post-mortem reports in cases of custodial deaths

N. Gopalaswami, IAS
Secretary General

D.O. No. 40/1/1999-2000-CD (NRR)
राष्ट्रीय मानव अधिकार आयोग
National Human Rights Commission

January 3, 2001

Dear

As you are aware, the Commission had issued general instructions in 1993 that intimation be given to the Commission of any custodial death within 24 hours of its occurrence. These intimations are to be followed with the post-mortem reports, Magisterial Inquest Report/Videography report of the post-mortem etc. However, it is found that there is a considerable delay in sending the post-mortem report along with the videography and the Magisterial Inquest Report.

This causes delay in the Commission in processing the cases of custodial deaths and the awarding of interim relief wherever *prima facie* there is reason to conclude that the custodial death was a result of custodial violence. In order to streamline the procedure, the following instructions are issued:

- 1.1 The post-mortem report along with the videograph and the Magisterial Enquiry report must be sent within 2 months of the incident.
- 1.2 The post-mortem reports have to be sent in the new proforma which was circulated vide letter No. NHRC/ID/PM/96/57 dated 27.03.1997. All concerned authorities may be instructed to use the new proforma. A copy of the new proforma* is enclosed for ready reference.
2. In every case of custodial death, Magisterial Enquiry has also to be done as directed by the Commission. It should be ensured that the Magisterial Enquiry is completed as soon as possible but in such a way that within 2 months deadline mentioned in Para 1.1 the Magisterial Enquiry report is also made available.
3. In some cases of custodial death, after post-mortem the viscera is sent for examination and viscera report is called for. However, the viscera report takes some time in coming and therefore, this is to clarify that the post mortem report and other documents should be sent to the Commission without waiting for the viscera report. The viscera report should be sent subsequently as soon as it is received.

* For the new proforma refer to page nos.12 to 25.



Instructions may kindly be issued to all concerned authorities to adhere to the above guidelines.

Thanking you and with Season's Greetings,

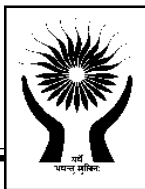
Yours sincerely,

Sd/-

(N. Gopalaswami)

To

All Home Secretaries



ANNEXURE-I

MODEL POST-MORTEM REPORT FORM

(Read carefully the instructions at Appendix 'A')

NAME OF INSTITUTION _____

Post Mortem Report No. _____ Date _____

Conducted by Dr. _____

Date & Time of receipt of the body
and Inquest papers for Autopsy _____

Date & Time of commencement of Autopsy _____

Time of completion of Autopsy _____

Date & Time of examination of the dead body
at Inquest (as per Inquest Report) _____

Name & Address of the person _____
video recording the Autopsy _____

Note: The tape should be duly sealed, signed and dated and sent to the National Human Rights Commission, Sardar Patel Bhawan, Sansad Marg, New Delhi.

CASE PARTICULARS

1. (a) Name of deceased and as entered
in the Jail or Police record _____
(b) S/O, D/O, W/O _____
(c) Address : _____
2. Age (Approx) : _____ yrs; Sex : Male/Female
3. Body brought by (Name and rank of Police officials)
(i) _____
(ii) _____
of Police Station _____



4. Identified by (Names & addresses of relatives/persons acquainted)

(i) _____

(ii) _____

IF HOSPITAL DEAD BODIES - (particulars as per hospital records)

Date & Time of Admission in Hospital _____

Date & Time of Death in Hospital _____

Central Registration No. of Hospital _____

SCHEDULE OF OBSERVATIONS

(A) GENERAL

(1) Height _____ cms. (2) Weight _____ Kgs.

(3) Physique - (a) lean/ medium / obese

(b) Well built/average built/poor built/emaciated

(4) Identification features (if body is unidentified)

(i) _____

(ii) _____

(iii) Finger prints be taken on separate sheet and attached by the doctor.

(5) Description of clothes worn - important features:

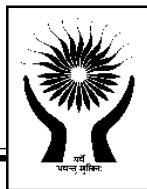
(6) Post-mortem Changes :

(a) As seen during inquest

- Whether rigor mortis present _____

- Temperature (Rectal) _____

- Others _____



(b) As seen at Autopsy -

(7) (a) External general appearance -

(b) State of eyes

(c) Natural orifices

(B) EXTERNAL INJURIES:

(Mention Type, Shape, Length x Breadth & Depth of each injury and its relation to important body landmark. Indicate which injuries are fresh and which are old and their duration.)

Instructions :-



- (i) Injuries be given serial number and mark similarly on the diagrams attached.
(ii) In stab injuries, mention angles, margins and direction inside body. (iii) In fire arm injuries, mention about effects of fire also.

C) INTERNAL EXAMINATION

1. HEAD

- (a) Scalp findings
- (b) Skull (Describe fractures here & show them on body diagram enclosed)
- (c) Meninges, meningeal spaces & Cerebral vessels
(Hemorrhage & its locations, abnormal smell etc. be noted)
- (d) Brain findings & Wt. (Wt. _____ gms.)
- (e) Orbital, nasal & aural cavities - findings.

2. NECK

- Mouth, Tongue & Pharynx
- Larynx & Vocal cords
- Condition of neck tissues
- Thyroid & other cartilage conditions
- Trachea

3. CHEST

- Ribs and Chest wall
- Oesophagus
- Trachea & Bronchial Tree



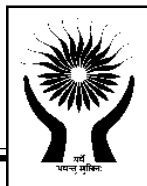
5. SPINAL COLUMN & SPINAL CORD (To be opened where indicated)

OPINION

- i) Probable time since death (keep all factors including observations at inquest)
- ii) Cause & manner of death- The cause of death to the best of my knowledge and belief is :-
 - (a) Immediate cause -
 - (b) Due to -
 - (c) Which of the injuries are ante-mortem/post-mortem and duration if ante-mortem ?
 - (d) Manner of causation of injuries
 - (e) Whether injuries (individually or collectively) are sufficient to cause death in ordinary course of nature or not ?
- iii) Any other

SPECIMENS COLLECTED & HANDED OVER (Please tick)

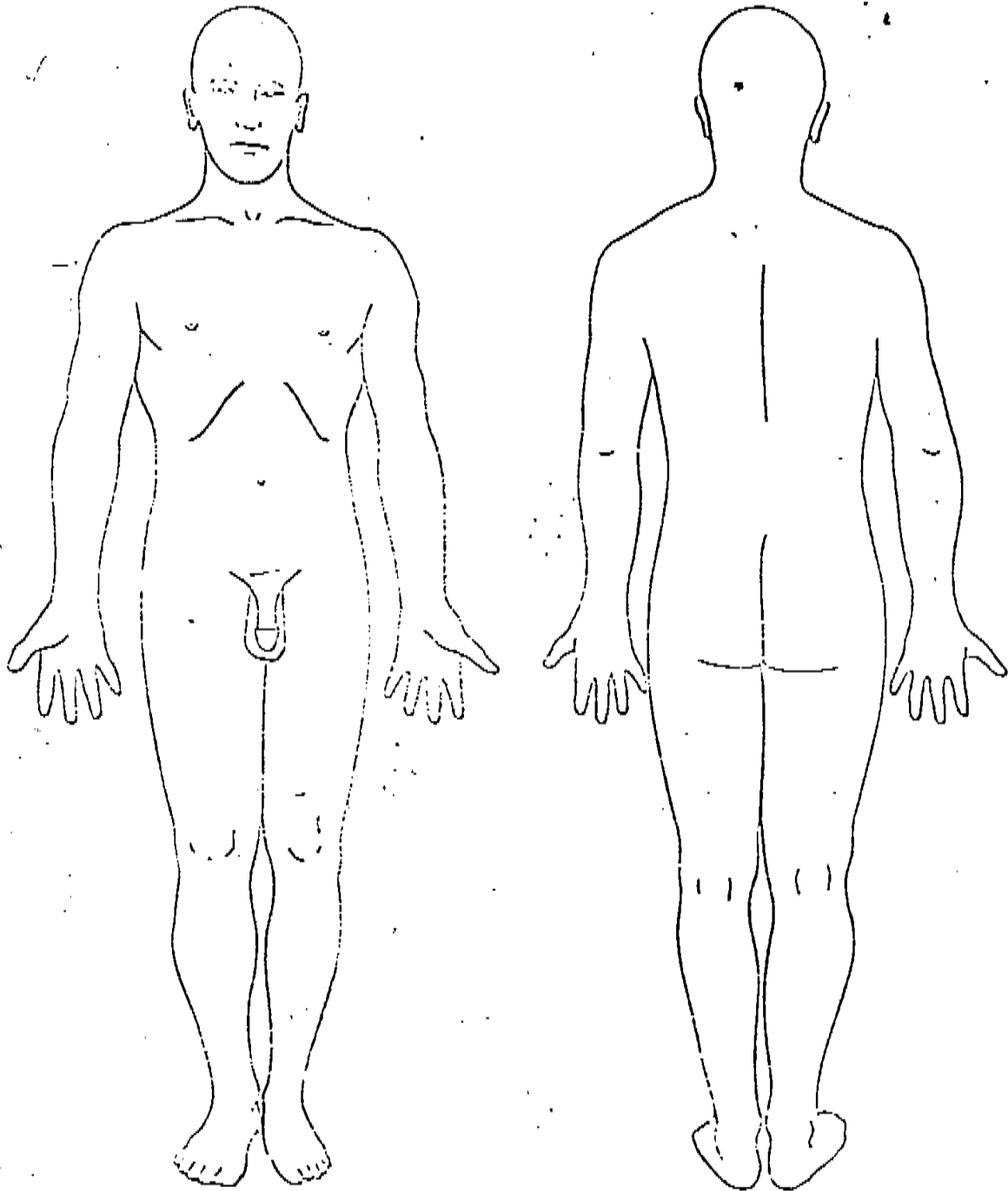
- a) Viscera (Stomach with contents, small intestine with contents, sample of liver, kidney (one half of each), spleen, sample of blood on gauze piece (dried), any other viscera, preservative used)
- b) Clothes
- c) Photographs (Video cassettes in case of custody deaths), finger prints etc)
- d) Foreign body (like bullet, ligature etc.)
- e) Sample of preservative in cases of poisoning.



- f) Sample of seal
- g) Inquest papers (mention total number & initial them)
- h) Slides from vagina, semen or any other material

PM report in original, ____ inquest papers, dead body, clothings and other articles (mention there) duly sealed (Nos. ____) handed over to police official _____ No. _____ of PS _____ whose signatures are herewith.

Signature : _____
 Name of Medical Officer _____
 (in block letters) _____
 Designation _____
 SEAL

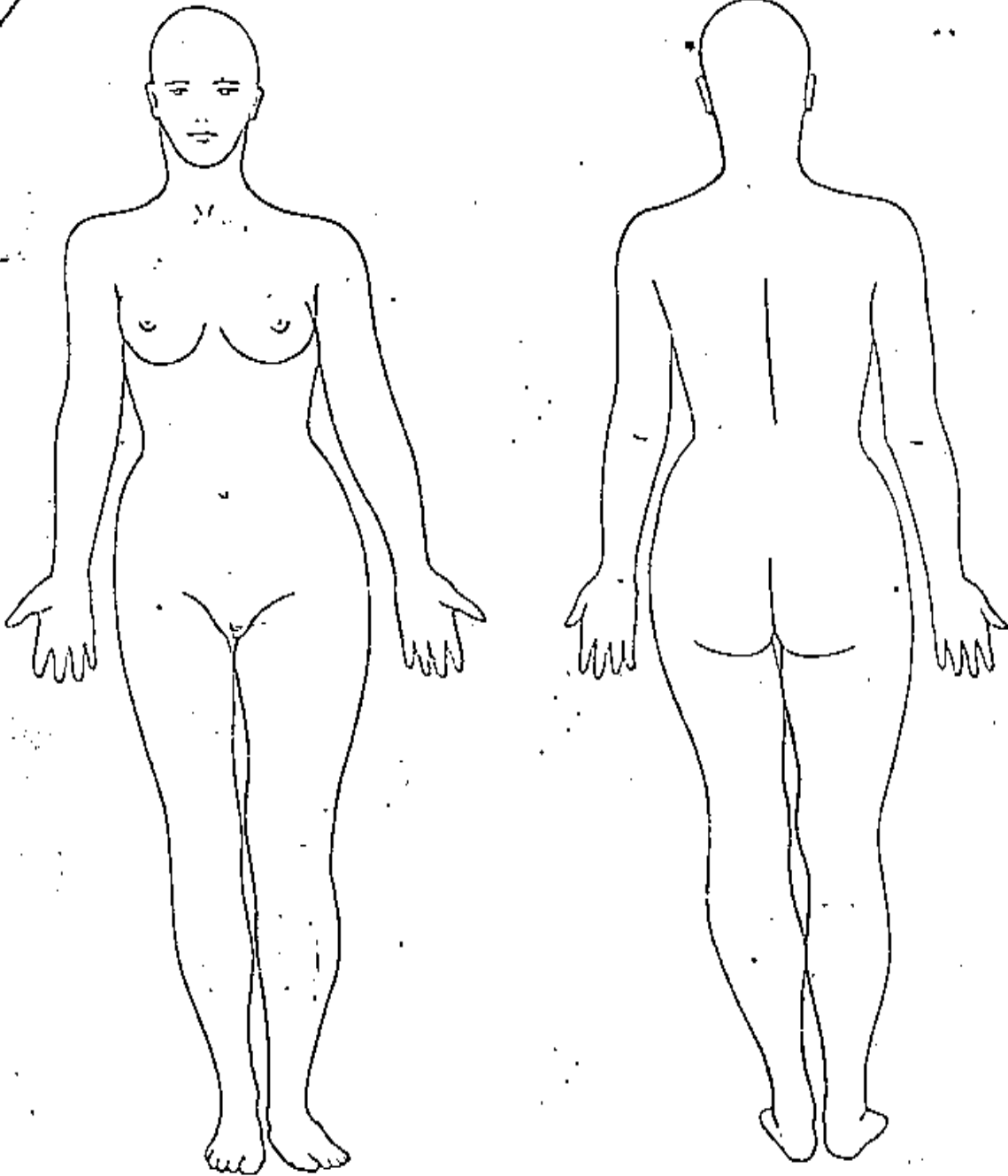
**Full Body: Male-Anterior and Posterior Views (Ventral and Dorsal)**

Name _____ Case No. _____

Date _____



Full Body: Female-Anterior and Posterior Views

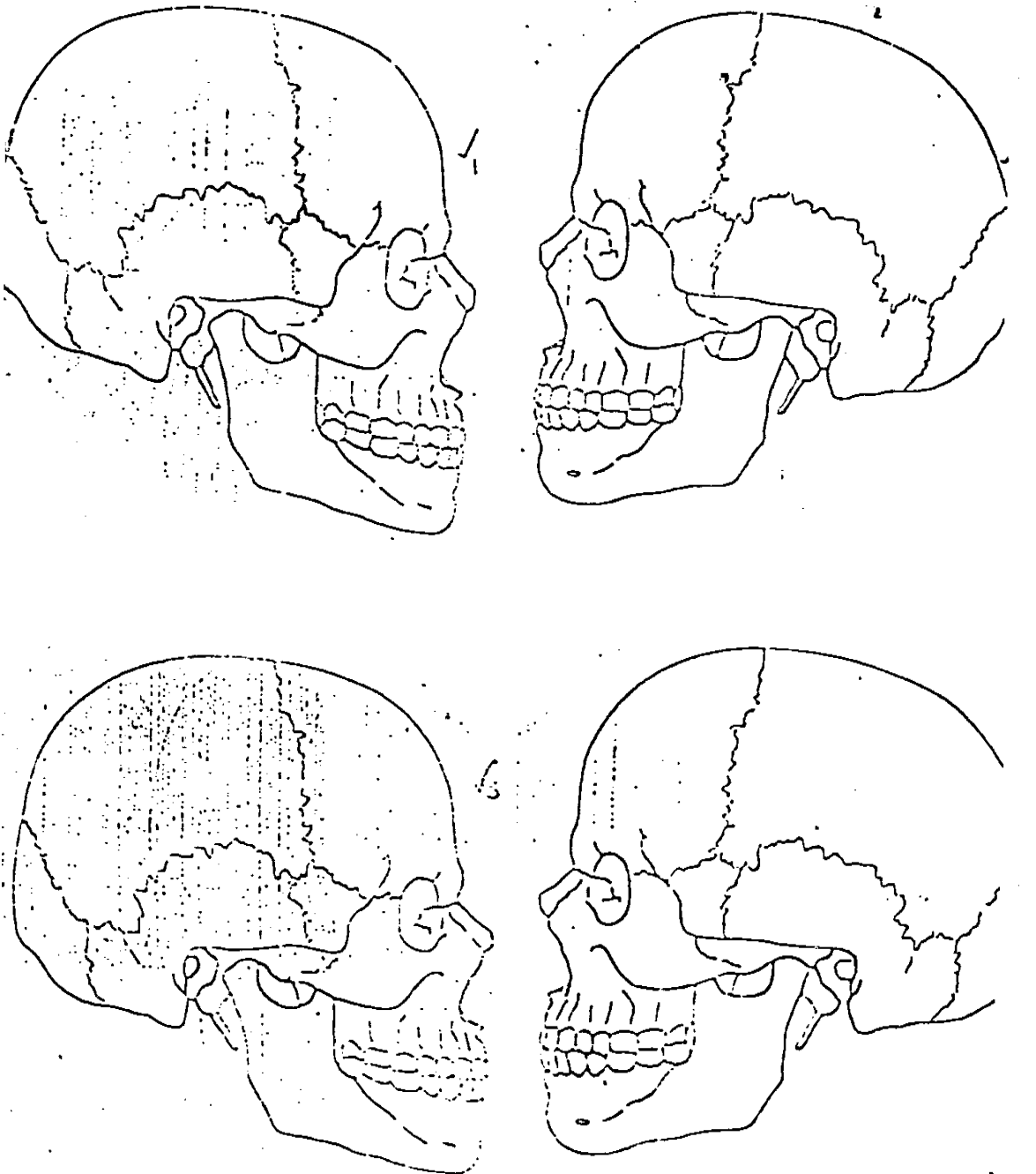


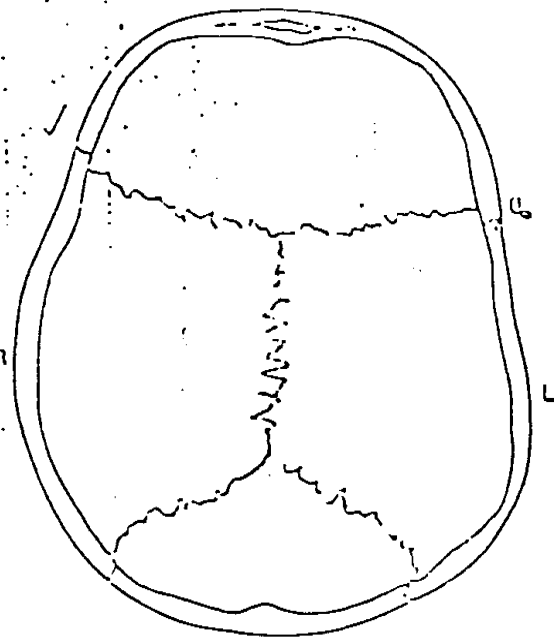
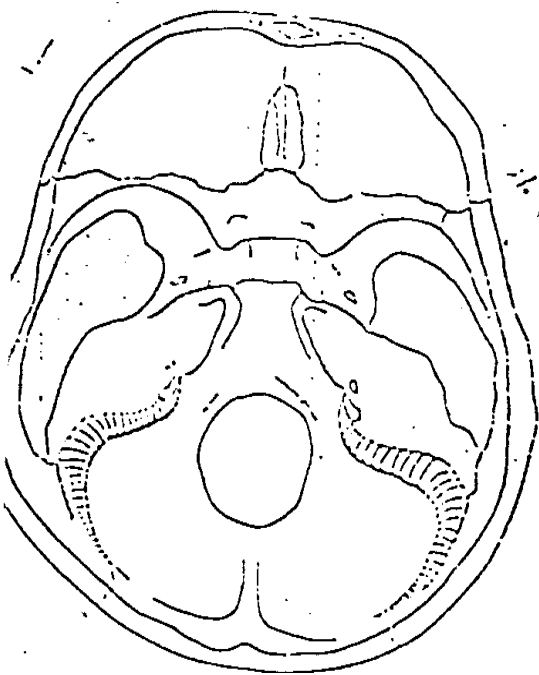
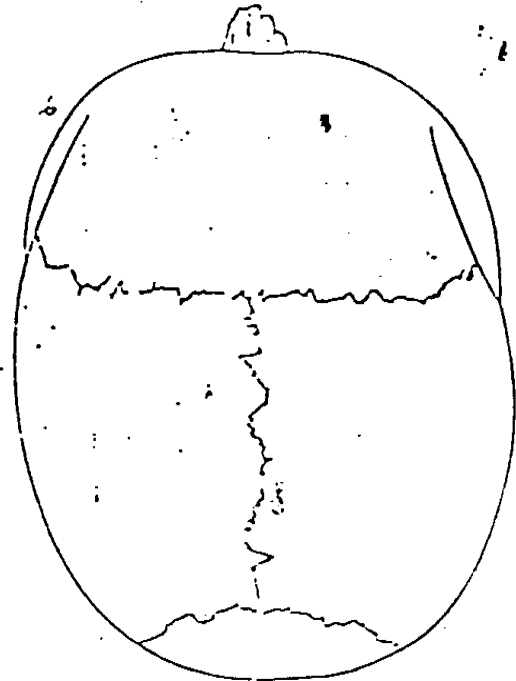
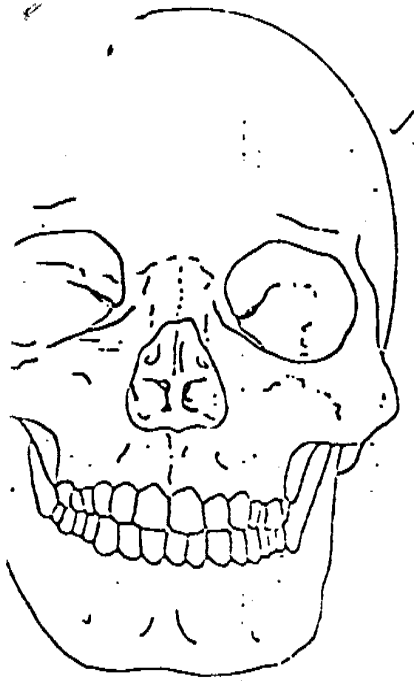
Name _____ Case No. _____

Date _____



Head - Surface and Skeletal Anatomy : Lateral view





Inner View of Skull

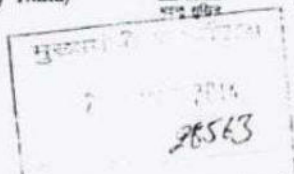
Justice K. G. Balakrishnan
 Chairperson
 (Former Chief Justice of India)



National Human Rights Commission

Manav Adhikar Bhawan, C-Block, GPO
 Complex, INA, New Delhi-110 023 India
 Phone : 91-011-24663201, 24663202
 Fax : 91-11-24651329
 E-mail : chairnhrc@nic.in

D.O. No.1/743/2014/FC



19 MAR 2014

My Dear Chief Minister *Smt. Vasundhara Raje*,

The Commission has been receiving reports of custodial deaths and deaths in police action. Whenever such report is received, the Commission holds an enquiry to find out if there was any violation of human rights. Post mortem report is a vital piece of evidence in such enquiry.

A communication dated 10.8.1995 was addressed to Chief Ministers of all States emphasizing that all post mortem examinations done in cases of custodial deaths or in encounter deaths should be video-filmed and cassette should be sent to the Commission along with post mortem report.

To ensure better quality of post mortem and video filming, the Commission invited suggestions from experts. On the basis of suggestions received from them, the Commission has formulated fresh guidelines for video filming and post mortem examination in cases of custodial deaths and encounter deaths so as to help in better analysis of cases. The guidelines are enclosed herewith as **Annexure-A**.

It is requested that the concerned authorities of the State /Union Territories may be given necessary instructions to follow the guidelines for video filming and photography of postmortem examination in cases of death in police action in their true spirit.

With regards,

Yours sincerely,

(K.G. Balakrishnan)

To

Smt. Vasundhara Raje,
 Chief Minister,
 Govt. of Rajasthan, Secretariat,
 JAIPUR - 302 006

Sub: Guidelines for video-filming and photography of post-mortem examination in case of death in police action

In case of deaths in police action while conducting post-mortem examination of the deceased photographs of the deceased should be taken and the post-mortem examination of the deceased should be video filmed. The video film and photographs should be sent to the Commission. The aim of video-filming and photography of post-mortem examination should be:-

- i) to record the detailed findings of the post-mortem examination, especially pertaining to marks of injury and violence which may suggest custodial torture.
- ii) to supplement the findings of post-mortem examination (recorded in the post-mortem report) by video graphic evidence so as to rule out any undue influence or suppression of material information.
- iii) to facilitate an independent review of the post-mortem examination report at a later stage if required.

2. The following precautions should be taken before conducting post-mortem examination:

- i) Both hands of the deceased need to be wrapped in white paper bags before transportation. The dead body afterwards should be covered in special Body Bags having zip pouches for proper transportation.
- ii) Clothing on the body of the deceased should not be removed by the police or any other person. It should be collected, examined as well as preserved and sealed by the doctor conducting the autopsy, and should be sent for further examination at the concerned forensic science laboratory. A detailed note regarding examination of the clothing should be incorporated in the post-mortem examination report by the doctor conducting the autopsy.
- iii) In case of alleged firearms deaths, the dead body should be subjected to radiological examination (X-rays/ CT Scan) prior to autopsy.

3. Video-filming and photography of post-mortem examination should be done in the following manner:

- i) At the time of video-filming of the post-mortem examination the voice of the doctor conducting the post-mortem should be recorded. The doctor should narrate his prima-facie observations while conducting the post-mortem examination.

- ii) A total of 20-25 coloured photographs covering the whole body should be taken. Some photographs of the body should be taken without removing the clothes. The photographs should include the following:
 - a) Profile photo-face (front, right lateral and left lateral views), back of head.
 - b) Front of body (up to torso-chest and abdomen) - and back
 - c) Upper extremity - front and back
 - d) Lower extremity - front and back
 - e) Focusing on each injury/ lesion-zoomed in after properly numbering the injuries*
 - f) Internal examination findings (2 photos of soles and palms each, after making incision to show absence/ evidence of any old/ deep seated injury).
- * In firearm injuries while describing, the distance from heel as well as midline must be taken in respect of each injury which will help later in reconstruction of events.
- iii) Photographs should be taken after incorporating post-mortem number, date of examination and a scale for dimensions in the frame of photographs itself.
- iv) While taking photographs the camera should be held at right - angle to the object being photographed.
- v) Video-filming and photography of the post-mortem examination should be done by a person trained in forensic photography and videography. A good quality digital camera with 10X optical zoom and minimum 10 mega pixels should be used.

Dr. Govind, IAS
Secretary, General



राष्ट्रीय मानव अधिकार आयोग
मानव अधिकार भवन, सी-ब्लॉक,
जीपीओ कॉम्प्लेक्स, आईएनए, नई दिल्ली-110 023 भारत
NATIONAL HUMAN RIGHTS COMMISSION
Manav Adhikar Bhawan, C-Block
GPO Complex, INA, New Delhi-110 023 India

24th April, 2019

D O No 237/11/6/2017-JCD/FC

Dear Karan

E7993
01/05/19 26 APR 2019 (R)

I would like to bring to your kind notice that Dr. Anil Aggarwal, Director-Professor of Forensic Medicine Maulana Azad Medical College, Delhi, a forensic expert on the panel of the NHRC, has recommended that in case of custodial deaths, the Post Mortem examination must be -

- Done by a board of at least 3 doctors preferably from 3 different institutions as the doctors from the same institution are likely in some cases to be influenced by their senior members in the board, impeding independence of the other members and
- All doctors doing postmortem must be holding a postgraduate degree in forensic medicine and must have at least an experience of 5 years in the specialty of postmortem examination

Upon consideration of aforesaid recommendations of Dr. Anil Aggarwal in case No 237/11/6/2017-JCD, the Commission has recommended that the same shall be forwarded to all the Chief Secretaries/Administrators of the States/Union Territories to put them into practice in their respective States/Union Territories for conducting post mortem examination in the cases of custodial deaths.

I therefore, request you to please look into the matter personally and kindly ensure that the aforesaid recommendations are put into practice in your State/Union Territory for conducting post mortem examination in the cases of custodial deaths.

With warm regards

Yours sincerely,

(Jaideep Govind)

Shri Karan Avtar Singh
Chief Secretary
Govt of Punjab
Room No. 28, 6th Floor
Civil Secretariat, Chandigarh
Punjab-160001

Dairy No. OSD/11/6/2017 E8091.
Dated: 2-5-2019

क्रमांक: प02(97)एचएचआर/2024

जयपुर, दिनांक:-

समस्त जिला कलक्टर,
राजपू।

विषय: राष्ट्रीय मानवाधिकार आयोग के प्रकरण सं. 237/11/6/2017-जेसीडी,
हिरासत में हुई मृत्यु के संबंध में पोस्टमॉर्टम जांच के दौरान एनएचआरसी द्वारा
प्रदत्त निर्देशों की पालना हेतु।

संदर्भ: माननीय आयोग का पत्र दिनांक 28.08.2024

महोदय,

उपर्युक्त विषयान्तर्गत संदर्भित पत्र के क्रम में निवेदन है कि राष्ट्रीय मानवाधिकार
आयोग, नई दिल्ली ने प्रकरण संख्या 237/11/6/2017-जेसीडी बाबत माननीय मुख्य सचिव
महोदय को पत्र दिनांक 28.08.2024 प्रेषित कर राज्य में हिरासत में हुई मृत्यु के संबंध में पोस्टमॉर्टम
जांच के दौरान संलग्न पत्र में निर्धारित अनुशंसाओं की पालना सुनिश्चित करने बाबत निम्नांकित
निर्देश जारी किए गए हैं:-

Directions to all states that at least in custodial deaths, the PM examination must be:

- (a) Done by a board of at least 3 doctors preferably from 3 different institutions. If from the same institution, they are generally under obvious pressure of the most senior person in the board.
- (b) All doctors doing postmortem must be holding a postgraduate degree in forensic medicine and must have at least an experience of 5 years in the specialty of postmortem examinations.

अतः माननीय आयोग, नई दिल्ली के पत्र दिनांक 28.08.2024 की प्रति संलग्न कर निवेदन है
कि हिरासत में हुई मृत्यु के संबंध में माननीय आयोग द्वारा प्रेषित उक्त पत्र में प्रदत्त निर्देशानुसार
पोस्टमॉर्टम जांच किया जाना सुनिश्चित करावे।

संलग्न: उपर्युक्तानुसार।

भवदीय,

(सुखवीर सैनी)आई.एस.
संयुक्त शासन सचिव

Validity unknown

Email:- dshomehumanright@gmail.com TEL 0141-2922329 कगल नं: 2126 प्रथम चर, मुज

RajKaj Ref No.:
19596318



Digitally signed by: Sunilaveer Saini
Designation: Joint Secretary To
Government
Date: 2025.12.26 17:45 IST
Reason: Approved

**ADVISORY FOR POSTMORTEM
SAMPLE SENT FOR
MEDICOLEGAL PURPOSE FOR
CONFIRMATION OF RABIES**

ADVISORY FOR POSTMORTEM SAMPLE SENT FOR MEDICOLEGAL PURPOSE FOR CONFIRMATION OF RABIES

Preamble: This document provides advisory on necessary procedure to be followed for postmortem sample sent for medicolegal purpose for confirmation of Rabies. It provides guidance on pre-requisite, documents required for accepting the sample at the laboratory, recommended sample, sample collection and storage guidelines, sample transport guidelines to be considered for samples for medico-legal aspects of suspected rabies case in reference laboratory.

A. Target audience

- All Hospitals and Centres with PM facility
- District/State Police Department,
- District/State Judicial and executive magistrate

B. Aim and Objectives of medico-legal postmortem of suspected rabies case

To confirm rabies infection as the cause of death in a medicolegal case suspected as rabies associated death

(Disclaimer: Laboratory test if found positive for rabies, confirms the diagnosis. However negative tests do not rule out the diagnosis. Hence Clinico-epidemiological correlation is required.)

C. Pre-requisite for medico-legal postmortem of suspected rabies case

Clinical Presentation

CASE DEFINITIONS

- a. **Suspected Rabies Case (Epidemiological)**- Death of a human with the history of animal bite/ dog bite of few weeks/month. Wherever available, the details of such cases should be shared in a line list- name, age, gender, address as per proforma annexed at Annexure1.
(Disclaimer: As the incubation period for rabies is typically 2–3 months hence dog bite cases with less than 3 months history are fit for testing or as and when directed by Court¹).
- b. **Clinical Case**- A suspected clinical case of rabies in human is defined as an acute neurological syndrome (i.e. encephalitis) dominated by forms of hyperactivity (furious rabies)/paralytic syndromes (paralytic rabies) progressing towards coma and death, usually by cardiac or respiratory failure, typically within 7-10 days of the first signs if no intensive care is instituted. First sign may include any of the following: aerophobia, hydrophobia, paraesthesia or localised pain, dysphagia, localised weakness, nausea or vomiting.
- c. Hydrophobia is pathognomonic feature of rabies and documented signs and symptoms of hydrophobia can be considered as clinically confirmed cause of death if accompanied with a certified video/ documented history of dog bite by Medical Officer for medicolegal purposes so no laboratory testing is required. However, in

few instances neurological presentation especially in case with no classic features, post-mortem may be required

D. Documents required for accepting the sample at the laboratory

A police officer not below the rank of constable with authorisation letter and Copy of Identity Card accompanied by the sample must provide the laboratory for documentation purposes with the following attested documents by Officer in charge of a police station.

- a. Copy of First Information Report (FIR)/ General Diary (GD) Entry.
- b. Copy of brief facts and history about the case by Investigating Officer (IO).
- c. Clinical Case Sheet declaring the person dead by Causality MO or Ward MO and having information on hydrophobia or animal bite history.
- d. Autopsy report.
- e. Photographic evidence of animal bite on the body (marks, healed wounds, fresh wounds) if feasible
- f. Signed seal which is placed on the sample during the postmortem.
- g. Clinico-epidemiological information collected on the proforma and signed/stamped preferably by authorised signatory.
- h. Chain of custody of shipment of sample (date, time and temperature) must be mentioned.

E. Recommended sample and Storage box

Safety Precaution : Rabies is a highly infectious disease. All personnel's involved in the post – mortem should be equipped with appropriate personal protective equipment (PPE), including gloves, masks and face shields.

- a. Recommended tissue sample – Brain (Half preserved in 50% glycerol-phosphate buffered saline (50:50 mixture) (if minus 20°C is not readily available) and Half in sterile PBS)
- b. Recommended sites – Brain stem, Cerebellum, hippocampus are preferred sites if identifiable.

Identifiers on sample Vials:- Name, age, sex, PM No., Police station, date of collection, signature and name of autopsy surgeon along with sample seal.

F. Sample collection, storage and transport

- a. Fresh brain tissue is ideal for testing. (Autolysed or decomposed tissues are not accepted/processed)
- b. Fresh brain should be preserved according to mentioned guidelines within 30 minutes of isolation.
- c. Fresh brain (preferred sample) can be stored at minus 20°C for 24-48 hours if any delay is anticipated store at -20 °C.
- d. In case of non-availability of facility for storage at minus 20 °C, sample preserved in 50 % glycerol-saline will also be acceptable.
- e. Sample collection box should be preferably clear polypropylene jar with wide mouth, air tight and leak proof cover with capacity ranging from
o 60ml (2 cm X 2cm cubes of the different sections of brain from recommended

- sites) or
 - o 500 ml (Half Brain /complete cerebellum with brain stem) or
 - o 1000ml (full brain)
- f. Specimens must be transported to the laboratory in transport containers, which comply with UN3373 regulations (United Nations Economic Commission for Europe, 2017) requirements² and in line with IATA guidelines³ if sample is shipped to some other laboratory/health care facility.
- g. Prior intimation to designated BSL 2 lab authorized for Rabies testing may be sent and sample receiving timing may be duly enquired by sample submission personnel.
- h. Dispose of all biological waste generated during sample collection following strict protocols. Clean and decontaminate all equipment and surfaces thoroughly.

G. Sample rejection

Sample processing is done only if fits into the laid down criteria in the advisory else sample will not be accepted or rejected.

References

1. Rabies. Retrieved November 29, 2023, from Who.int
<https://www.who.int/news-room/fact-sheets/detail/rabies>.
2. 49 CFR part 178 -- specifications for packagings. (n.d.). Ecfr.gov. Retrieved October 10, 2023, from
<https://www.ecfr.gov/current/title-49/subtitle-B/chapter-I/subchapter-C/part-178>
3. Iata.org. Retrieved October 10, 2023, from
<https://www.iata.org/contentassets/b08040a138dc4442a4f066e6fb99fe2a/dgr-62-en-3.6.2.pdf>

Proforma for a case of Hydrophobia/Acute Neurological Symptoms for Suspected Case of Rabies (Human)

Section 1 (To be filled by investigating officer)

Sr. no:	Name:	Age:	Sex:
Complete address:			
Place of death:	Date of death:	PM no.:	PM date:
FIR registered: Yes/No		FIR details:	
Date of custody of samples:		Date of shipment of samples to: testing laboratory	

Sign.....
.....

Section 2 (To be filled by the treating doctor)

Date of admission	Date of animal bite:
Animal species:	Dog/cat/Monkey/Mongoose/Others specify
Type: Pet/Stray	Fate of animal: Alive/killed/unknown
Bite: Provoked/Unprovoked/Not known	
Outcome in other persons bitten: Alive/Dead/Not known	
No. of other persons bitten by same animal within one week of the bite:	
Type of exposure:	
4. Minor scratches or abrasions without bleeding 5. Nibbling of uncovered skin 6. Contamination of mucous membrane with saliva 1. Licks on intact skin 2. Single or multiple bites with bleeding 3. Licks on broke skin	
Duration between bite and local treatment of wound: 0/1//2/3/4/5/6/7/more days	
Local treatment taken before coming to anti rabies clinic: Yes/no/not known	
If yes, tick whichever is applicable: Washed with water/washed with soap and water/any other specify	
Who advised to come to anti rabies clinic: Self/Relative/Health worker/Neighbour/Friend/Previously treated	
Patient	
Previous history:	

P/H/O/ IMMUNIZATION : Immunized/ Incompletely immunized/Documents not available/ Unimmunized

Sign.....

Note: In case of no treating doctor, investigating officer to fill the details as far as possible.

Section 3 (To be filled by treating doctor)

Treatment given at anti rabies clinic	Details	Date
Wound washed in clinic	Yes/No	
Local instillation of ARS	Yes/No	
Wound suturing	Yes/No	
Antiseptic/cauterization	Yes/No	
Route of vaccine	ID/IM	
Any deviation from schedule		
Vaccine brand name and schedule details		
Vaccination document available	Yes/No	

Section 4 (To be filled by treating doctor)

Clinical symptoms	Details	Date of onset
Fever		
Local paraesthesia		
Breathlessness		
Paralysis		
Convulsions		
Hydrophobia		
Any other relevant details		
Treatment given		
Any other close contact of hydrophobia case		
Radiological investigations		

Cause of death:

Sign.....

Section 5 (To be filled by autopsy surgeon (preferably) and /or IO)

Findings on body	Details	Date
Bite marks/scratches/abrasions s/o animal bite or contact		
Any other relevant findings noted externally		

Section 6 (To be filled by IO)

Specimens of suspected case given to laboratory	Collection date	Transportation date	Name and ID No. of Authorized Messenger	Name of Police Station
Blood				
CSF				
Skin biopsy				
Saliva				
Corneal smear				
Brain				
Any other				

Signature of autopsy surgeon

Signature of IO

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/260182850>

Uniform guidelines for postmortem work in India

Article in *Journal of Forensic Medicine and Toxicology* · January 2013

CITATION

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[Om P Murty](#)

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SPECIALARTICLE

UNIFORM GUIDELINES FOR POSTMORTEM WORK IN INDIA: FACULTY DEVELOPMENT ON STANDARD OPERATIVE PROCEDURES (SOP) IN FORENSIC MEDICINE AND TOXICOLOGY

O.P. Murty¹, Anil Kohli², Tabin Millo³, Mukta Rani⁴ SK Verma⁵, Asit K Sikary⁶, Shalini Girdhar⁷, SK Sharma⁸
KK Banerjee⁹, P Sampath Kumar¹⁰

ABSTRACT

Skill-based forensic training has become necessity of the world to increase the practice of evidence based forensic practice. Unfortunately, many criminals are let off due to improper reporting of findings and defective workout of cases at their first contact in the hospitals and autopsy centers. In India, there are about 358 medical colleges and their training standards are different from college to college. This varied standards have created a serious gap in the forensic knowledge and practice and reasons are conflicting resource material, teaching methods, faculty development and their proper training, unplanned training of faculty, arbitrariness in the subject coverage, pattern of assessment of trainees and trainees, inadequate human resource, poorly equipped working stations and infrastructure available.

To combat this deficiency a step is being taken by us to train forensic professionals and organize skill-based training of faculty. This program has been termed as "Faculty Development Training Workshops on Standard

Operative Procedures (SOP) for Medico-Legal Work and Modular Teaching in Forensic Medicine and Toxicology". This will help forensic practitioners in recording objective findings and observations in more transparent and authentic manner. Thus, this practice will indirectly help administrative and judicial outcomes in criminal cases where forensic evidence matters.

We started this training in May, 2012 in phase wise manner. This training and Forensic faculty development is aimed to add more skills among professionals to meet expectations of society and law. To meet these challenges, team of trained professionals are being created through these training workshops. This faculty development programme covers professional, technical, personal and social aspects of faculty growth. Such programs are likely to produce quality forensic services. This training will help them to provide quality services and teaching.

This goal will be achieved through multiple training workshops on modular teaching and Standard Operative Procedures with the help of National resource faculty pooled from different medical colleges. These workshops have Leading presentations, key-demonstrations, group discussion, hands-on exercises and sharing of experiences.

There is overall shortage of trained professionals in this region, so opportunities to obtain training at low cost in home country are created through these training workshops, conferences and sharing experiences. We intend to make these modules available to different institutions on non-commercial basis. In this document on SOP, we have tried to give brief account of all common situations faced by a general forensic practitioner in day to day practice in a simplified way. We will make efforts to make these SOP available to all practitioners in the field through all other possible means through national bodies.

Keywords: SOP; Minimum guidelines for postmortem work; Autopsy Standards; Standard Operative Procedures for Postmortem Work; Postmortem Protocols; Autopsy Protocols; Indian forensic medicine.

- 1,3,6. Additional Professor, Additional Professor, Senior Demonstrator, Department of Forensic Medicine and Toxicology, All India Institute of Medical Sciences, New Delhi 110029.
- 2,5,9. Reader, Professor, Professor, Department of Forensic Medicine and Toxicology, University College of Medical Sciences, Delhi 110095
- 4,7. Associate Professor, Assistant Professor, Department of Forensic Medicine and Toxicology, Lady Harding Medical College, New Delhi 110001.
8. Assistant Professor, Department of Forensic Medicine and Toxicology, Army College of Medical Sciences, Delhi Cantt, New Delhi
10. Professor and Head, Department of Forensic Medicine and Toxicology, Sri Ram Chandra Institute of Medical Sciences, Porur Chennai Tamil Nadu.

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INTRODUCTION

This document is based on professional experience of the team members, common knowledge literature and resources available on the subject in public domain on

internet as well as in the printed literature. All possible resources have been acknowledged as a part of fair dealing with subject, but if there is any inadvertent overlook then it may be brought to the notice of Chief Coordinator for rectification. Same material which is given/available at multiple sources is not referenced as it becomes common knowledge material.

This document is aimed to encourage development of quality services and teaching in the field of Forensic Medicine and allied branches. It has futuristic outlook and application; this is not suitable for retrospective comparison or review. This document should not be applied blindly to all centers and more so it is advisory in nature. It is not a replacement to textbooks on the subject but these suggestions are 'trigger points' to initiate working in that particular direction so that case can be worked out in best possible way.

This material is mainly meant for teaching and developing uniform guidelines, protocols for betterment of society. There is no conflict of any nature and it has no financial support and grant from any source. It is an outcome of self motivation and honorary work of group members for social and scientific cause. Central or State Government of India are authorized to make any appropriate use of this in original or modified form.

This is honorary work produced by like-minded professionals and we held three workshops on quality services and teaching at AllMS for this purpose in 2012-2013 to have minimum format. These workshops were held in collaboration with faculty for LHMC, UCMS and ACMS, New Delhi. This is first version for field use and it will be reviewed periodically. All are welcome to give inputs as we are open to positive inputs and determined to improve it further.

Almost maximum possible events seen in Indian forensic medicine working have been covered. To facilitate concept of quality services, we have given photographic points so that evidence-based practice is imbibed in daily practice. We feel, our infrastructure requires overhauling and every mortuary should get minimum infrastructure and facilities. It will take few years to make these really practical. We have 358 medical colleges and most are having mortuaries as forensic is an essential subject in second phase of MBBS course. In addition we have more than 671 districts and all districts have mortuaries. In total, we will be having around 1500 mortuaries in the country. Approximately, more than 1000 mortuaries are having heavy work load. In Delhi there are nine districts and all are having mortuaries and 5 of these are attached to medical colleges. We are planning to integrate and interlink all mortuaries in future for faster communication. In this venture, we require help of all professionals who believes in doing something for the country.

In this manual, we have discussed whole forensic

subject in 92 topics and every topic has bare minimum introductory information, expected external and internal findings, investigation required, common cause of death, audit sheet mentioning important check points, and in the end of topic we have mentioned 'Social Forensic Message' as a part of our social responsibility.

We admit that there may be some short coming as there is vast literature, SOP, journals and books available on the subject which may be missed by us. We request readers to fill this gap as it belongs to all of us and we have bounden moral duty to uplift our specialty. We will make all efforts to spread this information among Indian Forensic Experts through all other means so it can be brought into practice. Now, we discuss each topic in chronological order as mentioned in the index.

POSTMORTEM EXAMINATION ^{14,45,25,26,27}

Medico-Legal Postmortem

Autopsy is being requested by Investigative Agencies -Police under Section 174 Cr PC and /or Magistrate under section 176 Cr P C with following objectives :

1. To find out cause of death
2. To find factual, objective, medical information for law enforcing agencies and court.
3. To allow proper recovery and preservation evidence
4. To document injuries and disease
5. To determine manner of death
6. To know time of death
7. To reconstruct Crime Scene
8. To provide correlation of facts and circumstances related to the death
9. To help in identification of victim, etc.

The post mortem report is required by people of different levels like police, public, court, lawyer. All have different level of understanding. It should be concise, simple and relevant to points raised during interrogation of the particular case. The main unavoidable reason for ordering PM remains cause of death.

Postmortem is a serious exercise and has serious medical, social and legal repercussions. The result of autopsy has potential of affecting life, limb and liberty of people so utmost care should be taken to avoid injustice to any one. One should be cautious in medico-legal practice that very genesis of this work is **doubt, litigation, review and re-examination at various stages** till conclusion by court.

Waiving off Postmortem

Medico-Legal Postmortem is done on request of Police/

Magistrate/ Court. Medical Officer has no power to waive off postmortem examination. He can play a role of an advisor in such cases but final decision lies with Investigative Agency.

Complete or Incomplete Postmortem Procedure

As on today in India, full postmortem is carried out in medico-legal cases i.e.

1. Examination of clothing /items over the body.
2. External examination of body from head to toe front, back and sides.
3. Internal examination with opening of all the three cavities i. e Head, chest and abdomen.

There is no practice or provision of incomplete or partial or limited postmortem in medico-legal cases. Partial postmortem is practiced in clinical autopsies(Non-MLC cases).

Exchange of dead bodies

In large number of public mortuaries in India, possibility of exchange of bodies is always there. This is mainly due to disinterest of relatives to touch the bodies due to their personal beliefs and practices; bodies of similar appearance, height, sex, and look, illiteracy among handlers and relatives. More possibilities do exist in circumstances :

- Visual identification can be wrong in mutilated, burnt and decomposed bodies.
- There is strong repulsion in public in viewing decomposed and distorted faces.
- Circumstances are shocking and disturbing to next of kin so they avoid to see it.

Steps to be taken when body exchange has taken

1. Set up teams to handle specific tasks as body recovery, public handling, media handling, counseling and legal handling of case.
2. Try to recover the right bodies and handover to relatives with sympathy and apology.
3. If body has been taken to different state then help of local police is must to recover body or ashes.
4. Enquiry should be carried out to fix responsibility.
5. Steps should be taken to prevent future happening.

Suggestions

- Positive identification when requested, should be carried by DNA profiling and other records .
- Slough skin has finger prints so it should be preserved.
- Dismembered or mutilated remains may have finger prints / foot prints intact, try to preserve these.

Crime Scene Visit

Medical Officer can visit Crime Scene on request of Investigator or can put his advice to IO for visiting scene if it is going to clarify some issues in question. It should be in writing on either side. A report to this effect should be made part of inquest. Important points in each scenario are given in each type of death inside in this document.

Working Hours

Normal Working hours should be declared by every center. Usually these timings can be anywhere from sunrise to sunset in peripheral or district centers. In cities, these can be made round the clock also by intuitional/ local administration policies. There is no restriction from law side about doing postmortem beyond routine hours but it is dependent on Government Orders and other technical or human resource reasons.

Display of information

1. There should be proper display of policies, timings, contact numbers of officers/PRO for any clarification, telephone numbers of different morgues in the city, public utility numbers and information, transport policy, dressing and clothing, information about nearest cremation and burial grounds.
2. Public Information about certificates to be obtained from mortuary before taking possession of dead body by relatives.

Retention of tissues/organs

In medico-legal cases, tissues can be retained without consent and after completion of investigation these should be disposed off by proper methods of disposal as per hospital practice. The most common method of disposing in incineration of tissues and biological waste.

If tissues are retained for any purpose other than medico-legal investigation or working out of a case then proper written consent of relatives should be obtained. All organs retained for museum should be anonymised. A piece retained for purpose of future use in medical education, progress in medicine and future research for human benefit does not require consent but retention of body and full organs should not be without consent. Make the specimens non-identifiable. Such usages have inherent power to use for teaching and public benefit from the very inception of sanction of medical school. There is no limit for retention.

In borderline case, world wide principle is "Human welfare takes over individual rights" provided anonymity and protocol is maintained. Histology and histopathology microphotograph does not require consent. Name of the individual and face should not be displayed in public without consent. Consent is not required for anonymised images. Display of specimen, photographs and organs in museum for educating medical, paramedical, science and investigative students is not a public display.

Research in the mortuary

For any planned research on corpse following guidelines are recommended:

1. It should have approval of Ethics Committee of main Institution where research is planned (place of Principal Investigator/ PhD registration centre).
2. Approval /NOC of Ethics Committee of Local Institution where dead bodies are used.
3. Request to Mortuary for use of tissues with copies of proposal, ethics committee approval, consent form and name of researcher.
4. Proper acknowledgement of the department wherever public display/publication is there
5. Declaration that tissues will not be used for any other purpose and are meant only for research purposes.

Advisory to Police Personnel

All police personnel who bring cases for postmortem, please ensure that :

1. Request for PM is made (Form filled up)
2. Police Form 25/35 A B C, are filled up as per the requirement of case.
3. Crime Scene Assessment/CSI is attached with inquest, if feasible photographs either as prints/ on CD / in Pen drive should be submitted at the time of postmortem.
4. Death Summary, if it is hospital death should be attached.
5. IO should bring police photographer/ videographer if there is legal requirement in the case.
6. Crime Scene visit should be arranged, if desired by IO or advised by doctors in consultation and under supervision of Consultant on Duty / CMO or senior most doctor available.
7. Our working is as follows (Medical College)
 - Work In -charge for the day – Consultant on Duty / Chief Medical officer
 - Duty Officer (Immediate First responder) – Senior Resident/ Senior Medical Officer on Duty
 - Junior Resident / Junior Medical Officer on duty (Second Responder)
 - Our working recommends team approach (example- JR+SR+ Consultant)

Non-teaching centers have different set up of Sr Medical Officer, Chief Medical Officer& Specialist. Medico-legal postmortem work is a team work and it cannot be carried

out as a solo act in isolation. All evidences and working steps should be managed with utmost care as this may be the last opportunity to preserve important items from the body of a victim of crime.

MINIMUM FACILITIES AT PM CENTERS

Mortuary complex is very important area in the hospital premises and all classes of society visit this area that too in groups. This area is another face of hospital so care should be taken that public or visitors carry good impression about it. This area should have general ambient surrounding, office, enquiry counter, doctors room, staff room, store, cold storage, specimen storage, clothing drying room, public viewing of deceased, dissection area for normal autopsy, dissection room for infectious and decomposed bodies, organ retrieval / evidence preservation, photographer room, observation area for students.

Audit sheet for minimum facilities required at post mortem centre

Items to be checked	Yes	No
Building infrastructure		
Autopsy room • One room at primary level • Two rooms at district level • Minimum three rooms at tertiary 1 Normal room for routine cases 2 Separate room for decomposed cases 3 One clean room for organ retrieval		
Autopsy tables Primary level (1), district level (2), medical college (4).		
One table can be made evidence collection table (putting white cotton or plastic sheet) on dried and clean table		
Evidence collection Table (Clean Table without running water and may have a fixed camera) • Put a white plastic sheet over the table • Transfer the body to this table over the sheet • Collect evidence • Sampling • Swabs • Smears • Photography of original condition, with clothing and without clothing • Taking off clothing, description and examination • Examination • Personal effects collection Fold the sheet and seal it for further evaluation at Forensic Laboratory		
Working Table • Transfer the body to working		

autopsy table having running water for complete PM		
• Take full photography without or with cleaning and then proceed to perform		
• External examination in detail		
• Internal Examination in detail		
• Sampling as indicated further (SOS)		
Doctors room		
Office room		
Staff room		
Public cum Counselor – organ donation Room		
Police room –where they can prepare inquest papers With table, chairs		
Cold storage (30-50 spaces for bodies at college level)30 working ; 10 for unknown cases; 10 for disaster		
Water		
Electricity		
Waiting place for relatives		
Instrument sets – Two sets for every table		
Weighing Machines (Electronic -2 ; 5 kg -1 ; 10kg -1 ; 20kg -1; Body weight weighing machine 100kg		
Protective garments and masks		
Gloves (sterile , non-sterile, general)		
Gum boots (different sizes)		
Plastic bags for body		
Containers for toxicology samples/ viscera preservation		
Fridges: 4°C – One(Normal utility)-20°C– One(samples requiring deep freezing)-70°C– One(DNA Profiling tissue samples)		
Bath rooms for staff, doctors and toilet for public		
Changing room for doctors and staff, must in higher centers (district and college room)		
Store rooms at centers		
Clothing Drying Room In cases, where clothing are soiled with stains, these require drying before sealing so one separate place is required for this purpose. It may be open/ shaded area / or close room with minimum facilities		
• Hangers		
• Hanging Rods		
• Moveable fans		
• Hot blowers		
Strong Room /Exhibit Room / separate Almirah		
For keeping weapon / other items under custody		

Cameras digital (ordinary-two; heavy duty- one)		
One vehicle on demand for crime scene visit		
One photostat and scanning machine in higher centers		
Independent X-ray machine at college level with one borrowed radiographer from radiology department on need. X-ray facilities at district level.		
Conference room at secondary and tertiary level Mortuaries (25-50-100 people)		
Observation Room for students (25-50-100 people)		
Working arrangement policies		
Waste disposal universal policies		
Body handling policy		
SOPs for normal cases and working pattern at college and district level		

Every Postmortem Center should be provided with digital camera, videographer facilities, computers for computerized reports and all above mentioned items are helpful in providing quality services and efficient work. Facilities can be categorized on work load of the centre. At all medico-legal centers viscera preservation materials and five meter white clothing or plastic for covering body before handing over should be a part of mortuary budget. Asking material from relatives should be discouraged.

BODY HANDLING POLICY

1. All bodies should bear **identification tags** over plastic or cloth covering of the dead body; over chest, wrist or ankle areas in hospitalized or brought dead persons.
2. Body should be identified by accompanying police personnel and relatives of deceased.
3. All bodies shall be refrigerated immediately in cold storage (4°C) with proper tag and identification number by morgue attendant/staff.
4. **Do not clean** the body or clothing after death till postmortem examination is conducted.
5. All clothing of the deceased should remain with the body and their examination should be documented in the postmortem report.
6. Clothing should not be disposed off in any case without permission of Police. All clothing should be handed over to police in cases of murder, suicide, custody, encounter and jail deaths, in sealed packet (after air drying the clothing if stained with blood or any other stains).

7. Body should not be disturbed in any way till original condition photography and after that start evidence collection, finger printing. All steps should be with permission of IO (Investigating Officer) at scene; and in the morgue autopsy surgeon when submission of inquest papers is there till then IO is custodian of body on behalf of state. Only authorized person (IO and Autopsy Surgeon) has authority to take decision in this regard.
8. In hospital admitted cases all therapeutic needles, bandages, drainage tubes etc should not be disturbed from the body if medical negligence is suspected till these findings are documented and photographed. This is also important in cases where there was surgical intervention in firearms, stab or injury or like cases.
9. X-ray should be done upon arrival in the hospital in firearm and suspected skeleton trauma cases or as mentioned earlier. These should be taken in presence of emergency personnel and IO with proper documentation. Introduction of digital X-ray has made things easier and cost effective. X-ray documentation is of great help and is very economical and should be encouraged in the interest of justice.
10. Body is handed over to Autopsy Surgeon by IO at the time of postmortem and then he receives back it from him after autopsy. Role of relatives is in identification of person, they receive body from IO.
11. Body can be preserved for a reasonable period with mutual agreement depending upon nature of case. A limit of 72 hours as mentioned in various police manual is for primitive autopsy centers where there is no electricity and storage facilities or body is highly decomposed and is not suitable for further preservation. India is a vast country and everyone cannot afford air travel to reach morgue as majority belong to low income group. It should be minimum one week to few months if refrigeration facilities are available at the centre.

Futuristic view would be to afford 24 hours evidence preservation services. Currently, it is difficult due to shortage of human resource at all centres.

DOCUMENT POLICIES

The common form of documentation in postmortem services remains written reports, diagrams, sketches, photographs and videography. Postmortem reports are usually handwritten but due to court requirement, electronic advancement and for clarity, nowadays computer typed reports are required. All doctors must get orientated to this development and should type their own reports. A general points about these reports are given below.

1. Report completion time - Immediate to 3 days in normal cases; 3 weeks when histopathology is carried out; 3 months when viscera analysis or special examination

is required.

2. Handwritten or Typed reports – Typed reports should be given now within reasonable time- 2 weeks if handwritten report of death certificate has been issued immediately.
3. Printed Forms / typed reports for different type of death as mentioned in next page should be made available for clear and fast work.
4. Photocopy and scanning facilities so that soft copies of document can be retained.
5. Internal Audit policies /cross-checking – daily/weekly/ monthly.
6. External Audit Policies – periodical 5 years (Currently not practiced in India).
7. Maintenance of files, documents, photographs, etc should be clearly documented.
8. Custody of documents, procedure for keeping and releasing documents.
9. Accreditation of centre.

Postmortem reports are maintained for indefinite period. Local guidelines and policies should be drafted in consistency with recommendation of government. If storage space is a problem then these can be maintained electronic form (pdf) after a cut off point like 30 years. Postmortem center must develop common formats, some of these are mentioned in next page.

COMPUTERIZED / PRINTED FORMATS IN POSTMORTEM WORK SHOULD BE MADE AVAILABLE

1. Adult/ Geriatric Male Postmortem Format
2. Adult/ Geriatric Female Postmortem Format
3. Fetus / Conception Products
4. New Born Postmortem Format
5. Children Postmortem Format
6. Adolescent Girls Postmortem Format
7. Adolescent Boys Postmortem Format
8. Dismembered Human Remains Postmortem Format
9. Charred Human Remains Postmortem Format
10. Exhumation case Postmortem Format
11. Skeleton Remains Inventory
12. Skeleton Remains Format with Sketches
13. Custody Deaths (NHRC case)
14. Body Sketch Format

15. Organ Sketches
16. Coronary and cerebral vascular sketches
17. Important Body Parts Sketches
18. Subsequent opinion format
19. Weapon examination format
20. Custody of document transfer sheet

Currently, one printed format is available and it is modified according to the nature of case. Most of the Indian states have their own format in dual language, one is local language and other is in English language. Use of different types of format will avoid inadvertent errors creped in or overlooked in typing when reports are prepared in hurry and not cross-checked. A cross-check mechanism among team members is advocated to avoid embarrassment at later stage due to inadvertent serious errors may occur during cut - paste or modification.

INQUEST PAPERS REQUIRED FOR CONDUCTING PM

1. Request for Postmortem – **Must**
2. Medico Legal Certificate if any- desirable
3. Police Form 25/35A , B or C as per need of case- **Must**
4. Seizure memo(items seized at scene)- Desirable
5. Crime Scene assessment by CSI team / Photographs – Desirable (overall scene can be provided in CD/ Pen drive). Overall scenario information is very helpful otherwise precious time of medical man and investigator is lost in speculations and confabulations.
6. Statements of public/panch/ relatives – desirable
7. Death Summary in hospital death /treatment summary – most desirable if hospitalization was there.

In fact, above mentioned documents are essentially desired but in cases when it is a holiday, document is not ready, interstate-transfer of patient, it may not be feasible to bring these in reasonable period. Autopsy should not be delayed unnecessarily.

With scanning facilities a copy of inquest papers can be retained in Pdf form with the department.

MINIMUM TRAINING OF MEDICAL PERSONNEL

1. General Medical Officer -MBBS with three months orientation course for PHC (Minimum 25 cases independently and 50 under supervision with report writing and digital photography)
2. Senior/Chief Medical Officer/Specialist - MBBS and MD in Forensic Medicine or persons having MBBS with six months to one year orientation course (100 independent PM and 200 under supervision) for District centre

3. For Tertiary centers, more experienced professional should carry out or supervise the postmortem work.

Basic Skills expected in Medical man handling Forensic cases

- Professional Skills
- Communication skills
- Workable English language skills
- Description of wounds/lesions
- X-ray interpretation of findings in forensic situations
- Handling, preservation and transportation of evidence
- Different types of format used for writing PM findings
- Sketching skills
- Photography skills (digital recording and interpretation)
- Making diagnosis (Know as how to differentiate from other probable diagnosis)

Type of Center	Postmortem Services	Clinical Forensic Services	Referral
Primary Health Centre (PHC)	Natural Death, Accidents, Asphyxia (Hanging, strangulation, smothering, drowning), fall from height, Poisoning, Murders (stab, blunt objects)	Injury, Poisoning , Sampling of any case in emergency First aid in any case	Can refer cases asphyxia, factory accidents , female/ maid servant deaths and Sexual assault if not competent with his skills.
District Health centre (DHC)	All above mentioned cases plus dowry death , custody death, encounter death, board cases, maternal deaths, firearm , murders and other deaths	Dealing with all types of MLC cases X-ray and when Histopathology services are expected	Can refer where they find it difficult to work on case due to facilities and expertise
Tertiary Centre - Medical college level and super specialty centers. (TC)	All above cases plus medical negligence, encounters, skeleton remains, custody deaths, maternal deaths, Second autopsy ; must have capability to handle Crime branch and CBI cases, Expert opinion	Dealing with all above cases and all referred cases with advance facilities of smear examination, X-ray, Skeleton examination etc . It must all facilities and services including subspecialties like sexual cytology ,Subsequent opinion, scene reconstruction, age estimation, DNA Profiling, Toxicology	Must have capacity to handle all types of Medico-legal work. It should organize orientation courses for Primary, District and tertiary center workers. It must develop subspecialties of forensic like forensic histopathology, skeleton examination, radiology etc.

Note- The doctor referring the case to higher center must accompany the case to gain knowledge, expertise and confidence so that in future he can independently handle such cases in his own center.

- Rendering opinion on basis of findings (deduction from findings)
- Limitations (Do's and Don'ts)

POSTMORTEM CASES DISTRIBUTION AT PRIMARY, DISTRICT AND TERTIARY CENTERS

PHOTOGRAPHY ^{28,76}

All mortuaries should have minimum two digital cameras. In every case following photographs are highly recommended as a routine practice in every mortuary. It is very economical and easy to take photographs. These will be part of official record of mortuary under safe custody. Postmortem documentation consists of PM report, inquest papers, photographs, sketch, diagrams and investigation reports.

Photography should be carried out in a systematic and clock-wise manner and **overall** view, **midrange** and **close-up** should be taken in every case.

Overall view – for seeing relationship of body or injury with other objects.

Mid range- relationship photograph with other immediate body part.

Close-up – for detail of injury or item in view

All photographs should be taken with and without of reference number and scale. Photographs without reference and scale are good for viewing in totality and academic purpose as these scale and number markers may hide some part.

Minimum photographs in routine cases are

1. Scene photographs if scene is visited by Medical Officer or given by Investigative Officer (print/cd/pendrive).

2. Photograph indicating condition of body with clothing when brought.
3. Total body photographs – Front, back and both sides
4. Routine – Face, Face and trunk, groin and thigh, lower limbs from front and back of body.
5. Specific – Injury/lesion in relation to body; close-up shots.
6. Cause of death findings.

Where photographic facilities are not available then sketches are recommended for recording of injuries/lesions as these are best shown in sketches. Photographs/Sketches can be easily done by Medical officer. In addition to above, police/IO should bring his police photographers/ Videographer in murder, custody and board cases. All labels should be typed and should show case number and year like PM999/13AIIMS.

All photographs taken at the center by anyone (either doctor/ Morgue Attendant/ Photographer) will be transferred to master computer for safe custody in the designated folder with case number and year like A22/2012 or 2012- A 22 .

The doctor conducting autopsy can have one copy of photographs for academic or research or court use with understanding that these will not be used for any other purpose. These photographs should be made available to police or court only on written request as any other document in medico-legal practice. If photographs are required to be used for research purposes then a copy of project and ethical clearance should be asked from the researchers with written undertaking about proper use and not disclosing the identity of victim. Photographer can also work as record keeper for photographic documentation of the unit under supervision.

Full front view of body of with Clothing as case brought to centre	Full Back View of body with clothing	Right side of body	Left side of body	Face front view and both sides (3)	Full Front of body without clothing	Full Back of Body without clothing	Any special feature of interest	
P1	P2	P3	P4	P5	P6 P7	P8	P9	P10

Simplified plan for Photography after receiving body at Post mortem Centre Minimum 27 Digital Photographs

P11	Head and Neck
P12	From shoulders , chest and abdomen with upper limbs on sides
P13	From pelvis to upper part of thighs
P14	From lower part of thighs, legs and feet dorsum
P15	Soles close-up

Stage 0 - Face photographs of victim front , right side view

P16	Head and Neck
P17	From shoulders , chest and abdomen with upper arms of sides
P18	From lower back , buttocks to upper part of thighs
P19	From lower part of thighs , legs and feet
P20	Soles close-up

of face, left side view of face by morgue attendant on duty
 -----Identity Photograph in morgue

Right hand front and back with open webs	Left hand front and back with open webs

attendant file with entry number of register in medico-legal cases.

Stage 1- Minimum 10 photographs

Stage 2- 10 Photographs

Segmental standard Photography front of body

Segmental standard photography back of body

Stage 3- Four Photographs

Close up view of hands

Stage 4- as required

Rest of the photographs should be taken as per need of the case as each is unique in nature and presentation.

1. Injuries in detail with and without scale with midrange and close-up shots as per the need of case.
2. Special /remarkable observation as per the case

Photographs required by court /police from Forensic Department

Example of certificate to be given by doctor, if photographs taken at the time of PM are required by Police / Court

Certificate

This is to certify that photographs no 1-20 recorded on CD were taken by me (or name of photographer in my presence) in the mortuary on 4/5/2013 in relation to post-mortem no A 22/2013.

Name and Designation

Photographs are required by Forensic Practitioners in:

Clinical Forensic Medicine cases

Post-mortem Cases

Histopathology

Professional Examination photographs

Academic photographs for books and journals

Scene visit or scene reconstruction

Postmortem photography –**minimum shots** – Face, front of body, back of body and both sides with and without clothing (total 10 photographs).

Digital Photographs are equally good for academic as well as legal purposes. If we examine metafile of photograph file, it gives fairly good information about background. If resources are limited and there is no availability of rolls then digital photographs are must and should not be missed.

FORMAT FOR CRIME SCENE

(Modifiable-keep it simple and handy, it can be plain paper also)

Ref. Letter.....Telephonically called.....

PM..... No.....

Date.....Time.....

Time of arrival to scene.....

Location.....

Weather condition at scene.....

Temperature.....Humidity level.....

Outside weather at Morgue.....

Accompanied by.....

Investigating Officer of case.....

Initial Information/ PCR Record.....

Observation of surrounding

Observation of victim

- Position
- Clothing
- Wounds

Time Since Death

- Rigor Mortis

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- Postmortem Staining
 - Decomposition
 - Core Body Temp
 - Injuries visible
 - Insects
- Any other important finding
 - Blood/stains spatter
 - Items found in vicinity
 - Sketches
 - Impression

Female Clothing Chart (Also take photograph)

Clothing	condition	observation	Photograph	Sketch	peculiarity	tears	Stains	Trace evidence
Neck – Duppata/ Mufflar/ Neck collar etc.								
Upper part – Kameej/, T shirt/, Kurta / Kurti / blouse/ gown etc.								
Lower part – Salwar/ Pant /half pant/ Jean/Pyjami etc.								
Undergarment – panty/ underwear/ etc.								
Winter clothing – Woolen half or full pullover/ coat / Firan/ Kurta etc.								
Full naked body								
Half naked body								

Male Clothing (Also take photograph)

Clothing	condition	observation	Photograph	Sketch	Peculiarity	tears	Stains	Trace
Neck – Mufflar/ Neck collar/ tie etc.								
Upper part – Kameej/ T shirt/, Kurta / coat etc.								
Lower part – Pant / half pant/ Jean/ Pyjami/Lungietc.								
Undergarment – underwear/ Kachha etc.								
Winter clothing – Woolen half or full pullover/ coat / Kurta etc.								
Full naked body								
Half naked body								

Any advisory to IO and his team

Camera used

Crime Scene should be visited along with Consultant / CMO on Duty

This is modifiable crime scene visit plan and details noting can be developed according to need of the case as example given below for clothing description.

Signature

Female Clothing – condition, Clothing examination, chart, Condition

Observation, Photograph, Sketch. Special mention of peculiarity, Tears/ defects

Stains, Trace material

The basic processing of any evidence is identification of evidence, immediate position of other objects, way of lifting it/ preserving it, labeling, tagging, making ready for transportation and maintaining chain of custody.

Near by items – example

Bedsheet / Bed cover/ Quilt/ Shawl/ Blanket/saree / Duppata/Belt/ String/ Rope/towel etc.....

Example - Crime scene evaluation when a person is found dead on the spot

Check Points	Yes	No	Indeterminate
Who is the person?			
When he died ?			
How he died			
Any one else involved ?			
Who located ?			
Single death or group involved			
What time incident happened?			
When last seen alive			
Is it home / road /indoor / outdoor/ guest/ farm house etc?			
Scene Photographs			
Weather –clear/ cloudy/ foggy/hot/humid/ rainy/cold			
Raining-hard/ moderate/ light/drizzling			
Vegetation			
Rigor Mortis absent/ mild/strong / well established			
Is Rigor Mortis consistent with original position?			
Postmortem Staining-absent/ anterior/ posterior/ sides/ limbs			
Is PM staining blanchable on pressure?			
Is PM staining consistent with position?			
What is colour of			

PM staining			
Natural Orifices Mouth – foam/food/saliva/ Mucus/Blood/ cloth/ other Nose – Mucus/food/ foam/ blood / others			
Ears- Bleeding/			
Anus – soiled with blood/ faeces/foreign body/ lubricant – if found naked			
Genital organs, if found naked			
Describe injuries over exposed parts			
Items and their relation with body			
Resuscitation by family/ friends/ Attendant- Pinching/ Slapping/ Shaking/ holding arms/ push on chest/ mouth to mouth breathing / chest pumping			
Medical support Team- Mouth to mouth breathing/ Face mask breathing / Intubation/ Oxygen/ Chest compression/ IV line			
Hospital – IV line / Face mask breathing/ Ambu bag pressure breathing / Intubation/ Chest cardiac massage			
Clothing – clean/ soiled Blood/vomit/ mud/grit/Cut/ hole/ tear/ wrinkling/ fresh de-stitching Buttons-loose/ detached Appropriate to weather and location any Natural disease record			
Medication, if taken, details			

Visible wounds

Blood - Location, colour, direction, size, thickness, dry/ wet, spatter, shape.

Digital Camera has replaced sketches. By chance camera is not available then sketches are best and simple way of recording findings.

Photographs of genitalia of victim should be reserved for medical viewing only. Ordinarily these should not be given to police or court until unless particularly asked. For genital areas, sketches are best form of communication.

CRIME RECONSTRUCTION

In forensic practice, there are cases of hanging, strangulation, firearms, bodies over railway tracks, fall from height, vehicular death where suspicion of homicide is there. To make things clear, investigative team ask for reconstruction of events. It is basically a team work and comprises of investigative team, forensic scientists, forensic medicine expert and computer programmer to create graphics. Team is not fixed and it can be expanded or reduced as per the case.

Reconstruction is based on the ability to make observations at the scene, the scientific ability to examine physical evidence, and the use of logical approaches to theory formulations.¹⁶¹

These request may be immediate or late depending on complexity of crime. One must be clear of terminology of reconstruction, re-enactment, re-creation, and criminal profiling.

Reconstruction is based on the ability to make observations at the scene, the scientific ability to examine physical evidence, and the use of logical approaches to theory formulations.

Re-enactment Refers to having victim, suspect, witness or other individuals to re-enact the event that produced the crime or the physical evidence based on their knowledge of the crime.

Re-creation is to replace the necessary items or actions of the crime scene through original scene documentation.

Criminal Profiling is a process based upon the psychological and statistical analysis of the crime scene, which is used to determine the general characteristics of the most likely suspect of the crime.

Basic Training for reconstruction

This training is imparted to forensic medicine experts during their training. This is how to make reach to conclusions in such complex situations. In any case, necessary steps of reconstruction are scientific training, scientific principles, logical methodology, common sense Observation capacity, experience, interpretation, analysis and theory projection.

Sources of Information and physical facts

Sources of Information remain crime scene, physical evidence, records, statements, witness account known data, previous events of similar nature, crime Scene photographs, sketches, postmortem report, chemical analysis report, FSL report on physical evidence – fibers, slides, DNA, bullets

etc, Notes, crime scene reports, visiting of scene, orientation, any experimentation, previous reconstruction, photographs, videotapes of scene, postmortem,, measurements analysis and reconfirming hypothesis.

Limitations

Limitations of reconstruction remains limited knowledge, poor training, untrained staff, reasoning flaws, limited resources, circumstantial information is poorly collected, design of reconstruction is on wrong lines, hypothesis error, pre-determined goal, wrong comparison, lack of personnel.

Format of reconstruction report must have request for reconstruction, need for reconstruction, team constitution, reviewed material on record, views about previously expressed view/reports, study sketches, photographs, labeling of observation in photographs, doubts or further enquiring points, missing link, tabulation of facts, observation, linking, hypothesis, re-evaluation, peer discussion with presentation. There could be more points depending on nature of case, it is absolutely flexible.

All events should be put in chronological order and important observations should be noted. A reasoned answer is appreciated more by the courts and dogmatic opinions are rated poor. It should not have subjective bias.

Opinion expression can be a comparative statement, disagreement and could be expressed as consistent, inconsistent, most probable, most likely, inconclusive, could be, cannot be determined on available material.

Medical investigation is based on:

- Observation (open eyes, attentive ears, alert mind, control tongue)
- Collection of facts (medical, circumstantial, personal body habits)
- Noting all external and internal findings in the case systematically
- Investigation as required (biochemical/ toxicology/ ballistic/DNA etc)
- Time sequencing of available facts – chronology of events
- Marshalling of facts, identify the problem and their possible answers
- Identify the main reason for –immediate cause of death and event responsible for it i.e. multiple injuries as a result of road traffic accident or like
- What are logical alternatives? could something else also lead to this
- Precedents in scientific literature, papers, case series on similar problem

- Probabilities – weighing other important findings and ruling out others
- Record evidence – making detailed report of material of relevance
- Main findings – summary (clinico-pathological-medico-legal relationship)
- Shifting facts to drive some opinion on basis of your training and knowledge
- Conclusion/opinion to the best of your knowledge and belief

X-RAY USE IN FORENSIC PRACTICE

X-ray is advised in following conditions:

1. Firearm cases
2. Burnt remains.
3. Age estimation.
4. Foreign body within body.
5. Drug smuggling through sealed packets in body cavities, gut and genitalia.
6. Air Embolism.
7. Bony Peculiarities helpful in identification.
8. Any other condition as per need of the case and circumstances like child abuse, poly trauma, documentation of pattern of fractures, decomposed, skeletonized remains etc.
9. Sudden Death of young or middle-aged person mainly foreigner at airport or during air travel.
10. Medical negligence cases where air embolism, wrong placement of endo-tracheal tube, leaving of surgical instruments is suspected.
11. Road Traffic Accident to understand and record pattern of skeleton injuries.

Henceforth, we can consider taking minimum set of x-rays when a traumatized person (MLC) is brought to hospital in following order Head and Neck (AP and Lateral view), chest, abdomen with upper limbs on sides, pelvis and thighs, knee, lower limbs and feet. These will work as good evidences and will be helpful in locating skeleton trauma in suspicious cases or cases mentioned above. This will be helpful in giving quality services and is very cost effective. As forensic cases are usually of serious nature so this much of cost can be afforded easily by state/ hospital providing these services.

BASIC RULES FOR SAMPLING/EVIDENCE COLLECTION^{14,45,47}

All samples and evidences over the body should be collected legally and should be properly documented.

Whenever, it is suspected that victim had contact with assailant. The following samples are must:

- Blood.
- Blood in Gauze piece (dried and preserved).
- Body hair of involved /injured part.
- Scalp hair if scuffling /injury (Hair Standard sample (20-30 hair) from different parts of scalp or injured part after plucking).
- Nail Scrapping /clipping.
- Photographs / Sketches of important findings and injuries.
- Clothing as worn by deceased (must in all cases except natural deaths).

For rest different situations, please read individual section and sample collection.

PLAN FOR POSTMORTEM EXAMINATION

Planning to do a case, depends on your preparation to face the challenge.

Every case is unique as particular individual has died first and last time. It is like a planning for good operation which has to be carried out by autopsy surgeon. We feel more comfortable and can expect good results if a case is handled in systematic manner and following suggested way for working out cases in more efficient way. In postmortem examination, we can visualize a case with following essential workouts stages.

Stage A

- Inquest papers findings
- Crime Scene Scenario assessment
- Pre- autopsy workout
- With Clothing examination
- With clothing photography

Stage B

- Examination of body after taking off clothing
- Photography after taking off clothing
- Evidence collection continues
- Cleaning of body
- Examination of injuries with dimensions
- Photography of important injuries and findings
- Sketch preparation of injuries
- Photography with orientation in relation to body and close up shots

Stage C

- Internal Examination.
- Important findings noting and photography.

Stage D

- Cause of Death
- Opinion framing in relation to queries raised by IO.

Essential documentation after above steps:

Certification

- Postmortem Certificate
- Cause of death certificate
- Postmortem report

*All possible evidences as per requirement of the case and request of IO should be collected from the body as it may be **last opportunity** to retrieve.*

SURGICAL INCISIONS FOR OPENING BODY^{14,39,45}

These methods are mentioned for convenience, any deviation or modification can be done according to need by autopsy surgeon.

Head: Incision from one mastoid tip to another mastoid tip – coronal section.

Neck Opening:**A. Front of neck**

- I shaped incision from chin to suprasternal notch (most common in all except asphyxia deaths).
- Y shaped incision – from mastoid tips to suprasternal notch (most common in asphyxia deaths).
- T shaped incision – an incision at nipple level extended towards neck (can be carried out in asphyxia more so in traumatic asphyxia).

B. Back of neck (when indicated)

- 'I' shaped – occipital protuberance to prominent spine process (method of choice).
- Y shaped.

Back of trunk (when indicated)

- Flaps method 'H' shaped by giving one incision at shoulder level from acromion to acromion and then going downwards till sacral area and then giving horizontal incision at iliac crest level.
- 'I' shaped Incision

Incision to see buttocks (when indicated)

Incision along with gluteal folds

Incision to calf (when indicated in DVT)

Over back of leg I shaped or T shaped

Soles (when indicated)

I, T, H shaped incision

Finger or toes (when indicated)**I, T or H shaped incision**

Internal organs can be dissected cavity wise or en-bloc or organ by organ or in-situ as per the need of the case. Basic rule is that all organs should be examined as we do not practice partial autopsy in medico-legal cases. In cases of fulminant TB or HIV, dissection and exposure should be minimum so in-situ is acceptable but not in other types of cases. Flexibility in adopting evisceration technique is permissible.

PERSONAL PROTECTION AND CARE IN AUTOPSY ROOM^{1,2,14,39,45}

There should be special structural design as well as special operational procedures to safeguard the health of all personnel working in the autopsy room.

The autopsy room must be properly ventilated, illuminated and clean. There should be ample running water. Air supply should be from ceiling to the floor with exhaust at the floor level to avoid turbulence. The room must be separated so that no infected material is sent out without proper disinfection. Daily cleaning and disinfection must be done. Odor control, use of ultra-violet lamps after the end of the working hours and weekly fumigation is must. It is advisable to have a separate area for high risk cases with minimal exposure and with facilities for exhaust air supply to the workers. Unauthorized entry to the autopsy room must be prevented.

Those working in autopsy room must be educated regarding the infectious hazards and preventive measures, personal safety and the safety of the others, first aid measures etc before taking up the job. They must be immunized for tetanus, tuberculosis, hepatitis B, etc. They must be subjected to periodical medical checkup including X-Rays if necessary.

Whenever working in the autopsy room caps, masks, autopsy room suit, gowns, aprons, gum boots, double gloves must be worn. Use of goggles or visors is also advisable.

While doing autopsies care must be taken to prevent unnecessary soiling of floor, walls and instruments and splashing of blood, body fluids and water. Due care must be taken to prevent injuries to self and others.

First aid facilities must be available in case any accidental injury happens. In case of accidental cuts and pricks, contamination must be avoided and bleeding must be encouraged with washing under running water. Splashing to eyes must be dealt by washing with cold running water immediately. Any accident happened in the

autopsy room must be reported to the infection control section and the victim must be follow up. Special screening of the victim must be done periodically.

The instruments must be kept clean and in good working condition. All instruments must be washed with

disinfectant after use. Flakes of dried blood must be removed with brushes.

Ideally the instruments must be autoclaved. But instruments kept in Lysol (1:40) for 2 hours can be considered safe to use. Biological and other materials must be disinfected and disposed in a proper way to prevent

Routine Cleaning Agents in Mortuary

Phenolic substances 2% solution	Active against most bacteria including tuberculosis Not effective against viruses	Floor , drains, walls , instruments, boots , clothing , tables
Hypochlorites 1-10% solutions depending on infective material	Effective against viruses Also effective against HIV and Hepatitis	Blood spillage Infective cases HIV and hepatitis Corrosive to instruments
Savlon Solution	Clean instruments with liquid soap and wash in running water and keep in savlon solution	Instruments All other used material for dissection
Gluteraldehyde 2%	Highly infective cases	HIV , Hepatitis , flues etc.
Fumigation	It can done on weekly basis	Helps in controls insect , mosquitoes , flies
Mosquitoes repellent spray	Once in week	Helps in controlling mosquitoes and flies

them from being a public health hazard.

Infection can be acquired in mortuary by inhalation, cuts, percutaneous inoculation, contamination of mucus surfaces of orifices, ingestions and infective material over skin surface. There are four varieties of pathogens divided on basis of their virulence, transmission power, preventive and curative response. For details any textbook or site of Royal College of Pathologist may be consulted. Good hygiene, follow up of universal guidelines, had washing, using face masks, gloves, disposable gowns can avoid infection in majority cases. In India tuberculosis, hepatitis and meningitis remain a threat.

Where possible pre-autopsy screening of HBV, HCV and HIV can be done in postmortem blood and results are quite reliable.

Steps for cleaning autopsy instruments

1. Keep all instrument in a steel perforated tray with the help of forcep.
2. Wash under running water and remove all biological material.
3. Put in soap solution and clean with ordinary brush with touching.
4. Wash in running water again.

5. Put instruments in cidex solution tray.

AUDITSHEET

FACILITY/PROCEDURE	YES	NO
Ventilation, lighting, running water adequate?		
Workers aware of risks?		
Immunization of workers complete?		
Personal Protection Devices available?		
First aid facilities available?		
Accident reporting and follow up planned?		
Proper disposal of biological material arranged?		
Weekly Mortuary cleaning		

Basic **minimum** requirements – Plastic apron , head cap , gum boots, gloves and face mask, liquid soap, running water are must item in any autopsy room.

Social Forensic Message

Tuberculosis is common disease among pathologists and if you are careless then HIV and hepatitis can be in bonus.

SAMPLING AND SPECIMEN PRESERVATION^{1,2,3,14,39,45}

SPECIMEN FOR TOXICOLOGY

Total body **weight** and **length** of the body should be considered before interpretation of the concentration of

substances. Therefore weight and height have to be recorded. Personal details (age, sex, occupation, brief history of illness & symptoms), postmortem interval, date and time of sampling, nature of any preservative used, condition of storage, poisons suspected have to be provided.

In cases of suspected foul play, strict chain of custody must be maintained to avoid any challenge in court room by defense lawyers in the form of proper labeling, proper sealing, safe storage, proper handing over and receiving. Mortuary office contact number should be provided to the laboratory for any further clarification on request form.

Any risk such as HIV, Hepatitis must be conveyed to all those handling samples. For toxicology analysis fresh samples are best wherever facilities are available. In case, there is expected delay of more than one day after collection and immediate refrigeration then Sodium Fluoride and Potassium Oxalate should be added to blood to retard putrefaction changes.

It is a good practice to preserve **two set** of liquid samples, one with preservative and another plain without any additive (in cold storage). There is no harm to preserve little extra quantity in sensitive cases (murder, dowry death, death in custody, foreigner, sex- murder, negligence, public dignitary etc)

Blood

Peripheral Vein blood (Femoral, Jugular, Sub-clavian) is preferred. Blood can be syringed out or can be taken after opening the veins. Keep the sample in a screw cap bottle containing NaF (Sodium Fluoride) and Potassium Oxalate. Vacutainers can also be used as these are already sealed.

100mg of NaF and 30 mg of Potassium Oxalate to 10ml of blood should be added. Roughly it is one pinch of these salts.

For toxicology, basically serum is utilized for toxicological screening and cellular sediments are discarded. It is always better that collect 50/100ml in one tube, centrifuge it and preserve upper part and discard bottom part. This can save large amount of fluid for wider screening.

This is suitable for Ethanol, Methanol, Cocaine, other abusive drugs, CN, CO and other Poisons. In the case of Cocaine, plastic bottles should be avoided. In cases of CN and CO airtight cap should be used. In cases of volatile poisons a thin layer of liquid paraffin is advised over the top of collected fluid to avoid evaporation.

For insulin and Cortisol levels- Serum should be separated immediately.

For Glycosylated Hemoglobin- Heparinisation of the sample to be done.

Urine

Catheter samples or Supra pubic puncture samples can be collected from urinary bladder.

100mg sodium fluoride for every 10 ml of urine is recommended. 30 ml in NaF or thymol is desirable quantity.

A pinch of Phenyl curate and little Thymol should also be added in urine samples as a preservative.

Bile

It is suitable for Morphine and other Opioids, Drugs like Chlorpromazine. It can be obtained after opening of gall bladder or full gall bladder with adjoining tissues can be kept for analysis. Bile may be extracted in 20 ml wide mouth bottle as it is thick fluid and normal preservative NaF can be added if there is delay in chemical analysis.

Vitreous

It should be aspirated into a syringe with a wide bore needle especially when blood is not available due to decomposition.

This is mainly used for sugar, electrolytes, urea and creatinine estimation. But it can also be used for toxicological analysis also. Aspiration can be done with syringe of 5ml with needle size of gauze 15/16/17. A portion of the vitreous should be preserved with NaF on similar way as for blood samples. After taking sample, fill equal amount of water or saline so that eye can retain its original shape and contour.

Cerebrospinal Fluid

This is mainly used for microbiology and virology.

Lumbar puncture, cisternal puncture before dissecting the body or from the space in front of Pons after the opening of skull but before removing the brain or from the lateral ventricles can be performed to collect CSF.

NaF should be added for toxicological analysis. Aseptic procedure should be followed in bacteriological studies. (See below).

Stomach Contents

Open via greater curvature and collected in to wide mouth jar without contamination. Container with screw cap lid is used.

Preservative is added, if there is delay before sending to Laboratory.

This is used when ingestion of poisons or drug over dose is suspected.

Loops of small bowel

Both ends of small intestine of about 10- 30cms is tied and put into large containers. It is routinely preserved in poisoning cases. Intestine contents and intestine walls should be examined in obstruction typhoid, tuberculosis or as indicated in the case.

Loops of large bowel

These are not taken routinely. Chemical analysis is indicated when heavy metal poisoning is suspected. (Arsenic,

Antimony, etc).

Other tissues

Usually these are taken when there is no way to collect fluids due to decomposition, charring or advanced mutilation.

Liver-50-100g away from portal tract with total weight of liver.

Brain, Spleen 50-100g

Muscle -50-100g

Muscle, Skin tissue, Puncture Marks in injection cases (Insulin, Morphine, Heroine, Cocaine, other drugs or toxins) without preservatives is preferred if it is to be examined immediately. Otherwise preservatives should be added. Normal preservative in majority of cases remain saturated solution of common salt (Sodium Chloride).

In cases of insect or snake bites, fang marks should be preserved for histopathology and immunology studies. FSL does not do these tests, hence local arrangements with microbiology department has to be made. One control sample of skin one cm² size should be kept. In cases of heavy metal poisoning scalp or pubic hair and bone piece can be subjected for analysis.

Commonly saturated solution of NaCl, alcohol, thymol remains the common preservative. These tissues are usually preserved when body is brought in advanced stage of decomposition until unless specifically required.

Specimens For Biochemistry

If Postmortem blood is unsuitable

Vitreous humour should be taken with wide bore needle in to a syringe. Eye should be filled with water thereafter for cosmetic reasons.

Potassium and other electrolytes, sugar (Glucose), urea and creatinine can be done using vitreous.

Cerebrospinal fluid can also be used for this purpose.

Specimen For Microbiology

Smears

Smears can be prepared using pus collections/mucus/ other tissues and body fluids. After fixation in alcohol, Gram Staining, Ziehl Neelsen, special fungal staining can be done as indicated to identify organisms.

Blood Cultures

Blood Samples can be taken from large veins after cleaning the Skin with antiseptics, with gloved hands using a sterile needle and a syringe. As a double precaution, needle is heated in flame of spirit lamp (to destroy the germs derived from the nearby areas), blood sample is introduced into Culture Bottles. Sent immediately to laboratory or stored at 4°C.

Alternatively blood can be taken from heart after searing the surface with a hot Iron Blade with sterile syringe and needle. But contamination is high with gut flora.

This sometime will not give positive cultures due to high antibiotic levels prior to death.

Swabs from valve vegetations can be collected under sterile condition.

Spleen Culture

Sear the surface with hot blade, make a hole with a sterile blade and plunge a sterile swab into the organ and put into culture bottle. It is indicated in cases of transfusion death, infections. There is no need in routine cases.

Cerebrospinal Fluid

By Lumber puncture, cisternal puncture, from ventricles (after opening the skull) under sterile conditions and introducing into culture bottles.

Swabs

From nose, pharynx, trachea, bronchi, or deep air ways can be collected under sterile conditions in to Viral or Bacterial culture bottles as in suspected Avian Flu cases.

Specimen For Histology

Routine tissues

Liver, Spleen, Kidney, Heart, Lung, Thyroid, Adrenals, Pancreas, Muscle, Brain or any other tissue as indicated. In some cases more than one sample is taken as indicated. 2 cm size sample is best as formalin can penetrate to this level so causes effective preservation. Standard Size is 20mm x 12mm x 5mm in to a container with 10% buffered formalin. Ideally, tissue: formalin volume should be 1:6 or at least level of formalin should be well above tissue piece.

The buffered formalin is preferred for better preservation, reduce formalin pigmentation, reduce antigenic determinants and to reduce degradation of DNA / RNA material. Tissue fixation is done to prevent autolysis, retard degradation of tissues and to maintain original appearance of tissue.

Formalin pigment may appear as black birefringent shiny deposits in tissue sections. These black deposits are prominent in blood rich areas. These can be avoided by buffered formalin. This pigment is acid formalin hematin pigment, and it is formed by reaction of formic acid in unbuffered formalin with haem part of haemoglobin.

To describe any lesion should include **shape, capsule, size, colour, consistency, relationship with near by structures, extent of lesion**. If multiple lesions are there then overall description and important findings.

Description of shape: Circular, convex, concave, cuboidal, cylindrical, elliptical, fusiform, fimbriated, leaf like, flowery, angulated, rectangular, oval etc.

Margins of tissue: Bulging, circumscribed, cystic, tooth like (dentate), encapsulated, fragmented, septated, smooth, wavy, wrinkled, angulated tortuous etc.

Colour of tissue: White, pale, black, bluish, brown, dark-brown, light yellow, yellow, green, grey, greyish, orange, purple, red, tan coloured, etc.

Consistency of tissue: Firm, friable, soft, fleshy, caseous, cystic, bony-hard, mucoid, rubbery, gritty, pliable, soft, spongy, thin, thick etc.

Appearance: Gelatinous, glistening, shiny, slimy, moist, granular, honeycombed, broken-up. Macerated, multinodular, multicystic, transparent, opaque, velvet etc.

Decalcification of hard tissues/ vessels

Reason - Hard tissues damage microtome

1. First preserve tissue in formalin for 2 days
2. Decalcification is done in Nitric Acid - few hours under monitoring

Staining in routine and specific situations in forensic practice:

Routine stain in histopathology and cytology – Haematoxylin and Eosin

Aminotic fluid: Alcian green – phloxine tartrazine; keratin stains red with Phloxine tartrazine while mucin is stained green with Alcian green.

Amyloid: Congo – red for larger areas and Crystal violet for small amyloid globules

Calcium: Alizarin red S

Collagen tissues: Van Gieson (red) and Masson Trichrome (green)

Elastic fibres in **blood vessels:** Elastic Van Gieson (EVG) – Black

Fat or lipids: Oil-red (red) and Sudan Black (black)

Fibrin: Martius scarlet blue (red)

Glycogen/glycoprotein/mucin- Periodic-acid Schiff (PAS): red

Hemosiderin – Perl's stain – blue

Muscles- Masson Trichrome (red)

For immediate results Frozen Sections can be taken using Liquid Nitrogen and Microtome and stained with H&E.

If such facilities are not available, smears can be prepared on slides and stained with Leishman or Giemsa.

BONE MARROW: Smears should be taken into albumin and glycerin media and fixed with methanol and stained with Giemsa.

Chromosomal Studies

Facia lata sample is grounded and suspended in serum

containing antibiotics. Then growth is inhibited with Colchicine and chromosomal studies done.

For DNA Profiling

1. Blood 10ml in EDTA bottle (purple bottle)
2. Blood on blotting paper, dried and preserved
3. Blood stains on gauze piece after rubbing on them over organ / muscles/ fetal skin. Dry the gauze piece and preserve it in paper envelope.
4. Tissue samples (ideally liver, heart, kidney, muscles or fresh soft tissue of any solid organ) in plastic tubes/ packets frozen at (-20 degree centigrade). Solid organ 50-100 grams are sufficient for DNA profiling.
5. Dental Pulp, Hair root in decomposed bodies
6. Skin
7. Bones – usually sternum, clavicle or long bones. Preserve these bones without any additive if there is no delay in examination. Otherwise, remove wetness from extracted bones and preserve these in paper and keep in fridge. If these are to be preserved for longer time then absolute alcohol or 70% alcohol or saturated saline remains ideal preservative. Never preserve tissues and bones in formaldehyde as it denatures protein and make DNA extraction very difficult.

Blood is the best sample for DNA profiling. In decomposed cases when blood is not an option then teeth are next best samples. For safer practice long bones, ribs, vertebrae may be cut and frozen. For cutting bone, always use **fresh or properly cleaned blade**. Blades may be cleaned with Sodium hypochlorite or commonly used with bleach or soap solution at the centre. Bone cutter used for skull opening on routine basis should be avoided if there is alternative otherwise follow above suggestion of cleaning blade and base of saw.

Never Use Formalin to Preserve if DNA Profiling is Requested

Sample in sexual offences

For semen stains preservation either in gauze piece or plain cotton - wool swabs must be used. Samples should be **dried** before packing, otherwise, these will get decomposed.

Swabbing from following sites is done to obtain stains, focus remains on DNA profiling and semen traces.

- Around the vaginal orifice and the interior of vulval labia
- Mid vagina
- The upper vagina, posterior fornix, cervix and the using a speculum if permitted
- If more fluid is seen in high vagina pipette can be used to collect these

- From margin and interior of anus as indicated
- If dried semen is suspected on clothing, body or pubic hair cotton swabs moistened with saline can be used.
- Slides should be prepared for examination of spermatozoa (wet smear examination at spot).
- Swabs can be used for examination of prostatic acid phosphates and Prostate Specific Antigen.
- Swabs can be preserved in deep freezer for DNA studies
- Pubic hair combing samples can be retained for comparison with suspected hair found with suspects
- Any matted pubic hair with semen for sperms, semen and DNA profiling
- Nail clippings or scraping can be preserved for comparison and analysis.(DNA, Traces)
- Bite mark swab for DNA profiling
- Bite marks photographs with scale for identification of accused
- Teeth photographs of victim for comparison if accused has some bites
- Swabs should also be preserved for oil/lubricant present over condoms (to establish penetration)
- Any visible lubricant or cream used (for penetration)

Sample selection and direction to laboratory about expectation from sample

Sample	Expectation	Care during sampling	Duration
Vaginal swabs – Four FSL samples 1.Outer part labia majora 2. Opening 3. Poster part of vagina 4. Cervix ----- Hospital Samples 1.Culture swab	Semen, saliva, blood, infective material Ask for DNA profiling of accused P30 Prostatic Antigen Acid Phosphatases ----- Culture for infective material	Always dry the swab before preserving	One week
Vaginal smears -4 smears From Outer part From inside ----- One wet smear ----- Vaginal wash with normal saline(after above sampling only)	Presence of spermatozoa Blood if injury Vaginal cells ----- For hanging drop preparation Hanging drop preparation	Air dry smear Fix in 70% or absolute alcohol It is examined by examining doctor for motile spermatozoa and % of motile sperms	
Forensic	Samples Continues.....		
Oral swabs	Saliva ABO Grouping DNA Profiling	Air dry sample	Three days
Blood in Gauze piece	For reference standard blood of female	Dry the blood soaked gauze	Any time
Breast swab	Saliva DNA profiling	Dry the swab	72 hours
Bite mark swab	Saliva DNA Profiling	Dry sample	72 hours
Bite mark preservation	Cast making for comparison Photography with scale on sides of bite injury	Always take multiple shots of overall , mid range and close-up	Any time till it is visible
Matted Pubic hair	1.Cut the bunch with scissor 2. Prepare smear	Dry and keep in paper envelope Sperms	In not bathed , any time
Pubic hair combing	For foreign hair(assailant) Hair for standard comparison if female hair is found in male	Keep in white paper or can be kept in small glass bottle, Seal for FSL	72 hours
Injuries over body	Proper description of all injuries and take multiple shots of overall, mid range and close-up	Photographs should be with and without scale. Genital injuries should be represented by sketch for court and police purpose.	Any time till these can be recognized visually or artificial UV light
Nail scrubbing or clipping	For foreign skin, blood, hair and fibres	Keep from both hands separately	One week
Urine	For date rape drugs	GHB, Benzodiazepine or like	One week

Always dry samples before preserving for Forensic Science Laboratory

<i>Red tube (plain tube)</i> • Serology – Hepatitis, HIV, Dengue Full Blood Count • Endocrine-Cortisol • Liver functions • Renal function • Electrolytes	• Bone Marrow • DNA studies • Glycosylated Hemoglobin • Hemoglobin content, Hemoglobinopathies
Yellow Tube (SST II Bottle) • Blood Urea • Serum creatinine • Serum Electrolytes	Gray Tubes (Fluoride) • Common drugs (opiod, heroin, cocaine, amphetamines etc) • Blood sugar • Blood Alcohol

Quantity Requirement with modern techniques

Blood- 10-50ml

Urine- 25-50ml or as available

Vomitus - 100 grams or as available

Liver, Kidney, Spleen- 100g each

Vitreous- 2.5-5 ml or as available

Bile –as available

Muscle- 100g

Solid organs- 100 grams

Old practice is in place to preserve maximum quantity, please consult requirement of laboratories where samples are going to be analyzed in your area. Ask laboratory for any clarification. Number of FSL laboratory should be available.

Old practice in place is, one jar contains liver 500g, spleen half and kidney half from both; another jar contain stomach, stomach contents and small intestine first 30 cm ; all are preserved in saturated solution of Sodium Chloride/ common salt. One bottle 100ml blood with added half little spoon of Sodium fluoride and Potassium oxalate. Discuss with your laboratory for guidelines on the issue.

There are limited laboratories and their workload is very high so only in genuine cases where it is mandatory or specific request to get the toxicology results, one should send samples. It should not be a time buying tactic. Good preservation of samples may yield good result not casually packed material without preservative.

List of sampling which should be performed by autopsy surgeon are:

1. Femoral blood collection

2. Vitreous humor aspiration
3. CSF aspiration
4. Synovial fluid collection from knee, elbow and ankle
5. Stomach content collection
6. Blood collection from heart
7. Collection of material for culture blood, pus, cavity fluids
8. Blood soaked dried gauze piece
9. Smear preparation
10. Swabs from different parts in sexual assault, bite marks, foreign material etc
11. Material for DNA profiling - Blood, bone, muscles, teeth
12. Tooth extraction, preservation
13. Long bones cutting and preservation
14. Skin rubbing from fetal skin
15. Nail scrapping
16. Nail clipping
17. Pubic hair combing
18. Pubic hair collection (pulling and cutting)
19. Head hair combing
20. Head hair collection (pulling and cutting)
21. Botanical material from body surface and clothing
22. Soot and inflammable material from scalp hair, clothing, ear and nostril
23. Blood smear preparation
24. Sphenoid sinus fluid aspiration
25. Swabs from body surfaces
26. Histology sampling from different organs
27. Sampling for diatoms in drowning cases
28. Swabs in firearm cases for gunpowder residue, paraffin cast preparation
29. Tissue collection, blood collection, stain collection at site/ from vehicle etc.
30. Faulty procedures and their consequences - full exposure, lab visit and demonstrations

A full orientation course should be given to doctors before they start forensic autopsy work. A list of some samples is given for convenience of users.

Some common samples collection in Forensic Practice

Method of collection	Spot identification and collection photograph	Precaution
1. Femoral Blood Collection steps 1. Keep 10-50 ml syringe with wide bore needle ready for withdrawing blood from femoral vessels 2. Expose inguinal region 3. Clean area with salvon or spirit, wait till evaporation 4. Locate femoral artery -it is located midway between superior anterior iliac spine and pubic tubercle 5. Artery is approached perpendicularly, almost at 90°, it gives little resistance before puncture 6. If femoral is approached, it 1 cm medial to femoral artery 7. Aspirate blood 10ml to 50 ml as per requirement 8. Transfer to container 9. Put Sodium Fluoride and Potassium Oxalate (one pinch per 10ml or 1% of total weight like 1 gram in 100 ml blood) 10. Seal bottle with identification and case information 11. Prepare for transportation and handing over to IO		
2. Vitreous Collection 1. Take 5ml syringe with needle 15/17 gauze 2. Retract eyelid 3. Puncture eye ball on lateral part at oblique angle (60°) 4. Aspirate vitreous (1.5 to 3ml) 5. Transfer to bottle/ yellow top tube 6. Add Sodium Fluoride 7. Seal 8. Label 9. Take plain tape water and inject into eyeball to restore shape 10. Prepare / transport sample to laboratory		
3. CSF Collection (cisternal puncture from back of neck) 1. Take a long needle with wide bore 2. Attach with 10-20 ml syringe 3. Put a wooden platform under upper chest 4. Flex neck 5. Palpate atlanto- occipital membrane in the middle 6. Pierce the skin at this point with needle pointing towards nasal bridge 7. Go about 2 cm deep and feel resistance 8. Aspirate CSF 9. Transfer to tubes 10. Add Sodium Fluoride 11. Seal, label and make ready for transfer		
4. CSF (after neck evisceration) 1. Keep syringe and needle ready 2. Eviscerate neck structures 3. Clean area 4. Identify first and second cervical vertebrae 5. Pierce theca membrane between these via spinal foramen 6. Aspirate CSF		

7. Follow other steps as mentioned above		
5. CSF after opening cranial cavity 1. Open Skull 2. Dura is exposed 3. Can pierce dura after making nick 4. Aspirate CSF from sides and base 5. Other steps are similar		
6. Bile Collection 1. Keep ready one small wide mouth bottle ready 2. Open abdomen 3. Expose gall bladder 4. Take wide bore needle 5. Pierce GB and aspirate bile or (give a small cut and directly put bottle under it) 6. Transfer bile into needle 7. Add NaF 8. Seal, label. make it ready for transfer		
7. Bile collect after removing liver 1. After dissection when liver is taken out 2. Dissect whole gall bladder with contents 3. Transfer to bottle 4. Put preservative 5. Seal, label and transfer to laboratory		
8. Collection of Gastric Contents 1. Open Abdomen 2. Identify stomach 3. Ligate oesophageal end of stomach 4. Ligate pyloric end of stomach 5. Remove stomach 6. Open stomach and take out contents into a bottle (100 grams or as available) 7. Keep contents over glass slide and try to identify contents 8. Examine stomach and preserve it for chemical analysis 9. Take 30 cm of SI and its contents		
9. Synovial fluid 1. Take a wide bore long needle 2. Identify joint knee, ankle 3. Flex a little 4. Pierce at weakest point 5. Synovial fluid 6. It is thick fluid, oily fluid 7. Transfer it bottle		
10. Urine Collection 1. Give incision till supra pubic area 2. Expose bladder 3. Clean area 4. Puncture with wide bore needle and aspirate 5. Or give a small cut and aspirate by syringe without needle 6. Transfer it to 50/100 ml bottle 7. Put thymol 8. Seal and label it		

Investigation Face Sheet of Postmortem

No..... Dated

Example

Investigation	Samples	Purpose
Histopathology	Heart, lungs, Kidney.....	Hyper Tension changes
Haematology	Blood smear	Anaemia
Biochemical	Blood Vitreous	Lipid profile Electrolytes, Sugar, Urea
Microbiology	Culture from Brain	Meningitis
Forensic samples	Viscera	Toxicology
	Vaginal swabs	Semen
	Blood	DNA Profiling

Audit Sheet

Check points	Yes	No	Remarks
Guidelines for preservation of different samples available?			
Preservative containers/ tubes available?			
NaF, Saturated Saline, Alcohol thymol available?			
Procedure adopted for collection of samples?			
Sample taken from correct place?			
Sample taken to correct container?			
Correct preservative added?			
Proper Labeling?			
Proper Storage?			
Specific request for testing a substance/differential diagnosis?			
Complete Details of case findings are given?			
Integrity of material?			
Chain of custody maintained?			
Probable Diagnosis?			
Any other query like poisoning /drugs etc			

Basic Rules for sampling/evidence collection^{14,45,47}

All samples and evidences over the body should be collected legally and should be properly documented. Whenever, it is suspected that victim had contact with assailant. The following samples are must:

- Blood
- Blood in Gauze piece (dried and preserved)
- Body hair of involved /injured part
- Scalp hair if scuffling /injury (Hair Standard sample (20-30 hair) from different parts of scalp or injured part after plucking)
- Nail Scrapping /clipping
- Photographs / Sketches of important findings and injuries
- Clothing as worn by deceased (must in all cases except natural deaths)

For rest different situations, please read individual section and sample collection.

Good practice is an important step to deliver justice to case.

SUDDEN ADULT NATURAL DEATHS^{1,2,4,5,6,7,10,11,14,39,45,61,80}

Preliminaries

1. History

Name of the Deceased, Age and Sex

Time, Place and Date of Examination

Introductory Comments- Scene and Brief History of Incident.

Personal History- Occupation, Marital status and also history of sudden death in family.

Medical History- Previous and current illness and treatments.

Social History- Alcohol and Drug consumption, Smoking and Other habits.

2. External Examination

- Description of clothing.
- Height, Weight.
- General Description (Obesity, Emaciation, Dehydration, Hygiene etc).
- Identification features including Scars, Tattoos, Hair and Teeth.
- Signs of Medical intervention.
- Description of External Injuries.
- Postmortem Changes Lividity, Rigidity, Changes of Decomposition.

3. Internal Examination

i. Cardiovascular system

Pericardium and pericardial cavity description (thickening, adhesions) and contents, amount, volume and nature.

Heart- Description of

- Pericardium (Hemorrhages, Adhesions, Rupture).
- Myocardium (Thickness, Fibrosis, Fresh Infarcts).
- Endocardial (Hemorrhage, Fibrosis).
- Valves (diameter, Thickening, Vegetations, Adhesions as indicated).
- Wall thickness(Right and Left Ventricles) near valves.
- Weight of the heart after removing clots (Total Weight and Right and Left Ventricular Weights separately where desired and indicated).

Coronary arteries description, distribution of Right and Left (Anterior descending and Circumflex) coronary arteries, atheroma, thrombi and severity of narrowing and Bridging

Major arteries- Carotid, aorta, internal thoracic renal arteries as indicated

ii. Respiratory system

Pleural cavity: Adhesions, contents and its nature and volume should be described

Larynx, pharynx: Position, integrity, and contents like blood, froth, fungus, water, mud should be described.

Trachea, Bronchial tree: Mucosa and contents (pus, blood and froth) should be described

Lungs: Description of external surface, cut surface and consolidation. Weights of Right and Left lungs

Pulmonary vessels: Description of atheroma and thrombi

Mediastinal nodes: Description as indicated

iii. Gastro-Intestinal system

Oesophagus: Description of mucosa, erosions as indicated

Stomach: Description of mucosa (erosions, ulceration, growths) and wall, contents- peculiar odour, volume and nature

Small and Large bowels: Description of mucosa, contents and wall as indicated

Liver: Weight, Description of external and cut surfaces and texture,

Gall bladder: Description of the nature and contents, size, amount etc. as indicated

Pancreas: Weight, description of nature of surface and cut surface as indicated

Spleen: Weight and description of the nature and texture,

Peritoneal cavity: Description of contents nature amount,

any adhesions

iv. Genito-Urinary system

Kidneys Weight, Description of the surface, cut section cortex and medulla.

Ureters and bladder Description and contents.

Prostate Assessment of the size, Description of the cut surface and the texture.

Penis and Testicles description as indicated, morphology, testicular size, abscess etc.

Cervix and Uterus – appearance, morphology, contents description as indicated.

Ovaries—size, weight, external morphology, cut surface or as description as indicated.

v. Central Nervous system

Meninges: Description of surface (bleeding, pus, thickening, adhesions).

Major arteries in neck and Circle of Wills: Description, distribution of atheromas, aneurysms

Brain: Weight, Description of Surface and cut surface and ventricular system, Description of CSF

SPECIMENS (This is mainly case dependent)

Histology: Organs should be targeted according to the case ^(1,2,4)

Heart: One section from each chamber and interventricular septum. More sections from affected part. Sections from Sinus and AV node sites. Sections from Coronaries as indicated.

Lungs: One section from each lobe and more sections from affected site.

Liver-one section from left and right lobe.

Brain- Sections from Cortex, Cerebellum and Brain Stem.

Adrenals: For hypertrophy, haemorrhage, pheochromocytoma

Toxicology: As indicated

Microbiology: As indicated

Radiology: As indicated

Summary of Major anatomical and investigation findings.

Cause of Death (according to International Classification of Diseases)

In “CAUSE OF DEATH” FORM

Medical certificate of cause of death:

Part a: particulars of deceased

Part b: cause of death

II: Incidental Finding / associated non-fatal findings

Comments

Death due to Natural Diseases or not

Brief explanation of the disease

Relevant Medico-Legal Issues Addressed

Postmortem Certificate

Filling of Postmortem Certificate should be carried in each case where PM report is not issued on same day. This is helpful document for burial / cremation / transport of body. In majority cases, cause of death is clearly determined at time of postmortem, so clearly mentioning it in certificate will be a great relief to the relatives and it solves their concerns.. A sample of post mortem certificate is given here as well as in death certification.

Post mortem Certificate***To whom it may concern***

This is to certify that Post Mortem Examination was conducted on the body of Son/
Wife/Daughter of

..... On
..... at Body
was brought for PM by Police
Station Through PC
.....

The deceased died due to
.....

Signature
Name
Department

Audit Sheet^{5,7}

Procedure	Yes	No
Identification of the person done?		
Risk factor identified in history?		
Specific external features noted?		
System-wise dissection done?		
Major Pathology identified?		
Other pathological findings noted?		
Cause of Death ascertained?		
Medico-legal issues addressed?		
Histology samples retained?		
Blood and other fluids retained as indicated?		
Proper documentation done?		
Further action taken as indicated?		

Common Causes

- Ischemic Heart Diseases

- Coronary Artery Disease
- Intracranial Hemorrhages
- Pneumonia
- Bronchial Asthma
- T B
- Epilepsy
- Diabetes Mellitus

Photographic evidence

- Photographs as per practice in each case
- Cause of death

EXAMINATION OF HEART^{14,16-21, 61,80}

Heart should be routinely examined as it is one of the vital organs of the body and frequently is the site of fatal lesions and diseases. It should be examined more meticulously in cases of sudden death, or with the history of hypertension or other cardiac diseases

History

- Hypertension
- Any heart disease: previous or current
- Family history of heart disease, hypertension or sudden death

Examination of precordium

If there is any lesion or injury suggestive of involvement of heart like large contusion, stab wound or fractured ribs, start examination after opening the sternum.

Pericardium

- Examine the pericardium while the heart is still in-situ.
- Determine if it is free from the underlying heart or adherent, keep in mind that adhesion may be focal.
- Whether the appearance is normal or dull.
- Any injury to the pericardium: old or fresh.
- Open the pericardium with inverted T-shaped incision: determine the content of the sac, the thickness of the wall, appearance of the visceral surface.

Heart

- Examine if the heart is attached to the great vessels with normal anatomical continuity or lying freely detached from other structures.
- Remove the heart with great vessels attached at least 1 cm beyond the pericardial fold.

If any congenital heart disease is suspected, it is better to eviscerate heart and lungs en block to retain the

connections of both the organ, especially in infant and child death cases.

External Examination

- Measurement of width at the level or just below of valvular region ; for the length highest point when heart is kept in normal anatomical position. Any concentric hypertrophy should be measured at that point.
- Measurements: for exact circumference (1cm below the AV sulcus) weight should be taken after dissection.
- Examination the external surface, any focally adherent pericardium, any visible fibrosis or recent infarcts, determine the age of fresh / recent or healing infarcts.
- Document any contusion, laceration or any wound to the heart (contusion over base of the heart should be differentiated from Lividity).

Internal Examination

- Dissect the heart: along the blood flow (usual way), along the short axis of heart to examine the AV valves in detail and by creating window if only focal lesions are present.
- Examine each chamber for: any visible fibrosis or recent infarcts, cavity dilatation, thickness of the wall.
- Examine inter-atrial septum: patency of foramen ovale
- Examine inter-ventricular septum: septal defect, membranous or muscular.
- Examine AV valve: circumference, any incompetence or stenosis, cusps: fibrosis, any growth or nodules, examine both the surface, atrial and ventricular.
- If artificial valves are there, look for its functioning, any blockage, any missing part.
- Examine cordae tendinae: shortened, adherent to each other or ruptured.
- Examine papillary muscles: infarction, adherent to each other or ruptured.
- Semi lunar valves: circumference, any incompetence or stenosis, cusps: fibrosis, any growth or nodules, examine both the surface, ventricular and arterial.
- Take the weight of the heart after the dissection of the heart.

Coronary arteries

- Right and Left: main trunk, anterior descending and circumflex, it's better to examine the coronaries before dissection of heart.
- Ostia of the coronaries should be examined for patency of lumen, any thrombus, plaque, concentric or eccentric narrowing. Coronary lumen narrowing is expressed in percentage and it is measured as cross-

sectional area of lumen. It can be expressed as 20% to 90 % narrowing , narrowing more than 70 % has demonstrable effect of myocardium. It can also be expressed in simplified way as 25 %, 50% , 75 % or 100% . If WHO criteria for measuring narrowing are followed then uniformity can be maintained otherwise subjectivity creeps in.

- Look for the anatomical normalcy of the arteries: their origin, path, bifurcation, their branches
- Better way to examine the coronary lumen is to make transverse incision along the artery 3-5 mm apart. Keep all sections serially and take photographs to demonstrate condition.
- Decalcify if the lesion is calcified otherwise crushing force applied to the vessel may dislodge thrombus or clot fragmented or make these hard walls cracked.
- Keep in mind, lesion over left coronary artery is mostly confined to proximal 3cms, while the lesion over right coronary is diffusely present along the artery
- Look for any embolism present within the coronaries: air embolism, fat embolism or thrombo-embolism

Parameters

- Weight of heart.
- Circumference of heart at highest level, usually near valves.
- Weight of right and left ventricle separately where indicated.
- Left ventricle is measured along with septum, right is measured without septum.
- In adults ventricular thickness of heart is measured perpendicular to epiradium and excluding trabeculated subendocardial muscle. Left ventricle thickness (at site 1 cm below the mitral valve is <15mm. Right ventricle thickness at site 1 cm proximal to pulmonary valve ring is <5mm.
- Thickness of all walls of four chambers.

How to measure separate ventricular weights

1. Transect heart at atrio-ventricular groove and exclude mitral and tricuspid valves.
2. Transect at the base of aorta and pulmonary trunk
3. Remove epicardial fat.
4. Separate right ventricle from left ventricle (septa remains with left ventricle).
5. Weigh right ventricle and left ventricle plus septa separately.

Weighing of heart¹⁶⁰

Combined weight of both ventricles should be less than 250 grams.

Right ventricle is usually less than 65 grams.

Left ventricle plus septa is usually below 190 grams.

Ratio (LV+S)/RV = 2.3 to 3.3.

Right ventricular hypertrophy : RV > 80g or LV+S / RV is less than 2.

Left ventricular hypertrophy : LV+S is more than 225 grams.

Routine Sampling

- Routine sampling: one section from anterior wall of right ventricle, one section from lateral wall of left ventricle, one section from right atrium, one section from left atrium, one from the ventricular septum, and sections from the lesions/suspected site.
- Sampling of the pericardial fluid for microbiological analysis if indicated.

Tissues for proper cardiac histopathology screening in sudden cardiac deaths / cardiac pathology cases as per need of the case

- Left ventricle – anterior, lateral and posterior wall
- Septum – minimum one piece or as indicated by morphology.
- Right ventricle – One or two sections.
- Right and left atrium – one piece.
- Conduction system – SA area, AV area, fibres area.
- One full coronal section 1-2 cm below valves or 4-5 cm

above apex of heart.

- In addition to above any abnormal looking area on naked eye examination.

Staining methods for cardiac tissues on histopathology:

H&E: for normal screening, MI, Myopathies, IHD, myocarditis.

Connective tissue stain – Elastic Van Gieson or Masso's Trichrome in old healed myocardium.

Amyloid changes – Congo red.

Iron deposits- Perl's Persian Blue.

PAS – Storage disorders.

Myocarditis- Immunocytochemistry for CD3, CD 20 and CD68 and H& E screening.

Toxicology – Alcohol, amphetamine, cocaine, Opiates in blood, urine and GIT contents. Toxicology screening may be required in some cases but not in all and depends on age and circumstances.

Special dye staining gross methods:^{16,17}

- Special dye used for identification of recent infarct areas is Tetrazolium dye: Nitro-Blue Tetrazolium and Triphenyl Tetrazolium Chloride.
- These dyes change colour of normal myocardium to purple-blue but infarcted area of myocardium remain unstained.
- These dye methods are not much useful beyond 12 hours.

Common Cardiac Conditions ^{Davies, RCPATH} and steps by autopsy surgeon

Appearance / disease	Macroscopic Findings	Expected outcome	Tissue / sample
Coronary vessels atheroma with blockage from thrombus ^f	Atheroma narrowing the coronary vessels and thrombus lodged in the lumen	Sudden death with necrosis of affected myocardium	Ventricles walls anterior, lateral and posterior, septum, affected lesion with adjoining normal appearing tissues. Coronaries with affected lesions with epicardial fat and myocardium below. See other arteries and aorta Take blood for cardiac Troponin T
Coronaries with atheroma with one or more vessel having < 1mm diameter with healed myocardium ^f	Whitish patches in myocardium of scarring. Narrowed coronaries with atheroma and one showing narrowing more than 75 % narrowing	High probability of sudden death	Narrowed part of vessels Myocardium showing scarring and macroscopic changes. Take blood for cardiac Troponin T
Coronaries with atheroma and one vessel showing narrowing of diameter < 1 mm but no evidence of healed infarction. ^f	Narrowed coronaries, one showing narrowing and having diameter less than 1 mm. Myocardium appearance normal	Possibility of sudden death exists and depends on circumstances	Take blood for cardiac Troponin T
Coronaries near normal No evidence of IHD Ischaemic Heart Disease but dilation/hypertrophy/	Hypertrophy of either of ventricular wall, congestive heart failure signs, dilation of heart	There is moderate possibility of sudden death	Ventricular myocardium Take blood for cardiac Troponin T
No significant coronary and cardiac pathology	Normal coronaries Normal myocardium	Less chances of sudden cardiac death	Full cardiac HP Conduction System Toxicology Take blood for cardiac Troponin T
Cardiac Myopathies	Thickened myocardium, enlarged heart. Fibers variability and disarray appearance on microscopic examination	Probable chances sudden death in stressed conditions like strained jogging, sports events and conditioning training of forces.	Full cardiac HP Vitreous for electrolytes and Sugar Take blood for cardiac Troponin T and Cholesterol
Myocarditis	Inflamed or more reddish heart Near normal appearance	Possibility of sudden death is there but depends on severity and circumstances. More than 5 cells per microscopic field	Full HP coverage from both ventricles and septum Virus screening from nasal washing, sphenoid sinus aspirate, tracheal /lung aspirate

Ref :Davies MJ. The Investigations of Sudden Cardiac Death. Histopathology 1999;34:93-98. And The Royal College of Pathologist ,2005.

For better understanding heart failures, following information is of great help¹⁶⁰ :

Acute heart Failure – Blood Investigation, ECG if available, C9 Immunichemistry, Cardiac Troponin, full macroscopic and histopathological screening of heart are quite helpful in making diagnosis

Chronic heart failure – Pulmonary hypertension, intravascular haemosiderin deposition and hepatic venous congestion. Histopathology evaluation of liver, lungs and heart is must in these cases.

Failure of heart supported with artificial devices- although rare but battery failure, short-circuiting, dislodgement, fractures, insulation breaks, mainly lead related problems can result in failure of already a diseased/ unhealthy heart.¹⁶⁰

EXAMINATION OF THE CONDUCTION SYSTEM⁷,

11, 17-22

When history is suggestive of involvement of conduction system or routine examination of coronary vasculature reveals occlusion of right coronary artery.

History

- Congenital heart disease, previous dysrhythmia
- Family history of dysrhythmia, sudden death

Location

- **SA node:** in the sulcus terminalis, at the summit of superior vena cava and right auricle
- **AV node:** lies in the right atrium between the coronary sinus ostium and medial leaflet of tricuspid valve within the triangle of Koch
- **Bundle of His:** traversing through the central fibrous body, entering the membranous ventricular septum up to the top of muscular septum
- **Bundle Branches:** lies in the ventricular septum over the respective side of the septum

Sampling

- **SA node:** a section taken involving the lower part of superior vena cava, anterior wall of the right atrium, sulcus terminalis and right auricle
- **AV node:** a section from the lower part of right atrium from the region bound medially upto the septal leaflet, laterally the coronary sinus ostium, above the tendon of Todaro and below the posterior leaflet of tricuspid valve

- **Bundle of His:** a section from the upper part of the muscular part of the ventricular septum involving the lower part of the membranous part of 4cm width keeping in mind that the bundle runs from posterior to the anterior part of septum obliquely

Sectioning

- Make multiple sections each 3 mm thick

Staining

- Trichrome
- Verhoff-van Gieson
- H& E staining

Microscopic findings

- Age related changes: fibro-fatty infiltration, senile calcification, atrophy, hypertrophy, senile amyloidosis.
- Blocked vessels to the conduction system.
- Fibrosis, inflammation, infarction, amyloid deposition.
- Irregular arrangement of the myocardial fibres.

Audit Sheet

Procedure (Examination of Heart)	Yes	No
Identification of structures		
Location of SA Node		
Location of AV Node		
Location of area of AV Bifurcation		
Purkinje Fibres area		
Tissue Selection and sampling		
Method of putting labels and tagging		
Awareness of importance		

Common lesions which may be found are cyst, calcification, fat infiltration, fibrosis. It requires patience and hard work to screen conduction system. It is not recommended routinely and should be referred to higher centers where trained personnel are there.

Photographic evidence:

- Heart photography
- Heart measurement
- Calcification
- Cyst
- Myocardial fibrosis
- Gross findings of interest
- Histopathology photography of lesions

SUDDEN DEATHS IN EPILEPSY

Sudden death in epilepsy poses a great problem to

medical investigator in clearly deciding the case. Epilepsy is a clinical syndrome characterized by recurrent episodes of convulsive seizures due to abnormal discharge of nerve cells in gray matter of brain. It may be generalized, focal, structural or functional. Focal epilepsy with seizures is usually associated with focal lesions in a specific area. Temporal lobe epilepsy causing psychomotor seizures is usually produced by a lesion in or near the medial temporal cortex.¹²⁴ In epilepsy patients, tachycardia developed during fits produce ischemic changes in myocardium. It puts heart into stress and uncontrolled dysarrhythmias result in fatality.

Sudden unexpected death in epilepsy is also responsible for sudden deaths. It can be defined as sudden, unexpected, witnessed or unwitnessed, nontraumatic, and non-drowning deaths in patients with epilepsy and post-mortem examination and toxicological examination does not reveal any thing¹²⁶. There are definite correlation that altered autonomic cardiac nerve discharge, interictal epileptogenic activity and cardiac arrhythmias, which contribute to sudden death in epileptic patients.

Contributory causes of such deaths remain autonomic neurohumoral dysfunction, autonomic cardiac neural dysfunction, cardiac changes of subendocardial perivascular and interstitial fibrosis, atherosclerosis of coronaries, anti-epileptic drugs¹²⁶. During the winter, there is increase in haemoconcentration (erythrocyte count, plasma cholesterol, and plasma fibrinogen levels) which may cause arterial thrombosis¹²⁵.

Postmortem findings

- Bodily Injuries occurred during fit
- Oral structures injuries – tooth injury, fresh and old bites over sides of tongue
- Aspiration of vomitus
- Aspiration of fluids –gutter / drain / rainy / tub
- Gums for hypertrophy
- Previous injuries

Previous injuries relevant to issue

- RTA
- Fall from height
- Frequent falls during fits
- Head Injury
- Healed injuries

Previous relevant diseases

- Tuberculosis
- Sarcoidosis
- Calcification
- Worm infestation

- Cysticercosis

Investigation

- Epileptic drugs screening for overdose in blood, urine, gastric contents, plasma and vitreous humor.
- Toxicology screening as routine.
- Hair also helpful in screening cases.

Histopathology

- Fresh and old tongue bites indicating tonic-clonic convulsions.
- Myocardium for fibrosis. Heart requires special examination, take a full mid coronal section of heart about 4-5 cm from apex for further examination; beside this coronal section and make 8- 10 cardiac tissue sampling block from left ventricle(3), septum(1) and right ventricle(2) and rest as per gross findings of fibrosis. Fibrosis may be graded according to severity and may be shown in sketch as shaded, crossed, gray and dark gray areas. Subendocardial part of heart is very informative.
- Lungs: aspiration, oedema
- Any other organ as indicated but brain examination is must
- Scarring in brain tissue and other findings as microscopic findings of decreased myelin, gliosis, cystic gliotic lesions, neuronal clusters, increased perivascular oligodendroglia, cerebellar gliosis.
- Plan for sections from brain should include : Full coronal sections just front and behind mid brain, mammillary bodies may act as reference. Beside this brain histology should have hippocampus gyrus, cingulate gyrus, superior and middle temporal gyrus, middle frontal gyrus, caudate nucleus, putamen, globus pallidus, cerebellar vermis, dentate nucleus, and sections from cerebellar hemisphere. In addition to these any gross tumor, calcified area, cyst, thinned out or enlarged area should be included in screening.

Epileptic case also require documentation of all morbid anatomical, toxicological and histopathological findings.

Audit Sheet

Check Points	Yes	No
History, previous attacks		
Medical history		
Scene Assessment		
Examination of oral cavity		
Complete body examination		
Complete internal examination		
Brain examination in detail		
Drugs screening - antiepileptic etc.		
Exclusion of other cause of death		
Cause of death		

Common findings which may be observed in a epileptic case are external evidences of fits, bites over tongue sides, gum thickening if on medication, injuries sustained during fall or accident during seizures, brain oedema, focal findings in brain, atrophy in mesial temporal area(Ammon's horn), cerebellar atrophy, cardiac abnormality or pathology, pulmonary oedema, aspiration of gastric contents. Previous trauma may also be correlated.

Photographic points: Overall scene circumstances of death, position of body, evidence of incontinence of urine and feces, objects which could be correlated with injuries, medicines.

Photography during postmortem: Fully body photography as in any other case, incontinence of urine and feces, injuries over the body, face, teeth, gums, tongue, trachea, lungs, heart and brain.

Death may be due to as a result of status epilepticus, accidental trauma during seizures, aspiration during seizures, overdose of medicines, and could be a case of sudden and unexpected death associated with epilepsy(SUDEP) where toxicological and anatomical cause is not detected. Status SUDEP^{RCPath} is defined as "sudden, unexpected, unwitnessed or witnessed, non-traumatic and non-drowning deaths in patient with epilepsy, with or without evidence for a seizure, and excluding documented status epilepticus, where autopsy examination doesnot reveal a toxicological or anatomical cause of death."

(Ref:153.Love S. Review. Postmortem sampling of the brain and other tissues in neurodegenerative disease. *Histopathology* 2004;44:309-317.

154. Black M, Graham DI. Sudden Death in epilepsy. *Current Diagnostic Pathology* 2002;8:365-372.)

ANAPHYLACTIC DEATHS¹⁵⁶⁻¹⁵⁸

Systemic anaphylaxis is presented with vascular shock, wide spread oedema, and severe difficulty in breathing¹⁵⁸. Some people may develop an acute fatal allergic anaphylaxis to foreign materials like medicinal products, antisera, vaccines, edible proteins, stings and bites. In such cases time ranges from 5 minutes to a few hours. Often there are non-specific findings in most cases but still meticulous examination can yield satisfactory results to make a diagnosis. It becomes a herculean task to autopsy surgeon when a person with anaphylaxis is admitted in intensive care, many additional findings creep in so diagnosis becomes more difficult. Discuss with laboratories before starting the case and make a proper plan to preserve proper samples in right containers.

History: History of injection, consumption, previous history of allergy, test dose, urticaria, severe itching.

Presentation: Itching, swelling, urticaria, rashes, collapse, restlessness, tight chest with constricting chest.

Gross findings

Skin: Injection mark and inflammation skin around it. Urticaria, wheals

Laryngo-pharynx: Laryngeal oedema, vulva, fauces and lingual are watery and oedematous almost choking the passage. Small patechial haemorrhages with red tinge are noticed. It may have copious sticky mucous and secretions. Vocal cord.

Tracheo-bronchial tree: filled with blood tinged froth with copious secretions.

Lungs: oedematous, bronchial asthma like appearance but chronic findings of asthma are missing. Bronchioles filled with fluid, mucous, eosinophils. Patechial haemorrhages are seen in sub pleural surfaces and inter lobar fissures.

Heart: coronary artery and may contribute to ischaemic changes in anaphylactic shock.

Kidneys : Findings of shock

Brain: oedematous, watery surface, easily flattens on cutting, differentiation between white and gray matter. White matter extraordinarily shining and watery.

Other Investigation required in the case.

Biochemical – vitreous chemistry for electrolytes.

Immunological - Ig E levels, blood mast cell tryptase, specific drug antibodies if available.

HP recommended - Heart, coronary artery, lungs with airways, vocal cords, injection site

Microscopy - It depends as on what stage, case was brought for autopsy. If it is immediate death without hospitalization then findings are having a different presentation. After hospitalization and resuscitative measures presentation is slightly different as therapeutic and resuscitative measures do produce their impact.

Findings of shock, hypoxia are very dominant in such cases.

Audit Sheet

Common Cause of death - Anaphylactic Shock and asphyxia.

Common presentation - cardiac arrest.

CAUSE OF DEATH UNASCERTAINED AT AUTOPSY (NON-DECOMPOSED BODIES)^{1,2,4,5,6,7,10,11,14,45,88}

Following guidelines in addition to those described under Sudden Adult Natural Deaths.

Internal Examination

Cardio-Vascular system.

Heart- Measure left and right ventricular thickness at the level of papillary muscles.

Respiratory system

Lungs- Specific comment on the contents in the airway, mucus and foreign bodies and Disorders

Anaphylaxis signs

Mucus consistency and microscopy of bronchial secretions

Central Nervous system

Brain -Description of ventricular system and examination for Colloid Cyst

Spinal cord-Special dissection and description as indicated

Others

Adrenal glands- Description of gland as indicated

Lymph nodes- Description of Cervical, Mediastinal, Para-aortic, and Pelvic group of nodes as indicated

Pituitary- Description of the gland

Specimens

Histology ⁶

Heart- At least one section from anterior, lateral, posterior and septum of left ventricle.

One section from right ventricle

Sections from SA node, AV node and conducting system.

Lungs- One section from each lobe

Adrenal glands- One section from each gland

Pancreas- One section

Spleen- One section

Lymph nodes- One section from each group of nodes

Bone marrow- One section and smear

Brain- Sections from Cerebral cortex, Midbrain, Pons, Cerebellum and Hippocampus and corpus callosum.

Skeletal muscle- One section including Quadriceps and the Deltoid.

Pituitary-One section

Kidneys- One section from each kidney

Toxicology and Biochemistry

Blood- For full toxicological examination and Ethanol and Methanol

Vitreous- For Potassium, Sodium, Urea, Glucose, Acetone and Toxicology

Bile for Opioids and other drugs

Stomach contents for Toxicology

Urine for Ketone Bodies

Serology

Consider serum Cortisol

Microbiological cultures

As indicated

Radiology

As indicated

Audit Sheet ^{5,7,11}

Check Points	Yes	No
History		
Treatment record		
Substance known		
Past history		
Photography		
External appearance		
Findings in oropharynx, larynx, glottis		
Internal findings		
Samples for Immunochemistry		
Histopathology		
Bio-chemistry		
Opinion		

Common Causes

- Metabolic Disorders (Hyperkalemia,)
- Endocrine Disorders (Hypoglycemia)
- Cardiac dysarrhythmia
- Conduction System Disorders
- Epilepsy
- Asthma
- Poisoning
- Snake Bites
- Vaso-vagal shock

Important photographic evidence

Place where he was found dead

- Overall view
- Sleeping position
- Items in vicinity
- Any medication / bottles/ food etc

At the time of postmortem

- Clothing search
- Face
- Full photography

- Important external and internal findings

Social Forensic Message

It is a time for postmortem centre to review its working if rate of undetected causes cross 5% of total autopsy cases.

NEGATIVE AUTOPSY^{77,14,45}

In forensic practice, there are instances when autopsy even after meticulous examination is unable to determine the cause of death. Before declaring any case as negative autopsy/obscure autopsy, one should screen for proper medical history, histopathology of vital organs, toxicological screening, crime scene evaluation, drug interaction, envenomation, hypersensitive reaction due to new protein material, vaso-vagal inhibition, concealed injection and air embolism. The important reasons which also contribute to undetermined cause of death are inadequate training, inadequate and improper external and internal examination, incomplete medical examination, not attempting histopathology and toxicology screening. Medical history is very important in these cases. If negative autopsy is more than 5%, then centre requires audit and introspection of method of working out such cases. The following guidelines are recommended in such cases.

1. Evaluate scene and take proper medical history- palpitation, syncope, dizziness, snoring, 2. position when recovered dead, room ventilation, sexual asphyxia, mental illness, addicting substance use etc.
2. Examine clothing and search pockets for any abuse substance / medicine, suicide note.
3. Full photography of body with close-up.

4. Examine body in systematic way to screen for any hidden injury/ injection.
5. Sampling for vitreous, blood, urine before starting autopsy for toxicology screening and prepare blood smear for haematological abnormality like anaemia, leukemia, pancytopenia etc.
6. Swabbing palms and finger tips for toxic substance.
7. Examine oral cavity and its swabbing for toxic substance.
8. Examine oro-pharynx- larynx and respiratory track for any bolus or aspiration
9. Examine for air embolism
10. Open head first and look for head trauma
11. Take culture from brain surfaces for meningitis
12. Examine for thrombosis in coronaries in heart and brain vascular tree
13. Examine heart in detail and take sampling from coronaries, myocardium and conduction system
14. Examine GIT in detail and subject contents for toxicology screening
15. Examine for seizure effects
16. Genitalia for recent sexual activity, swabbing for saliva for vagino-oral sex in sexual active females for air embolism. Look for teeth bite in clitoris area for vaso-vagal and over stimulation.

A simplified approach to understand importance of sampling in such cases is given in tabulated form to highlight their importance.

What are you looking for?	Sample of choice	Time of sampling	Important thing to remember
Electrolyte Imbalance	Vitreous humor(eyefluid)	At earliest point when brought to hospital	More informative in first 72 hours
Drug Interaction	1. Blood 2. Urine 3. GIT contents	1 and 2 at earliest opportunity	Serum portion is used for analysis so cellular component is not very important for toxicology screening
Air embolism	Examine heart and brain for embolism	At autopsy	One must follow the procedure as how to look for embolus
Thrombosis	In coronaries and cerebral vascular tree	At autopsy	One must be able to differentiate between thrombus and agonal thrombus
Myocarditis	Take sample from both myocardium (one from each chamber), both ventricles should have more representation in sampling	At autopsy	It is usually not visible to naked eye so any history viral infection in immediate recent past (few weeks to 2 months)
Fatty Liver	Liver HP screening Lipid profile	Blood for Lipid profile Liver -4 pieces -right lobe, left lobe, near GB, dome of liver	Lipid profile can be trusted up to one week after death
Anaphylaxis	Larynx, vocal cords, lungs, skin, visceral surfaces	Section from larynx, lungs, skin, stomach for mushroom, sea food or new protein material or seeds	Angio-oedema is quite common after consumption of betel nut, new protein
Electrocution	Wet soles, hands or any body part; current leakage at scene or any electric item in hands or immediate vicinity	Examine soles and hands carefully. Take close up of suspected contact areas and then examine photographs after magnification	In rainy season, wet surface, person working on machine in shops, restaurant and work place etc
Infection	Blood culture, brain surface/ culture	Examine brain lungs properly	Early infections where thick pus is not formed are missed on naked eye examination
Decomposition beyond three days in summer and one week in winter	At least try Toxicology and HP every such case. Send maggots also for toxicology	Blood chemistry is not very helpful but vitreous can still be tried	It poses real problem in human corpse in more than two weeks

Minimum requirement for such cases is overall assessment of scene, clothing, body, complete post-mortem, histopathology of organs and toxicology screening. After these workout, if nothing is found then it can be declared as negative autopsy and cause be assigned as functional natural death – exact cause of death could not be ascertained.

Audit Sheet

CHECK POINTS	Yes	No
Overall Scene Assessment		
Medical History		
Full Photography		
Complete external examination		
Complete Internal examination		
Proper sampling		
Samples for HP		
Toxicology Screening		

Minimum workout before declaring it negative / functional death

Essential work out	yes	No
Complete Autopsy		
Histopathology		
Toxicology Screening		

MECHANICAL ASPHYXIAL DEATHS

(COMPRESSION OF THE NECK)^{1,2,4,5,6,7,10, 11,55,14,45}

The following procedure is in addition to what described under Sudden Natural Death

Scene visit

- Scene visit should be carried out as indicated or at least assessment should be done on basis of Crime team reports and photographs provided by IO.
- All scenes should be visited on written request on either side (for all forensic cases).
- In the cases of hanging measurements from ground to the hanging point (Suspension Point), height of the support to reach the suspension point, must be documented.
- Scene must be examined for signs of violence and circumstantial evidences.
- Scene visit/assessment is always educative to give clear opinion which saves precious time of medical and investigative personnel.
- Finger prints over skin may be attempted with superglue fuming in a transparent chamber. One specific transparent chamber should be made available in the mortuary where superglue fuming can be

done. Lifting of finger prints can be carried either by trained medical team or finger experts as available. Photography is must before lifting the prints.

External Examination

- Ligature must be described with special reference to width, length, presence of cut ends and description of the knots.
- The ligature mark is very important evidence, as it reproduces the pattern and dimensions of the ligature itself.
- Height, length between finger tips to toes when the upper limb is raised should be measured (to assess the accessibility to the hanging point)
- Distribution of Hypostasis must be described and interpreted in relation to the posture.
- Comment on the presence of petechial hemorrhages, congestion of head and neck, Subconjunctival hemorrhages of eyes.
- Description of ligature mark (Abraded Contusion) with reference to width, length, direction and presence of gaps must be made.
- Comparison of Abraded injury and the ligature must be done.
- External Genitalia and anus must be examined for injuries and sexual penetration.

Internal Examination⁶

- Detail neck dissection in a bloodless field to note soft tissue injury (after removing the brain and thoracic contents, after draining of blood neck should be dissected in situ layer by layer).
- The thyroid cartilage, hyoid bone and other laryngeal cartilages must be examined for fractures and periosteal and peri-cartilaginous haematoma.
- Special comment must be made on the integrity of the cervical spine.

Specimens

- 1 Toxicology as indicated (mainly sedative , intoxicants, psychotropic)
- 2 Radiology- Neck before the dissection to see fracture, if required and X-ray facilities are there
- 3 Histology of soft tissues , muscles, glands, cartilages for hemorrhages is optional in doubtful cases
- 4 Anal and Genital swabs as indicated.
- 5 If indicated, clothing fibres stuck to skin of neck area(all around the neck in ligature mark area) should be visualized with the help of hand lens and should be removed with gloved finger on plain white paper. Paper

should be folded and should be sent for further analysis as per the need of case. Another simple method of using sticky cello-tape, leucoplaster can be used to pick up fibers in neck area. This is put on plain and transparent sheet or OHP sheet. It should be put in paper envelope for further analysis. This is not done routinely but in sensitive cases where is allegation of third part involvement, it is must.

6. In some cases, if latent finger prints are attempted then neck area should be fumigated with finger print dusting powder with the help of finger print / forensic technician.

Audit Sheet^{5,7,11}

Procedure	Yes	No
Scene visit		
Measurement of ligature mark/s and material in detail Ligature material examined and preserved		
Attempts to recover DNA material from ligature Ligature mark examined and documented		
Neck dissection of anterior and posterior segments Photography of face, ligature material and mark, teeth, tongue, inner cheeks, thyro-hyoid complex and tracheal rings		
Radiography if required		
Toxicology screening as indicated		
Documentation		
Relevant medico-legal issues addressed		

Common Circumstances

- Suicidal Hanging(fixed noose inverted V shaped; running noose-horizontal ligature mark; lower suspension/partial suspension oblique/horizontal mark)
- Throttling(Manual strangulation)
- Ligature Strangulation
- Smothering
- Gagging
- Judicial hanging
- Accidental Compression of neck (fall)
- Sexual asphyxia (Scene assessment is must)

Common Mechanisms

- Vagal inhibition of heart
- Cerebral ischemia
- Cerebral Congestion
- Anoxia
- Cervical cord injury

Weight pressure for occluding neck vessels:

- Jugular vessels-2kg;
- Carotid-4-5kg;
- Vertebral arteries-30kg;
- Trachea-15kg.

Time of producing unconsciousness varies from 10 seconds to one minute if both side vessels are compressed. This is the reason even if person is brought down, cerebral hypoxia makes person brain dead.

How to say?

Whether it is hanging?: Signs of asphyxia, oblique and incomplete ligature in upper part of neck, dribbling saliva, eyes findings, shining/pale subcutaneous tissue, carotid tears, hemorrhages in lumbo-sacral region, absence of any other cause of death are sufficient to declare it as ante-mortem hanging.

Note – There may be concomitant poisoning or other type of suicidal attempt.

Post mortem suspension of body will not show above mentioned findings. Most common allegation in hanging cases, remains it was 'strangulation' not hanging and if hanging there was involvement of third party. If precaution is taken then these issues can be settled fairly.

Whether it is strangulation?

If one finds complete ligature mark around neck, marked asphyxia findings above ligature, blood from oral and nasal cavity, subconjunctival haemorrhages, haematomas and injuries to neck structures, struggle injuries, multiple nail injuries are sufficient to declare it as ligature strangulation.

Whether it is manual strangulation?

In cases of manual strangulation disc shaped bruises from finger digits associated with curved /crecentric nail abrasions; haematomas, bruising and injuries to neck structures; asphyxial findings as above in ligature strangulation; associated smothering attempt.

Whether it is compression by object?

Strangulation by neck compression by objects or pressure over neck from back against object. These situation will have impression of object, neck trauma is prominent and is slightly of different type from ligature and

manual strangulation. Close photography and comparison with object shape and pattern is helpful in differentiating. Skin tags over object may present. Shaving of back scalp hair can help in finding bruise over upper neck. Dissection of front and back is recommended.

Photographic Points in different asphyxia deaths

Hanging

At scene where hanging is being carried out-

- Photograph overall view,
- Body view and then closer views of
- Hanging point /Suspension point – roof, ceiling fan, window railing etc.
- Type of knot
- Manner of application of knot to neck
- Knot around the neck
- Facial features – cyanosis, condition of tongue, saliva dribbling, condition of eyes
- Relation of feet to ground – touching, if above how far
- Floor just underneath feet
- Stepping point
- Signs of struggle
- Place from which ligature was taken or cut

At the time of Postmortem examination

- Ligature
- Knot
- Ligature mark complete coverage with and without scale
- Open Eyes with bulbar and palpebral conjunctivae for hemorrhage and state of cornea
- Lips
- Dribbling of saliva over face, neck and clothing
- Hands with nail
- Feet with nails
- Face –front, both sides and back
- Layer-wise dissection and important findings of front and back of neck
- Oro-pharynx – larynx
- Haemorrhagic points at dorso-lumbar spine
- Tears in carotid

Strangulation

- Ligature
- Ligature mark over neck

- Finger and finger nail marks
- Nostrils and its contents
- Lips for contusions and teeth indentation marks
- Eyes as in hanging
- Hands and nails
- Ankles for ligature
- Struggle marks
- Important neck findings on layer by layer dissection
- Thyro-hyoid complex
- Sub pleural blebs
- Inter lobar fissure haemorrhages in lungs
- Oro-pharynx for congestion, haemorrhages
- Tongue sides for bites
- Any other important findings

Smothering important views of at postmortem examination

- Nose flattening
- Around mouth nail abrasions and finger shaped bruises
- Lips for injuries
- Inner lips for teeth indentation tears, bruising and abrasions
- Marks of resistance

Gagging important views at postmortem examination

- Gagging piece of cloth/ material in place
- Position of hands and legs (tied or not)
- Cloth inside oral cavity and abrasions by it, cloth fibers
- Abraded palatal surfaces and inner cheeks
- Secretions in trachea and near vocal cord
- Rest as deemed important

Traumatic Asphyxia photographic views of

- Discolored part of upper trunk and face
- Remains of material causing compression
- Inhalation of finer particles of gravel/ mud / sand etc

Social Forensic Message

Man has only fifteen minutes of life if asphyxia takes charge

DEATHS IN DROWNING (WATER IMMERSION)^{1,2,4,5,6,7,10, 11,14}

The following procedure is in addition to what described under Sudden Natural Deaths.

(For the bodies recovered from wells, ponds, lakes, swimming pools, rivers and sea without any apparatus used for

swimming and diving)

History

Details about the water body where the body found have to be documented

Well- Used or unused; protected or unprotected; depth; presence or absence of projection like stones.

Ponds and lakes: Measurements, human activities, nature of water, presence of animals such as crocodiles, fish etc.

Swimming pools: Commercial or private, well maintained or ill- maintained, measurements (Width, length, Depth), presence of life guards and other people, Chlorination, Lighting, etc.

Rivers: Nature of water, presence of stones, human activities, animals, etc.

Other water bodies can be lake, sea, canal, tank, pond and bath-tubs etc.

Scene visit should be done if indicated and desired some points.

Details about the person

Can or cannot swim?

Instruction received from coach, owner in the case of Swimming pool deaths.

Alcohol and drug habits of the person.

Details about the body at the time of recover

In cloths, swimming kit?

With or without shoes?

Presence or absence of bondage or ligatures.

Fresh or decomposed state at the time of recovery

External Examination

- Body must be examined with clothes, shoes and contents must be documented.
- Careful examination to document effects of immersion is important. (Washer Woman hands and feet, Cutis anserina)
- Presence of cadaveric spasm must be documented
- Presence or absence of tenacious foam must be documented and photographed is recommended
- Any injury found on the body must be documented.

Internal Examination

Central Nervous system

- It is recommended that the brain is examined at the beginning of the postmortem examination.
- The cervical spine is examined carefully.

Respiratory system

A formal dissection of the neck is mandatory and larynx, trachea and major airways and contents must be described. Special mention must be made regarding froth in the airways.

Pleural cavity must be examined for effusion.

Specimens

Validity of Diatom test is debated widely and it should be accepted that there is no ONE diagnostic test for drawing opinion⁶.

Examination of Blood samples from right and left heart for difference in electrolytes is obsolete.¹

Blood for toxicological screening including alcohol and drug abuse has to be done.

Histology of major organs should be done.

Procedure for deaths associated with Self Containing Under-water Breathing Apparatus (SCUBA) (In addition procedure described above)⁶

Scene Visit

This should be done whenever appropriate.

The SCUBA equipment must be examined by a competent technical person and a verbal or written report must be provided to the pathologist by Investigating Officer. Identifiable defects in equipment must be recorded, photographed and documented by technical person for future reference.

Radiological Investigation

It is highly recommended.⁶

External Examination

Examination of the ear drums must be done ideally with an auriscope for ruptured tympanic membrane.

Internal Examination

Respiratory System

It must be checked for pneumo-thorax.

Evidence of interstitial emphysema must be looked for.

Cardiovascular System

- The pathologist must check for evidence of air embolism.
- Epicardial arteries and great veins must be examined for air bubbles. Epicardial sac must be filled water and right atrium and ventricle must be opened under water to demonstrate escaping air bubbles.
- Presence or absence of foramen ovale must be documented.

Central Nervous System

The brain and spinal cord must be referred for formal

neuropathological examination.

Musculoskeletal System

Head, neck, and shaft of humerus and femur must be examined for changes due to dysbarism. Musculature of chest and upper limbs may show bleeding.

Specimens

1. Histology

Samples from major organs must be retained for subsequent histological examination.

2. Radiology

Once the equipment is removed, the body must be subjected to full X-Ray examination including limbs, lateral chest, where possible upright 45 degree angle chest X-Ray. These must be done immediately after receiving the body.

3. Toxicological Analysis

Audit Sheet for Bodies Recovered with out any Apparatus^{5,7,11}

Check Points	YES	NO
Details about type of water body documented		
Depth of water in feet or meter		
Photography at scene and at the time of PM		
Body position on surface / deep / bottom / face down or up/limbs tied or free		
Mouth and nostrils – covered or open		
Clothing and shoes examined		
Body intact/dismembered/ damaged by aquatic creatures		
Cadaveric spasm		
Ocular signs		
Skin changes - Signs of immersion documented		
Signs of decomposition documented- purging, bloating, skin discoloration, skin slippage, marbling, adipocere		
Insect position		
Formal neck dissection done		
Respiratory tract examined for foreign bodies		
Toxicological screening done		
Samples for diatom test taken Water sample preserved		

Audit Sheet For Scuba Deaths

In addition to above procedure⁵

PROCEDURE	YES	NO
Radiology of the body		
Examination of the apparatus with a qualified technician		
Histological examination of bones and other tissue for necrosis		
Blood gas analysis if death is on arrival in the hospital		

Special Note on -

Swimming pool drowning , the following information may be asked

Check Points	Yes	No
Use of intoxicant like alcohol and drugs		
Ability to swim		
Trauma		
Diving		
Seizure		
Epilepsy		
Coronary Artery Disease		
Tiredness		
Exhaustion		
Electrolyte Imbalance		
Full stomach and aspiration		
Chlorination level of water		
Bacterial level		
Presence of trained coach		

Common Circumstances

- Accidental Drowning
- Suicidal Drowning
- Homicidal drowning

Common Mechanisms

- Laryngeal Spasm
- Vagal Inhibition of heart
- Liquid (water) aspiration in to air passage and Anoxia
- Electrolytes imbalance
- Pneumonia in delayed deaths

Immersion artefacts

- Light red, pink postmortem staining
- Maceration of skin or washer-woman's skin
- Epidermis of hands and feet peels off like gloves

- Chromogenic bacteria(bacillus prodigiosus and bacillus violaceum) invade skin and give tattoo appearance-1-2 weeks.
- Aquatic Injuries

Photographic points

At Scene

- Overall scene
- Position of body
- Clothing
- Foot wear
- Face - foam from nose and mouth , cyanosis
- Hands- cadaveric spasm
- Whether tied or open limbs
- Body – any visible injury
- Insect activity
- Artefacts
- Type of algae
- bites of sea creatures
- Water sample for diatoms

At the of post-mortem

- Overall body
- Mouth and nostril
- Froth at nostrils and upper respiratory tract
- Lips and contents of mouth
- Head & Neck
- Clothing
- Limbs
- Trachea
- Lungs
- Stomach
- Any other important findings

On autopsy features to decide fairly **in favour of drowning** are foam over nostrils and upper respiratory tract, aquatic debris in bronchioles, pulmonary edema fluids sinuses, petrous ridge haemorrhages, emphysema acusom, same fluid in small intestine, cadavric spasm, no other fatal injury. Decomposed bodies recovered from water pose a difficulty but meticulous workout of case can result in positive diagnosis.

Social Forensic Message

Swimming is a good exercise if you know it

Toxic Gases induced suffocation

Lack of oxygen either due to mechanical , chemical and concentration of oxygen in ambient air result in asphyxia deaths. Common examples remain carbon monoxide, carbon dioxide, hydrogen sulphide, phosphine, hydrogen sulphide, nitrous oxide, chlorine, methane, methyl isocyanate, cyanide, ammonia. A brief description of important gases is given here.

Carbon Monoxide

It is an odourless, colourless, and non- irritating gas and can accumulate in confined places, covered external air passages, underwater swimming, incomplete combustion of organic materials. If, it is associated with smoke from fire then soot deposition may be seen over skin and in respiratory tract.

Postmortem findings: Cherry red and bright pink postmortem staining and appearance of organs and muscles due to presence of carboxyhemoglobin. This pinkish discoloration is also noticed over inner surface of lips, inner of cheeks, nail bed in fingers and toes and surfaces of organs.

CO levels more than 10 % in blood is confirmatory of it's role in death. If it is absent then other causes of suffocation should be evaluated/ considered. Inhalation of heated smoke and steam result in rapid swelling and increased secretions in respiratory tract.

Cyanide

Cyanide is a very strong and fatal asphyxiant when present in gaseous form. The reaction cyanide salt with Hcl in stomach liberate HCN or KCN gas.

Postmortem findings: Cherry red or pinkish bright discoloration of skin and other structures.

Strong odour of bitter almond emanating from body cavities and fluids. Stomach contents, blood and urine are ideal samples to detect it chemically.

Methane: It is a product of decay of organic matter. It replaces oxygen in confined places and sewages. This may cause rapid loss of consciousness. Postmortem findings are non-specific and are those of suffocation. Low oxygen level in air of place may be noted by Oxymer.

Nitrous Oxide: recreational use may result in accidental death.

Tunnel Entrapment: Metro tunnels in modern India have posed problems of entrapment in closed railway compartment due to electric failure, fire, explosion and collision. In busy hours, one compartment has more than 100 people commuting at one time. One compartment has 52 sitting and more than 100 people can be accommodated in standing. In peak hours, mainly in the morning and evening hours, festival times, one bogie has more than 200 people riding it. In cases of electricity failure in summer and

humid environment, it is very suffocating inside and quality of air has dominance of carbon dioxide. As the duration of entrapment increases beyond 20-30 minutes, CO₂ toxicity takes over, outcome and severity depend on number of commuters and air quality.

Outcome of entrapment depends on type of incident and time taken in evacuation of passengers. India is highly populated country and all public transport are overloaded and overstressed. There have been more than 10 incidents with fatal outcomes. Fatality results from suffocation due to lack of oxygen, inhalation of smoke arising from fire, stampede due to panic situation; multiple injuries from jumping, concrete and iron structures over track; injuries from another train on parallel or opposite lines.

SEWER GAS SUFFOCATION FATALITY^{14,40,41,48,85}

Hydrogen sulphide in combination with methane, nitrogen, hydrocarbons, ammonia and carbon dioxide is formed in sewers, is known as sewer gas. This is a work related suffocation among cleaners of sewages. At times, these workers enter into sewage without protective devices which lead to suffocation. The main gas which is responsible of such deaths is Hydrogen Sulphide in higher concentration. It is present in wells, sewage, septic tanks, close premises, coal mines, dung gas or any organic garbage dumps.

H₂S is colourless, toxic, flammable and water soluble gas. It is generated as by product of organic decomposition. It is heavier than air so it get accumulated in low lying areas and close spaces. It is easily recognized due to peculiar smell of 'rotten eggs'. Normal tolerable limit is 20ppm and levels more than 100 ppm is dangerous to life.⁴⁰ It produces irritation of respiratory track. At levels more than 300 ppm it is neurotoxic and cause collapse and paralysis. Hydrogen sulphide in higher concentration 1000-3000ppm produce effect on CNS leading to sudden deaths.⁸⁵

Sampling, 10 ml blood in red top tube for blood thiosulphate (normal 0.3 microgram/ml, range beyond 8 are dangerous)⁴¹. Blood samples should be collected at earliest for blood sulphide levels. Among tissues lungs and brain are very useful for thio-sulphate levels. Urine samples for thiosulphate are very helpful in slow deaths.

Post mortem findings: It produces cyanosis, bronchial secretions, pulmonary oedema, haemoptysis, visceral congestion, petechial haemorrhages, greenish colour of brain, typical greenish blue to chocolate colour post-mortem staining. There are generalized asphyxia findings. There may aspiration of sewage contents in lungs.

Photo documentation in sewage gas poisoning

Scene

- Overall of scene
- Drain depth and gas

- Safety measures and equipments
- Sludge over body
- Face and nostrils
- Condition of clothing

At the time of postmortem examination

Overall appearance, postmortem staining appearance, trachea, lungs, brain, stomach

Audit sheet in sewer gas fatality

Overall scene	Yes	No
History		
Clothing		
Photography		
Sampling		
External findings		
Internal findings		
Viscera preservation		
Opinion		

Social Forensic Message

Wear safety devices while going deep into sewer for cleaning.

Exhaust fans are put over main holes of gutter before entering.

DEATH ASSOCIATED WITH FIREARM INJURIES^{1,2,4,5,6,7,10, 11,14,53,67}

The following procedure is in addition to the procedure described for Sudden Natural Deaths

History: Date and time of the incident, nature of the weapon involved, distance between the weapon and the victim, number of shots, etc.

Psychiatric History of the victim (suicidal attempts)

Scene must be visited when appropriate. Spatter of blood and tissues must be documented

Radiography of the relevant part body should be done to locate missiles and locate fractures and lesions like pneumothorax, pneumoperitonium.⁽⁶⁾ If x-rays are taken on arrival of the body to casualty then these are very helpful in deciding future course of case. First radiograph should be with clothing and then subsequent can be done on naked body.

Photography of clothing, body and injuries is highly recommended. Photography should include body with clothing, wounds, photographs of after cleaning, tracks formed by missiles. Details in the end.

External Examination

Never Disturb clothing

Clothing must be examined in situ and in relation to the

injuries in the body. Presence or absence of Burning, Blackening, Tattooing, direction of the blood stains and direction of fibers must be noted. Photography of clothing must be done. Residue must be taken from palms, fingers and web space by swabs moisten with saline by the pathologist or forensic science expert and should be sent for comparison and analysis whenever it is thought appropriate. Clothing must be preserved and chain of custody must be maintained.

Examination of the body

Description of the Entry wounds and Exit wounds (**Entry wounds and Exit wounds should be described separately**)

1. Presence or absence of Burning, Blackening and Tattooing
2. Measurements of Skin defects
3. Comments on the abrasion color around the skin defect
4. Comment on Muzzle Imprint, Foresight imprint and description.
5. Direction of wound and travel of missile
6. Color changes of tissue due to Gases (CO)
7. Exact location in reference to fixed anatomical landmarks and in relation to midline and heel level (Distance in centimeters)
8. Description of Residue and collection for analysis

Measurements from acromio-clavicular joint to olecranon and the distance from the olecranon to the tip of middle finger ⁽⁶⁾ should be taken in suicidal cases.

Internal Examination

- Documentation of the injuries to the organs, amount of blood in cavities and reconstruction of the tract in relation to entry and exit wounds. Location of bullet/foreign Bodies, recovery and preservation for analysis.

Specimens

- Blood for alcohol, drugs and toxicological analysis as indicated
- Histology of Skin when appropriate for powder effect and inflammatory reaction
- Residue and projectiles for analysis by Ballistics experts.
- All bullets/discharged ammunition should be put in a glass bottle having cotton padding. All bullets should be photographed with scale, one sketch should be made. Electronic weight of bullet should be recorded. These small measures of electronic weight, X-ray, sketch and photographs can avoid any possible tampering of evidence at the later stage.

Comments

- Opinion on the nature of weapon like shot gun or rifled (pellet or bullet weapon) further part depends on confidence and training of the person
- Possible range of fire (with muzzle mark/wad and fire (close contact) within fire/powder range (close range) or beyond it without powder and residue effect (distant range)
- Number of shots
- Number of weapons (different types of ammunition used).
- Nature of Projectiles (Jacketed, Unjacketed, Measurements).
- Opinion of Ballistic Division (Firearm expert for physical properties) must be sought
- Medical man should confine to Wound ballistics and general properties
- Reconstruction or animated reconstruction by using advance computer software and dummy experimentation is very informative
- Common problems in interpretation of wounds are due to surgical intervention, removing of clothing or clothing not subjected to examination, presence of multi layers of clothing and decomposition of body.
- Ammunition (bullets and pellets) are identified on basis of identification number, manufacturer, weight, diameter, cartridge type, base design, length, colour, shape. location of cannellure.
- Test fire indicated relationship with tested weapon, unrelated to weapon, fired with same weapon having primary and secondary markings.
- Evaluation of original positions may give answers to bullet trajectory and atypical wounds while reconstructing scene.
- Interpretation of firearm wounds should be avoided when blood is masking their appearance.
- Stop running water on autopsy table when examining for retrieval of bullets. Use of filtering sieves in water sink prevents slippage of bullets into drain.
- Among body tissues, fat is notorious for providing a soft cushion to embedded bullets and makes retrieval a difficult task. The body areas like abdomen, buttocks, thighs, spine and para-spinal muscles pose a difficulty in retrieval. All bullets should be retrieved in murder, encounter, gang fight and multiple assailants are involved.

Scene Evaluation in consultation with IO and Crime Scene Investigation team (CSI)

Check points	Yes	No
Incidence date and timing		
Position of body		
Relative positions of parties		
Blood spatter		
Casing of bullets		
Discharged bullets from through and through wounds		
Disturbance of area		
Items present around		
Entry /Exit to premises if closed premises		
Types of weapon used		
Photography from all angles in relation to body and premises		

Evidence list in Firearm cases

Check points	Yes	No
Blood in gauze piece		
Hair of wounded area		
Finger Nail scrapping		
Gunpowder residue from entrance		
Clothing showing gunpowder deposition / defect in clothing		
Presence or absence of flame, singeing, powder, soot deposition muzzle imprint, stippling Photography of entry /exit wounds in relation to body and close shots	Encircle if present	
Swabs from hands if suspected / evident that victim handled weapon		
Track length and direction		

Planning of firearm case should be carried out in four stages:

- At Crime Scene (overall view , blood , bullets, cases, weapon, finger and foot prints , vehicle tyre marks, entry and exit points)
- At Casualty (Important are clothing, original wound, surgical intervention, x-ray)
- Postmortem Room (Complete work out of case)
- After postmortem reconstruction of scene in relation to firearm injuries on postmortem examination (putting things in logical order)

Firearm cases should be dealt in a well planned way as

done in any surgery case

- X-ray with clothing
- Photography with clothing and original shape (Six shots).
- Photography without clothing in original shape , orientation and close-up shots
- Evidence Preservation (Blood , gauze , swabs etc)
- Cleaning of body
- Proper description of wounds with orientation and close-up shots
- Preparation of sketch of each track and its photography
- Permanent cavity dimensions formed by missiles
- Handling of recovered missiles and bullets
- Embedded bullet should be retrieved with gloved fingers
- Body wounds – number, location, size, appearance, track, surgical intervention, clothing finding in relation,
- Hands –powder, gas, blood, tissue
- Gases- Nitro-cellulose, nitro-glycerine, nitrites, graphite, H, CO, N, Co2

Role Division in firearm cases

Forensic Medicine Expert	Forensic Scientist
Examine clothing for firearm effects – powder, holes, tears, burns, blood in systematic manner and document these with sketches, photographs and diagrams Seal clothing for further examination in FSL.	Examine clothing for gun powder and tears in the clothing Examine bullets as per their protocol for finer details Weapon examination
Examine and record all injuries inside and outside of the body. Make proper sketches and take appropriate photographs Preserve all discharged ammunition bullets, pellets without cleaning/ washing. Take photograph, prepare sketch and electronic weight of bullets. Seal it for further examination for primary and secondary markings and other tests as required.	Crime reconstruction with the help of forensic medicine expert and investigator
Do not comment on microscopic part until unless, you are trained in this If recovered bullets are brought then advise – first send these for DNA and Ballistic examination	This part belongs to forensic Ballistic Division This part belongs to Forensic Laboratory

Crime Scene Reconstruction: It is a joint exercise carried out by forensic scientist (Ballistic), forensic medicine, investigator and computer programmer for animation.

Clothing examination is must for corroboration of injuries over the body and is integral part of forensic medical

examination.

Commenting on nature of fibers , finer parts of gun powder and their chemical testing , heat effects etc belongs to forensic scientist.

Swabs from hands/ entry wounds – these should to be collected by medical man during postmortem or forensic scientist if facilities are provided to morgue. These may be taken on plain swab or may be taken by moistened swab with 5% nitric acid.

Audit Sheet^{5,7,11}

PROCEDURE	YES	NO
Scene visit		
Radiography		
Photography original condition, clothing, defects in clothing, body wounds, tracks		
Clothing examined for effects and gun powder residue		
Injuries examined for effects of gun powder residue without cleaning		
Firearm and other Injuries after cleaning described with size, shape and powder effect		
Reconstruction of large wound for clear view		
Internal tracts described and sketch prepared for each wound		
Recovery of missiles		
Missile's weight, sketch, photograph identification sign		
Preservation of bullets in cotton padded bottle		
Residue and missiles handed over to police properly		
Relevant medico-legal issues addressed		
Toxicology done as indicated		
Documentation		

Common Circumstances

1. Homicidal Shooting
2. Suicidal Shooting
3. Accidental Injuries

Common Causes of death

- Injuries to Brain
- Injuries to Chest organs (heart, lungs)
- Hemorrhagic Shock

- Hemo-pneumothorax
- Injuries to neck structures

PHOTOGRAPHIC POINTS IN FIREARM CASES

Firearm - all perforations, penetrations, grazing injuries

- Overall view
- Close of body with items around
- Clothing defects in mid and close range
- Hand position with close-up of discolored areas
- Entrance wound of firearm
- Exit wound of firearm
- Powder effects -burns, deposition, stippling
- Firearm's presence / absence in vicinity
- Possible trajectories and discharged ammunition and their location
- Ejected cartridge case near place of firing
- Penetrating slug
- Places in walls if there / tree for lodging of fired bullets
- Points of reflection in walls, trees, pillar, vehicle etc
- Place of firing and angle of travel of projectile

At the time of postmortem examination

- Standard Photographs as already mentioned in general section.
- All clothing defects and discoloration.
- Mid and close-up photographs of all injuries entry, exit , graze or otherwise with and without scale and reference number.
- Track of wound with dimensions.
- Cavity effect of bullet.
- Hands.
- Photograph of available X-rays for easier documentation.

Social Forensic Message

Majority of licensed firearm are used towards self and family. These are methods of affluence otherwise other people manage with bricks and bats.

ROAD TRAFFIC ACCIDENTS DEATHS^{1,2,4,5,6,7,10,63,64}

Following procedure is in addition to what described under Sudden Natural Deaths

History(from IO/Relatives/ eyewitnesses)

- Whether the victim is a pedestrian, driver, passenger

(Front or Back seat), rider or pillion rider (with or without helmet).

- How the incident occurred? Hit and run Incident? Run-over? Date and Time.
- Death occurred on the spot or after some time. Conscious level and activities after the accident.
- Consumption of Alcohol or Drugs.
- Medical History specially CAD /Epilepsy/Vision/hearing impairment etc

External Examination

- Description of clothing, shoes and other belongings
- Description and Measurements of injuries and exact location and direction .
- Presence of contact traces and their collection.
- Tyre marks and patterned injuries must be noted.
- Photography/sketch of patterned injuries.
- Examination of eyes for cataracts, prosthesis, eye spectacles etc.
- Examination of ears for signs of natural diseases

Attempts must be made to identify Primary Impact, Secondary Impact and Secondary Injuries.

Internal Examination

Central Nervous system

- Injuries to scalp and skull –Nature and extent
- Extradural, Subdural, Intracerebral and Intracerebellar and Subarachnoid Hemorrhages –Extent and blood amount/volume.
- Measure and comment on the extent of the brain laceration and contusions
- Presence of Primary Brainstem Hemorrhages. Coup and Contra-coup injuries
- Comment on the evidence of Diffuse Axonal Injuries by observing grossly and on histopathology
- Comment on signs of brain herniation and oedema
- Integrity of Cervical Spine

Cardiovascular system

Presence of myocardial contusions and lacerations; presence of intravascular catheters and pacemakers.^{6,7}

Respiratory system

- Injuries to chest wall and ribs, sternum and clavicles
- Lungs contusions and laceration (estimate the percentage of lung parenchyma involved)
- Integrity of diaphragm
- Measure the blood volume/amount in pleural cavities

- Position of intercostals Catheters

Gastrointestinal system

- Liver capsular tears. Comment on the depth/size of the injuries.
- Hemo-peritoneum – Measurement of the volume
- Retroperitoneal hemorrhages –extent in relation to anatomical markings
- Mesenteric and bowel tears, contusions- Comment

Reticulo-endothelial System

- Spleen- integrity of capsule and parenchyma

Musculoskeletal System

- Injuries to limbs, pelvis and fractures
- Measurements of injuries, exact location and height from the level of the heel.

Specimens⁶

1. Histology- Retain samples from brain, lungs, kidneys for examination for fat embolism as indicated
Brain for examination for Diffuse Axonal Injury (from Corpus callosum, Parasagittal white matter, pons, internal capsule, superior cerebellar peduncle) as indicated
2. Blood for alcohol, drugs as indicated
3. Radiology (if felt necessary)
4. Broken pieces of glasses/paint pieces/gravel

Comment

- Reconstruction of the Event.
- Photography / Sketch as indicated
- Gravity and details of fatal Injuries
- Summary of Major injuries and pattern which can be helpful in making diagnosis about position of victim (pedestrian, driver, occupant etc)

Audit Sheet^{5,7,11}

PROCEDURE/check points	Yes	No
Overall scene		
Overall body photographs		
Clothing Examination		
External injuries documented		
Patterned injuries identified		
Internal bleeding Measured		
Reconstruction of the accident attempted		
Blood sample for Alcohol and Drugs retained		
Blood /tissue for grouping or DNA for matching if found on vehicles		

Common Causes of Death

- Head Injuries
- Chest Injuries (Hemo-pneumothorax)
- Hemorrhagic Shock (abdominal Injury)
- Multiple Injuries
- Air embolism in head and neck injuries or Fat embolism especially in limb injuries

Photographic evidences in vehicular Accident**At scene**

- Overall scene
- Position of victim and degree of injuries
- Deceased Activity at the time of incident
- Position of vehicle
- Posted speed limit of signposts
- Weather conditions – visibility, rain , fog , lightening
- Road condition –even/ uneven/ broken /pits / eroded / slippery /oily etc
- Skid marks and their length
- Speed breakers
- Condition of tyre – wear and tear
- Skid Place from where it occurred

At the time of postmortem

- Overall scenario
- Clothing condition
- Material over clothing – paint/ grease/mud / tyre marks/
- Broken pieces if glass
- Blood
- Tissue scattered /crushed
- Crushed part of bones or muscles
- Injuries in detail
- Internal important findings of trauma
- Any natural disease
- Cause of death

Autopsy surgeon should be well versed with different forms of traffic accidents like involvement of cyclists, pedestrian, two- wheeler, three wheeler, four wheeler, trucks, bus, tankers etc.

Social Forensic Message

Learn traffic manners first before driving a vehicle, a must test for all drivers

Drunken driving can produce disability or will bring miseries to your love one.

FACTORY ACCIDENTS

Industrialization has increased number of factories in urban and semi urban areas in India. Any fatality occurring at work place is a big issue between workers and management . Main reasons for confrontation remains safety and compensation to deceased family. There is emotional outburst among workers and at times lead to rioting situation. There is legal issue of compensation and fixing responsibility for negligence. Death certification and relationship with employment activity has serious impact of these issues.

In factory accidents , enquire for following circumstances depending on nature of incident :

General enquiry

Location

Overall view of scene

Machinery involvement

Electricity leakage

Fire eruption

Leakage of gases

Chemical toxicity

Chemical burns

Falling of objects

Bursting of machine

Broken missiles from machine

Human error/ factors

Intoxication

Drug / substance abuse

Deprivation of sleep

Ill health –Tuberculosis, diabetes, hemi paresis

Vision- cataract, retinopathy

Heart ailments – CAD, IHD, MI

What to look for at the time of post-mortem

General condition of deceased

Clothing with trace material related to employment

Injury pattern – general and patterned injuries produced by machinery

Fatal Injury like crushed head, crushed limbs

Complete external and internal examination

Any peculiarity related to long term association with job

Sampling

From clothing – trace material like grease, cement, dust, fine metal dust etc

From body – Swabs for material present over body for corroboration

Photographs and sketches of patterned injuries

Blood, urine for toxicology screening

Photographic points**Scene**

Overall view of scene

Position of body

Blood and tissue over machinery

Hair and blood over object if something has fallen over head

Machinery involved

Body mid and close-up range

At the time of post mortem

Overall view of body

Clothing

Full body photography as per routine protocol

Patterned injuries

Important external and internal findings

Cause of death

Common cause of death

Crushed head

Crushed limbs

Head injuries

Electrocution

Suffocation

Multiple Injuries

Audit Sheet

Check points	Yes	No
Overall scene		
History		
Body overall		
Clothing		
Photography		
Sampling		
Cause of death		
Any other issue of relevance		

LIFT / ESCALATOR ACCIDENTS

There is increase in high rising buildings and business establishment in recent past in majority of metropolitan cities of the world. At many times, accidents do happen due to mechanical failure and human errors. Most common situation occur due to sudden collapse of lifts due to broken iron strings / pulleys or electrical failure or lack of preventive measures. The injury patterns depends on nature of accidents.

Out side lift

Head crushing while curious looking into depth or above through defective doors.

Crushing or bifurcation of bodies while trapped in between sharp iron doors of lift

Falling inside the pit and then being crushed by incoming lift towards basement

Inside the lift

Head and neck injuries during sudden collapse of lift

Spine fractures

Limb fractures

Crushed between the doors while making forced exit or entry

Escalator

Accidental fall due to loss of balance

Missing steps while walking in running escalator

Recreation riding on sides and falling

Trapping of clothing like gown, duppata / chunni, shoe laces

Patterned injuries due to projecting spikes from steps

Patterned injuries to head and neck

Asphyxiation while being trapped

Sampling

Blood, urine for intoxicant / drug screening

Common causes of death

Lift accidents – Head Injuries, multiple injuries, neck fractures, suffocation in ill-ventilated lift while being trapped in it due to long electric failure

Escalator – Head Injuries, neck injuries, asphyxiation

Photographic points**Scene**

Overall scene

Faulty lift

Blood stains and scalp hair over sides of lift

Overall condition and position of boy

Injuries

At the time of post-mortem

Overall condition of body

Clothing

External Injuries, any patterned injury

Internal Injuries

Cause of death

Audit Sheet

Check points	Yes	No
Overall scene		
Body with clothing		
History		
External Injuries		
Internal Injuries		
Sampling		
Cause of death		

Social Forensic Message

Don't panic when stranded, lift has sufficient air to breathe; keep calm and call for help.

Pressing of all buttons together may be helpful in putting on the siren for help.

CONSTRUCTION INDUSTRY ACCIDENTS^{57,71,72,83,84}

Construction work is labour intensive work and injuries are part and parcel of this work. Construction activities may result in work place fatalities. Majority of people involved are male. The issues of negligence and compensation arise and have serious consequences. Postmortem are important to establish or refute the link. Most of the accidents occur due to lack of energy caused by hunger, fatigue, long working hours, sleepiness, compromised safety measures. Fall from height is responsible for than 50% fatality and next is by falling objects^{57,72}.

Construction failure

Collapse of roof

Collapse of building

Collapse of wall

Fall from broken support platform

Slip and fall from height

Breaking of escalator

Buried under sand, debris, excavation rock

Electrocution

Cradle collapse

Rotten ropes

Weak stations

Falling material

Crane accidents

Human error

Intoxication

Carelessness

Lack of protective measures

Injuries depend on type of incident

External –multiple injuries, head injury, fractures, spine injuries

Internal – fracture ribs cage, rupture/ laceration of organs

Human diseases- cardiac, neurological, vision

Sampling – Blood and urine for Intoxicants like alcohol; Vitreous humor for sugar levels

Photographic points

Scene

Overall scene

Body

Trace material like cement, cement gravel mixture etc

Boots

Helmet

Position

Injuries

At the time of post mortem

Overall body

Clothing

External injuries

Internal injuries

Cause of death

Body and face reconstruction in disfigured bodies

Common cause of death

Multiple Injuries as a result of fall from height

Head Injuries by falling objects or falls

Electrocution - wet surfaces or broken wires

Suffocation when buried in trenches or under falling objects or sands etc

Traumatic Asphyxia falling of heavy object over chest

Suffocation due lack of oxygen in deep trenches

Audit Sheet

Check Points	Yes	No
Overall Scene		
History		
Overall body condition		
Clothing and protective measures worn		
External Injuries		
Internal Injuries		
Cause of death		
Sampling		
Any thing peculiarity		

DEATHS DUE TO RAILWAY ACCIDENTS^{7,11,12,13,14}

India has wider network of railways throughout the country. Injuries may be sustained while boarding a running train, crossing the railway lines, traveling on steps, ejection from open doors, hanging from door handles, jumping from trains, lying over tracks for self killing, head injuries from projections while head is being taken out in running train and collusion of trains. These happenings can lead to injuries as well as fatalities. Pattern of injuries varies according to accident.

Following procedures in addition to what described under sudden natural deaths.

History

1. Date and time of incident?
2. Whether victim jumped himself or pushed by someone?
3. If accident, then whether victim was on the train, or outside the train as in railway level crossing or at station?
4. Whether he was seen falling down or not?
5. In case of mass casualties the engine driver is one of the prime interest to know the exact cause, hence thorough medical history as well as autopsy is mandated with screening for blood alcohol or drugs
6. Exact location of body in relation to the railway track.
7. History of alcohol intake or drug abuse.
8. Whether driver / victim suffering from mental illness or medical conditions like hearing problems or poor vision?
9. Whether brought dead to hospital or died during the course of treatment?

External examination

In general, injuries due to railway collision cause extreme destruction of body and may cause separation of limbs,

decapitation or extrusion of organs.

A careful description of external injuries with dating of injuries and ruling out other causes of death is needed

- Description of clothing, shoes (wearing or not, damages present) and other belongings
- Description and measurements of injuries, exact location and direction
- Wheel mark patterns on the body, dirt grease and manner of severing must be noted
- Photography/sketch of relevant and important injuries as indicated
- Attempt to be made to identify the area of impact to the wall/pole/ground

Internal examination

Central Nervous system:

- Injuries to scalp and skull-nature and extent
- Extradural, subdural, intracerebral and intercerebellar, and subarachnoid hemorrhages-Extent and blood volume/amount.
- Measure and comment on the extent of brain laceration and contusions.
- Presence of primary brainstem hemorrhages. Coup and contra-coup injuries.
- Comment on brain herniation, spinal cord examination with special interest to integrity of cervical spine.
- Decapitation injuries are common especially in a determined suicidal person who places his head across the track for self destruction.

Cardiovascular system

- Presence of natural disease- coronary artery as well as the myocardium examination.
- Presence of existing intravascular devices or pacemakers
- Presence of myocardial contusions, lacerations

Respiratory system

- Injuries to chest wall and ribs, sternum and clavicles
- Lung contusions and lacerations (estimate the percentage of lung parenchyma involved)
- Integrity of diaphragm
- Measurement of blood amount/volume in pleural cavities, check for signs of pneumothorax.
- Position of any inter-coastal catheters

Gastrointestinal system

- Liver capsular tears, comment on the depth/size of

injuries

- Hemo-peritoneum- measurement of volume
- Retroperitoneal hemorrhages- extent in relation to anatomical markings.
- Mesenteric and bowel tears, contusions- comment

Reticulo-endothelial system

- Spleen- integrity of capsule, parenchyma and amount of clot surrounding the spleen

Musculo-skeletal system:

- Injuries to limbs, pelvis and fractures. Extreme injuries include amputation of one or more limbs
- Presence of any congenital/ acquired anomaly may have role while crossing track or boarding train.
- Measurements of injuries, exact location and height from the level of heel.

Specimens

1. Blood for alcohol, drugs
2. Radiology for bony injuries likely to be missed
3. Histology (If necessary as indicated)
4. DNA in mass casualties

Comment

- Reconstruction of the event along with crime scene visit- may help to corroborate the circumstantial evidence.
- Gravity of injuries
- Summary of major injuries

Audit Sheet

Procedure	Yes	No
History		
Clothing examination		
External injuries documented		
Rule out foul play		
Wheel pattern injuries/ dirt, grease identified		
Internal bleeding measured		
Reconstruction of event with crime scene visit		
Blood sample for alcohol and drugs		
DNA for identification		

Common causes of death

- Multiple Injuries
- Head injuries- Decapitation

- Traumatic amputation of limbs
- Chest injuries (hemo-pneumothorax)
- Hemorrhagic shock
- Septicemia (delayed deaths)

Important Photographic points

Scene

- Over all view
- Personal items
- Position of body
- Body parts if transected
- Any suicide note

At the time of postmortem

- Overall body view
- Clothing
- Body photographs
- Pattern of injuries
- Important external and internal findings.

Social Forensic Message

Don't have competition with running train while crossing, let it go first

DEATHS ASSOCIATED WITH FALL FROM HEIGHT 11,52,57,71,72,73, 74,83,84

Following procedures in addition to what described under sudden natural deaths.

History

1. Date and time of incidence?
2. Place of incident: whether workplace, residence, deserted buildings.
3. Whether victim accidentally slipped or jumped himself or pushed by someone?
4. Whether he was seen falling down or not?
5. History of alcohol intake or drug abuse.
6. Whether brought dead to hospital or died during the course of treatment?
7. Whether suffering from mental illness or medical conditions?
8. Was there sufficient lighting
9. Safety measures adopted to prevent mishap
10. Presence of suicide note
11. Personal belongings at site

Scene Visit (recommended where it is going to be informative and confirmatory)

- Look for the height of building or object from where person has jumped / fallen
- Landing surface formation and blood or other tissues over it
- Any intervening objects and their pattern, peculiarity, damage, any blood stain or other biological material present over it
- Ante-mortem jump or fall or it was a drop of a dead body
- Keep in mind the height; low (10-15 feet), moderate (20-25 feet) or great height more than 25 feet.
- Projected path of falling and expected distance of recovery of body
- Dummy exercise in controversial cases is helpful, if feasible by resources ; it is not essential but just of corroborative value.

External examination

- Description of clothing, shoes (wearing or not, recovery from the place of fall, damages present).
- Description and measurements of injuries, exact location and direction.
- Presence of contact traces and their collection
- Grazed abrasion patterns or patterned injuries must be noted
- Photography/sketch of important and relevant injuries
- Attempt to be made to identify the area of impact to the wall/ground after the fall.
- In slip and fall , only a few minor abrasions or bruises, major trauma is to head or wrist/elbow fracture or fracture femur (in old osteoporotic people).

Internal examination**Central Nervous system:**

- Injuries to scalp and skull-nature and extent
- Extradural, subdural, intracerebral and intracerebellar, and subarachnoid hemorrhages- Extent and blood volume
- Measure and comment on the extent of brain laceration and contusions
- Presence of primary brainstem hemorrhages. Coup and contra-coup injuries.
- Comment on brain herniation, spinal cord examination with special interest to integrity of cervical spine

Cardiovascular system

- Presence of natural disease- coronary artery as well as the myocardium examination.
- Presence of existing intravascular devices or pacemakers
- Presence of myocardial contusions, lacerations

Respiratory system

- Injuries to chest wall and ribs, sternum and clavicles
- Lung contusions and lacerations (estimate the percentage of lung parenchyma involved)
- Integrity of diaphragm
- Measurement of blood volume in pleural cavities, check for signs of pneumothorax.
- Position of any inter-coastal catheters

Gastrointestinal system

- Liver capsular tears, comment on the severity , size and depth of injuries
- Hemoperitoneum- measurement of amount
- Retroperitoneal hemorrhages- extent in relation to anatomical markings.
- Mesenteric and bowel tears, contusions- comment

Reticulo-endothelial system

- Spleen- integrity of capsule, parenchyma and amount of clot surrounding the spleen

Musculo-skeletal system:

- Injuries to limbs, pelvis and fractures
- Measurements of injuries, exact location and height from the level of heel.

Specimens

1. Blood for alcohol, drugs as indicated
2. Radiology for bony injuries which likely to be missed or poorly documented . It also established pattern of fractures.
3. Histology (If necessary and indicated), not required routinely

Comment

- Reconstruction of the event along with crime scene visit- may help to corroborate the circumstantial evidence.
- Gravity of injuries
- Summary of major injuries.

Audit Sheet

Procedure	Yes	No
History relevant to issue		
Crime Scene evaluation photos /visit/reconstruction		
Clothing examination		
External injuries documented		
Grazed abrasion/ patterned injuries identified		
Internal bleeding measured		
Dust/botanical material over palms and soles		
Blood sample for alcohol and drugs		

COMMON CAUSES OF DEATH

- Multiple Injuries
- Head injuries
- Spinal Injuries
- Hemorrhagic shock
- Limb bones fractures (lower end of tibia and fibula, femur)
- Chest injuries (hemo-pneumothorax)
- Septicemia (delayed deaths)
- Fat embolism

Characteristic pattern of injuries in form of – Calcaneum and talus bone fracture while landing on feet; ring fracture in base of skull when impact get transmitted through spine in sitting like posture or buttock portion strikes or there or erect standing landing posture is there; rib fractures if sides are involved.

Important photographic points in deaths due to fall

Fall or slip from standing height (average height as per age)- slip and fall cases

- Causes of Tripping (slippery surface during floor washing, wet mud in raining, oil leaks, uneven surface, stairs etc)
- Imbalance (stepping, slippery slippers/ foot wear, uneven
- Stopping surface
- Sudden pushing
- Imbalance
- Obesity
- Objects present over scene like brick/ stone / pavement/ projecting stones
- Surface hitting the body

- Major impact is seen in head, mainly in occipital , temporal and frontal parts depending on side of slip
- Injuries over elbow, side of chest, trunk and upper portion of lower limbs may be there
- Take close-up of patterned injuries (mainly abrasions produced by gravel or any projecting object like bath room fittings etc)

Jumping/fall from more than standing height , one should assess

Scene

- Total height
- Body mass
- Body orientation
- Distribution of impact forces
- Age
- Vision
- Landing point/ Stopping distance

At the time of postmortem

- Overall view of body with clothing
- Shoes with lower part of legs
- External Injuries
- Head and neck
- Trunk showing its integrity
- Fracture bones
- Organ lacerations and tears

Fall from first floor up to third floor (25-30 feet)

- Overall view
- Jumping surface feet and palm prints with dust
- Shoes or footwear near jumping point
- Suicide note near jumping points
- Projections in the jumping path
- Ground surface where body was recovered
- Overall view of the body
- Close range of head and neck
- Close range of ankle and thigh areas

At the time of post mortem

- Overall view of body with clothing
- Surface injuries
- Internal injuries in head, neck chest , abdomen , pelvis and limbs

- Fracture sites
- Bleeding pools
- Close up of patterned injuries

Fall from heights more (third to tenth floor) roughly more than 25 feet

- Same as above mentioned
- Bursting of head
- Multiple bone fractures
- Multiple spine fracture

When falling from high building air cushion drives body little away from the foot of building so body may fall little away from the wall.⁷⁴

More than 80- 100 feet (10th floor and even more heights)

- Body is like a jumbled mass with multiple fracture and disruption of body parts
- Bursting of head, skull bone pieces may be present in vicinity with scattered brain matter
- Tissue and blood may be spotted in larger periphery
- Rest depends on type of landing surfaces
- Sometimes, there may severing of body due to intervening projections in the fall trajectory

Social Forensic Message

Keep balcony railing height above the waist level

High rising buildings shifts mode of committing suicide to jumping in spur of moment!

Principle of easy accessibility in impulsive suicides

FATAL ANIMAL ATTACKS ¹⁰⁸⁻¹¹²

Animal whether predator or prey has well developed and effective weapon for attacking its prey or to defend from the other predators. Animal are good friends of humans since inception of civilization but at times they kill them too. Parts used to cause injuries by different animals could be – teeth, head, horn, tusk, paws, claws, tail, trunk, feet as per possession and convenience. For simplicity, these animal can be categorized as below:

Pet animals – dogs, cats

Domestic Cattles- cow, buffalo, ox, goat, camel, horse

Stray animals – dogs, cats, cow, buffalo, ox

Aquatic pet animals like crocodiles, alligators

Forest / zoo animals- tiger, lion, jaguar, leopard

A brief account of injuries produced by them is as:

Dogs: Dog bites are commonest injuries in day to day life. The size and age are of the victims determine sites of bites.

Children are bitten over neck, face, head and extremities. Adults are bitten over hands, lower and upper extremities. Injuries varies from puncture, crush, tear, avulsion.

Cat: cause small puncture wounds, scratches with paws and teeth.

Cow: blunt trauma to groin, abdomen or head either by head or horn or legs. Horn injuries are large penetrating lacerations to abdomen, chest or face regions. Bull injuries are common in groin and abdomen or blunts trauma to chest and head. It cause injuries to organs and thus results in crushing and lacerations. The injuries are more towards right side of body and groin area as a result of natural reflex of defence. Once horn get entangled in groin then there could be tears and laceration in groin.

Buffalo: same as above

Ox : same as above, more severe variety due to aggression and repeated trauma.

Camel: Crushing and grinding of tissues with lacerations. Teeth indentation marks

Horse: Blunt trauma by leg and bits are common

Donkey: Unlikely but sometimes kicks

Elephants: Goring, throwing and stamping. Crushing effect over chest, abdomen, head and neck are common. Look for foot pad marks. Injuries are severe due to heavy crushing.

Tiger / Lion/ Jaguar: Cause tearing, lacerations and avulsions by teeth and paws. Most attacks are directed towards neck as their teeth and jaw are adjustable and even penetrate spine of victim easily.

Jackal, fox, have dog like bites and injuries. .

Crocodile/ alligator: They take a tight grip and shake victim vigorously to separate it from other parts of the body. They produce injuries by biting and crushing force of strong jaws.

Autopsy

Overall body view

External Findings – condition of clothing, Injuries, bites, any pattern injury

Internal findings at neck – crushing and tearing

Internal findings to abdomen and chest – tearing by horns, lacerations, crushing effect

Groin- bruises, tears, avulsion and protrusion

Photographic points depends on type of animal

Condition of clothing

Details of neck trauma

External body injuries

Important internal findings

Groin injuries

Patterned injuries with oriental and close-up shots.

Sampling –

1. Blood or saliva of animal from human victim
2. Blood and human tissues from animal if killed

Audit Sheet

Check Points	Yes	No
Overall view of body		
Clothing details		
External Injuries		
Internal Injuries		
Photography		
Cause of death		
Human tissues and blood from animal mouth or GIT if killed		

Cause of death

Crushing of neck

Multiple injuries

Haemorrhage from penetrating injuries

Large open tears and penetrations to chest and abdomen

Note: Many times, big animals like cow comes suddenly on road then fast moving vehicles may have accident then those fatalities will be dealt under RTA.

Social Forensic Message

Never irritate an animal when hungry or in hormonal peak.

Ragging Deaths

In Indian institutions, when ever new admissions are there in colleges then fresher are subjected to an unique way of introduction to seniors in the college. This relevant in majority of the institutions but at times, it takes ugly shape and even results in fatalities and suicides

In 2009, there were registered 88 cases of suicide and there were total 12 deaths. After this a serious view was taken by Indian Courts and UGC. The University Grants Commission vide its letter no F.1-16/2007 (CPP-II) dated June 17, 2009, **Ragging** constitutes one or any of the follows acts¹²⁷

“Any conduct by any student or students whether by words spoken or written or by an act which has the effect of teasing, treating or handling with rudeness a fresher or any other student.

Indulging in rowdy or undisciplined activities by any student or students which causes or is likely to cause annoyance, hardship, physical or psychological harm or to raise fear or apprehension thereof in any fresher or any

other student;

Asking any student to do any act which such student will not in the ordinary course do and which has the effect of causing or generating a sense of shame, or torment or embarrassment so as to adversely affect the physique or psyche of such fresher or any other student.

Any act by a senior student that prevents, disrupts or disturbs the regular academic activity of any other student or a fresher.

Exploiting the services of a fresher or any other student for completing the academic tasks assigned to an individual or a group of students.

Any act of financial extortion or forceful expenditure burden put on a fresher or any other student by students;

Any act of physical abuse including all variants of it: sexual abuse, homosexual assaults, stripping, forcing obscene and lewd acts, gestures, causing bodily harm or any other danger to health or person;

Any act or abuse by spoken words, emails, post, public insults which would also include deriving perverted pleasure, vicarious or sadistic thrill from actively or passively participating in the discomfiture to fresher or any other student;”

Any act that affects the mental health and self-confidence of a fresher or any other student.

With or without an intent to derive a sadistic pleasure or showing off power, authority or superiority by a student over any fresher or any other student.

Whenever such a case is brought for postmortem examination then meticulous job is required to substantiate or negate the findings. A systematic approach is always desired.

History

College entry, behavior, exposure to outer world, schooling, social background, any previous incidence of bullying, sadness, emotional disturbance etc.

Circumstantial

- Detention period
- Clothing for semen and fecal stains
- Ropes
- Restraint objects
- Beating objects
- Food and water deprivation
- Suicide Notes

Psychological and social factors

- Minority

- Deprived class
- Inhuman behavior
- Maturity level
- Non- exposure to such environment
- Making nude

Post mortem findings

- Injuries due to beating
- Forced posture
- Sexual exploitation – sodomy / vaginal sex
- Forced masturbation
- Electrocution marks
- Torture injuries – pulling body hairs

Histopathology (for corroboration)

- Lungs for asphyxia findings
- Brain for hypoxial findings
- Injury lesions for duration of infliction

Toxicology

- Routine screening for abuse substances in blood, urine and vitreous
- Urine for myoglobin resulting from muscle crushing in beating

Photographic evidence**Scene**

- Place of ragging
- Items in vicinity
- Clothing
- Body injuries

At the time of postmortem

- Body photographs in detail
- Mouth
- Eyes
- Nostrils
- Sexual organs for injuries
- Stomach – food material
- Injuries
- Cause of death

Common manner of death

- Suicides
- Culpable Homicides

Common cause of death**Homicidal**

- Head Injuries
- Shock as a result of multiple injuries

Suicidal

- Hanging
- Poisoning

Audit Sheet

Check Points	Yes	No
History		
Crime Scene assessment		
Clothing examination and photography		
Body examination and photography		
Sampling		
Toxicology screening		
Cause of death		
Opinion		

STAB /SLASH WOUNDS ^{1,2,4,5,6,7,10, 11,14,45}

The following procedure is in addition to what described under sudden Natural Deaths

History

- History about the incident and clinical records if the deceased has been subjected to operative procedure.
- Handedness (Dominant hand) of the victim in cases of suicide and assailant in cases of homicide must be established

External Examination ^{1,39}

- Examination of clothes while still on the body and its relation to injuries on the body. Sketches / photography should be done and proper description has to be recorded in the report.
- Cuts in the clothing must be measured, described and traces must be collected and submitted for analysis and whether they correspond with the bodily injuries.
- Blood stains on the cloths must be described.
- Size, site, shape, disposition of injuries, direction, margins, edges, surrounding tissue injuries must be described and documented.
- Injury length is measured with and without edge apposition.
- Distance of the injuries from heel level should be measured.
- Special attempt must be made to identify hesitation

marks, defense wounds in hands, hilt marks etc.

- Photography of injuries with scale parallel and sides to injuries is recommended. Relationship of injuries to body parts to be shown whenever possible. One photograph should be perpendicular to the injury with close-up features.
- Nails must be examined and clipping must be done to find foreign skin or blood, if indicated
- Use of transparent sheet is very handy to draw sketches of injuries with the help of permanent ink marker. Place transparency plastic sheet over the injury part and draw picture of wound. After this clean undersurface of plastic sheet. After cleaning and drying, put a white paper and make a photocopy, which can be attached with PM report.
- When clubbing the several wounds in one particular region, always use word "MULTIPLE STAB/SLASH/CUT WOUNDS", with minimum and maximum dimensions. Use of transparent plastic is helpful in drawing these multiple wounds.

Internal Examination

- Injury must be explored layer by layer and measurements should be taken and features in each layer must be documented⁴
- Injury damage must be documented.
- Blood volume/amount in cavities must be measured.

SAMPLES

Trace materials around wounds must be collected and sent for forensic analysis.

Hair and blood samples should be retained if injuries are there in those areas having hairs for future comparison with suspected weapon which may have these stains and hair.

Opinion

Weapon examination: IO is advised to bring photograph of weapon if recovered at crime scene along with inquest papers. Firstly, recovered weapon should be subjected for DNA and trace material examination to avoid contamination.

A weapon may be subjected for comparison to autopsy surgeon only after DNA, Trace material, and finger print examination.

Opinion on the probable nature of the causative weapon may be expressed on basis of injuries.

Audit Sheet^{5,7,11}

Procedure	Yes	No
Clothing examined		
Hairs of involved part		
Blood in gauze piece dried and packed		
Finger nail scrapings		
Photographs without cleaning		
Photographs after cleaning		
Examination of external wounds completed		
Handedness of the deceased established		
Track of the wound described		
Internal bleeding measured		

Common Circumstances

- Homicidal
- Accidental
- Suicidal

Common Causes

- Injury to heart
- Injuries to Lungs and Hemo-pneumothorax
- Hemorrhagic Shock
- Injuries to neck structures
- Head injuries caused by heavy cutting weapon

Photographic points in stab injury cases

Suicidal Stab

- Overall view of scene
- Close up of body
- Items near body
- Look for suicide note
- Personal history/treatment record – mental/ social/ financial/ domestic / disturbance / depression
- Suicide threats –old scars over wrist /arms
- Weapon and its relation with body
- Bleeding pools
- Prints on weapon
- Cut on finger and thumb

At the time of postmortem

- Overall view
- Clothing defects
- Hands for stains, cuts

- Overview of injured body area like abdomen epigastriac area or chest
- Wound in detail with close-up view with and without scale
- Minute details of wound edges and angles
- Track of wound
- Depth of wounds

Homicidal Stab

- The principal feature of stabbed wound is their depth which is usually greater than their width. The external wound gives no indication of its depth.
- Clothing defects with and without scale
- Wound size with and without scale
- Unique features / pattern
- Track length
- Any where on body through clothing
- Multiple
- Single or multiple weapon
- Clothing tearing, missing buttons, prints on weapon
- Close up of edges
- Gelatin cast of wound
- Weapon marks in organs/ bones
- Defence wounds over body

Chop wounds/ slash wounds

- Overall body view
- Clothing cuts
- Individual or group wise systematic coverage in detail with and without scale before and after cleaning
- Close up of wounds after cleaning
- Defense wounds
- Peculiar features
- Weapon marks

Suicide by light sharp force

- Incised wounds are inflicted by instruments with a sharp cutting edge such as razor blade or a sharp knife
- Quite place
- No disturbance
- In front of mirror
- Disorderly scene is rare
- Can walk to some other place also before final collapse

Social Forensic Message

Anger control counseling in aggressive individuals

BLUNT FORCE INJURIES

Blunt force injuries are most common injuries encountered by forensic man. Blunt force injuries may present as abrasions, bruise, lacerations and fracture. The surfaces of objects may be patterned, rough or highly irregular. These objects may inflict patterned or irregular shape injuries over body surface depending on their shape and make up.

Recording of Injuries – individually or collectively, size, location, distance from nearest anatomical landmark, photograph with and without scale, make a sketch over body chart, if patterned record in detail, healing stage, if some foreign material is there then photograph and record in detail.

Photography

- i. Distant orientation photograph showing presence of injuries
- ii. Mid view- Showing injury in relation to anatomical parts of body
- iii. Close-up view showing injury from near range
- iv. Very close view showing details and pattern in the injury

Always take photograph with and without scale.

It is always helpful to record and preserve material over these injuries which may be in form of mud, grit, coal dust, cement, plaster-of-paris, sand, red sand, lime-dust, pebbles, grease, botanical material, paint etc. These may reflect contact or causing surface.

Extent of injuries will depend on extent of force, body part, health status of sufferer, clothing over area, vascularity of area, resiliency of area, layer of subcutaneous tissue, underneath bony areas.

Easy bruising is found in females, children, alcoholics, liver disease, anaemia, purpura, scurvy and malnourished people. Bruises are unlikely to be seen when abdominal walls, diffuse flat or hard surface, thick layer of clothing is involved.

If a blood or tissue laden weapon is brought for examination to autopsy surgeon. It is advised that it should be sent to biological division for obtaining DNA material. After obtaining /procuring stains, it should be examined for injuries correlations for causation.

All Injuries should be photographed and should also be shown on sketch diagrams as a practice.

Most important blunt injury from morbidity and mortality point of view is head injury which is being specifically

discussed here.

Audit Sheet

Check Point	Yes	No
Mapping on sketch diagrams		
Photography with and without scale		
Description of injuries – identification of injury(type), Size, shape, colour, healing process, Infection, foreign material in it		

HEAD INJURY

Head Injury is serious trauma in terms of morbidity and mortality. Head and neck regions remain centre of attack in homicidal injuries due to their fatal outcomes. In accidents and falls, these remain areas of concern as impact to this region will bring either death or serious mental disability to person.

Head injury has wider connotation and implies

- Injuries to scalp skin and tissues underneath
- Injuries to skull bones
- Injuries to cranial content of cranial cavity

Injuries to cranial contents are of more serious consequences. In majority cases, multiple and overlapping injuries are seen. Injuries to scalp may be abrasions, laceration(incised-looking lacerated wound), incised wound, slash wounds, cut lacerations with indentation in bones.

Skull bones may have indentation marks of weapon, different varieties of fractures depending on their causative agent and circumstances. Most informative fractures are ‘signature’ fracture, gutter fracture and fractures from blunt weapons.

Among intracranial haemorrhages, outside the dura is extradural haemorrhage, beneath the dura is termed as subdural haemorrhage, in arachnoid plexuses these are known as subarachnoid haemorrhage, next variety is subpial haemorrhage. Inside brain substance are intracerebral haemorrhage.

Brain may show counter (impact side) and countercoup(opposite the impact) contusions.

Documentation is very important and sketch, photographs, videos should be used to document injuries and haemorrhages in sensitive and academic cases. Ready made diagrams of skull should be made available in mortuary for documentation of injuries and fractures. X-ray, CT Scan and MRI record should be maintained in soft files for further use. Special mention should about volume of

When duration of injuries is important then colour of haemorrhage or injury with degradation, reparative changes should be noted.

Steps of scalp, skull, dura and brain examination

- Examine scalp for injuries
- Open skull as per practice
- Examine skull bones for fracture
- Make a sketch of fracture
- Take photographs with and without scale of important findings
- Open skull by saw
- Examine Dura, size and spread of haemorrhages
- Open dura and examine subdural space for blood, pus, adhesions and estimate volume
- Examine surface of cerebrum and describe haemorrhagic areas and spread
- Examine base for haemorrhage
- Cut dura to expose cerebellum and examine areas
- Delivery of brain
- Examine in detail as per need of case
- Take photographs of important findings
- Make coronal sections at 1-2 cm interval
- Take section for histopathology as required.

Histopathology of lesions also help in determining the duration of injury. Histology is most useful in the assessment of diffuse axonal injury. For diffuse injury at least 8-10 areas are screened for proper assessment. In a simplified approach sections from frontal lobes, motor area of temporal lobe, occipital lobes, midbrain area, white matter from corpus callosum area where crossing of fibres is more, thalamus area, cerebellum tonsillar area are sufficient in routine screening rest of samples are according to gross findings and what we are planning to screen. In pliable brains, these can be kept for few hours in hours before dissection for better exposure of findings. The selected sites are flexible and depend on gross examination, in practice the following areas are sampled as suggested by Royal College. Pathologists, 2005. It is good document to read as good points are given to remember during performing such cases. A summary of important blocks are mentioned below for convenience.

- Block1: Frontal to include parasagittal white matter areas and corpus callosum at the level of the head of the caudate nucleus
- Block 2: Basal ganglion, including the internal capsule;
- Block 3: Hippocampus (at the level of the lateral geniculate body)
- Block4: Thalamus, including internal capsule;
- Block 5: Posterior corpus callosum and parietal

parasagittal white matter;

- Block 6: Parietal convexity
- Block 7: Pons, including the superior cerebellar peduncle
- Block 8: Cerebellum, vermis
- Block 9: cerebellum, dentate nucleus
- Block 10 Cerebellum, including cerebral peduncle
- Block 11: Medulla Oblongata
- Block 12: Mid brain
- Block 13 : Spinal cord at the level of injury
- Block 14: any other relevant area

In concluding head injury, Glasgow Scale, X-ray, CT Scan and MRI if available are important to make a proper opinion about severity. Glasgow coma scale less than 8 is indicative of serious injury. Opening skull and examining brain at autopsy has no alternative to record findings as findings are under or over report reported.

Audit Sheet

Check Points	Yes	No
History		
X-ray, MRI, CT Scan, if available		
Examination for injuries		
Photography		
Opening Skull		
Detailed examination of skull bones and dura		
Delivery of brain		
Detail examination of brain		
Photography		
Sketch representation of injuries and fractures		
Histopathology		

Rest as per the protocol

Skull fractures should also be represented by sketch diagrams as linear fractures are not appreciated well in photography. Main Traumatic reasons for fatality remain damage to intracranial contents. Blood collection of more than 70 ml produces serious pressure effects. Maximum adjusting capacity of brain remain 150-200 ml which has rapid fatality. Herniation sites like cerebellar tonsils, parahippocampal gyrus, and uncus area may look blackish or discoloured due to pressure necrosis and will show marked indentation of bony projections. These should be photographed and sections for histopathological examination is also informative.

Haemorrhage more than 30 ml at base produces fatality. In cases of pontine haemorrhage, any size more than big pin head size is almost fatal. Subdural and subarachnoid haemorrhage combination is maximally seen in head injury cases.¹⁵⁹ Contusion and diffuse axonal injuries are another prominent findings in these cases.

Social Forensic Message

External appearance of head injuries can be very deceptive even serious intracranial injuries may be present without any obvious signs of external injuries.

All Injuries to head require proper observation and evaluation. Clinical signs of mental clarity, vomiting, pupils size, increased intracranial pressure are good indicators for clinical diagnosis.

DEATH ASSOCIATED WITH SEXUAL ASSAULTS ^{1,2,4,5,6,7,10, 11,14,45,59,89,90}

Following procedure is addition to what described under Sudden Natural Deaths

History

Detail history of the incident, time, place, exact nature of the act, number of people involved, place where the body found and the stage of decomposition, nature of clothing etc.

Personal History of the deceased (married or not, pregnant or not, drug and alcohol abuse, medical history, last sexual act). Findings should be noted for penetrative assault or non-penetrative sexual assault.

Preliminaries

- Scene visit as indicated- Position in which body was recovered, clothing, items present nearby, blood and stains over the spot, intoxicant containers, drugs, condom/ condom covers are important in solving case
- Photography as indicated - body and genital injuries, bite marks, botanical material, stains are important items to be photographed
- Collection of samples and swabs before attempting to record temperature.
- Examination and retention of clothing.
- Collecting traces found on cloths or body

External Examination

- Look for bite marks, saliva, semen, blood stains
- Injuries on genital, peri-genital (thighs, anus) and para-sexual parts (breast, lips, neck, thighs etc.). Adopt systematic approach to record injuries. Use photography and sketching as per need. Minor injuries have great corroborative value.
- Injuries due to restraint around neck, wrists, ankles
- Injuries due to rough surface on back
- All orifices for fresh or old injuries. Presence or absence of semen, blood, saliva
- Loose foreign or self hair on the body
- Matting of pubic hair due to semen.

- Stains near orifices, thighs, clothing should be properly documented and preserved for further analysis.

Injuries are seen in form of abrasions, bruises, minor tears over body during restrain or fight or overpowering. There may patterned injuries like finger nail abrasions, disc shaped bruises from finger tips.

Bite marks may be present over face, neck, breast, thighs and buttocks during sexual act and forcible foreplay. Defence bites may be also present over assailant. Bite marks are patterned injuries produced by teeth when used with force. These are seen in form of abrasion, cut-lacerations and bruises. Every human has a specific pattern so it can be used for comparison. If it is a fresh case then swab from bite should be preserved for DNA profiling.

Bite marks should be photographed with and without scale. At least take overall view, mid view and finer close-up of injury showing details. The human bite may be identified by its gross, class and individual features. The size, shape, canine distance, angulations, front and back of occlusal surface are of great value. One must read guideline American Association of forensic odontologist⁷⁵.

Description of bite mark

Type in form of- Abrasion/ bruise/ laceration/ avulsion/ crushed	Location on body	Shape- round/ovoid/ moon crescent like/irregular	Colour- red/blue/purple /green/yellow	Size- horizontal /oblique/v ertical	Healing Bleeding/pus/ healing /healed

- Semen- Vagina, Anus, Mouth, Thighs, any other place*
- Fecal Matter on penis*
- Blood for DNA Profiling*
- Hair for DNA profiling or Comparison*
- Foreign Bodies over body or in the genitalia*
- Nail Scrapings / clippings*
- Vaginal washouts*
- General Lubricant – oil, cream over genitalia*

Bite marks should be differentiated from love-suction marks, defibrillator, hair curler, resuscitative devices, cardiac ECG electrode etc.

In children sexual assault cases, injuries to genitalia may be prominent due to disproportionate genital organs. Injuries should be properly documented. These injuries may extend to pelvis, urethra, anal canal. Photographic evidence may be preserved but should be kept away from public viewing. Bite marks present over child may relate presence and act of adult perpetrator.¹¹⁹

Internal examination

Standard Neck Dissection

Standard En-Bloc Pelvic Dissection⁴

Samples

Samples collected in sexual assault cases are to establish the identity of the victim, assailant, and determining the place of assault. (Locard's Principle)

In addition special test done as indicated.

- Saliva- on lips, breast, or any bite mark; keep samples for DNA profiling also*

- Condom Lubricant –Inside genitalia from walls*

Swabs should be collected from Vagina (Introitus, high and low, posterior fornix), Anus, Mouth, Ears, Nose, Thighs, Pubic area or any other suspected area or place and Smears on Slides should be made. Examination should be done for Sperms, Prostatic acid phosphates, Prostate Specific Antigens. Special Test for Blood group antigens and DNA Studies should be done as indicated. In suspected cases screening for HIV and Sexually Transmitted Diseases must be done. Lubricant material present over condoms is specific and can be correlated from covers recovered from crime scene.

Evidence type	Collection/procuring by photographs	Purpose
Hair (Pubic, head and body)	By combing	Can help in identification of assailantMay link victim to crime sceneLinking assailant to victim
Blood	From peripheral vessels	For drugs and alcohol screening Presence of these may show inability of victim to give consent
Urine	From Bladder	Drugs and alcoholInability to give consent
Semen stains	Swabbing	May identify assailant Suggestive of recent Sexual activityMay indicate Penetrative Sexual Assault
Body Injuries	Bruise, abrasions, laceration, bite marks	Show use of force
Genital Injuries	Tear, bruise, abrasions	Show force and penetration
Clothing	Tears, wrinkles, stains debris, botanical material	Link with assailant Identification of assailant Use of force
Fingernails scrapings	Blood, skin, fibers and hair	Identification of assailant Indicative of resistance Linking victim and assailant

Ref : WHO. In: Sexual Violence Research Initiative by Janice Du Mont and D White, ,2007:10.¹⁶⁷

CEHAT. In: Manual for Sexual Offences, Mumbai, India.

Wet smear examination

Wet smear hanging drop should be prepared to see spermatozoa and their motility. This part can be easily be done in hospital. The slides should also be seen after H&E staining for sperms, bacteria and type of vaginal cells. Medical staff should be given orientation course before reporting.

For Forensic laboratory

Swabs -4, Blood control, blood for sedative/rape drugs, urine for drugs, clothing for semen and blood and other physical trace material should be sent routinely to laboratory. Idea is to find out identity of assailants and confirmation of commission of sexual act.

Swabs

- Mouth** – Take 2-3 swabs, from margins of teeth, posterior part, control
- Breast** (3 or more) – from nipple areas on both sides, from bite mark
- Vagina** (4)- from external apart of vagina near valvular area, from external orifice, from posterior part, from cervix.
- Matted pubic hairs with semen – one or two swabs with cutting of bunch for an analysis.

For taking swabs, to moisten area one or two drops of distilled water or normal saline or normal boiled and cooled water or injection water can be used.

Smears

- Vaginal smears**(6) – From external part(2), from vagina(2), cervix(2)
- Anus** (2) – from external part and internal rectum
- Mouth**(2) from lips and teeth margins and posterior part
- Stains** over thigh, abdomen or any other part as per the case

For making smears, take clean slides; dip swab tip in one or two drops of distilled water or normal saline or normal boiled and cooled water or injection water; rub this over stain and smear it over glass slides by rolling. Preserve the swabs.

Air dry slides and put in card box or slide carrier to avoid breakage.

There is no harm in taking 2 sets of samples in high stake cases. Smears can be examined in forensic department/ laboratory medicine or FSL as per the practice of the

hospital.

Fixing of slides is not recommended if examination is immediate or in a day or two. In undue delay, few drops of alcohol should be put over the slides and then dry it. Heat fixing is not recommended as it may denature DNA.

Give clear instruction to laboratory as for what you are sending these samples like

DNA material extraction for DNA Profiling. Detection of semen by presence of sperms; if sperms are not detected or destroyed by lapse of time then confirm semen presence by P30 (Prostatic Antigen) and other chemical methods like Acid Phosphates concentration.

Special Note: Genital photography should be taken in injuries and positive findings but these should be given to police or court if specifically asked with advisory as these should be made public and their interpretation should be done with the help of medical man. Caution should be issued to them as not to make public display in the court. Sketches are more than sufficient for police and court purposes.

Findings expected in male-female physical sexual contact

- Semen – sperms and chemical part of semen (semen plasma)
- Pubic hair exchange
- Blood from injuries to female genitalia or male injury frenulum tear or menstrual blood
- Skin tissue – if struggle in female nails
- Sweat – if summer and hot
- Saliva – if oral use is there
- Cloth fibers from underwear or other body clothing

Vaginal smear examination in forensic practice

In sexual offences, vaginal smear examination is an integral part of assessment. Examination of smear gives important clues. These slides become important when there is allegation of change of slides under motivation or inadvertently. Evaluation of vaginal smear is likely to have following component:

- Vaginal cells – basal, intermediate and superficial type.
- Micro-organism – Doderlein bacilli, fungi, Candida, STD organisms.
- Spermatozoa – motile / non-motile, complete/ incomplete, normal/ abnormal shaped.
- Blood- menstrual blood, blood from injured female parts, blood from accused.
- Foreign material – pubic hair, oil, condom fragments, cotton /cloth fibers, botanical material.

6. Fecal stains – if multi assailant, vaginal and anal sexual intercourse is there
7. Salivary stains and buccal cells – if oral contact is there

Presence of spermatozoa in vaginal smear : Detection of spermatozoa in vaginal smears is an important clue of male – female physical relationship. At times, it becomes only source of DNA extraction for DNA profiling for positive identification. There are three ways of evaluation in sexual assault cases.

1. Evaluation of **wet-smear** hanging drop preparation for motile spermatozoa to comment upon on recent activity
2. Fresh Smear – air dried smear directly seen under microscope and is commented
3. Fresh smear – air dried and then fixed in alcohol, after fixation it stained with Hematoxylin and Eosin (H&E)
4. Three Smears are sent to Forensic Science Laboratory

All forensic experts who wish to practice smear evaluation should take up orientation course at tertiary centers. They should undergo evaluating at least 25 slides of vaginal smears, anal smears, buccal smears and slides prepared from surface of body.

Motility of sperms in female, average duration of detection

Out of vagina	Vagina	Cervix
up to 12 hours	up to 24 hours	up to 5 days

Sperms condition in genitalia of dead female

Sperms state	Vagina	Cervix	Uterus	Body Surface	Clothing
Intact Sperms in dead bodies	Up to 2 days in average conditions. If well preserved body then even up to weeks	Up to one week in average normal conditions. In well preserved bodies upto several weeks	Up to 7 - 10 days	If dried then no time limit In wet up to 12 hours	If dried no time limit
Broken sperms	Up to one week	One week or more	1-2 weeks	In dried stains, can be recovered in fair quantity	In dried stains can be obtained in fair quantity. Over sanitary pads, a large number can be there.

Another important component of vaginal smears is **vaginal cells**, uterine shedding in menstrual cycle. In vaginal smears, presence of different stages of cells is very informative about hormonal status, uterine condition and pregnancy. Representation of vaginal cells is expressed as Maturation Index. Maturation Index (MI) is relative percentage of cells expressed in the order as para-basal, intermediate and superficial cells. It involves five random fields (x10 magnification) and counting 100 epithelial cells in each area determining the type of cells. Maturation Index in different situations is given below.

Condition of female	Maturation Index * 163,168,169 (Para basal/ Intermediate/ Superficial)	Remarks
At Birth	0/95/5	Hormonal effect of pregnancy of mother has effects on body of new born
Pre-pubertal	90/10/10	There is lack of sex hormones
Menstrual phase		
Before Ovulation	0/30/70	Oestrogen dominance
Secretory phase	0/70/30	Progesterone dominance
Pregnancy	0/95/5	Progesterone + steroid effect (Intermediate cell dominance)
Post-partum	100/0/0	Infancy like
Early Menopause	0/100/0	Steroid effect is more, atrophy starts
Late Menopause	100/0/0	Atrophic changes
Threatened abortion	0/80/20	Poor progesterone effect There is increase in superficial cells
Intrauterine death	40/50/10	Large number of para basal cells

*Ref: 163 .Chaudhari MK. In: An Essential Guide to Pathology, Central Book Agency, Kolkata, 1998:84-85.

168.McEndre B. Clinical application of vaginal maturation

index. Nurse Pract 1999 Sept;24(9):48,51-2,55-6.

169. Meisels A. The maturation value. Acta Cytol 1967;11(4):249.

Para basal are not usually seen in reproductive life of female. Intermediate cells and superficial cells are in dominance in reproductive age groups. Para-basal cells are found in massive infection, intrauterine death (IUD), post-partum period, lactation.

Role Division in fatal sex-related crimes in relation to swabs and slides preparation

Job description	Forensic Medicine Expert	Forensic Scientist / Trained Evidence Technician / Nurse	Overlapping Roles
Swab Taking	Duty of FME but other trained person can also take	Can but should under supervision of FME	In some situations, overlapping can be there
Smear Preparation	Yes, in hospital / Mortuary by FME	-	-
Hanging drop preparation	Yes, In Mortuary/ hospital by FME	-	-
Wet smear examination	In hospital / Mortuary by FME	-	-
Smear cytological examination in different stains	By Medical Trained person like Laboratory Medicine / trained FME	Can do but Forensic Scientist are not trained in cellular part	Overlapping exists because majority FME try to avoid this part
DNA extraction from spermatozoa in smear	Not trained	DNA Profiling Unit in Forensic Science Division	Forensic Scientist trained in DNA profiling is the right person
Seminal plasma component	Trained but do not practice	Chemical detection semen is done by Biological Division of Forensic Science Laboratory	Role of Forensic Scientist

These samples should be collected for screening of Alcohol, Drugs or other poisons as indicated. Toxicology analysis is helpful in detecting date rape drugs like GBH, GBL, Flunitrazepam, cannabis, benzodiazepine, cocaine etc. These drugs can be detected from 6 hours to three days. Alcohol is detected up to 10 hours, depending on consumption.

Urine and blood remains the best samples for their detection.

Appropriate Histological sampling done as per the requirement of case—Exclusion of Pregnancy

In sexual assault case, one can follow following step by step examination as :

A. Handling original condition of body with clothing –

Action	Yes	No
Finger nail scrapping and cutting		
Photography		
Clothing examination		
Sampling of trace material – mud grass, hair, oil, cream etc		
Hair		
Blood		
Semen stains		

B. After removal of clothing at the time of Postmortem Examination

Systematic Recording of Injuries		
Complete Photography		
Evidence Collection as required		
Sketch of bodily injuries / appearance before cleaning		
Sketch of bodily injuries / appearance after cleaning		
Photography as required with orientation and close-up shots		
Wet smears examination		

D. During Autopsy with details of findings

External findings		
Internal findings		
Swabs from uterus		
Injury to genitalia documentation		
Cause of death findings		

D. After Autopsy

Proper documentation of external and internal findings		
Proper preservation, sealing and transportation of samples and viscera		
Wet smear examination		
Custody of photographs		
PM report finalization		
Documentation to Police		
Documentation to relatives		
Final opinion after getting reports and investigations		

Role Division

Actually in medico-legal work, overlapping of some roles may be there but still we can fix some responsibility on

involved people.

In hospital premises

General Doctor /GDMO	Forensic Medicine expert	Dentist	Nursing staff	Technician	Forensic Scientist
Identification of Injuries Documentation of injuries Preservation of samples like swab, smears, clothing	In addition to GDMO's role Identification and analysis of patterned injuries Examination of wet smears Proper documentation and photography of patterned injuries like bite mark, weapon mark etc In bite mark analysis help of a dentist should be taken while commenting on inclusion or exclusion some one. They should attend orientation workshops	Documentati on of bite in more specific manner Preparation of cast Lifting bite pattern Analysis of bite marks	Custody of samples Attending and helping while examining females Sample taking and preservation	Staining Smears Sealing of samples follow other instructions as required	DNA extraction / Chemical test / Grouping

Unnecessary barrier should not be created among professionals as science is overlapping and if a person is trained and given proper exposure on particular science, it is more than sufficient to make a proper use of it. Medico-legal management of any patterned injury is part of forensic medicine course a trained dentist is of added value and helpful colleague.

Most of the mobile with public also has photography facility so any photo taken by them in beginning phase when victim is located first is a precious information. This can be utilized by specialist later in the process of investigation. Even public should be made aware if there is delay in hospital examination then stains and liquid falling from genitalia by victim should be taken dry cotton / surgical bandage or cotton clothing or any clean fabric and air dry it, may be used for the forensic examination purpose. This may be handed over to police or doctor examining. It will be helpful in preserving stains and thus extracting DNA.

Outside hospital

Forensic Science Laboratory (Biology, DNA Fingerprinting and Chemistry Divisions- Forensic Scientist)

Forensic Scientist's role - Chemical test for semen, DNA Profiling, Isolation of DNA from slides, swabs, clothing.

Social NGO (Social Forensics) - To spread awareness about value of evidence preservation and legal requirement in such cases. Telling simple methods and techniques of preserving semen stains on a plain cotton wool, cotton cloth, panties; dry it and keep in envelope and hand it over to medical / social / police person who can seal it as 'material given by victim' in clinical/ live cases. This material may be forwarded to forensic laboratory for DNA and other tests through IO of the case.

3.Crime Scene Reconstruction - It is team work constituting investigator, forensic scientist, forensic medicine expert, artist, photographer and computer programmer and others as required.

Audit Sheet^{5,7,11}

Procedure	Yes	No
History of incident complete		
Overall scene view		
Scene visit/evaluation as indicated		
Photography as indicated		
External Examination and Sampling and Swabbing		
All orifices examined and sampling and Swabbing		
Formal Neck examination and dissection		
Formal Pelvic examination and dissection		

On high risk of sexual assault

- Commercial sex workers
- Domestic servants
- Handicap People
- Living alone
- Multiple partners
- Homosexuals
- Drug addicts
- Landless field, brick- clan, construction labourers

- Young immature girls

Common Causes of death

- Smothering
- Strangulation
- Injuries
- Shooting
- Gagging
- Stabs/cuts
- Blunt trauma

Photographic evidence in sexual assault case

At scene

- Position of body
- Condition of clothing
- Position of personal effects
- Condoms

- Lubricants
- Panties
- Lower garments
- Items in vicinity
- Body photographs without disturbing
- Hands and nails
- Injuries present in visible parts

At the time of post-mortem

- Overall scenario
- Clothing
- Limbs
- Injuries
- Visible stains
- Important findings

Evaluation of injured hymen, average usual findings in normal female

Duration of Injury	Findings in dead	Findings in living
First 8 hours	Swollen, red, blood oozed, dried up stains	Swollen, red, painful, bleeding on touch, stains around
8-24 hours	Congested, blood tinged stains and ooze, swollen	Oedematous, swollen, sero-sanguineous oozing
2 nd day	Same as above, serous clear dried oozed stains	Serous ooze, edema start subsiding if not infected otherwise infection may set in. Healing process starts
3 rd day	No oozing, only little crusts, inflammation marked	No serous oozing, healing process sets in, oedema and swelling still persisting
3-7 days	Oedema is less, healing progress	Oedema is less, healing is in progress
7-10 days	Oedema negligible	Oedema is very light or almost normal appearing healed wound
15 days	No oedema, healing complete, well set margins, take their post-rupture shape and size. These are of gray-white colour	No oedema, healed hymen tears are visible. Gray-white colour tags

Evaluation of freshly injured anus

Time duration of sodomy act	Findings in dead	Findings in living
Up to 24 hours	Blood present in anus, smeared around; reddened appearance.	Blood oozing is prominent Painful, spasm of muscles if tear is large. Oedematous ring, abraded and bruised
At 2-3 days	Edema, congestion, infection, blood tinged stains	Painful, spasm, congestion swollen with oozing of blood tinged stains.
3-7 days	Mildly swollen, clear stains of oozed material, tears appreciated with inflammation	Painful, spasm start reducing, painful defecation with lubricants and Nitroprusside
7-10 days	Normal appearance with healed tears	No pain and oozing, wounds are fairly healed. Normal functions start appearing and shape also become normal.

Anal and rectal tears with smearing of blood around anus due to repeated penile movements. Presence of semen,

funneling effect of anus, sexually transmitted disease, chronic proctitis, multiple healed tears with smoothening

of skin around. One can safely commit that these are consistent with sodomy. In acute cases with trauma and chronic cases, it is not difficult to comment about it. Wet smear examination is very helpful in detecting sperms.

163. Sugar NF, Fine DN, Eckert LO. Physical Injury after sexual assault: Findings of a large case series. *Am J Obs & Gynae* 2004;190:71-76.

Other useful further readings:

164. Marilyn Sawyer Sommers. Defining patterns of genital injury from sexual assault: A Review. *Trauma Violence and Abuse* 2007;8 (3):270-280.

165. Heger AH, McConnell, Ticson Lynne, Guera Lisa, Lister Julie, Zaragoza Toni. Healing Patterns in Anogenital Injuries: A longitudinal study of injuries associated with sexual abuse, accidental injuries, or genital surgery in preadolescent child. *Paediatrics* 2003;112(4):829-837.

166. RN Karmakar. Editor: In : JB Mukherjee's Forensic Medicine and Toxicology, 3rd edition, Academic Press, Kolkata 2007:839-846.

Social Forensic Message

Rape is a serious social problem and shows degrading social norms and **disregard to law and disrespect to a woman**.

DOWRY DEATHS^{66,78,86}

If a woman dies within seven years of marriage then inquest is being carried out by Magistrate under section 176 Cr P C. Sections applicable in such deaths are :

498A: A husband or relative of husband subjecting her to cruelty.

113 A: Presumption as to abetment of suicide by a married woman.

113 B: presumption as to dowry death.

The reasons for such death may be maladjustment, harassment, humiliation, physical incompatibility, family discord, shattering of unrealistic dreams and expectations, infidelity, unreasonable materialistic demands, sadistic acts and alcoholism of husband, suspected out of wedlock pregnancy and infertility. At times morbid obesity (BMI more than 35)⁸⁰, hairy body and ugly facial looks are also precipitating reasons for suicides. Deaths can be classified as :

Suicide: Hanging, poisoning, burning, jumping from heights, cutting wrist.

Homicide: strangulation, blunt force injuries due severe beating, head injuries

Accident: Electrocution, slip and fall, burns

Natural: tuberculosis, systematic disease

Finding during post mortem beside cause of death, look for signs of neglect, physical injuries, poisoning, infertility, pregnancy and menstrual phase.

Photographic evidence at scene – overall scene, signs of struggle, position of body, suicide note, poisoning material

Photographic evidence at the time of postmortem- overall body view, full photography, neck, head, injuries, pelvic organs, tubal block, menstrual signs or pregnancy signs of uterus.

Autopsy

Signs of neglect – malnourishment, clothing condition, detergent dermatitis, Body Mass index (less than 20).

Examine body for injuries.

Neck for ligature mark and finger nail abrasions or bruises.

All cavities to be examined.

Bloc dissection of neck and pelvis.

Fallopian tubes for blockage, calcification, tuberculosis, infection.

Ovaries - cyst

Uterus - fibroid, menstrual phase, endometritis, tuberculosis, infections; If pregnant, preserve foetus if paternity is in dispute. Preserve foetus plain if can be transported early otherwise preserve in absolute alcohol (70%).

Cervix - unusual dilatation, scarring, blockage, ulcers

Ovarian steroidogenic activity in women reaches peak during luteal and premenstrual period. This gives physical and psychological tension in women. Suicidal tendency is more in some females luteal and premenstrual phase¹¹⁶.

Audit Sheet

Check Points	Yes	No
Overall Scene		
History		
Photography		
Clothing examination		
Sampling		
External Examination		
Internal Examination		
Viscera preservation for toxicology as deemed necessary		
Pelvic organ examination		
Cause of death		

Common cause of death**Suicidal**

Hanging

Poisoning

Burns

Cutting wrist

Jumping from height

Homicidal

Manual strangulation

Ligature strangulation

Smothering

Head Injury by blunt object

Shooting

Social Forensic Message

Avoid arguments with a female when she is menstrual phase as trivial matters can become suicide trigger points. As majority of the suicides in females occur during this phase.

Take care of your spouse during this premenstrual and menstrual phase and consult physician for diuretics, hormonal and anti-anxiety/ antidepressant drugs, if suicidal threats are recurrent.

MATERNAL DEATHS ^{1,2,4,5,6,7,10, 11,14,,40,41,44,45}

The following procedure is in addition to what described under Sudden Natural Death

Definition

A death of woman occurring during pregnancy, at child birth or within six weeks (forty two days) after child birth of the duration and the site of the pregnancy from a medical cause related to, or aggravated by, the pregnancy or its management.⁶

Preliminaries

All the clinical details and clinical materials must be scrutinized before commencing the postmortem examination.

Radiology

Radiograph of the chest to exclude pneumothorax and air embolism before opening body cavities.

It is advisable to perform radiographs of Chest, Abdomen and Head before the Autopsy as there is high possibility of air / amniotic/ thrombus embolism in these cases.

Internal Examination**Cardiovascular System****AIR EMBOLISM**

1. Inspect and Comment on the presence of air bubbles (FROTHY BLOOD) within the great veins.
2. Fill the pericardial sac with water and open the right atrium and ventricle under water and observe for air bubble escaping

Amniotic Fluid Embolism

1. Remove heart and lungs en bloc without further dissection
2. Incise the main pulmonary trunk and right and left pulmonary arteries and their branches looking carefully for thrombotic and amniotic emboli i.e. meconium, vernix, and lanugo hair.

Coronary Arteries

Specific comments on important findings.

Gastrointestinal System

Examine the Liver with specific reference to the degree of fatty changes, necrosis or hemorrhages.

Genitourinary System**UTERUS**

1. Consider microbiological swabs from the cervix, placenta and blood cultures
2. Prior to removal, examine the vulva, vagina, cervix and external surface of the uterus for evidence of trauma and tears
3. Removal of Uterus and genitalia intact en bloc if trauma is suspected.
4. Open the uterus from anterior approach and carefully pack the vagina and uterine cavity with cotton wool soaked with 10% Formalin and fix it (ideally for 5 days) before detail examination if indicated. Usually, normal screening is quite alright and informative.

Look for previous scars and search carefully for tears and placental remnants

5. Retention and preservation of the entire specimen.

Note

The prerequisite for amniotic fluid embolism to occur is amnion to be torn. The tear may be in the amnion enclosing the fore or hind waters. Hence clinically intact membranes do not exclude the diagnosis.

Lethal amniotic fluid embolism is most commonly associated with relatively small tears in the uterus; cervix or vagina where there may not be complete disruption of the wall⁶.

Placenta

Abnormal placentation is an important factor in a significant proportion of the deaths associated with hemorrhage. Adverse perinatal outcomes are noticed in form

of infections, infarctions, placentomegaly, retroplacental haematoma, placenta succenturia, single umbilical artery cord haemorrhage and edema.¹¹⁴

There are two major patterns of abnormality.

- a. Site-Typified by ectopic pregnancy and placenta previa
- b. Attachment-Typified by a morbidly adherent placenta (Placenta accreta, increta and precreta)

Weight and the measurements of the placenta must be recorded. Specific comments on the appearance of the placenta with reference to meconium staining and estimation of the degree of any placental infarcts and hemorrhages.

Specific comments on the length and insertion of the umbilical cord and knotting of the blood vessels must be made.

Site

As it is the lower segment attachment of the placenta which is of major importance, the uterus must be opened from fundus to display the placenta.

Attachment

- Morbidly adherent placenta is frequently associated with a clinical history of difficulty in delivering the placenta which is often incomplete.
- Careful examination of the post partum uterus and all raised lesions as well as those clearly related to retained products must be examined histologically.

The full term placenta is about 500 grams; a placenta has than 350grams has adverse effects of pregnancy. In anemia, weight of placenta may go up to 650 grams¹¹⁴.

On histopathology: Chronic villi should be examined for size, stromal density, syncytial knots, inflammation, infarction, calcification, hemorrhage and fibrinoid deposition. Inter villous space is evaluated for crowding of villi, fibrin deposition and intervillous thrombi¹¹⁴.

Central Nervous system

- The brain and the entire dura including the sinuses should be removed by the pathologist and submitted for examination.
- Blocks from all regions of hemorrhage should be submitted as foci of hemorrhage may relate to metastatic choriocarcinoma.
- If spinal or epidural anesthesia has been performed the spinal cord should be referred for formal neuropathological examination.
- It is highly recommended that formal neuropathological examination of the brain to be performed if consultation is available.

Endocrine system

Examine and embed the pituitary for evidence of infarction.

SPECIMENS⁶

HISTOLOGY

- One block from each lobe of lung
- Pituitary gland
- Placental site of the uterus and additional sections as indicated.

(It is recommended that additional tissue be retained for possible further examination including lung, heart, kidney, liver, tubes and ovaries)

Specialized Histopathology

Amniotic Fluid Embolism

Histopathological examination of the lungs is always necessary in the diagnosis of the amniotic fluid embolism. The histological component of the amniotic fluid emboli have been defined as follows

- i. Epithelial Squamous cells shed from fetal skin
- ii. Lanugo Hairs which increases in number with gestation
- iii. Fatty Material Caseosa Vernix
- iv. Mucin-generally derived from the fetal intestine and associated with passage of meconium
- v. Bile pigments derived from the meconium

Though all these components may be identified in routine Hematoxylin and Eosin sections, it is recommended to use Alcian Phloxin (Attwood's) stain⁶.

Pre-eclampsia, Eclampsia and Hypertension

In pre eclamptic toxemia, a major abnormality is seen in the uterine vasculature:

Fibrinoid necrosis associated with large number of lipophages in the vessel wall, the latter being cuffed by mononuclear cells. This change is typically found in the terminations of the spiral arteries in the deciduas parietalis, the basal arteries of the deciduas basalis and the myometrium and in the myometrial segments of the spiral arteries of the placental bed.

Acute fatty liver of Pregnancy

Acute fatty liver in the late pregnancy can present with abdominal pain and recurrent vomiting without prior warning of jaundice.

The salient feature includes the features of fat in small vacuoles in the centrilobular hepatocytes while a ring of normal hepatocytes remains around portal systems.

Necrosis is not a feature

TOXICOLOGY

Toxicology screening as indicated. Drug levels if indicated and facilities available.

Approximate uterus length at different periods of pregnancy^{14,43,44,45}

Full term 36 weeks onwards	26-28 cm	
36 weeks	26 cm	Forwardly inclined or slip a bit down
32 weeks	24 cm	At xiphoid tip
28 weeks	20 cm	Between umbilicus and xiphoid tip
24 weeks	16 cm	At umbilicus
20 weeks	14.5 cm	Between pubic symphysis and umbilicus
16 Weeks	13.5 cm	Just above pubic symphysis
12 weeks	12.5 cm	Within pelvis
Non pregnant uterus	6-7.5 cm	In pelvis

Involution of uterus after delivery –levels of upper most part^{14,43,44,45}

Approximate rate of reducing size of uterus is 1.5 cm per day

Duration after delivery	Upper end of uterus can be at	Dimensions	Uterine weight
Immediate after delivery	3cm below umbilicus	24-20cmx14cmx5 cm	800-1000 grams
3 days	5cm below umbilicus	17 cmx10cmx 4-5cm	500 grams
One week	Between umbilicus and pubic symphysis	14cmx 8cmx4cm	350 grams
Two weeks	Pubic symphysis	12cmx7cmx3cm	300grams
Three weeks onward	Pelvic		
Six weeks	Near Normal size	10cmx6cmx2.5cm	120grams
Eight to ten weeks	Normal size	8-10cmx5cmx2cm	80-100 grams

Audit Sheet^{5,7, 11,45}

Procedure	Yes	No
Clinical documents scrutinized		
Radiography		
Examination of placenta		
System wise dissection		
Special attention paid to look for air/amniotic embolisation		
Lungs screening and Histopathological evaluation		
All organs subjected for histology with special stains if necessary		
Central nervous system subjected to neuropathological examination		

Placental attachment size in regressing uterus^{14,43,44,45}

Immediately after delivery	10 cm
After 3 days	7.5 cm
After one week	4 -5 cm
After 2 weeks	2.5 cm
After 6 weeks	1.5 cm
After 8 weeks	1 cm
After 10 weeks	Unidentifiable grossly
After re- menstrual period	Unidentifiable even on HP
Uterus ready for next pregnancy	Even endometrium

Common Causes of death

list is in addition to points mentioned in natural death sheet

- Hemorrhages (Ante-partum or Post-partum)
- Embolisation (Amniotic fluid, Air)
- Infections
- Eclampsia
- Aggravation of Natural Diseases

Photographic points in maternal death

- Overall body pictures
- Face for swollen , paleness
- Lower limbs for oedema and deep vein thrombosis
- Abdomen size
- Surgical wound

Internal

- Abdominal cavity for blood
- Lungs for oedema , aspiration , fat embolism
- Uterus size , thickness

- Placental site
- Cervical tears
- Lacerations
- Ovaries and fallopian tubes

Social Forensic Message

No mother should die due to lack of health care facilities.

Abortion Deaths

Abortions are quite common in reproductive age group in India. Pregnancy in wedlock relations can be terminated as per MTP Act 1971. MTP, if it is carried out at authorized centres has lesser chances of death due to sterile instrumentation and proper anatomical knowledge. In cases of illegal abortions, various conventional or non-conventional methods are adopted by qualified as well as non qualified people to terminate the pregnancy which put life at greater risk. Illegal abortions at the hands of unqualified persons results in more injuries and complications. Possibility of death increases due to lack proper knowledge, no anaesthesia, and non-sterile instrumentation.

History: period of gestation, physical changes in body, place of abortion, place notified or unrecognized

General Findings: Breast changes, pigmentation, fluid retention, DVT

Abdomen: Abdominal wall, distension, blood, chemical peritonitis, adhesions, pus pockets, fat **necrosis**

Genital parts: Swelling, injuries, bleeding, pus, foul smell, distension with crepitus

Cervix : signs of instrumentation, injuries, infection, size, shape

Uterus: size, shape, walls, curetting over inner surface, conception products and placental remains, blackish-green pus in anaerobic infective cases, soft and crepitus myometrium, placental attachment site, examine placental site for chorionic villi under microscope. Air bubbles under outer surface in gangrenous pelvic organs, walls crepitus, myometrium discoloured.

Fallopian tubes: size, shape, blockage, calcification, pus, swelling, haemorrhage

Ovaries: Size, shape, presence of corpus luteum

Heart: walls, coronaries, frothy blood, clot, DVT dislodged thrombus

Lungs: embolism, congestion, consolidation

Aborted material: It depends on duration of conception. In early period, if embryo is not found look for presence of chorionic villi. If fetus is recognized then examine it as done for fetus age and maturity evaluation.

In abortion cases, basically all findings of delivery

should be looked for but it depends on duration gestation period.

All important findings should be photographed. Fetus material may be retained for DNA profiling. It can be done in five ways:

1. Take one cotton gauze piece, rub it over skin of fetus, dry it and then put it paper envelope.
2. Take tissue as such and keep it in minus 20°C freezer.
3. Keep fetal remains in absolute alcohol or 70% alcohol.
4. If nothing is available at centre then preserve it in saturated solution of common salt.
5. If there is difficulty in getting absolute alcohol then whisky / scotch/ liquor which usually have 40-50% alcohol, can be used as last resort.

Special Note: Never use formalin if DNA profiling is desired.

Samples: Blood, Urine, abortus material, uterus, cervix, culture in infective cases chemical material in genital tract, botanical material present in cervix or uterus or vagina.

Scene Visit

At clinic: it is always better to visit scene with Gynecology and Obstetrics Specialist.

- Place
- Instrumentation
- First aid measures
- Anaesthetic measures
- Minimum facilities as per MTP Act 1971 and Rules 1972
- Qualification of abortionists
- Abortus material
- Bleeding and soiled garments
- Place of disposal of clothes

At the times of post mortem

Complete examination and photography

Photography

- Important external findings
- Important Internal findings
- Local genital findings
- Chemical present
- Botanical material present
- Instrumentation signs
- Hot water bottle marks
- Bleeding

- Infection
- Tears
- Cause of death

Cause of death in legal abortion

- Pulmonary thrombo-embolism
- Hypoxia resulting from anesthetic procedures
- Uterine Perforation
- Vaso-gvagal stimulation from cervix manipulation
- Infection
- Septicemia
- DIC
- Bleeding
- Amniotic fluid embolism
- Air embolism

Causes of death in Illegal Abortions

- Shock from dilation of cervix
- Tear in cervix and bleeding
- Uterine perforation
- Infection
- Gangrene
- Embolisms – thrombus, air and amniotic fluid embolism

Audit Sheet

Check Points	Yes	No
History		
Scene		
Photography		
External examination		
Internal examination		
Genital examination		
Sampling		
Cause of death		

Social Forensics

In highly populated India, liberal policies about abortion are in the interest of country.

ECTOPIC PREGNANCY DEATHS ¹²⁸⁻¹³⁷

Ectopic pregnancy is defined as pregnancy that develops after implantation of the blastocyst anywhere other than the endometrial lining the uterine cavity.¹²⁸ Generally, it refers to the implantation of a fertilized egg in a location outside of the uterine cavity, fallopian tubes,

ovaries, cervix, uterine cornue, and abdominal cavity. The most common site is within fallopian tubes. Salpingitis is the main cause of tubal pregnancy and now is considered due to Chlamydia.¹²⁹ The other sites are ovary, abdominal cavity and uterine end of fallopian tubes. The most common reason for ectopic pregnancy remains infection in tubes / PID. Other reasons can be leiomyomas, adhesions, previous surgery.

It is one of the leading cause of pregnancy-related death in the first trimester, accounting for 9% of all pregnancy-related deaths.¹³⁰ The incidence of ectopic pregnancy has been reported to increase about four folds due to multi factorial reasons like increase age for marriage, previous caesarians, parity, smoking, previous ectopic, endometriosis, structural anomalies and life style of the women affected.¹³¹ More than 95% of the ectopic pregnancies occur in fallopian tubes. Another 2.5 % occur in corona of the uterus and the remainders are found in the ovary.¹³²

Ruptured tubal or ectopic pregnancy is one of the acute abdomens which necessitate immediate surgery; misdiagnosis or delay in starting of treatment has high chances of fatality. On an average tubal pregnancy usually does not go beyond 8-10 weeks due to lack of decidual reaction in the fallopian tube, the weak and thin wall of tube, there is bleeding due to trophoblastic invasion into the wall. Thus the tissues of the tubal wall form a gestation sac for the growing ovum, and haemorrhage may occur in the tubal lumen or into the layers of broad ligament. Rupture is usually occur after 6 weeks of pregnancy. Mean age at death due to rupture of ectopic pregnancy was found 27 (+_ 6) years.¹³³ Presentation is acute abdomen and if goes undetected , can have fatal outcome. Massive haemoperitoneum is the usual cause of death when ruptured ectopic pregnancy is missed or left unattended.

Early diagnosis before ectopic pregnancy ruptures reduces both mortality and morbidity. The blood and urine level of HCG level should be obtained. The level of beta HCG in blood is 1190 + 320IU/l for unruptured and 4160 + 400 IU/l for ruptured ectopic is quite helpful in making diagnosis.¹³⁵ Urinary HCG levels correlate well with that in blood.¹³⁶ It is certainly inadequate to use clinical features alone in making diagnosis of ectopic pregnancy. Diagnostic aids such as Immunological urine pregnancy test, ultrasonography, culdocentesis, and laprotomy when needed, make the job much easier. It is extremely difficult to diagnose heterotopic pregnancy (intrauterine as well tubal pregnancy), and 50% of such cases are identified only after tubal rupture.¹³²

Postmortem Findings

- Bloated abdomen
- Blood in pelvis cavity / abdomen
- Bleeding at the site of implantation

- Fertilized ovum undergoes normal development with formation of placenta, amniotic sac and decidual changes at implantation site.

Investigation

- HCG assay
- Ultrasound

Histopathology

- Uterus – endometrial for decidual changes, may be or may not be
- Site of rupture for bleeding and other changes
- Conception products

Photographs

- Face for pallor look
- Clothing
- Lower abdomen for hot water application, trauma
- Rest as per need of case
- Bleeding volume in abdomen
- Rupture site
- Conception products
- Uterus, ovaries and fallopian tubes

Cause of death

- Haemorrhagic Shock
- Air embolism

Audit Sheet

Check Points	Yes	No
History		
Amenorrhea of 6-8 weeks		
Pain Abdomen		
HCG		
Ultrasound		
Abdominal aspiration		
Abdomen examination		
Pelvis examination		
Conception products		
Blood Volume measured		
Cause of death		

Note: The other conditions which may simulate ectopic pregnancy are: 1. acute appendicitis; 2. perforating peptic ulcer; 3. twisted ovarian tumour; 4. ruptured endometrial cyst and 5. acute haemoperitoneum from rupture of vessels of ruptured corpus luteal cyst.¹³⁴

One should rule out these possibilities.

STILL BIRTH^{45,50,14}

Intrauterine/ Intra partum fetal death after the age of legal viability i.e. born with no “signs of life” from 28 weeks to full term 40 weeks. Major problem faced by autopsy surgeon is to decide whether it was dead fetus or it died during process of labour.

A simple answer to these queries is to conduct meticulous postmortem examination.

Protocol adopted is as follows

- Place of recovery
- Condition at recovery
- Covering
- Clotting
- Placenta
- Height
- Weight

External features and measurements

- Body weight
- Crown-rump length(sitting posture height) about 2/3 of crown to heel length
- Crown-heel length (standing height)
- Shape of Head
- Occipito-frontal circumference (important in contracted pelvis cases)
- Chest circumference at nipple level(expanded or non-expanded chest)
- Abdominal circumference at umbilicus
- Umbilical position
- Nasal patency
- Palate
- Lips
- Ear position(low, high, normal)- Chromosomal aberrations
- Ear shape
- Nasal bridge (depressed/ elevated/ flattened)
- Thickening skin in posterior neck
- Hands shape and fingers shape
- Foot length and foot print
- Spinal integrity
- Genital position (Testes descended/not descended)

- Anus patency
- Vernix caseosa
- Skin condition (fresh/ peeled off/ discolored)
- Skin blebs, sloughing
- Hair length
- Finger nails
- Eyebrows
- Eyelids
- Laxity of joints
- Integrity of joints

Special features of hard and soft palate, choanal atresia, ear size and position, tongue protrusion, nuchal thickening (Trisomy 21), short sternum (Trisomy 18), polydactyl (Trisomy 13), finger lengths, genitalia, patency of orifices are of special importance in such cases.

Internal

- Softening of organs
- Collapse of head
- Sub scalp bleeding
- Sub arachnoid haemorrhage
- Make specific incisions
- Note position of chest and abdominal organs
- Muonium

Common causes

Fresh still births are quite common in obstructed labor due to contracted pelvis, prolonged second stage of labour.

History	Yes	No
Skin		
Shape of head		
Circumferences		
Anatomical abnormality		
Chest expansion		
Umbilical cord		
Scalp trauma		
Cord		
Internal organ maturity		
Position of organs		

Examination of placenta

Placental disc weighs about 500 grams near term. If it weighs less than 350 grams and over 700 grams, is indicative of pathology. The usual dimension of placental disc is about 18 cm and shape is oval and round. The thickness varies 2

to 2.5 cm. If placental thickness less than 1 cm and above 3 cm is indicative of pathology. Thickness is measured after giving a cut. Placenta should be cut at 1-2 cm interval, consistency should be noted

Fresh/ New Infarct – red in colour

Old Infarct – pale and hard

Firm area- infarct, collection of fibrin, thrombosis

Placenta examination points

Photograph with covering/ container, overall and close up shots

Weight with umbilical cord

Weight without umbilical cord

Diameter

Thickness maximum

Thickness minimum

Cotyledons

Foetal Surface

Maternal surface

Maternal attachment site

Umbilical cord length, haemorrhage, knots, varicosity, method of cutting

HP Blocks: Maternal surface, foetal surface, umbilical cord, from thickness of placenta-attachment site. Membrane is made as a roll then one section is taken; any scarring, infective, shrunken or hypertrophied area. If thrombosis then one sample for age of thrombus.

Method of dissection of placenta

Make serial sections of 1-1.5 cm from one to another end and look for infection, haemorrhage and thrombosis.

Umbilical Cord Examination

The average length of umbilical cord is about 60 cm ; short cord is considered when it is less than 32 cm and

Gestational Age (weeks)	Umbilical Cord Length in cm
20-21	32.4
22-23	36.4
24-25	40.1
26-27	42.5
28-29	45.0
30-31	47.6
32-33	50.2
34-35	52.5
36-37	55.6
38-39	57.4
40-41	59.6
42-43	60.3

while long cord is labeled when it is 100 cm or above at full term. The simplified average length with gestation period is mentioned below in the table (Benirschke and Kaufmann), average length is with plus minus range of 8 cm to 12 cm on either side with advancing gestation weeks.

Histo-pathological sections – one near fetus and another nearer to placenta

Cord insertion can be central, eccentric, marginal.

Method of autopsy of conception products⁵⁰

Up to 12 weeks – Sectioning methods

12- 22 weeks – mini necropsy

22weeks – 40 weeks – Full autopsy

Common cause of death

Immaturity

Nonviable foetus

Congenital abnormality

Asphyxia during birth process (fresh intra-partum still births)

Instrumentation

Photographic evidence at the time of postmortem

- Overall photo
- Head shape
- Skin changes
- Diameters
- Umbilicus
- Sub-scalp haemorrhage or fluid collection
- Any fracture or any injury
- Lungs and chest cavity
- Any other peculiarity

Caput succedaneum presents as scalp swelling that extends across the midline and over suture lines and is associated with head moulding. It is mainly a fluid collection in subscalp subcutaneous space. It resolves in few days.

A cephalohaematoma is haemorrhage of blood between the skull and the periosteum of a recently born baby and is secondary to rupture of blood vessels crossing periosteum.

Prolonged second stage of labour depends on pelvis size, condition of uterus, position of fetus, pushing efforts of mother. One must know reasons for obstructed labour in such cases. Normal period of second stage varies from 30 minutes to three hours in nulliparous woman. In multiparous it is up to 30 minutes.

Assessing time of death in still birth- If skin is intact and red, the death should be less than 8 hours. If there is

skin slippage with detachment of epidermis, death should be more than 8 hours and up to 72 hours. If there is severe skin slippage and discoloration of organs with serosanguinous effusion in the body spaces, fetal death is more than 72 hours. If skull bones overlap, death may have occurred for 4-5 days. In this regard, Langley's grading of maceration is quite helpful.

Social Forensic Message

Encourage hospital delivery where trained personnel are there.

INFANTICIDE 1,2,4,5,6,7,8,9,10, 11,44,45

The following procedure is in addition to the procedures described under Sudden Natural Deaths and Deaths associated with Child Abuse and Deaths of Suspected SIDS.

History

- Marital status of parents, antenatal history of the pregnancy, Birth history and Post natal complications of the infant and the mother must be looked into in detail.
- Birth Weight of the child must be recorded.
- Clinical notes must be scrutinized.

Preliminaries

- If the Placenta is available, it must be examined and necessary samples must be taken for histology and genetic screening. Umbilical cord must be examined
- Photography must be done.
- Radiography as indicated and where it could be of help.
- Weight, Crown rump and Crown heel length, Head, chest and abdominal circumference must be measured.
- Presence or absence of clothing must be noted.

External Examination

- Injuries and abnormalities must be documented and photography must be done.
- Maturity of the child must be estimated.
- Any congenital abnormality incompatible with life must be noted.
- Examination of Umbilical cord in detail (Length, ends, Watson Jelly).
- Presence or absence of caput succedaneum.

Internal Examination

- Special technique- after removing cerebral hemispheres inspection of falx cerebri and tentorium cerebelli to exclude hemorrhage during birth^{1,2,4}

- Cardiovascular and respiratory systems must be dissected en bloc.^{1,2}
- Lungs must be examined for signs of respiration
- Gastrointestinal system must be examined for presence or absence of food materials and samples must be retained for further analysis.
- Dissection of ends of the relevant bones for age estimation

SAMPLES

- All organs including placenta and umbilical cord for histological examination.
- Blood samples for toxicology as indicated.
- Blood culture and virology as indicated
- Genetic screening as indicated

Changes in circulation⁴⁵

Umbilical cord has two arteries and one vein, surrounded by Wharton jelly. Umbilical arteries and vein start contracting after birth and are completely closed by third day. These are completely obliterated by fourth or fifth day. The ductus arteriosus is closed by 10th day. The closure of foramen ovale occurs by second or third month after birth.

Audit Sheet^{5,7,11}

Procedure Check Points	Yes	No
Overall condition		
Body photography		
Covering		
Prenatal and postnatal history scrutinized		
Placenta and umbilical cord examined		
Maturity of the baby estimated		
Heart and lung examined en bloc		
Sample of all organs retained for histology		
Microbiological samples collected as indicated		

Common Causes

- Head injuries
- Chest injuries
- Strangulation
- Smothering
- Starvation
- Drowning in milk /water etc
- Untied umbilical cord

Photographic points in Infant death

Scene

- Overall view
- Bed with pillows, quilt and other clothing
- Preventive margins
- Sleeping positions
- Medication around of recent use
- Hygienic condition of residence / place of stay
- Wall for any scalp hair / blood
- Instruments of hitting around
- Co-sleeper with infant and their relative position

At the time of post-mortem

- Overall all view of body
- Clothing
- Full body photography
- Injuries with and without scale
- Important findings
- Important internal findings
- Cause of death

Social Forensic Message

People should practice equality towards both sexes as they are required by society.

All measures should be taken to prevent female feticide and infanticide.

SUDDEN INFANT DEATH SYNDROME^{1,2,4,5,6,7,8,9,10,11}

The following procedure is in addition to what described under Sudden Natural Death and infanticide

History

In the history following points must be stressed

- Consanguinity of parents (blood relationship of mother and father)
- Family history of previous deaths in childhood and details about siblings
- History of the Family tree
- Maternal and Paternal ages and medical and social history
- Maternal illness during pregnancy
- Mode of Birth. Period of gestation, birth weight, complications after birth
- Immunization History
- Parental Habits (Smoking, Alcohol, Drugs, etc)
- Details about beddings

- Details about child's last meal
- Details of the incident. Position of sleeping (on back, face down), with whom, etc.

Scene Visit

To inspect the room and the condition of bedding. (Even though the bed is not there, scene visit will be a benefit)

Preliminaries

Photographs of the body and Radiography of the body as indicated

External Examination

- Clothing must be described
- Distribution of Rigor Mortis and Hypostasis must be described
- Weight and the Height of the body must be documented and whether it is compatible with the chronological age must be analysed. Head, chest and abdominal circumference must be measured
- Body must be examined to exclude injuries and if any injury is found, explanation of it must be sought.

Internal Examination^{1,4,8,9}

Special neck and facial dissection as indicated

Central Nervous System

Any development abnormality must be noted.

Falx and Tentorium cerebelli examined after removing hemispheres.

Middle ear must be examined for signs of infections after removing the brain by removing the petrous part of temporal bone.

Cervical spine should be examined as indicated.

Respiratory System and Cardiovascular System

- Description of the Thymus and its weight must be noted
- Heart and Lungs must be dissected en bloc. Patent Ductus Arteriosus must be excluded.
- Heart must be examined for congenital abnormalities.
- Larynx, trachea and major bronchi and peripheral bronchi must be examined for aspirated materials

Dissection of all systems including Reticulo-endothelial system, endocrine system and collection of samples^{1,4}

Special Investigations

Histology

Retaining tissues of all organs for Histopathological examination.

Special Staining as indicated

Microbiology

Blood for virology, bacteriology and culture as indicated.

Toxicology

Full screening for common poisons and special toxins as indicated.

Biochemical Studies of Vitreous for Glucose, Electrolytes and other metabolites.

Screening for metabolic disorders as indicated (1,2)

Screening for Genetic Disorders as indicated

Audit Sheet^{5,7,11}

Procedure	Yes	No
Risk factors identified in the history		
Bedding examined		
Maturity assessed		
Central nervous system examined by neuro-pathologically		
Microbiological Screening		
Biochemical screening		

Probable Mechanisms

- Electrolyte imbalance
- Conduction disorders
- Respiratory distress
- Metabolic disorders
- Overlaying
- Viral infection
- Prominent trachea-bronchial secretions

Photographic points in sudden death in childhood

- Overall view of body
- Full body photograph
- Face
- Neck
- Limbs
- Back of trunk
- Any peculiarity
- Important internal findings
- Cause of death

Social Forensic Message

Give special care to young children in rainy and winter season

NEW BORN DEATHS WHERE MATERNITY OR PATERNITY IS DISPUTED^{1,2,4,5,6,7,10, 11}

The following procedure is in addition to what is described under Sudden Natural Deaths. Here, efforts are directed towards parentage determination.

History

History of allegation

Exchange of babies in labor room

Fire in hospital nursery

Prenatal and postnatal history

Birth history

History of consanguinity

History of recovery of the body and the state of it.

Preliminaries

Photography of the body.

Foot print analysis

Collection of blood samples from Alleged Father, Mother, Siblings and relatives as is the case may be, after getting the authority and consent.

Safety and custody of the samples must be maintained.

External Examination

Exclusion of injuries and malformations.

Internal examination

Collection of Blood samples for Blood grouping and DNA analysis

Exclusion of congenital abnormalities incompatible with life.

System wise dissection and collecting samples for histology.

Samples

Blood for grouping

Blood for DNA Profiling

Material for DNA Profiling -Bone marrow, tooth pulp, hair with roots, psoas or thigh muscles samples in decomposed bodies

Routine Histology sections , specifically of lungs and brain

Toxicological Screening

Preferred family samples in order of preference

1. Parents (Biological mother and father)

2. Twin brother / sister

3. One parent , children

4. Siblings

5. Grand children

Audit Sheet^{5,7, 11}

Procedure	Yes	No
Risk identified in history		
Proper authority obtained for taking samples form Alleged Mother /Father / Siblings		
Chain of Custody of samples maintained		
DNA studies arranged		
Proper documentation done		

Common Risks

- Unmarried Couples
- Unwanted pregnancies
- Single mothers
- Domestic servants
- Hospital mix-ups
- After natural Disasters

Photographic points**Scene**

- Overall scenario
- Nursery pictures
- CCTV footage if available
- Documentary foot prints

At the time of PM

- Body
- Foot length with scale
- Blood for DNA
- Clothing
- Important external and internal findings

Social Forensic Message

Always advocate counseling of parents as no child is illegitimate

Identify mental illness sings!

DEATHS SUSPICIOUS OF CHILD ABUSE (NON-ACCIDENTAL INJURY IN CHILDREN)^{1,2,4,5,6,7,8,9,10, 11,60}

Child abuse is social disease where perpetrators are those who are entrusted to care for the child.. 'Child abuse

consists of anything which individuals, institutions, or processes do or fail to do which directly or indirectly harms children or damages their prospects of safe and healthy development into adulthood.

'Physical Abuse of Child is also known as battering or non accidental injury. A physically abused child is defined as 'any child who receives physical injury (or injuries) as a result of acts (or omissions) on the parts of his parents or guardians'^{142,143} For clinicians, another version of definition is also used to fit on their needs:

'Child abuse and neglect is any interaction or lack of interaction between family members which results in non accidental harm to the individual's physical and/or developmental states.

Non accidental injury in children or child abuse can be categorized into: physical abuse, neglect, sexual abuse, emotional abuse, abandonment. According to Cantwell & Rosenberg, the child has a right to expect and the adult care taker has a duty to provide: food, clothing, shelter, safekeeping, nurturing and teaching¹⁴⁴. Failure to provide these constitutes neglect¹⁴⁵. There are some acts of omission of not providing proper clothing of winter, nutritious food and beating on small mistakes out proportionately.

Actually, parent's socioeconomic, emotional and relationship status plays an important risk factor in child abuse here. If the parent is a drug addict or alcohol consumer or unemployed, surely, the risk of child abuse are higher.⁶⁰

Child abuse carries a significant mortality and morbidity with consequences including:¹⁴²

- Death or disability in severe case
- Affective and behavior disorders
- Developmental delay and learning difficulties
- Failure to thrive and growth retardation
- Predisposition to adult psychiatric disorders
- Increased risk of the abused becoming abuser

This is applicable universally to all unfortunate children who survive the pain and trauma of child abuse. It is more in countries where poverty, illiteracy, and unemployment is rampant. Innocent children become target of psychopathic, mentally disturbed and, suspected infidelity frustrated parents or caretakers.

Minimum Standard in addition to what is described under Sudden Natural Deaths and Standard Procedure for Sudden Infant Death Syndrome

Preliminaries

It is mandatory that all cases where death has occurred in the setting of potential child abuse, full body radiographs should be taken. Also take appropriate photography prior to postmortem examination. Bite marks present over child

may relate presence and act of adult perpetrator¹¹⁹.

Radiographs should ideally be interpreted for features of bone diseases, fractures and estimation of age of injuries.

External Examination

- Special comments on hygiene, built (Height and Weight for age), nourishment
- Documentation of hair loss
- Shaving of scalp hair to reveal occult injuries
- Examination of the Tympanic Membrane for injuries and ear discharge using an otoscope.
- Examination of lips, mouth and frenulum for injuries
- Examination of eyes for subconjunctival hemorrhages and fundus for retinal detachment and bleeding.
- Anus and External genitalia must be examined for injuries and signs of infection or abuse
- Special attention must be paid for the determination of age and multiplicity of injuries.

Internal Examination

Central Nervous System

- Special comments on the presence or absence of subgaleal hematomas
- Special comments on the presence or absence of type and extent of skull fractures
- Special comments on intracranial hemorrhages (Extradural, Subdural, Subarachnoid and Intracerebral) and their extent and ageing.
- Cervical spinal cord dissection and description. Spinal cord and the eyes must be examined if indicated.

Respiratory system

Formal neck dissection in situ, in bloodless field, layer by layer (after opening the skull and removing the brain and excision of thoracic contents at the level of thoracic inlet and draining blood)

Musculo-skeletal System

Skeletal injuries detected in radiography or postmortem examination can be excised for Histopathological examination for ageing of injuries.

Subcutaneous dissection of upper and lower limbs, Facial dissection, Back and buttocks dissection must be done.

Genito-urinary System

- Appropriate swabs and smears should be taken.
- Opinion of Clinical Forensic Physician or Pediatrician is optional
- A formal perineal dissection is optional

Respiratory System

Formal neck dissection must be done in situ, bloodless field, layer by layer. (Achieved by removing brain and thoracic contents at thoracic inlet level before dissecting the neck).^{1,6}

Specimens⁶

In addition to sudden natural deaths and SIDS deaths

1. Oral, Anal, High and Low Vaginal swabs and smears when indicated for sperms, seminal fluid and any other foreign bodies
2. Full toxicology examination of blood, stomach contents (including vitreous electrolytes, glucose and urea when indicated)

Radiological Examination

Photography

Audit Sheet^{5,7, 11}

Procedure	Yes	No
Photographic documentation of Injuries		
Radiography done before autopsy		
Genital examination and swabbing		
Formal neck dissection as indicated		
Central nervous system subjected to Neuropathological examination		
Tissues and fluids retained for toxicological screening		

Common Causes

- Head Injuries (SDH, EDH, ICH, SAH)
- Chest injuries (pneumothorax)
- Abdominal Injuries (Hemorrhagic Shock)
- Strangulation or smothering
- Starvation and Neglect

Social Forensic Message

Children require care and protection, not exploitation and abuse

They have faith in you as you have in Almighty!

ELDERLY DEATH^{49,79}

As civilization is advancing, distances are reducing, values in regard to joint family system is reducing day by day, isolation of elderly people is becoming more common. People migrate due to varied reasons so a large majority of people beyond 65 years live independently. There is a common perception that elderly die only due to natural causes is incorrect, there are other reasons too are responsible for their death. Among elderly road traffic accidents, fall from height, slip and fall, poisoning, hanging are common causes of unnatural deaths.⁴⁹ Male are three times more prone to trauma in comparison to females due

to mobility.

These cases should be dealt with special attention in the history before starting the case. Focus on getting information on vision, cataract, hearing, medication, existing diseases, mental equilibrium and financial health. Living conditions and circumstances at place of stay. Previous attempts of suicide and deliberate self harm.

Abuse findings: non-accidental multiple injuries, multiple duration injuries, cataract, malnutrition, poor and inappropriate clothing, uncared, bedsores, beating injuries

Photographic points: clothing, General body condition, chronic disease signs, injuries, diseased organs, abused and neglect findings, cause of death

Common causes of unnatural deaths

- Road Traffic deaths- accidental
- Fall and fracture head or femur – accidental
- Poisoning –common suicidal method
- Hanging – Next common cause of death
- Murders by blunt force and strangulation and stabs

Natural causes of death in elderly are

- Ischaemic Heart Disease due to coronary artery disease
- Coronary thrombosis in atherosclerosed vessels
- Hypertensive intracranial haemorrhage
- Renal failure due hypertension and diabetes
- Complications of diabetes
- Tuberculosis

Audit sheet

History	Yes	No
Scene assessment		
Old Investigations /treatment record as per the case		
Photography of important findings		
Any other important finding to show neglect		
Toxicology screening, if required		
Diseases present		
Cause of death		
Opinion		
Arrangement for funeral /Social Agency information		

Common cause of death

- Cardiac lesions
- Head Injuries

- COPD
- Uncontrolled Diabetes
- Intracranial hemorrhage

Photographic evidences

- Overall condition of house / old age home
- Clothing
- Condition of body
- Injuries
- Bed sores

At the time of postmortem

- Overall body
- Clothing
- Malnutrition
- Ankle oedema
- Eyelid swelling
- Bed sores
- Injuries
- Multiple duration injuries

Social Forensic Message

Take care of your elders !

DOMESTIC WORKER DEATH⁴²

Increasing mobility in the era globalization and unable to find adequate employment landless labour migrate to urban and suburban areas. It may be due to varied reasons like unemployment, poverty, desire to progress, violence and exploitation in villages. Most of female are employed as maid / domestic workers. In India both sexes are employed as domestic help.

Domestic maid violence is an assault and coercive behaviour including physical, psychological and at times sexual exploitation too by employer and his house against a person hired as domestic help⁴².

When there are fatalities, then it could be accidental, suicidal, natural or homicidal. Post-mortem findings depend on type of death. In suicidal or homicidal death, pregnancy arising from boy friend, co-workers, guard, adulterous activities, master or any house hold male members could be the precipitating reason.

Accidental reasons: fall during cleaning floor over soapy and slippery surface, fall from stairs, accidental burns, accidental electrocution etc.

Suicidal deaths: Mainly due to hanging, consuming poison, burning self, cutting wrists, jumping from building etc.

Homicidal deaths: Are rare but could be due to strangulation, beating, head injury etc. It is usually out of anger in extreme cases of defiance, theft, neglect of work, cheating and their involvement in sexual exploitation of minors of the house.

Abuse: Physical injuries of beating of different duration, fracture of bones, allergic dermatitis in hands and feet due to detergents, nutritional neglect if full time worker, sexual abuse (deal as given separately under sexual offences)

Natural disease: Tuberculosis, cardiac disease in aged

Photographic evidences

Scene

- Overall scene
- Clothing
- Body surfaces
- Items in vicinity
- Floors
- Ceiling

At the time of post-mortem

- Overall body
- Clothing
- Full photography as indicated
- Close up of important wounds
- Important external findings
- Important internal findings
- Cause of death

Audit Sheet

What to examine	Yes	No
History		
Overall view of scene		
Clothing		
Full photography		
X-ray if fracture		
Sampling as required		
If pregnancy, DNA profiling sampling in 70%-absolute Alcohol or in kit		
Injuries close up		
Cause of death		

Common cause of death

- Hanging
- Poisoning
- Jumping from building

- Injuries
- Tuberculosis
- Abortion

Social Forensic Message

People should inculcate habit of doing their work themselves

Self-help is the best help!

DEATHS ASSOCIATED WITH FIRE^{1,2,4,5,6,7,10, 11,66}

Following procedure is in addition to what described under Sudden Natural Deaths

History

History of the incident with nature of the inflammable substance and condition of the victim immediately after the incident must be recorded. Any statement by the victim regarding the circumstances must be recorded.

Preliminaries

- It is mandatory that in all cases where carbonization of the body has occurred potentially obscuring evidence of ante mortem injuries (Firearm, Blast etc), full body radiograph is performed prior to postmortem examination.⁶
- Photography must be performed to record the distribution of soot, burns and other injuries and visible artifacts.

External Examination

- Clothing must be examined, described, sketch drawn, and retained for analysis of inflammable materials.
- Body surface area of burn must be calculated as per (Rule of Nine). Keep in mind that body parts ratio is slightly different. Total percentage can be summed up at end. Use different formulae for children (Lund), adolescent and adults (rule of nine).
- Description of the extent and the distribution of burn injuries and the depth.
- Description of the un-burnt area.
- Head hair and body hair must be examined and described and samples must be retained for analysis of inflammable materials.
- If the victim has survived for a period after burns, Healing process and the infective process must be described.

Internal Examination

Central Nervous system

Scalp and skull must be examined and attempt must be made to differentiate ante-mortem hematomas and fracture

from post mortem artifacts.

Cardiovascular System

- Heart must be examined for features of shock.
- Blood must be examined for color (Cherry Pink in CO poisoning) and retained for analysis

Respiratory System

Larynx, Trachea, Major bronchi must be examined to document the presence or absence of soot and signs of inflammation. Consider photography and Histology when necessary.

Gastrointestinal system

Upper gastrointestinal tract must be examined for presence or absence of soot and inflammation.

Genitourinary system

Detail dissection and Swabs if possible including histology to confirm or exclude Sexual violence and pregnancy in the cases of Women subjected to burns.

Specimens

Histology

Larynx, Trachea and Bronchi, lungs and upper gastrointestinal tract

Toxicology

Full Toxicology Analysis including qualitative and quantitative assays for Carboxyhemoglobin and Hydrogen Cyanide⁶

Clothing and Swabs for analysis of Inflammable Substances.

Comments

Opinion whether the Burns are Ante mortem or Post mortem?

Whether the Pattern is suggestive of Suicide, Homicide or accident

Audit Sheet^{5,7, 11}

Procedure	Yes	No
Radiography		
Examination and retention of clothing		
Burn area estimated		
Un-burnt area described		
Upper respiratory tract examined for soot		
Histology of lungs		
Toxicology and CO screening estimation		

Common Circumstances

- Accidental

- Homicidal
- Suicidal

Common Mechanisms

- Inhalation of irrespirable gases
- CO or CN poisoning
- Pain and shock
- Hypovolemic Shock
- Septicemia after some time

Antemortem signs: red lines at margin, inflammatory reactions, blisters, intact soles, armbits and sides of eyelids (crow foot appearance), reddish discoloration of trachea, soot particles in lower respiratory tract, CO levels.

Photographic evidence in burns**At Scene**

- Overall view of scene
- Location of body
- Extent of fire
- Circumstances
- Attempt to conceal crime
- Cause of onset of fire
- Intoxication signs or empty bottles
- How the person is being identified
- Position of different bodies, if more than one
- Place after removing bodies
- Position of other items etc.

At the time of postmortem examination

- Overall view of body and clothing
- Area of burns
- Feature and depth of burns at different points
- Close of vital reaction findings
- Infection, eschar, sloughing, granulation tissue
- Condition of clothing at different points
- Hair singeing
- Soot deposition over skin
- Heat ruptures
- Mucus membrane of tracheal and GIT
- Soot deposition in respiratory track
- Lungs, display of soot particles in deep bronchioles on compression

- Any other remarkable findings

Scalds

- Clothing
- Area involved
- Dribbling marks of liquid material and its direction
- Blister
- Depth of burns
- Inflammatory and healing signs
- Close-up of features

Social Forensic Message

Safety first in fire situations

Always x-ray burnt human remains

DECOMPOSED BODY ^{1,2,4,5,6,7,10, 11}

The following procedure is in addition to what described under Sudden Natural Deaths

Preliminaries**Scene Visit**

As indicated and felt necessary

Crime Scene evaluation report by Police

Surrounding area must be scrutinized for signs of violence, personal effects.

Photography

Whole body as it is, before and after removing clothes.

In unknown cases a minimum set of photographs should be taken routinely which cover face (Front, right side and left side, Front of body up to neck area, front of chest, pelvis area with thighs, lower limbs, feet soles, palmar areas, sides of body, back in three portions –head and neck with shoulder are, back of trunk, buttocks and thigh and lower limb.

Specific features as required.**Radiography**

As indicated. It is helpful in determining age, firearm injuries and skeleton trauma

FINGERPRINTING BY POLICE, otherwise staff should be trained these. Removal of digits should be avoided as it is mutilating. No harm in asking training under fingerprint division of FSL for efficient management of evidences.

SAFE CUSTODY OF ALL PERSONAL EFFECTS- All items should be kept in transparent plastic envelope.

External Examination

- Scars, Tattoos, Birth marks, Deformities or any other specific features must be recorded in documents and

photography.

- Dental Examination should be arranged with a Forensic Odontologist if possible.
- Hair, teeth retained for analysis and comparison.
- De-gloving hands must be preserved in concentrated glycerin for finger printing¹. For Toxicology preservation saturated NaCl is required.
- Attempts must be made to differentiate injuries from effects of animals and weather, machinery and elements.
- Stage of the decomposition must be clearly documented and photographed.

Internal Examination

- Dissection of systems as much as possible and retaining tissues for histology and toxicology
- Skeletal examination for the purpose of identification (Age, Sex, Stature, Race and Specific Identification features- Old Fractures, Deformities, Prostheses, etc) and any Injuries (Fractures, Cuts, Firearm Injuries etc)

Samples

Histology

As much as circumstances allow

Toxicology

Available body fluids and soft tissues

SAMPLE FOR DNA PROFILING (See General Instructions)

Any of the following samples

Hair with root/ Teeth with pulp/Bone with marrow/any other soft tissue

No harm in keeping little extra material.

PERSONAL EFFECTS

For comparison and identification

Reporting

- Identity- General And Specific
- Cause of Death
- Circumstances of Death
- Time Since Death
- State of Disposal

Audit Sheet^{5,7, 11}

Procedure	Yes	No
Scene Visit		
Photography		
Radiology		
Collection of personal belongings and custody of them		
Dental charting / opinion on teeth		
Finger Printing		
Sample for DNA studies		
Sample for Histology		
Sample for Toxicology		
Skeletal Survey		
Medico-Legal Issues addressed		

Common causes

- Firearm injuries
- Stabs
- Strangling and smothering
- Multiple injuries
- Head injuries

UNCLAIMED BODIES

There is rapid migration and mobility of people from one area to another area. Unclaimed dead bodies are brought to every morgue. Majority of these dead bodies are found in vicinity of religious places, hospital, road side and water bodies.¹¹³

Every unknown remains requires proper disposal as the per the protocol of the state

Before disposing remains of unclaimed one should ensure that :

1. Make a proper entry and follow protocol of Institution (Height, Weight, age, clothing description, skin texture, any unique observation and cause of death)
2. Basic information- Body found on date and timings, location of scene, Police station, mortuary arrival and disposal, PM date, cause of death, DNA samples stored at which center etc)
3. Take photographs of face from different angles
4. Photographs of belongings
5. Photographs of clothings
6. Photographs of identifying features like tattoos, skeleton deformities, artificial prosthesis and dentition
7. Tissues (muscle, bones, blood in dry gauze piece,

pulled scalp hair) for DNA Profiling as and when required. Wet tissues should be kept in a polythene under / plastic bottle under minus seventy degree temperature. Take all precaution to contamination of samples. Instruments should be cleaned twice with bleach powder and sterilized or use new disposable items.

8. Name of persons authorized to dispose off
9. One month preservation of body is a reasonable period in India depending on condition of body. It may be extended to any limit depending on circumstances of case.
10. One should not insist on disposal if preservation facilities are available and body can be preserved without any environment hazard (72 hours as Police Manual)
11. Bodies in high decomposed stage with maggots and strong foul smells are very repulsive so their preservation can hasten decomposition of other bodies
12. Sloughed skin of hands should be preserved for finger prints in saturated saline / alcohol/ or glycerin
13. DNA Profiling samples should be cleared within one year.
14. In addition, radiographs of skull and full sinus view can also be considered.

In Non- MLC bodies, disposal of remains is carried out by hospital. In MLC bodies, disposal is carried out by police.

(Radiograph comparison of facial points lies within medical domain)

Clothing Examination Format

- Type
- Texture
- Observation
- Tags prepared
- Photographs
- Sketches
- Any thing of evidentiary value
- Special mention

Photographic evidence

- Clothing
- Personal effects (belongings)
- Dentition
- Penis circumcision

- Jewelry
- Peculiarity
- Injuries
- Fractures
- Important external and internal findings
- Entomology – eggs, larvae, puppa, flies

Common Cause of deaths^{113,115} are ;

- Starvation
- Peumonia
- Chronic Illness – Pulmonary Tuberculosis , diabetes, renal and hepatic failure
- Road Traffic Accidents
- Railways accidents
- Drowning where water bodies are there

For disposal of unclaimed bodies in the hospital If address in recorded then procedure would be through record section of the hospital. Record officer must send letter to relatives to give them opportunity

1. Send registered letter on noted address in hospital record with a copy to area local police of that region
2. Send first reminder after two weeks asking them to take possession of the body
3. Send second notice after another two weeks as a final chance to take possession of body.
4. Start process for cremation and bural as per recorded religion . A specimen copy of a such a letter can be as under.

Ref/ Mortuary / 2013 No.

Dated

.....

Subject : Disposal of unclaimed body preserved at Mortuary
Sir,

It is submitted that the dead of s/d/w
of..... Aged Sex
..... R/O Via hospital
registration number on dated in ward
no.....bedno.....Diedon
Under care of Dr..... is lying in the
mortuary since.....

No one has come forward to claim the body. Therefore, it is requested to start process of disposal of dead body as per the policy of the hospital of the body. Kindly sanction requisite funds as allocated for this purpose to following attendant to do the needful.

People assigned the job of disposal of this body are

Sanitary Attendant.....

Morgue Attendant.....

Verified by Mortuary Clerk/ Technician

Please send notice on above address by registered post through record officer,

Thanking you

yours Sincerely

Officer Incharge Mortuary

Social Forensic Message

Standard of society is judged from the respect given to its dead

EXAMINATION OF THE SKELETON REMAINS^{7,11,12,14}

Whenever completely skeletonised or partially skeletonised remains are brought for medicolegal autopsy, it becomes a challenge for the autopsy surgeon to give his opinion.

History whether deceased is known or unknown, last seen alive, site of recovery of skeleton etc.

A skeleton chart is prepared and all the bones are counted.

It is advised to consult with an anatomist, anthropologist, radiologist and a dentist with forensic knowledge, where facilities are available for formulating a scientific opinion. In ordinary circumstances forensic medicine expert with little more training is sufficient for forensic purposes to reach on conclusion. The following queries have to be answered:

Whether human or animal bones

- Examine gross anatomical characteristics –Medical man
- Microscopic characteristics - Medical man /FSL
- Chemical analysis of bone ash- FSL
- Precipitin test- species identification - FSL/ FMT

Whether bones belong to one or more individuals

Mix up of bones is possible in mass disasters/ natural calamities, common burials, aircraft accidents.

- Examine the number of bones received for examination
- Note the side to which the bone belongs whether left or the right side
- Check for the fitting of adjacent bones and morphological similarities
- Determine whether all the bones ascribed to one individual belong to same age

- Due consideration to anatomical variations should be given as in supernumerary ribs, fingers etc.
- Ultra-violet light can be used up to certain extent to segregate bones based on the spectrum of colours emitting from bones(due to varying amounts of minerals in them)
- X-ray examination for trabecular pattern for age and sex
- Neutron activation analysis to distinguish the relative mineral contents in the bones can be performed, if facilities are there. Currently, not practiced.

Race

- Examination of skull, mandible and teeth, limb bones and pelvis- Racial profiling can be done based on numerous differentiating features

Age at the time of death

- Examination of epiphysis of long bones
- Dental examination
- Calcification of costal, laryngeal cartilages and hyoid bone; changes in the sacrum; closure of cranial sutures; parietal bone thinning; changes in the joints; histological examination of teeth and bones

Sex of the individual

- Examination of skull, pelvic bones, mandible and other long bones
- Recognizable sex differences are appreciable only after puberty

Stature

Measurement of long bones and use of multiplication formulae (Indian population)

Identification

- Characteristic features of bones when present are carefully noted. e.g malunited fractures, deformities or peculiarities of bones are helpful.
- Superimposition technique if skull is available and a photograph of the alleged victim is made available from Forensic Science Laboratory
- Reconstruction of face when skull available
- X-ray comparison of corresponding bones with the one taken during life if available
- Determination of blood group antigens from the teeth pulp material
- DNA analysis from the teeth or bones
- Examination and collection of exhibits found along with the skeleton - clothes, identify cards, jewellery, bullets, weapons, soil (in exhumed bodies)

- Currently DNA profiling is method of choice for absolute diagnosis
- DNA profiling and Fingerprinting are absolute methods of identification

Cause of death

Look for clues of unnatural deaths- Position, manner and site of skeletal recovery- crime scene evaluation

- Injury to the bones available- fractures especially skull, hyoid, ribs and spine, missing teeth
- Examination and preservation of any foreign bodies- bullet, glass, knife blade or any such weapons
- Screening for toxicology- arsenic, antimony lead or heavy metals
- Examination of exhibits- any missing articles, look for clothes for signs of struggle, tears, soiling, chemical analysis if indicated.

Time since death

History of last seen alive, interaction with friends or relatives, call records on cell phones or any other available means should be corroborated

- Examination whether completely skeletonised or soft tissue attached
- Presence or absence of odour
- Entomological examination of maggots/insects present on the body
- Examination of exhibits- clothing- sweaters, blankets, socks etc- seasonal corroboration

Special features like manner of separation in case of fragments of skeleton is present, whether any animal gnaw/ bite marks present on the bones should also be noted

Photography

- Crime scene evaluation - Position, site of recovery of skeleton
- IO should be encouraged to bring crime scene digital photographs in CD/pen-drive when requesting for examination of remains
- Exhibits – weapons, clothings, jewellery or other articles
- Entire skeleton after arranging in anatomical position on table
- Special photography techniques for facial reconstruction, superimposition etc from FSL

Radiology where required and felt necessary

- Age estimation
- Stature estimation
- Special features for identification

- Determination of fractures or metallic foreign bodies

Audit Sheet

Procedure	Yes	No
History		
Skeleton chart prepared and bones counted		
Consultation with anatomist, anthropologist, dentist, radiologist -opinion taken if required		
Examination of clothes and other exhibits found along with it		
Superimposition technique advised if Previous comparable material is there		
X-ray and other special radiological techniques used		
Crime scene visit and reconstruction done		
Photography as deemed fit		
Toxicology Screening for heavy metal and other toxicity		
Entomology evidence evaluated		
Blood group analysis		
DNA analysis for positive identification		

DISMEMBERED REMAINS^{14,45,105}

Done mainly for disposing the body (homicidal) and sometimes by animals, mainly post-mortem

Post-mortem examination's purpose: identification, determination of cause of death and time since death

History

- Circumstances from where the remains discovered

Identification

- Determine human or non-human, by anatomical features, by DNA analysis or by Precipitin test
- If more than one remains, determine they belong to one human or more
- Age: by determination from ossification centers and if skull, by sutural fusion
- Sex: by features of bone, skull and pelvis
- Height by using multiplication factors
- DNA sampling is very important and essential for positive identification
- Any peculiarities to the part: congenital deformity/ lesion, acquired deformity/lesion: scars, tattoos
- Dental examination

- X-ray of remains is quite helpful in knowing age, foreign body and peculiarities.

External Examination

- Examine the dissected margins to determine how the parts were dismembered
- Any disease or injuries to the part, determine if they are sufficient to cause death or not
- Try to differentiate homicidal, accidental, suicidal injuries and defense wounds
- Determine the extent of decomposition for time since death
- Subject skin for histology for ante-mortem and postmortem issue

Internal Examination

- Dissect the part as usual
- Look for any disease to the part
- Look for any injury or fracture and determine the age of the injury/fracture
- Determine if the lesions are sufficient to cause death or not
- Determine the manner of the lesion: suicidal, homicidal and accidental

X-ray

In dismembered remains x-ray should be taken as it is quite helpful in giving idea about sex, age and method of separation like sharp instruments or crushing force etc.

Sampling

- Sample of skin, tissue, bone or blood for DNA analysis
- Sample the viscera, if available, for analysis
- Histology of skin for Ante Mortem/Post Mortem issue or any other relevant tissue.

Audit Sheet

Procedure	Yes	No
History		
Crime Scene Evaluation		
Photography		
Evidence Collection		
DNA sampling		
X-ray		
External Examination		
Internal Examination		
Age, sex and race determination		
Description of Injuries		
Toxicology screening		
Time Since death		
Medico-Legal Questions		

Common reasons

- Sexual Jealousy
- Extortion and Killing
- Disposal of dead body
- Homicide and disposal

Common causes of death

- Ligature Strangulation
- Throttling
- Cut throat
- Cranio-cerebral damage

SUSPECTED POISONING CASE^{1,2,4,5,6,7,10, 11,77,91}

The following procedure is in addition to what described under Sudden Natural Deaths. Please see relevant section SOP and Auditing of Poisoning cases.

History

- Detail history about the onset and progression of the signs and symptoms, foods and drinks, about the health of other people who shared the same food and drink source should be obtained.
- Clinical notes should be scrutinized for details of signs, symptoms and treatments.

Preliminaries

Vomitus, clothing soaked with vomitus, remaining food and drinks, their containers should be submitted for analysis

External Examination

- Color of skin, mucus membranes and eyes should be noted.
- Presence or absence of froth and nature must be documented.
- All orifices including mouth should be examined for injuries, remnants of poison.
- Site and direction of IV drip marks must be noted.
- Skin should be examined carefully for injection marks and retained for analysis.

Internal Examination

- Tongue, oral mucosa, esophagus, stomach and the gut should be examined for contents, mucosal changes etc. Any content must be retained for analysis.
- Facial dissection can be done in cases with doubtful circumstances to exclude evidence of force used to make the victim drink poison by holding mouth (Not necessary in every case).
- If volatile substance abuse is suspected Lungs tied at

bronchi should be submitted for analysis in air tight bags^{1,2}. Material should be kept in fridge after collection if not analyzed immediately.

- Gases can also be collected in air tight syringe, for blood gas analysis.

Samples

Histology

All organs including mucosa of upper GIT, skin and other orifices as indicated.

TOXICOLGICAL ANALYSIS (Please refer to SAMPLING AND PRESERVATION OF SPECIMENS)

Blood, Bile, Urine, Stomach contents, Vitreous, and Organ samples as indicated.

When ingestion of poisons is suspected intestinal content from 3 different sites like stomach, small intestine and jejunum or a piece of large intestine⁴. Muscles, bones, joint fluids can also be subjected for analysis in decomposed and skeletonized bodies.

Standard colour tubes

Red Tube (plain tubes)

Serology-Hepatitis, HIV, Dengue

Endocrine- Cortisol

Liver Function

Renal Function, Electrolytes

Yellow Tube (SST II Bottle)

Blood Urea, Serum Creatinine

Serum Electrolytes

Blood Grouping

Gray Tube (Fluoride)

Blood Sugar

Blood Alcohol

Common Drugs (Heroin, Opioids, Cocaine)

Purple Tube (EDTA)

Full Blood Count

Hemoglobin content, Hemoglobinopathies

Glycosylated Hemoglobin

DNA Studies

Bone Marrow

Quantity Requirement as specified or as available

Blood- 10-25ml

Urine-25-50ml

Vomit- 100g as available

Liver, Kidney, Spleen-100g

Vitreous- 2.5ml or as Available

Bile- as available; Gall bladder if bile is not aspirated in sufficient quantity

Muscle -50-100g

Audit Sheet

Procedure	Yes	No
Risk Factors identified in History		
Preliminary samples retained		
External features of poisoning looked for		
Internal features of poisoning described		
Tissues from affected and target organ for HP retained		
Full toxicological Analysis arranged		

Common substances: Aluminum phosphate in rural India, Pesticides in agriculturists; benzodiazepine; cough syrups with alcohol ; opium products- crude opium, smoke, brown sugar; house cleaning agent and insect killers are more common in urban and semi urban areas.

Common Risk factors

- Working in Factories
- Working in Laboratories
- Working in new environment
- Food and drink scarcity
- Drug and alcohol addiction
- Children and elderly
- Psychiatric patients
- People with financial or marital problems

Photographic evidences

At scene

Overall view

Position of body

Facial look

Materials in vicinity

Vomit

Medicine

Alcohol bottles

Suicide Note

Involvement of people

At the time of postmortem

Overall body

Face

Fingertips

Oropharynx

Oesophagus

Stomach

Small Intestine

Lungs

Kidney

Heart

SNAKE BITES FATALITIES^{14,44-47,51,56,68-70, 81,82,95}

There are many thousand species of snakes throughout world. Only about 10% of total snakes are poisonous. In India, about 10 variety are poisonous but only four common poisonous snakes i.e. Cobra, krait, saw-scaled viper, Russell's viper are blamed for envenomation. These are most encountered in forest, hilly lands, farms, unused desolate spaces. In India, 15000-20000 death are reported due to snake envenomation out of 2 lacs bites every year. Over seashores poisonous sea snakes are seen, they have peculiar nostrils and flattened tail. Snakes likes to eat rodents, frogs, lizard and prefer to live under some type of cover.

They can pass through very small holes and can enter in houses through pipes, holes, space under doors. One should watch movies on national geographical channel to understand their habits.

Poisonous snakes have fangs which are collapsible, modified tubular teeth like structure and inject venom and leave needle like puncture marks after penetrating victim's body. These fangs are attached to parotid salivary gland which is situated behind the both eyes and produces toxic saliva (venom). These fangs are straightened when snake bites the person and goes about 1-2 cm deep. Snake bite location depends on the position of victim's body at the time of attack. It could be on buttocks, thighs while defecating in open fields, hands and forearm while working in fields, head area while cleaning roof of hut or plucking fruits from trees, raised crops (grapes, loki, cucumber, tori, ghiya etc.), dried dung stores (Bitoda); neck, face or exposed limbs while sleeping over ground; lower limbs in ankle, feet or area above it.

Fang marks are in pair in upper jaw and are adjacent to each other depending on size of jaw of biting snake. At times fang mark may be single also if fang is broken or has poor grip over biting area, sideswipe as majority snakes bite due to defence or panicky situation or threatened situation. The depth of fang mark depends on the part of body involved. Fang marks distance to each other varies

from 0.5cm onwards depending on size and age of snake.

Venom has neurotoxic, cytotoxic and haemotoxic effects depending on type of snake

History: Time of incident, snake seen, colour and size of snake, first aid, **antivenom given**. Viper's and sea snakes bites are very painful in comparison to cobra. Krait bites are almost painless.

Findings in snake bite case (sea snakes are also discussed in marine envenomation)

Use magnifying lens as these fang marks are **very small** especially viper bites are not clearly visible to naked eye

Colubrine: Froth in nostrils and mouth, puncture marks (0.8-2 cm), asphyxia, CNS – fragmentation of nuclei of cells, degeneration; dry gangrene.

Viperine: Puncture mark (1.5-2.5 cm), bleeding, marked swelling, cellulitis, purpura, patchial haemorrhages, wet gangrene. Viper's fangs are almost double than cobra and krait.

General appearance: Cyanosis is very marked in cobra and krait; DIC, haemorrhages, renal failure and paleness is prominent in viper bites. Gangrene of limbs, necrosis, peeling of skin, blisters may be present later.

Clothing: Amber colour fluid, becomes yellowish needles on drying.

Skin: It has needle puncture mark like appearance, few mm size, and may be skin, subcutaneous or muscle deep. Venom spreads rapidly through subcutaneous areolar space very rapidly. There is swelling and cellulitis in the area in and around the bite. Bitten skin is swollen, bluish discoloured in cobra and krait bites. In viper bites, small clots may present in vicinity of fang marks and blood vessels. Venom over skin will be present as yellow crystals. Local incision for examining the extent of extravasation, oedema and tissue necrosis if any. Keep skin for histopathology.

Internal Examination

Nostrils and mouth – froth, blood tinged secretions and froth

There is intense asphyxia, congestion, haemorrhages under visceral surfaces

Larynx – angio-oedema, mucus

Lungs – oedema, secretions, haemorrhages in sub-pleural and interstitial spaces.

Liver – Necrosis

Heart – toxic myocarditis (on HP)

Muscles – myositis

Lymphnodes – axillary and inguinal region enlarged

Kidney –haemorrhagic nephritis ,interstitial haemorrhages (on HP), necrosis. Renal findings are very informative so special emphasis should be given on renal changes.^{51,68-70} A brief method as how to look for findings in kidney is given for convenience.

- Blunt dissection to separate the peri-nephric fat.
- Examine kidneys in situ.
- Remove kidneys by cutting the ureter and vessels.
- Examined for haemorrhages [subcapsular pin point haemorrhages]
- Weigh the kidneys
- Make Longitudinal sagittal slice with a brain knife.
- Section through the kidney from the convexity towards the hilum.
- Lift the capsule off the cortex with toothed forceps.
- Examine the cortex, corticomedullary junction, and the corticomedullary ratio. Measure cortical thickness at level of hilum.
- Look for scattered haemorrhages and intensity of congestion
- Take Blocks from the upper pole of both the sides.
- Cut Tissue size of 2cm x 2cm x 2cm and preserve in formalin for histopathology

What Investigations to look for making diagnosis at post-mortem examination.

1. **Blood smear** – for haemolysis (immediate sampling, or ante mortem blood taken in hospital
2. Blood clotting and bleeding time from hospital records. Incoagulable blood in 20 minutes due to effect on factor, V, IX, and factor X.
3. **Urine** – red or brown colour urine, protein, myoglobinuria, haematuria
4. **Vitreous humor** – Electrolyte imbalance
5. **ELISA** – Enzyme Linked Immunoabsorbent Assay (enquire from clinical laboratory as Forensic Science Laboratory).

(Snake centres are maintaining Snake Venom detection kit for several variety of land and sea poisonous snakes. Common available kit test for 5-7 poisonous snakes. These are used mainly used to confirm the variety of snake to give specific mono-valent antivenom therapy).

6. **Swabs** from bitten area for venom testing is the **best sample** before cleaning the wound.
7. **Second best sample is urine** for testing venom if bitten area is cleaned or washed. Blood is more prone to give

false positive and false negative tests⁴⁶.

8. **Fluid in blisters** is also a good sample for detection
9. Raised blood urea and creatinine indicates kidney damage
10. Histopathology of kidneys is also helpful in diagnosing type of snake bites.⁵¹
11. Histopathology of skin, if multiple bite then one bite area should be included.

One must remember that venom may not be detected if it is a dry bite, area washed, thick layer of clothing, heavy boots, leakage or superficial bite on mobile part of the body. A snake, who is resting or hibernating has high concentration of venom. Any snake usually eats once a week so hungry snake has more lethal and concentrated venom.

In fatal cases, how to preserve the bitten area for species identification.

The usual method is saturated solution of common salt as done in most of the places. If rapid services are available sample should be sent at 4°C or in glass vial on dry ice cubes(remember venom is water and alcohol soluble).

Another method⁴⁷, which suggests that tissues should be preserved in solution having 70% ethanol, 2 % glycerol, 28% [0.02M] PBS, _pH 7.4, and 0.05% thimerosal is being recommended for preservation of forensic samples. It is always a better option to discuss with laboratory about tissue/ sample requirement which is going to provide venom detection services.

Kidneys are of great help in diagnosing and classifying the snake type⁷⁰.

How to declare whether it is a case of snake bite?

1. Evidence to suggest the bite occurred
2. Bite mark identified
3. Dead snake brought with body or statement given by deceased to rescuers or police
4. Signs of envenomation
5. Specific findings of cobra or viperine or sea snake bite.
6. Species detected from venom recovered from bite mark.

Photographic evidences

- General condition of body
- Nostrils and mouth
- Nail beds
- Bitten area – fang marks
- Dry venom over skin
- Bleeding gums , bitten site
- Lungs - oedema, fluid, haemorrhages

- Kidneys – necrosis, congestion, bleeding, sub capsular haemorrhages
- Urine Colour – brown/red

Audit Sheet

What to look for	Yes	No
History		
Bite mark		
Use of lens		
Swabs from bite for venom		
Urine for venom		
Lungs gross and HP		
Kidney gross and HP		
Liver gross and HP		
Hospital Investigation		

Best samples are swab from bite, urine, blister fluid, bitten tissue and blood.

Social Forensic Message!

Keep house free from rodents as snakes like them for food.

Once bitten, take patient to hospital for ante venom therapy or 24 hours observation

INSECT BITES/STINGS DEATHS ^{14,45,47,81,95}

The commons stinging and other creatures sting human beings and at times produce sever local and systematic envenomation. The common ones honey bees, wasps, hornets, fireants , scorpion, black and brown spiders, ticks, centipede, millipedes.

Envenomations signs depends on single or multiple stings. One sting leaves about 50 microgram venom. Scorpion venom is more poisonous than snake venom, only it's injecting quantity is less.

Postmortem findings

Local – oedema, discolored area, swelling, bleeding, urticaria
Systematic – angio-oedema, pulmonary oedema, increased bronchial secretions

Death usually results from hypersensitivity, circulatory failure and pulmonary oedema

Samples –

Skin- Local skin with sting; control skin

HP – Lungs , kidneys, adrenals, heart

Blood for immunological studies

Photographic evidences

Sting

Skin condition

Oro-laryngo-pharynx for oedema

Pulmonary oedema

Harmorrhages over visceral surfaces

Lungs – surface and pulmonary oedema

Kidneys-haemorrhages

Audit Sheet

Check Points	Yes	No
History		
Sting Mark		
Photography		
Compete external examination		
Complete Internal examination		
Histopathology		
Immunology		

MARINE ENVENOMATION ^{45,47,81,82,106,107}

Poisonous fishes, sea-snakes, blue octopus and a few other creatures bites or sting human involved in marine activities. Only about 10% of sea creatures are having venom while rest of them are innocuous Significant morbidity and confirmed deaths have occurred following envenomation with jelly fish , spiny fish, cone snails, blue octopi, sea snakes⁸¹.

Marine envenomation occurs through injection or application of venom produced by glands.

Theses sea creatures can be divided into vertebrates and invertebrates.

Method of injecting venom

Bites- sea snakes, blue octopi and other octopi

Nematocysts- sea-wasp, man-of-war , jelly fish

Stings – bony fish, urchins, starfish, stingray

1. Vertebrates- sea snakes , stingrays, scorpaenidae(turkey fish, tigerfish, zebrafish, scorpion fish, lionship, stone fish)

2. Invertebrates- sea urchin, corals, sponges, shells, sea-anenomes, octopus , box –jelly fish, Portuguese man-of-war.

1. Vertebrates

1.1 Stingrays- Tail has injecting power and fires the victim. Venom contains serotonin and phosphodiesterase

1.2 Stonefish or lionfish – stings . venom galds are located at the tip of spines. Venom has stonustoxin, trytphan, nor-epinephrine and verrucatoxin.

1.3 Lion fish- has venom glands. Venom contains thromboxane, Prostaglandin-2

1.4 Sea snakes- Majority of sea snakes are poisonous. All are toxic, bites through small fangs. The fang marks varies from 1 to 4 , and in some cases up to 20 also. There are about 52 species but 6 are commonly involved human fatality, most commonest are beaked snake and yellow bellied sea snake . Majority of snakes are bright in colour. Venom contains neurotoxin, myotoxins and haemolysins. Presence of heavy urine myoglobinurea and increased hepatic enzymes are indicative of serious envenomation. Renal failure is due to combined effect of rhabdomyolysis and direct venom effects on the kidneys⁸².

2. Invertebrates

2.1 Jelly fish- Majority of species of jelly fishes have microscopic **cnidae**, which are highly specialized organelles consisting of an encapsulated hollow barbed thread bathed in venom. These have long tentacles hanging from pneumatophore.

Venom is injected by nematocysts. These stinging organelles, called nematocysts, are distributed along tentacles. Nematocysts are spring like venom glands which everts to deliver venom. Penetration of flesh leads to hypodermic delivery of venom. Venom has serotonin, histamine, bradykinin, fibrinolysin, hemolysin .

2.2 Portuguese Man-of-war – Multiple stings through tentacles. Venom causes circulatory collapse.

2.3 Box jelly fish (sea wasp)- venom is very strong and one sting release can kill many human beings. . Mostly person dies within few minutes.

2.4 Sea urchin- spicules has venom glands

2.5 Blue- Octopus- Venom has tetrodotoxins

2.6 Cone shells- inject venom through long tooth.

2.7 Fire coral – has nematocysts

2.8 Sponges- Spicules inject venom when comes in contact with skin

Local findings at the time of autopsy

The common findings involve sting or bite marks. Area may show skin changes, reddened area, swelling, oozing, inflammation.

Bites- sea snakes, blue octopi and other octopi

Nematocysts- sea-wasp, man-of-war, jelly fish

Stings – bony fish, urchins, starfish, stingray

(Repeated for emphasis)

Systematic findings

There may be findings of hypersensitivity, circulatory and respiratory failure. There are findings of asphyxia , generalized congestion.

Samples

Sting mark and skin

Blood for immunology

Venom testing kit especially developed for snakes and scorpions

Muscles for myositis

Urine – myoglobin

Cause of death

It depends on stinging creature or biting sea-snake. Hypersensitivity, respiratory failure and cardiac toxicity are predominant.

Audit Sheet

Check Points	Yes	No
Over all condition		
Clothing		
Face		
Skin		
Sting/ bite		
Any evidence of biting/stinging creature		
Immunology		
Toxicology		
Complete external examination		
Complete Internal examination		
Cause of death		

DEATHS ASSOCIATED WITH DRUG ADDICTION/ ABUSE 1,2,4,5,6,7,10, 11,14,44,45,95

The following procedure is in addition to what described under Sudden Natural Deaths

History

- Detail Personal and Social History (Age, Sex, Marital status, Occupation, Foreign Travels, Present and past illness, Treatments and drugs taking, Allergies).
- Details about the Illegal Drugs (Source of Drugs, Route of administration, Frequency and amount, Associates, Alcohol intake, Smoking).
- Detail history of illness and Death (Symptoms and Signs developed suddenly, Gradually, Found Dead in lonely place, Posture, Signs of Violence and struggle, Presence or absence of drugs and other items like Syringes, Tubes, Foils, Matches, Filters, Needles, Condoms, packets, Pills, Bags, Chemical Bottles, Glue Tubes etc. in the vicinity)
- History of previous hospitalization or Institutionalization.

Scene Visit and Photography as indicated

External Examination

- Description of Clothing (Dirty, Stains, Tears, Any drug or items recovered from pockets, Identity cards or other items in Unidentified cases.)

- Description of personal hygiene and appearance (Un-kept Hair and Beard)
- Presence of Tattoos, Scars, Lumps, Skin Sepsis, Injection sites, Contusions and Ecchymotic patches, Hardened veins, Thickened Nasal Mucosa, Burnt Fingers etc.
- Examination of all orifices for injuries, sepsis, thickening of mucosa, foreign bodies etc.
- Presence of Wasting and features of Malnutrition.
- Any other injury

Internal Examination (special attention must be paid to following areas)

Respiratory System

Heavy congested lungs, Presence of froth in airways, petechial hemorrhages on pleura.

Pleural effusions

Gastro-intestinal tract

Peritoneal effusions

Stomach contained un-dissolved tablets, packets,

Entire small and large bowel must be opened and contents must be scrutinized for packets, tablets, etc.

Cardio-Vascular System

Pericardial Effusions,

Valves must be examined for signs of endocarditis

Central Nervous System

Presence of edema

Areas of Necrosis

Reticulo endothelial system

Enlarged Nodes

SAMPLES

Toxicological Analysis (This should be decided according to the indications, Please refer to SAMPLING AND PRESERVATION OF SPECIMENS)

- Venous Blood in Fluoride bottle
- Vitreous humour
- Stomach content
- Bile for Opioids and Chlorpromazine
- Nasal swabs
- Alcohol Mouth washes for Cannabis
- Urine
- Head Hair with Roots

Histology

- Liver samples from right and left lobes

- Brain in Cocaine related deaths
- Injection sites
- Lungs and Lymph nodes for Granulomatous reactions

Microbiology

- Blood samples for HIV screening, if required
- Blood Samples for Culture if some serious infection is suspected which can be dangerous to staff

Drug Addict Death should be considered as HIGH RISK and appropriate precaution must be taken in postmortem examination, handling samples and disposal of wastes and instruments. Universal precautions are must in these cases

Audit Sheet^{5,7, 11}

Procedure	Yes	No
Risk in personal history identified		
Detail drug history		
Scene visit as indicated		
Clothing examination		
Specific points in external examination		
Specific points in internal examination		
Toxicological and drug level estimation		
Appropriate Histology		
Screening for HIV		
Precautionary measures		

Common Risks

- Living alone
- Homosexuals/Prostitutes/commercial sex workers
- Prisoners
- Unemployed
- Living in foreign countries
- People in entertainment industry

Common causes

- Drug over dose
- Poisoning
- Anaphylaxis
- Air embolism
- HIV/Infections

Photographic evidence in Volatile Substance Abuse

Scene

- Overall view of scene
- Items present in the vicinity
- Close up of body
- Mouth and nostrils secretions and froth

- Finger tips
- Injection site
- Other material of abuse
- Sex/ abnormal sex related material

At postmortem examination

- Overall view
- Face
- Hands
- Clothing and pocket details
- Important external findings of drug abuse
- Important internal findings of lungs, stomach
- Injection marks, if present

Social Forensic Message

Drug Abuse is a sure way to immorality in the world.

DEATHS ASSOCIATED WITH VEHICLE EXHAUST GAS INHALATION^{1,2,5,6,7,10, 11,91,92}

Following procedure is in addition to what described under Sudden Natural Deaths and Suspected Poisoning Deaths

History

Special attention must be paid on the background of the person

- Psychiatric history,
- Suicidal attempts
- Marital and social disputes
- Technical Knowledge about vehicles and associated apparatus
- Detail history of the incident and circumstances
- Medical history
- History of alcoholism, drug abuse
- Diesel or petrol engine
- Devices used to bring exhaust fumes inside the vehicle/ blocked chamber.

Preliminaries

The scene should be visited as indicated

Precautions should be taken to avoid exposure to gas

Assistance of a knowledgeable person should be obtained to examine the vehicle and associated apparatus by technical to be arranged by police

Switches, tubes, keys should be examined.

Finger Printing must be arrange before handling the instruments as indicated

External Examination

Clothing should be examined for suicidal notes etc.

Body color should be noted and photographer as indicated.

Distribution and color of Hypostasis noted

Injuries should be excluded.

Look for blisters in dependent areas

Mucous membranes must be examined before refrigeration.

Internal examination

System- wise dissection to exclude any contributory pathology.

Changes in basal ganglia region in delayed deaths

Samples

Toxicology

Blood sample should be collected for analysis for CO, Drugs, Alcohol, Psychiatric drugs.

Sample for CO must be in a air tight containers. (See **Sampling And Specimen Collection**)

Autopsy room spot test for CO can be performed. (Few drops of Blood into a solution of 10% NaOH –Normal blood turns brownish but if CO is present the color remained Pink.)

If blood is not available Spleen and Muscle can be sent for analysis

Pieces of Lung can be sent in container tightly sealed and refrigerated. Immediate analysis is recommended. Blood gas analysis can be attempted as in other cases.

Histology

Target organ basal ganglia of brain, lungs

Other organs as indicated

Audit Sheet^{5,7, 11}

Procedure	Yes	No
Risks identified in history		
Scene visit		
Instruments assessed		
Specific external features observed		
Specific internal features observed		
Appropriate sampling		
Precaution taken to retain in sampling for CO		

Please note - other situations like closed and unused space, CO produced by Geyser, use of burning coal in winter also

produce CO poisoning and similar findings may be seen.

High Risk

- Psychiatric patients
- Drivers and Mechanics
- Children and Debilitated
- People with poor knowledge about apparatus
- Alcoholics and Drug addicts

Exhaust suffocation

Scene

- Vehicle position
- Parking
- Running engine or stopped
- Position of exhaust and pipes attached to it
- Pipe entry into interior
- Sealing of points to avoid leakage
- Any foreign finger print of the vehicle
- Position of victim
- Articles in surrounding
- Alcohol / beer bottles
- Cigarette
- Any suicide note

At the time of post-mortem

- Face
- Clothing
- Wearings in hands /neck –excessive religious
- Skin colour
- Postmortem staining showing pinkish colour
- CO spot test
- Blood colour
- Important external and internal findings

Social Forensic Message

Inhalation of volatile substances and gases is on the rise, catch them early

Increase mass awareness!

DEATHS ASSOCIATED WITH ELECTROCUTION^{1,2,4,5,6,7,10, 11,95,97}

Following procedure is in addition to what described under Sudden Natural Deaths

History

Personal, Medical and Social history of the individual

- Occupation / Mechanical knowledge
- Marital status
- Alcohol or drug abuse
- Suicidal attempts
- Past and present illness / any medical or surgical device in body (pace makers)
- Detail History of the incident
- Place of incident
- Nature of current AC/DC
- Voltage, amperage, resistance, earthing, Trip switch technical verification
- Association of water/dampness at spot / Rain
- Use of Shoes/ Slippers at the time of incident
- Nature of Floor- Wooden/Cemented/Metal, Damp/Dry
- Details of Device handled by the Victim and their particles embedded at contact point

Scene visit and examination of the device must be done with technical person who has knowledge of electricity and devices.

Photography as indicated

Minimum required is Crime Scene, clothing, contact points, exit point, peculiar finding

External Examination

Clothing and slippers/shoes

Other ornaments such as Rings, Belts etc.

Signs of cadaveric spasm of hands

Injuries

- Entry wound (Size, Site, Shape, Burning, Blistering, Charring, Pale areola, Red margin, splitting of Skin, Color change, metallization, other associated injuries)
- Exit wound (Details as described above)
- Examination of Soles and Palms
- Any other injury including head injury
- Arc Eye, Singing of hair
- “Crocodile Skin” appearance
- Congestion, Petechiae, Froth
- Signs of Asphyxia
- Patterned wounds/signature burns
- Sometimes electric wounds may not be formed due to

wet surface.

- Hidden surfaces, examine with magnifying lens.

Internal Examination

Changes may be absent.

Nonspecific changes may be there.

- Petechial Hemorrhages
- Pulmonary edema
- System- wise dissection to exclude other natural illness
- Examination of fractures
- Examination for head injury

Samples

HISTOPATHOLOGY (desirable but not mandatory in all cases)

- ***Skin Specimens*** from suspected Entry and Exit wounds in addition to routine histological samples of internal organs as required
- ***Brain stem,***
- ***Heart including conduction system***
- ***Intercostal muscles***
- ***Kidney for Myoglobinurea***

Toxicological Analysis

Blood and bile samples for alcohol, abusive drugs if indicated

ELECTRICAL DEVICES AND THE INSTALLATION MUST BE EXAMINED BY A COMPETENT PERSON TO AVOID FUTURE CATASTROPHES.

Audit Sheet

Procedure	Yes	No
Personal history		
Details about Current		
Scene visit and Examination of Circuit and devices		
External Examination for Entry and exit		
Internal examination		
Histopathology of Skin lesion		
Toxicology		

Common risks

- Unskilled/ Semiskilled workers
- Domestic servants
- Children and Elderly

- Damp environment
- Damaged /old Houses

Common Mechanisms

- Respiratory arrest
- Arrhythmias
- Thoracic muscle spasm

Photographic evidences in electrocution

Site

- Overall view
- Leakage point
- Type of electric supply
- Solo incident or mass incident
- Broken / wear and tear point
- Entrance marks on body
- Exit marks on bodies
- Electrical equipment involved
- Water point if wet surface
- Place where body fell or landed ultimately
- Work in progress at time of shock

At the time of postmortem examination

- Overall view of body
- Face
- Clothing
- Point of contact
- Electric burns
- Organ involved
- Exit wound

DEATHS ASSOCIATED WITH LIGHTNING^{1,2,4,5,6,7,10,11,95,96,97}

The following procedure is in addition to what described under Sudden Natural Death

History

- Date and time of the incident
- Exact site of incident (near high building, flat ground, mountain, shade, tall trees)
- Whether raining or not?
- Whether lightening seen and thundering heard?
- Number of people involved
- Other animals involved

- Destruction to trees and other structures, mobile phones
- Presence of high -tension lines, transformers, and other electrical devices

Incident verification, Scene Visit and photography as indicated\

Crime Scene visit can be informative to find local impact of lightening incident like metallization of objects, burning effect, torn trees, burnt grass and botanical material, remnant of shoes etc may be obtained from scene

External Examination

- Examination of Clothing for destruction
- Examination of metallic objects like Coins, Keys for melting
- External features like Fern Like pattern on skin, burn alone skin creases, other injuries, filigree burns, fire flame burns
- Surface burns are usually superficial in nature
- Examination of ear drums for bleeding and tympanic membrane rupture

Internal examination

- Routine system wise dissection.
- Examination for Pneumothrax,
- Examination for ruptured viscera
- Examination of fractures
- Examination for head injury

Sample

Histology as indicated

Toxicology as indicated, generally there is no need of it as it natural phenomenon beyond control of human. Only in cases of forced labor/construction/ field job, plea may be taken as he did not act on advice to remain inside as he was under influence of alcohol.

Audit Sheet^{5,7,11}

Procedure	Yes	No
Risk factors identified in the history		
Scene visit and Photography		
Clothing and other objects Examination		
External Examination for specific signs		
Histology and toxicology as indicated		

Common Risks

- Tropical countries
- Close to tall trees, buildings

- Outside during rain
- In playgrounds/Paddy-fields
- Use of telephones
- Other recent electronic devices

Common Causes

- Multiple injuries
- Electrocution
- Rupture of viscera
- Head injuries

Photographic points in cases of Lightning

Scene of occurrence

- Overall scene
- Evidence of disruption of ground , building , and other objects
- Incidence of rain and lightening in area
- Place of occurrence
- Clothing may show extensive tears with scorches or burns
- Shoe and tight clothing may burst open
- Body will show extensive tears and splits in the skin, opening of body cavity, entry or exit marks
- Melting of metallic objects

At the time of postmortem

- Overall view of the body
- Type of burns
- Condition of clothing
- Hair Singeing
- Bleeding from ear drum rupture
- Disruption of shoes with holes
- Magnetization and melting of metal objects

Social Forensic Message

Don't use your mobile when it is lightning

DEATHS IN HIV POSITIVE CASES^{1,2,4,5,6,7,10,11}

The following procedure in addition to what described under Sudden Natural Death

History

Detail personal history (Marital status, Sex Habits, Foreign Travels, Occupation, Blood and blood product transfusion, accidents, injuries, Past or Present illness and treatments)

Preliminaries (High Risk Autopsy)

Follow NACO guidelines

- Staff should take precautionary measures (CAPS, MASKS, GOWNS, APRONS, BOOTS, DOUBLE GLOVES, VISORS, GOGGLES)
- Minimum number of staff must attend the case.
- Whenever possible disposable items must be used
- Waste must be disinfected with 2% hypochlorite solution and discard with proper care.
- All instruments must be disinfected.
- Table should be cleaned
- Proper hygienic procedure followed after post mortem like hand washing, baths)

External Examination

- Emaciation and wasting
- Signs of drug addiction
- Signs of sepsis
- Thrombosed veins

Internal Examination

Dissection must be restricted to the target organs.

Injuries during the Autopsy must be avoided

- Signs of Lung infections
- Signs of Central Nervous System involvement
- Lymphadenopathy
- Fungal infections in skin folds

(Accidental injury to the staff during autopsy procedure must be reported to Head of Department and all precautionary methods to be followed.)

SAMPLES (with warning like – dangerous or as per laboratory guidelines)

- Histological Samples
- Serology for HIV screening (not to be disclosed openly)

Audit Sheet^{5,7,11}

Procedure	Yes	No
Risk identified		
Precautionary methods adopted		
Necessary Dissection done		
Staff took precaution		
Waste disposed properly		
Laboratory staff advise for infective material		

High Risk Persons

- Commercial sex workers
- Casual sexual contacts
- Drug addicts
- Homosexuals
- Multiple blood and blood product transfused patients (e.g. hemophiliacs)
- Domestic Workers
- Foreigners
- Sailors
- Prisoners
- Multiple partners

DEATHS ASSOCIATED WITH BIRD FLU^{1,2,3,7, 11}

The following procedure in addition to what described under Sudden Natural Deaths and cases associated with HIV

History

Foreign travels

Association with chickens, birds

Occupation in Zoo

Health care worker

Family member/ Friend of Patient

Preliminaries

ALL THE STAFF MUST BE WARNED AND PROPER PRECAUTIONARY METHODS MUST BE FOLLOWED. Minimal Number of staff should be involved. And they must be followed up for Symptoms of any infection for 10 days.

Record of all involved persons must be kept³

Internal Examination***Respiratory system***

Fluid samples must be collected from nasopharynx down wards in sealed saline containers and sent to laboratory immediately with warnings

Proper histology samples to be taken into Formalin Containers

If there is delay in sending samples they should be taken into Viral Culture media.

Sample must Not Be Freezed³

After the examination body must be bathed in 1:10 Sodium Hypochlorite Solution and kept in sealed waterproof bag.³

Samples (With Warning)

VIROLOGY

HISTOLOGY AS INDICATED

Audit Sheet^{5,7, 11}

Procedure	Yes	No
Risk identified in history		
Precautionary methods followed		
Samples collected and dispatched properly		
Sterilization of instruments		
Attending staff followed up		

High Risk

- Travelers to Endemic countries
- Workers in Poultries, Zoo,
- Bird Lovers
- Health care workers

Deaths Associated with Disease/ Pyrexia of Unknown Origin^{1,2,3,4,5,6,7,10, 11}

The following procedure is in addition to what described under Sudden Natural Deaths and Cases where the Cause of Death Unascertained at Postmortem Examination

History

- Family history of Similar Deaths,
- Tuberculosis, Toxoplasmosis, Hepatitis, Sexually Transmitted Diseases including HIV/AIDS, Tumors and Malignancies, Blood disorders
- Details about occupation- Dealing with animals, Foreign Travels and Dealing with Foreigners, Working as a Health workers, Traveling to Endemic areas
- Details about Foods and Drinks –Taking from restaurants, Vendors etc or homemade foods only and source of water.
- Drugs History- What are the drugs, Injections other therapies
- Sexual History
- Progression of the Disease.
- Weight Loss
- Bowel and bladder habits

Case should be considered as a high risk case and safety Precautions must be followed and warning of people handling the body and samples must be done

External Examination

- Presence or absence of Wasting, Sepsis, Icterus, Pallor, Injection of blood vessels of sclera, Warts (General body and Genital)
- Wounds, Injection marks,
- Hair Loss, General Hygiene.
- Enlargement of lymph nodes
- Examination of Ear, Nose, Throat, Urethra, Vagina

Internal Examination

System- wise dissection

Cardiovascular System

- Examination of Heart valves for vegetations, thickening, ASD, VSD or Prosthesis, other abnormalities

Respiratory System

- Enlarged hilar, mediastinal and other nodes
- Cavitations, signs of Bronchiectasis, Emphysema etc

Central Nervous System

- Signs of Meningitis, Brain abscess,
- Signs of encephalitis
- Sinusitis
- Middle ear infections

Genitourinary System

- Pyelonephritis, Renal Abscess, Renal Stones, Abnormalities in Ureters and Bladder. Nature of Urine
- Genital Warts, Ulcers
- Uterus for Pyometrium.

Gastrointestinal System

- Liver for abscess,
- Gall bladder for stones, abnormalities and pus or signs of infections
- Length wise dissection of Small and Large intestine for signs of infections, ulcers, growths, etc.
- Para aortic and mesenteric nodes
- Examination of Stools

Samples**Histology of all Target organs**

In addition- Histology of Uterus, Gall bladder and Urinary bladder any other site as indicated

Blood

- For Culture

- Thick film for special staining for Malaria, filaria and Other parasites
- Blood for Virology
- HIV Screening

Spleen smear- Staining for malaria and other parasites

Bone marrow

Culture and staining for Hematological Disorders

Urine for Culture

Bile for culture

CSF for culture for bacteria and Fungi

Blood for Toxicological screening

Audit Sheet^{5,7,11}

Procedure	Yes	No
Risk Identification		
External Examination for specific features		
CVS examination for Endocarditis		
CNS examination		
Attention paid for rear sites of infection		
Cultures taken		
Virology /HIV		
Blood and Marrow staining done		
Toxicology screening		
Safety methods		

High Risk

- HIV positive people
- Sex-workers
- Drug addicts
- People working with animals
- Laboratory workers
- People with valvular heart diseases/ ASD/VSD
- People on Steroids /Immunosuppressant
- Travelers to Foreign Countries

DEATH DUE TO HUNGER STRIKE /STARVATION^{8,14,45}

It is equivalent to self-starvation, a diagnosis of exclusion

It is diagnosed by excluded all the natural and other causes of weight loss and decreased immunity

History

- Deceased particulars: Age, Sex, Weight before strike
- Duration
- Only food withdrawal or both food and water withdrawal
- History of any preexisting disease/disorder
- Environmental examination and physical exertion

External Examination

- Physique: thin, emaciated
- Determine the weight loss during the strike
- Skin is usually thin and shiny with associated pigmentation and is usually stretched over the bony prominence.
- Signs of dehydration
- If long duration: signs of vitamin and mineral deficiency
- Trophic skin changes

Internal Examination

- Look for any disease present that can cause death or can contribute to death
- Look for diseases that can cause weight loss like tuberculosis, diabetes, malignancies, etc.
- All the viscera shrunken and atrophied, with the exception of brain which is usually less atrophied.
- Gall bladder distended with bile
- Loss of fat in the subcutaneous tissue, omentum and around viscera (never caused by natural diseases)
- Stomach and intestine show atrophy of all the coats, intestine appears like tissue paper with atrophy of mucosa

Sampling

- Histological sampling of heart, lung, brain, liver, spleen and kidney to rule out natural diseases like tuberculosis, diabetes and carcinoma
- Toxicological analysis of viscera and blood for any intoxication

Causes of death

- Multi-organ failure due to electrolyte disturbance
- Super-added infections due to decreased immunity (it is much difficult to determine whether the infections were pre-existing or started afterwards)

*Medico-legally Death due to hunger strike is considered equivalent to Suicide in India.

Audit Sheet

Procedure	Yes	No
History		
Physical exertion		
Duration of Fasting		
Type of fasting solid/liquid		
Body Weight loss		
Skin condition		
External Examination		
Internal examination		
Vitrous Biochemistry		
Blood- fresh samples		
Urine for ketone		

Photographic evidences

Overall body

Skin condition

Subcutaneous fat

Organs

DEATHS RELATED TO ANESTHESIA AND SURGERY^{1,2,4,5,6,7,10,14}

Following procedure is in addition to what described under Sudden Natural Deaths.

Definition

These are the cases where the anesthetic agent is considered to have substantially contributed to the death. In general they occur during operative procedure or in the immediate post-operative period⁶.

Classification of deaths associated with invasive procedures and anesthesia¹⁶⁰

- A. Those directly caused by the disease or injury for which the invasive procedure or anesthesia was being performed.
- B. Those caused by disease or abnormality other than that for which the procedure was being performed.
- C. Those resulting from a mishap during, or a complication of, the invasive procedure.
- d. Those resulting from a mishap during, or as a complication of, the administration of an anesthetic.

Common fatal complications of invasive procedures

Sepsis, including bronchopneumonia, multi-organ failure, pulmonary embolism, peri-operative myocardial infarction, hemorrhage and sepsis.

Specific problem in death associated with surgery and anesthesia

Minimum morphological findings, variety of devices are used during operation, difficulty in assessing multi-factorial deaths.

Preliminaries

- Clinical Condition of the patient prior to operative procedure must be evaluated. (Specially the Cardiac and Respiratory systems)
- It is helpful to perform at least the chest radiograph and radiographs of other areas as indicated⁶.
- It is helpful for the pathologist to review the medical records prior to the autopsy.

Review the material available - surgical notes, anaesthetic notes, videos, photographs, laboratory reports, OPD record, Nursing notes.

In Anaesthetic Deaths

- Induction phase - sensitivity, hypotension, heart

ischaemia

- Instrumentation - patency of tubes, gas connections, oxygen cylinders
- Electricity- faulty instrument, leakage of current
- Faulty intubation
- Already compromised health
- Aspiration of Gastric contents

Surgery

- Swelling, oedema, exudates
- Bleeder loose, untied, slipping off
- Tying of vessels wrongly - ischaemia like coeliac plexus in duodenal trauma tying arterial supplying to liver
- Very long surgery
- Late complication of thrombosis, infection, adhesion
- DIC, intravascular coagulation, blood transfusion
- Cardiac enzymes
- Liver function Test
- Kidney function Test
- Therapeutic measures

External Examination

Documentation of all monitoring equipments, vascular cannulae, intercostals tubes, other catheters, endotracheal tubes to be performed. Record the content of label and volume retained in the intravenous bags and bottles. Monitoring of equipments / theatre will be done by IO with the help of medical team consisting of autopsy surgeon and specialty surgeon. Now, Medical council has stressed that Autopsy surgeon should restrict to the cause of death and issue of negligence will be settled by council with the help of medical board to avoid unnecessary harassment of the accused team in cases of registered practitioners. In cases of quack / unregistered practitioner, IO can proceed with medical team for investigation.

Internal Examination

Pathologist may consider performing at least some of the dissection in situ. At least the position of the endotracheal tube should be documented prior to removal of the organ block⁶.

Cardiovascular System

Documentation of the presence or absence of the patent foramen ovale.

Peri-operative Myocardial Infarction - The risk of infarction increases with age and severity of pre-existing cardiac disease. Majority of peri-operative myocardial infarctions occur between one and three days after the surgical procedure

Respiratory System

Measurement of volume of blood or other fluids in the pleural cavity

Integrity of Trachea and Major Bronchi**Central Nervous System**

- Consider fixation of the brain and referral for specialist neuropathological examination.
- Examination of venous sinuses.
- Consider dissection and fixation of the spinal cord if indicated.

Genitourinary System

Measurement of the volume of urine in the bladder.

Specimen**Histology**

Skeletal Muscle – Must be examined in order to facilitate the diagnosis of Malignant Hyperthermia. as indicated⁶

In addition, samples from major organs must be retained for examination.

Blood

Pre-mortem blood- For Creatinine Phosphokinase activity, if available

Toxicology

Blood, Bile Vitreous, Urine must be retained for toxicological analysis as indicated.

Microbiology**As indicated****Radiology**

Chest X-Ray at 45 degree for documentation of gas within the heart and great vessels. Documentation of the degree of Pneumothorax.

Other X-Rays as indicated**Photography**

Photograph of the postmortem examination with labels and date and time indicators will be helpful for interested parties in a later date. Videography is also recommended in these cases to prove or disprove findings.

Hematology

If there is the clinical suggestion of transfusion mismatch or accident, relevant material must be retained for analysis by an **independent laboratory**, if required.

Surgery cases have to be assessed in three stages as:

1. Preoperative period
2. Surgery period
3. Post operative period

Anaesthesia related death can be divided in four parts as :

1. Peri operative phase – over sedation, over medication
2. Starting phase (Induction phase)- inducing anaesthesia, poorly sensitized
3. During operation – long operation so excessive doses
4. Post operative

Deaths by unregistered practitioner is not covered by medical council and it is an issue between state and crime

Common issues and steps to be taken

Questions by IO / Issue	Role of Autopsy Surgeon	Role of Medical Council	Independent opinion
Whether surgery was justified ?	-----	MC	Independent witness
Whether competent in that surgery ?	-----	Medical Council	
Whether he/she possess ordinary skills	can	can	Can
Scene Assessment or visit to clinic on request to assess the scenario	Can (team of autopsy surgeon, anaesthetic and specialist from concerned specialty is recommended)	Team appointed can visit Medical Council is a constitutional Body	-----
Assessment of anaesthetic set up	Can be carried out Forensic specialist with anaesthetic colleague	Can appoint committee	-----
Cause of death	Domain	Committee with the help of Forensic Expert	-----
Interpretation of clinical findings	can	Can	Can
Information to media	No	No (only final outcome after enquiry)	No
Closure of premises Is domain of Investigative agency and court	No	No	No

committed so autopsy surgeon of area is fully authorized to take any steps as required by the case and permissible by local and central law as he senior most medical practitioner in such matters. He can assess scenario, can take technical help of others or any lawful action as per local state rules.

Before making diagnosis, one should analyze and find answer for following questions :

1. What are findings at autopsy?
2. How do you prove these?
3. How do you analyze it ?
4. What is acceptable conclusion?
5. What is cause of death

There should not be in a haste in making conclusions in these cases.

Communications with clinician is encouraged in clinical autopsies but in medico-legal autopsies, there may be hostility and apprehensions so more reliance should be put on written record brought by IO or through court.

Overdose of medicines – This is very difficult part to prove or disprove these allegations. Only early sampling of CSF, vitreous, blood and urine can be done by autopsy surgeon. As far as analysis is concerned a frank discussion with supporting clinical and forensic laboratories. Clinical record is very important to give a list of substances used in the case.

Excessive premedication- Clinical records and analysis thereof can prove or disprove the issue.

Air way obstruction from secretions, failed endo-tracheal tube, putting endo- tracheal tube in oesophagus in place of trachea. A pre- autopsy X-ray is of help if tube is in place. A few other reasons for obstruction are spasm of muscles, posture, aspiration of gastric contents, blood, denture, gauze pieces, cotton wools, and broken piece of any tube or instrument.

In anaesthetic deaths, there is advancement of drugs and these metabolize very fast so detection with exact concentration is a very difficult task. Our forensic Science laboratories are not prepared.

Heart failures may be:

Acute heart Failure – Investigation ECG, C9 Immunichemistry, Cardiac Troponin, full macroscopic and histopathological screening of heart

Chronic heart failure – Pulmonary hypertension, intravascular haemosiderin deposition and hepatic venous congestion. Histopathology evaluation is must in these cases.

Failure of heart supported with artificial devices- although rare but battery failure, short-circuiting, dislodgement,

fractures, insulation breaks, mainly lead related problems can result in failure of already a diseased/ unhealthy heart¹⁶⁰.

Cause of Death

In majority of cases death is due to brain hypoxia and it can be easily demonstrated on gross and Histopathological examination.

Blood aspiration, cardiac dysarrhythmias, hypersensitivity and undetected, uncontrolled hemorrhage also contribute significantly.

In the view of the fact that autopsy surgeon may have a limited experience with deaths associated with an anesthetics, it may be prudent to list the cause of death in a descriptive and demonstrable way⁶.

Audit Sheet^{5,7,11}

Procedure	Yes	No
Clinical Notes scrutinized before autopsy		
Radiography done as per need		
Medical intervention documented		
Samples for overdose, toxicology retained		
Central nervous system subjected to neuro-pathological examination mainly for hypoxic changes		
Histo-pathological Screening of Vital Organs (Heart, lung, liver, brain, rest as per need)		
Muscle samples retained for Enzyme studies (Heat hyperpyrexia)		
Conference with other specialists arranged		

Common Causes

- Injuries or condition for which surgery done
- Natural Diseases (IHD, Diabetes, Asthma), sometimes undiagnosed at PAC
- Anoxia due to displaced tubes
- Hyperpyrexia due to halogenated anesthetic agents
- Hemorrhagic shock
- Drug over-dosage or wrong drugs

DEATHS ASSOCIATED WITH MISMATCHED BLOOD TRANSFUSION^{1,2,4,5,6,7,10, 11,54}

Following procedure is in addition to what is described under Sudden Natural Deaths and Death associated with Anesthesia and Surgery.

History

- History of allergies of the deceased person.
- History of illness which required the transfusion
- Chronological order of the illness and the death
- History of previous blood or blood product transfusion
- Drug history of the person.
- Any history of past transfusion reaction

Preliminaries

- Safe custody and retention of the transfusion sets, pilot bottles and the samples from the blood bank by Investigate IO / Autopsy panel/ enquiry team
- Any pre transfusion blood samples from the deceased must be retained for analysis by IO / Autopsy panel/ enquiry team
- Scrutiny of all the clinical records, request forms, cross matching and direct testing records and their safe custody has to be maintained.
- Leftover drugs consumed by the deceased must be retained in safe custody for analysis as indicated

External Examination

External features such as edema, erythema, scratching mark, cyanosis, icterus, frothing, injection and resuscitation marks must be recorded

Internal Examination**Respiratory system**

Froths and laryngeal edema must be documented

Genito-urinary system

Kidneys must be examined for signs of acute renal failure

Cardiovascular system

Signs of acute cardiac failure

Samples**Histology**

- Samples from all internal organs must be taken for routine histology.
- Samples from Kidneys Heart and Lungs must be retained for special staining.
- Kidney are very informative as cast, myoglobin, ATN, fungal invasion may be seen.

Blood Samples

Blood samples from the body must be preserved.

Smears must be prepared

- They must be subjected to microscopy and analysis

- Vitreous, bile must be retained for analysis as indicated.

Urine

It is very important , sample from the body must be retained for analysis

Audit Sheet^{5,7,11}

Procedure	Yes	No
Risk factors identified in history		
Sample of blood to Laboratory		
Blood in bottle		
Victims Blood sample		
Histopathology of Kidney, Lungs heart, brain		
Urine Analysis for blood, Myoglobin cast etc		
Vitreous urea and creatinine levels		
Culture of all blood samples		

Common Risks

- Emergency transfusions
- Multiple transfusions
- Patients with Allergies
- Patients with asthma

Common causes

- Anaphylaxis
- Renal Failure
- Electrolytes imbalances
- Circulatory overload

Social Forensic Message

Blood donation is considered one of the biggest donation to save human lives.

Encourage it!

DEATHS OCCURING IN CUSTODY^{1,2,4,5,6,7,10, 11,37,98}

The following description is in addition to what described under Sudden Natural Deaths. Follow NHRC guidelines while conducting such autopsies.

Definition

A death in custody refers to a death of an individual while in prison, under arrest or in the process of being detained by authorities¹.

Scene Visit

- Scene visit have to be done even after removal of the body from the site for crime scene reconstruction if felt

necessary to correlate findings over the body.

- If the body is still in the scene, core body and ambient temperature should be recorded and distribution of rigor mortis, hypostasis must be recorded.
- Photography of original position is of immense value
- Crime scene should be on written request on either side i.e. either Medical Officer is requesting to clarify certain issues or IO is requesting to satisfy his queries or directed by court. It should be writing and should be recorded. It is applicable to all types of cases where case visit is recommended.

Autopsy

Preliminaries

- History of circumstances, any pre-existing natural disease, drug abuse, mental health issue, psychological disease
- The postmortem examination must be carried out after a proper authority as per a homicide case with police personal in attendance and with a police photographer.
- Documentation of injuries present over the body and description.
- Photography and Radiology should be arranged as indicated.
- A record of resuscitative measures under taken by ambulance personnel, warden or co-prisoners should be available to the pathologist. (even after the postmortem examination)

External Examination

- Complete photographs of the body including the close up photographs of the face including teeth and hands.
- If Oleresin (capsicum) spray is suspected, examination under Ultra Violet light and swabs for analysis are recommended.
- Documentation of presence or absence of injuries to anus and external genitalia and swabs for analysis as indicated.
- Document the presence or absence of Petechial hemorrhages in conjunctivae, periorbital and retro-auricular skin and buccal mucosa.

Internal Examination

Respiratory System

Formal neck dissection is recommended in situ, in bloodless field in layer by layer with photography.

Genito-urinary system

Formal perineal dissection is recommended with photography of dissected specimen if there are indications such as injuries, sexual assault or DIC.

Gastro-intestinal System

The gastric contents must be collected. The entire small and large bowel should be opened in order to exclude presence of illegal drugs.

Musculoskeletal system

Musculo-cutaneous and musculo-skeletal dissection to be done including palm and sole dissection as indicated.

Specimens

(As per requirement and circumstances of the case)

- Swabs and Smears from oral cavity, anus, rectum, perineal, low and high vagina. These must be performed prior to temperature recordings.
- Fingernail scrapings
- Full routine toxicology
- Full body Radiology
- Swabs for tortuous material preferably- Alcohol swabs for presence of Oleoresin capsicum or any other chemical material.

Audit Sheet^{5,7,11}

Procedure	Yes	No
Proper authority obtained/ request for PM		
Scene visit		
Photography of the body & videography		
Radiography		
Nail scraping		
Proper dissection of injured area/ affected part		
Natural orifices Detail examination Nose (hair pulling / infection) Ears (Infection, tympanic membrane rupture, bleeding) Mouth (Gingival hygiene, caries, fracture & extraction of teeth, swabs for semen, STD) Anus (old or recent injuries) Vagina (old or recent injuries, sexual acts, STDs, Semen)		
Sexual organs		
Toxicology screening		
Relevant medico-legal issues addressed (answer to the questions of Inquiring Officer addressed or evaded)		
Documentation done		

Common Causes

- Natural Diseases (MI, TB, CVA, Asthma, Diabetes, Etc)

- Drug overdose
- Head Injury (fall , assault)
- Strangulation and Hanging
- Postural asphyxia
- Aspiration (After Alcohol or drug intake)

Custody Death Photographic points

Scene

- Overall view with original
- Site where person was found unconscious or dead
- Clothing full detail
- Face from different angles
- Neck all around
- Hands- palmar and dorsal view
- Feet – dorsal and plantar view
- Items near by body

At the time of PM

- Videotaping for NHRC
- Overall view
- Standard shots as for any case
- Face from different angles
- Full body photography
- Important findings on external examination
- Important internal finding
- All important natural lesions / diseases
- Rest as per the type of case i.e. Firearm , blunt force, hanging etc
- Cause of death

DEATH ASSOCIATED WITH LYCHING BY MOB

Lynching is homicidal hanging or killing by beating by public mob to punish the deceased in cases of robbery, caste marriages, honor killings, punishment in rage of anger to drivers, thieves etc. is not uncommon.

Purpose of post-mortem in such cases is note pattern of injuries, diagnose torture, determine cause of death and manner of death. The common form of lynching is carried out by hanging from a tree, electric pillar, beating , burning and flogging etc.

History

- Detailed history of the incidence and detailed investigation

External Examination

- Injury to the clothing
- Bodily injuries suggestive of torture and struggle
- Look for signs of asphyxia: purplish lividity, bluish discoloration of nails, lips and other mucosa
- Examine the ligature mark as Lynching is considered as Homicidal Hanging
- Look for the other injuries over the neck as in strangulation: nail marks, penny bruises
- Keep in mind, the injuries over the neck can be inflicted by both the accused or the victim: the linear abrasions more vertically placed are caused usually by victim and the linear abrasion more horizontally placed are caused usually by the accused

Internal Examination

- Dissection of the neck to examine the underlying tissue of ligature mark: subfascial hemorrhage, hematoma or bleeding into the neck musculature, fracture and bleeding to the laryngeal structures
- Dissect the other viscera as usual
- Keep in mind to dissect the neck structure last to avoid spurious bleeding

Sampling

- Collect the fibres from the ligature material to the ligature mark over neck with the help of a cellophane tape
- Collect the foreign materials/biological material underneath the nails
- Usual viscera sampling for toxicological analysis

Audit Sheet

Findings	Yes	No
Place of recovery of body		
History		
Clothing		
External injuries indicative of beating /torture		
Internal Traumatic Injuries		
Multiple weapon injuries		
Duration		

Causes of death

- Asphyxia due to laryngeal blockade
- Cerebral ischemia due to blockage of carotid artery
- Cerebral apoplexy due to venous blockade

- Vagal inhibition of heart
- Multiple Injuries

Lynching –photographic points

Scene

- Overall view
- Position of body
- Suspensions points
- Knot
- Foot wears of deceased
- Condition of clothing
- Other Injuries over the bodies
- Foot prints near by
- Weapons present at scene
- Accessibility approach point to hang

At the time of PM

- Overall view of body
- Ligature details
- Ligature mark details
- Injuries
- Fractures
- Burns
- Rupture internal organs
- Important findings and inside injuries
- Grazed abrasions produced by dragging
- Any other special feature

Mass Disaster

WHO has defined disaster as an occurrence that causes damage, ecological disruption, loss of human life or deterioration of health and health services on a scale sufficient to warrant an extraordinary response from outside the affected community or area. If more than 12 people are fatally involved in one incident then it is termed as 'disastrous situation', limit of 12 is flexible. Indian Disaster Act deals all these aspects in detail. Natural disasters are beyond the scope of these guidelines.

Man made/ created disasters are bomb blasts, stampede, boat / ship sinking, bus fallen in mountain deeps, or any other transportation mishaps, fires, riots, gas leakages, mass suffocation due to smokes, food poisoning, building collapse, fires etc.

Forensic Department is asked to handle dead bodies in such situations. The simple ways are

Making an area as a make shift mortuary, keeping bodies in a row of 10-20 each, assigning them number, putting tags, making inventory of items, taking identity photographs for display, arranging clothing, air-conditioners.

Make multiple teams to handle 5- 10 bodies (flexible) each team- basic roles, identity photographs, making inventory of personal effects, clothing description, recording injuries, arranging x-ray, reconstruction if face is disfigured, taking blood samples for DNA profiling or any other use. If there is shortage of human resource then one person can easily handle 5-10 bodies. It is observed that in mass casualties main problem is identification and storage. Postmortem are usually waived off when there is common cause of death. In these circumstances only sample cases are carried out to corroborate findings. The common causes remain suffocation by smoke in a closed space fire incident, multiple injuries in building collapse, drowning in ship/ boat sinking, fire etc.

It is suggested that every public morgue should 10-20 additional storage spaces for such situations.

Team constitutions can be done for followings tasks:

- Transportation to hospital
- Media Handling
- Relatives handling
- Arranging Identification
- Photography
- Videotaping
- Case handlers / PM staff
- Support staff for shifting, dressing and lifting bodies
- Psychotherapy to bereaved families
- Documentation Assistance with photocopier and scanning facilities.
- CCTV coverage of storage areas.
- Handling multiple claims over body
- DNA profiling material preservations kits

Another major problem is of transport for carrying victims to nearby hospital or morgue. One example of mass disaster due to stampede as commonly seen in Kumbh- kamela and Macca and Madina religious visits is given here. Main issue of identification is core concern.

DEATH DUE TO MASS STAMPEDE^{7,11,14,95}

History

Place, date and time of incident.

Whether died on the spot, during resuscitation or during course of treatment.

Age of the deceased- infant, adult or elderly

Any pre existing disease

Alcohol or drug intake

Associated incident: Fire outbreak/ mob chase/ bomb blast- need to look for additional injuries thereof.

Deaths due to mass stampede occur as a reason of traumatic asphyxia as in restriction of respiratory movements. It may be due to injuries to the thoracic structures causing impairment in breathing or may be due to multiple injuries to head and abdominal viscera causing internal bleeding and exsanguinations causing death. Neurogenic shock can occur if trauma is associated to head, neck, genitals or to the abdomen region

External examination

- Examination of clothing, shoes etc is done
- Look for asphyxia signs
- Face , neck , chest part distal to the compression is intensely congested
- The level of compression is indicated by a well defined demarcating line between the pale compressed part and the distal congested part
- Description and measurements of injuries and exact location and direction
- Kick marks in the form of patterned abrasions or patterned contusions are noted
- Photography of patterned injuries

Internal examination

Central nervous system

- Injuries to the scalp and skull- Nature and extent
- Pattern of fractures if any
- Extra-dural, subdural intra-cerebral and inter-cerebellar and subarachnoid hemorrhages- extent and blood volume
- Measurement and comment on brain injuries- contusions or lacerations
- Presence of coup and contra-coup injuries
- Injuries to the brain stem and spinal cord

Cardiovascular system

- Presence of myocardial contusions, petechiae hemorrhages

Respiratory system

- Injuries to the chest wall, sternum and clavicles
- Presence of flail chest
- Lung contusions, petechiae, laceration (estimate the percentage of lung parenchyma involved)

- Measure the volume of blood in pleural/chest cavity
- Presence of pneumothorax or intercostal catheters

Gastrointestinal system

- Liver capsular tears or parenchymal blunt injuries- comment on depth of injuries
- Hemo-peritoneum- measurement of volume
- Retroperitoneal hemorrhages- extent in relation to anatomical markings
- Mesenteric and bowel tears, contusions- comment

Reticulo-endothelial system

- Spleen – integrity of capsule, parenchyma and any clots

Musculo-skeletal system

- Injuries to limbs- Exact location and height from the heel
- Injuries to pelvis- fractures

Specimens

Blood for alcohol, carbon monoxide (entrapment in smoke)

Radiology – in case of suspected fracture likely to be missed

Crime scene evaluation with photography

Audit Sheet

Procedure	Yes	No
History		
Patterned injuries noted		
Signs of asphyxia		
Internal bleeding measured		
Blood sample for alcohol and carbon monoxide		
Radiology (if indicated)		
Crime scene visit		
Photography		

Cause of death

Traumatic Asphyxia

Multiple injuries to chest and abdomen

DEATHS DUE TO BOMB EXPLOSIONS^{7,11,13,14,45,95,100}

Bomb is a mechanical device filled with a mixture of explosive substance and missiles and is fired by a detonator or a fuse. A bomb on explosion, releases a large amount of energy along with dangerous gases and missiles. Mass casualties are common. The forensic doctors have the

challenge during autopsy due to varying combination of injuries as the body may be blown into pieces during explosion, deaths may be due to shock wave, flash burns, flying missiles or due to fumes and in some cases deaths may be as a result of mass stampede or crushed under the debris of buildings demolished by explosions.

Preliminaries: major objectives to address during autopsy are:

1. Identification of victim- pieces or fragments of victims may only be available. Identification should be made using articles, identity cards, and clothing. Confirmed by DNA matching.
2. Enlisting the injuries- Explosion is extremely directional- localization of injuries may help in detecting the relative position of victim and the bomb explosion
3. Cause of death- depends on nature and intensity of explosion and also location of victim in relation to the explosion- close or distant/closed or open space

Injuries are produced by a bomb due to disruptive effect, flame, radiant heat, air blast flying missiles, falling masonry, smoke, dust and fumes. Most of the times, a classical triad of abrasion, contusion and laceration over the body is seen.¹²⁰ Blast injuries are classified into primary, secondary, tertiary and quaternary blast injuries¹²¹.

External examination:

The possibility of contamination of the body with radioactive or chemical material needs to be kept in mind at the time of conducting autopsy

- Complete body X-ray of the victim(s) are compulsory before the clothing is removed-to identify fragments of explosive itself or metallic fragments within the body
- Clothing should be retained for chemical analysis- trace evidence of explosive used
- Note varying sized abrasions, bruises and lacerations – due to explosion as well as flying missiles
- Splinters of wood, dust, glass or the explosive itself may be found deep within the wound
- Signs of crush asphyxia may be present
- Body may be shattered, abdomen disrupted, intracranial hemorrhages or herniation of brain may be present. Limbs may be blown off, decapitation can occur.
- Hemorrhage in the ear drum, hollow organs like bladder, lungs and intestines are present if the victim suffered blast impact.

Internal examination

Central nervous system

- Injuries to the scalp and skull- ranging from laceration of scalp to decapitation

- Pattern of fractures if any
- Extra-dural, subdural intra-cerebral and intra-cerebellar and subarachnoid hemorrhages- extent and blood volume should be noted
- Brain may be found apart from the skull cavity on the crime scene
- Measurement and comment on brain injuries- contusions or lacerations
- Injuries to the brain stem and spinal cord

Cardiovascular system

- Presence of myocardial contusions, petechiae hemorrhages
- Presence of missiles within the heart wall or cavity

Respiratory system

- Injuries to the chest wall, sternum and clavicles
- Presence of pieces of missiles embedded within the muscles, lungs or large vessels.
- Lung contusions, petechiae, laceration (estimate the percentage of lung parenchyma involved)
- Measure the volume of blood in pleural \chest cavity
- Blast lung injury

Gastrointestinal system

- Hollow organs-stomach, bladder and intestine – ruptured-blast injuries, may be blown out of the abdominal cavity
- Solid organs - Liver capsular tears or parenchymal blunt injuries- comment on depth of injuries
- Hemo-peritoneum, measurement of volume of blood
- Retroperitoneal hemorrhages- extent in relation to anatomical markings
- Mesenteric and bowel tears, contusions- comment

Reticulo-endothelial system

Spleen – integrity of capsule, parenchyma and any clots

Musculo-skeletal system

- Injuries to limbs- Exact location and height from the heel, amputation through the joints may be present.
- Look for fragments of explosives embedded in the limbs

Injuries to pelvis- open or closed fractures

Specimens¹

Histopathology: lung tissues show hemorrhages, contusions and help in detecting injuries caused by shock waves, kidney is looked for myoglobinuria (acute tubular necrosis)- crush syndrome

Blood test for caboxy-haemoglobin, cyanides and phosphorus particularly in fire-related blasts and that which occurs in closed space

Explosive residues need to be collected with extreme caution and dispatched for subsequent examination.

Clothes and other exhibits need to be send for chemical analysis

Radiological examination is imperative as mentioned above.

Photography of crime scene as well as the body is highly recommended .

Audit Sheet

Procedure	Yes	No
Collection of all possible fragments from explosion site		
Crime scene visit		
Photography		
X-ray examination of whole body		
Clothing and other articles examination and preservation		
Identification		
Enlisting the injuries		
Histo-pathology		
Blood tests		
DNA matching		
Chemical analysis of explosive residue		

In persons who survive bomb attack and are hospitalized, must be visited by forensic medicine expert and should record his observation as with lapsing time most of the findings will fade or heal. Protocols are modifiable in such cases as per the need of case. If injured dies later due to complications then these recorded observations are of great value.

Common causes of death

- Blast Lungs and Intra pulmonary hemorrhages
- Multiple Injuries and fragmentation of body parts
- Shock
- Haemorrhage
- Burns due to fire
- Radiation Burns
- Burial in collapsed buildings
- Peculiar – triad of injuries

Photography points- overall scene, bodies and their fragments, complete body photos.

The blast injuries, other than bomb blasts which are seen in practice are as:

- Vehicle Tyre blast (two wheeler, three wheeler, LMV, HMV etc.)
- Domestic gas cylinder blast
- Mobile phone battery blast
- Dynamite blast during excavation and breaking of stones
- Landmine blast
- Air conditioner cylinder blast in cars, AC, freeze
- Cylinder blast in laboratory
- Mobile battery blast
- Fire and blast of collided tankers

Points to be noted

- Radius of spread of broken pieces of cylinder / blasted body
- Damage at spot
- Blast effects over scene and body
- Impregnated pieces in body
- Injuries
- Radiant heat

DEATHS ASSOCIATED SPORTS ACTIVITIES ^{1,2,4,5,6,7,10, 11,62,138-41}

Sports related death are always be an emotive topic. Sudden death is defined as “an abrupt unexpected death of pathological or idiopathic cause, in which death occurs within 1 to 2 hours of onset of symptoms” ^(138, 139). The majority of sudden deaths occurred during or immediately after exercise (game, conditioning, training, etc) are given importance here. Sports are often regarded as a part of lifestyle owing to the widely held perception that it betters health and life in whole. The possibility of those indulge in sports to be susceptible to sudden death often seems to be unlikely, ironic and counter intuitive. Nevertheless, such sudden catastrophes continue to occur, usually in the absence of prior symptoms. Autopsy is most often the only means in making a definitive diagnosis and for determination of the cause of sudden death.

According to American Heart Association, “the commonest forms of heart diseases associated with sudden death during exercise are coronary artery disease and hypertrophic cardiomyopathy. Less common cardiac conditions linked to sports related sudden death include anomalous origin of the coronary arteries, aortic rupture associated with Marfan’s syndrome, myocarditis, mitral valve prolapse and various arrhythmias” ^(140,141)

American Heart Association Recommended as before taking up active sports, person should be screened for ¹⁰:

- Family History: Any premature sudden or cardiac death
- Personal History: excessive fatigue; shortness of breath; exertional chest pain or discomfort; heart murmur; systemic hypertension
- Physical examination: heart auscultation; brachial and femoral pulses

Therefore, the common concept of “excess of everything is bad” applies here also in avoiding of “intense” physical activity.

When either the family history is suggestive, or clinical suspicion is raised, or risk factors such as hypertension, hypercholesterolemia or cigarette smoking are present, subjects should undergo maximal exercise testing for measurement of exercise performance and the electrocardiographic response to exercise. When abnormalities are detected, further specialist cardiological investigation including echocardiography and possibly coronary angiography is indicated (Murty et al)⁶².

The following procedure is in addition to what described under Sudden Natural Deaths

History

Exact History of the Incident (Activities prior to death- Foods and drinks, alcohol, smoking, last complain, area of injury or blow, with what, speed of the ball, fall, associated struggle in case of contact sports, etc.)

(In cases of Indoor Games and some outdoor games presence of electrical items nearby must be enquired).

Personal History (Previous and Current illness, Treatments, Previous syncopal attacks, Drug, Alcohol and Smoking history).

Family History (Sudden deaths, Deaths in young age, Other chronic illness like Hypertension, Diabetes, Ischemic Heart Disease, Epilepsy, Asthma) in deceased and in the family.

Scene Visit as Indicated

External Examination

Look for any sign of injuries, cyanosis, pallor, edema, injection marks, froth.

Internal Examination

System wise dissection of all organs has to be done.

Cardiovascular System

Heart for signs of any abnormality, enlargement. Thickening of walls, Coronary vessels.

Heart valves for any abnormality

Dissection of conducting system and retaining of

samples for histopathology.

Respiratory System

Signs of spontaneous pneumothorax, bullae.

Froth in the Bronchial Tree.

Pulmonary edema, Consolidation.

Central nervous system

For Head Injury, Spinal injuries.

Colloid Cysts, Subarachnoid Hemorrhages.

Any injury to internal organs must be excluded

SAMPLES

Histology

All the organs for histology including conducting system of the heart.

Toxicology

Full toxicological Screening.

Blood and Urine for Cortisol levels.

Screening for Illegal Drugs (Amphetamines, heroin, benzodiazepines etc.).

Audit Sheet^{5,7, 11}

Procedure	Yes	No
Risk factors identified in history		
Details of incident documented		
External injuries looked for		
Internal injuries looked for		
Histopathological Screening arranged		
Toxicological screening arranged		
Screening for cortisol and illegal drugs		

Common Risks

- Untrained people
- No supervision
- No facilities
- Bad medical History
- Bad family History
- No first Aid facilities

Common Causes

- Head Injuries
- Neck injuries
- Chest Injuries
- Abdominal Injuries

- Multiple injuries
- Unsuspected heart diseases

ORGAN TRANSPLANTATION DEATHS (DONOR OR RECIPIENT DURING TRANSPLANTATION)

Organ donation is a noble cause and is considered highest kind of sacrifice. But unfortunately because of organ trading and illegal operations, at times cases are brought for postmortem examination.

Scene Examination/ Evaluation

- Scene examination with IO should be assessed
- Basic facilities, registration, qualification, training of retrieval team.
- Tables and instrument where death occurred should be examined with surgeon and anesthetic experts who can advise on technical parts.

Photography as indicated

Wound site photography is must

History

Donor

Recipient

External findings

- General Physical examination
- Retrieved organ site
- Surgical wound
- Surgical wound scar at position of kidney /liver / pancreas etc
- Other findings as in any other case

Internal Examination

Integrity of different organs

Note- In case of recipients of kidney transplant, it will be placed in the inguinal region and in case of liver, it will be in right hypochondrium.

Kidney transplant is placed extra peritoneally in the contra lateral iliac fossa¹¹⁷. In man the spermatic cord is mobilized, preserved and medially retracted. In women the round ligament is divided between ligatures. Renal artery is anastomosed with internal iliac, or external iliac or splenic artery.

Investigation

Histopathology

Anesthetic doses analysis

Blood investigation as per need

Urine examination

Transplanted Kidney: Findings to be noted are location of kidney, vascular attachments, infection, rejection, disease flared up, HP, urea level, KFT, Culture, condition of original kidney, clinical records. Normal glomeruli, tubules show cloudy changes, interstitium show oedema and mononuclear infiltration and focal haemorrhages¹¹⁷.

Transplanted Liver: Site, Gross findings of original and transplanted kidney, rejection findings, attachments, vascular sites, infection, culture, HP and LFT, clinical records.

Transplanted Pancreas: hemorrhage, autolysis, fat necrosis, calcium level, Amylase level, rejection findings, HP, clinical records.

Transplanted Heart: Gross, vascular connections, rejection, infection, valves, pericardium fluid culture.

General

Lungs: Consolidation, pneumonia, pulmonary oedema and haemorrhages.

Brain: Congestion and oedema, infarctions.

Kidney in end stage: hyalization of glomeruli, throidization of tubules, mononuclear infiltration in interstitium and vessels shows nephrosclerosis¹¹⁷.

GIT: Necrotizing enterocolitis, diverticulitis, encephalopathy, infarctions.

The most common complications are renal allograft rejection, which can be hyper acute which is immediate after revascularization, the second variety is accelerated rejection within a few day to some weeks.

Other major complications can be uncontrolled haemorrhage at the time of operation, postoperative thrombosis, graft vessel thrombosis. Urological complications like urter obstruction, UTI, stones, urinary fistula.

Audit Sheet

Check Points	Yes	No
History		
Legal documentation		
Donor related / unrelated		
Recipient		
Approval of authorization Committee		
Medical Record scrutiny		
External scars / wounds		
Internal organ integrity		
Investigations as required		
Histopathology		
Photography		
Culture		

Cause of death

Infections / rejection

Cirrhosis of liver

Hypoxia

Dysarrhythmias

Hemorrhagic shock

Photographic points

Overall view of body

Face

Injection sites for pus or blood

Complications

Site of transplant

Anastomosis of vessels

Bleeders if any

RADIATION INJURY DEATHS^{14,118}

Radiation refers to high-energy electromagnetic waves (x-rays, gamma rays) or particles (neutrons, alpha and beta particles). This is also due to radioactive substances like uranium, plutonium and radon, iodine, gold do cause harm to body.

Whenever human body is exposed to radiation beyond threshold limits. It causes damage to tissues. X-rays and therapeutic radiation when given in excess and without precaution can result in serious injury.

Radiation doses are measured by different units:

1. Roentgen
2. Gray (Gy)
3. Sievert (Sv)

The biologic effects of different types of radiation.

About 6 Gy causes death. More than 4 Gy causes symptoms in different systems. When cumulative dose of radiation becomes more than 20 Gy, it causes serious damages.

On human body, there are two types of exposures.

1. Irradiation radioactive ways, passes directly through the body from outside.
2. Contamination is contact or / and retention of radioactive substance in form of liquid/ dust / disposed off equipment etc.

These radiations are called 'ionising radiation' and whatever the source, have the same harmful effects if it is strong enough or is received for long enough time. the urine and blood are drained off rapidly with plenty of running water directly into drain¹¹⁸.

Dose^{14,95}

Dose of radiation	Effects
50 rads disability	Could effect blood but without
50-100 rads	Mild Injury and blood changes
100-200 rads changes	Mild illness in addition to above
200-250 rads	Moderate illness with mortality
500 rads	Early death
More	Likely hood of certain death

History

- Skin falling
- Unexplained sickness, loss of appetite, malaise, severe vomiting, diarrhoea which is not responding to usual therapy after contact with such material
- Necrotic lesions after coming into contact with some instrument/ material
- Blood dyscrasia due to bone marrow effects
- Working in laboratories/Profession /Nuclear plants where these substances are used
- Waste dealers

External examination

Tissue damage

Dehydration

Skin damage

Internal examination

Necrosis of tissues and bones

Bone marrow changes

Blood cells abnormality

Ovulation and sperms defect

Damage to genetic material

Special instructions

Fluid in body cavities may contain radioactive material. Some organs like thyroid, prostate, bladder are more prone to have higher concentration in therapeutic and cancerous conditions.

Special long handled instrument are recommended during dissection. Lead apron used by Radiographers should be used. Devices in the body like pacemakers should be taken out from the body before cremation. All instruments should be washed with detergent and then put under running water. If possible instrument / disposable items should be disposed under guidance of Radiological safety officer.

Audit Sheet

Check Points	Yes	No
History		
Awareness about dangers		
Substance involved and its decaying		
Use of lead aprons		
Special Containers		
Long handle instruments		
External Findings		
Internal Findings		
Handling Instruction		
Giego Meter		
Medico-Legal issues		
Special Disposal of waste		
Radiology Safety Officer (intimation is must)		

Common Cause of death

- Blood dyscrasia
- Bone marrow depression
- Lueukopenia
- Tissue Necrosis
- Sloughing of skin
- Sepsis in necrosed organs

HEAT WAVE DEATHS

In India, summer season from April to July has very high temperatures, it ranges from 35 to 48°C . In day time from 11 am to 4pm, cases of heat effects which are locally termed as 'Loo' are quite common. It results in neuronal failure in unprotected individuals. The findings are more prominent in diabetic, alcoholic, obese, young, weak and ill persons. The clinical condition may have heat cramps, heat pyrexia and heat prostration.

In fatal cases, post-mortem findings are nonspecific. The main effects remain necrosis of muscles, myocardium, DIC is usually due to cardiac arrhythmias. The following features should be noticed .

Temperature of the day

Environmental conditions

Place or occurrence

Clothing - type, colour

Skin: Prickly heat, reddened back, back of neck, urticaria in abdomen and thighs.

Brain: Cerebrum:congestion, oedema, patchial haemorrhages. Cellular changes with swollen dendrites,

degenerative changes and diffuse proliferation of microglia.

Cerebellum: oedema and swelling more prominent. Oedema of purkinje layer. Disintegration of purkinje cells and gliosis. There is rarefaction of granular layer.

Thalamus and hypothalamus show oedema and degenerative changes.

Respiratory System: Trachea and bronchi may contain haemorrhagic froth. Lung parenchyma show oedema, congestion and haemorrhages.

Heart: Patchial and confluent sub epicardial and subendocardial haemorrhages. There may be degeneration of myocytes.

Kidneys: Haemoglobinic nephrosis, tubular necrosis, congestion.

Adrenals: Cortical degeneration, perivascular haemorrhages, pericapsular haemorrhages, dilated sinusoids and haemorrhages may be the prominent findings.

Blood vessels: DIC may be seen

Samples

1. Vitreous for electrolytes and glucose
2. Blood
3. Urine for catecholamines and myoglobin

Record humidity and mid day temperature of day.

Audit Sheet

Check Points	Yes	No
History		
Timings of exposure		
Day temperature		
Humidity		
Clothing		
Core Body Temperature		
Skin condition		
Eyes		
Complete external examination		
Complete Internal Examination		
Sampling –vitreous, blood and urine		
Histology – Brain, Lungs, Heart, Kidney Adrenals		
Toxicology screening if indicated		
Photography as per routine		
Conclusion		

Social Forensic Message

Cover body with light colour clothing and cover your head. Remember Saudi Dress in Summers and drink raw

mango panna preparation, lemon water and eat onion with meals.

COLD WAVE DEATHS

India has extreme cold weather from November to February months in Northern parts of country. In extreme weather conditions when temperature dips down below 10 °C, homeless people and people exposed to cold in unprotected conditions are found dead in the morning. Freezing of tissues and cells cause injury in two ways (Robbins and Croatan, 7th ed 445-446):

1. Direct effects are probably mediated by physical disruption of organelles within cells and high salt concentration incident to the crystallization of the intracellular and extracellular mater.
2. Indirect effects are exerted by circulatory changes, chilling produces vasoconstriction, increased permeability which leads to oedematous changes. Vasoconstriction also causes increased viscosity of blood which causes ischaemia, degenerative changes and infarction and ultimately produce gangrene.

Salient features in cold wave deaths, observed during postmortem are given below.

Post-mortem findings

Clothing – inappropriate and insufficient clothing and foot wears.

Head and neck – unprotected

Skin – Remarkable pinkish coloration, pink areas with blurred margins around joints elbow, knee, ankles and hips.

Face – Pinkish patches over ears, nose, cheeks, chin

Hands and feet – Swollen fingers and toes, ankle oedema, bluish, blackish

Blood – bright red colour

Stomach- acute erosion, ulceration and haemorrhages

Pancreas- fat necrosis and haemorrhages

Organs – may show micro infarcts, congestion

Lungs = congestion and microinfarcts

Brain – perivascular haemorrhages

Coronaries – Thrombosis

Sampling

Urine – Alcohol / drugs

Blood – Alcohol , drugs

Histopathology- cold effects findings in organs

Audit Sheet

Check Points	Yes	No
History		
Temperature recording		
Clothing		
Photography		
Sampling		
Complete external examination		
Complete Internal examination		
Histopathology-pancreas, lungs brain and heart		
Opinion		

EXHUMATION ^{14,45,95,103}

It is lawful digging out of an already buried body on order of Magistrate U/S 176 CrPC. Places of burial may be public burial grounds,- Kabristan , family burial grounds or places of surreptitious disposal in cases of concealment of death. It can also be termed as digging up, unearthing and disinterment of body. In this regard, please Punjab Police Rules25.34 ¹⁰³

Exhumation involves to take the human body or remains of a body or the coffin containing a body out of the place of burial or disposal. The procedures adopted by different religions are as:

- **Christian** – Body is laid out after washing, and clothed in a shroud or night attire. Roman Catholic faith prefers crucifix on the chest of the deceased, or that arms should be folded as cross
- **Muslim** – Body is washed by a professional , after the head has been turned towards Mecca It is then clothed in 3 pieces of white cloth 9 yards long , covering upper, middle, and lower portions of the body , Generally coffin is not used.
- **Hindu and Budhist-** Body is washed, wrapped in a shroud, covered with flowers, and cremated.
- **Jewish** – Body is laid out with the eyes closed, and the feet pointing towards the door. A purification ritual called ‘Tahara ‘is performed by 2 qualified Jews, and the body is then buried wrapped in a shroud.

Why is it be carried out ?

Criminal Cases which may necessitate exhumation may be :

Determination of identification, verify identification, uncover previously undocumented evidence; parties, determination of the cause of death , manner of death, cause of the accident; to collect forensic evidence

Civil cases may also require in following cases:

Identification, accidental death claim, insurance negligence, Inheritance claim, disputed identity / paternity / maternity, separation overseas and burial of wrong body.

Arrangements are made for exhumation after consulting all the involved parties:

- Relatives and other interested
- Cemetery keeper, undertaker, cemetery worker,
- Pathologist's team
- Workers, photographer, forensic toxicologist, odontologist, anthropologist as per need
- Material procurement kits
- Other necessary basic instruments
- Vehicle to carry remains to Mortuary

Plan to exhume should be prepared in consultation with involved parties and administration:

- Day and timing
- Starting early in the morning
- In presence of Magistrate, Doctor, Police, witness
- Identification team/ burial manager / relations
- Digging up team
- Sampling and documentation material
- Security of site

Time Limit: No time limit in India

On site:

- Identification of site
- Plan to dig up
- Collection of earth above and below and a control sample
- Noting entomological evidence
- Coffin
- Autopsy as the procedure adopted in other cases.

Describe place, dimensions of grave, identifying items, collect earth from above body, below the body, sides. Take out body / remains and examine at morgue in details as per the procedure for normal post-mortem examination.

Audit Sheet

Check Points	Yes	No
Magistrate Order		
Time fixation for exhumation		
Arrangements and teams to participate		
Time of departure		
Time of arrival at the burial place		
Persons identifying the place of burial		
Description of grave (Length, Breadth covering, depth)		
Presence of Magistrate, IO and other teams members		
Description of coffin, clothing or other coverings		
Sampling of earth(500grams) liquids in coffin		
Sampling of debris/liquids in coffin for poison		
Entomology evidence		
Take out body, if skeletonised then pack after making sketch and photography		
Photography at every stage		
Videography		
Complete Autopsy as any other autopsy		
Ancillary Investigations as indicated		
Special findings should be photographed and if possible retained		
Approximate time of death		
Cause of death or other issues raised in the case		
Issues related to death resolved		

Common situation

- Consistency with previous findings if postmortem was done before
- New findings as postmortem was performed casually without opening cavities
- Inconsistency in reports
- Knowing exact cause of death if post mortem was not done

DEATH OF FOREIGN NATIONAL

With advancement travelling and job related placement, many foreigner who dies naturally or unnaturally are brought to morgue either for preservation or at times for post-mortem. The main issues remain custody, embalming, transportation. Body preservation policies are to be noted against the IATA regulations with respect to non nationals.

All centers should have display of embalming policies with procedure forms. Appropriate authorization forms and fitness certificates for airlifting and transport by all modes should be made available with pre-drafted checklist.

Post-mortem should be carried as per normal procedures as laid down, depending on type of case.

Audit Sheet

Check Points	Yes	No
Identity verification		
Passport details		
Information to Embassy		
Arrangement for transport		
Embalming		
Care taker undertaking /authorization by Embassy		
Police certificate /NOC		
Photography		
Cause of death		
Post mortem Certificate		

Main reasons for deaths in such cases remain as:

- Natural Deaths
- Drug Overdose
- Drug Carrier
- Poisoning (stupefying and intoxicating agents)
- Sexual Assault
- Murder
- Accident

EMBALMING SERVICES²⁸

In normal practice, embalming services are required only when a body has to be transported from one place to another either by road / rail or air. It is carried out in most of the centers on official payment. The rates are nominal and varies from 2000 to 10,000 INR or as in practice .

It requires **1.** Request form, **2.** NOC from police, **3.** Cause of Death Certificate. These services are provided either by Forensic or Anatomy departments. After the embalming procedure certificate to this effect is issued as :

a. Certificate of Embalming

This is to certify that the dead body / Postmortem body / Autopsy body of late Son / Daughter/ Wife / aged Sex..... an Indian / Foreigner ID / Passport No..... was brought tot his Department from where he / she had died / where

PM was done , is embalmed in the Department of Forensic Medicine /Anatomy. Embalming assures that the body is not hazardous to public health. The Death Certificate / Certificate of Postmortem and no objection certificate from the Police / Embassy / High Commission / Mission for embalming this dead body, have been seen by me , and found in order. The body after embalming , is handed over to the claimants, who brought it to this department.

Signature of Medical Officer with rank

Received the embalmed body of Late..... with Embalming

Certificate

Signature of Claimant with full particulars

b. **NOC from Police** – the language of this certificate is :

No Objection Certificate for Transportation of Dead Body

This is to certify that s/d/ w/ of.....t/o

.....Has died on dated at about AM/ PM at his residence/ hospital, etc. (Name) His death is natural / due to illness / other reason (mention other reason) As per the certificate / report given by the hospital / doctor. His relative(full particulars) intends to take him out of Delhi for funeral etc. We have no objection for same. Date of issue Name of officer and Seal

c. 3rd Important document is Death Certificate as used in the hospital as WHO guidelines.

AUTOPSY IN EMBALMED BODIES

There are occasions when person dying naturally or otherwise are brought for embalming and afterwards circumstances develop where death certification is required for legal and other civil purposes. The body is a well preserved and most pathogenic organisms are killed. It is also devoid of foul smells developing with time after death. If poisoning is not the issue then performing autopsy on embalmed body is a wonderful experience. It is just like performing anatomical dissection.

Advantages: Tissue is well preserved , anatomical relations are intact, lesions become more distinct , body is free from pathological organisms.

Disadvantages: It interferes with detection of poison, tissue get denatured and there is difficulty in recovery of DNA material, thrombus get dislodged, tissues get hardened and

dissection requires little force and care. All bacteria get destroyed so it interferes with identification.

Sampling in embalmed body: Vitreous humor, synovial fluid, bile are ideal samples for screening for toxicology. Besides this muscle mass from psoas and gluteal region can be preserved for toxicology. For DNA liver, spleen, bone marrow, muscles can be preserved. Although, it is a difficult process but it is possible to extract DNA from embalmed tissues. CSF from ventricles can be obtained after opening cranial cavity.

Organ dissection

All organs are good in shape and contour. These very hard in consistency. The appearance is just like half preserved tissues museum specimen. Findings are appreciated better than a normal autopsy. Major diseases and lesions can be easily diagnosed.

Photography

Femoral vessels where embalming trochar, cannula was introduced

Abdomen walls

Full body photography external as well as internal

Cause of death

Any other special findings

TIME SINCE DEATH^{14,29,30,35,36,95}

A simplified method of estimating time since death is very important factor to guide the crime investigation. Examination by naked eye methods are listed below with their time limits in normal weather of 25-30 degrees Centigrade with average humidity. All values are approximate and time of death is based on assessment of multiple factors.

Finding seen in the body of corpse	Time since death	(Noted) Yes/No	Estimate
Transparent cornea, Postmortem staining is very faint, patches are not appreciated, only small streaks are visible	Within 1-2 hours		
Body surface cold postmortem staining in patches, rigor mortis is appreciated in small muscles of the body like face, lids etc	2-3 hours		
Body surface cold, PM staining well developed and fixed. Rigor mortis well developed and appreciable in upper parts of the body.	6-8 hours		
Rigor mortis appreciable in all parts of the body, well developed and fully appreciable in both limbs	Near 12 hours		
Body cold, greenish	12-24 hours		

discoloration over the right iliac fossa, eggs of common flies as small cluster may be present over natural orifices			
Rigor mortis start receding, greenish discoloration over abdomen and chest, distension of the abdomen with bloating	24-36 hours		
Whole body bloated, facial features blurred, hairs and nails easily pulled off, grown pupae, maggots all over the body	3-5 day		
Internal organs are pulpy, black and present in form of pulaceous mass	1 week		
Most of the soft tissues decomposed and present in unrecognizable form and texture, fibrous changes in prostate/uterus are identifiable	2 weeks		
Skeleton exposed, bones still attached with tendons	1=3 months		
Bones get separated but small fibers can be seen at the ends of joint bones	3-6 months		
Bones lying separately without fibers	>6-12 months		
Condition of Gastric Contents digestion and emptying (veg or non-veg) normal dietLiquid (Water/tea /coffee) leave empty stomach Over full stomach	1-4 hours 15-20 minutes 1-2 hours		
Small Intestine Ileo-caecal junction: Hepatic Flexure: Splenic Flexure: Pelvic colon: 12-18 hours	1-8 hours within 2-4 hours 4-6 hours 9-12 hours		
Evacuation: Nothing is left in intestine after 48 hours.	18-24 hours		
Time of Death by observing return of PM staining to blanched area after pressing skin for 2-5 minutes with moderate pressure against skin showing PM staining. 20-25 degree centigrade	Approximate Time Since Death		
5-10 seconds 30 seconds 60-120 seconds 5-8 minutes 8-10 minutes 10-15 minutes 10-15 minutes More than 15 minutes	2 hours 4 hours 6-8 hours 10-12 hours 14-16 hours 18-24 hours 18-24 hours 24-28 hours		
Rigidity of body Primary Relaxation Face rigidity Neck rigidity	0-1hours 0.5-2 hours 2-4 hours		

Upper limb rigidity Chest Trunk Lower Limbs Strong rigidity	4-6 hours 6-8 hours 8-10 hours 10-12 hours 12-18 hours		
Decomposition changes and Time Since Death Green discoloration iliac fossae right Fluid from mouth and protruding tongue Softening and protrusion of eye balls Loosened nails and hairs Soft tissues liquefied and absent Presence of joint ligatures Bones becomes yellow and smooth and lack vital appearance Mummification Saponification Disintegration of body More in neutral and dry soil	18-24 hours 2-3 days 5-7 days 5-10 days 1- 3 months 3-6 months 1 year 3-6 months 3-12 months 25-100 years		
Motility of sperms³⁶ Weak activity can be seen up to	10 hours post death 24 hours after death		
Rectal Temperature with long thermometer Changeable factor³⁶ Tem °C Changeable factor 32 1.2 29.1-32 0.9 27.1-29 0.824.1-27 0.7 19.1-24 0.6 Less than 19 0.5	Time of death = Normal body Temp- cadaver changeable factor rectal temp x		
Electrical stimuli of muscles Positive response Weak response Irregular response	2 hours Up to 3 hours Up to 8 hours		
Refloating of bodies to surface in drowning/ immersion in well/river/ pond/sea like water bodies Summer Hot and humid Light winter Extreme winter (below 45°F)	2-3 days 2-5 days 1-2 weeks May not surface		
Cold water immersion survival 3°C 3-8°C 8-28°C	3/4 th hour 1.5 hour 3 hours		
Drowning (non-winter season) period of submersion Wrinkling of skin Bleaching look Soddening Degloving	2-4 hours 12 hours 24 hours 48 hours		
Lice in scalp hair and other body parts over dead body Live Dead	Less than 3 days Die within 3-6 days after the death of individual		
Grass colour If green grass under dead becomes yellow due to unavailability of sun rays then it means corpse is lying for more than	5 days or more		
Urine volume in normal routine 1ml/ per minute Per hour 1x60=60 ml is formed	Total volume of urine in ml – residual urine in ml= Time of Death after last voiding		
Entomology Common House fly (Garbage fly) • Small white eggs hatching • First maggot • Second Maggot • Third maggot stage Blue Bottle (Calliphorade) • Yellow banana eggs • Hatching time • First maggot • Second Maggot • Third maggot stage Sarcophagidae(fruit flies) Summary Fresh Body- Common House fly Blue Bottle Bloated body Liquefaction Post Decay stage Skeleton with tandons of joint Dry stage>	Any moment, average 8-12 hours 36 hours Upto 2 day Upto 3-4 days 8- 14 hours 8-14 hours 2-3 days 4-5 days 4-5 days 2-3 days 3-7 days 1-3 weeks 3-4 weeks >1 month >3-6 months (open) >1-3 years buried		
Time of death in still born Skin – reddish, fresh Vernix caseosa Skull bones appearance normal Tissues fresh Posture normal bleeding under scalp due forceps or narrow pelvis	Fresh death during labour process		
Time interval between intrauterine death and delivery³⁹ Skin slippage Skin blebs Skin sloughing and haemolysis, softening of organs Liquefied brain, overlapping of sutures, collapse of calvarium Laxity and dislocation of joints	12 hours 24 hours 48 hours 5days 7days		

Intestine contents emptying, rectum contents emptying and form, urine volume, ambient temperature of atmosphere at scene, degree of DNA degradation, humidity in atmosphere, clothing layers are valuable in deciding time since death. Other circumstantial factors like newspaper piling, light on or off, TV schedule, manner of clothing, food in utensils, dish in sink, purchase receipts, phone calls, dust deposition, maggot, flies and fungus help in determining time of death. Vitreous humor electrolytes Potassium, Sodium and chloride are very helpful in first 72 hours in estimating time since death.

The features and limits as mentioned above may be seen in almost in **double time** in extreme winter season. These features show variation depending on humidity, temperature, close or open space. All factors should be given weight to make a final estimate of time since death. It is multi factorial issue rather than single criteria issue

TIME OF INJURY^{37,38,66,95}

(Injury infliction time before death)

The time limits are only approximate and should not to be considered in isolation

Bleeding from injury (genital tissue, skin shows little earlier healing) time of injury Oozing of blood Serosanguineous Serous Pus formation visible Healing	Few hours to 1 day 2-3 days 3-7 days 7-10 days About 1.5-3 days		
Histological findings (time of injury) Lecukocytes Erythrocytes Macrophages Thrombosis in small vessels Hemosiderin Granulation tissue Soft scar Firm scars	15-45 minutes 20 minutes 6 hours 12 hours 48 hours 5-6 days 1 month 2-3 months		
Bone Callus in fractured bone Hemorrhage Bone Necrosis Organization of clot Granulation tissue Proliferation and infiltration of osteogenic cells Fibroblastic reticulum Soft callus Hard Callus Healing of fractured bone	Immediate 2 Days 4 Days 5 Days 7 Days 10 days 2 weeks 6-8 weeks 12-16 weeks		
Bruise colour changes Red Recent Bluish, light blackish tinge Brownish/ dark bluish	Fresh up to 6 hours 24 hour 2-3 days 3-4 days		

(hemosiderin) Greensih hue in bruise (hemotoidin) Yellowish (Bilirubin) Faint yellowish	4-6 days 7 days 7-14 days		
Healing of abrasion Oozing Soft covering Brownish scab Black brownish Black scab shrinks at margins, start separating Hypopigmentated area Healed, unrecognizable abrasion area	Immediate 6 hours to 1 day 2-3 days 4-5 days 6-7 days 7-14 days 2 weeks		
Healing of wound Fresh, bleeding with clot Margins swollen, red dried up blood and lymph Capillary network, new vessels Capillary network, fibroblasts along with vessels Vessels thickened, connective tissue expands Scar formation is complete and is soft, elastic and pinkish; slough falls off; Scar with some indurations White scar with mild indurations White scar with small indurations < 5cm wound Large wounds with indurations	Within few hours, 6 hours 12-24 hours 24-36 hours 48 hours 3-5 days 6-7 days 7-9 days 2-3 weeks 4 -5weeks 4-6 months		
Burn Injury Immediate – redness Blister formation Swelling, oozing, bleeding Pus formation and visible pus, slough formation Thick pus formation– creamy layer Slough formation and granulation tissue Fall of superficial slough Fall of deep slough Healing of deep burns Scar Contracture of joints	Immediate 15 minutes to 3 hours 24 hours 36-48 hours 2-3 days 3-6 days 7-8 days 3 weeks 1 month More than 1 month		
Subdural Hemorrhage³⁸ Acute=Fresh, red to dark red, clotted blood, without features of organization or resolution and no membrane formation Subacute Subdural Hematoma =subdural haematomas that have remained undetected or unoperated for at least 3 days Clot is liquefied two Chronic is s usually after two weeks, a neo membrane can be appreciated	3 days Analytical More than 3 days upto 21 days 2-3 weeks More than 2-3 weeks		

DEATH CERTIFICATION ^{101, 102, 45}

Certification is most important exercise in medico-legal working. Death certificate is an important document and the right of next of kin to have it as it may be required for cremation, settle other legal duties and rights of the deceased individual. In every case where medico-legal is conducted a death certificate /Post-mortem Certificate is mandatory on part of autopsy surgeon. Detailed post-mortem should be given to investigating officer as post-mortem was conducted on their request. All doctors who are going to issue death certification must read Death and Birth Registration Act, India, 1969 and International Classification of Death 10 (ICD 10) issued by WHO.

Classification of causes of Death ICD 10

The 10th version of International Classification of Diseases (ICD-10) was introduced by WHO in 1993 and India adopted this in the year 2000. Accordingly, the Directors of Health Services of all States/Union Territories were advised to adopt the ICD-10 classification system for coding morbidity and mortality records. Medical certification of cause of death (MCCD) scheme is basically a part of International Statistical Classification of Diseases and health related problems (ICD) formulated by WHO. The purpose of promoting use of ICD 10 is to ensure uniform data collection and analysis.

In the structure of ICD 10, there are 3 volumes and 21 chapters. Volume 1 is the **Tabular list**, which is an alphanumeric (code) listing of diseases and disease groups, Volume 2 is **Instruction Manual** on how to use volumes 1 and 3 and Volume 3 is the **Alphabetical index** of the diseases and conditions found in the Tabular list.

Table 1: Classification of diseases in the International Classification of Diseases-10 ICD-10 Chapters with Title and three-character (code) categories (Adopted from WHO ICD-10 volume 1)

Chapter	Title	Three-character categories
I	Certain infectious and parasitic diseases	(A00-B99)
II	Neoplasms	(C00-D48)
III	Diseases of blood and blood-forming organs and certain disorders involving the immune mechanisms	(D50-D89)
IV	Endocrine, nutritional and metabolic diseases	(E00-E90)
V	Mental, behavioural disorders	(F00-F99)
VI	Diseases of the nervous system	(G00-G99)
VII	Diseases of the eye and adnexa	(H00-H59)
VIII	Diseases of the ear and mastoid process	(H60-H95)
IX	Diseases of the circulatory system	(I00-I99)

X	Diseases of the respiratory system	(J00-J99)
XI	Diseases of the digestive system	(K00-K93)
XII	Diseases of the skin and subcutaneous tissue	(L00-L99)
XIII	Diseases of the musculoskeletal system and connective tissue	(M00-M99)
XIV	Diseases of the genitourinary system	(N00-N99)
XV	Pregnancy, childbirth and the puerperium	(O00-O99)
XVI	Certain conditions originating in the perinatal period	(P00-P96)
XVII	Congenital malformations, deformations and chromosomal abnormalities	(Q00-Q99)
XVIII	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	(R00-R99)
XIX	Injury, poisoning and certain other consequences of external causes	(S00-T98)
XX	External causes of morbidity and mortality*	(V01-Y98)
XXI	Factors influencing health status and contact with health services	(Z00-Z99)

For international data comparison, the list of three-character categories is the mandatory level. The coding procedure is done at the regional level but the statistics are published by the RGI. Every cause-of-death statement is coded and tabulated in the statistical offices according to the latest revision of the International Classification of Diseases and National List prepared from ICD. Cases in which deaths are due to external causes, dual coding of both the external cause and the nature of injury is done.

ICD -10 : Chapter XX (Code IX also) ; For citing Code XX External causes of morbidity and mortality(V01-Y98)*

This chapter permits the classification of environmental events and circumstances as the cause of injury, poisoning of environmental events and circumstances as the cause of injury, poisoning and other adverse effects.

This chapter contains the following blocks:

V01-X59 Accidents

V01-V99 Other external causes of accidental injury e.g. falls, accidental drowning, exposure to inanimate mechanical forces

X85- Y09 Assault

Y10-Y34 Event of undetermined intent

Y35-Y36 Legal intervention and operations of war

Y40- Y84 Complications of medical and surgical care

Y85-Y89 Sequelae of external causes of morbidity and mortality classified elsewhere

Example

Intentional self-harm (X60-X84)

X60	Intentional self-poisoning(ISP) by and exposure to non opioid analgesics, antipyretics and anti rheumatics e.g
	• 4- aminophenol derivatives • Nonsteroidal anti-inflammatory drugs NSAID • Pyrazolone derivatives • Salicylates
X61	ISP by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs. Not elsewhere classified
	• Antidepressants • Barbiturates • Hydantoin derivatives • Iminostilbens • Methaqualone compounds • Neuroleptics • Psychostimulants • Succinimides and oxazolinediones • Tranquillizers
X62	ISP by and exposure to narcotics and psychodysleptics (hallucinogens), not elsewhere classified
	• Cannabis and its derivatives • Cocaine • Codeine • Lysergide (LSD) • Herion • Mescaline • Methadone • Morphine • Opium • Morphine
X63	ISP by and exposure to other drugs acting on autonomic nervous system
	Paprasympathetolytics (anticholinergics and antimuscarinics) and spasmolytics, parasymphommetics (cholingergics) sympatholytics (antiadrenergics), sympathomimetics (adrenergics)
X64	ISP by and exposure to other and unspecified drugs, medicaments and biological substances
	Agents primarily acting on smooth muscles and the respiratory system anaesthetics (general)/ local drugs affecting the CVS, GIT, hormones and synthetic substitute, systematic and haematological agents, systematic antibiotics and other anti- infective, therapeutic gases; topical preparations; vaccines; water balance agents and drugs affecting mineral and uric acid metabolism
X65	ISP by and exposure to alcohol
X66	ISP by and exposure to organic solvents and halogenated hydrocarbons and their vapours
	Benzene and homologues Carbon tetrachloride chloro fluorocarbons Petroleum and its derivatives
X67	ISP by and exposure to other gases and vapours
	Carbon monoxide, lacrimogenic gas, motor exhaust gas, nitrogen oxides; sulphardioxide; utility gas; Excludes metal fumes and vapours (X69)
X68	ISP by and exposure to pesticides
	fumigants; fungicides; herbicides; insecticides; rodenticides; wood preservatives; excludes :plant foods

	and fertilizers(x69)
X69	ISP by and exposure to other and unspecified chemicals and noxious substances
	Corrosive aromatics , acids and caustic alkalis , glues and adhesives; metals including fumes and vapours ; paints and dyes; plant foods and fertilizers; poisonous food stuffs and poisonous plants; soaps and detergents
X70	Intentional self-harm(ISH) by hanging, strangulation and suffocation
X71	ISH by drowning and submersion
X72	ISH by handgun discharge
X73	ISH by rifle, shotgun and larger firearm discharge
X74	ISH by other and unspecified firearm discharge
X75	ISH by explosive material
X76	ISH by smoke, fire and flames
X77	ISH by steam, hot vapours and hot objects
X78	ISH by sharp object
X79	ISH by blunt object
X80	ISH by jumping from a high place; includes intentional fall from one level to another
X81	ISH by jumping or lying before moving object
X82	ISH by crashing of motor vehicle; train; tram; excludes crashing of aircraft(X83)
X83	Intentional self-harm by other specified means; intentional self-harm by
	Caustic substances, except poisoning, crashing of aircraft, electrocution
X84	Intentional self- harm by unspecified means

Event of undetermined intent is classified under Y10-Y34.

ICD is worth reading document before practicing. Another important document is '*Physician's Manual on Medical Certification of Cause of Death. 5th Edition. Vital Statistics Division, Office of the Registrar General, India, Ministry of Home Affairs, New Delhi 2012.*'

In medico-legal post-mortem services, more than 90% cases are straight and there is no hindrance from law side so cause of death can be stated in clear words. This **post-mortem certificate** is to be issued in triplicate , one copy to relative / next of kin, police and one office copy. It is very helpful document and majority of people will not need detailed post-mortem report which is mainly for police and court.

1. Sample of Post-mortem Certificate
2. Sample of cause of death certificate for Municipal Corporation under Birth and Registration Act, 1969
3. Cause of death in Post-mortem report may be written as small paragraph of a few lines explaining sequences and their causation It may be one word or few logical sentences, for example hanging, strangulation, burns, firearm injury are self explanatory words. In some cases, detail is required to convey the message, it should be left to the discretion autopsy surgeon.

This should not be ambiguous, double meaning and

unrelated statement. It may reflect reason for pendency like toxicological analysis of viscera or any further requirement like histopathology or specialist advise etc. It is a legal document, any personal or administrative comment should be avoided in this document..

4. Notification to public authorities / public officer as per government notification and requirement of state and central government.
5. Photocopies of post-mortem report in murder, custody death, dowry death, encounter, bomb explosions, abetment of suicide cases etc., should be referred to police officer / court and exemption under RTI section 8(h) interfering in investigation, may be cited.

In cases of accidents, natural death cases, suicide where no abetment charge is there can be released to next of kin on written request with Photo ID proof and thumb impression to avoid any fake claim or fraud.

Actually, cause of death is public domain information while details in MLC or post-mortem details are confidential information. These details should not be made public until unless specifically exempted/ requested by court / Police to diffuse public and media pressure, exemption should be in writing; which is unlikely as no one would take responsibility so any communication beyond cause of death to public media by autopsy surgeon falls under breach of trust and is an unauthorized communication under motivation or immaturity or unprofessionalism. Autopsy surgeon should refrain from such activities.

To keep standard, checking of reports by trained people or senior people should be regular periodical exercise in the department. Organize reorientation program for those, who are not performing well.

Examples of certificates to be issued after postmortem examination by autopsy surgeon:

1. **Post-mortem Certificate**—to relatives MUST
2. **Death Certificate** —relative, corporation and police MUST

3. **Post mortem report** – Police / Magistrate as the case may be. MUST

4. **Public Media** – Cause of death (by Police PRO or PRO of hospital), if required

A. Post mortem Certificate

To whom it may concern

This is to certify that Post Mortem Examination was conducted on the body of Son/ Wife/Daughter of..... On..... at Body was brought for PM by Police Station..... Through PC

The deceased died due to

Signature

Name

Department

B.

1. Immediate cause of death

2. Proximate cause of death

i. Any underneath disease

International form of Medical Certification of Cause of Death

Manner of death:

How did the injuries occur?

1. Natural 2. Accidental 3. Suicidal

4. Homicidal 5. Pending investigation

If deceased was a female, was pregnancy the death associated with? 1. Yes 2. No.

If yes, was there a delivery? 1. Yes 2. No.

Name and signature of the Medical Attendant certifying the cause of death

FORM No. 4**(See Rule.7)****MEDICAL CERTIFICATE OF CAUSE OF DEATH**

(For Hospital In-patients. Not to be used for Still births)

To be sent to Registrar with Form No.2 (Death Report)

Name of the Hospital _____

I hereby certify that the person whose particulars are given below died in the hospital in Ward No. _____ on _____ at _____ A.M./P.M.

Name of the Deceased					For use of statistical office
Gender	Age at death				
Male/ Female	If 1 year or more, age in years	If less than 1 year, age in month	If less than one month, age in days	If less than one day, age in hours	
Cause of Death					Interval between onset and death approx.
I. Immediate cause: State the disease, injury or complication which caused death, not the mode of dying such heart failure, asthenia etc. (a)..... Due to (or as a consequence of)					
Antecedent cause: Morbid conditions, if any, giving rise to the above cause, stating underlying conditions last (b)..... Due to (or as a consequence of) (c).....					
II. Other significant conditions contributing to the death but not related to the disease or conditions causing it					

Date of verification.....

(To be detached and handed over to the relative of the deceased)

Certified that Shri/smt/Kum.
S/W/D of Shri.....

R/o Was admitted to this hospital on and expired on at.....AM/PM.

Doctor.....

(Medical Supdt and Name of Hospital)

Important Points –

- Unacceptable** cause of death-cardio-pulmonary arrest, respiratory arrest, renal failure, hepatic failure, multiorgan failure, intracranial haemorrhage or like become misleading so should be qualified by proximate cause.

Do's

- Be familiar with Birth and Death Registration Act, 1969

requirement and your duty

- Read ICD 10 of WHO
- Always be precise, concise and to the point
- Always give copy to relatives, registrar office and police

Don't

- Don't write unrelated thing in this column
- Write vague words or terminology

C. Postmortem report - EXAMPLE OF A MODEL POST MORTEM REPORT (TYPED FORMAT)**Example**

.....name of Institution

Department of Forensic Medicine and Toxicology

Phone.....

Fax.....

POST MORTEM REPORT

Police

Station:

OF xyz
 Autopsy No: A999/2013
 Registration No: 1760738 – 2013
 Police Report No: 6694/2013
 I.D. No: 590726 – 10 – 6537 Sex: Male
 Marital Status: Age:
 Occupation: Unemployed Address:

We, Dr A, Dr B and Dr C carried out an autopsy examination on the body of XYZ S/O on 20/12/13 commencing at 1500 hours at the Mortuary, Name of hospital.....

The body was identified by:

1. Police:

Rank No:

Relative Name:
 I.D.No:590726 – 10 – 6537

Relationship:

History of the case

EXTERNAL EXAMINATION

The body was that of large built adult Indian male, ... cm in length and kg in weight with advanced/no decomposition changes. He was wrapped in black plastic bag with no cloth found or with clothing

Rigor mortis was fully established. Post-mortem hypostasis was absent. There was heavy smell of decomposition noted.

His complexion was black; head hair was black, wavy and cm in length. Black moustache and beard were present (..... cm). Generalized swelling of the body was noted. The face showed greenish-black discoloration and the eyes was oedematous. Multiple blisters were noted over the face and ears. Purge fluid was seen coming out from the nose and the mouth. The tongue was bitten. The upper and lower jaws had natural set of teeth except missing 2 premolar and 2 molar teeth. The abdomen was distended. Marbling and peeling of the skin was seen over the right upper abdomen. The hands were normal and fingernails were pale. Feet and toenails were normal. The external genitalia was swollen, penis was uncircumcised.

Identifying features:

1. Identification tag bearing the deceased's name was noted on the right foot.
2. No obvious scars were noted on the body.

Signs of recent medical therapy:

Nil

Injuries:

No obvious external marks of injuries identified

INTERNAL EXAMINATION

Central Nervous System:

The scalp was normal. Skull and meninges were normal. Decomposition of the brain was marked in which the brain was liquefied. The normal pattern of sulci and gyri was destroyed. The normal anatomy of the cerebral vessels could not be identified.

The upper part of the spinal cord was unremarkable. The remainder of the spinal cord was not examined.

Cardiovascular System

The pericardium was intact and of unremarkable thickness. There was no unusual collection of fluid within the pericardial cavity.

The great vessels arising from the heart showed normal anatomy. The heart (245 g) was pale of normal configuration and the chambers showed concordance. Sign of decomposition was seen. The epicardium and endocardium were unremarkable. The myocardium was unremarkable. The atria and ventricles were unremarkable. The left and right ventricular wall measured 14 mm and 4 mm, respectively. No areas of fibrosis or infarction noted.

The right coronary, left anterior descending and left circumflex arteries were patent. The aorta showed few fatty streak.

Respiratory System:

The soft tissues of the thoracic cage were intact. Ribs and sternum were normal. The pleural cavities were normal with smooth surfaces. The nasopharynx and the larynx with its surrounding structures were unremarkable. The trachea and bronchi were unremarkable. The lumen contained a small amount of secretion.

The lungs (right – 420 g, left – 300 g) were unremarkable in configuration. The pleural surfaces were normal. Cut sections showed mild congestion. The pulmonary arteries were healthy.

Alimentary System:

The peritoneal cavity was normal and no unusual effusion noted.

The tongue and oropharynx was unremarkable. The oesophagus was normal and empty. The stomach contained 100 ml of altered blood. No unusual smell noted in the gastric contents. The mucosa showed areas of superficial erosion. The external surfaces of the small and large bowel were unremarkable.

The liver (925 g) was small in size and showed macronodular cirrhosis. Cut section of the liver showed multiple nodules ranging from 0.5 cm to 3.0 cm in diameter with yellowish cut surface. No obvious tumour seen. The

gallbladder was unremarkable. Biliary tract was patent. The pancreas was autolysed.

Genito-Urinary System:

The kidneys (right - 100 g, left - 100 g) were autolysed. The normal cortico-medullary and renal pelvis was unidentifiable. The ureters were unremarkable.

The testes were examined by external palpation and showed no abnormality.

Endocrine System:

The pituitary, thyroid and adrenal glands were unremarkable showed decomposition changes.

Reticulo-endothelial System:

The spleen (165 g) was normal in size. Cut sections were normal.

There was no lymphadenopathy.

Musculoskeletal System:

Within the limits of dissection, the musculoskeletal system visualized appeared to be normal.

Time since Death

Cause of Death

Example 1

Part I

Immediate cause of death	a. Myocardial Infarction
Immediate Proximate	b. Chronic Ischaemic heart disease

Part II

Other significant conditions - Diabetes Mellitus

Example 2

Part I

Immediate cause of death	a. Acute renal failure
Immediate Proximate	b. Nephropathy
	c. Diabetes Mellitus

Part II

Other significant conditions - Chronic Ischaemic heart disease

Example

In injury cases

Immediate cause of death	a. Haemorrhagic shock
	b. Rupture live

Proximate cause of death	c. Road Traffic Accident (can add word consistent or could be seen, if you want to be guarded)

In paragraph writing method – one can express like

Death in this case was due to haemorrhagic shock resulting from rupture liver caused by blunt trauma, which could be seen in RTA.

In some cases, there could be **one word cause of death also**, like hanging, strangulation, smothering, gagging etc, which are sufficient in itself and are self-explanatory. In such situations, rest of the column can be left without filling.

SUBSEQUENT OPINION IN RELATION TO POSTMORTEM

Reference Dated

This has reference to application from I O.
Rank Police station. in relation postmortem no. conducted on by me or referred to me because earlier doctor has left the institution or second opinion is required by court / investigative agency.

List of documents submitted are :

Original Postmortem report.

Inquest papers

Photographs

Viscera analysis report

Forensic Laboratory report.

Important observations and findings in above documents

Sketch diagrams.

Photographs

Video evaluation

Computer reconstruction of events.

Analysis of photographs and findings in computer

Literature comparison/ review

Opinion : After considering postmortem findings, scene assessment, viscera analysis report and circumstantial evidences to the best of my knowledge and belief, I am of considered opinion that

Enclosure returned (No...)

Signature

*Format may be modified as per need of case

PS: Queries put by Investigating seeking explanation about human acts and behavior ;

Simulation exercises and comparison with injuries present over the body are also included in this exercise.

EXHIBIT EXAMINATION

Exhibit examination is an important part of forensic examination as correlation, consideration of possibility and exclusion of possibility of involvement of particular object is projected in this procedure. Weapon, photographs, clothing and other items are brought by IO for examination and corroboration with post mortem findings. A few examples where such exercise is done are mentioned here.

- Clothing examination report
- Bullet examination report
- Sharp weapon examination report
- Blunt weapon examination
- Premises inspection
- Crimes Scene Assessment
- Vehicle examination
- Water bodies Inspection
- Machinery Inspection

Steps to be taken

- Always receive in a sealed packet with seals over it
- It must be accompanied with letter
- Issue receipt and mention time for collection of report
- Always touch with gloved hands
- Always take photographs with scale
- Examine in detail
- Address the queries put up by IO
- Put identification tag by which you can identify later on
- If item recovered has blood stains then, first send it to biological division of
- FSL for blood and DNA
- Return in sealed packet with sample seal
- Obtain proper receipt

Anticipate possible questions by defence, casual approach brings embarrassment in public. Expert are identified by their reports and professional approach in the case not otherwise by tall claims.

The exhibit may be real, actual which are involved in crime like club, knife, pistol etc. or it may be representative or demonstrative like photographs, replica, diagrams, maps, sketch etc.

A review of old cases of similar nature is quite helpful to beginner. A helping hand from computer animation and artist is helpful in demonstrating the event and its outcome.

A few basic things about exhibits examination:

1. Protects the evidence present over it
2. Examine in methodical manner and use magnifying lens
3. Take overall and close-up photographs
4. Preserve evidence
5. Use computer to see magnified image and compare with wounds
6. Safe guard evidences and item
7. Pack and seal properly
8. Maintain chain of custody

Social Forensic Message

What you say or present is likely to be challenged so show your objective evidence.

Your reports are self explanatory of your worth and expertise !

SUICIDE NOTE ANALYSIS^{146,147}

Suicide Note Analysis is analysis of a message left by a dying person as what was his desire, aim, circumstances, mood, situation, triggers, or any abetment. Note may be in form of written text, video, email, verbal recording or message communicated to any other person.

Before committing suicide some people leave a message for those left behind what we term suicide note. Suicide note by definition is a product of person who has decided to die. Shneidman wrote 'Suicide is a human malaise and notes are penultimate act giving voice to the malaise. He proposed five possible kinds of notes

1. Thetical- Notes which assert a thesis as declarative or testimonial.
2. Antithetical- Those notes which report or deny a stated or implied thesis.
3. Synthetical- Those notes which combine the basic tenants of thesis and antithesis.
4. Athetical- A suicide note which is lacking a point of view.
5. Amphithetical- Those notes which present the simultaneous co existence of a point of view and opposite.

Preservation of suicide Note : On recovery of note either at scene, on in mail, or in pocket. First duty is to preserve the note and then make copies for record and analysis. Meanwhile send the note for hand writing confirmation to documentation division of Forensic Science.

1. Photography of Note
2. Safety of Note

3. Preservation in transparent plastic / envelope
4. Make copies of note for psychoanalysis

In hospital suicide note should be analyzed by a team constituting of Forensic Medicine Expert, Psychiatrist and clinical psychologist(optional). A simplified and modifiable format is given for convenience.

FORMAT FOR SUICIDE NOTE ANALYSIS

1. Number of notes written:

One _____ More than one _____

2. Type of note : Short note (< 100 words) _____ Long note (>100 words) _____

3. Time mentioned on the note:

- Same day as suicide
- Not the same day
- Not mentioned

4. Place where note was found:

- At home
- Some other place

5. Person to whom note was addressed:

- Not specified
- Parents
- Sibling
- Friend
- Children
- Spouse
- Any other

6. Whether specific instructions given like:

- Disposal of possessions
- Care of family
- Financial arrangements
- Repaying debts
- Any other

7. Expressed affects:

- None specified
- Forgiveness
- Love
- Anger / grievance/blame
- Low mood / hopelessness/Guilt
- Relief / tiredness / weariness
- Reunion

8. Difficulties mentioned:

- Illness / pain

- Job / financial difficulties
- Academic problems
- Interpersonal problems
- Any other

9. Type of suicide note:

- Thetical (Positive or implied, giving specific reasons)
- Antithetical (Giving contradictory reasons)
- Synthetical (Combination of two)
- Athetical (Note which is lacking a point of view)
- Amphithetical (Note which present the simultaneous co-existence of a point of view and opposite)

10. Type of Personality:

- Logical (In physical pain)
- Paleological (delusional and hallucinatory)
- Thantological (Wanting suicide as mean for transition to another life for saving reputation)
- Catalogical (Being lonely, hopeless fearful and pessimist)

11. Type of suicide note:

- Escapist Note
- Reactionary/Panicky Note
- Vengeful (to punish others)
- Manipulative (to make failure of some plan)
- Psychotic (to fulfill delusionary call)

12. Type of suicide depending on social circumstances:

- Anomic (Unable to adjust to social / economic condition)
- Egoistic Suicide (Due to personal reasons)
- Altruistic (Suicide due to social reasons)
- Fatalistic (Suicide to escape from the situation like marital abuse, physical illness etc.)

13. Has handwriting of the note confirmed by some relative / sent for handwriting analysis?

Yes _____ No _____

14. Opine whether the person (Who has committed suicide) could have been saved by proper psychological counseling or psychiatric help?

- Yes

- No

SUICIDE NOTE ANALYSIS- TRY TO FIND OUT ANSWERS FOR QUESTIONS ¹⁴⁷

Ques 1: What type of note is it?

Short: <100 words

Long: >100 words

Ques 2: What is the mood reflected in the note?

1. Depression alone
2. Depression with positive affect
3. Depression with hostility affect
4. Neutral affect
5. Hostility alone directed at self
6. Hostility alone-Directed at others
7. Hostility with positive affect
8. Positive affect alone
9. Combination of outward directed hostility with positive affect
10. Combination of inward directed hostility with positive affect

Ques 3. What are feeling expressed in suicide note

1. Sparing the feelings of other
2. Blaming ones self
3. Blaming others
4. Clear anger
5. Subtle anger
6. Low self esteem
7. Grief stricken
8. Feeling defeated/overwhelmed
9. Feeling hopeless/helpless
10. Unable to show feelings
11. Unworthy
12. Performance failure
13. Failed relationship
14. Feeling for self

Ques 4. Which type of personality is reflected in the suicide note?

1. Logical type: Being in physical pain
2. Paleological type: Delusional or hallucinatory
3. Thanatological type: Suicide as means of going to another world
4. Catalogical type: Hopeless, Fearful, Pessimistic

Ques 5: What are difficulties mentioned in the note?

1. Physical illness
2. Mental illness
3. Job/Financial difficulty
4. Academic pressure

5. Any other
6. No difficulty mentioned

Ques 6: Can you further specify the type of Suicide note is it:

1. Thetical: Notes asserting a thesis as declarative or testimonial
2. Antithetical: Notes that report or deny a stated or implied thesis
3. Synthetical: Notes that combine basic tenets of thesis antithesis
4. Athetical: Lacking "a point of view" and simply contain instructions or directions
5. Ambithetical: That present simultaneous existence of a point of view and opposite. They are close to psychological realities.

Ques 7: What is the pattern of suicide note:

1. Unbearable psychological pain-Person is in state of heightened disturbance (Perturbation)
2. Interpersonal relation-Appears to be related to unsatisfied or frustrated needs e.g achievement, affiliation, autonomy, dominance etc
3. Rejection-aggression: Appears that someone has created a situation in which death is desired partly in order to hurt or attack someone else
4. Inability to adjust: He points out that life is hard, bitter, futile and hopeless
5. Indirect expression- Person communicates ambivalence e.g., complication, contradictory feelings, attitude and trust
6. Identification-egression: There is evidence of egression with arm of termination with relief of pain he/she has been suffering
7. Ego: Person wishes to die, the suicide is accomplished due to relative weakness in the capacity for developing constructive tendencies
8. Cognitive constriction: Person appears to be intoxicated or dragged by one's overpowering emotion and constricted logic and perception

Ques 8: Describe suicide as:

Egoistic: Lack of integration of individual, taking his own life because of higher commandment

Anomic: Lack of regulation of individual by society

Altruistic:

Ques 9: What do you think that an earlier endeavour could have saved this person?

Yes

No

Ques 10: Express your opinion after going through the note:

Its a short note athetical type with catalogical personality, mood as depression, difficulty mentioned as mental illness and in my opinion an earlier endeavour could have saved this person

SECOND AUTOPSY ¹⁴⁸⁻¹⁵²

At times, there are request for second postmortem examination. Although second autopsy is not very common but we do get cases off and on in forensic practice. This practice is in existence since ancient time, in one well known case in literature, Dr. William Palmar in 1856, court observed *“It is hard to believe that such a serious exercise as a postmortem could be conducted so carelessly and unprofessionally”*¹⁴⁹.

There are genuine apprehensions over the cursory autopsy work. The main reasons for request remain – perception of public, relatives, rampant corruption culture in the country, suspicious first postmortem, inadequate information, public out cry, false allegations, inconsistent findings, vague and ambiguous report, motivated representations, rumors, misinterpretation of findings by lay public. It is double edged weapon but it has demoralizing impact on first team as it is viewed as erosion on their credibility. As such in the law, there is no such provision about second autopsy of unburied body is carried out on administrative grounds, public complaint, apprehension, administrative jugglery, courts and police do make request for second- postmortem.

If we view this from public point of view then it is their right to get a reliable information about their love ones. In this regard NHRC of India formed a committee to frame guidelines on this issue. A Committee, headed by Dr. Justice K. Ramaswamy, set up by the Nation Human Rights Commission recommended (07-02-2001)¹⁵⁰ that the following rules be observed in respect of a second post-mortem:

- a. This procedure, ordinarily, should not be undertaken unless either the Investigating Officer or the concerned authority or supervisory officer is of the view that the first post-mortem was wrongly done or done with a view to helping the accused to escape punishment.
- b. The second post-mortem may also be ordered by the Sub-Divisional Magistrate/Additional District Magistrate of the area concerned, after looking into all the facts.
- c. The second post-mortem should be conducted by a “Board” of two Forensic Medicine Specialists at a teaching institution where post-mortems are being conducted.
- d. The post-mortem report of the first doctor should be made available to the Board before conducting the

second post-mortem.

- e. The doctor who conducts the first post-mortem should be informed about the same and be allowed to be present at the second post-mortem.
- (iii) There is a need to strengthen the existing Forensic Science Laboratories by providing them with the requisite trained manpower for the examination of viscera, and by ensuring the availability of modern infra-structural facilities and equipment.

These are unavoidable so we should have a protocol for these.

In view of above, second autopsy should be carried after proper orders from concerned magistrate. These autopsies are conducted by a panel of doctors either from same hospital or different hospital under videotaping.

Ideally a list of all eligible experts should be available with administration for the above job. As a matter of convenience, magistrate usually writes to head of department to nominate the person as per availability of doctors on duty. In this regards, board constitution practices require more clear guidelines.

1. Availability of list of qualified experts with administration.
2. Choosing members of Board
3. Paper work before starting second autopsy
4. Deciding date and timings
5. Clear expectation from Board
6. Ensure following before starting case
 - PM report of first PM
 - Crime Scene evaluation report
 - Photographs or video available
 - Inquest papers of first PM
 - Ancillary facilities
 - FSL toxicology and biological facilities
 - Photography
 - Video-taping
 - Histopathology facilities
 - Back up biological material

Second Autopsy is a specialized job and people with experience should be involved by the department.

Audit Sheet**Before Autopsy**

Check Points	Yes	No
Authority Letter		
First Postmortem Report		
Photographs of first PM		
Video if available		
Common meeting to brief of facts		
Plan discussion for second autopsy		
Special Investigation if any		
Viscera preserved report		

During and after Autopsy

Check Points	Yes	No
Preparation made		
Photography arranged		
Video-taping arranged		
Complete Photography and videotaping		
Complete external examination		
Complete internal examination		
Special examination of any system		
Histopathology, if required		
Toxicology, if required		
Answers to the query of IO		
Opinion		
Back up /Spare biological material for future use if required		

Common outcomes

1. Agreement over first and second autopsy
2. Disagreement in opinion of first and second autopsy
3. New findings in second autopsy
4. Interference by artefacts, decomposition, previous removal and dissection of viscera.

Common Observations

1. Incomplete Autopsy in form of
 - a. non-dissection of internal viscera, only superficial incision is given
 - b. Head is not opened
 - c. Organ is missing due to previous preservation
 - d. Dissection of affected is not done like neck dissection in asphyxia deaths, pelvic organs in abortion case etc.
2. **Incomplete workout of the case** – cursory autopsy, not using x-ray, HP
3. Cause of death misinterpreted or not detected
- D. Disposal of viscera of other cases
- E. Important findings missed

Classical mistakes in autopsy work as pointed out Mortiz¹⁵¹ remain – unclear objective, incomplete autopsy,

embalming before autopsy, decomposed body, misinterpretation of postmortem changes, poor evaluation of scene and photographs, premature conclusion and over enthusiastic novice.

In pediatric autopsies, Sturmer WO¹⁵² expressed 10 categories of potential and actual errors. He emphasized on scene investigation data, complete medical reports, all macroscopic findings, evaluation of microscopic slides, toxicology and other relevant clinical investigation reduce errors of both omission and commission.

DAILY INSPECTION REPORT OF MORTUARY

Every big postmortem centre (1000 PM/year) is expected to have minimum three/four postmortem tables. This requires a daily watch on cleaning and functioning of centre. A simplified way is given here to guide.

Mortuary Technician MO/ Mortuary Incharge

Any other problem of the day

DISPOSAL OF MORTUARY WASTE MATERIAL

Disposal of waste material is very important area in mortuary services as human bodies are brought in different conditions. In highly decomposed cases whole vicinity is vitiated due to strong smell emanating from human remains. There are different sources of waste in mortuary complex and these require cleaning on daily basis. A brief account of these wastes is discussed here. Close supervision and strict adherence to clean habits is very important in mortuary. Majority of the hospital are engaging contract services for cleaning and waste disposal.

Sources of waste in mortuary services

- A. From dead bodies brought to the mortuary
- B. From Health professionals working in the mortuary
- C. From public visiting the mortuary to receive dead
- D. From Police personnel

Follow international guideline for disposal of items as per universal guidelines

Container Colour	Items to be discarded	Final recommended disposal
Yellow Small	Discarded needles, blades, instruments.	Incineration
Yellow Large	Tissue waste, bone, specimen, HP waste after trimming	Incineration
Green	Organic waste	
Red	Infected and soiled linen, plaster, bandages, plastic, plastic gloves caps, shoe cover	Incineration
Blue	Surgical gowns	Recycle if cotton surgical gowns other send for disposal

Number of postmortem conducted	Postmortem certificate issued	Postmortem report issued	Pending reports	Observation/ remarks
Cleaning of Instrument	Table 1	Table 2	Table 3	
Person responsible for cleaning				
Mortuary Hall cleaning	Hall 1	Hall 2	Common area	Tissue Trimming
Person responsible for cleaning				
Premises cleaning	Office and Clinical forensic other and premises	Toilets	Office Tables	Doors
Person responsible				
Number of bodies in cold storage	MLC	Non MLC	Unclaimed	
Cold storage Temperature	Cold Storage 1	Cold Storage 2	Storage 3	A/C of Mortuary OT
Morgue Attendant on duty	8am to 2 pm	2 pm to 8 pm	8pm to 8am	General Duty
Name of MA				
Viscera preserved PM no				
Night Autopsy				

Other material

All material originating from human body are highly infectious material so precaution and prevention are in the best interest of staff

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1. Quality assurance review of the Victorian Institute of Forensic Medicine, Department of Forensic Medicine, Monash University.
2. Minimum Standards adopted by the Victorian Institute of Forensic Medicine, Department of Forensic Medicine, Monash University.
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WORKSHOP ORGANIZING TEAM OPERATIONAL GUIDELINES FOR POSTMORTEM WORK IN INDIA

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SOP is ready for field test

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MINISTRY OF SOCIAL JUSTICE AND EMPOWERMENT

NOTIFICATION

New Delhi, the 22nd June, 2001

Rules under the Juvenile Justice (Care and Protection of Children) Act, 2000 (56 of 2000)**[For better implementation and administration of the provisions of the said Act in its true spirit and substance]**

F. No. 1-3/2001-SD.—Whereas the Constitution of India has, in several provisions, including clause (3) of article 15, clause (e) and (f) article 39, articles 45 and 47, impose on the State a primary responsibility of ensuring that all the needs of children are met and that their basic human rights are fully protected;

AND WHEREAS, the General Assembly of the United Nations has adopted the Convention on the Rights of the Child on the 20th November, 1989;

AND WHEREAS, the Convention on the Rights of the Child has prescribed a set of standards to be adhered to by all State parties in securing the best interests of the child;

AND WHEREAS, the Convention on the Rights of the Child emphasises social reintegration of child victims, to the extent possible, without resorting to judicial proceedings;

AND WHEREAS, the Government of India has ratified the Convention on the 11th December, 1992;

AND WHEREAS, it was considered expedient to re-enact the Juvenile Justice Act, 1986 bearing in mind the standards prescribed in the Convention on the Rights of the Child, the United Nations Standard Minimum Rules for the Administration of Juvenile Justice, 1985 (the Beijing Rules), the United Nations Rules for the Protection of Juveniles Deprived of their Liberty (1990), and all other relevant international instruments;

AND WHEREAS, to give effect to the provisions of the Constitution and Convention, the Juvenile Justice (care and protection of children) Act, 2000 (herein under referred to as the said Act) was enacted to consolidate and

amend the law relating to juveniles in conflict with law and children in need of care and protection, by providing for proper care, protection and treatment by catering to their development needs, and by adopting a child friendly approach in the adjudication and disposition of matters in the best interest of children and for their ultimate rehabilitation through various institutions established under that Act.

NOW, THEREFORE, in pursuance of the above said provisions and all other enabling powers in this behalf, the Central Government hereby lays down the principles and makes the following Rules (model) to be applied until new rules are framed by the State Government in this regard to provide for better implementation and administration of the provisions of the said Act in its true spirit and substance, namely:-

PRINCIPLES

The following principles shall, *interalia*, be fundamental to the development of strategies, interpretation and implementation of the said Act.

This enumeration does not preclude resorting to any higher measures possible or evolved in consonance with the Constitution.

1. Principle of right to innocence-

The juvenile or child's right to innocence and presumption of innocence up to the age of seven years (or up to the age of twelve years, as under) be respected throughout the process from the initial contact to aftercare.

The basic components of the right to and presumption of innocence are:

(i) Age of innocence:

- (a) A juvenile or child is presumed to be innocent of any malafide or criminal intent up to the age of seven years in all cases and upto twelve years in the cases wherein he is unable to understand the consequences of his action on account of immaturity of understanding;
- (b) Unlawful conduct which is done for survival, or is due to environmental or situational factors or is done under control of adults, or peer groups, is ought to be covered by the principles of innocence.
- (c) The idea is to allow certain benefits to a juvenile in conflict with law *vis a vis* his mental development assessed by the experts in the field through out the world as of eighteen years being the time of demarcation and with this end in view the yardstick can only be the date of occurrence because the whole spirit is to impart benefit to such juvenile on grounds of lesser development of his mental faculty.

(ii) Procedural protection of innocence

Procedural safeguards shall be guaranteed to protect the presumption of innocence.

(iii) Provisions of Legal aid and *Guardian Ad Litem*

To protect the juvenile's or child's right to and the presumption of innocence, provisions must be made when needed, for free legal aid and guardian ad litem.

(iv) Avoidance of harm

At all stages, from the initial contact till disposition, extreme care shall be taken to avoid any harm to the sensitivity of the juvenile or child.

2. Principle of Best Interest.-

This principle seeks to ensure physical, emotional, intellectual, social and moral development of juvenile or child, so as to make him a useful and good citizen by ameliorating the impediments to healthy development.

3. Principle of Family cushion.-

The family, biological, adoptive or foster (in that order), must be involved in the processes, preferred as placement cushion and strengthened as the base unit for care, protection and redirection of the juvenile or child under the said Act unless the best interest measures or mandates dictate otherwise.

4. Principle of no harm, no maltreatment.-

The juvenile or child who is placed in any institution under the said Act or under any placement cushion, shall not be subjected to any harm, abuse, neglect, maltreatment, corporal punishment or solitary confinement.

5. Principle of non-stigmatizing semantics, decisions and actions.-

The non-stigmatizing semantics of the said Act must be strictly adhered to, and the use of adversarial or accusatory words, such as, arrest, remand, accused, charge sheet, trial, prosecution, warrant, summons, conviction, inmate, delinquent, neglected, custody, etc., is prohibited in the processes pertaining to the juvenile or child under the said Act.

6. Principle of balancing.-

This principle aims at striking a balance between the provisions of the said Act on one hand and constitutional safeguards and social ethos on the other, in the dispensation of matters pertaining to juvenile or child.

7. Principle of non-waiver of rights.-

No waiver of rights of the juvenile or child, whether by himself or the competent authority or anyone acting or claiming to act on behalf of the juvenile or child, is either permissible or valid.

Non-exercise of a fundamental right does not amount to waiver.

8. Principle of equality.-

Equality of access, equality of opportunity, equality under the said Act, is guaranteed to the juvenile or child; and as such there shall be no discrimination on the basis of age, sex, place of birth, disability, race, ethnicity, status, caste, cultural practices, work, activity or behaviour of the juvenile or child or that of his parents or guardians, or the civil and political status of the juvenile or child.

9. Principle of right to privacy and confidentiality.-

The juvenile's or child's rights to privacy and confidentiality shall be protected by all means and through all the stages of the proceedings.

10. Principle of Fresh Start.-

The principle of fresh start promotes new beginning for the juvenile or child by ensuring erasure of his past records.

11. Principle of last resort.-

Institutionalization of juvenile or child will be a step of the last resort after reasonable enquiry and that too for the minimum possible duration.

12. Principle of repatriation.-

Any juvenile or child, who is a foreign national and who has lost contact with his family, shall also be eligible for protection under the said Act and he shall be repatriated, at the earliest, to his country.

**The (name of State/UT) Juvenile Justice (Care and Protection of Children)
Rules, 2001**

In exercise of the powers conferred by section 68 of the Juvenile Justice (Care and Protection of Children) Act, 2000 (No. 56 of 2000), the State Government/Administrator _____ hereby makes the following rules, namely:-

CHAPTER - I

PRELIMINARY

1. Short title and commencement.-

(1) These rules may be called the (name of the State/UT) Juvenile Justice (Care and Protection of Children) Rules, 2001.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. Definition.- In these rules, unless the context otherwise requires,-

(a) "Act" means the Juvenile Justice (Care and Protection of Children) Act, 2000 (56 of 2000);

(b) "adoption" means taking permanent custody and responsibility of a juvenile or a child covered under this Act, who shall have *pari passu* rights of a natural born child;

(c) "Form" means the form annexed to these rules;

(d) "institution" for the purposes of these rules, means an observation home, or a special home, or a children's home or a shelter home, set up certified or recognized under sections 8, 9, 34 and 37 of the Act respectively;

(e) "Officer-in-charge" (nomenclature as used by the State Government) means a person appointed for the control and management of the institution;

(f) "State Government" in relation to a Union Territory, means the Administrator of that Union territory appointed by the President under article 239 of the Constitution;

- (g) all words and expressions defined in the Act and used, but not defined in these rules, shall have the same meaning as assigned to them in the Act.

CHAPTER – II

JUVENILE IN CONFLICT WITH LAW

3. Juvenile Justice Board.-

(1) The Board shall consist of a Metropolitan Magistrate or a Judicial Magistrate of the first class, as the case may be, and two social workers of whom at least one shall be a woman, forming a bench.

(2) Every such bench shall have the powers conferred by the Code of Criminal Procedure 1973 (2 of 1974).

(3) (a) A Magistrate with special knowledge or training in child psychology or child welfare shall be designated as the principal Magistrate of the Board.

(b) In case the principal Magistrate with such special knowledge or training is not available, then, the State Government shall provide for such short-term training in child psychology or child welfare as it considers necessary.

(4) The two social workers, of whom at least one shall be a woman, shall be appointed by the State Government on the recommendation of the Selection Committee set up under sub-rule (2) of rule 24 of these rules.

(5) The Selection Committee shall take into consideration the panels of names recommended by the local authority while considering the selection of social workers for the Board and shall prepare a panel of names for each Board including a panel of names to fill in vacancies, which may arise during the tenure of the Board.

(6) The social worker to be appointed as a member of the Board shall be a person who has been actively involved and engaged in planning, implementing and administering measures relating to health, education or other welfare activities pertaining to children for at least seven years.

(7) The Board shall have a tenure of three years and the appointment of members shall be co-terminus with the tenure of the Board.

(8) A social worker being a member of the Board shall be eligible for appointment for a maximum of two terms.

(9) The Board shall hold its sittings in the premises of an Observation Home and shall meet on all the working days of a week.

(10) A member may resign any time, by giving one month's advance notice in writing or may be removed from his office as provided in sub-section (5) of Section 4 of the Act.

(11) The social worker members of the Board shall be paid such traveling or meeting allowance or honorarium, as the State Government may, decide from time to time.

4. Institutional Management for juveniles in conflict with law.-

(1) The State Government or the voluntary organisation certified by that State Government shall set up separate observation homes for boys and girls.

(2) The State Government or the Voluntary Organisation certified by that Government shall set up separate special homes for girls above the age of 10 years and boys in the age groups of 11 to 15 and 16 to 18 years as and when required.

(3) The following procedure shall be followed in respect of the newly-admitted juveniles, namely:-

- (a) receiving and search;
- (b) hair-cut (unless prohibited by religion), issue of toiletry items;
- (c) disinfection and storing of juvenile's personal belongings and other valuables;
- (d) bath;
- (e) issue of new set of clothes, bedding and other outfit and equipment (as per scales);
- (f) medical examination and treatment, where necessary and in case of any juvenile suspected to be suffering from contagious or infectious diseases, mental ailments, addiction, etc., he shall be immediately segregated in specially earmarked dormitories or wards or hospitals;
- (g) attending to immediate and urgent needs of the juvenile's like appearing in examinations, interview letter to parent(s), personal problems etc., and
- (h) verification by the Officer-in-charge of the order of the Board, identification marks, register entries, cash, other valuables, etc.

(4) Every institution shall follow a schedule of orientation for the newly-admitted juvenile covering the following aspects, namely:-

- a) health, sanitation, hygiene;
- b) institutional discipline and standards of behaviour, respect for elders, teachers, etc.
- c) self-improvement opportunities; and
- d) responsibilities and obligations.

(5) A case history of the juvenile or the child admitted to an institution shall be maintained which may contain information regarding his socio-cultural and

economic background and these information may invariably be collected through all possible and available sources, including home, parents or guardians, employer, school, friends and community.

(6) The educational level and vocational aptitude of the juvenile admitted, may be assessed on the basis of test and interview conducted by the teacher, the workshop supervisor and other technical staff and necessary linkages may also be established with outside specialists and community-based welfare agencies, psychologist, psychiatrist, child guidance clinic, hospital and local doctors, open school, Jan Sikshan Sansthan etc.

(7) All residents in the institution shall be given work like-

- (a) self-help in maintaining their own establishment ;
- (b) cleaning of open spaces, gardening, etc.;
- (c) preliminary operations for crafts.

(8) A well conceived programme of pre-release planning and follow up of cases discharged from special homes shall be organized in all institutions in close collaboration with existing governmental and voluntary welfare organizations.

5. Daily Routine.-

Every institution shall have a well regulated daily routine for the juveniles, which shall be displayed and provide, *inter alia* , for regulated and disciplined life, personal hygiene and cleanliness, physical exercise, educational classes, vocational training, organized recreation and games, moral education, group activities, prayer and community singing and special programmes for sundays and holidays.

6. Diet Scale.-

The State Government shall prepare a diet scale, to be strictly adhered to by the institutions, for juveniles in consultation with nutrition experts so that the diet becomes balanced, nutritious and varied, with a special diet which may be provided on holidays, festivals and to the sick juveniles as required.

7. Issue of clothing, bedding and other articles. -

Each juvenile shall be provided with clothing and bedding, including customary under-garments, towel, jersey for winter, school uniform for juveniles attending outside schools, durry, bed-sheets, blanket, pillow, chappal or shoes, utensils as required; and tooth powder, soap, oil, comb, etc. as per the scale laid down by the State Government from time to time.

8. **Sanitation and Hygiene.-** Every institution shall have the following facilities, namely:-

- (a) sufficient treated drinking water;

- (b) sufficient water for bathing and washing clothes, maintenance and cleanliness of the premises ;
- (c) proper drainage system;
- (d) arrangements for disposal of garbage;
- (e) protection from mosquitoes;
- (f) sufficient number of latrines in the proportion of at least one latrine for seven children;
- (g) sufficient number of bathrooms in the proportion of at least one bath room for ten children;
- (h) sufficient space for washing;
- (i) clean and fly-proof kitchen;
- (j) sunning of bedding and clothing ;and
- (k) maintenance of cleanliness in the Medical Centre.

9. Accommodation.- The minimum standard of accommodation, to the extent possible, shall be as follows: -

(a) Dormitory	-	40 square feet per juvenile.
Classroom	-	Sufficient accommodation.
Workshop	-	Sufficient work space.
Play ground	-	Sufficient play ground area shall be provided in every institution according to the total number of juveniles in the institution.

(b) The dormitories, classrooms and workshops shall have sufficient cross ventilation and light.

10. Medical Care.-

(1) Every institution shall provide for the necessary medical facilities so as to ensure that-

- (a) regular facilities are available for the medical treatment;
- (b) arrangements are made for the immunization coverage; and
- (c) a system is evolved for referral of cases with deteriorating health or serious cases to the nearest civil hospital or recognised treatment centres.

(2) Each juvenile admitted in an observation home shall be medically examined by the Medical Officer within 24 hours and in special cases within 48 hours giving the reasons therefor, and also at the time of transfer of the juvenile to a special home, within a similar period before transfer and further at any other time that may be considered necessary by the Medical Officer or the Officer-in-Charge.

(3) No surgical treatment shall be carried out on any juvenile without the previous consent of his parent or guardian, unless either the parent or guardian cannot be found and the condition of the juvenile is such that any delay shall, in the opinion of the medical officer, involve unnecessary suffering or injury to the health of the juvenile, or without obtaining a direction to this effect from the Board.

(4) A health record of each juvenile in the institution shall be maintained on the basis of quarterly medical check-up.

11. Monitoring and Evaluation of Juveniles.-

(1) A juvenile shall be grouped on the basis of the age, physical and mental health, length of stay order, degree of delinquency and the character.

(2) For the purposes of sub-rule(1), a monitoring and evaluation committee shall be constituted in each institution consisting of the following personnel, namely:-

Officer-in-Charge	-Chairperson.
Child Welfare Officer/Psychologist	- Member-Secretary.
Medical Officer	-Member.
Workshop Supervisor/ Instructor in Vocation	-Member.
Teacher	-Member.

(3). The committee shall meet periodically to consider and review-

- (a) custodial care, housing, place of work, area of activity and type of supervision required;
- (b) individual problems of juveniles, family contacts and adjustment, economic problems, and institutional adjustment, etc;
- (c) vocational training and opportunities for employment;
- (d) education, i.e. health education, social education, academic education, vocational education and moral education;
- (e) social adjustment recreation, group work activities, guidance and counseling;
- (f) special instructions, collecting moral information, and special precautions to be taken, etc.;

- (g) review of progress and adjusting institutional programmes to the needs of the inmates;
- (h) planning post-release rehabilitation programme and follow up for a period of two years in collaboration with aftercare service;
- (i) pre-release preparation;
- (j) release, and
- (k) any other matter which the Officer-in-Charge may like to bring up.

12. Rewards and Earnings.-

Rewards to the juveniles, at such rates as may be fixed by the management of the institution from time to time, may be granted by the Officer-in-Charge as an encouragement to steady work and good behaviour; and at the time of release, the reward shall be handed over after obtaining a receipt from the parent or the guardian who comes to take charge of the juvenile.

13. Visits to and communication with inmates.-

(1). The parents and relations of the juveniles shall be allowed to visit once in a month or in special cases, more frequently at the discretion of the Officer-in-Charge as per the visiting hours laid down by him.

(2). The receipt of letters by the juveniles of the institution shall not be restricted and they shall have freedom to write as many letters as they like at all reasonable times, and the institution shall ensure that where parents, guardians or relatives are known, at least one letter is written by the juvenile every month for which the postage shall be provided.

(3). The Officer-in-Charge may peruse any letter written by or to the juvenile, and may for the reasons that he considers sufficient to refuse to deliver or issue the letter, may destroy the same after recording his reasons in a book maintained for the purpose.

14. Prohibited Articles .-

No person shall bring into the institution the following prohibited articles, namely:-

- (a). fire-arms or other weapons, whether requiring license or not (like lathi, spears, swords etc.);
- (b). alcohol and spirit of every description;
- (c). bhang, ganja, opium and other narcotic or psychotropic substances ;
- (d). tobacco, or
- (e). any other article specified in this behalf by the State Government by a general or special order.

15. Articles found on search and inspection.-

(1) The Officer-in-Charge shall see that every juvenile received in the institution is searched, his personal effects inspected and on money or

valuables found with or on the person of the juvenile is kept in the safe custody of the Officer-in-Charge.

(2) Girls shall be searched by a female member of the staff with due regard to decency.

(3) In every institution, a register of money, valuables and other articles found with or on the person of a juvenile received therein shall be maintained which may be called the "Personal Belonging Register".

(4) The entries made in the Personal Belonging Register, relating to each juvenile, shall be read over to juvenile in the presence of a witness whose signature shall be obtained in token of the correctness of such entries and it shall be countersigned by the Officer-in-Charge.

16. Disposal of articles:-

The money or valuables belonging to a juvenile received or retained in an institution shall be disposed of in the following manner:-

(a) On an order made by the competent authority in respect of any juvenile, directing the juvenile to be sent to an institution, the Officer-in-Charge shall deposit such juvenile's money together with the sale proceeds in the manner laid down from time to time in the name of the juvenile.

(b) The juvenile's money shall be kept with the Officer-in-Charge and valuables, clothing, bedding and other articles, if any, shall be kept in safe custody.

(c) When such juvenile is transferred from one institution to another, all his money, valuables and other articles, shall be sent along with the juvenile to the Officer-in-Charge of the institution to which he has been transferred together with a full and correct statement of the description and estimated value thereof.

(d) At the time of release of such juvenile, the valuables and other articles kept in safe custody and the money deposited in name of the juvenile shall be handed over to the parent or guardian, as the case may be, with an entry made in this behalf in the register and signed by the Officer-in-Charge.

(e) When a juvenile of an institution dies, the valuable and other articles left by the deceased and the money deposited in the name of the juvenile shall be handed over by the Officer-in-Charge to any person who establishes his claim thereto and executes an indemnity bond.

(f) A receipt shall be obtained from such person for having received such valuables and other articles and the amount.

(g) If no claimant appears within a period of six months from the date of death or escape of such juvenile, the valuables and other articles and amount shall be disposed of as per the decision taken by monitoring and evaluation committee.

17. Duties of the Officer in charge.-

(1) The Officer-in-charge shall be responsible for the following, namely:-

- (a) security measure and periodical inspection thereof;
- (b) proper maintenance of buildings and premises;
- (c) prompt, firm and considerate handling of all disciplinary matters;
- (d) careful handling of plant and equipment;
- (e) accident preventive measures;
- (f) fire preventive measures;
- (g) segregation of a juvenile or child suffering from contagious or infectious diseases;
- (h) proper storage and inspection of food stuffs;
- (i) stand-by arrangements for water storage, power plant, emergency lighting, etc.,

(2) In the event of an escape of a juvenile or a child, the following action shall be taken, namely :-

- (a) The Officer-in-Charge shall immediately send the guards in search of the juvenile, at places like railway stations, bus stands and other places where the juvenile is likely to go;
- (b) The parents or guardians shall be informed immediately about such escape;
- (c) A report shall be sent to the area Police Station along with the details and description of the juvenile or the child, with identification marks and a photograph, with a copy to the Board and the authorities concerned;
- (d) The Officer-in-charge shall hold an inquiry about such escape and send his report to the Board and the authorities concerned.

(3) On the occurrence of any case of death or suicide the procedure to be adopted shall be as under:-

- (a) If a juvenile or child dies within twenty four hours of his admission to the institution an inquest and post-mortem examination shall be held at the earliest.
- (b) Whenever a sudden or violent death, or death from suicide or accident takes place, immediate information shall be given to the Officer-in-Charge and the Medical Officer.
- (c) The Officer-in-Charge and the Medical Officer shall examine and inspect the dead body and in case a juvenile dies due to causes other than natural causes, or if the cause of death is not known, or if the death has occurred due to suicide, violence or accident,

or whenever there is any doubt or complaint or question concerning the cause of death of any juvenile, the Officer-in-charge shall inform the Officer-in-charge of the Police Station having jurisdiction.

- (d) The Officer-in-charge shall also immediately give intimation to nearest Magistrate empowered to hold inquests.
- (e) The Medical Officer shall report to the Officer-in-charge about the happening of the natural death of a juvenile and see that the body is decently removed to the mortuary.
- (f) In case of natural death or due to illness of a juvenile or child of an observation home or special home, the Officer-in-charge shall obtain a report of the Medical Officer stating the cause of death and a written intimation about the death shall be given immediately to the nearest Police Station, the Board, the National Human Rights Commission and the authorities concerned.
- (g) The parents or guardians of the deceased juvenile shall be contacted and the Officer-in-charge shall wait for twenty-four hours for the arrival of relatives.
- (h) As soon as the inquest is held, the body shall be disposed of in accordance with the known religion of the juvenile.

(4) In the event of any custodial rape or sexual abuse, the following action shall be taken, namely:-

- (a) In case a resident makes any complaint, or occurrence of such rape or abuse comes to the knowledge of the Officer-in-charge, a report shall be placed before the Board, who shall order for special investigation and direct the local police station to register case against the person(s) found guilty under the relevant provisions of the Indian Penal Code, 1860(45 of 1860).
- (b) The Special Juvenile Police Unit shall also take due cognizance of such occurrences and conduct necessary investigations.

(5) In the event of any other offence committed in respect of residents, the Board shall take cognizance and arrange for necessary investigation to be carried out by Special Juvenile Police Unit.

18. Leave of absence of a juvenile or child.-

(1) The juvenile or child of an institution may be allowed to go on leave of absence or released on license and stay with his family during examination, emergencies or special occasions like marriage in the family.

(2) While the leave of absence for short period not exceeding seven days excluding the journey time may be recommended by the Officer-in-charge, but granting of such leave shall be by the Board.

(3) The parents or guardian of the juvenile or child may submit an application to the Officer-in-charge requesting for release of the juvenile or child on leave, stating clearly the purpose for the leave and the period of leave.

(4) If the Officer-in-charge considers that granting of such leave is in the interest of the juvenile or child, he shall call for a report of the Probation Officer on the advisability or otherwise and forward the case to the Board.

(5) While issuing orders sanctioning the leave of absence or release on license in Form VII, as the case may be, the competent authority shall mention the period of leave and the conditions attached to the leave order, and if any of these conditions are not complied with during the leave period, the juvenile or child may be called back to the institution.

(6) The parent or guardian shall arrange to escort the juvenile or child from and to the institution and bear the travelling expenses; whereas, in exceptional cases or during an emergency, the Officer-in-charge may arrange to escort the juvenile or child to the place of the family and back.

(7) If the juvenile or child runs away from the family during the leave period, the parent or guardian are required to inform the Officer-in-charge of the institution immediately, and try to trace the juvenile or child and if found, send the juvenile or child to the institution.

(8) If the parent or guardian do not take proper care of the juvenile or child during the leave period or do not bring the juvenile or child back to the institution within the stipulated period, such leave may be refused on later occasions.

(9) If the juvenile or child does not return to the institution on expiry of the sanctioned leave, the Board shall refer the case to police for taking charge of the juvenile or child and bring him back to the institution.

(10) The period of such leave shall be counted as a part of the period of stay in the institution and the time which elapses after the failure of a juvenile or child to return to the institution within the stipulated period, shall be excluded while computing the period of his stay in the institution.

19. Release. -

(1) The Officer-in-charge shall maintain a roster of the cases of juvenile or child to be released on the expiry of the period of stay as ordered by the Board.

(2) Each case shall be placed before the Classification Committee for proper mainstreaming and with regard to cases in which the juvenile or child is kept for the maximum period, action may be initiated six months before they attain the age of eighteen years.

(3) A timely information of the release of a juvenile or child and of the exact date of release shall be given to the parent or guardian and the parent or the

guardian shall be invited to come to the institution to take charge of the juvenile or child on that date.

(4) If necessary, the actual expenses of the parent's or guardian's journey both ways and of the juvenile's or child's journey from the institution shall be paid to the parent or guardian by the Officer-in-charge at the time of the release of the juvenile or child.

(5) If the parent or guardian, as the case may be, fails to come and take charge of the juvenile or child on the appointed date, the juvenile or child shall be taken by the escort of the institution; and in case of a girl, she shall be escorted by a female escort.

(6) At the time of release or discharge, a juvenile or child may be provided with a set of summer or winter clothing, if the Officer-in-charge deems it necessary.

(7) If the juvenile or child has no parent or guardian, he may be sent to an aftercare organization, or in the event of employment to the person who has undertaken to employ the juvenile or child.

(8) The Officer-in-charge of a girls' institution, subject to the approval of the competent authority, may get suitable girls above the age of eighteen years married according to the procedure laid down by that authority from time to time.

(9) The Officer-in-Charge shall order the discharge of any juvenile or child, the period of whose detention has expired and inform the competent authority within seven days of the action taken; and if, the date of release falls on a Sunday or another public holiday, the juvenile or child may be released on the preceding day with an entry to that effect being made in the register of discharge.

(10) The Officer-in-charge shall in appropriate cases, order the payment of subsistence money, at such rates as may be fixed from time to time and the railway or road, or both, fare, as the case may be.

(11) In deserving cases, the Officer-in-charge may provide the juvenile with such small tools, as may be necessary, to start a work or business subject to such maximum cost as may be fixed by the institution.

(12) The Officer-in-charge may, subject to the approval of the competent authority, allow at their own request such girls as have no place to go, to stay in

the institution after the period of their stay is over, till the time some other suitable arrangements are made.

20. Maintenance of case file.-

(1) The case file of each juvenile or child shall be maintained in the institution containing the following informations, so far as applicable-

- (a) report of the person or agency who produced the juvenile or child before the Board;
- (b) probation officer's report;
- (c) information from previous institution;
- (d) initial interview material, information from family members, relatives, community, friends and miscellaneous information;
- (e) source of further information;
- (f) observation reports from staff members;
- (g) reports from Medical Officer, Intelligence Quotient (I.Q) testing, aptitude testing, educational or vocational tests;
- (h) social history ;
- (i) summary and analysis by Officer-in-charge ;
- (j) initial classification sheet;
- (k) instruction regarding training and treatment programme and about special precautions to be taken;
- (l) leave and other privileges granted;
- (m) violation of rules, if any, and special achievements;
- (n) quarterly progress report from various sections;
- (o) review sheet;
- (p) Monthly Cycle (m.c.) report (in case of girls);
- (q) pre-release programme;
- (r) final progress report ;
- (s) leave of absence or release on license ;
- (t) final discharge;
- (u) follow-up reports;
- (v) central index number;
- (w) annual photograph ; and
- (x) remarks ;

(2) All the case files maintained by the Institutions and the Board shall, as far as practicable, be computerised and networked so that the data is centrally available.

21. Production of a Juvenile.-

(1) As soon as a juvenile in conflict with the law is apprehended by the police, the police shall place the juvenile under the charge of the special juvenile police unit, or the designated police officer.

(2) The special juvenile police unit to which the juvenile is brought, shall inform the probation officer concerned of such apprehension, to obtain information regarding the antecedents and family background of the juvenile and other material circumstances likely to be of assistance to the Board for making the inquiry.

(3) Prior to production of a juvenile before the Board, the juvenile may be placed in a safe place within the Police Station, (which shall not be a lock up), or in a place of safety.

(4) The special juvenile police or the designated police officer shall produce the juvenile before the Magistrate or a member of the Board within twenty four hours of his apprehension (excluding the time taken to bring the juvenile from the Police Station or place of safety to the Board).

(5) In case of delay in production before the Magistrate or the Board, the details of not doing so be recorded in the police daily or general diary.

(6) In case a recognized voluntary organization takes a juvenile to the Board, the voluntary organization shall also inform the concerned Police Station.

(7) The State Government shall recognize only those registered voluntary organizations which can provide the services of probation, counseling, case work, a place of safety and also associate with the Special Juvenile Police Unit and are willing and have the capacity, facilities and expertise to do so.

(8) The registered voluntary organization shall prepare a report narrating the circumstances of apprehension and offence committed and produce the juvenile before the Board or Police with the report.

(9) When a juvenile is produced before an individual member of the Board, the order given by the member shall be ratified in the next meeting of the Board.

(10) The police or the recognized voluntary organization shall be responsible for the safety and basic amenities to the juveniles apprehended or kept under their charge during the period they are with them.

22. Procedure to be followed by a Board in holding inquiries and the determination of age.-

(1) In all cases under the Act the proceedings shall be conducted in as simple a manner as possible and care shall be taken to ensure that the juvenile or child against whom the proceedings have been instituted is given home like atmosphere during the proceedings.

(2) When witnesses are produced for examination, the Board shall be free to use the power under section 165 of the Indian Evidence Act, 1872(1 of 1872), to question them so as to bring out any point that may go in favour of the juvenile or the child.

(3) While examining a juvenile or child and recording his statement, the competent authority shall be free to address the juvenile or child in any manner that may seem suitable, in order to put the juvenile or child at ease and to elicit the true facts, not only in respect of the offence of which the juvenile or child is accused, but also in respect of the home and social surroundings and the influence to which the juvenile or child might have been subjected.

(4) The record of the examination shall be in such form as the Board may consider suitable having regard to the contents of the statement and circumstances in which it was made.

(5) In every case concerning a juvenile or a child, the Board shall either obtain, -

- (i) a birth certificate given by a corporation or a municipal authority; or
- (ii) a date of birth certificate from the school first attended ;or
- (iii) matriculation or equivalent certificates, if available; and
- (iv) in the absence of (i) to (iii) above, the medical opinion by a duly constituted Medical Board, subject to a margin of one year, in deserving cases for the reasons to be recorded by such Medical Board,

regarding his age; and, when passing orders in such case shall, after taking into consideration such evidence as may be available or the medical opinion, as the case may be, record a finding in respect of his age.

(6) The State Government shall recognize registered voluntary organizations, to supervise and submit periodical reports, as directed by the Board regarding the orders passed under clauses (b) and (c) of sub-section(1) of section 15 of the Act.

(7) In accordance with the rules made under sub-section (2) of section 10 of the Act, the Board shall, in Form-I, order a Probation Officer, or otherwise to conduct a social investigation, reporting on the character and antecedents of

the juvenile or child with a view to assessing the best possible mode for placement, such as, with the family, an institution or otherwise permissible under the Act.

(8) When a juvenile or child is placed under the care of a parent or a guardian and the Board considers it expedient to place the juvenile or child under the supervision of a probation officer, it shall issue a supervision order in Form- II.

(9) The competent authority may, while making an order placing a juvenile under the care of a parent, guardian or fit person, as the case may be, direct such parent, guardian or fit person to enter into a bond in Form IV with or without sureties.

(10) Whenever the Board orders a juvenile or child to be kept in an institution, it shall forward to the Officer-in-charge of such institution a copy of its order, in Form III with particulars of the home and parents or guardian and previous record.

(11) The juvenile or child shall be lodged in a home closest to where he belongs.

(12) The Officer-in-charge of an institution, certified as special home under sub-section (2) of section 9 of the Act, shall be informed in advance by the Board before any juvenile or child is committed to it.

(13) The Officer-in-charge of the said institution may, on receipt of the information, intimate in writing objections, if any, to the committal of the juvenile or child and the objections shall be taken into consideration by the Board before the juvenile or child is committed to the said institution.

(14) In case the Board orders the parent of the juvenile or child, or the juvenile or child to pay a fine and the amount realized shall be deposited in the government treasury.

23. Procedure in respect of Sections 23, 24, 25 and 26 of the Act.-

The offences against the juvenile or child specified in sections 23, 24, 25 and 26 shall be either bailable or non-bailable besides being cognizable under the provisions of the Code of Criminal Procedure Act, 1973 (2 of 1974) and the provisions of bail or otherwise, shall apply on the Police, the Board and the concerned accordingly.

CHAPTER III

CHILD IN NEED OF CARE AND PROTECTION

24. Child Welfare Committee.- (1) The Committee shall consist of a Chairperson and four other members as the State Government may think fit to

[To be published in the Gazette of India, Extraordinary,
Part-II, section 3, sub-section (i)
New Delhi, Friday, October 26, 2007/KARTIKA 4, 1929]

MINISTRY OF WOMEN AND CHILD DEVELOPMENT

NOTIFICATION

New Delhi, the 26th day of October , 2007

Rules under the Juvenile Justice (Care and Protection of Children) Act 2000 (56 of 2000) (as amended by the Amendment Act 33 of 2006) to be administered by the States

[For better implementation and administration of the provisions of the said Act in its true spirit and substance]

G.S.R. 679(E) - WHEREAS the Constitution has, in several provisions, including clause (3) of article 15, article 21, article 21A, clauses (1) and (2) of article 22, articles 23 and 24, clauses (e) and (f) of article 39, article 39 A, articles 45, 47 and 51 A (k), impose on the State a primary responsibility of ensuring that all the needs of children are met and that their basic rights are fully protected;

AND WHEREAS, the Convention on the Rights of the Child adopted by the General Assembly of the United Nations on the 20th November, 1989 and ratified by India on 11th December 1992, emphasizes conferment of rights on children, and reintegration of juveniles and care and protection of vulnerable children, with a view to furthering their right to survival, development, protection and participation;

AND WHEREAS, the United Nations Standard Minimum Rules for the Administration of Juvenile Justice, 1985 (the Beijing Rules) and the United Nations Rules for the Protection of Juveniles Deprived of their Liberty (1990) set the minimum standard to be adhered to in the administration of juvenile justice in respect of juveniles in conflict with law;

AND WHEREAS, the United Nations Guidelines for the Prevention of Juvenile Delinquency (Riyadh Guidelines) and all other relevant international instruments focus on the prevention of juvenile delinquency and provide guidelines for it;

AND WHEREAS, to give effect to the provisions of the Constitution and relevant international instruments , the Juvenile Justice (Care and Protection of Children) Act, 2000 (56 of 2000) as amended by the Juvenile Justice (Care and Protection of Children) Amendment Act, 2006 (33 of 2006) was enacted to consolidate and amend the law relating to juveniles in conflict with law and children in need of care and protection, by providing for proper care, protection and treatment by catering to their developmental needs, and by adopting a child friendly approach in the adjudication and disposition of matters in the best interest of children and for their ultimate rehabilitation and for matters connected therewith or incidental thereto, through institutional as well as non-institutional measures enumerated under the said Act;

NOW, THEREFORE, with a view to provide for better implementation and administration of the provisions of the said Act in its true spirit and substance, the Central Government in pursuance of the above said provisions and in exercise of the powers conferred by the proviso to sub-section (1) of section 68 of the Juvenile Justice (Care and Protection of Children) Act, 2000 (56 of 2000) hereby makes the following rules and lays down the fundamental principles to be applied in administration of juvenile justice, namely:-

CHAPTER - I

PRELIMINARY

1. Short title and commencement.— (1) These rules may be called the Juvenile Justice (Care and Protection of Children) Rules, 2007.

(2) They shall come into force on the date of their publication in the Official Gazette.

2. Definition.— In these rules, unless the context otherwise requires-

(a) “abandoned” means an unaccompanied and deserted child who is declared abandoned by the Committee after due inquiry;

(b) "Act" means the Juvenile Justice (Care and Protection of Children) Act, 2000 (56 of 2000) as amended by the Juvenile Justice (Care and Protection of Children) Amendment Act, 2006 (33 of 2006);

(c) “best interest of the child” means a decision taken to ensure the physical, emotional, intellectual, social and moral development of juvenile or child;

(d) “child friendly” means any process and interpretation, attitude, environment and treatment, that is humane, considerate and in the best interest of the child;

(e) “community service” implies service rendered to the society by juveniles in conflict with law in lieu of other judicial remedies and penalties, which is not degrading and dehumanizing.

Examples of this may include:

- (i) cleaning a park;
- (ii) getting involved with Habitat for Humanity;
- (iii) serving the elderly in nursing homes;
- (iv) helping out a local fire or police department;
- (v) helping out at a local hospital or nursing home; and
- (vi) serving disabled children.

(f) “detention” in case of juveniles in conflict with law means “protective custody” in line with the principles of restorative justice;

(g) "Form" means the form annexed to these rules;

(h) "individual care plan" is a comprehensive development plan for a juvenile or child based on age specific and gender specific needs and the case history of the juvenile or child, prepared in consultation with the juvenile or child, in order to restore the juvenile's or child's self-esteem, dignity and self-worth and nurture him into a responsible citizen and accordingly the plan shall address the following needs of a juvenile or a child:

- (i) Health needs;
- (ii) Emotional and psychological needs;
- (iii) Educational and training needs;
- (iv) Leisure, creativity and play;
- (v) Attachments and relationships;
- (vi) Protection from all kinds of abuse, neglect and maltreatment;
- (vii) Social mainstreaming; and
- (viii) Follow-up post release and restoration.

(i) "institution" means an observation home, or a special home, or a children's home or a shelter home set up, certified or recognized and registered under sections 8, 9, 34, sub-section (3) of section 34 and section 37 of the Act respectively;

(j) "Officer-in-charge" or such other nomenclature as issued by the State Government, means a person appointed for the control and management of the institution;

(k) "orphan" means a child who is without parents or willing and capable legal or natural guardian;

(l) "place of safety" means any institution set up and recognized under sub-section (3) of section 12 and sub-section (1) of section 16 of the Act for juvenile in conflict with law or children;

(m) "recognised" means a person found fit by the competent authority or, an institution found fit by the State Government on the recommendation of the competent authority as per clauses (h) and (i) of section (2) of the Act; or, recognition of an institution or agency or voluntary organisation by the State Government to operate as a children's home, observation home and special home; or a shelter home, specialised adoption agency or after care organization under sub-section (1) of section 37, sub-section (4) of section 41 and clause (a) of section 44 of the Act;

(n) "registered" means all institutions or agencies or voluntary organisations providing residential care to children in need of care and protection registered under sub-section (3) of section 34;

(o) "State Government" in relation to a Union Territory means the Administrator of that Union Territory appointed by the President under article 239 of the Constitution;

(p) “street and working children” means children without ostensible means of livelihood, care, protection and support in accordance with the provisions laid down under clause (d) (1) of section 2 of the Act;

(q) “surrendered child” means a child, who in the opinion of the Committee, is relinquished on account of physical, emotional and social factors beyond the control of the parent or guardian;

(r) all words and expressions defined in the Act and used, but not defined in these rules, shall have the same meaning as assigned to them in the Act.

CHAPTER - II

FUNDAMENTAL PRINCIPLES OF JUVENILE JUSTICE AND PROTECTION OF CHILDREN

3. Fundamental principles to be followed in administration of these rules.— (1) The State Government, the Juvenile Justice Board, the Child Welfare Committee or other competent authorities or agencies, as the case may be, while implementing the provisions of these rules shall abide and be guided by the principles, specified in sub-rule (2).

(2) The following principles shall, *interalia*, be fundamental to the application, interpretation and implementation of the Act and the rules made hereunder:

I. Principle of presumption of innocence:

(a) A juvenile or child or juvenile in conflict with law is presumed to be innocent of any malafide or criminal intent up to the age of eighteen years.

(b) The juvenile’s or juvenile’s in conflict with law or child’s right to presumption of innocence shall be respected throughout the process of justice and protection, from the initial contact to alternative care, including aftercare.

(c) Any unlawful conduct of a juvenile or a child or a juvenile in conflict with law which is done for survival, or is due to environmental or situational factors or is done under control of adults, or peer groups, is ought to be covered by the principles of innocence.

(d) The basic components of presumption of innocence are:

(i) Age of innocence

Age of innocence is the age below which a juvenile or child or a juvenile in conflict with law cannot be subjected to the criminal justice system. The Beijing Rule 4(1) clearly lays down that “the beginning of the age of criminal responsibility shall not be fixed at too low an age level bearing in mind the facts of mental and intellectual maturity”. In consonance with this principle, the mental and intellectual maturity of juvenile or child or a juvenile in conflict with law below eighteen years is considered insufficient through out the world.

(ii) Procedural protection of innocence

All procedural safeguards that are guaranteed by the Constitution and other statutes to the adults and that go in to strengthen the juvenile's or child's right to presumption of innocence **shall be guaranteed to juveniles or the children or juveniles in conflict with law.**

(iii) Provisions of Legal aid and Guardian Ad Litem

Juveniles in conflict with law have a right to be informed about the accusations against them and a right to be legally represented. Provisions must be made for guardian ad litem, legal aid and other such assistance through legal services at State expense. This shall also include such juveniles right to present his case before the competent authority on his own.

II Principle of dignity and worth:

(a) Treatment that is consistent with the child's sense of dignity and worth is a fundamental principle of juvenile justice. This principle reflects the fundamental human right enshrined in Article 1 of the Universal Declaration of Human Rights that all human beings are born free and equal in dignity and rights. Respect of dignity includes not being humiliated, personal identity, boundaries and space being respected, not being labeled and stigmatized, being offered information and choices and not being blamed for their acts.

(b) The juvenile's or child's right to dignity and worth has to be respected and protected throughout the entire process of dealing with the child from the first contact with law enforcement agencies to the implementation of all measures for dealing with the child.

III. Principle of Right to be heard:

Every child's right to express his views freely in all matters affecting his interest shall be fully respected through every stage in the process of juvenile justice. Children's right to be heard shall include creation of developmentally appropriate tools and processes of interacting with the child, promoting children's active involvement in decisions regarding their own lives and providing opportunities for discussion and debate.

IV. Principle of Best Interest:

(a) In all decisions taken within the context of administration of juvenile justice, the principle of best interest of the juvenile or the juvenile in conflict with law or child shall be the primary consideration.

(b) The principle of best interest of the juvenile or juvenile in conflict with law or child shall mean for instance that the traditional objectives of criminal justice, retribution and repression, must give way to rehabilitative and restorative objectives of juvenile justice.

(c) This principle seeks to ensure physical, emotional, intellectual, social and moral development of a juvenile in conflict with law or child so as to ensure the safety, well being and permanence for each child and thus enable each child to survive and reach his or her full potential.

V. Principle of family responsibility:

(a) The primary responsibility of bringing up children, providing care, support and protection shall be with the biological parents. However, in exceptional situations, this responsibility may be bestowed on willing adoptive or foster parents.

(b) All decision making for the child should involve the family of origin unless it is not in the best interest of the child to do so.

(c) The family - biological, adoptive or foster (in that order), must be held responsible and provide necessary care, support and protection to the juvenile or child under their care and custody under the Act, unless the best interest measures or mandates dictate otherwise.

VI. Principle of Safety (no harm, no abuse, no neglect, no exploitation and no maltreatment):

(a) At all stages, from the initial contact till such time he remains in contact with the care and protection system, and thereafter, the juvenile or child or juvenile in conflict with law shall not be subjected to any harm, abuse, neglect, maltreatment, corporal punishment or solitary or otherwise any confinement in jails and extreme care shall be taken to avoid any harm to the sensitivity of the juvenile or the child.

(b) The state has a greater responsibility for ensuring safety of every child in its care and protection, without resorting to restrictive measures and processes in the name of care and protection.

VII. Positive measures:

(a) Provisions must be made to enable positive measures that involve the full mobilization of all possible resources, including the family, volunteers and other community groups, as well as schools and other mainstream community institutions or processes, for the purpose of promoting the well-being of the juvenile or child through individual care plans carefully worked out.

(b) The positive measures shall aim at reducing vulnerabilities and reducing the need for intervention under the law, as well as effective, fair and humane dealing of the juvenile or child.

(c) The positive measures shall include avenues for health, education, relationships, livelihoods, leisure, creativity and play.

(d) Such positive measures must facilitate the development of identity for the child and provide them with an inclusive and enabling environment.

VIII. Principle of non-stigmatizing semantics, decisions and actions:

The non-stigmatizing semantics of the Act must be strictly adhered to, and the use of adversarial or accusatory words, such as, arrest, remand, accused, charge sheet, trial, prosecution, warrant, summons, conviction, inmate, delinquent, neglected, custody or jail is prohibited in the processes pertaining to the child or juvenile in conflict with law under the Act.

IX. Principle of non-waiver of rights:

- (a) No waiver of rights of the child or juvenile in conflict with law, whether by himself or the competent authority or anyone acting or claiming to act on behalf of the juvenile or child, is either permissible or valid.
- (b) Non-exercise of a fundamental right does not amount to waiver.

X. Principle of equality and non-discrimination:

- (a) There shall be no discrimination against a child or juvenile in conflict with law on the basis of age, sex, place of birth, disability, health, status, race, ethnicity, religion, caste, cultural practices, work, activity or behaviour of the juvenile or child or that of his parents or guardians, or the civil and political status of the juvenile or child.
- (b) Equality of access, equality of opportunity, equality in treatment under the Act shall be guaranteed to every child or juvenile in conflict with law.

XI. Principle of right to privacy and confidentiality:

The juvenile's or child's right to privacy and confidentiality shall be protected by all means and through all the stages of the proceedings and care and protection processes.

XII. Principle of last resort:

Institutionalization of a child or juvenile in conflict with law shall be a step of the last resort after reasonable inquiry and that too for the minimum possible duration.

XIII. Principle of repatriation and restoration:

- (a) Every juvenile or child or juvenile in conflict with law has the right to be re-united with his family and restored back to the same socio-economic and cultural status that such juvenile or child enjoyed before coming within the purview of the Act or becoming vulnerable to any form of neglect, abuse or exploitation.

(b) Any juvenile or child, who has lost contact with his family, shall be eligible for protection under the Act and shall be repatriated and restored, at the earliest, to his family, unless such repatriation and restoration is likely to be against the best interest of the juvenile or the child.

XIV. Principle of Fresh Start:

(a) The principle of fresh start promotes new beginning for the child or juvenile in conflict with law by ensuring erasure of his past records.

(b) The State shall seek to promote measures for dealing with children alleged or recognized as having impinged the penal law, without resorting to judicial proceedings.

CHAPTER - III

JUVENILE IN CONFLICT WITH LAW

4. Juvenile Justice Boards.— There shall be one or more Juvenile Justice Boards in every district, which shall be constituted by the State Government as per section 4 of the Act.

5. Composition of the Juvenile Justice Board.— (1) The Board shall consist of a Metropolitan Magistrate or a Judicial Magistrate of the first class, as the case may be, and two social workers of whom at least one shall be a woman, forming a bench:

Provided that the Principal Magistrate of the Board shall review the pendency of cases before the Board and take such steps, as may be necessary in the expeditious disposal of the cases.

(2) Every such bench shall have the powers conferred by the Code of Criminal Procedure 1973 (2 of 1974).

(3) (i) A Magistrate with special knowledge or training in child psychology or child welfare shall be designated as the Principal Magistrate of the Board.

(ii) In case the Principal Magistrate with such special knowledge or training is not available, then, the State Government shall provide for such short-term training in child psychology or child welfare as it considers necessary.

(4) The two social workers, of whom at least one shall be a woman, shall be appointed by the State Government on the recommendation of the Selection Committee set up under rule 91 of these rules.

(5) The State Government shall provide for such training and orientation in child psychology, child welfare, child rights, national and international standards for juvenile justice to all members of the Board as it considers necessary, in accordance with the Integrated Child Protection Scheme of the Central Government.

6. Tenure of the Board.— (1) The Board shall have a tenure of three years and the appointment of members shall be co-terminus with the tenure of the Board.

(2) A social worker being a member of the Board shall be eligible for appointment for a maximum of two consecutive terms.

(3) Any extension of the tenure of members of the Board shall be on the basis of their performance appraisal by the District Child Protection Unit of the State Government and on the recommendation of a Selection Committee constituted for the purpose and the performance appraisal of members of the Board shall necessarily assess their participation in the proceedings of the Board and contribution in case disposal.

(4) A member may resign any time, by giving one month's advance notice in writing or may be removed from his office as provided in sub-section (5) of section 4 of the Act.

(5) Any vacancy in the Board may be filled by appointment of another person from the panel of names prepared by the Selection Committee, and shall hold office for the remaining term of the Board.

7. Qualifications for Members of the Board.— (1) The social worker to be appointed as a member of the Board shall be a person not less than 35 years of age, who has a post-graduate degree in social work, health, education, psychology, child development or any other social science discipline and has been actively involved and engaged in planning, implementing and administering measures relating to child welfare for at least seven years.

(2) No person shall be considered for selection as a Member of the Board, if he, -

(a) has been convicted under any law;

(b) have ever indulged in child abuse or employment of child labour or any other human rights violations or immoral act;

(c) is holding such other occupation that does not allow him to give necessary time and attention to the work of the Board;

(d) does not fulfill the qualification and experience prescribed in the Act and the rules made there under and in such a case the Selection Committee shall after due inquiry and on establishment of such fact, reject his application and recommend the name of the next person from the list of names prepared for filling the vacancies.

8. Sitting and conveyance allowances.— The social worker members of the Board shall be paid such travel and sitting allowance, as the State Government may determine, but it shall not be less than rupees five hundred per sitting.

9. Sittings of the Board.— (1) The Board shall hold its sittings in the premises of an Observation Home or, at a place in proximity to the observation home or, at a suitable premise in any institution run under the Act, and in no circumstances shall the Board operate from within any court premises.

(2) The premises where the Board holds its sittings shall be child-friendly and shall not look like a court room in any manner whatsoever; for example, the Board shall not sit on a raised platform and the sitting arrangement shall be uniform, and there shall be no witness boxes.

(3) The Board shall meet on all working days of a week, unless the case pendency is less in a particular district and concerned authority issues an order in this regard.

(4) A minimum of three-fourth attendance of the Chairperson and Members of the Board is necessary in a year.

(5) Every member of the Board shall attend a minimum of five hours per sitting.

10. Functions of the Board.— The Board shall perform the following functions to achieve the objectives of the Act, namely:-

- (a) adjudicate and dispose cases of juveniles in conflict with law;
- (b) take cognizance of crimes committed under section 23 to 28 of the Act;
- (c) monitoring institutions for juveniles in conflict with law and seeking compliance from them in cases of any noticeable lapses and improvement based on suggestions of the Board;
- (d) deal with non-compliance on the part of concerned government functionaries or functionaries of voluntary organizations, as the case may be, in accordance with due process of law;
- (e) pass necessary direction to the district authority and police to create or provide necessary infrastructure or facilities so that minimum standards of justice and treatment are maintained in the spirit of the Act;
- (f) maintain liaison with the Committee in respect of cases needing care and protection;
- (g) liaison with Boards in other districts to facilitate speedy inquiry and disposal of cases through due process of law;
- (h) take suitable action for dealing with unforeseen situations that may arise in the implementation of the Act and remove such difficulties in the best interest of the juvenile;
- (i) send quarterly information about juveniles in conflict with law produced before them, to the District, State Child Protection Unit, the State Government and also to the Chief Judicial Magistrate or Chief Metropolitan Magistrate for review under sub-section (2) of section 14 of the Act;
- (j) any other function assigned by the State Government from time to time relating with juveniles in conflict with law.

11. Pre and Post-Production action of police and other agencies.— (1) As soon as a juvenile alleged to be in conflict with law is apprehended by the police, the concerned police officer shall inform:

- (a) the designated Juvenile or the Child Welfare Officer in the nearest police station to take charge of the matter;
 - (b) the parents or guardian of the juvenile alleged to be in conflict with law about the apprehension of the juvenile, about the address of the Board where the juvenile will be produced and the date and time when the parents or guardian need to be present before the Board;
 - (c) the concerned probation officer, of such apprehension to enable him to obtain information regarding social background of the juvenile and other material circumstances likely to be of assistance to the Board for conducting the inquiry.
- (2) Soon after apprehension, the juvenile shall be placed under the charge of the Juvenile or Child Welfare Officer from the nearest police station, who shall produce the juvenile before the Board within twenty four hours as per sub-section (1) of section 10 of the Act and where such Juvenile or the Child Welfare Officer has not been designated as per provisions laid down under sub-section (2) of section 63 of the Act or is not available for some official reasons, the police officer who had apprehended the juvenile shall produce him before the Board.
- (3) The police apprehending a juvenile in conflict with law shall in no case send the juvenile in lock-up or delay his charge being transferred to the Juvenile or the Child Welfare Officer from the nearest police station, if such an officer has been designated.
- (4) A list of all designated Juvenile or the Child Welfare Officers in a district and members of Special Juvenile Police Unit with contact details shall be prominently displayed in every police station.
- (5) For gathering the best available information it shall be incumbent upon the Police or the Juvenile or the Child Welfare Officer from the nearest police station, to contact the parents or guardians of the juvenile and also apprise them of the juvenile's law breaking behaviour.
- (6) The police or the Juvenile or the Child Welfare Officer from the nearest police station, shall also record the social background of the juvenile and circumstances of apprehension and offence alleged to have been committed in the case diary of each juvenile, which shall be forwarded to the Board forthwith.
- (7) The police or the Juvenile or the Child Welfare Officer from the nearest police station, shall exercise the power of apprehending the juvenile only in cases of his alleged involvement in serious offences (entailing a punishment of more than 7 years imprisonment for adults).
- (8) In such cases where apprehension apparently seems to be in the interest of the juvenile, the police or the Juvenile or the Child Welfare Officer from the nearest police station, shall rather treat the juvenile as a child in need of care and protection and produce him before the Board, clearly explaining the juvenile's need for care and protection in its report and seek appropriate orders from the Board under rule 13 (1) (b) of these rules.

(9) For all other cases involving offences of non-serious nature (entailing a punishment of less than 7 years imprisonment for adults) and cases where apprehension is not necessary in the interest of the juvenile, the police or the Juvenile or the Child Welfare Officer from the nearest police station, shall intimate the parents or guardian of the juvenile about forwarding the information regarding nature of offence alleged to be committed by their child or ward along with his socio-economic background to the Board, which shall have the power to call the juvenile for subsequent hearings.

(10) In case the Board is not sitting, the juvenile in conflict with law shall be produced before the single member of the Board as per the provisions laid down under the sub-section (2) of section 5 of the Act.

(11) In dealing with cases of juveniles in conflict with law the Police or the Juvenile or the Child Welfare Officer from the nearest police station, shall not be required to register an FIR or file a charge-sheet, except where the offence alleged to have been committed by the juvenile is of a serious nature such as rape, murder or when such offence is alleged to have been committed jointly with adults; instead, in matters involving simple offences, the Police or the Juvenile or the Child Welfare Officer from the nearest police station shall record information regarding the offence alleged to have been committed by the juvenile in the general daily diary followed by a report containing social background of the juvenile and circumstances of apprehension and the alleged offence and forward it to the Board before the first hearing.

(12) The State Government shall recognize only such voluntary organizations that are in a position to provide the services of probation, counseling, case work, a safe place and also associate with the Police or the Juvenile or the Child Welfare Officer from the Special Juvenile Police Unit, and have the capacity, facilities and expertise to do so as protection agencies that may assist the Police or the Juvenile or the Child Welfare Officer from the police at the time of apprehension, in preparation of the report containing social background of the juvenile and circumstances of apprehension and the alleged offence, in taking charge of the juvenile until production before the Board, and in actual production of the juvenile before the Board within twenty-four hours.

(13) The Police or the Juvenile or the Child Welfare Officer from the Special Juvenile Police Unit, or the recognized voluntary organization shall be responsible for the safety and provision of food and basic amenities to the juveniles apprehended or kept under their charge during the period such juveniles are with them.

(14) When a juvenile is produced before an individual member of the Board, and an order obtained, such order shall need ratification by the Board in its next meeting.

12. Procedure to be followed in determination of Age.— (1) In every case concerning a child or a juvenile in conflict with law, the court or the Board or as the case may be the Committee referred to in rule 19 of these rules shall determine the age of such juvenile or child or a juvenile in conflict with law within a period of thirty days from the date of making of the application for that purpose.

(2) The court or the Board or as the case may be the Committee shall decide the juvenility or otherwise of the juvenile or the child or as the case may be the juvenile in conflict with law, prima facie on the basis of physical appearance or documents, if available, and send him to the observation home or in jail.

(3) In every case concerning a child or juvenile in conflict with law, the age determination inquiry shall be conducted by the court or the Board or, as the case may be, the Committee by seeking evidence by obtaining –

- (a) (i) the matriculation or equivalent certificates, if available; and in the absence whereof;
- (ii) the date of birth certificate from the school (other than a play school) first attended; and in the absence whereof;
- (iii) the birth certificate given by a corporation or a municipal authority or a panchayat;

(b) and only in the absence of either (i), (ii) or (iii) of clause (a) above, the medical opinion will be sought from a duly constituted Medical Board, which will declare the age of the juvenile or child. In case exact assessment of the age cannot be done, the Court or the Board or, as the case may be, the Committee, for the reasons to be recorded by them, may, if considered necessary, give benefit to the child or juvenile by considering his/her age on lower side within the margin of one year.

and, while passing orders in such case shall, after taking into consideration such evidence as may be available, or the medical opinion, as the case may be, record a finding in respect of his age and either of the evidence specified in any of the clauses (a)(i), (ii), (iii) or in the absence whereof, clause (b) shall be the conclusive proof of the age as regards such child or the juvenile in conflict with law.

(4) If the age of a juvenile or child or the juvenile in conflict with law is found to be below 18 years on the date of offence, on the basis of any of the conclusive proof specified in sub-rule (3), the court or the Board or as the case may be the Committee shall in writing pass an order stating the age and declaring the status of juvenility or otherwise, for the purpose of the Act and these rules and a copy of the order shall be given to such juvenile or the person concerned.

(5) Save and except where, further inquiry or otherwise is required, inter alia, in terms of section 7A, section 64 of the Act and these rules, no further inquiry shall be conducted by the court or the Board after examining and obtaining the certificate or any other documentary proof referred to in sub-rule (3) of this rule.

(6) The provisions contained in this rule shall also apply to those disposed off cases, where the status of juvenility has not been determined in accordance with the provisions contained in sub-rule(3) and the Act, requiring dispensation of the sentence under the Act for passing appropriate order in the interest of the juvenile in conflict with law.

13. Post-production processes by the Board.— (1) On production of the juvenile before the Board, the report containing social background of the juvenile and circumstances of apprehension and offence alleged to have been committed provided by the officers, individuals, agencies producing the juvenile shall be reviewed by the Board, and the Board shall pass the following order in the first summary inquiry on the same day, namely:-

- (a) dispose off the case, if the evidence of his conflict with law appears to be unfounded or where the juvenile is involved in trivial law breaking;
- (b) transfer to the Committee, matters concerning juveniles clearly stated to be in need of care and protection in the police report submitted to the Board at the time of production of the juvenile;
- (c) release the juvenile in the supervision or custody of fit persons or fit institutions or probation officers as the case may be, through an order in **Form-I**, with a direction to appear or present a juvenile for an inquiry on a next date;
- (d) detain the juvenile in an Observation Home or fit institution pending inquiry, only in cases of juvenile's involvement in serious offences as per an order in **Form-II**;
- (e) in all cases of release pending inquiry, the Board shall notify the next date of hearing, not later than 15 days of the first summary enquiry and also seek social investigation report from the concerned Probation Officer through an order in **Form-III**;

(2) The Board shall take the following steps to ensure fair and speedy inquiry, namely:-

- (a) at the time of initiating the inquiry, the Board shall satisfy itself that the juvenile in conflict with law has not been subjected to any ill-treatment by the police or by any other person, including a lawyer or probation officer and take corrective steps in case of such ill-treatment;
- (b) in all cases under the Act the proceedings shall be conducted in as simple a manner as possible and care shall be taken to ensure that the juvenile, against whom the proceedings have been instituted, is given child-friendly atmosphere during the proceedings;
- (c) every juvenile brought before the Board shall be given the opportunity to be heard and participate in his inquiry;
- (d) cases of petty offences, if not disposed off by the Special Juvenile Police Unit or at the police station itself, may be disposed off by the Board through summary proceedings or inquiry, while in cases of heinous offences entailing punishment of 7 years or more, due process of inquiry in detail may follow;
- (e) even in cases of inquiry pertaining to serious offences the Board shall follow the procedure of trial in summons cases.

(3) When witnesses are produced for examination in inquiry relating to a juvenile in conflict with law, the Board shall keep in mind that the inquiry is not to be conducted in the spirit of strict adversarial proceedings and it shall use the powers conferred by section 165 of the Indian Evidence Act, 1872 (1 of 1872) so as to question the juvenile and proceed with the presumptions that favour the juvenile's right to be restored.

(4) While examining a juvenile in conflict with law and recording his statement, the Board shall address the juvenile in a child-friendly manner in order to put the juvenile at ease and to

encourage him to state the facts and circumstances without any fear, not only in respect of the offence of which the juvenile is accused, but also in respect of the home and social surroundings and the influence to which the juvenile might have been subjected.

(5) The Board may take into account the report of the police containing circumstances of apprehension and offence alleged to have been committed and the social investigation report in **Form-IV** prepared by the Probation officer or the voluntary organization on the orders of the Board as per **Form-III**, along with the evidence produced by the parties for arriving at a conclusion about the juvenile.

(6) Every inquiry by the Board shall be completed within a period of four months after the first summary inquiry and only in exceptional cases involving trans-national criminality, large number of accused and inordinate delay in production of witnesses, the period of inquiry may be extended by two months on recording of reasons by the Board.

(7) In all other cases except where the nature of alleged offence is serious, delay beyond four to six months shall lead to the termination of the proceedings.

(8) Where the proceedings are delayed beyond six months on account of serious nature of the offence alleged to have been committed by the juvenile, the Board shall send a periodic report of the case to the Chief Judicial Magistrate or Chief Metropolitan Magistrate stating the reason for delay as well as steps being taken to expedite the matter.

14. Legal Aid.— (1) The proceedings before the Board shall be conducted in non-adversarial environment, but with due regard to all the due process guarantees such as right to counsel and free legal aid.

(2) The Board shall ensure that the Legal Officer in the District Child Protection Unit and the State Legal Aid Services Authority shall extend free legal services to all the juvenile in conflict with law.

(3) The Legal Officer in the District Child Protection Unit and the State Legal Aid Services Authority shall be under an obligation to provide legal services sought by the Board.

(4) In the event of shortfall in the State Legal Aid Services support, the Board shall be responsible for seeking legal services from recognized voluntary legal services organisations or the university legal services clinics.

(5) The Board may also deploy the services of the student legal services volunteers and non-governmental organisation volunteers in para-legal tasks such as contacting the parents of juveniles in conflict with law and gathering relevant social and rehabilitative information about the juveniles.

15. Completion of Inquiry and Dispositional Alternatives.— (1) The Board shall complete every inquiry within the stipulated time of four months and on recording a finding about

juvenile's involvement in the alleged offence, pass one of the seven dispositional orders enumerated in section 15 of the Act.

(2) Before passing an order, the Board shall obtain a social investigation report prepared by the probation officer or by a recognized voluntary organization ordered to do so by the Board, and take the findings of the report into account.

(3) All dispositional orders passed by the Board shall necessarily include an individual care plan for the concerned juvenile in conflict with law, prepared by a probation officer or voluntary organization on the basis of interaction with the juvenile and his family where possible.

(4) Where the Board decides to release the juvenile after advice and admonition or after participation in group counseling or orders him to perform community service, necessary direction may also be made by the Board to the District or State Child Protection Unit or the State Government for arranging such individual counselling, group counseling and community service.

(5) Where the Board decides to release the juvenile in conflict with law on probation and place him under the care of the parent or guardian or fit person, the person in whose custody the juvenile is released may be required to submit a written undertaking in **Form-V** for the good behaviour and well-being of the juvenile for a maximum period of three years.

(6) The Board may order release of a juvenile in conflict with law on execution of a personal bond without surety in **Form VI**.

(7) In the event of placement of a juvenile in conflict with law in care of a fit institution or special home, the Board shall keep in mind that the fit institution or special home is located nearest to the place of residence of the juvenile's parent or guardian.

(8) The Board, where it releases a juvenile in conflict with law on probation and places him under the care of parent or guardian or fit person or where the juvenile is released on probation and placed under the care of fit institution, may order that the juvenile be placed under the supervision of a probation officer. The period of supervision shall be a maximum of three years.

(9) Where the Board decides that a juvenile in conflict with law ought to be treated as a child in need of care and protection, it shall make necessary orders for production of such juvenile before the nearest Committee for suitable care, protection and rehabilitation.

(10) Where it appears to the Board that the juvenile in conflict with law has not complied with probation conditions, it may order the juvenile to be sent for detention in a special home.

(11) Where a juvenile in conflict with law who has attained the age of sixteen years and the offence committed by him is of such a serious nature that in the satisfaction of the Board, it is neither in the interest of the juvenile himself nor in the interest of other juveniles of the special home, the Board may order the juvenile to be kept in a place of safety and in a manner considered most appropriate by it.

(12) The State Government shall make arrangement for complying with the detention of special category of juveniles in conflict with law in place of safety other than the special home.

(13) In no case the period of detention shall exceed beyond the maximum period provided in clause (g) of sub-section (1) of section 15 of the Act.

16. Institutions for juveniles in conflict with law.— (1) The State Government or the voluntary organisation recognised by that State Government shall set up separate observation homes or special homes for boys and girls.

(2) The observation homes or special homes shall set up separate residential facilities for boys and girls up to 12 years, 13-15 years and 16 years and above.

(3) Every institution shall keep a copy of the Act, the rules made by the Central Government and the State rules if any, for use by both staff, juveniles and children residing therein.

(4) The State Governments in collaboration with civil society shall develop and make available simplified and child friendly versions of the Act and the rules in regional languages.

(5) All facilities and services for juveniles in conflict with law shall be made available and maintained as per the provisions of the Act and the State rules. In case the State rules have not been notified, the provisions of these rules shall apply.

17. Release.— (1) The Officer-in-charge shall maintain a roster of the cases of juveniles in conflict with law to be released on the expiry of the period of stay as ordered by the Board.

(2) Each case shall be placed before the Management Committee set up under rule 55 of these rules by the concerned probation officer or child welfare officer or case worker for ensuring proper release and social mainstreaming of the juvenile post-release.

(3) The release shall be as per the pre-release and post-release plan prepared under the individual care plan and reviewed from time to time by the management committee set up under rule 55 of these rules and in all cases of release, necessary action and preparation shall be initiated well before the time of release and shall include preparation for post-release follow-up.

(4) The timely information of the release of a juvenile and of the exact date of release shall be given to the parent or guardian and the parent or guardian shall be invited to come to the institution to take charge of the juvenile on that date.

(5) If necessary, the actual expenses of the parent's or guardian's journey both ways and of the juvenile's journey from the institution shall be paid to the parent or guardian by the Officer-in-charge at the time of the release of the juvenile.

- (6) If the parent or guardian, as the case may be, fails to come and take charge of the juvenile on the appointed date, the juvenile shall be taken by the escort of the institution; and in case of a girl, she shall be escorted by a female escort.
- (7) At the time of release or discharge, a juvenile shall be provided with a set of summer or winter clothing and essential toiletries, if the Officer-in-charge considers it necessary.
- (8) If the juvenile has no parent or guardian, he may be sent to an aftercare organization, or in the event of his employment, to the person who has undertaken to employ the juvenile.
- (9) The Officer-in-charge of a girls' institution may, subject to the consent of the girl and the approval of the competent authority, help the girl with her social re-integration by way of sending a girl above the age of eighteen years to an after care programme or, helping her with some vocation or gainful employment or, helping her settle into family life according to the procedure laid down by the competent authority from time to time.
- (10) The Officer-in-Charge shall order the discharge in **Form-VII** of any juvenile whose detention period has come to an end and inform the competent authority within seven days of the action taken and if the date of release falls on a Sunday or a public holiday, the juvenile may be discharged on the preceding day with an entry to that effect being made in the register of discharge.
- (11) The Officer-in-charge shall in appropriate cases, order the payment of subsistence money, at such rates as may be fixed from time to time, by the State or the District Child Protection Unit or the State Government, and the railway or road, or both, fares, as the case may be.
- (12) In deserving cases, the Officer-in-charge may provide the juvenile with such small tools, as may be necessary, to start a work or business subject to such maximum cost as may be fixed by the institution which shall also form part of the post-release plan.
- (13) Where a girl has no place to go after release and requests for stay in the institution after the period of her stay is over, the Officer-in-charge may, subject to the approval of the competent authority, allow her stay till the time some other suitable arrangements are made.

18. Procedure to be followed in respect of sections 21, 22, 23, 24, 25 and 26 of the Act.—

- (1) In the event of violation of provisions laid down under section 21 of the Act,-
 - (a) the Board shall take cognizance of such violation by print or electronic media and shall initiate necessary inquiry and pass appropriate orders as per provisions contained in sub-section (2) of section 21 of the Act; and
 - (b) where the National or the State Commission for Protection of Child Rights takes *suo motu* cognizance of violation under section 21 of the Act, it shall inform the District or the State Child Protection Unit of the concerned district and the State directing them to initiate necessary action through the Board.

(2) In the event of an escape of a juvenile in conflict with law or a child, the following action shall be taken within twenty-four hours,-

(a) the Officer-in-Charge of any institution shall immediately send a report to the area Police Station or Special Juvenile Police Unit along with the details and description of the juvenile or child, with identification marks and a photograph, with a copy to the Board, District Child Protection Unit and other authorities concerned;

(b) the Officer-in--charge of institutions other than shelter homes or drop-in-centres shall send the guards or concerned staff in search of the juvenile, at places like railway stations, bus stands and other places where the juvenile is likely to go;

(c) the parents or guardians shall be informed immediately about such escape; and

(d) the Officer-in-charge of an institution other than a shelter home or drop-in-centre shall hold an inquiry about such escape and send his report to the Board or Committee and the authorities concerned and the report shall be placed before the Management Committee set up under rule 55 of these rules in the next meeting for review.

(3) The offences against a juvenile in conflict with law or a child specified in sections 23, 24, 25 and 26 shall be either bailable or non-bailable besides being cognizable under the provisions of the Code of Criminal Procedure, 1973 (2 of 1974) and the procedures shall apply on the Police, the Board and the concerned authorities and functionaries accordingly.

CHAPTER IV

CHILD IN NEED OF CARE AND PROTECTION

19. Child Welfare Committee.— There shall be a Child Welfare Committee in every district, which shall be constituted by the State Government through a notification in the Official Gazette as per sub-section (1) of section 29 of the Act.

20. Composition of the Child Welfare Committee.— (1) The Committee shall consist of a Chairperson and four other members, of whom at least one shall be a woman.

(2) The Chairperson and members of the Committee shall be appointed on the recommendation of a Selection Committee set up by the State Government, for the purpose under rule 91.

(3) The Selection Committee, while selecting the Chairperson and Members of the Committee, shall as far as possible ensure that none of them are from any adoption agency.

(4) The State Government shall provide for such training and orientation in child psychology, child welfare, child rights, national and international standards for juvenile justice to all members of the Committee as it considers necessary.

21. Tenure of the Committee.— (1) The Committee shall have a tenure of three years and the tenure of Chairperson and Members shall be co-terminus with the tenure of the Committee.

(2) The Chairperson and Members of the Committee shall be eligible for appointment for a maximum of two consecutive terms.

(3) Extension of the tenure of members of the Committee shall be on the basis of their performance appraisal by the District Child Protection Unit or the State Government and on the recommendation of the Selection Committee.

(4) With a view to ensuring continuity on completion of the tenure of a Committee, the State Government shall constitute a new Committee before the expiry of the term of the existing Committee; where after the existing Committee shall handover all records and information to the newly formed Committee.

(5) The Chairperson and Members may resign at any time by giving one month's notice in writing or may be removed from office as provided in sub-section (4) of section 29 of the Act.

(6) Any casual vacancy in the Committee may be filled by appointment of another person from the panel of names prepared by the Selection Committee, and shall hold office for the remaining term of the Committee.

22. Qualifications for Chairperson and Members of the Committee.— (1) A person to be selected as a Chairperson or Member of the Committee shall have either of the following qualifications, in addition to a minimum of seven years experience in their respective field:

(i) a person with post graduate degree in social work, psychology, child development, education, sociology, law, criminology and, where such a person is not available, a person with at least a graduate degree in any of the social science disciplines;

(ii) a teacher, doctor or a social worker who has been involved in work concerning children.

(2) The Chairperson or Member of the Committee shall be a person not less than 35 years of age.

(3) No person shall be considered for Selection as a Chairperson or Member of the Committee, if he,-

(i) has a previous conviction record;

(ii) has been involved in any immoral act or in an act of child abuse or employment of child labour;

(iii) is holding such full-time occupation that may not allow him to give necessary time and attention to the work of the Committee as per the Act and these rules;

(iv) does not fulfill the qualification and experience prescribed in the Act and the rules made thereunder, and in such a case the Selection Committee shall after due inquiry and on establishment of such fact, reject his application and recommend the name of the next person from the list of names prepared for filling the vacancies.

23. Sitting and conveyance allowances.— The Chairperson and Members of the Committee shall be paid such travel and sitting allowance, as the State Government may determine, but it shall not be less than rupees five hundred per sitting per member.

24. Sitting of the Committee.— (1) The Committee shall hold its sittings in the premises of the children's home or, at a place in proximity to the children's home or, at a suitable premise in any institution run under the Act.

(2) On receiving information about child or children in need of care and protection, if circumstances are such that the child or children cannot be produced before the Committee, the Committee may move out to reach the child or children and hold its sitting at a place that is convenient for such child or children.

(3) The premises where the Committee holds its sittings shall be child-friendly and shall not look like a court room in any manner whatsoever; for example, the Committee shall not sit on a raised platform and the sitting arrangement shall be uniform and there shall be no witness boxes.

(4) The Committee shall meet a minimum of three days a week, which may be extended by the State Government depending on case and pendency of work.

(5) A minimum of three-fourth attendance of the Chairperson and Members of the Committee is necessary in a year.

(6) The duration of a sitting is dependent on the pendency of work before the Committee.

(7) Every member of the Committee shall attend a minimum of four hours per sitting.

25. Functions and Powers of the Committee.— The Committee shall perform the following functions to achieve the objectives of the Act, namely:-

- (a) take cognizance of and receive children produced before the Committee;
- (b) decide on the matters brought before the Committee;
- (c) reach out to such children in need of care and protection who are not in a position to be produced before the Committee, being in difficult circumstances, with support from the District Child Protection Unit or State Child Protection Unit or the State Government;
- (d) conduct necessary inquiry on all issues relating to and affecting the safety and well being of the child;
- (e) direct the Child Welfare Officers or Probation Officers or non-governmental organisations to conduct social inquiry and submit a report to the Committee;
- (f) ensure necessary care and protection, including immediate shelter;
- (g) ensure appropriate rehabilitation and restoration, including passing necessary directions to parents or guardians or fit persons or fit institutions in this regard, in addition to follow-up and coordination with District Child Protection Unit or State Adoption Resource Agency and other agencies;

- (h) direct the Officer-in-charge of children's homes to receive children requiring shelter and care;
- (i) document and maintain detailed case record along with a case summary of every case dealt by the Committee;
- (j) provide a child-friendly environment for children;
- (k) recommend 'fit institutions' to the State Government for the care and protection of children;
- (l) declare 'fit persons';
- (m) declare a child legally free for adoption;
- (n) keep information about and take necessary follow-up action in respect of missing children in their jurisdiction;
- (o) maintain liaison with the Board in respect of cases needing care and protection;
- (p) visit each institution where children are sent for care and protection or adoption at least once in three months to review the condition of children in institutions, with support of the State Government and suggest necessary action;
- (q) monitor associations and agencies within their jurisdiction that deal with children in order to check on the exploitation and abuse of children;
- (r) co-ordinate with the Police, Labour Department and other agencies involved in the care and protection of children with the support of District Child Protection Unit or State Child Protection Unit or State Government;
- (s) liaison and network with the corporate sector and non-governmental organisations for any of the above, including for social inquiry, restoration and rehabilitation, as and when required; and
- (t) maintain a suggestion box to encourage inputs from children and adults alike and take necessary action.

26. Procedure in relation to Committee.— (1) The quorum for the meeting shall be three members attending, which may include the Chairperson.

(2) Any decision taken by an individual member, when the Committee is not sitting, shall require ratification by the Committee in its next sitting.

(3) The Committee shall take into consideration the age, developmental stage, physical and mental health, opinion of the child and the recommendation of the child welfare officer or caseworker, prior to disposal of cases.

(4) For final disposal of a case, the order of the Committee shall be signed by at least two members, including the Chairperson.

27. Production of a Child before the Committee.— (1) A child in need of care and protection shall be produced before the Committee within twenty-four hours, excluding journey time, by one of the following persons-

- (a) any police officer or Special Juvenile Police Unit or a designated police officer;
- (b) any public servant;
- (c) childline, a registered voluntary organization or by such other voluntary organization or an agency as may be recognized by the State Government;

- (d) social worker;
- (e) any public spirited citizen; or
- (f) by the child himself.

(2) In case of a child under two years of age, who is medically unfit, the person or the organization shall send a written report along with the photograph of the child to the Committee within twenty-four hours and produce the child before the Committee as soon as the child is medically fit along with a medical certificate to that effect.

(3) The Committee can *suo motu* take cognizance of cases brought to their notice and reach out to a child in need of care and protection where necessary and the District or the State Child Protection Unit or the State Government shall provide necessary support and assistance to the Committee for carrying out such functions.

(4) In case the Committee is not sitting, the child may be produced before the single member of the Committee as per the provisions laid down under the sub-section (2) of section 30 of the Act for being placed in safe custody of parent or guardian or fit person or fit institutions, as the case may be, till such time that the child can be produced before the Committee.

(5) In case the single member is also not accessible, or that the hours are odd, the child shall be taken by an non-governmental organisation or Childline or Police to an appropriate institution for children registered under the Act with all the necessary documents, and placed in such institution till the time of production before the Committee.

(6) The concerned institution shall inform the Chairperson or a member of the Committee about such child and produce the child before the Committee within twenty four hours and in such cases, it may not be necessary for the person who brings a child in need of care and protection to an institution to be present at the time of production of the child before the Committee.

(7) Whoever produces a child before the Committee shall submit a report on the circumstances under which the child came to their notice and efforts made by them on informing the police and the missing persons squad and in cases where a recognized voluntary organization or any police personnel produce a child before the Committee, they shall also submit a report on the efforts made by them for tracing the family of the child.

(8) Any general medical or gynecological examination of children shall not be a pre-requisite for production of the child before the Committee or admission in an institution.

(9) The Committee shall facilitate the filing of a police complaint and First Information Report in cases of missing children as well as matters of violence, exploitation and abuse of children and arrange for required legal aid through the Legal Officer in the District Child Protection Unit or District or State Legal Aid Services Authority or voluntary organisations.

(10) Each Committee shall send quarterly information about children in need of care and protection received by them to the District or State Child Protection Unit or State Government.

(11) Children shall be provided a child-friendly environment during the proceedings of the Committee.

(12) The Committee shall have an empanelled list of lawyers, social workers and mental health expert who may assist the Committee in dealing with cases of abused children and who may also interface with the Public Prosecutor or Assistant Public Prosecutor to facilitate legal services to the abused children, when the cases relating to such children are taken up in regular criminal courts.

(13) Every possible effort shall be made to trace the family with support from the District Child Protection Unit, and assistance of recognized voluntary organizations, childline or police may also be taken.

(14) The Committee shall send the child to the designated place of safety, with age and gender appropriate facilities, pending inquiry and in such eventuality, the District Child Protection Unit or State Child Protection Unit or State Government shall provide transport or make necessary budgetary allocations for such expenses based on the actual fare.

(15) The child may be escorted by the police officer or representative of the voluntary organization or by any other arrangement as considered appropriate by the Committee with support from the District Child Protection Unit and in case of a girl child, a female escort shall accompany the child.

(16) A list of all recognized child care institutions along with their capacity and appropriate facilities as prescribed under section 34 of the Act, a list of all child related resource services and a list of contact details of all Child Welfare Committees across the country shall be provided to the Committee by the District Child Protection Unit or State Government.

(17) The Committee may, while making an order in **Form VIII** placing a child under the care of a parent, guardian or fit person pending inquiry or at the time of restoration, as the case may be, direct such parent, guardian or fit person to enter into an undertaking in **Form IX**.

(18) Whenever the Committee orders a child to be kept in an institution, it shall forward to the Officer-in-charge of such institution a copy of the order of short term placement pending inquiry, in **Form X** with particulars of the home and parents or guardian and previous record.

(19) Whenever the Committee orders a child to be kept in a fit institution as part of restoration under clause (f) of sub- section (3) of section 39 of the Act, it shall forward a copy of its order of restoration in **Form XI** to the Officer-in-charge of such institution.

(20) The child shall be placed in an institution closest to where his parents or guardians belong as far as possible, unless the child has been subjected to abuse or exploitation by parents or guardians.

28. Procedure for inquiry.— (1) When a child is brought before the Committee, the Committee shall assign the case to a social worker or caseworker or child welfare officer or

Officer-in-charge as the case may be, of the institution or any recognized agency for conducting the inquiry through an order in **Form-XII**.

(2) The Committee shall direct the concerned person or organization about the details or particulars to be enquired into for developing an individual care plan and suitable rehabilitation.

(3) All inquiries conducted by a social worker or caseworker or child welfare officer or Officer-in-charge of the institution or any recognized agency shall be as per **Form-XIII** and must provide an assessment of the family situation of the child in detail, and explain in writing whether it will be in the best interest of the child to restore him to his family.

(4) The inquiry must be completed within four months or within such shorter period as may be fixed by the Committee:

Provided that the Committee may, in the best interest of the child and for the reasons to be recorded in writing, extend the said period under special circumstances.

(5) After completion of the inquiry, if, the child is under orders to continue in the children's home, the Committee shall direct the Officer-in-charge of the home to submit quarterly progress report of such child and produce the child before the Committee for an annual review of the progress.

29. Children's Homes.— (1) The State Government itself or in association with voluntary organizations, shall set up separate homes for children in need of care and protection, in the manner specified below-

- (a) all children's homes shall be registered as child care institutions under sub-section (3) of section 34 of the Act and rule 71 of these rules;
- (b) all children's homes shall be certified as per the procedure laid down in rule 70;
- (c) all children's homes shall report to the concerned Committee about every child in need of care and protection received by them;
- (d) children of both sexes below ten years may be kept in the same home but separate facilities shall be maintained for boys and girls in the age group 5 to 10 years;
- (e) every children's home shall include separate facilities for children in the age group of 0-5 years with appropriate facilities for the infants;
- (f) separate children's homes shall be set up for boys and girls in the age group 10 to 18 years;
- (g) children in the age group of 10 to 18 shall be further segregated into two groups of 10 to 15 years and 15 to 18 years.

(2) Each children home shall be a comprehensive child care center with the primary objective to promote an integrated approach to child care by involving the community and local Non-Governmental Organisations through the Management Committee set up under rule 55 of these rules and the District Child Protection Unit or State Child Protection Unit or the State Government shall make an annual performance review of functioning of the children's homes.

(3) The activities of such centre shall focus on:

- (a) preparing and following individual care plans for every child, with rights based approach, specifically addressing the child's physical and mental health, emotional needs, education, skill development, protection and special needs if any;
- (b) family based non-institutional services, such as, foster family care, adoption and sponsorship;
- (c) specialized services in situations of conflict or disaster and for juvenile or children affected by terminal or incurable disease to prevent neglect by providing family counselling, nutrition, health interventions, psycho-social interventions and sponsorship;
- (d) emergency outreach service through childline (Toll free Help Line No. 1098);
- (e) linkages with Integrated Child Development Services to cater to the needs of children below six years;
- (f) linkages with organizations and individuals who can provide support services to children; and
- (g) opportunities to volunteers willing to provide various services for children.

30. Shelter Homes.— (1) For children in urgent need of care and protection, such as street children and run-away children, the State Government shall support creation of requisite number of shelter homes or drop-in- centres through the voluntary organizations.

(2) Shelter homes shall include:

- (g) short-stay homes for children needing temporary shelter, care and protection for a maximum period of one year,
- (h) transitional homes providing immediate care and protection to a child for a maximum period of four months,
- (i) 24 hour drop-in-centres for children needing day care or night shelter facility.

(3) The shelter homes or drop-in-centres shall have the minimum facilities of boarding and lodging, besides the provision for fulfillment of basic needs in terms of clothing, food, health care and nutrition, safe drinking water and sanitation.

(4) There shall be separate shelter homes for girls and boys as per rule 40(2)(d) of these rules.

(5) All shelter homes shall provide requisite facilities for education, vocational training, counselling and recreation or make arrangements for it in collaboration with voluntary organizations or corporate sector.

(6) The Committee, Special Juvenile Police Units, public servants, Childlines, voluntary organizations, social workers and the children themselves may refer a child to such shelter homes.

(7) All shelter homes shall submit a report of children using the shelter home facility along with a photograph of the child to the Committee, the missing persons bureau or special juvenile police unit and the District Child Protection Unit or the State Child Protection Unit.

(8) The requirements of producing a child received by a shelter home before the Committee, inquiry and disposal under sections 32, 33, 38 and 39 of the Act shall apply only to shelter homes other than drop-in-centres as specified in rule 30(2)(c) of these rules.

(9) The services of Officer-in-charge, child welfare officer, social worker shall be provided for the proper care, protection, development, rehabilitation and reintegration needs of children in shelter homes.

(10) No child shall ordinarily stay in a short stay home for more than a year except in special circumstances with the approval of the Committee.

31. Guidelines for prevention of sexual abuse of children.— The Central Government, State Government, the Juvenile Justice Board, the Child Welfare Committee, other competent authorities and agencies shall, in the best interest of children, ensure that every person, school or such other educational institutions abide by the guidelines issued from time to time by Central Government and State Government.

CHAPTER V

REHABILITATION AND SOCIAL REINTEGRATION

32. Rehabilitation and Social Reintegration.— The primary aim of rehabilitation and social reintegration is to help children in restoring their dignity and self-worth and mainstream them through rehabilitation within the family where possible, or otherwise through alternate care programmes and long-term institutional care shall be of last resort.

33. Adoption.— (1) The primary aim of adoption is to provide a child who cannot be cared for by his biological parents with a permanent substitute family.

(1) For all matters relating to adoption, the guidelines issued by the Central Adoption Resource Agency and notified by the Central Government under sub-section (3) of section 41 of the Act, shall apply.

(3) In case of orphaned and abandoned children the following procedure shall apply, namely:-

- (a) Specialized Adoption Agencies shall produce all orphaned and abandoned children who are to be declared legally free for adoption before the Committee within twenty-four hours of receiving such children, excluding the time taken for journey;
- (b) a child becomes eligible for adoption when the Committee has completed its inquiry and declares the child legally free for adoption;
- (c) such declaration shall be made in **Form XIV**;

- (d) a child must be produced before the Committee at the time of declaring such child legally free for adoption;
- (e) whenever intimation is received by the police about an abandoned infant, the police shall take charge of the infant and arrange to provide immediate medical assistance and care;
- (f) subsequently, the child shall be placed in a specialized adoption agency or recognized and certified children's home or in a pediatric unit of a Government hospital followed by production of the child before the Committee within twenty-four hours;
- (g) procedure for declaring a child abandoned and certifying him legally free for adoption:

- (i) in case of an abandoned child, the recognized agency shall within twenty four hours, report and produce the child before the Committee with the copy of the report filed with the police station in whose jurisdiction the child was found abandoned;
- (ii) the Committee will institute a process of inquiry, which shall include a thorough inquiry conducted by the Probation Officer or Child Welfare Officer, as the case may be and who shall give report in **Form XIII** to the Committee containing the findings within one month;
- (iii) there shall be a declaration by the specialized adoption agency, stating that there has been no claimant for the child even after making notification in at least one leading national newspaper and one regional language newspaper for children below two years of age and for children above two years, an additional television or radio announcement and notification to the missing persons squad or bureau shall be made;
- (iv) the steps stated in (iii) shall be taken within a period of sixty days from the time when the child is found in case of a child below two years of age and in case of children above two years of age, this period shall be four months;
- (v) the period of notification shall run concurrently with the inquiry to be conducted and report submitted under clause (ii) of this sub-rule;
- (vi) the Committee shall declare the child legally free for adoption on completion of the process of inquiry, including declaration of the specialized adoption agency made under clauses (ii) and (iii) of this sub-rule;
- (vii) no child above seven years who can understand and express his opinion shall be declared free for adoption without his consent.

(4) In case of surrendered children the following procedure shall apply, namely:-

(a) a surrendered child is one who had been declared as such after due process of inquiry by the Committee and in order to be declared legally free for adoption, a 'surrendered' child shall be any of the following:

- (i) born as a consequence of non-consensual relationship;
- (ii) born of an unwed mother or out of wedlock;
- (iii) a child in whose case one of the biological parents is dead and the living parent is incapacitated to take care;

- (iv) a child where the parents or guardians are compelled to relinquish him due to physical, emotional and social factors beyond their control;
 - (b) serious efforts shall be made by the Committee for counselling the parents, explaining the consequences of adoption and exploring the possibilities of parents retaining the child and if, the parents are unwilling to retain, then, such children shall be kept initially in foster care or arranged for their sponsorship;
 - (c) if the surrender is inevitable, a deed of surrender in **Form XV** shall be executed on a non-judicial stamp paper in the presence of the Committee;
 - (d) the adoption agencies shall wait for completion of two months reconsideration time given to the biological parent or parents after surrender;
 - (e) in case of a child surrendered by his biological parent or parents, the document of surrender shall be executed by the parent or parents before the Committee;
 - (f) after due inquiry, the Committee shall declare the surrendered child legally free for adoption in **Form XIII** as the case may be after a sixty days' reconsideration period as per Central Adoption Resource Agency guidelines.
- (5) For the purposes of section 41 of the Act, 'court' implies a civil court, which has jurisdiction in matters of adoption and guardianship and may include the court of the district judge, family courts and city civil court.

34. Foster Care.— (1) For children who cannot be placed in adoption, order shall be issued by the competent authority in **Form XVII** for carrying out foster care, as given in sub-section (2) of section 42 of the Act and rule 35 (1) of these rules, under the supervision of a probation officer or case worker or social worker, as the case may be, and the period of foster care shall depend on the need of the child.

(2) Every State Government shall design its own foster care programme so as to reduce institutionalization of children and enable a nurturing family environment for every child.

(3) The State Government shall consult the Boards or Committees, non-governmental organisations, academicians and organisations working on alternative care for children in developing the foster care programme.

35. Criteria for selection of families for foster care.— (1) In case of the children covered under rule 34 of these rules, the following criteria shall apply for selection of families for foster care, namely:-

- (i) foster parents should have stable emotional adjustment within the family;
- (ii) foster parents should have an income in which they are able to meet the needs of the child and are not dependent on the foster care maintenance payment;
- (iii) the monthly family income shall be adequate to take care of foster children and approved by the Committee;
- (iv) medical reports of all the members of the family residing in the premises should be obtained including checks on Human Immuno Deficiency Virus (HIV), Tuberculosis (TB) and Hepatitis B to determine that they are medically fit;

- (v) the foster parents should have experience in child caring and the capacity to provide good child care;
- (vi) the foster parents should be physically, mentally and emotionally stable;
- (vii) the home should have adequate space and basic facilities;
- (viii) the foster care family should be willing to follow rules laid down including regular visits to pediatrician, maintenance of child health and their records;
- (ix) the family should be willing to sign an agreement and to return the child to the specialized adoption agency whenever called to do so;
- (x) the foster parents should be willing to attend training or orientation programmes; and
- (xi) the foster parents should be willing to take the child for regular (at least once a month in the case of infants) checkups to a pediatrician approved by the agency.

(2) There shall be no discrimination in selection of foster-parents on the basis of caste, religion, ethnic status, disability, or health status and the best interest of the child shall be paramount in deciding foster-care placement.

(3) The foster parents shall be declared 'fit persons' by the Committee before placing the child as per the provisions laid down in clause (i) of section 2 of the Act after thorough assessment done by the Child Welfare Officer or Social Worker as per **Form XVI**.

36. Pre-adoption Foster Care.— In case of pre-adoption foster care, the provisions contained in sub-section (1) of section 42 and the corresponding guidelines notified under sub-section (3) of section 41 of the Act, shall apply.

37. Sponsorship.— (1) The State Government shall prepare sponsorship programme in consultation with the Non Governmental Organisations, Child Welfare Committees, other relevant government agencies and the corporate sector.

(2) The State Government, with the help of District or State Child Protection Units shall identify families and children at risk and provide necessary support services in the form of sponsorship for child's education, health, nutrition and other developmental needs.

(3) The children's homes and special homes shall promote sponsorship programmes as laid down in section 43 of the Act.

(4) The institutions receiving sponsorship, shall maintain proper and separate accounts of all the receipts and payments for the programme.

(5) The Board or the Committee shall make an order in **Form XVIII** for support to a juvenile or child through sponsorship and send a copy to the District or State Child Protection Unit or the State Government for appropriate action

38. After Care Organisation.— (1) The State Government shall set up an after care programme for care of juveniles or children after they leave special homes and children's homes with the objective to facilitate their transition from an institution-based life to mainstream society for social re-integration.

(2) After care programmes shall be made available for 18-21 year old persons, who have no place to go to or are unable to support themselves, by the District or State Child Protection Units in collaboration with voluntary organizations for the purpose of section 44 of the Act and this rule.

(3) Once the Board or the Committee passes an order in **Form XIX** for placing a juvenile or a child completing 18 years of age under the after care programme, a copy of such order shall be sent to the District and the State Child Protection Unit and the State Government, who shall be responsible for arranging after care.

(4) The Board or the Committee shall have jurisdiction over persons placed in after care programme.

(5) The objective of these organisations shall be to enable such children to adapt to the society and during their stay in these transitional homes these children will be encouraged to move away from an institution-based life to a normal one.

(6) The key components of the programme shall include:-

- (a) community group housing on a temporary basis for groups of young persons aged 18-21 years;
- (b) encouragement to learn a vocation or gain employment and contribute towards the rent as well as the running of the home;
- (c) encouragement to gradually sustain themselves without state support and move out of the group home to stay in a place of their own after saving sufficient amount through their earnings;
- (d) provision for a peer counsellor to stay in regular contact with these groups to discuss their rehabilitation plans and provide creative outlets for their energy and to tide over crisis periods in their life.

(7) During the course of vocational training a stipend may be provided till such time that the youth gets employment.

(8) Loans may be arranged for the youth in an after care programme aspiring to set up entrepreneurial activities on the basis of an application made by them and due verification of the need for such a loan, and necessary professional advice and training shall be made available to the youth in the after care programme in this regard.

(9) The structure shall include 6 to 8 youths in each group home who may opt to stay together on their own and one peer counsellor for a cluster of five group homes.

39. Linkages and co-ordination.— (1) The State Government shall circulate a copy of the Act and the rules framed thereunder to establish effective linkages between various government, non-government, corporate and other community agencies for facilitating the rehabilitation and

social reintegration of juveniles or children through the Board or the Committee as the case may be.

(2) The State Government with the help of State or District Child Protection Unit shall identify the roles and responsibilities of each department at State or district levels for effective implementation of the Act and the rules and inform them through a notification.

(3) The State Government with the help of State or District Child Protection Unit shall arrange for appropriate training and sensitization of functionaries of these departments from time to time in coordination with National Institute of Public Cooperation and Child Development and its Regional Centres.

(4) The State Government with the help of State or District Child Protection Unit shall develop effective networking and linkages with local non-governmental organisations for specialized services and technical assistance like vocational training, education, health care, nutrition, mental health intervention, drug de-addiction and legal aid services.

CHAPTER VI

STANDARDS OF CARE FOR INSTITUTIONS

40. Physical infrastructure.— (1) The homes for juveniles in conflict with law and children in need of care and protection shall function from separate premises.

(2) The accommodation in each institution shall be as per the following criteria, namely:-

(a) Observation Home:

- (i) Separate observation homes for girls and boys;
- (ii) Classification and segregation of juveniles according to their age group preferably 7-11 years, 12-16 years and 16-18 years, giving due consideration to physical and mental status and the nature of the offence committed.

(b) Special Home:

- (i) Separate special homes for girls above the age of 10 years and boys in the age groups of 11 to 15 and 16 to 18 years;
- (ii) Classification and segregation of juveniles on the basis of age and nature of offences and their mental and physical status

(c) Children's Home:

- (i) While children of both sexes below 10 years can be kept in the same home, separate bathing and sleeping facilities shall be maintained for boys and girls in the age group of 5-10 years;

- (ii) Separate children's homes for boys and girls in the age group of 7-11 and 12- 18 years;
- (iii) Separate facilities for children in the age group of 0-5 years with appropriate facilities for infants.

(d) Shelter Home:

- (i) Separate shelter homes for girls and boys;
- (ii) Separate shelter homes for girls above the age of 10 years and boys in the age groups of 11 to 15 and 16 to 18 years.

(3) The norms for building or accommodation for an institution with 50 juveniles or children shall be as under:

(i)	2 Dormitories	Each 1000 Sq. ft. for 25 juveniles/children i.e. 2000 Sq. ft.
(ii)	2 Classrooms	300 Sq. ft. for 25 juveniles/children i.e. 600 Sq. ft.
(iii)	Sickroom/First aid room	75 Sq. ft. per juvenile/children for 10 i.e. 750 Sq. ft.
(iv)	Kitchen	250 Sq. ft.
(v)	Dining Hall	800 Sq. ft.
(vi)	Store	250 Sq. ft.
(vii)	Recreation room	300 Sq. ft.
(viii)	Library	500 Sq. ft.
(ix)	5 bathrooms	25 Sq. ft. each i.e. 125 Sq. ft.
(x)	8 toilets/latrines	25 Sq. ft. each i.e. 200 Sq. ft.
(xi)	Office rooms	(a) 300 Sq. ft. (b) Superintendent's room 200 sq. fit
(xii)	Counselling and guidance room	120 Sq. ft.
(xiii)	Workshop	1125 Sq. ft. for 15 juvenile @75 Sq. ft. per trainee
(xiv)	Residence for Superintendent	(a) 2 rooms of 250 Sq. ft. each (b) kitchen 75 Sq. ft. (c) bathroom cum Toilet/latrine 50 Sq. ft
(xv)	2 Rooms for Juvenile Justice Board/Child Welfare Committee	300 Sq. ft. each i.e. 600 Sq. ft.
(xvi)	Play ground	Sufficient area according to the total number of juveniles or children
	Total	8495 Sq. ft.

(4) The Superintendent shall stay within the institution and be provided with quarters and in case he is not able to stay in the home for legitimate reasons (to be permitted by Director, Child Protection), any other senior staff member of the institution shall stay in the institution and be in a position to supervise the overall care of the children or juveniles and, take decisions in the case of any crisis and emergency.

(5) (i) the standards of accommodation as per the norms laid down in rule 40(2) shall be observed to the extent possible and shall include a minimum of following facilities

:

- (a) Dormitory: 40 Sq. ft. per juvenile or child
- (b) Classroom: 300 Sq. ft for 25 juvenile or child
- (c) Workshop: 75 Sq. ft. per juvenile or child
- (d) Play ground: Sufficient play ground area shall be provided in every institution according to the total number of juveniles in institution

(ii) there shall be proper and smooth flooring for preventing accidents.

(iii) there shall be adequate lighting, ventilation, heating and cooling arrangements, safe drinking water and clean toilets, in terms of gender, age appropriateness and accessibility.

- (iv) all institutions under the Act shall make provision of first aid kit, fire extinguishers in kitchen, dormitories, store rooms, counselling room, periodic review of electrical installations, proper storage and inspection of articles of food stuffs, stand-by arrangements for water storage and emergency lighting.

(6) The Observation homes and special homes shall be child-friendly and in no way shall they look like a jail or lock-up.

41. Clothing and Bedding.— The clothing and bedding shall be as per the scale and climatic conditions. The requirements of each juvenile or child and the minimum standards for clothing and bedding are laid down in Schedule-I of these rules.

42. Sanitation and Hygiene.— Every institution shall have the following facilities, namely:-

- (a) sufficient treated drinking water; water filters shall be installed;
- (b) sufficient water for bathing and washing clothes, maintenance and cleanliness of the premises;
- (c) proper drainage system;
- (d) arrangements for disposal of garbage;
- (e) protection from mosquitoes by providing mosquito nets;
- (f) annual pest control;
- (g) sufficient number of well lit and airy toilets in the proportion of at least one toilet for seven children;
- (h) sufficient number of well lit and airy bathrooms in the proportion of at least one bath room for ten children;
- (i) sufficient space for washing;
- (j) clean and fly-proof kitchen and separate area for washing utensils;
- (k) sunning of bedding and clothing;
- (l) maintenance of cleanliness in the Medical Centre.

43. Daily Routine.— (1) Every institution shall have a daily routine for the juveniles or children developed in consultation with the Children's Committees, which shall be prominently displayed at various places within the institution.

(2) The daily routine shall provide, *inter alia*, for a regulated and disciplined life, personal hygiene and cleanliness, physical exercise, yoga, educational classes, vocational training, organized recreation and games, moral education, group activities, prayer and community singing and special programmes for sundays and holidays.

44. Nutrition and Diet Scale.— The following nutrition and diet scale shall be followed by the institutions, namely:-

- (a) the children shall be provided four meals in a day including breakfast;

- (b) the menu shall be prepared with the help of a nutritional expert or doctor to ensure balanced diet and variety in taste as per the minimum nutritional standard and diet scale set out in Schedule II of these rules;
- (c) every institution under this Act shall strictly adhere to the minimum nutritional standard and diet scale specified in Schedule II;
- (d) juveniles or children may be provided special meals on holidays and festivals;
- (e) infants and sick juveniles or children shall be provided special diet according to the advise of the doctor on their dietary requirement.

45. Medical Care.— Every institution shall:

- (a) maintain a medical record of each juvenile or child on the basis of monthly medical check-up and provide necessary medical facilities;
- (b) ensure that the medical record includes weight and height record, any sickness and treatment, and other physical or mental problem;
- (c) have arrangement for the medical facilities, including a doctor on call available on all working days for regular medical check-ups and treatment of juveniles or children;
- (d) have sufficient medical equipments to handle minor health problems including first aid kit with stock of emergency medicines and consumables;
- (e) train all staff in handling first aid;
- (f) tie-up with local Primary Health Centre, government hospital, medical colleges, other hospitals, clinical psychologists and psychiatrists and mental health institutes for regular visits by their doctors and students and for holding periodic health camps within the institutions;
- (g) make necessary arrangements made for the immunization coverage;
- (h) take preventive measures in the event of out break of contagious or infectious diseases;
- (i) set up a system for referral of cases with deteriorating health or serious cases to the nearest civil hospital or recognised treatment centres;
- (j) keep sick children under constant medical supervision;
- (k) admit a juvenile or child without insisting on a medical certificate at the time of admission;
- (l) arrange for a medical examination of each juvenile or child admitted in an institution by the Medical Officer within twenty four hours and in special cases or medical emergencies immediately;
- (m) arrange for a medical examination of the juvenile or child by the Medical Officer at the time of transfer within twenty four hours before transfer;
- (n) not carry out any surgical treatment on any juvenile or child without the previous consent of his parent or guardian, unless either the parent or guardian cannot be found and the condition of the juvenile or child is such that any delay shall, in the opinion of the medical officer, involve unnecessary suffering or injury to the health of the juvenile or child, or otherwise without obtaining a written consent to this effect from the Officer-in-charge of the institution;
- (o) provide or arrange for regular counselling of every juvenile or child and ensure specific mental health interventions for those in need of such services,

including separate rooms for counselling sessions within the premises of the institution;

(p) refer such children who require specialized drug abuse prevention and rehabilitation programme, to an appropriate centre administered by qualified personnel where these programmes shall be adopted to the age, gender and other specifications of the concerned child.

46. Mental Health.— (1) A mental health record of every juvenile or child shall be maintained by the concerned institutions.

(2) Both milieu based interventions that is creating an enabling environment for children and individual therapy are must for every child and shall be provided in all institutions.

Explanation.— For the purpose of this sub-rule, milieu based intervention is a process of recovery, which starts through providing an enabling culture and environment in an institution so as to ensure that each child's abilities are discovered and they have choices and right to take to decisions regarding their life and thus, they develop and identify beyond their negative experiences and such intervention has a critical emotional impact on the child.

(3) The environment in an institution shall be free from abuse, allowing juveniles or children to cope with their situation and regain confidence.

(4) All persons involved in taking care of the juveniles or children in an institution shall participate in facilitating an enabling environment and work in collaboration with the therapists.

(5) Individual therapy is a specialized process and each institution shall make provisions for it as a critical mental health intervention.

(6) Every institution shall have the services of trained counselors or collaboration with external agencies such as child guidance centres, psychology and psychiatric departments or similar government and non-governmental agencies, for specialized and regular individual therapy for every juvenile or child in the institution.

(7) A mental health care plan shall be developed for every juvenile or child by the child welfare officers in consultation with mental health experts associated with the institution and integrated into the individual care plan of the concerned juvenile or child.

(8) The recommendations of mental health experts shall be maintained in every case file and integrated into the care plan for every child.

(9) All care plans shall be produced before the Management Committee set up under rule 55 of these rules every month and before the Child Welfare Committee every quarter.

(10) No juvenile or child shall be administered medication for mental health problems without a psychological evaluation and diagnosis by appropriately trained mental health professionals.

47. Education.— (1) Every institution shall provide education to all juveniles or children according to the age and ability, both inside the institution or outside, as per the requirement.

(2) There shall be a range of educational opportunities including, mainstream inclusive schools, bridge school, open schooling, non formal education and learning and input from special educators where needed.

(3) Wherever necessary, extra coaching shall be made available to school going children in the institutions by encouraging volunteer services or tying up with coaching centers.

48. Vocational Training.— (a) Every institution shall provide gainful vocational training to juveniles or children.

(b) The institutions shall develop networking with Institute of Technical Instruction, Jan Shikshan Sansthan, Government and Private Organization or Enterprises, Agencies or non-governmental organisations with expertise or placement agencies.

49. Recreation facilities.— (1) A provision of guided recreation shall be made available to all juveniles or children in the institutions.

(2) It shall include indoor and outdoor games, music, television, picnics and outings, cultural programmes and library.

50. Institutional Management of juveniles or children.— (1) The following procedure shall be followed in respect of the newly admitted juveniles:

- (a) receiving and search;
 - (b) disinfection and storing of juvenile's personal belongings and other valuables;
 - (c) bath and haircut (unless prohibited by religion);
 - (d) issue of toiletry items; new set of clothes, bedding and other outfit and equipment (as per scales);
 - (e) medical examination and treatment where necessary and in case of every juvenile suspected to be suffering from contagious or infectious diseases, mental ailments or addiction;
 - (f) segregation in specially earmarked dormitories or wards or hospitals in case of a child suffering from contagious disease requiring special care and caution;
 - (g) attending to immediate and urgent needs of the juveniles like appearing in examinations, interview letter to parents, personal problems and verification by the Officer-in-charge of age of juvenile as per order of the Board.
- (2) Every newly admitted juvenile or child shall be allotted a case worker from amongst the probation officers or child welfare officers or social workers or counsellors attached to the institutions or voluntary social workers or counsellors.
- (3) Every newly admitted juvenile shall be familiarized with the institution and its functioning and shall receive orientation in the following areas:

- (a) personal health, hygiene and sanitation;
 - (b) institutional discipline and standards of behaviour, respect for elders and teachers;
 - (c) daily routine, peer interaction, optimum use of developmental opportunities; and
 - (d) rights, responsibilities and obligations within the institution.
- (4) The designated officer shall enter the name of the juvenile or child in the Admission Register and allocate appropriate accommodation facility.
- (5) The photograph shall also be taken immediately for records and the case worker or probation officer or welfare officer shall begin the investigation and correspondence with the person, the juvenile or child might have named.
- (6) The Officer-in-charge shall see that the personal belongings of the juvenile or child received by the institution is kept in safe custody and recorded in the Personal Belonging Register and the item must be returned to the juvenile or child when he leaves the institution.
- (7) The girl juvenile or child shall be searched by a female member of the staff, and with due regard to decency and dignity of the juvenile or child.
- (8) The educational level and vocational aptitude of the juvenile admitted, may be assessed on the basis of test and interview conducted by the teacher, the workshop supervisor and other technical staff and necessary linkages may also be established with outside specialists and community-based welfare agencies, psychologist, psychiatrist, child guidance clinic, hospital and local doctors, open school or Jan Sikshan Sansthan.
- (9) A case history of the juvenile or the child admitted to an institution shall be maintained as per **Form XX**, which shall contain information regarding his socio-cultural and economic background and these informations may invariably be collected through all possible and available sources, including home, parents or guardians, employer, school, friends and community.
- (10) A well conceived programme of pre-release planning and follow up of cases discharged from special homes shall be organized in all institutions in close collaboration with existing governmental and voluntary welfare organizations.
- (11) In the event of a juvenile or child leaving the institution without permission or committing an offence within the institution, the information shall be sent by the officer-in-charge of the concerned institution to the police and the family, if known; and the detailed report of circumstances along with the efforts to trace the juvenile or child where the juvenile or child is missing, shall be sent to the Board or Committee, as the case may be.
- (12) An individual care plan for every juvenile or child in institutional care shall be developed with the ultimate aim of the child being rehabilitated and re-integrated based on

their case history, circumstances and individual needs and the individual care plan shall be based on following guidelines:

- (a) the Officer-in-charge, counsellor along with the child welfare officer or case worker, or social worker shall prepare an individual care plan for every child in an institution within one month of his admittance as per **Form XXI**;
- (b) all care plans shall include a plan for the juvenile's or child's restoration, rehabilitation, reintegration and follow-up;
- (c) the care plan shall be reviewed quarterly by the Management Committee set up under rule 55 of these rules for appropriate development and rehabilitation including options for release or restoration to family or foster care or adoption;
- (d) juveniles or children shall be consulted while determining their care plan;
- (e) continuity of care plan shall be ensured in cases of transfer or repatriation or restoration.

51. Prohibited Articles.— No person shall bring into the institution the following prohibited articles, namely:

- (a) fire-arms or other weapons, whether requiring license or not (like knife, blades, lathi, spears and swords);
- (b) alcohol and spirit of any description;
- (c) bhang, ganja, opium or other narcotic or psychotropic substances;
- (d) tobacco; or
- (e) any other article specified in this behalf by the State Government by a general or special order.

52. Articles found on search and inspection.— (1) The Officer-in-Charge shall see that every juvenile received in the institution is searched, his personal belongings inspected and money or any valuables found with the juvenile is kept in the safe custody of the Officer-in-Charge.

(2) The girls shall be searched by a female member of the staff and both the girls and boys shall be searched with due regard to decency and dignity.

(3) In every institution, a record of money, valuables and other articles found with a juvenile shall be maintained in the "Personal Belongings Register".

(4) The entries made in the Personal Belongings Register, relating to each juvenile, shall be read over to juvenile in the presence of a witness, whose signature shall be obtained in token of the correctness of such entries and it shall be countersigned by the Officer-in-Charge.

53. Disposal of articles.— The money or valuables belonging to a juvenile received or retained in an institution shall be disposed of in the following manner, namely:

- (a) on an order made by the competent authority in respect of any juvenile, directing the juvenile to be sent to an institution, the Officer-in-Charge shall deposit such juvenile's money

together with the sale proceeds in the manner laid down from time to time in the name of the juvenile;

(b) the juvenile's money shall be kept with the Officer-in-Charge and valuables, clothing, bedding and other articles, if any, shall be kept in safe custody;

(c) when such juvenile is transferred from one institution to another, all his money, valuables and other articles, shall be sent along with the juvenile to the Officer-in-Charge of the institution to which he has been transferred together with a full and correct statement of the description and estimated value thereof;

(d) at the time of release of such juvenile, the valuables and other articles kept in safe custody and the money deposited in name of the juvenile shall be handed over to the parent or guardian, as the case may be, with an entry made in this behalf in the register and signed by the Officer-in-Charge;

(e) when a juvenile in an institution dies, the valuable and other articles left by the deceased and the money deposited in the name of the juvenile shall be handed over by the Officer-in-Charge to any person who establishes his claim thereto and executes an indemnity bond;

(f) a receipt shall be obtained from such person for having received such valuables and other articles and the amount;

(g) if no claimant appears within a period of six months from the date of death or escape of such juvenile, the valuables and other articles and amount shall be disposed of as per the decision taken by Management Committee set up under rule 55 of these rules.

54. Maintenance of case file.— (1) The case file of each juvenile and child shall be maintained in the institution containing the following information:

- (a) report of the person or agency who produced the juvenile before the Board;
- (b) officer-in-charge's, probation officer's or child welfare officer's, counselor's and case-workers reports;
- (c) information from previous institution;
- (d) report of the initial interaction with the juvenile, information from family members, relatives, community, friends and miscellaneous information;
- (e) source of further information;
- (f) observation reports from staff members;
- (g) regular health status reports from Medical Officer, drug de-addiction progress reports, progress reports *vis-a-vis* psychological counselling or any other mental health intervention, where applicable;
- (h) Intelligence Quotient (I.Q) testing, aptitude testing, educational or vocational tests;
- (i) social history;
- (j) summary and analysis by case-worker and Officer-in-charge;
- (k) instruction regarding training and treatment programme and about special precautions to be taken;

- (l) leave and other privileges granted;
- (m) special achievements and violation of rules, if any, ;
- (n) quarterly progress report;
- (o) individual care plan, including pre-release programme, post release plan and follow-up plan as prescribed in **Form XXI**;
- (p) leave of absence or release under supervision;
- (q) final discharge;
- (r) follow-up reports;
- (s) annual photograph;
- (t) case history duly filled in prescribed **Form XX**;
- (u) follow-up report of post release cases as per direction of the competent authority if any; and
- (v) remarks.

(2) All the case files maintained by the institutions and the Board or Committee shall, as far as possible, be computerised and networked so that the data is centrally available to the State and the District Child Protection Unit and the State Government.

55. Management Committee.— (1) Every institution shall have a Management Committee for the management of the institution and monitoring the progress of every juvenile and child.

(2) In order to ensure proper care and treatment as per the individual care plans, a juvenile or child shall be grouped on the basis of age, nature of offence or kind of care required, physical and mental health and length of stay order.

(3) The Management Committee shall consist of the following personnel:

District Child Protection Officer (District Child Protection Unit)-	Chairperson
Officer-in-charge	- Member-Secretary
Probation Officer or Child Welfare Officer or Case Worker	- Member
Medical Officer	- Member
Psychologist or Counsellor	- Member
Workshop Supervisor or Instructor in Vocation	- Member
Teacher	- Member
Social Worker Member of Juvenile Justice Board or	
Child Welfare Committee	- Member

A juvenile or child representative from each of the Children's Committees (on a monthly rotation basis to ensure representation of juveniles or children from all age groups) - Member

(4) In the districts where District Child Protection Unit is not constituted the District Magistrate or Collector or his nominee shall be the Chairperson of this Committee.

(5) Where voluntary organizations are involved in providing professional and technical services like education, vocational training, psychosocial care, mental health intervention and legal aid,

the Management Committee may invite a representative of such voluntary organizations as a special invitee to the Management Committee meetings.

(6) (a) The Management Committee shall meet every month to consider and review—

- (i) custodial care or care in the institution, housing, area of activity and type of supervision or interventions required;
- (ii) medical facilities and treatment;
- (iii) food, water, sanitation and hygiene conditions;
- (iv) mental health interventions with the juveniles and children;
- (v) individual problems of juveniles and children, provision of legal aid services and institutional adjustment, leading to the quarterly review of individual care plans;
- (vi) vocational training and opportunities for employment;
- (vii) education and life skills development programmes;
- (viii) social adjustment, recreation, group work activities, guidance and counseling;
- (ix) review of progress, adjustment and modification of residential programmes to the needs of the juveniles and children;
- (x) planning post-release or post-restoration rehabilitation programme and follow up for a period of two years in collaboration with aftercare services;
- (xi) pre-release or pre-restoration preparation;
- (xii) release or restoration;
- (xiii) post release or post-restoration follow-up;
- (xiv) minimum standards of care, including infrastructure and services available;
- (xv) daily routine;
- (xvi) community participation and voluntarism in the residential life of children such as education, vocational activities, recreation and hobby;
- (xvii) oversee that all registers as required under the Act and rules are maintained by the institution, check and verify these registers, duly stamped and signed in the monthly review meetings;
- (xviii) matters concerning the Children's Committees;
- (xix) any other matter which the Officer-in-Charge may like to bring up.

(b) The officer-in-charge or child welfare officer shall file a quarterly progress report of every juvenile or child in the case file and send a copy to the District Child Protection Unit and Board or Committee, as the case may be.

(7) The Management Committee shall set up a complaint and redress mechanism in every institution and a Children's Suggestion Box shall be installed in every institution at a place easily accessible to juveniles and children away from the office set up and closer to the residence or rooms or dormitories of the children.

(8) (a) The Children's Suggestion Box, whose key shall remain in the custody of the Chairperson of the Management Committee, shall be checked every week by the Chairperson of the Management Committee or his representative from District Child Protection Unit, in the presence of the members of the Children's Committees.

(b) If there is a problem or suggestion that requires immediate attention, the Chairperson of the Management Committee shall call for an emergency meeting of the Management Committee to discuss and take necessary action.

(c) The quorum for conducting the emergency meetings shall be five members, including two members of Children's Committees, Chairperson of the Management Committee, Member of Committee or the Board as the case may be and the Officer-in-Charge of the institution.

(d) In the event of a serious allegation or complaint against the Officer-in-Charge of the institution, he shall not be part of the emergency meeting and another available member of the Management Committee shall be included in his place.

(e) All suggestions received through the suggestion box and action taken as a result of the decisions made in the emergency meeting or action required to be taken shall be placed for discussion and review in the monthly meeting of the Management Committee.

(9) A Children's Suggestion Book shall be maintained in every institution where the complaints and action taken by the Management Committee are duly recorded and such action and follow up shall be communicated to the Children's Committees after every monthly meeting of the Management Committee.

(10) The Board or Committee shall review the Children's Suggestion Book at least once in three months.

56. Children's Committees.— (1) Officer-in-Charge of every institution for juveniles or children shall facilitate the setting up of Children's Committees for three different age groups of children, viz., 6-10 years, 11-15 years and 16-18 years and these Children's Committees shall be constituted solely by children.

(2) Such Children's Committee shall be encouraged to participate in following activities:

- (a) improvement of the condition of the institution;
- (b) reviewing the standards of care being followed;
- (c) preparing daily routine and diet scale;
- (d) developing educational, vocational and recreation plans;
- (e) supporting each other in managing crisis;
- (f) reporting abuse and exploitation by peers and caregivers;
- (g) creative expression of their views through wall papers or newsletters or paintings or music or theater;
- (h) management of institution through the Management Committee.

(3) The Officer-in-Charge shall ensure that the Children's Committees meet every month and maintain a register for recording its activities and proceedings, and place it before the Management Committee in their monthly meetings.

- (4) The Officer-in-Charge shall ensure that the Children's Committees are provided with essential support and materials including stationary, space and guidance for effective functioning.
- (5) The Officer-in-Charge shall, as far as possible, seek assistance from local voluntary organization or child participation experts for the setting up and functioning of the Children's Committees.
- (6) The local voluntary organization or child participation expert shall support the Children's Committees in the following:
 - (j) selecting their leaders;
 - (k) conducting the monthly meetings;
 - (l) developing rules for the functioning of Children's Committees and following it;
 - (m) maintaining records and Children's Suggestion Book and other relevant documents;
 - (n) any other innovative activity.
- (7) The Management Committee shall seek a report from the Officer-in-Charge on the setting up and functioning of the Children's Committees, review these reports in their monthly meetings and take necessary action where required.

57. Rewards and Earnings.— The rewards to a juvenile or child, at such rates as may be fixed by the management of the institution from time to time, may be granted by the Officer-in-Charge as an encouragement to steady work and good behaviour; and at the time of release, the reward shall be handed over after obtaining a receipt from the parent or the guardian who comes to take charge of the juvenile or child or juvenile or child himself.

58. Visits to and communication with juveniles or children.— (1) The parents and relatives of the juveniles or children shall be allowed to visit once in a month or in special cases, more frequently at the discretion of the Officer-in-Charge as per the visiting hours laid down by him, except where parents or relatives or guardian have been found to be responsible for subjecting the juvenile or child to violence, abuse and exploitation.

(2) The receipt of letters by the juveniles or children of the institution shall not be restricted and they shall have freedom to write as many letters as they like at all reasonable times; and the institution shall ensure that where parents, guardians or relatives are known, at least one letter is written by the juvenile or children every month for which the postage shall be provided by the institution.

(3) The Officer-in-Charge may peruse any letter written by or to the juvenile or children, and may for the reasons that he considers sufficient refuse to deliver or issue the letter and forward it to the Committee after recording his reasons in a book maintained for the purpose.

(4) The Officer-in-Charge shall, in special circumstances or as per orders of the Board or Committee, allow a juvenile or child to make telephonic communication with his parents or guardians or relatives.

59. Death of a juvenile or child.— On the occurrence of any case of death or suicide in an institution the procedure to be adopted shall be as under: -

- (1) In the event of an unnatural death or suicide of a juvenile or child in an institution it is imperative for the institution to ensure that an inquest and post-mortem examination is held at the earliest.
- (2) In case of natural death or due to illness of a juvenile or child, the Officer-in-charge shall obtain a report of the Medical Officer stating the cause of death and a written intimation about the death shall be given immediately to the nearest Police Station, the Board or Committee, the National or State Commission for Protection of Child Rights, District Child Protection Unit or State Child Protection Unit or any other concerned authority and the parents or guardians or relatives of the juvenile or child.
- (3) Whenever a sudden or violent death or death from suicide or accident takes place, immediate information shall be given by the case-worker or probation officer or welfare officer to the Officer-in-Charge and the Medical Officer and the Officer-in-Charge shall immediately inform the nearest police station, Board or Committee and parents or guardians or relatives of the deceased juvenile or child.
- (4) If a juvenile or child dies within twenty four hours of his admission to the institution, the Officer-in-charge of the institution shall report the matter to the officer-in-charge of the Police Station having jurisdiction and the District Medical Officer or the nearest Government Hospital and the parents or guardians or relatives of such juvenile or child without delay.
- (5) The Officer-in-charge shall also immediately give intimation to nearest Magistrate empowered to hold inquests and to the Board or as the case may be the Committee.
- (6) The Officer-in-Charge and the Medical Officer at the institution shall record the circumstances of the death of the child and send a report to the concerned Magistrate, the Officer-in-charge of the police station having jurisdiction, the Committee and the District Medical Officer or the nearest government hospital where the dead body of the juvenile or child is sent for examination, inspection and determination of the cause of death and the Officer-in-charge and the Medical Officer shall also record in writing their views on the cause of the death if any, and submit it to the concerned Magistrate and the Officer-in-charge of the police station having jurisdiction.
- (7) The officer-in-charge and the Medical Officer shall make themselves available for any inquiries initiated by the police or the Magistrate concerning the cause of death and other details regarding such juvenile or child.
- (8) As soon as the inquest is held, the body shall be handed over to the parents or guardian or relatives or, in the absence of any claimant, the last rituals shall be performed under the supervision of the officer-in-charge in accordance with the known religion of the juvenile or child.

60. Abuse and exploitation of the juvenile or child.— (1) Every institution shall have systems of ensuring that there is no abuse, neglect and maltreatment and this shall include the staff being aware of what constitutes abuse, neglect and maltreatment as well as early indicators of abuse, neglect and maltreatment and how to respond to these.

(2) In the event of any physical, sexual or emotional abuse, including neglect of juveniles and children in an institution by those responsible for care and protection, the following action shall be taken:

(i) the incidence of abuse and exploitation must be reported by any staff member of the institution immediately to the Officer-in-Charge on receiving such information;

(ii) when an allegation of physical, sexual or emotional abuse comes to the knowledge of the Officer-in-Charge, a report shall be placed before the Board or Committee, who in turn, shall order for special investigation;

(iii) the Board or Committee shall direct the local police station or Special Juvenile Police Unit to register a case, take due cognizance of such occurrences and conduct necessary investigations;

(iv) the Board or Committee shall take necessary steps to ensure completion of all inquiry and provide legal aid as well as counselling to the juvenile or child victim;

(v) the Board or Committee shall transfer such a juvenile or child to another institution or place of safety or fit person;

(vi) the Officer-in-charge of the institution shall also inform the chairperson of the management committee and place a copy of the report of the incident and subsequent action taken before the management committee in its next meeting;

(vii) in the event of any other crime committed in respect of juveniles or children in institutions, the Board or Committee shall take cognizance and arrange for necessary investigation to be carried out by the local police station or Special Juvenile Police Unit;

(viii) the Board or Committee may consult Children's Committee setup in each institution to enquire into the fact of abuse and exploitation as well as seek assistance from relevant voluntary organizations, child rights experts, mental health experts or crisis intervention centres in dealing with matters of abuse and exploitation of juveniles or children in an institution.

61. Juvenile or Child suffering from dangerous diseases or mental health problems.— (1) When a juvenile or a child placed under the care of a fit person or a fit institution under the provisions of the Act, is found to be suffering from a disease or physical or mental health problems requiring prolonged medical treatment, or is found addicted to a narcotic drug or psychotropic substance, the juvenile or the child may be sent by an order of the competent authority to an appropriate place for such period as may be certified by medical officer to be

necessary for proper treatment of the juvenile or the child or for the remainder of the term for which he has to stay.

(2) When the juvenile or the child is cured of the disease or physical or mental health problems, the competent authority may, if the juvenile or child is still liable to stay, order the juvenile or the child to be placed back in the care of fit person or institution from where the juvenile or child was removed for treatment and if the juvenile or the child is no longer liable to be kept under the care of fit person or institution, the competent authority may order him to be discharged.

(3) The order of restoration of a juvenile or a child suffering from an infectious or contagious disease to his parents or guardian shall be based on the principle of best interest of the juvenile or child, keeping in mind the risk of stigmatization and discrimination and discontinuation of treatment.

(4) Where there is no organization either within the jurisdiction of the competent authority, or nearby District or State for care and protection of juveniles or children suffering from serious psychiatric or physical disorder and infection, as required under section 58 of the Act, necessary organization shall be set up by the State Government at such places, as it may deem fit to cater to the special needs of such juveniles or children.

62. Leave of absence of a juvenile or child.— (1) A juvenile or child in an institution may be allowed to go on leave of absence or released under supervision for examination or admission, special occasions like marriage or emergencies like death or accident or serious illness in the family.

(2) While the leave of absence for short period generally not exceeding seven days excluding the journey time may be recommended by the Officer-in-charge, but granting of such leave shall be by the Board or Committee.

(3) The parents or guardian of the juvenile or the Officer-in-charge on behalf of the juvenile or child may submit an application to the Board or Committee requesting for relieving the juvenile or child on leave, stating clearly the purpose for the leave and the period of leave.

(4) While considering the application of leave of absence, the Board or Committee shall hear the juvenile or child or the parents or guardians of the juvenile or child and if the Board or Committee considers that granting of such leave is in the interest of the juvenile or child, appropriate order shall be made and the Board or Committee may call for a report from the probation officer or child welfare officer in case the preliminary information gathered from the juvenile or child or concerned parent or guardian is not sufficient for the purpose.

(5) While issuing orders sanctioning the leave of absence or relieving under supervision, as the case may be, the competent authority shall mention the period of leave and the conditions attached to the leave order, and if any of these conditions are not complied with during the leave period, the juvenile or child may be called back to the institution.

(6) The parent or guardian shall arrange to escort the juvenile or child from and to the institution and where this is not possible, the Officer-in-charge may arrange to escort the juvenile or child to the place of the family and back. In case the parents or guardian is willing to arrange escort but does not have requisite financial means, the Officer-in-charge shall arrange for the traveling expenses as admissible under the rules.

(7) If the juvenile or child runs away from the family during the leave period, the parent or guardian is required to inform the Officer-in-charge of the institution immediately, and try to trace the juvenile or child and if found, the juvenile or child shall be brought back to the institution immediately.

(8) If the juvenile or child is not found within twenty four hours, the Officer-in-Charge shall report the matter to the nearest police station and missing person's bureau, but no adverse disciplinary action shall be taken against the juvenile or child and procedure laid down under the Act shall be followed.

(9) If the parent or guardian does not take proper care of the juvenile or child during the leave period or does not bring the juvenile or child back to the institution within the stipulated period, such leave may be refused on later occasions.

(10) If the juvenile or child does not return to the institution on expiry of the sanctioned leave, the Board or Committee shall refer the case to police for taking charge of the juvenile and bring him back to the institution.

(11) The period of such leave shall be counted as a part of the period of stay in the institution and the time which elapses after the failure of a juvenile to return to the institution within the stipulated period, shall be excluded while computing the period of his stay in the institution.

63. Inspection.— (1) The State Government shall constitute State, District or city level inspection committee on the recommendation of the Selection Committee constituted under rule 91 of these rules.

(2) The inspection committees shall visit and oversee the conditions in the institutions and appropriateness of the processes for safety, well being and permanence, review the standards of care and protection being followed by the institutions, look out for any incidence of violation of child rights, look into the functioning of the Management Committee and Children's Committee set up under rules 55 and 56 of these rules and give appropriate directions.

(3) The team shall also make suggestions for improvement and development of the institution.

(4) The team shall consist of a minimum of five members with representation from the State Government, the Board or Committee, the State Commission for the Protection of Child Rights or the State Human Rights Commission, medical and other experts, voluntary organizations and reputed social workers.

(5) The inspection shall be carried out at least once in every three months.

- (6) The inspection visit shall be carried out by not less than three members.
- (7) The team may visit the institutions either by prior intimation or make a surprise visit.
- (8) The team shall interact with the children during the visits to the institution, to determine their well-being and uninhibited feed back.
- (9) The follow up action on the findings and suggestion of the children shall be taken by all concerned authorities.
- (10) The action taken report, findings and suggestions from the Inspection Committee shall be sent to the District Child Protection Unit and the State Government.

64. Social Audit.— (1) The Central Government or the State Government shall monitor and evaluate the implementation of the Act annually by reviewing matters concerning establishment of Board or Committee or Special Juvenile Police Unit where required, functioning of Board or Committee or Special Juvenile Police Unit, functioning of institutions and staff, functioning of adoption agencies, child friendly administration of juvenile justice and any other matter concerning effective implementation of the Act in the State.

(2) The social audit shall be carried out with support and involvement of organizations working in the field of mental health, child care and protection and autonomous bodies like the National Institute of Public Co-operation and Child Development, Indian Council for Child Welfare, Childline India Foundation, Central and State level Social Welfare Boards, School of Social Work and School of Law.

65. Restoration and Follow-up.— (1) The order for restoration of the juvenile or child shall be made by the Board or Committee on the basis of a fair hearing of the juvenile or child and his parents or guardian, as well as on the reports of the Probation Officers or Child Welfare Officers or non-governmental organisations directed by the Board or Committee to conduct the home study and any other relevant document or report brought before the Board or Committee for deciding the matter.

(2) The Board or Committee shall send a copy of the restoration order along with a copy of the order for escort as per **Form XXII** to the District Child Protection Unit or State Government who shall provide funds for restoration of the juvenile or child.

(3) Every restoration shall be planned for as part of the individual care plans prepared by the case-workers or counsellors or child welfare officers or probation officer, as the case may be, and shall be based on the review and recommendations of the Management Committee set up under rule 55 of these rules.

(4) Besides police, the Board or Committee shall seek collaboration with non-governmental organisations to accompany juveniles or children back to their family for restoration.

- (5) In case of girls, the juvenile or child shall necessarily be accompanied by female escorts.
- (6) The expenses incurred on restoration of a juvenile or child, including travel and other incidental expenses, shall be borne by the District Child Protection Unit or State Government.
- (7) When a juvenile or child expresses his unwillingness to be restored back to the family, the Board or Committee shall make a note of it in its records in writing and such juvenile or child shall not be coerced or persuaded to go back to the family, particularly if the social investigation report of the child welfare officer or probation officer establishes that restoration to family may not be in the best interest of the juvenile or child or, if the parents or guardians refuse to accept the juvenile or child back.
- (8) A follow-up plan shall be prepared as part of the individual care plans by the Child Welfare Officers or Probation Officers or non-governmental organisations assigned by the Board or Committee to assist in restoration of the child.
- (9) A quarterly follow-up report shall be submitted to the Board or Committee by the concerned Child Welfare Officer or Probation Officer or non-governmental organisation for a period of two years with a copy to the officer-in-charge of the institution from where the juvenile or child is restored.
- (10) The follow-up report shall clearly state the situation of the juvenile or child post restoration and the juvenile's or child's needs to be met by the State Government in order to reduce further vulnerability of the juvenile or child.
- (11) The officer-in-charge shall file the follow-up report in the case-file of the juvenile or child and place the report before the management committee set up under rule 55 of these rules in its next meeting.
- (12) The officer-in-charge shall also send a copy of the follow-up reports to the District Child Protection Unit.
- (13) Where a follow-up is not possible due to unavailability of government functionaries or non-governmental organisations, the concerned District Child Protection Unit shall provide necessary assistance and support to the concerned Board or Committee.

66. Visitor's Book.— (1) A Visitor's Book shall be maintained, in every institution, in which the person visiting the home shall record the date of his visit with remarks or suggestions, which he may think proper.

(2) The Officer- in-charge shall forward a copy of every such entry to the District Child Protection Unit or State Government, with such remarks as he may desire to offer in explanation or otherwise; and thereon, the designated authority shall issue such orders as he may consider necessary.

67. Maintenance of Registers.— The Officer- in-charge shall maintain in his office, such registers and forms, as required by the Act and as specified by these rules made there under and the list of registers or files or books to be maintained shall minimally comprise of:

- (a) Admission and discharge register;
- (b) Supervision register;
- (c) Medical file or medical report;
- (d) Nutrition diet file;
- (e) Stock register;
- (f) Log book;
- (g) Order book;
- (h) Meeting book;
- (i) Cash book;
- (j) Budget statement file;
- (k) Inquiry report file;
- (l) Individual case file with individual care plan;
- (m) Children's Suggestion book;
- (n) Visitor's book;
- (o) Staff movement register;
- (p) Personal belongings register;
- (q) Minutes register of Management Committee;
- (r) Minutes register of Children's Committees; and
- (s) Attendance register for staff and juveniles or children.

68. Personnel or Staff of a Home.— (1) The personnel strength of a home shall be determined according to the duty, posts, hours of duty per day and category of children that the staff is meant to cater to.

(2) The institutional organizational set up shall be fixed in accordance with the size of the home, the capacity, workload, distribution of functions and requirements of programmes.

(3) The whole-time staff in a home may consist of Officer-in-charge, Probation Officer (in case of Observation home or Special home), Case Workers (in case of Children's home or shelter home or after care organization), Child Welfare Officers, Counselor, Educator, Vocational Training Instructor, Medical Staff, Administrative staff, Care Takers, house father and house mother, child mentors, volunteers, store keeper, cook, helper, washerman, safai karamchari, gardener as required.

(4) The part-time staff, shall include Psychiatrist, Psychologist, Occupational therapist, and other professionals as may be required by time to time.

(5) The staff of the home shall be subject to control and overall supervision of the Officer-in-charge who by order, shall determine their specific responsibilities and shall keep the concerned authority informed of such orders made by him from time to time.

(6) The duties and responsibilities of the staff under the Officer-in-charge shall be fixed in keeping with the statutory requirements of the Act.

(7) The Officer-in-charge and such other staff who may be required, shall live in the quarters provided for them within the premises of the home.

(8) The number of posts in each category of staff shall be fixed on the basis of capacity of the institution; and the staff shall be appointed in accordance with the educational qualifications, training and experience required for each category.

(9) The suggested staffing pattern for an institution with a capacity of 100 juveniles or children could be as mentioned below:

Sl. No. (1)	Staff/Personnel (2)	No. of Posts (3)
1.	Officer-in-Charge (Superintendent)	1
2.	Counsellor	2
3.	Probation Officer or Child Welfare Officer or Case Worker	3
4.	House Mother or House Father	4
5.	Educator	2 (voluntary or part time)
6.	Doctor	1
7.	Paramedical staff	1
8.	Store-keeper cum Accountant	1
9.	Art & Craft cum Music Teacher	1 (part time)
10.	PT Instructor cum Yoga Trainer	1 (part time)
11.	Driver	1
12.	Cook	2
13.	Helper	2
14.	Housekeeping	2
15.	Gardener	1 (part time)
	Total	25

(10) The number of posts in the category of counsellor, case worker or probation officer, house father or house mother, educator, and vocational instructor shall proportionally increase with the increase in the capacity of the institution.

(11) In case of institutions housing infants, provision for *ayahs* and paramedical staff shall be made as per the need.

CHAPTER VII

MISCELLANEOUS

69. Recognition of fit persons or fit institution.— (1) Any individual who is willing temporarily to receive a juvenile or child in need of care, protection or treatment for a period as

may be necessary, may be recognized by the competent authority as a fit person after due verification of their credentials and reputation.

(2) Any suitable place or institution, the manager of which is willing temporarily to receive a juvenile or child in need of care and protection for a period as may be necessary, may be recognized by the State Government as a fit institution on the recommendation of the competent authority.

(3) An institution recognized as a fit institutions shall,—

- (a) meet the standards of care laid down in the Act and the rules made thereunder;
- (b) have the capacity and willingness to meet the standards of care laid down in the Act and the rules;
- (c) receive and provide basic services for care and protection of the juveniles and children;
- (d) prevent subjection of juvenile or child to any form of cruelty or exploitation or neglect; and
- (e) abide by the orders of the competent authority.

(4) A list of fit institutions approved by the State Government shall be kept in the office of the Board and the Committee.

(5) A fit institution with collateral branches may send the juvenile or child placed therein by an order of the competent authority to any of its branches after seeking permission from the competent authority.

(6) Before declaring any person as a fit person or recommending an institution as a fit institution, the competent authority shall hold due enquiry and only on being satisfied, recognition shall be given.

70. Certification or recognition and transfer of Management of Institutions and after care organizations.— (1) Any organization desiring certification under the Act shall make an application together with a copy each of the rules, bye-laws articles of association, list of members of the society or the association running the organization, office bearers and a statement showing the status and past record of specialized childcare services provided by the organization, to the State Government, who shall after verifying the provisions made in the organization for the boarding and lodging, general health, educational facilities, vocational training and treatment services may grant certification or recognition under sections 8, 9, 34, 37, 41 and 44 of the Act, as the case may be, on the condition that the organization shall comply with the standards or services as laid down under the Act and the rules framed their under, from time to time and to ensure an all round growth and development of juvenile or child placed under its charge.

(2) Any organization desiring recognition under the Act shall make an application to the Competent Authority, who shall after due inquiry, recommend the State Government for such recognition.

(3) The State Government may, transfer the management of any State run institution under the Act to a voluntary organization of repute, who has the capacity to run such an institution; and certify or recognize the said voluntary organization as a fit institution to own the requisite responsibilities under a Memorandum of Understanding for a specified period of time.

(4) The State Government may, if dissatisfied with the conditions, rules, management of the organization certified or recognized under the Act, at any time, by notice served on the manager of the organization, declare that the certificate or recognition of the organization, as the case may be, shall stand withdrawn as from a date specified in the notice and from the said date, the organization shall cease to be an organization certified or recognised under sections 8, 9, 34, 37,41 or 44 of the Act, as the case may be:

Provided that the concerned organization shall be given an opportunity of making a representation in writing, within a period of thirty days, against the grounds of withdrawal of certificate or recognition of that organization.

(5) The decision to withdraw or to restore the certificate or recognition of the organization may be taken, on the basis of a thorough investigation by a specially constituted advisory board under section 62 of the Act.

(6) On the report of the advisory board, the Officer- in- charge of the institution shall be asked to show cause so as to give an explanation within thirty days.

(7) When an organization ceases to be an organization, certified or recognised under sections 8, 9, 34, 37,41 or 44 of the Act, the juvenile or the child kept therein shall, be transferred to some other institution of repute, certified or recognized under sections 8, 9, 34, 37,41 or 44 of the Act or discharged, in accordance with the provisions of the Act and the rules relating to their discharge and transfer by giving intimation of such discharge or transfer to the Board or the Committee, as the case may be.

71. Registration under the Act.— (1) All institutions and organisations running institutional or non-institutional care services for children in need of care and protection, whether run by the government or voluntary organization, shall get themselves registered under sub-section (3) of section 34 of the Act.

(2) All such institutions shall make an application together with a copy each of rules, bye-laws, memorandum of association, list of governing body, office bearers, balance sheet of past three years, statement of past record of social or public service provided by the institution or organization to the State Government, who shall after verifying that provisions made in the institution or organization for the care and protection of children, health, education, boarding and lodging facilities, if any, vocational facilities and scope of rehabilitation, may issue a registration certificate to such organization under sub-section (3) of section 34 of the Act and as per this rule.

72. Grant in aid to certified or recognized organization.— (1) An organization certified or recognized or registered under sections 8, 9, 34, sub-section (3) of section 34, 37 or 44 of the Act, may during the period when certification or recognition or registration is in force, may apply for grants-in-aid by the State Government, for the maintenance of juvenile or child received by them under the provisions of the Act; and for expenses incurred on their education, treatment, vocational training, development and rehabilitation.

(2) The grants-in-aid may be admissible, at such rates, which shall be sufficient to meet the prescribed norms, in such manner and subject to such conditions as may be mutually agreed to by both the parties.

(3) In case of transfer of management of government run homes under sections 8, 9, 34, sub-section (3) of section 34, 37 and 44 of the Act to a voluntary organization, the same budget which the Government was spending on that home, shall be given to the voluntary organization as grant-in-aid under the Memorandum of Understanding signed between both the parties describing their role and obligations.

73. Admission of outsiders.— (1) No stranger shall be admitted to the premises of the institution, except with the permission of the Officer- in-charge or on an order from the Board or Committee.

(2) In special cases, where parents or guardians have travelled a long distance from another state or district, the Officer-in-Charge shall allow parents or guardians entry into the premises and a meeting with their children, provided they possess proper identification and are not reported to have subjected the juvenile or child to abuse and exploitation.

74. Identity Photos.— (1) On admission to a home established under the Act, every juvenile or child shall be photographed

(2) One photograph shall be kept in the case file of the juvenile or the child, one shall be fixed with the index card, a copy shall be kept in an album serially numbered with the negative in another album, and a copy of the photograph shall be sent to the Board or Committee as case may be, as well as to the district or State Child Protection Unit.

(3) In case of a child missing from an institution or in case of lost children received by an institution, a photograph of the child with relevant details shall be sent to the missing person's bureau and the local police station.

75. Police Officers to be in plain clothes.— While dealing with a juvenile or a child under the provisions of the Act and the rules made thereunder, except at the time of arrest, the Police Officer shall wear plain clothes and not the police uniform.

76. Prohibition on the use of handcuffs and fetters.— No child or the juvenile in conflict with law dealt with under the provisions of the Act and the rules made there under shall be handcuffed or fettered.

77. Procedure to be followed by a Magistrate not empowered under the Act.— (1) When any juvenile or child is produced before a Magistrate other than Board or Committee, and the Magistrate is of the opinion that such person is a juvenile or child, he shall record his reasons and send the juvenile or child to the appropriate competent authority.

(2) In case of a juvenile produced before a Magistrate not empowered under this Act, such Magistrate shall direct the case to be transferred to the Board for inquiry and disposal.

(3) In case of a child in need of care and protection produced as a victim of a crime before a Magistrate not empowered under the Act, such Magistrate shall transfer the matter concerning care and protection, rehabilitation and restoration of the child to the appropriate Committee.

78. Transfer.—(1) During the inquiry, if it is found that the juvenile or child hails from a place outside the jurisdiction of the Board or Committee, the Board or Committee shall order the transfer of the juvenile or child and send a copy of the order to the State Government or State or District Child Protection Unit.

Provided that:

- (i) such transfer is in the best interest of the juvenile or child;
- (ii) no child shall be transferred or proposed to be transferred only on the ground that the child has created problems or, has become difficult to be managed in the existing institution or, is suffering from a chronic or terminal illness or, on account of disability;
- (iii) such transfer shall only take place after the completion of evidence and cross-examination that may be required in a legal proceeding involving a juvenile or child; and
- (iv) the reasons for and circumstances of such transfer are recorded in writing.

(2) The State Government or State or District Child Protection Unit shall accordingly:

- (i) send the information of transfer to the appropriate competent authority having jurisdiction over the area where the child is ordered to be transferred by the Board or Committee; and
- (ii) send a copy of the information to the Officer-in-charge of the institution where the child is placed for care and protection at the time of the transfer order.

(3) On receipt of copy of the information from the State Government or State or District Child Protection Unit, the Officer-in-charge shall arrange to escort the child at government expenses to the place or person as specified in the order.

(4) On such transfer, case file and records of the juvenile or child shall be sent along with the juvenile or child.

79. Procedure for sending a juvenile or child outside the jurisdiction of the competent authority.— (1) In the case of a juvenile or a child whose ordinary place of residence lies outside the jurisdiction of the competent authority, and if the competent authority considers it necessary to take action under section 50 of the Act, it shall direct a probation officer or case worker or child welfare officer, as the case may be, to make enquiries as to the fitness and

willingness of the relative or other person to receive the juvenile or the child at the ordinary place of residence, and whether such relative or other fit person can exercise proper care and control over the juvenile or the child.

(2) Where a juvenile or child is ordered to be sent to the ordinary place of residence or to a relative or fit person, execution of a bond by the juvenile or child without any surety, in **Form VI**, is necessary along with an undertaking by the said relative or fit person in **Form V or IX** as the case may be.

(3) Any breach of a bond or undertaking or of both given under sub-rule (2) of this rule, shall render the juvenile liable to be brought before the competent authority, who may make an order directing the juvenile to be sent to an institution home.

(4) Any juvenile or a child, who is a foreign national and who has lost contact with his family shall also be entitled for protection.

(5) The juvenile or the child, who is a foreign national, shall be repatriated, at the earliest, to the country of his origin in co-ordination with the respective Embassy or High Commission.

(6) The Board or Committee shall keep the Ministry of External Affairs informed about repatriation of every juvenile or child of foreign nationality carried out on the orders of the Board or Committee.

(7) A copy of the order passed by the competent authority under section 50 of the Act shall be sent to-

- (a) the probation officer or child welfare officer who was directed to submit a report under sub-rule (1) of this rule;
- (b) the probation officer or child welfare officer, if any, having jurisdiction over the place where the juvenile or the child is to be sent;
- (c) the competent authority having jurisdiction over the place where the juvenile or the child is to be sent; and
- (d) the relative or the person who is to receive the juvenile or the child.

(8) During the pendency of the order under sub-rule (6) of this rule, the juvenile or the child shall be sent by the competent authority to an observation home or children's home as the case may be.

(9) Where the competent authority considers it expedient to send the juvenile or the child back to his ordinary place of residence under section 50, the competent authority shall inform the relative or the fit person, who is to receive the juvenile or the child accordingly; and shall invite the said relative or fit person to come to the home, to take charge of the juvenile or the child on such date, as may be specified by the competent authority.

(10) The competent authority inviting the said relative or fit person under sub-rule (8) of this rule may also direct, if necessary, the payment to be made by the Officer-in-charge of the home,

of the actual expenses of the relative or fit person's journey both ways, by the appropriate class and the juvenile's or child's journey from the home to his ordinary place of residence, at the time of sending the juvenile or the child.

(11) If the relative or the fit person fails to come to take charge of the juvenile or the child on the specified date, the juvenile or the child shall be taken to his ordinary place of residence by the escort of the observation home and in the case of a girl, at least one escort shall be a female.

80. State Child Protection Unit.— The specific functions of the State Child Protection Unit shall include:

- (a) implementation of the Act and supervision and monitoring of agencies and institutions under the Act;
- (b) set up, support and monitor the District Child Protection Units;
- (c) represent State Child Protection Unit as a member in the Selection Committee for appointment of members of Boards or Committees;
- (d) make necessary funds available to the District Child Protection Units for providing or setting up required facilities to implement the Act;
- (e) network and coordinate with all government departments to build inter-sectoral linkages on child protection issues, including Departments of Health, Education, Social Welfare, Urban Basic Services, Backward Classes & Minorities, Youth Services, Police, Judiciary, Labour, State AIDS Control Society, among others;
- (f) network and coordinate with civil society organizations working for the effective implementation of the Act;
- (g) training and capacity building of all personnel (Government and Non-government) working under the Act;
- (h) establish Minimum Standards of Care and ensure its implementation in all institutions set up under the Act;
- (i) review of the functioning of Committees; and
- (j) all other functions necessary for effective implementation of the Act.

81. District Child Protection Unit.—(1) The District Child Protection Unit shall coordinate and implement all child rights and protection activities at district level.

(2) The specific functions of the District Child Protection Unit shall include:

- (a) ensure effective implementation of the Act at district or city levels by supporting creation of adequate infrastructure, such as, setting up Boards, Committees, Special Juvenile Police Units and homes in each districts;
- (b) identify families at risk and children in need of care and protection;
- (c) assess the number of children in difficult circumstances and creating district-specific databases to monitor trends and patterns of children in difficult circumstances;
- (d) periodic and regular mapping of all child related services at district for creating a resource directory and making the information available to the Committees and Boards from time to time;
- (e) implement family based non-institutional services including sponsorship, foster care, adoption and after care;

- (f) ensure setting up of District, Block and Village level Child Protection Committees for effective implementation of programmes as well as discharge of its functions;
- (g) facilitate transfer of children at all levels for either their restoration to their families or placing the child in long or short-term rehabilitation through institutionalization, adoption, foster care and sponsorship;
- (h) supporting State Adoption Resource Agency in implementation of family based non-institutional services at district level;
- (i) network and coordinate with all government departments to build inter-sectoral linkages on child protection issues, including Departments of Health, Education, Social Welfare, Urban Basic Services, Backward Classes & Minorities, Youth Services, Police, Judiciary, Labour, State AIDS Control Society, among others;
- (j) network and coordinate with civil society organizations working under the Act;
- (k) develop parameters and tools for effective monitoring and supervision of agencies and institutions in the district in consultation with experts in child welfare;
- (l) supervise and monitor all institutions or agencies providing residential facilities to children in district;
- (m) train and build capacity of all personnel (Government and Non-government) implementing the Act to provide effective services to children;
- (n) organize quarterly meeting with all stakeholders at district level including CHILDLINE, Specialised Adoption Agencies, Officer-in-charges of homes, non-governmental organisations and members of public to review the progress and implementation of the Act; and
- (o) liaison with the State Child Protection Unit, State Adoption Resource Agency at State level and District Child Protection Units of other districts.

82. Setting of the Child Welfare Committee.— (1) The State Government shall set up by notification in Official Gazette Child Welfare Committees under section 29 of the Act in every district with requisite infrastructure, personnel, and finances for smooth running, as listed below:

- (a) the infrastructure shall consist of a sitting hall, a separate room for the Committee, room for office staff, waiting room for children, waiting room for parents or guardian, room for personal interaction between the child or parents and the Committee, a record room, safe drinking water facility and toilets;
- (b) the State Government shall provide necessary human resource support for every Committee, including welfare officer, steno-typist or computer operator, peon, safai karamchhari.

(2) The allowances of the Chairperson and Members shall be disbursed by the District Child Protection Unit or State Government as per rule 23 of these rules.

83. Setting up of Juvenile Justice Board.— The State Government shall set up by notification in Official Gazette, Juvenile Justice Board in every district, with requisite infrastructure, personnel, besides the Principal Magistrate and Members and Finances as listed below:

(1) Infrastructure shall consist of a Board Room, waiting room for children, a room for Principal Magistrate and Members, a record room, room for Probation Officers, waiting room for parents and visitors, safe drinking water facility and toilets.

(2) The State Government shall provide necessary human resource support for every Board, including probation officer, steno-typist or computer operator, peon, safai karamchhari.

84. Special Juvenile Police Unit.— (1) The State Government shall appoint a Special Juvenile Police Unit at the District level within four months of the notification of these rules and the unit shall consist of a juvenile or child welfare officer of the rank of police inspector and two paid social workers having experience of working in the field of child welfare, of whom one shall be a woman.

(2) The District Child Protection Unit or the State Government shall provide services of its two social workers to the Special Juvenile Police Unit for discharging their duties.

(3) The juvenile or child welfare officer at the police station shall be a person with aptitude and appropriate training and orientation to handle the cases of juveniles or children in terms of the provisions of the Act.

(4) The transfer and posting of the designated Juvenile or Child Welfare Officer shall be within the Special Juvenile Police Units of other police stations or district unit, unless there is an exceptional case of promotion and in such cases, other police officer must be designated and deputed in the unit so that there is no shortfall.

(5) Special Juvenile Police Unit at district level shall coordinate and function as a watch-dog for providing legal protection against all kinds of cruelty, abuse and exploitation of child or juvenile.

(6) The unit shall take serious cognizance of adult perpetrators of crimes against children and see to it that they are without delay apprehended and booked under the appropriate provisions of the law and for this purpose the district level units shall maintain liaison with other units of police station.

(7) The Special Juvenile Police Units shall seek assistance from the voluntary organizations, panchayats and gramsabhas or Resident Welfare Associations in identifying juveniles in conflict with law as well as reporting cases of violence against children, child neglect and child abuse.

(8) The Special Juvenile Police Units shall particularly seek assistance from voluntary organizations recognized as protection agencies by the State Government for the purpose of assisting Special Juvenile Police Units and local police stations at the time of apprehension, in preparation of necessary reports, for taking charge of juveniles until production and at the time of production before the Board as per rule 11 (12) of these rules.

(9) The Superintendent of Police in a district shall head the Special Juvenile Police Unit and oversee its functioning from time to time.

(10) A Nodal Officer from Police not less than the rank of Inspector General of Police shall be designated in each State to coordinate and upgrade role of police on all issues pertaining to care and protection of children or juveniles under Act.

(11) Any police officer found guilty, after due inquiry, of torturing a child, mentally or physically, shall be liable to be removed from service, besides being prosecuted for the offence.

85. Honorary or Voluntary Welfare Officers and Probation Officers.— To augment the existing probation service, honorary or voluntary welfare officers and probation officers may be appointed from the voluntary organization and social workers found fit for the purpose by the competent authority and their services may also be co-opted into the implementation machinery by the orders of the competent authority.

86. Duties of the Officer-in-Charge of an institution.— (1) The Officer-in-charge shall have the primary responsibility of maintaining the institution and shall stay within the institutional premises to be readily available as and when required by the juveniles or children and the staff and in case where an accommodation is not available within the institutional premises, the Officer-in-charge shall stay at a place in close proximity to the institution till such time that such an accommodation is made available within the institution.

(2) The general duties and functions of the Officer-in-charge shall include:

- (a) compliance with provisions of the Act and the rules and orders made thereunder;
- (b) compliance with the orders of the Board or Committee;
- (c) providing homely atmosphere of love, affection, care, development and welfare for juveniles or children;
- (d) maintaining minimum standards of care in the institution;
- (e) proper maintenance of buildings and premises;
- (f) security measures and periodical inspection, including daily inspection and rounds of the institution, proper storage and inspection of food stuffs as well as food being served;
- (g) supervision and monitoring of juveniles' or children's discipline and well being;
- (h) planning implementation and coordination of all institutional activities, programmes and operations, including training and treatment programmes or correctional activities as the case may be;
- (i) prompt action to meet emergencies;
- (j) ensuring accident and fire preventive measures within the institutional premises;
- (k) stand-by arrangements for water storage, power plant, emergency lighting;
- (l) careful handling of plants and equipments;
- (m) segregation of a juvenile or child suffering from contagious or infectious diseases;
- (n) observance and follow-up of daily routine;
- (o) filing of monthly report of juvenile or child in the case file;
- (p) organize local and national festivals in the institution;
- (q) organize trips or excursions or picnics for juveniles or children;

- (r) preparation of budget and control over financial matters;
- (s) allocation of duties to personnel;
- (t) supervision over office administration, including attending to personnel welfare and staff discipline;
- (u) prompt, firm and considerate handling of all disciplinary matters;
- (v) organize the meetings of the Management Committee set up under rule 55 of these rules and provide necessary support
- (w) maintenance of all records and registers required under the Act and the rules and monthly verification of the same by the Management Committee set up under rule 55 of these rules;
- (x) liaison, coordination and cooperation with the District Child Protection Unit or State Government as and when required; and
- (y) coordination with the legal officer in the District Child Protection Unit to ensure that every juvenile is legally represented and provided free legal aid and other necessary support or, where the District Child Protection Unit has not been set up, services of the District or State Legal Services Authority shall be made available.

87. Duties of a Probation Officer or Child Welfare Officer or Case Worker.— (1) Every probation officer or child welfare officer or case-worker shall carry out all directions given by the Board or Committee or concerned authority and shall perform the following duties, functions and responsibilities:

- (a) making social investigation of the juvenile (**Form IV**) or the child (**Form XIII**) through personal interview and from the family, social agencies and other sources;
- (b) attending the proceedings of the Board or Committee and submitting reports as and when required;
- (c) clarifying problems of the juvenile or the child and dealing with their difficulties in institutional life;
- (d) participating in the orientation, monitoring, education, vocational and rehabilitation programmes;
- (e) establishing co-operation and understanding between the juvenile or the child and the Officer- in-charge;
- (f) assisting the juvenile or the child to develop contacts with family and also providing assistance to family members;
- (g) developing a care plan for every child in consultation with the juvenile or child and following up its implementation;
- (h) participating in the pre-release programme and helping the juvenile or the child to establish contacts which can provide emotional and social support to juvenile or child after their release;
- (i) establishing linkages with voluntary workers and organizations to facilitate rehabilitation and social reintegration of juveniles and to ensure the necessary follow-up;
- (j) follow-up of juveniles after their release and extending help and guidance to them;
- (k) visiting regularly the residence of the juvenile or child under their supervision and also places of employment or school attended by such juvenile or child and submitting fortnightly reports as prescribed in **Form XXI**;

- (l) accompanying juveniles or children where ever possible, from the office of the Board to observation home, special home, children's home or fit person, as the case may be; and
- (m) maintaining case file and such registers as may be specified from time to time.

(2) On receipt of information from the Police or Juvenile or Child Welfare Officer of the Police under clause (b) of section 13 of the Act, the probation officer shall inquire into the antecedents and family history of the juvenile or the child and such other material circumstances, as may be necessary and submit a social investigation report as early as possible, in **Form IV or XIII**, to the Board.

88. Duties of House Father or House Mother.— (1) The general duties, functions and responsibilities of a house father, house mother and other care takers shall be as follows:

- (a) handling juvenile or child with love and affection;
- (b) taking proper care and welfare of juvenile or child;
- (c) maintaining discipline among the juveniles or children;
- (d) maintenance, sanitation and hygiene;
- (e) implementing daily routine in an effective manner and ensuring children's involvement;
- (f) looking after the security and safety arrangements of the home; and
- (g) escorting juveniles or children, whenever they go out of the home.

89. Disqualification for officer-in-charge, probation officer or child welfare officer or case-worker, house father or house mother and other care givers and staff.— (1) The officer-in-charge, probation officer or child welfare officer or case-worker, house father or house mother and other care givers and staff shall not employ a juvenile or child under their supervision or care and protection for their own purposes or take any private service from them.

(2) Any report of physical, sexual or emotional abuse of a juvenile or a child in an institution or outside, by a caregiver, shall hold them liable for disqualification after due inquiry.

90. Training of Personnel.— (1) The State Government or the Officer-in-charge shall provide for training of personnel of each category of staff, in keeping with their statutory responsibilities and specific jobs requirements.

- (2) The training programme shall include-
 - (a) orientation and induction training of the newly-recruited staff,
 - (b) refresher training courses and skill enhancement programmes for all care givers once a year, and
 - (c) staff conferences, seminars, workshops

(3) The State Government with the help of the State Child Protection Unit, National Institute of Public Cooperation and Child Development and its Regional Centres shall organize regular training and capacity building of personnel involved in the implementation of the Act and the rules made thereunder.

91. Selection Committee and its composition.— The State Government shall constitute a Selection Committee by notification in the official gazette, for a period of five years, consisting of the following seven members, namely:

- (a) a retired judge of High Court as the Chairperson;
- (b) one representative from the concerned Department of State Government not below the rank of Director as the Member Secretary;
- (c) two representatives from a reputed non-governmental organization, working in the area of child welfare;
- (d) two representatives from academic bodies concerned with social work, psychology, sociology, child development, education, law, criminology and with experience of working on children's issues; and
- (e) a representative of the National or State Human Rights Commission or, National or State Commission for Protection of Child Rights or, National or State Commission for Women.

92. Functions of the Selection Committee.— (1) (a) In making appointment of members of the Board or Committee, the Selection Committee shall take into consideration the applications received in this regard in response to a public advertisement to this effect by the District or State Child Protection Unit or the State Government; and

- (b) the Selection Committee shall select and recommend a panel of names to the State Child Protection Unit or State Government for appointment as members of the Board or Committee from amongst the applications received.

(2) In the event of any complaint against a member of the Board or Committee, the Selection Committee shall hold necessary inquiry and recommend termination of appointment of such member to the State Child Protection Unit or State Government, if required.

(3) (a) The Selection Committee, at the time of recommending names for appointment as member of Board or Committee shall also prepare a panel of names for each Board or Committee to fill in vacancies, which may arise during the tenure of the Board or Committee.

(b) In the event of a vacancy in the Board or Committee, the District Child Protection Unit shall inform the State Child Protection Unit or State Government for filling up such vacancy.

(c) The State Child Protection Unit or State Government shall fill the vacancies on the basis of the panel of names recommended by the Selection Committee.

(4) The Selection Committee shall recommend names for constitution of the State or District or City level Inspection Committees as required under section 35 of the Act.

93. Advisory Boards.— (1) The Central Government and the State Government shall constitute Advisory Board at Central, State, District, City levels for a period of three years.

(2) The Central Advisory Board shall be constituted through the Union Ministry of Women and Child Development.

(3) The State Government shall constitute the State Advisory Board, District Advisory Board and the City Advisory Board.

(4) All the Advisory Boards shall hold at least two meetings in a year.

(5) These Advisory Boards shall inspect the various institutional or non-institutional services in their respective jurisdictions; and the recommendations made by them, shall be acted upon by the Central Government and the State Government.

(6) The Central Government through the Central Ministry of Women and Child Development shall set up the Central Advisory Board to be headed by the Minister concerned and shall consist of the Secretary of the Ministry aforesaid, representatives from State Governments, representative members from the competent authority, leading non-governmental organisations, experts in child or juvenile care, children's institution and academic institutions as members.

(7) A designated official of the Central Ministry of Women and Child Development shall function as the Member Secretary of the Central Advisory Board.

(8) The State Government, through the Selection Committee constituted under rule 91 of these rules, shall set up State, District and City level Advisory Boards, which shall consist of representatives of the State Government, members of the competent authority, academic institutions, locally respectable and spirited citizens, representatives of non-governmental organizations.

(9) The District or City level Advisory Board constituted in terms of sub-section (3) of section 62 of the Act shall also function as the inspection committee under section 35 of the Act.

(10) The termination, resignation, or other vacancy caused in an advisory board and appointment of new members therein shall be done in the same manner as is done in case of the competent authority.

94. Openness & Transparency.— (1) All Children's homes shall be open to visitors with the permission of the Officer-in-charge and the Committee or Officer-in-charge as the case may be, may consider appropriate to allow representatives of local self government, voluntary organizations, social workers, researchers, medicos, academicians, prominent personalities, media and any other persons as visitors, as the Officer-in-charge considers appropriate keeping in view the security, welfare and the interest of the children.

(2) The Officer-in-charge of the home shall encourage active involvement of local community in improving the conditions in the homes, if, the members of the community want to serve the institution or want to contribute through their expertise.

(3) The Officer-in-charge shall maintain a visitors book and the remarks of the visitors given therein shall be considered by the advisory inspecting authority.

(4) While visiting an institution, the visitors will not say or do anything that undermines the authority of the Officer-in-charge or is in contravention of the Act or rules or impinges on the dignity of the children.

(5) The visitors may be allowed to visit observation homes and special homes with the permission of the competent authority.

95. Juvenile Justice Fund.— (1) The State Government shall create a Fund at the State level under section 61 of the Act to be called the 'Juvenile Justice Fund' (herein under referred to as the Fund) for the welfare and rehabilitation of the juvenile or the child dealt with under the provisions of the Act.

(2) In addition to donations, contributions or subscriptions coming under sub-section (2) of section 61, the Central Government shall also make contribution to the Fund.

(3) The Fund shall be applied:

- (a) to implement programmes for the welfare, rehabilitation and restoration of juveniles or children;
- (b) to pay grant-in-aid to non-governmental organizations;
- (c) to meet the expenses of State Advisory Board and its purpose;
- (d) to do all other things that are incidental and necessary for the above purposes.

(4) The management and administration of the Fund shall be under the control of the State Advisory Board under sub-section (3) of section 61 of the Act.

(5) The assets of the Fund shall include all such grants and contributions, recurring or non-recurring, from the Central Government and State Government or any other statutory or non-statutory bodies set up by the Central or State Government as well as the voluntary donations from any individual or organization.

(6) All withdrawals shall be made by cheques or requisitions, as the case may be, signed by the secretary-cum-treasurer and in the case of amounts exceeding rupees one thousand, they shall be signed duly by the secretary-cum-treasurer and a member of the board of management to be nominated by the State Advisory Board.

(7) The regular accounts shall be kept of all money and properties, and all incomes and expenditure of the Fund and shall be audited by a notified firm of Chartered Accountants, or any other recognized authorities as may be appointed by the Board.

(8) The auditors shall also certify the expenditure from the Fund made by the secretary-cum-treasurer.

(9) All contracts and other assurances shall be in the name of the board of management and signed on their behalf by the secretary-cum-treasurer and one member of the board of the management authorised by it for the purpose.

(10) The board of management shall invest for the time being the proceeds of sale or other disposal of the property, as well as any money or property not immediately required to be used to serve the objective of the Fund, in any one or more of the modes of investment authorised by law for the investment of trust moneys as the board of management may think proper.

(11) The board of management may delegate to one or more of the members such of its powers, which in its opinion are merely a procedural arrangement.

96. Application of these rules.— It is hereby declared that until the new rules conforming to these rules are framed by the State Government concerned under section 68 of the Act, these rules shall mutatis mutandis apply in that State.

97. Pending Cases.— (1) No juvenile in conflict with law or a child shall be denied the benefits of the Act and the rules made thereunder.

(2) All pending cases which have not received a finality shall be dealt with and disposed of in terms of the provisions of the Act and the rules made thereunder.

(3) Any juvenile in conflict with law, or a child shall be given the benefits under sub-rule (1) of this rule, and it is hereby clarified that such benefits shall be made available to all those accused who were juvenile or a child at the time of commission of an offence, even if they cease to be a juvenile or a child during the pendency of any inquiry or trial.

(4) While computing the period of detention or stay or sentence of a juvenile in conflict with law or of a child, all such period which the juvenile or the child has already spent in custody, detention, stay or sentence of imprisonment shall be counted as a part of the period of stay or detention or sentence of imprisonment contained in the final order of the court or the Board.

98. Disposed off cases of juveniles in conflict with law.— The State Government or as the case may be the Board may, either suo motu or on an application made for the purpose, review the case of a person or a juvenile in conflict with law, determine his juvenility in terms of the provisions contained in the Act and rule 12 of these rules and pass an appropriate order in the interest of the juvenile in conflict with law under section 64 of the Act, for the immediate release of the juvenile in conflict with law whose period of detention or imprisonment has exceeded the maximum period provided in section 15 of the said Act.

99. Disposal of records or documents.— The records or documents in respect of a juvenile or a child or a juvenile in conflict with law shall be kept in a safe place for a period of seven years and no longer, and thereafter be destroyed by the Officer-in-charge or Board or Committee, as the case may be.

100. Repeal.— The Juvenile Justice (Care and Protection of Children) Rules, 2001, notified vide F.No.1-3 /2001-SD, dated the 22nd June, 2001 in the Gazette of India, Extraordinary, Part I, Section 1 of the same date is hereby repealed.

SCHEDULE – I
Clothing, bedding, toiletries and other articles (rule 41)

(1) Juveniles or children shall be provided with the following articles:

Bedding		
S.No.	Article	Quantity to be provided per child
1.	Towels	4 per Year
2.	Cotton Bed Sheets	2 per 2 Year
3.	Pillow (Cotton stuffed)	1 per 2 Year
4.	Pillow Covers	2 per 2 Year
5.	Woolen blankets	2 per 2 years
6.	Cotton Durry	2 per 2 years
7.	Cotton filled quilt	1 per 2 years (in cold regions)
8.	Mattress	1 per 2 years
9.	Mosquito Net	1 per 2 years

Clothing for girls		
1.	Skirts & Blouse or Salwar Kameez or Half Sari with blouses and petticoats	5 sets per year for girls depending on age and regional preferences
2.	Banyans (1 Metre each)	6 per year for younger girls
3.	Brassieres	6 per year for older girls
4.	Panties (1 Metre Cloth each)	6 per year
5.	Sanitary Towels	12 packs per year for older girls
6.	Woolen Sweaters	2 in 2 years (in cold regions)
7.	Woolen Shawls	1 in 2 years (in cold regions)

Clothing for boys		
1.	Shirts	5 sets per year
2.	Shorts	5 sets per year for younger boys
3.	Pants	5 sets per year for older boys
4.	Vest	4 sets per year
5.	Underwear	4 sets per year
6.	Woolen Jerseys	2 in 2 years (for cold regions)
7.	Scarfs	2 in 2 years (for cold regions)

Miscellaneous Articles		
1.	Slippers	1 pair per year
2.	Shoes	1 pair per year
3.	School Uniform	2 sets per year for children attending outside schools
4.	School Shoes	1 pair per year for children attending outside schools
5.	School Bag and Stationery	1 set per year for children attending outside schools
6.	Handkerchiefs	6 per year

Note:

- a) In addition to the clothing specified above, each child shall be provided, once in three years, with a suit consisting of one white shirt, one pair of Khaki shorts or pants, one pair of white canvas shoes and one blazer (for cold regions) for use during ceremonial occasions. In the case of girls it shall be one white half sari or one salwar kameez or one white skirt and one white blouse, a pair of white canvas shoes and a blazer (for cold regions).
- (2) In every hospital attached to the institution where there is provision for in-patient cots, the following scale has to be followed:

<i>Night clothing & bedding</i>		<i>Scale for supply</i>
1	Mattress	One per bed per 3 years
2	Cotton Bed Sheets	Four per bed per year
3	Pillows	One per bed per two year
4	Pillow Covers	Four per bed per year
5	Woollen blankets	One per bed per 2 years
6	Pyjamas and loose shirts (Hospital type for boys)	3 pairs per child per year
7	Skirts and blouses or salwar kameez for girls	3 pairs per child per year
8	Cotton durry	One per bed per three years

Note:

- (i) When a child is admitted as an in-patient in the institution Hospital, the Institution Doctor shall issue the in-patient with the hospital clothing, the clothes on body being preserved, duly washed and handed back, at the time of the child's discharge from the hospital.
- (ii) Each child shall be provided with Kit Box or a Locker, as per convenience and necessity.
- (iii) The Superintendent shall make arrangements for two-tier bed system in place of conventional cots, as per convenience and necessity.

(3) Toiletry: Every resident of the Home shall be issued with oil, soap, and other material for in accordance with the following scales:

Hair oil for grooming the hair	100 mls per month
Toilet soap or carbolic soap	1 large bar per month
Tooth paste and brush	1 Brush per 3 months 50 gms paste per month
Comb	1 per year

Note:

(a) For washing of cloth and towels, bed-sheet etc., the following scale may be followed:

- (i) Washing Soap 1 soap for one month (125 gms)
- (ii) Whitening/bleaching agent to the extent required only for white clothing

Provided, however, the hospital clothing is not mixed with other clothing at the time of washing and if necessary, the Superintendent can issue the above items separately for washing of hospital clothing.

(b) The children attending school outside the institution may be issued with one additional bar of washing soap (100 gms) per head per month for washing their school uniform.

(4) The following items shall be provided for maintaining the Homes in a healthy and sanitary condition:

Item	Scale of supply
(1) Broom Stick	25 to 40 Nos per month depending on the area of the institution
(2) DDT spray	As per the institution Doctor's advice
(3) Effective bugs killing agent	As required
(4) Phenyl and cleaning acid (daily)	Depending on the area of lavatories to be cleaned as per institution Doctor's advice

SCHEDULE – II
Nutrition and Diet Scale (rule 44)

<i>Name of the articles of diet</i>	<i>Scale per head per day</i>
(1) Rice/Wheat/Ragi/Jowar	600 Gms, (700 Gms for 16-18 yrs age) of which atleast 100 gms to be either Wheat or Ragi or Jowar
(2) Dal/ Rajma/ Chana	120 Gms
(3) Edible Oil	25 Gms
(4) Onion	25 Gms
(5) Salt	25 Gms
(6) Turmeric	05 Gms
(7) Coriander Seed Powder	05 Gms
(8) Ginger	05 Gms
(9) Garlic	05 Gms
(10) Tamarind/ Mango powder	05 Gms
(11) Milk (at breakfast)	150 ml
(12) Dry Chillies	05 Gms
(13) Vegetables Leafy	100 Gms
Non-leafy	130 Gms
(14) Curd or Butter Milk	100 Gms/MI
(15) Chicken once a week or Eggs 4 days	115 Gms
(16) Jaggery & Ground Nut Seeds or Paneer (vegetarian only)	60 Gms each (100 Gms for paneer) Once in a week
(17) Sugar	40 Gms
<i>Following items for 50 Children per day</i>	
(18) Pepper	25 Gms
(19) Jeera Seeds	25 Gms
(20) Black Gramdall	50 Gms
(21) Mustard Seeds	50 Gms
(22) Ajwain Seeds	50 Gms
<i>On Chicken Day for 10 Kg. of Chicken</i>	
(23) Garam Masala	10 Gms
(24) Kopra	150 Gms
(25) Khas Khas	150 Gms
(26) Groundnut Oil	500 Gms
<i>For Sick Children</i>	
(27) Bread	500 Gms
(28) Milk	500 MI
<i>Other Items</i>	
(29) LP Gas for Cooking only	

Instructions:**(2) Variation in Diet**

- (a) Three varieties of dal i.e., Toor (Tuvani), Moong (Green Gram) and Chana (Bengal Gram) may be issued alternatively.
- (b) The Superintendent may also arrange to substitute chicken with fish at his discretion, provided that there is no extra expenditure to Government.
- (c) On non-vegetarian days, vegetarian children shall be issued with either 60 Gms of Jaggery and 60 Gms of Groundnut seeds per head in the shape of laddus or any other sweet dish or 100 gms paneer.
- (d) Potatoes shall be issued in lieu of vegetables once in a week.
- (e) Leafy vegetables such as Fenugreek(Methi), Spinach (Palak), Sarson (Mustard leaves)Gongura Thotakura or any other saag etc., may also be issued once in a week . If a kitchen garden is attached to any institution leafy vegetables, in addition to drumstick trees, curry leaves trees and coriander leaves, should be grown and issued and the Superintendent should try to issue variety of vegetables and see that the same vegetable is not repeated for at least a period of one week.
- (f) The Superintendent may make temporary alternations in the scale of diet in individual cases when considered necessary by him, or on the institution Doctor's advice subject to the condition that the scale laid down is not exceeded.

(3) Meal Timing and Menu:**a) Breakfast after 8:00 am**

- (i) Upma or chapattis made of Wheat or Ragi or any other dish.
- (ii) Chutneys from Gongura or fresh curry leave or fresh coriander or Coconut and Putnadal etc., dal/vegetable may be issued as a dish.
- (iii) Milk
- (iv) Any seasonal fruit in sufficient quantity

b) Lunch at 1:00 P.M. and Dinner After 7:00 P.M.

- (i) Rice/ Chapattis or combination of both
- (ii) Vegetable Curry
- (iii) Sambar or Dal
- (iv) Butter Milk or curd

(4) Others:

- (a) Depending on the season, the Superintendent shall have the discretion to alter the time for distribution of food .
- (b) On the advise of the Institution Doctor, every sick child who is prevented from taking regular food, on account of his ill-health, may be issued with medical diet, as indicated in diet scale.
- (c) Extra diet for nourishment like milk, eggs, sugar and fruits shall be issued to the children on the advice of the institution Doctor in addition to the regular diet, to pick up weight or for other health reasons and for the purpose of calculation of the daily ration, the sick children shall be excluded from the day's strength.

- (d) On the following national and festival occasions, sweet dishes may be distributed to all the children at the Home at the rate fixed by the Commissioner, from time to time.

1. Republic Day (26th January)
2. Ambedkar's Birthday (14th April)
3. Independence Day(15th August)
4. Mahatma Gandhi's Birth Day (2nd October)
5. Children's Day (14th November)
6. Child Rights Day (20th November)
7. Dussehra (Vijayadasami)
8. Deepavali
9. Ramzan (Id-Ul-Fitr)
10. Bakrid (Id-Ul-Zuha)
11. Christmas (25th December)

The States may specify additional festivals depending upon local preferences.

[F. No.1-2/2004-CW-II (Pt)]
 Dr. LOVELEEN KACKER
 JOINT SECRETARY

FORM-I
[Rule 13(1)(c)]

SUPERVISION ORDER

When the Juvenile is placed under the care of a parent, guardian or other fit person/fit institution

Profile No. _____ of _____ 20 ____.

Whereas (name of the juvenile/) has this day found to have committed an offence and has been placed under the care of (name) _____ (address) _____ on executing a bond by the said _____ and the Board is satisfied that it is expedient to deal with the said juvenile by making an order placing him/her under supervision.

It is hereby ordered that the said juvenile be placed under the supervision of _____ probation officer/case worker, for a period of _____ subject to the following conditions.

1. that the juvenile along with the copies of the order and the bond executed by the said _____ shall be produced before the _____ probation officer/caseworker named _____ therein.
2. that the juvenile shall be submitted to the supervision of the aforesaid probation officer/ case worker.
3. that the juvenile shall reside at _____ for a period of _____.
4. that the juvenile shall not be allowed to quit the district jurisdiction of _____ without the permission of the probation officer/case worker.
5. that the juvenile shall not be allowed to associate with bad characters.
6. that the juvenile shall live honestly and peacefully; and will go to school regularly/ endeavour to earn an honest livelihood.
7. that the juvenile shall attend the attendance centre regularly.
8. that the person under whose care the juvenile is placed shall arrange for the proper care, education and welfare of the juvenile.
9. that the preventive measures will be taken by the person under whose care the juvenile is placed to see that the juvenile does not commit any offence punishable by any law in India.
10. that the juvenile shall be prevented from taking narcotic drugs or psychotropic substances or any other intoxicants.
11. That the directions given be the probation officer/case worker from time to time, for the due observance of the conditions mentioned above, shall be carried out.

Dated this _____ day of _____ 20 ____.

(signature)

Principal Magistrate, Juvenile Justice Board

- Additional, conditions, if any may be inserted by the Juvenile Justice Board

FORM-II
[Rule 13(1)(d)]

Order of detention under Sub-Section _____ of Section _____, Sub-Section _____ of Section _____ and Sub-Section _____ of Section _____.

To
The Officer in charge

Whereas on the _____ day of _____ 20____,
_____ (name of the juvenile), son/ daughter of _____,
aged____, residing at _____ being found in Profile No.
_____ to be juvenile in conflict with law/ section _____
is order by me _____ Principal Magistrate, Juvenile Justice Board under
section _____ of Juvenile Justice Act, 2000 to be kept in the Observation
Home/ Special Home/ _____ for a period of
_____.

This is to authorize and require you to receive the said juvenile; into your charge, and to keep him/her in the Observation Home/ Special Home/ _____ for the aforesaid order to be carried into execution according to law.

Given under my hand and the seal of Juvenile Justice Board
This _____ day of _____ 20.

(signature)
Principal Magistrate, Juvenile Justice Board

Encl:

Copy of the judgment, if any, or orders, particulars of home and case history and individual care plan, if any:

Strike off which is not required.

FORM-III
ORDER OF SOCIAL INVESTIGATION/INQUIRY
 [Rule 13(1)(e) and (5)]

To

Probation Officer/ Case Worker/Person in-charge of Voluntary Organization/ Case Worker

Whereas a report/complaint under section _____ of the Juvenile Justice (Care and Protection of children) Act, 2000 has been received from _____ in respect of _____ (name of the juvenile), son/daughter of _____ approximate age _____ residing at _____, who has been produced before the Board.

You are hereby directed to enquire into the social antecedents, family background and circumstances of the alleged offence by the said juvenile and submit your social investigation report on or before _____ or within such time allowed to you by the Board.

You are also hereby directed to consult an expert in child psychology, psychiatric treatment or counselling for their expert opinion if necessary and submit such report along with your Social Investigation Report.

Dated this _____ day of _____ 20_____.

(Signature)
Principal Magistrate, Juvenile Justice Board

FORM IV
 [Rules 13(5) and 87(1)(a) and (2)]
SOCIAL INVESTIGATION REPORT

Sl. No. _____

Submitted to the Juvenile Justice Board _____ (address).

Probation Department/Concerned State Government Authority/Voluntary
 Organisation _____ (Signature
 and Stamp)

Profile No.

Under section:

Title of Profile:

Police Station:

Nature of offence charge:

Name	Religion
Father's Name	Caste
Permanent Address	Year of birth
Last address before apprehension	Age
	Sex
Previous institutional/case history and individual care plan, if any	

FAMILY

Members of family	Name	Age	Health	Education	Occupation	Monthly earnings	Disabilities	Any other eg. social habits
Father								
Step Father								
Mother								

Step mother								
Siblings								
Any other legal guardian/relative								

If married, relevant particulars

Other near relatives or agencies
Interested _____

Attitude towards religion normal
And ethical code of the home etc. _____

Social and economic status _____

Delinquency record of members
of family _____

Present living conditions _____

Relationship between parents/
Parents and children especially
With the juvenile under investigation _____

Other factors of importance if any _____

JUVENILES HISTORY

Mental condition
(Present and past) _____

Physical condition
(Present and past) _____

Habits, interests
(moral, recreational etc.) _____

Outstanding characteristics and
personality traits _____

Companions and their influence_____

Truancy from home, if any

School (attitude towards school,
teachers, class mates and vice-versa)

Work record (jobs held, reasons for leaving,
vocational interests, attitude towards job or employers)_____

Neighbourhood and neighbours report_____

Parent's attitude towards discipline
in the home and child's reaction_____

Any other remarks

RESULT OF INQUIRY

Emotional factors

Physical condition

Intelligence

Social and economic factors

Religious factors

Suggested causes of the problems

Analysis of the case including reasons for delinquency

Opinion of experts consulted

Recommendation regarding treatment and its Plan by Probation Officer

Signature of the Probation Officer/Case Worker

FORM – V
[Rules 15(5) and 79(2)]

**UNDERTAKING/ BOND TO BE EXECUTED BY A PARENT/ GUARDIAN/ RELATIVE
/FIT PERSON IN WHOSE CARE A JUVENILE IS PLACED**

Whereas I _____ being the parent, guardian, relative or fit person under whose care _____ (name of the juvenile) has been ordered to be placed by the Juvenile Justice Board _____, have been directed by the said Board to execute an undertaking/ bond with surety in the sum of Rs. _____/- (Rupees _____) or without surety. I hereby bind myself on the said _____ being placed under my care. I shall have the said _____ properly taken care of and I do further bind myself to be responsible for the good behaviour of the said _____ and to observe the following conditions for a period of _____ years w.e.f _____.

1. that I shall not change my place of residence without giving previous intimation in writing to the Juvenile Justice Board through the Probation Officer/Case Worker;
2. that I shall not remove the said juvenile from the limits of the jurisdiction of the Juvenile Justice Board without previously obtaining the written permission of the Board;
3. that I shall send the said juvenile daily to school/to such vocation as is approved by the Board unless prevented from so doing by circumstances beyond control;
4. that I shall send the said juvenile to an Attendance Centre regularly unless prevented from doing so by circumstances beyond my control;
5. that I shall report immediately to the Board whenever so required by it;
6. that I shall produce the said juvenile in my care before the Board, if he/she does not follow the orders of Board or his/her behaviour is beyond control;
7. that I shall render all necessary assistance to the Probation Officer /Case Worker to enable him to carry out the duties of supervision;
8. in the event of my making default herein, I undertake to produce myself before the Board for appropriate action or bind myself, as the case may be, to forfeit to Government the sum of Rs. _____ (Rupees _____).

Dated this _____ day of _____ 20.

Signature of person executing the Undertaking/Bond.

(Signed before me)

Principal Magistrate, Juvenile Justice Board

Additional conditions, if any, by the Juvenile Justice Board may be entered numbering them properly;

(Where a bond with sureties is to executed add)

I/We _____ of _____
 (place of residence with full particulars) hereby declare myself/ourselves as surety/sureties for
 the aforesaid _____ (name of the person executing the undertaking/bond) to adhere to
 the terms and conditions of this undertaking/bond. In case of _____ (name of the
 person executing the bond) making fault therein, I/We hereby bind myself/ourselves jointly or
 severally to forfeit to government the sum of Rs. _____/-
 (Rupees _____) dated this the
 _____ day of _____ 20 _____ in the presence of
 _____.

Signature of Surety(ties)

(Signed before me)

Principal Magistrate, Juvenile Justice Board

FORM VI
[Rules 15(6) and 79(2)]

PERSONAL BOND BY JUVENILE/CHILD

Personal Bond to be signed by juvenile/child who has been ordered under Clause _____ of Sub-Section _____ of Section _____ of the Act.

Whereas, I _____ inhabitant of _____ (give full particulars such as house number, road, village/town, tehsil, district, state) _____ have been ordered to be sent back/restored to my native place by the Juvenile Justice Board/Child Welfare Committee _____ under section _____ of the Juvenile Justice (Care and Protection of Children) Act, 2000 on my entering into a personal bond under sub-rule _____ of rule _____ and sub-rule _____ of rule _____ of these Rules to observe the conditions mentioned herein below. Now, therefore, I do solemnly promise to abide by these conditions during the period _____.

I hereby bind myself as follows:

1. That during the period _____ I shall not ordinarily leave the village/town/district to which I am sent and shall not ordinarily return to _____ or go anywhere else beyond the said district without the prior permission of the Board/Committee;
2. That during the said period I shall attend school/ vocational training in the village/town or in the said district to which I am sent;
3. That in case of my attending school/ vocational training at any other place in the said district I shall keep the Board/Committee informed of my ordinary place of residence.

I hereby acknowledge that I am aware of the above conditions which have been read over/explained to me and that I accept the same.

(Signature or thumb impression of the juvenile/child)

Certified that the conditions specified in the above order have been read over/explained to (Name of juvenile/child) _____ and that he/she has accepted them as the conditions upon which his/her period of detention/ placement in safe custody may be revoked.

Certified accordingly that the said juvenile/child has been released/relived on the _____.

Signature and Designation of the certifying authority
i.e. Officer-in-charge of the institution

FORM VII

[Rule 17(10)]

DISCHARGE ORDER

I _____ name and designation of the discharging authority _____ State Government/ Union Territory Administration, do by this order permit _____ son/ daughter of _____ residence _____ Profile Number _____ who was ordered to be detained/placed in a observation home/special home/after care home by the Juvenile Justice Board under section _____ of the Juvenile Justice (Care and Protection of Children) Act 2000, for a term of _____ on the _____ day of _____ 20_____ and who is now in the _____ home, at _____ to be discharged from the said _____ home and supervision and the authority of _____ during the remaining period of stay.

This order is granted subject to the conditions hereon, upon the breach of any of which it shall be liable to be revoked.

Dated _____

Signature and Designation of
Releasing Authority

Place: _____

Conditions:

1. The discharged person shall proceed to _____ and live under the supervision and authority of _____ until the expiry of the period of his/her detention unless the remission is sooner cancelled.
2. He/She shall not, without the consent of the _____ remove himself/herself from that place or any other place, which may be named by the said _____.
3. He/she shall obey such instruction as he/she may receive from the said _____ with regard to punctual and regular attendance at school/vocation or otherwise.
4. He/She shall attend the Attendance Centre located at _____ regularly.
5. He/She shall abstain from committing any offense and shall lead a sober and industrious life to the satisfaction of _____.
6. In the even of his/her committing a breach of any of the above conditions the remission of the period of detention hereby granted shall be liable to be cancelled and on such

cancellation he/she shall be dealt with under sub section (3) of section 59 of the Juvenile Justice (Care & Protection of Children) Act 2000.

I hereby acknowledge that I am aware of the above conditions which have been read over/explained to me and that I accept the same.

(Signature or mark of the released juvenile)

Certified that the conditions specified in the above order have been read over/explained to (Name of juvenile/child)_____and that he/she has accepted them as the conditions upon which his/her period of detention may be revoked.

Certified accordingly that the said juvenile/child has been discharged on the_____.

**Signature and Designation of the certifying authority
i.e. Officer-in-charge of the institution**

FORM VIII

[Rule 27(17)]

SUPERVISION ORDERWhen the Child is placed under the case of a parent guardian or other fit person

Case No. _____ of _____ 20____

Whereas (name of the child) _____ has this day been found to be in need of care and protection, and has been placed under the care and supervision of (name) _____ (address) _____ on executing a bond by the said _____ and the Committee is satisfied that it is expedient to deal with the said child by making an order placing him/her under supervision.

It is hereby ordered that the said child be placed under the supervision of (name) _____ (address) _____ for a period of _____ subject to the following conditions that:

1. the child along with the copies of the order and the bond, if any, executed by the said _____ shall be produced before the Committee as and when required by the person executing the bond
2. the child shall be placed under the supervision of the aforesaid parent/guardian/ fit person
3. the child shall reside at _____ for a period of _____
4. the child shall not be allowed to quit the district jurisdiction of _____ with the permission of the Committee.
5. the child shall go to school regularly/endeavour to earn an honest livelihood.
6. the person under whose care the child is placed shall arrange for the proper care, education and welfare of the child.
7. the child shall not be allowed to associate with undesirable characters and shall be prevented from coming in conflict with law.
8. the child shall be prevented from taking narcotic drugs or psychotropic substances or any other intoxicants.
9. the directions given by the Committee from time to time, for the due observance of the conditions mentioned above, shall be carried out.

Dated this _____ day of _____ 20 _____

(Signature)

Chairperson, Child Welfare Committee

- Additional conditions, if any may be interested by the Child Welfare Committee

FORM IX

[Rules 27(17) and 79(2)]

**UNDERTAKING BY THE PARENT OR 'FIT PERSON' TO WHOM
CHILD IS RESTORED**

I _____ resident of House no. _____ Street
 _____ Village/Town _____ District _____ State
 _____ do hereby declare that I am willing to take charge of (name of the child)
 _____ Aged _____ under the orders of the Child
 Welfare Committee _____ subject to the following terms and
 conditions:

- (i) If his/her conduct is unsatisfactory I shall at once inform the Committee.
- (ii) I shall do my best for the welfare and education of the said child as long as he/ she remains in my charge and shall make proper provision for his/her maintenance.
- (iii) In the event of his/her illness, he/she shall have proper medical attention in the nearest hospital.
- (iv) I undertake to produce him/her before the competent authority as and when required.

Date this day of

Signature**Signature and address of witness (es)**

(Signed before me)
Chairperson, Child Welfare Committee

FORM X
[Rule 27(18)]

ORDER OF SHORT TERM PLACEMENT PENDING INQUIRY

Name of the child :

Sex :

Age :

Father's Name :

Mother's Name :

Address :

Date of receiving by Organization/Institution:

Produced by:

This is to authorize and direct you to receive the said child in your charge, and keep her/him in the Shelter Home/Children's home for care and protection under section 33 (1) of the J.J. Act, 2000.

Next Date:

(Signature)
Chairperson/ Member
Child Welfare Committee

FORM XI

[Rule 27(19)]

ORDER OF RESTORATION OF A CHILD TO AN INSTITUTION

To
The Officer-in-Charge

Whereas on the _____ day of _____ 20____ (name of the child) _____, son/daughter of _____ aged _____ residing at _____ being in care and protection under section 33(4) of the Juvenile Justice (Care and Protection) Act 2000 is ordered by the Child Welfare Committee _____, to be kept in the _____ Children's _____ Home/ _____ Shelter _____ Home _____ for a period of _____.

This is to authorize and require you to receive the said child in your charge, and to keep him/her in the Children's Home/ Shelter Home _____ for the aforesaid order to be carried into execution according to law.

Given under my hand and the seal of Child Welfare Committee.

This _____ day of _____ 20.

(signature)
Chairperson/ Member
Child Welfare Committee

Encl:

Copy of the orders, particulars of home and previous record, case history and individual care plan, whichever is applicable:

FORM-XII

[Rule 28(1)]

ORDER FOR ENQUIRY

To

Child Welfare Officer/Person in-charge of Voluntary Organization/Social Worker/Case Worker

Whereas a report under section _____ of the Juvenile Justice (Care and Protection of children) Act, 2000 has been received from _____ in respect of (name of the child) _____, aged (approximate) _____, son/daughter of _____ residing at _____, who has been produced before the Committee under section _____ of the Juvenile Justice (Care and Protection of Children) Act, 2000.

You are hereby directed to enquire into the social and family background of the said child and submit your inquiry report on or before _____ or within such time allowed to you by the Committee.

You are also hereby directed to consult an expert in child psychology, psychiatric treatment or counselling for their expert opinion if necessary and submit such report along with your Inquiry Report.

You are hereby directed to enquire into the character and social antecedents of the said juvenile and submit your social investigation report on or before _____ or within such time allowed to you by the Board/Committee.

Dated this _____ day of _____ 20_____.

(signature)

**Chairperson/Member
Child Welfare Committee**

SEAL

FORM XIII

[Rules 28(3); 33(3)(g)(ii); and (4)(f); and 87(1)(a) and (2)]

FORMAT FOR INQUIRY REPORT

Sl. No _____

Produced before the Child Welfare Committee _____
(address).

Case No.

Concerned Government Department/ Voluntary Organisation

Category of child in need of care and protection:

Name	Religion
Father's Name	Caste
Permanent Address	Year of birth
Address of last residence	Age
	Sex

 Previous institutional/case history and individual care plan, if any
FAMILY

Members of family	Name	Age	Health	Education	Occupation	Monthly earnings	Disabilities	Any other eg. social habits
Father								
Step Father								
Mother								
Step mother								
Siblings								
Any other legal guardian/ relative								

If married, relevant particulars

Other near relatives or agencies
interested

Attitude towards religion, normal
and ethical code of the home etc.

Social and economic status

Delinquency record of members
of family

Present living conditions

Relationship between parent/
parents and children especially
with the said child

Other factors of importance if any

CHILD'S HISTORY

Mental condition
(Present and past)

Physical condition
(Present and past)

Habits, interests
(moral, recreational etc.)

Outstanding characteristics and
personality traits

Companions and their influence

Truancy from home, if any

School (attitude towards school,

teachers, class mates and vice-versa)

Work record (jobs held, reasons for leaving
vocational interests, attitude towards job or employers)_____

Neighbourhood and neighbours report_____

Parent attitude towards discipline
in the home and child's reaction_____

Any other remarks

RESULT OF INQUIRY

Emotional factors

Physical condition

Intelligence

Social and economic factors

Religious factors

Reasons for child's need for care and protection

Opinion of experts consulted

Recommendation of Child Welfare Officer/Case Worker/Social Worker regarding psychological support, rehabilitation and reintegration of the child and suggested plan

Signature of the Child Welfare Officer/Case Worker/Social Worker

FORM XIV
[Rule 33(3)(c)]

ORDER FOR DECLARING CHILD LEGALLY FREE FOR ADOPTION

1. In exercise of the powers vested in the Child Welfare Committee _____ constituted under sub-section _____ of section _____ of the Juvenile Justice (Care and Protection of Children) Act, 2000 and sub-rule _____ of rule _____ of these rules, minor _____ born on (date) _____ placed in custody of Specialised Adoption Agency (name & address) _____, _____ vide order _____ dated _____ of the Chairperson, Child Welfare Committee _____, has been declared legally free for adoption on the basis of details furnished through:
 - a) Inquiry/home study conducted by Child Welfare Officer/Social Worker/ Case Worker
 - b) Document of surrender executed by the parent(s) and surrender deed signed in the presence of the Committee under sub-rules _____ of rule _____ of these rules
 - c) Declaration submitted by the Specialised Adoption Agency under sub-rules _____ of rule _____ of these rules

2. _____ (name of the Specialised Adoption Agency) shall fulfill all conditions specified in Juvenile Justice (Care and Protection of Children) Act, 2000 and the rules relating thereto and furnish a copy of adoption decree/guardianship order in respect of the minor as may be required by Committee and the concerned Department of the State Government of _____.

Date:
Place

Chairperson/Member
Child Welfare Committee

For completion by the Specialised Adoption Agency.

- i. I have read and understood Chapters III and IV of Juvenile Justice (Care and Protection of Children) Act, 2000 and the rules thereunder and agree to abide/be bound by the same while placing said minor in adoption.
- ii. I further declare that the particulars stated in the declaration submitted by me on _____ true and correct. In case they are found to be false or incorrect, the Committee has right to suspend this Release Order for (name of the minor) _____ and ask for production of said minor before the Committee.

Date:
Place:

Child Welfare Officer/Social Worker

FORM XV
[Rule 33(4)(c)]

DEED OF SURRENDER

I _____ d/o or s/o _____ residing
at _____

am not in a position due to social reasons/ due to being single/ ill/ disabled to take care of my child (name, if any) _____ approximate age _____ years. I am explained the consequences of surrendering my child by the Child Welfare Officer/Social Worker (name) _____ and the Child Welfare Committee _____. In full knowledge of all these facts, I am surrendering my child before the Committee today, dated _____. Within two months from this stated date if I do not revise my decision to take back my child and do not approach the said Committee for the same, the Committee shall declare my child legally free for adoption and I shall have no further claim on my child.

Signature of parent/guardian

Date

That I _____ Child Welfare Officer/Social Worker have explained the procedure and the consequences of surrendering the child to the concerned parent/guardian on (date) _____.

Signature of Child Welfare Officer/Social Worker

Date

(Signed before me)

Chairperson/ Member
Child Welfare Committee

FORM XVI

[Rule 35(3)]

A. FOSTER CARER'S ASSESSMENT

1. Agency Details

Name of the Agency

Address

Telephone

Fax

E-mail

Name of the Social Worker

Tel

Date _____ (Form Completed)

2. Details of the Applicant

Surname

Full Name

Date of Birth

Religion

Language(s) spoken at Home

Occupation

(a) Nature of Work

(b) Hours of Work

Address

Telephone

3. Description of a preferred child

The type of child, the foster-carer would consider

(To be filled after a full discussion with the Foster-carer)

Age Range Under 2 years 3-6 years 7-12 years 13-15 years 16-18 years

Sl. No.	Type of Placement	Duration
(i)	Pre adoption	
(ii)	Emergency	
(iii)	Short term	
(iv)	Assessment	
(v)	Long term	

The Child an applicant can care for (Please Tick)

A child who is:

- i. Neglected
- ii. Orphaned
- iii. With Physical impairment
- iv. Mental impairment
- v. Hearing impairment
- vi. Speech impairment
- vii. Special Education needs
- viii. Learning difficulties
- ix. Physical abuse
- x. Sexual abuse
- xi. Who does not relate easily
- xii. Who needs control/may defy authority
- xiii. Born of rape/incest
- xiv. Who's parent(s) suffering from disease
- xv. Whose parent(s) is HIV positive
- xvi. Whose parent(s) are AIDS patient
- xvii. Whose parent(s) are alcoholic
- xviii. Drug addicts
- xix. Are in jail
- xx. Relinquished
- xxi. Belong to another caste
- xxii. Are of different religion

4. Profile of the family

Brief Family Profile					
Name	Gender	Approx. Age	Occupation	Education	Relationship with the applicant

(Give details of personalities, family life, experiences etc. Also highlight specific qualities of the family that can match with a child's needs. The details should facilitate initial identification of a potential match with a specific child.)

Accommodation (House)

(Details of type, size, own/rented space, amenities etc.)

Neighborhood

(Details of composition, amenities and facilities, public transport etc.)

5. Verification of applicant's identity

Place of residence

Period of stay

Nationality

Marital status (date/length of marriage)

Has either of the applicant had a previous marriage? Details

If children from previous marriage? Details

Specify documents seen with date

6. Career History

(Details of education, employment, voluntary work, part time work, leisure activities)

7. Agency Inquiries:

Medical check
Police check
Employer

8. Personal references (from 2 persons)

This section to be completed after interviews with two references; information gathered through these interviews should include:

- Length of time known
- Relationship to the applicant
- Provide evidence on the applicants ability to perform the tasks involved in _____
- Caring for children
- Providing a safe and caring environment
- Applicant as a neighbor
- Interests, talents, personality

Assessment of the social worker for these references

B. HOME STUDY REPORT

A Home Study Report of the foster carer(s) being a crucial document being prepared by the social worker of the Specialised Adoption Agency based on the information collected by the format given above should broadly include the following information:

- Social status and family background
- Description of the home
- Standard of living as it appears in the home
- Current relations amongst the members in the home
- Status of development of the children already in the home
- Employment and economic status
- Health details
- Details of facilities of education, medical, vocational trainings available in the neighborhood
- Reasons for wanting a child in foster care
- Attitudes of the grandparents and other relatives
- Anticipated plans for the foster child
- Legal status of the foster carer(s)
- Willingness to undergo training.

C. DETAILS OF APPLICANT(S)

1. Background:

Family structure with details of parents and siblings, significant details of other family members, childhood experiences, etc.

2. Relationships:

If couple – Length of married life, what qualities does each applicant bring to the partnership, what makes the relationship positive for each other? Within the relationship how do applicants cope with problems/stress/anger? How do applicants support each other? What is each applicant's assessment of how the foster placement will affect his or her relationship?

3. Decision making:

How is decision – making exercised in this relationship and how does each of the applicants view this? Is there wider extended family involvement in the couple's decision-making process? If so, how will this affect the child to be placed?

What are the strengths and vulnerabilities of this partnership?

- Children
- Children and their parents' relationships
- Children's attitude and readiness for a foster placement sibling. Describe each child and their temperament, any special talent and need, how children have been involved in preparation.

4. Applicants support networks:

Give a general picture of support systems currently used by the applicants including extended family, friends, neighbors, religious activities, community groups etc. include details of the location etc.

5. Other significant members of the family:

Living in the house or not. Their relationship to the applicants, how much time they spent within the home, their attitude to the proposed placement? How important is their acceptance of placement to the applicant.

6. Description of the family life style:

Outline what family considers important e.g. how important are religious & cultural practices. How is affection show in the family? How do the members spend their time? What expectations family members have with regard to personal space? What value is placed on education/hobbies and leisure activities that the whole family undertakes?

7. Parenting capacities:

Experience of the applicants of caring and working with children. Describe their adjustment to parenthood. What is their understanding of how children develop?

Using their own childhood experiences what patterns of parenting would the repeat and what would they change? What is their understanding of their own parenting strengths/potentials and about their parenting skills to meet the needs of individual child. To what extent they would expect other family members to be involved in parenting of their children/placed children.

How will they ensure that a child will be safe from physical sexual abuse in their family and within wider support networks?

8. Managing Unacceptable Behaviour:

What are rules in the household? How do the applicants show approval/disapproval? What are discipline measures they use? Their attitude towards punishment?

What do they anticipate would be the issues and difficulties and themselves for their own children and for their support network? What do they anticipate would be the issues and difficulties for the child? Which changes do they anticipate would need in their lifestyle?

Social workers assessment:

It should provide an analysis of all the information collected through the format and its significance with regard to the capacity of the applicant to carryout fostering task:

(What skills do the applicants have in relating to and working with children? How well will the applicant work with the agency, with biological parents? What are the strengths and resources of the applicants and which are the areas where they may experience difficulty? Also the point of disagreement between the social worker and the applicants should be recorded here)

Recommendations of the Child Welfare Officer/Social Worker

(Signature)

FORM XVII

[Rule 34(1)]

ORDER OF FOSTER CARE PLACEMENT

The child (name and address) _____ approximate
 age _____ d/o or s/o Mr. _____ and Mrs.
 _____ or Ms. _____
 is in need of care and protection of a family. Mr. _____ and
 Mrs. _____ or Ms. _____ resident
 of (complete address and contact numbers) _____
 _____ is/ are
 declared fit person/persons for foster-care placement of the child based on the home study report of the
 Child Welfare Officer/Social Worker Ms./ Mr. _____ of the
 organization (address) _____.

The child (name) _____ is placed in foster care for a
 period of _____ (days/ months), under the supervision of the aforesaid Child
 Welfare Officer/Social Worker (name and contact) _____.

Chairperson/ Member
Child Welfare Committee

FORM XVIII

[Rule 37(5)]

ORDER OF SPONSORSHIP PLACEMENT

The juvenile/child (name and address) _____

approximate age _____ d/o or s/o Mr. _____ and Mrs.

_____ or Ms. _____

has been identified by the State/ District Child Protection Unit as a juvenile/child at risk needing urgent care and protection. On the basis of the Inquiry Report submitted by the State/District Child Protection Unit/ Child Welfare Officer/ Social Worker it is established that the said juvenile/child needs sponsorship support for education/ health/ nutrition/ other developmental needs

_____ (*please specify*). The State/District Child Protection Unit is hereby directed to release Rs. _____ per month/ Rs. _____ as one time sponsorship support to the said juvenile/ child for a period of _____ (days/month) and carryout necessary follow up.

The State/District Child Protection Unit is also directed to clearly lay down the terms and conditions for sponsorship support and follow up.

**Principal Magistrate, Juvenile Justice Board/
Chairperson/Member, Child Welfare Committee**

**Copy to: State/District Child Protection Unit or concerned Department of the State
Government**

FORM XIX
[Rule 38(3)]

ORDER OF AFTER CARE PLACEMENT

The juvenile/child (name) _____ d/o or
s/o _____ has/ will be completing 18 years of age
on (date) _____. She/ he is still in need of care and protection for the purpose of
rehabilitation and reintegration. She/he is placed in (name of
organization) _____ for providing aftercare. The In-charge of
the Organization is directed to admit the child and provide all possible opportunities for her/ his
rehabilitation and reintegration in its truest sense. The person shall be provided all these
opportunities maximum till the age of 21 years only or till reintegration in the society, whichever
is earlier. The In-charge will send half yearly report on the status of the child/youth to the Child
Welfare Committee.

The State/District Child Protection Unit is hereby directed to arrange for aftercare for the said
juvenile/child for a period of _____ (days/month) and carryout necessary follow up. The
State/District Child Protection Unit is also directed to clearly lay down the terms and conditions for
aftercare programme and carryout necessary follow up.

**Principal Magistrate, Juvenile Justice Board/
Chairperson/Member, Child Welfare Committee**

**Copy to: State/District Child Protection Unit or concerned Department of the State
Government**

FORM XX

[Rule 50(9) and 54(1)(t)]

CASE HISTORY FORM FOR CHILDREN IN NEED OF CARE AND PROTECTION

Case/Profile No. _____

Date & Time _____

Affix a
latest
photograph
here

A. PERSONAL DATA

- 1 Name
- 2 Male / Female (tick the appropriate category)
- 3 a) age at the time of admission
b) present age:
- 4 Category:
 - Separated from family
 - Abandoned/deserted
 - Victim of exploitation and violence (give detail)
 - Run-away
 - Any other
- 5 Religion Hindu (OC/BC/SC/ST)
 Muslim/Christian/Other (pl. specify)
- 6 Location of Residence Urban/Sub-urban/Rural/Slum/
 Industrial/Other (Pl. specify)
- 7 Native District & State:
- 8 Description of the Housing:
 - i) Concrete building Tiled
House/Hut/On the street/Others
(please Specify)
 - ii) Three bed room/two-bed
room/one-bed room/no separate

- bed room
- iii) Owned/rental
9. By whom the juvenile was brought before the Child Welfare Committee:
- i) Police-Local Police/Special Juvenile Police Unit/Railway Police/ Women Police
 - ii) Probation Officers
 - iii) Social Welfare Organization
 - iv) Social Worker
 - v) Parent(s)/Guardian (s) (please Specify the relationship)
 - vi) Child himself/herself
10. Reasons for leaving the family
- i) Abuse by parent(s)/guardian(s)/step parents(s)
 - ii) In search of employment
 - iii) Peer group influence
 - iv) Incapacitation of parents
 - v) Criminal behaviour of parents
 - vi) Separation of Parents
 - vii) Demise of parents
 - viii) Poverty
 - ix) Others (please specify)
11. Types of abuse met by the child
- i) Verbal abuse – parents/siblings/ employers/others (pl. specify)
 - ii) Physical abuse
 - iii) Sexual abuse parents/siblings/ Employers/others (Pl. specify)
 - iv) Others – parents/siblings/ employers/others (pl. Specify)
12. Types of ill-treatment met by the child.
- i) Denial of food – parents/siblings employers/other (pl. specify)
 - ii) Beaten mercilessly – parents/ Siblings/employers/other (pl. specify)
 - iii) Causing injury – parents/ siblings/employers/other (pl. specify)
 - iv) Other (pl. specify) – parents/ siblings/ employers/others (pl. specify)
13. Exploitation faced by the child

- i) Extracted work without payment
 - ii) Little (low) wages with longer duration of work
 - iii) Others (pl. specify)
14. Health status of the child before admission.
- i) Respiratory disorders - present / not known / absent
 - ii) Hearing impairment - present / not known / absent
 - iii) Eye diseases - present / not known / absent
 - iv) Dental disease - present / not known / absent
 - v) Cardiac diseases - present / not known / absent
 - vi) Skin disease - present / not known / absent
 - vii) Sexually transmitted diseases - present / not known / absent
 - viii) Neurological disorders - present / not known / absent
 - ix) Mental handicap - present / not known / absent
 - x) Physical handicap - present / not known / absent
 - xi) Others (pl. specify) - present / not known / absent
15. With whom the child was staying prior to admission
- i) Parent(s) – Mother / Father / Both
 - ii) Guardian(s) – Relationship
 - iii) Friends
 - iv) On the street
 - v) Night shelter
 - vi) Orphanages / Hostels/ Similar Homes
 - vii) Other (pl. specify)
16. Visit of the parents to meet the child
- i) Prior to institutionalization –
Frequently / Occasionally / Rarely / Never
 - ii) After institutionalization -
Frequently / Occasionally / Rarely / Never
17. Visit of the child to his family
- i) Prior to institutionalization –
Frequently / Occasionally / Rarely / During festival times / During summer holidays /
Whenever fallen sick / Never
 - ii) After institutionalization –
Frequently / Occasionally / Rarely / During festival times / During summer holidays /
Whenever fallen sick / Never
18. Correspondence with parents -
- i) Prior to institutionalization –
Frequently / Occasionally / Rarely / During festival times / During summer holidays /
Whenever fallen sick / Never

- ii) After institutionalization –
Frequently / Occasionally / Rarely / During festival times / During summer holidays /
Whenever fallen sick / Never

B CHILDHOOD HISTORY (up to the age of 12 years)

19. Diet of mother during pregnancy:
i) Taken nutritious diet
ii) Ordinary diet
iii) Inadequate food intake
20. Health during pregnancy
i) Mother infected with contagious diseases
ii) Mother consumed/ used contraceptives
iv) Intake of antibiotics
v) No such details available
21. Birth details
i) Normal delivery/ prolonged delivery/ caesarian
ii) Under weight/ normal weight/ over weight
22. Details of immunization provided
23. Details of handicap
i) Hearing impairment By birth/ After accident/ diseases
ii) Speech impairment By birth/ After accident/ diseases
iii) Physical handicap By birth/ After accident/ diseases
iv) Mental handicap By birth/ After accident/ diseases
v) Others (please specify)

C. FAMILY DETAILS:

24. Household Composition:

S. No.	Name & Relationship	Age	Sex	Education	Occupation	Income
1	2	3	4	5	6	7

Health	History of Mental illness	Handicap	Habit	Socialization
8	9	10	11	12

25. Type of family:

Nuclear family / joint family/ broken family

26. Relationship among the family members:

i) Father & mother	Cordial/ Non cordial/ Not known
ii) Father & child	Cordial/ Non cordial/ Not known
iii) Mother & child	Cordial/ Non cordial/ Not known
iv) Father & siblings	Cordial/ Non cordial/ Not known
v) Mother & siblings	Cordial/ Non cordial/ Not known
vi) Juvenile & siblings	Cordial/ Non cordial/ Not known

27. History of crime committed by family members:

S. No.	Relationship	Nature of crime	Arrest if any made	Period of confinement	Punishment awarded
1.	Father				
2.	Step father				
3.	Mother				
4.	Step mother				
5.	Brother (a) (b) (c) (d)				
6.	Sister (a) (b) (c) (d)				
7.	Child				
8.	Others (uncle/ aunty/ grandparents)				

28. Properties owned by the family:

- i) Landed properties (pl. specify the area)
- ii) Household articles- Cows/ Cattle/ Bull
- iii) Vehicles- two wheeler/ three wheeler/ four wheeler (lorry/ bus/ car/ tractor/ jeep)
- iv) Others (please specify)

29. Marriage details of family members:

i) Parents	Arranged/ Special Marriage/ Local Union
ii) Brothers	Arranged/ Special Marriage/ Local Union
v) Sisters	Arranged/ Special Marriage/ Local Union

30. Social activities of family members:

- i) Participate in social and religious functions
- ii) Participate in cultural activities
- iii) Does not participate in social and religious functions
- iv) Not known

31. Parental care towards juvenile before admission:

- i) Over protection
- ii) Affectionate
- iii) Attentive
- iv) Not affectionate
- v) Not attentive
- vi) Rejection

D. ADOLESCENCE HISTORY (Between 12 and 18 years)

32. Puberty

- Early
- Middle age
- Late

33. Details of delinquent behaviour if any

- i) Stealing
- ii) Pick pocketing
- iii) Arrack selling
- iv) Drug pedaling
- v) Petty offences
- vi) Violent crime
- vii) Rape
- viii) None of the above
- ix) Others (please specify)

34. Reason for delinquent behaviour

- i) Parental neglect
- ii) Parental overprotection
- iii) Parents criminal behaviour
- vi) Parents influence (negative)
- vii) Peer group influence
- viii) To buy drugs/alcohol
- ix) Others (pl. specify)

35. Habits

A	B
i) Smoking	i) Watching TV/movies
ii) Alcohol consumption	ii) Playing indoor/outdoor games
iii) Drug use (specify)	iii) Reading books
iv) Gambling	iv) Religious activities
v) Begging	v) Drawing/painting/acting/singing
vi) Any other	vi) Any other

E. EMPLOYMENT DETAILS

Employment details of the juveniles prior to entry into the Home:

S.No.	Details of employment	Duration	Wages earned
i)	Cooly		
ii)	Rag picking		
iii)	Mechanic		
iv)	Hotel work		
v)	Tea shop work		
vi)	Shoe polish		
vii)	Household works		
viii)	Others (pl specify)		

36. Details of income utilization:

- i) Sent to family to meet family need
- ii) For dress materials
- iii) For gambling
- iv) For prostitution
- v) For alcohol
- vi) For drug
- vii) For smoking
- viii) Savings

37. Details of savings

- i) With employers
- ii) With friends
- vi) Bank/Post Office
- vii) Others (pl. specify)

38. Duration of working hours

- i) Less than six hours
- ii) Between six and eight hours

iii) More than eight hours

F. EDUCATIONAL DETAILS

39. The details of education of the juvenile prior to the admission to Children's Home

- i) Illiterate
- ii) Studied up to V Standard
- iii) Studied above V Std but below VIII Standard
- iv) Studied above VIII Std but below X Standard
- v) Studied above X Standard

40. The reason for leaving the School

- i) Failure in the class last studied
- ii) Lack of interest in the school activities
- iii) Indifferent attitude of the teachers
- iv) Peer group influence
- v) To earn and support the family
- vi) Sudden demise of parents
- vii) Rigid school atmosphere
- viii) Absenteeism followed by running away from school
- ix) Others (pl. specify)

41. The details of the school in which studied last:

- i) Corporation/Municipal/Panchayat Union
- ii) Government/SC Welfare School/BC Welfare School
- iv) Private management
- v) Convents

42. Medium instruction:

Hindi/English/Urdu/Tamil/Malayalam/Kannada/ Telugu
Other language (please specify)

43. After admission to Children's Home, the educational attainment from the date of admission till date;

No. of years	Class studied	Promoted /detained

44. Vocational training undergone from the date of admission into Children's Home till date.

No. of years	Name of Vocational Trade	Proficiency Attained

45. Extra curricular activities developed from the date of admission into the Children's Home till date

- i) Scout

- ii) Sports (please specify)
- iii) Athletics (please specify)
- iv) Drawing
- v) Painting
- vi) Others (pl. specify)

G. MEDICAL HISTORY

46. Height and weight at the time of admission:

47. Physical condition:

48. Medical history of child (gist):

49. Medical history of parent/guardian (gist):

50. Present health status of the child:

Sl. No.	Annual Observation	1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Quarter
1.	Date of review				
2.	Height				
3.	Weight				
4.	Nutritious diet given				
5.	Stress disease				
6.	Dental				
7.	ENT- Tonsils				
8.	External eye problem: vision				
	Left				
	Right				

51. Height and Weight Chart:

Date, Month & Year	Height	Admissible weight	Actual weight

H. SOCIAL HISTORY

52. Details of friendship prior to admission into Children's Home:

- i. Co-workers
- ii. School/Classmate
- iii. Neighbours
- iv. Others (pl. specify)

53. Majority of the friends are

- i. Educated
- ii. Illiterate
- iii. The same age group
- iv. Older in age
- v. Younger in age
- vi. Same sex
- vii. Opposite sex

54. Details of membership in group (please specify details)

- i. Associated with cine fans association
- ii. Association with religious group
- iii. Associated with arts and sports club
- iv. Associated with gangs
- v. Associated with voluntary social service league
- vi. Others (please specify)

55. The position of the child in the groups/league

- i. Leader
- ii. Second level leader
- iii. Middle level functionary
- iv. Ordinary member

56. Purpose of taking membership in the group:

- i. For social service activities
- ii. For leisure time spending
- iii. For pleasure seeking activities

- iv. For deviant activities
- v. Others (please specify)

57. Attitude of the group / league

- i. Respect the social norms and follow the rules
- ii. Interested in violating the norms
- iii. Impulsive in violating the rules

58. The location/meeting point of the groups

- i. Usually at fixed place
- ii. Places are changed frequently
- iii. No specific places
- iv. Meeting point is fixed conveniently

59. The reaction of the society when the child first came out of the family

- i. Supportive
- ii. Rejection
- iii. Abuse
- iv. Ill-treatment
- v. Exploitation

60. The reaction of the police towards children

- i. Passionate
- ii. Cruel
- iii. Abuse
- iv. Exploitation
- v. Ill-treatment

61. The response of the general public towards the child

HISTORY OF THE CHILD (GIST)

- i. Education
- ii. Health
- iii. Vocational training
- iv. Extra curricular activities
- v. Others

Suggestion of Child Welfare Officer/ Probation Officer after orientation to juvenile/child and the response towards orientation.

Follow up by Child Welfare Officer/ Probation Officer/ Case Worker/ Social Worker

Quarterly Review of Case History by Management Committee

**SUPERINTENDENT/
WELFARE OFFICER/PROBATION OFFICER**

FORM XXI

[Rules 50(12)(a), 54(1)(o) and 87(1)(k)]

INDIVIDUAL CARE PLAN

Individual care plan for each child shall be prepared following the principle of the best interest of the child. In preparing individual care plan the care options in the following order of preferences shall be considered:

- (i) Preserving the biological family
- (ii) Kinship Care
- (iii) In-country adoption
- (iv) Foster Care
- (v) Inter-country Adoption
- (vi) Institutional Care

Case/Profile No. _____ of 20____(year) of the Board/Committee

Admission No. _____

Date of Admission: _____

A. PERSONAL DETAILS

1. Name of the Child: _____

2. Age: _____

3. Sex: Male/Female _____

4. Father's/Mother's name: _____

5. Nationality: _____

6. Religion/caste: _____

7. Educational Attainment: _____

8. Summary of Case History:

- Health needs
- Emotional and psychological support needed
- Educational and Training needs
- Leisure, creativity and play

- Attachments and Relationships
- Religious beliefs
- Protection from all kinds of abuse, neglect and maltreatment
- Social mainstreaming
- Follow-up post release/restoration

B. FORTNIGHTLY PROGRESS REPORT OF PROBATIONER

Part One

1. Name of the Probation Officer/Case Worker
2. For the month of
3. Registration No.
4. Competent Authority
5. Profile No.
6. Name of the Child
7. Date of Supervision Order
8. Address of the Child
9. Period of Supervision

Part Two

Places of interview

.....

Dates

.....

1. Where the child is residing?
2. Progress made in any educational/training course.
3. What work he/she is doing and his/her monthly average earning, if employed.
4. Savings kept in the Post Office.
5. Savings Bank Account in his/her name.
6. Remarks on his/her general conduct and progress.
7. Whether property cared for?

Part Three

1. Any proceedings before the competent authority of or
 - a) Variation of conditions of bond
 - b) Change of residence
 - c) Other matters
2. Period of supervision completed on.....

3. Result of supervision with remarks (if any)
4. Name and Addresses of the parent or guardian or fit person under whose care the juvenile is to live after the supervision is over.

Date of report _____ Signature of the Probation Officer/Case Worker _____

C. PRE-RELEASE REPORT

Tick whichever is applicable

Final Release

☐

Transfer

☐

1. Details of place of transfer and concerned authority responsible in the place of transfer/release
2. Details placement of the juvenile/child in different institutions
3. Training undergone and skills acquired
4. Final progress report of the officer-in-charge/probation officer/child welfare officer/case worker/social worker (to be attached)
5. Date of release/transfer
6. Date of repatriation
7. Requisition for escort if required
8. Identification of escort
9. Recommended rehabilitation plan including possible placements
10. Sponsorship requirement and report, if applicable
11. Identification of Probation Officer/Case worker/social worker/non-governmental organisation for post-release follow-up
12. Memorandum of Understanding with non-governmental organisation identified for post-release follow-up
13. Identification of sponsorship agency/individual sponsor for the child post-release, if any
14. Memorandum of Understanding between the sponsoring agency and individual sponsor
15. Details of Savings Account of the child, if any
16. Details of child's earnings and belongings if any
17. Details of awards/rewards due to the child if any
18. Opinion of the child
19. Any other information

Note: Pre-release report shall be prepared 6 months prior to the date of release/transfer of juvenile/child and shall take into account the recommendations of the last review report and all other relevant information.

D. POST-RELEASE REPORT

1. Status of Bank Account : Closed / Transferred
2. Earnings and belongings of the child : handed over to the child or his/her parents/guardians – Yes/No
3. First interaction report of the probation officer/child welfare officer/case worker/social worker/non-governmental organisation identified for follow-up with the child post-release
4. Placement of the juvenile/child if any
5. Family's behaviour towards the child
6. Social milieu of the child, particularly attitude of neighbours/community
7. How is the child using the skills acquired?
8. Whether the child has been admitted to a school or vocation? Give date and name of the school/institute/any other agency
9. Report of second and third follow-up interaction with the child after two months and six months respectively

FORM XXII

[Rule 65(2)]

ESCORT ORDER

Case No.....

In the matter of Boy/Girl Child

.....

Aged about.....year taken

Charged for sole custody under

Section 33(3) of the Juvenile

Justice Act 2000

The Parents of the boy/girl child are reported to be residing at:

He/She therefore be sent under supervision of a proper police/ non-governmental organisation
escort to the_____.

For tracing and for handing over to the parents or close relatives of the said Boy Child/Girl Child residing at the aforesaid address or at other Place which may be shown by the Child, if no such parents or relative are traced or if traced but they are unwilling to take charge of the boy/girl be kept in the custody of the Superintendent.....Children's Home and the said Boy/Girl child be produced before the concerned Child Welfare Committee for further orders.

Orders

Pending Escort, the said Boy/Girl Child shall remain in Children's Home, residing at present.at--
----- The State/District Child Protection Unit, or Police Department or non-governmental organisation/ Childline shall positively make immediate arrangement not less than 15 days from the date of receipt of this order by him and send the said Boy Child/Girl Child at his/her aforesaid place of residence.

Dated this.....day of.....200

Chairperson/Member
Child Welfare Committee

CC to:

- 1.The Superintendent, Children Home,.
- 2.The State/District Child Protection Unit or non-governmental organisation or Childline

Ref.: 1. Order of admission of minor.....born on.....Profile No.....

राजस्थान सरकार
निदेशालय, चिकित्सा एवं स्वास्थ्य सेवायें, राजस्थान, जयपुर

Annexure 41

क्रमांक :चि.प्र./विविध/2017/403

दिनांक: 8/8/17

1. समस्त मुख्य चिकित्सा एवं स्वास्थ्य अधिकारी,
2. समस्त प्रमुख चिकित्सा अधिकारी,
3. समस्त अधीक्षक संलग्न चिकित्सालय समूह,
राजस्थान।

विषय:- आयु प्रमाण पत्र जारी करने के संबंध में दिशा-निर्देश।

माननीय राजस्थान उच्च न्यायालय जोधपुर द्वारा डी.बी. हैवियस कॉर्पस रिट संख्या 45/2017 श्री बंशीलाल जाट बनाम राजस्थान सरकार व अन्य में पारित आदेश दिनांक 08.05.17 की अनुपालना में राज्य के राजकीय चिकित्सा संस्थानों में आयु निर्धारण प्रमाण पत्र जारी करने के संबंध में समस्त चिकित्सा अधिकारियों को निर्देशित किया जाता है कि किसी भी बालिका/बालक की आयु निर्धारण के संबंध में प्रमाण पत्र जारी करने से पूर्व उसके अभिभावक की सहमति अथवा आपराधिक प्रकरणों में, जिनमें एफआईआर दर्ज की जा चुकी है, अनुसंधान अधिकारी की सहमति के बिना प्रमाण पत्र जारी नहीं किया जावे।

निदेशक (जन स्वा0)

चिकित्सा एवं स्वास्थ्य सेवायें
राजस्थान जयपुर

दिनांक: 8/8/17

क्रमांक :चि.प्र./विविध/2017/403

प्रतिलिपि निम्न को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है:-

1. विशिष्ट सहायक, माननीय चिकित्सा मंत्री महोदय, राजस्थान सरकार।
2. निजी सचिव, प्रमुख शासन सचिव, चिकित्सा एवं स्वास्थ्य सेवायें, राजस्थान जयपुर।
3. निजी सचिव, प्रमुख शासन सचिव, चिकित्सा शिक्षा, राजस्थान, जयपुर।
4. समस्त प्रधानाचार्य एवं नियंत्रक, मेडिकल कॉलेज संलग्न चिकित्सालय, राजस्थान।
5. निदेशक (जन स्वा0/आरसीएच/ईएसआई/एड्स), चिकित्सा एवं स्वास्थ्य सेवायें, राजस्थान, जयपुर।
6. समस्त संयुक्त निदेशक, चिकित्सा एवं स्वास्थ्य सेवायें, जोन, राजस्थान।
7. डी.एम. स्वर्णकार स्थाई केस प्रभारी अधिकारी, माननीय उच्च न्यायालय, जोधपुर को प्रेषित कर लेख है कि उक्त प्रकरण में माननीय न्यायालय के निर्देशों की अनुपालना में जारी निर्देश को श्री एस.के. व्यास, राजकीय अधिवक्ता के माध्यम से न्यायालय में पेश करावे।
8. समस्त खण्ड मुख्य चिकित्सा अधिकारी, राजस्थान।
9. समस्त चिकित्सा अधिकारी, सामुदायिक स्वास्थ्य केन्द्र, राजस्थान।
10. समस्त चिकित्सा अधिकारी, प्राथमिक स्वास्थ्य केन्द्र, राजस्थान।
11. प्रभारी सर्वर रूम, मुख्यालय।
12. रक्षित पत्रावली।

2. विजय साहिब, प्रमुख शासन सचिव, पिकिसरा एवं स्वास्थ्य से. 1/3 जगमगा

राजस्थान सरकार
निदेशालय, चिकित्सा एवं स्वास्थ्य सेवायें, राजस्थान, जयपुर

क्रमांक: चि.प्र./एमएलसी/2018/ 796

दिनांक: 13/12/18

समस्त मुख्य चिकित्सा एवं स्वास्थ्य अधिकारी,
राजस्थान ।
समस्त प्रमुख चिकित्सा अधिकारी,
राजस्थान ।

विषय:-स्वास्थ्य एवं परिवार कल्याण मंत्रालय भारत सरकार द्वारा जारी Guidelines & protocols on medicolegal care for survivors /victim of sexual violence को राजस्थान राज्य में लागू करने बाबत ।

सन्दर्भ:- गृह मंत्रालय भारत सरकार का पत्र क्रमांक D.o. No. 25020/46/2018/-PM-iii (WS) Dated : 25 July 2018 के क्रम में ।

उपरोक्त विषयान्तर्गत सन्दर्भित पत्र के क्रम में लेख है कि स्वास्थ्य एवं परिवार कल्याण मंत्रालय भारत सरकार द्वारा जारी Guidelines protocols on medicolegal care for survivors /victim of sexual violence के अनुसार कार्य करने की अनमति प्रदान की जाती है ।

उक्त स्वीकृति निजी सचिव, अति० मुख्य सचिव, चिकित्सा एवं स्वास्थ्य विभाग के डायरी क्रमांक 8026 दिनांक 15.11.2018 के अनुमोदन पश्चात जारी किया गया ।
संलग्न गाईडलाईन्स

बालकृष्ण
13/12/18

निदेशक (जन स्वा०)
चिकित्सा एवं स्वास्थ्य सेवाएं
राजस्थान, जयपुर

क्रमांक: चि.प्र./एमएलसी /2018/ 796

दिनांक: 13/12/18

प्रतिलिपी:

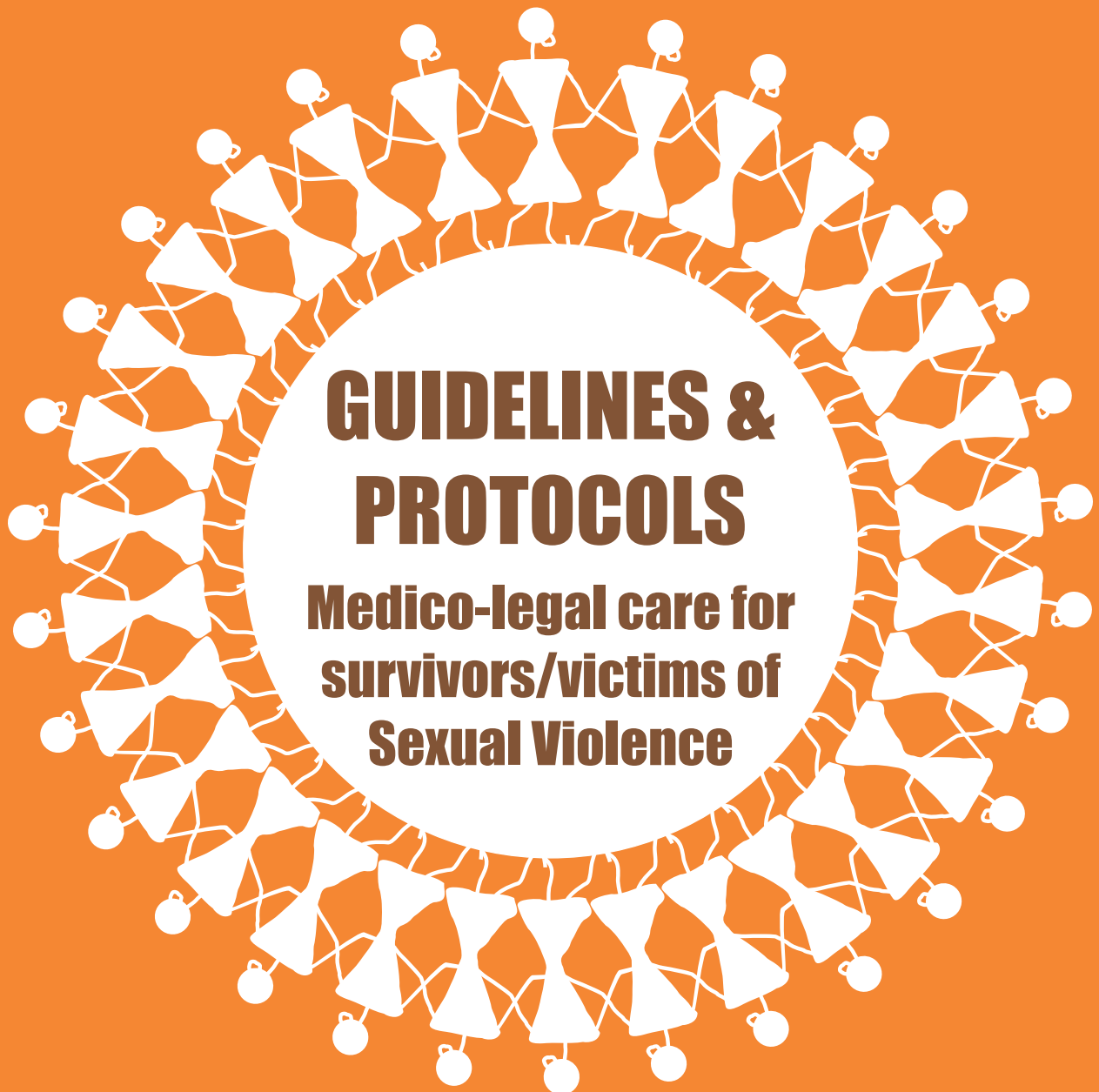
1. निजी सचिव, अति० मुख्य सचिव महोदय, चिकित्सा एवं स्वास्थ्य राज० जयपुर
2. निजी सचिव निदेशक जनस्वास्थ्य चिकित्सा एवं स्वास्थ्य विभाग रा० जयपुर ।
- ✓ 3. प्रभारी सर्वर रूम मुख्यालय को भेजकर लेख है कि उक्त गाईडलाईन्स को विभागीय वेबसाईट पर अपलोड कराया जाना सुनिश्चित करें ।
4. रक्षित पत्रावली ।

बालकृष्ण
13/12/18

निदेशक (जन स्वा०)
चिकित्सा एवं स्वास्थ्य सेवाएं
राजस्थान, जयपुर



Ministry of Health
& Family Welfare
Government of India



GUIDELINES & PROTOCOLS

**Medico-legal care for
survivors/victims of
Sexual Violence**

GUIDELINES & PROTOCOLS

Medico-legal care for survivors/victims of sexual violence

FOREWORD

I deem it a great honour to contribute this foreword to the Guidelines and Examinations Proformae for Medico Legal Cases of victims of sexual violence, being brought out under the auspices of the Ministry Of Health and Family Welfare, Government of India. With the publication of this compact document a long felt need to bring about a certain degree of uniformity in approaching, treating and documenting cases of sexual violence, mainly against women and girls should get fulfilled. Even so, there still maybe some gaps in these guideline which need to be plugged and through feedback received from various quarters further improvements can be effected in them. Thus, the exercise of drawing up these guidelines has to be treated as an iterative one and the process would need to continue till such time as a reasonable level of definitiveness can be brought into them.

The guidelines, have specially been drawn up for rape cases, although they could be used in other cases of sexual violence as well. Statistics pertaining to sexual and physical violence against women in this country are alarming as around one in three is likely to face this sort of violence in her lifetime. Thirty three percent plus is a big number while the approach to mitigating such problems has to be a holistic one cutting across boundaries. We in this Ministry have taken the first step towards sexual violence mitigation.

The guidelines are essentially aimed at doctors who might one day be called upon to handle female victims of sexual assault / rape in the course of their duty whether in a government hospital or even a private one. Sexual assault victims cannot be denied treatment in either of these hospitals when they approach them as denial has lately been made a cognizable criminal offence punishable with appropriate jail terms or fines or both. As is known rape law has been made more stringent with zero tolerance for offenders and through these guidelines the aim is to ensure a sensitive and humane approach to such victims, their proper treatment apart from attending or treating doctors responsibility and duty in recording and documenting the medical aspects in order that such cases when they come up before the criminal justice system are not found wanting in the quality of evidence produced by the prosecution during trial.

Many a times it has been experienced in the past in such cases that medical evidence has not been recorded and documented in a proper fashion leading thereby to a poor conviction in rape cases.

We are in debted to Justice Verma, who was the first one to highlight the need to standardize medical evidence collection during such victim's treatment process. This Ministry responded to the challenge and took the initiative in drawing up these guidelines. Here I would like to specifically mention the contribution made by my predecessor, Shri. Keshav Desiraju, the then Secretary/ Health and Family welfare, who realizing the gravity of this issue, responded to the challenge and expeditiously set up a committee for framing these guidelines in a time bound manner. We are deeply indebted to him for his personal intervention, indulgence and guidance at every stage of framing these guidelines.

Many persons from the medical, legal and administrative fields who have distinguished themselves in their professions have been associated with the work on these guidelines. Had it not been for their painstaking and dedicated effort these guidelines might not have either seen the light of day or may not have turned out to be so comprehensive and

complete. While it is difficult in the space allocated to me to pen down the names of all such individuals, it would suffice if a few of them were to be named. First and foremost, I would like to thank Ms. Padma B. Deosthali, Coordinator, CEHAT, Ms. Aruna Kashyap, Women's Rights Division, HRW, Ms. Vrinda Grover, Advocate, New Delhi, Ms. Indira Jaisingh, ASG, Professor Shekhar Sheshadri, Psychiatrist, NIMHANS, and Dr. Jagadeesh Reddy, Forensic Medicine Expert, Bengaluru.

I would also thank the Department of Health Research for their assistance in the formulation of the medical protocols, and the Ministry of Home Affairs for their kind support. The DGHS and his team of doctors who have contributed to this laudable effort in formulating the medical investigating protocol, while taking into consideration the concerns and suggestions of the Justice Verma Committee Report in Chapter 11; its conclusion recommendations and the appendix 7 of the report. A reference of the Ministry of Women and Child Development on the Child/patient interviewing and the sensitivities of forensic evidence collections that has been consulted needs a special mention, a sincere attempt to incorporate the psychological and social factors of the sexual assault survivor/victim, who could be a minor / child, as the case may be, have been drawn from the guidelines of Ministry of Women & Child Development. The responsibilities on the surrounding adults and the hospital staff have been articulated in such guidelines.

I would specially like to put on record my gratitude for Ms. Indira Jaisingh, Additional Solicitor General who has played a key role and contributed extensively to making its content pointed and effective.

I would also like to put on record my appreciation for the coordination and organisational efforts put in by Mrs. Shakuntala D. Gamlin, Joint Secretary, Ministry of Health & Family Welfare and her team comprising Shri Vikas Arya, Director, Shri Amal Pusp, Director, Smt. Aparna Sharma, Director, Shri Sanjay Pant, Under Secretary and staff from the Hospital Section. This team under the leadership of Shri C.K. Mishra, Additional Secretary (H) has worked hard in putting together these guidelines.

The guidelines are to be brought to the attention of hospitals within the jurisdiction of each state and UT. It is incumbent on every government hospital in the country to treat rape victims free of charge, even post treatment will have to be gratis. Through this document I would like to avail the opportunity of appealing to every private hospital in the country to treat rape victims free of charge too as a part of their corporate social responsibility. In doing so they would be contributing to make India a better and safe place to live in. I'm sure these guidelines will be helpful to all the medical practitioners to deal with such cases in an informed manner.

The guidelines are being uploaded on the Ministry's website for information of all concerned and with the request that suggestions for their further improvement may be sent to Director (H), Ministry of Health and Family Welfare, Nirman Bhawan, New Delhi.

Dated 19 March, 2014
New Delhi


Mr Lov Verma
Secretary (HFW)

Message from WHO Representative to India

Violence is preventable and is not inevitable. There is a need to address the economic and sociocultural factors that foster a culture of violence against women (VAW). While we recognize that there is a need to adopt a multi-sectoral framework of mutually reinforcing interventions for prevention and management of gender based violence particularly against women and girls, the focus of our work is to build health systems capacities. The health care system is the only institution that interacts with almost every woman at some point in her life and women living with violence are likely to visit health facilities more frequently than non-abused women. Interventions by health providers can potentially mitigate both the short and long-term health effects of gender-based violence on women and their families.

Taking into understanding the rise in the reported cases of violence against women and also the gaps in responding to the needs of survivors of sexual violence at various levels, the Ministry of Health and Family Welfare is committed to setting up of standardized protocols for care, treatment and rehabilitative services for survivors of sexual violence. These guidelines and protocols recognize the role of the health sector and is a positive way forward towards providing empathetic support and rebuilding lives after assault.

WHO will continue to play a significant role in generating evidence of the health consequences of VAW, build health systems capacity and partner with other sectors to adapt an integrated approach in addressing this public health issue.



Dr Nata Menabde
WHO Representative to India

No.Z.28015/21/2013-H

Government of India
Ministry of Health & Family Welfare
Department of Health & Family Welfare
Hospital Division

Nirman Bhawan, N. Delhi
Dated the 18th March, 2013

ORDER

A Committee is constituted under the Chairmanship of Shri Keshav Desiraju, Secretary (H&FW), to go into all M/o Health & Family Welfare's related aspects related to the survivors/victims of sexual violence and sexual assault arising out of the Justice Verma Committee Report, particularly, with reference to standardizing the medical examination protocols for them.

2. The Committee will function under the Chairmanship of Shri Keshav Desiraju, Secretary (H&FW) with the following members:-

- i) AS (H) & MoHFW
- ii) Joint Secretary (Hospitals), MoHFW
- iii) Ms. Vrinda Grover, Lawyer & Independent Researcher
- iv) Ms. Aruna Kashyap, Asia Researcher, Women's Rights Division, Human Rights Watch
- v) Dr. Suneeta Mittal, formerly of AIIMS
- vi) Dr. Shekhar Sheshadri, Psychiatrist and Prof. NIMHANS
- vii) Dr. Padma Deosthali, Coordinator of CEHAT
- viii) Dr. Jagadeesh Reddy, Forensic medicine expert
- ix) Ms. Indira Jaisingh, Lawyer
- x) Ms. Renu Khanna (SAHAJ)
- xi) Dr. T.S. Sidhu, formerly MS, RML Hospital
- xii) Dy. Director General (Planning), Dte.GHS ----- Member Secretary

3. Terms of Reference of the Committee:-

The Terms of Reference of the Committee are the following:-

- I) To finalise the revised 'Proformae' regarding 'Medical Examination Report for Sexual Assault Victim' and related guidelines for examination of such victims as drafted by DGHS.
- ii) To examine the relevant observations/recommendations made by the Justice (Retd.) Verma Committee Report for effective and time bound implementation.
- iii) To examine the relevant observations/recommended measures from the Minutes of meeting dated 4th January, 2013 of the Chief Secretaries and Director Generals of Police for effective and time bound implementation.
- iv) To examine the relevant observations/recommended measures from the meeting dated 23rd January, 2013 of Committee of Secretaries held under the Chairmanship of Cabinet Secretary for effective and time bound implementation.
- v) To finalise M/o H&FW's views on the draft manuals developed for addressing sexual violence by Indian Council of Medical Research (ICMR)

- vi) Any other related matter as desired by Chairman to be placed before the Committee.
- 4. The Committee may co-opt other members as per requirement.
- 5. This issues with the approval of Secretary (H&FW).

Sd/-
(Sanjay Pant)
Under Secretary to the Govt. of
India
Tel: 011-23061521

Copy for information to:

- 1. All Members of the Committee
- 2. DGHS/DD(P), Dte.GHS
- 3. Secretary, M/o Home Affairs - with reference to D.O No.15011/89/2012-SC/ST-W

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PART I

GUIDELINES FOR MEDICO-LEGAL CARE FOR
SURVIVORS/VICTIMS OF SEXUAL VIOLENCE

Glossary

Genetic sex and Anatomical Sex: Genetic sex refers to a person's sex chromosomes and anatomical sex refers to genitalia and gonads. It is assumed that appearance of genitalia corresponds to an individual's chromosomal pattern, eg. the Karyotype 46XX goes with the presence of ovaries, uterus and vagina, etc. However, this is not the case with intersexuality, wherein an individual's anatomical presentation is at variance with chromosomal pattern.

Gender identity: An individual's preferred gender role and presentation, as masculine, feminine, both or neither. Gender identity therefore is not determined by chromosomal or anatomical sex of a person.

Sexual orientation: An individual's sexual preference, whether homosexual, heterosexual or bisexual.

Gay/Homosexual: A man who is attracted towards other men.

Lesbian: A woman who is attracted to other women.

Bisexual: A person is attracted to both men and women.

Intersex: Non-conformity of an individual's body to prevalent ideas of maleness and femaleness. It is used as a blanket term for different biological possibilities and variations which may include, for instance, a large clitoris, absence of vagina, congenital absence of gonads among others.

Transgender: Individuals whose lived gender identity does not conform to their physiological appearance. It includes cultural categories such as hijras, transvestites as well as transitioning or post-operative transpersons. Transgender people may identify with either male or female gender identity, both, or neither.

Sex work: Is broadly defined as the exchange of money or goods in lieu of sexual services, either regularly or occasionally, involving female, male, and transgender adults.

Survivor: The Guidelines and proforma use the term survivor. The term survivor recognizes that the person has agency and she is capable of taking decisions despite being victimised, humiliated and traumatised due to the assault. Use of the term survivor by all those providing services recognizes these efforts and encourages them to believe the person and not pity her, whereas the term “victim” is understood as a person who doesn't possess agency and is not fully capable of comprehending situation at hand because of the victimhood faced. Given the judgmental attitudes towards the issue of rape and sexual assault, often police, health systems and other stake holders make decisions on behalf of the person because there is a belief that the person is so victimised that she may not be in a frame of mind to make decisions independently.

Victims: The term “victim” literally means a person suffering harm including those who are subjected to non-consensual sexual act which could be sexual assault, rape or sexual violence. It also means a person is in need of compassion, care, validation, and support.

INTRODUCTION

Sexual violence is a significant cause of physical and psychological harm and suffering for women and children. Although sexual violence mostly affects women and girls, boys are also subject to child sexual abuse. Adult men, especially in police custody or prisons may also be subject to sexual violence, as also sexual minorities, especially the transgender community. Sexual violence takes various forms and the perpetrators range from strangers to state agencies to intimate partners; evidence shows that perpetrators are usually persons known to the survivor.

The World Health Organisation (WHO) defines Sexual Violence as "any sexual act, attempt to obtain a sexual act, unwanted sexual comments/ advances and acts to traffic, or otherwise directed against a person's sexuality, using coercion, threats of harm, or physical force, by any person regardless of relationship to the victim in any setting, including but not limited to home and work." (WHO, 2003) Sexual assault, a form of sexual violence, is a term often used synonymously with rape. However, sexual assault could include anything from touching another person's body in a sexual way without the person's consent to forced sexual intercourse --- oral and anal sexual acts, child molestation, fondling and attempted rape. Forms of Sexual Violence include:

- Coerced/forced sex in marriage or live in relationships or dating relationships.
- Rape by strangers.
- Systematic rape during armed conflict, sexual slavery.
- Unwanted sexual advances or sexual harassment.
- Sexual abuse of children.
- Sexual abuse of people with mental and physical disabilities.
- Forced prostitution and trafficking for the purpose of sexual exploitation.
- Child and forced marriage.
- Denial of the right to use contraception or to adopt other measures to protect against STIs.
- Forced abortion and forced sterilization.
- Female genital cutting.
- Inspections for virginity.
- Forced exposure to pornography.
- Forcibly disrobing and parading naked any person.

(Please refer to **Annexure 1** for legal definitions.)

The Criminal Law Amendment Act (CLA) 2013 has expanded the definition of rape to include all forms of sexual violence-penetrative (oral, anal, vaginal) including by objects/weapons/fingers and non-penetrative (touching, fondling, stalking, etc.) and recognised right to treatment for all survivors/victims /victims of sexual violence by the public and private health care facilities. Failure to treat is now an offence under the law. The law further disallows any reference to past sexual practices of the survivor.

The health concerns of survivors/victims of sexual violence, and their right to health is an issue of importance. The Right to Health is not a fundamental right in India. However, the Supreme Court has interpreted the Right to Life as including the Right to Health. The Right to Health is enshrined in a number of international instruments ratified by India, including the International Covenant on Economic, Social and Cultural Rights (ICESCR), the Convention on the Elimination of Discrimination against Women (CEDAW), the Convention of the Rights of the Child (CRC), and the Convention on the Rights of Persons with Disabilities (CRPD).

The right to health care requires the state to ensure that appropriate physical and mental health services are available without discrimination and are accessible, acceptable and of good quality. This includes medical treatment for physical injuries, prophylaxis and testing for sexually transmitted infections, emergency contraception, and psychosocial support. Recognizing the right of all persons to health, health care workers must obtain informed consent of the survivors/victims of sexual violence prior to conducting medical examinations or initiating medico-legal investigations. All medico-legal examinations and procedures must respect the privacy and dignity of the survivor. To realize the right to health care of survivors/victims, health professionals must be trained to respond appropriately to their needs, in a sensitive and non-discriminatory manner respectful of the privacy, dignity and autonomy of each survivor. Health workers cannot refuse treatment or discriminate on the basis of gender, sexual orientation, disability, caste, religion, tribe, language, marital status, occupation, political belief, or other status. Refusal of medical care to survivors/victims of sexual violence and acid attack amounts to an offence under Section 166B of the Indian Penal Code read with Section 357C of the Code of Criminal Procedure.

The Ministry of Health and Family Welfare recognizes the critical role to be played by the Health professionals and health systems in caring for survivors/victims of sexual violence and collecting relevant evidence so that the culprit could be brought to the book.

While preparing the protocol and guidelines, the Committee under the Secretary (HFW) deliberated on the issues several times and took cognizance of the lack of uniform protocols and gaps in existing provision of medico legal care to survivors/victims of sexual violence, recommendations of the JVC, the CLA 2013 and Protection of Children from Sexual Offences (POCSO) 2012. While doing so, international standards especially the WHO Guidelines on medico legal care (2003) and Clinical and Policy Guidelines for responding to

Intimate Partner Violence (IPV) and sexual assault (2013) were referred to. The committee has drawn from the available evidence from health sector interventions, legal and other expert opinions and voices of survivors/victims.

The protocol and guidelines recognize the role of health sector in strengthening legal frameworks, developing comprehensive and multi-sectoral national strategies for preventing and eliminating all forms of sexual violence. Through these, the Ministry of Health and Family Welfare proposes to provide clear directives to all health facilities to ensure that all survivors of all forms of sexual violence, rape and incest, including people that face marginalisation based on disability, sexual orientation, caste, religion, class, have immediate access to health care services that includes immediate and follow up treatment, post rape care including emergency contraception, post exposure prophylaxis for HIV prevention and access to safe abortion services, police protection, emergency shelter, documentation of cases, forensic services and referrals for legal aid and other services. It recognizes the need to create an enabling environment for survivors/victims where they can speak out about abuse without fear of being blamed, where they can receive empathetic support in their struggle for justice and rebuild their lives after the assault.

The Ministry of Health and Family Welfare feels that sensitive handling can reduce self-blame and enhance healing for survivors. It also recognises the critical role of health professionals in their interface with the police, CWCs and judiciary. Such inter-sectoral collaboration is essential to provide services and deliver justice. The health system is committed to setting up services for survivors.

The Ministry places importance to:

- Provide medical assistance to the person suffering from violence
- Provide psychological assistance to both victim and perpetrator of Violence, if required. Health facilities can be instructed to handle all cases of Violence/suspected Gender Based Violence compassionately and to encourage them to seek the help of psychologist/psychiatrist.
- Help the law enforcing agencies to bring to book the perpetrators of Violence by conducting the necessary medico-legal examination.
- Refer those women, who come to healthcare facilities for self or childcare, to appropriate agencies as stated above, if it is suspected that they may be suffering from any kind of violence.
- Give parenting lessons to women coming to health care facilities for child care.
- Provide information about the ill-effects of drug abuse and alcoholism in order to help people in abstaining from such activities.
- Lay down standard operating procedures for the care, treatment and rehabilitation of survivors/victims of sexual violence.
- Propose to use these guidelines and protocol in all the health care facilities under the Ministry of Health and Family Welfare.

- Request State Government to follow them in their States/UTs.
- Although, this is essentially being done in all the health facilities, a uniform protocol and designated facilities would lead to prompt medical care. Apart from the present actions the Health care providers need to be more sensitive towards the victims of sexual violence. Additionally, the routine demographic data, detailed history can be recorded bringing out the root cause of the Violence. Accordingly the person can be referred to the appropriate agencies like Police, NGOs, Self-help Groups, Counsellors, etc. for appropriate redressal or dedicated centres providing all the required services under one roof.

These guidelines for health workers are aimed at providing an appropriate understanding of sexual violence and the needs and rights of survivors/victims of sexual violence, and to highlight the medical and forensic responsibilities of health professionals. It is also an important milestone in strengthening health system's response in addressing GBV. We are hopeful that concerted efforts will be taken to effectively implement these guidelines at the grass-root level.

The protocol and guidelines aim to achieve the following:

- Operationalise informed consent and respect autonomy of survivors in making decisions about examination, treatment and police intimation.
- Specific guidance on dealing with persons from marginalised groups such persons with disabilities, sex workers, LGBT persons, children, persons facing caste, class or religion based discrimination.
- Ensure gender sensitivity in the entire procedure by disallowing any mention of past sexual practices through comments on size of vaginal introitus, elasticity of vagina or anus. Further, it bars comments of built/height-weight/nutrition or gait that perpetuate stereotypes about 'victims'.
- Focus on history by recognising various forms and dynamics of sexual violence including activities that lead to loss of evidence
- Evidence collection based on science and history, with specific guidance for taking relevant samples and preservation of evidence.
- Lay down Standard Treatment protocols for managing health consequences of sexual violence.
- Lay down Guidelines for provision of first line psychological support.

HEALTH CONSEQUENCES AND ROLE OF HEALTH PROFESSIONALS

Health consequences of sexual violence

Sexual violence, in addition to being a violation of human rights, is an important public health issue as it has several direct and indirect health consequences. Survivors of sexual violence may present to health care services with varying signs and symptoms. For those survivors who do not reveal a history of sexual violence, the following signs and symptoms should prompt one to suspect the possibility of sexual abuse/assault:

Physical health consequences:

- Severe abdominal pain.
- Burning micturition.
- Sexual dysfunction.
- Dyspareunia.
- Menstrual disorders.
- Urinary tract infections.
- Unwanted pregnancy.
- Miscarriage of an existing fetus.
- Exposure to sexually transmitted infections (including HIV/AIDS).
- Pelvic inflammatory disease.
- Infertility.
- Unsafe abortion.
- Mutilated genitalia.
- Self-mutilation as a result of psychological trauma.

Psychological health consequences:

Short term psychological effects:

- Fear and shock.
- Physical and emotional pain.

- Intense self-disgust, powerlessness.
- Worthlessness.
- Apathy.
- Denial.
- Numbing.
- Withdrawal.
- An inability to function normally in their daily lives.

Long term psychological effects:

- Depression and chronic anxiety.
- Feelings of vulnerability.
- Loss of control/loss of self-esteem.
- Emotional distress.
- Impaired sense of self.
- Nightmares.
- Self-blame.
- Mistrust.
- Avoidance and post-traumatic stress disorder.
- Chronic mental disorders.
- Committing suicide or endangering their lives.

Role of the health facility and components of comprehensive health care response

Health professionals play a dual role in responding to the survivors of sexual assault. The first is to provide the required medical treatment and psychological support. The second is to assist survivors in their medico-legal proceedings by collecting evidence and ensuring a good quality documentation. After making an assessment regarding the severity of sexual violence, the first responsibility of the doctor is to provide medical treatment and attend to the survivor's needs. While doing so it is pertinent to remember that the sites of treatment would also be examined for evidence collection later.

Section 164 (A) of the Criminal Procedure Code lays out following legal obligations of the health worker in cases of sexual violence:

- Examination of a case of rape shall be conducted by a registered medical practitioner (RMP) employed in a hospital run by the government or a local authority and in the absence of such a practitioner, by any other RMP.
- Examination to be conducted without delay and a reasoned report to be prepared by the RMP.

- Record consent obtained specifically for this examination.
- Exact time of start and close of examination to be recorded.
- RMP to forward report without delay to Investigating Officer (IO), and in turn IO to Magistrate.

The Criminal Law Amendment Act 2013, in Section 357C Cr.PC says that both private and public health professionals are obligated to provide treatment. Denial of treatment of rape survivors is punishable under Section 166 B IPC with imprisonment for a term which may extend to one year or with fine or with both. Health professionals need to respond comprehensively to the needs of survivors. The components of a comprehensive response include:

- Providing necessary medical support to the survivor of sexual violence.
- Establishing a uniform method of examination and evidence collection by following the protocols. [in the Sexual Assault Forensic Evidence (SAFE) kit] [The contents of the kit are listed under Operational Issues (Page No.20)]
- Informed consent for examination, evidence collection and informing the police.
- First contact psychological support and validation.
- Maintaining a clear and fool-proof chain of custody of medical evidence collected.
- Referring to appropriate agencies for further assistance (eg. Legal support services, shelter services, etc).

It is important to establish a rapport with the survivor. The following guidelines are to help establish rapport:

- Never say or do anything to suggest disbelief regarding the incident.
- Do not pass judgmental remarks or comments that might appear unsympathetic.
- Appreciate the survivor's strength in coming to the hospital as it can serve to build a bond of trust.
- Convey important messages such as: the survivor is not responsible for precipitating the act of rape by any of her actions or inactions.
- Explain to the survivor that this is a crime/violence and not an act of lust or for sexual pleasure.
- Emphasize that this is not a loss of honour, modesty or chastity but a violation of his/her rights and it is the perpetrator who should be ashamed.
- Take help of a counselor, if required.

Facilitating procedures:

- The health worker should explain to the survivor in simple and understandable language the rationale for various procedures and details of how they will be performed.
- Specific steps when dealing with a survivor from marginalized groups such as children, persons with disability, LGBTI persons, sex workers or persons from minority

community, may be required as recommended in Chapter 3.

- Ensure confidentiality and explain to the survivor that she/he must reveal the entire history to health professional without fear. The survivor may be persuaded not to hide anything
- The fact that genital examination may be uncomfortable but is necessary for legal purposes should be explained to the survivor. The survivor should be informed about the need to carry out additional procedures such as x-rays, etc which may require him/her to visit to others departments.

While performing the examination, the purpose of forensic medical examination is to form an opinion on the following:

- Whether a sexual act has been attempted or completed. Sexual acts include genital, anal or oral penetration by the penis, fingers or other objects as well as any form of non-consensual sexual touching. A sexual act may not only be penetration by the penis but also slightest penetration of the vulva by the penis, such as minimal passage of the glans between the labia with or without emission of semen or rupture of the hymen.
- Whether such a sexual act is recent, and whether any harm has been caused to the survivor's body. This could include injuries inflicted on the survivor by the accused and by the survivor on the accused. However, the absence of signs of struggle does not imply consent.
- The age of the survivor needs to be verified in the case of adolescent girls/boys. Whether alcohol or drugs have been administered to the survivor needs to be ascertained.

GUIDELINES FOR RESPONDING TO SPECIAL GROUPS

This section aims to alert health professionals to the specific health care needs of different marginalized groups and equip them to respond to them in an appropriate, comprehensive and sensitive manner in a difficult situation. These guidelines stem from recognition of the historical stigmatization faced by marginalized groups in accessing health services.

For the purpose of these guidelines, marginalized groups are defined as

1. Individuals who face discrimination because their gender identity is not based on physiological appearance or where an individual's body doesn't fall in the rigid binary of male and female genitalia.
2. Individuals who face discrimination based on the sexual orientation they practice.
3. Individuals who face discrimination because they are involved in sex work.
4. Individuals with physical, psycho social and/or intellectual disability.
5. Individuals from religious minorities, castes or tribes.

Guiding principles for health professionals while working with special groups

1. Complete medical treatment and health care must be offered right at the outset at all health facilities. Health professionals should ensure that they are not biased against people belonging to marginalised groups and must treat them with respect
2. Health professionals must steer clear from demonstrating shock, disbelief, ridicule and ensure that such a conduct does not seep into the doctor- patient relationship.
3. Health professionals must acknowledge challenges and obstacles faced by marginalised groups in accessing health services and create an enabling atmosphere for them in the health facility.
4. Health professionals must enable survivors to feel at ease to be able to reveal the abuse that they have faced.
5. There must be cultural sensitivity while carrying out medical procedures. Cultural sensitivity refers to recognition of the caste, class, community, religion-determined behaviour and perceptions of the patient, without any bias/prejudice.

6. Individuals belonging to marginalised communities are often mistreated and ridiculed. In many instances, complaints from marginalised communities do not even get recorded. Therefore efforts must be made by health professionals to dialogue with the allied agencies such as the police, to record the complaint at the health facility if survivors express such a desire. Doing so at health institutions would be useful for survivors from marginalised groups as health institutions are perceived as less intimidating compared to police stations.
7. Health professionals must ensure that information on referral institutions providing good quality services for marginalised groups is available at the health facility.

A. Transgender and intersex persons

Medical practitioners must recognize that transgender and intersex people (TG/IS) are vulnerable to sexual violence due to the marginalization and discrimination they face. Under such circumstances, it is all the more essential that sexual violence faced by TG/IS people is recognized as such by health professionals who often serve as the first point of approach for a survivor of sexual violence. It is not uncommon for TG and IS persons to experience ridicule in the health facilities. Health professionals often ignorant of the variations in biology and gender identity and also tend to 'pathologize' them.

Guidelines for examination:

- Gender identity is not constituted by anatomy, especially appearance of genitals. Primacy should be given in the record to the survivor's stated gender identity and appropriate names and pronouns used.
- Intake forms and other documents that ask about gender or sex should have options as male/female/others.
- Genital anatomical variations of transgender and intersex people must be included in the examination proforma.
- Transgender and intersex people may be unwilling to report the case to law enforcement for fear of being exposed to inappropriate questions and abuse, therefore adequate care should be provided for those who do approach health institutions.
- Information on the intersex variations or transgender status of the survivor must be treated as confidential and not to be revealed without the survivor's consent.
- The inadvertent discovery during examination or history taking that a person is transgender or intersex must not be treated with ridicule, hostility, surprise, shock, or dismay. Such reactions convey that the person is being judged and is likely to make them uncomfortable in the health care setting.
- It is important to be aware of the possible health consequences that the sexual violence may have resulted in. For instance, transgender male individuals who still have ovaries and a uterus can become pregnant even when they were using testosterone and/or had

not been menstruating. Similarly, intersex variations which include non-typical genital appearance may still put some intersex women at risk of pregnancy. Health professionals must be aware of these variations and must anticipate health consequences accordingly.

- Some transgender or intersex survivors may want to talk about their perceptions of the role their gender identity might have played in making them vulnerable to an assault. Though Indian laws do not recognize gender identity-based hate crimes, it is important for the health professionals to record the survivor's account of the assault as part of the procedural history-taking, making note of the survivor's perception of the reasons for the assault, if so stated.
- Information about referral agencies that provide services to transgender or intersex survivors of sexual violence must be provided where available.

B. Persons of alternate sexual orientation

Sexual orientation refers to a person's sense of identity based on sexual attractions, related behaviour, and membership in a community of others who share those attractions. The 'normative' sexual orientation in our society is 'heterosexual', meaning that persons are expected to be attracted to others of the opposite sex. However, people may have various other sexual orientations. A person identifying with a homosexual identity for instance, is sexually attracted to a person of the same sex. There is widespread belief that homosexuality is a 'disease'; generally a 'mental illness' that needs to be cured or that homosexuality is a 'sin'. These ideas have no basis in fact and are responsible for deep-seated prejudices in society against lesbian, gay and bisexual people which often lead to a number of violent acts against them, including sexual violence.

Guidelines for examination

Even though the examination of a lesbian, gay or bisexual individual is not physically any different from that of a heterosexual person, a doctor should be especially sensitive to the former group's anxieties and concerns when it comes to such examinations.

- There should be no judgment on the person's sexual orientation in general or as a cause of the assault.
- Confidentiality of their sexual orientation should be maintained. One should not discuss or mention it to the other staff members unless needed for treatment reasons.
- The health professional should not express shock, wonder, or any other negative emotions when a person reveals their sexual orientation. The speech and behaviour of the health professional should remain inclusive.
- Old injuries or fact that a person is 'habituated to anal sex' should NOT be recorded.
- Treatment should NOT be denied to any person based on/due to their sexual orientation.

- The doctor and hospital staff should be understanding towards the survivor and should provide care and treatment with sensitivity.
- The doctor or the hospital staff should not give any advice or 'offer solutions' to 'cure' them of their sexual orientation.
- Lesbian, gay, bisexual and transgender persons are likely to be targets of hate crimes and may want to talk about the role their sexual orientation played in making them vulnerable to sexual violence. Their experience should be given a sincere hearing and validated. The survivors should be assured that it was not their fault that they were sexually assaulted.

C. Sex workers:

While women remain the largest group involved in sex work, the numbers of men acknowledged to be involved is growing. Although far less numerous, transgender individuals - both transvestites and trans-sexuals - are also active in sex work. It is important to bear in mind that just because sex workers exchange sexual acts for money or goods, does not mean that they cannot be sexually assaulted. The Supreme Court of India has acknowledged that a woman who is a sex worker has the right to decide with whom she will have sex, and so any non-consensual intercourse with her would therefore amount to rape. Sexual abuse by clients, police, pimps, brothel owners and others is commonly encountered by sex workers. Coercion to perform sexual acts by use of verbal threats, physical force and forced unwanted sexual acts by clients have been reported by sex workers as some of the types of sexual violence that they face.

Guidelines for examination

While examining sex workers reporting sexual violence, it is important to keep in mind that sex workers face a number of challenges due to the nature of their work when they approach the healthcare system. They have already faced a significant amount of discrimination from various agencies of society at every stage and hence their decision to approach a health care facility for treatment or examination should be considered a courageous one.

- A sex worker has a right to receive treatment and not providing it for any reason is punishable by law.
- Do not make assumptions about the person's health. Myths such as, "Sex workers are all addicts/HIV positive" are only myths. These propagate an unhealthy assumption of this group which may lead to further marginalization.
- Sex workers can be of any gender. No statements blaming the survivor or his/her profession for the violence faced should be made.
- Only information of the current episode of violence that the survivor is reporting must be documented. Any information of past sexual encounters is irrelevant to the current incident of sexual violence and should not be noted.

D. Persons with Disability

Persons with disability includes those who have long term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others. Women and children with disability are particularly vulnerable to violence, discrimination, stigma and neglect. In fact, persons with disabilities may be repeatedly victimized, especially by caretakers. Some reports suggest that women and girls with disabilities are three times more likely to be victims of physical and sexual abuse as compared to other women and girls. Women and girls with disabilities who are institutionalized are at risk of abuse in shelters and hospitals. This has now been recognized as 'custodial rape' in the revised Indian Penal Code (Criminal Law Amendment Act, 2013). Women with disabilities are often unable to report sexual abuse because of the obvious barriers to communication, as well as their dependency on carers who may also be abusers. When they do report, their complaints are not taken seriously and the challenges they face in expressing themselves in a system that does not create an enabling environment to allow for such expression, complicates matters further. India has ratified the United Nations Convention on Rights of Persons with Disabilities (UNCRPD) which mandates that country must make specific provisions to end discrimination and violence faced by persons with disabilities. It also mandates that healthcare systems must make necessary provisions to ensure access to health care to persons with disabilities. However, our health systems in general are not friendly to persons with disabilities.

Guidelines for examination:

- Be aware of the nature and extent of disability that the person has and make necessary accommodations in the space where the examination is carried out.
- Do not make assumptions about the survivor's disability and ask about it before providing any assistance.
- Do not assume that a person with disability cannot give history of sexual violence himself/herself. Because abuse by near and dear ones is common, it is important to not let the history be dictated by the caretaker or person accompanying the survivor. History must be sought independently, directly from the survivor herself/himself. Let the person decide who can be present in the room while history is being sought and examination conducted.
- Make arrangements for interpreters or special educators in case the person has a speech/hearing or cognitive disability. Maintain a resource list with names, addresses and other contact details of interpreters, translators and special educators in and around your hospital, who could be contacted for assistance.
- Even while using the services of an interpreter, communicate with the person directly as much as possible, and be present while the interpreter or special educator is with the person.

- Understand that an examination in the case of a disabled person may take longer. Do not rush through things as it may distress the survivor. Take time to make the survivor comfortable and establish trust, in order to conduct a thorough examination.
- Recognize that the person may not have been through an internal examination before. The procedure should be explained in a language they can understand. They may have limited knowledge of reproductive health issues and not be able to describe what happened to them. They may not know how they feel about the incident or even identify that a crime was committed against them.
- Ensure that adequate and appropriate counselling services are provided to the survivors. If required, the services of an expert may be required in this regard, which should be made available.
- Consent: All persons are ordinarily able to give or refuse to give informed consent, including persons with mental illness and intellectual disabilities, and their informed consent should be sought and obtained before any medical examination. Some specific steps may be required when taking informed consent from persons with mental illness or those with intellectual disabilities. If it is deemed necessary, such persons should (a) be provided the necessary information (what the procedure involves, the reason for doing the procedure, the potential risks and discomforts) in a simple language and in a form that makes it easy for them to understand the information; (b) be given adequate time to arrive at a decision; (c) be provided the assistance of a friend/colleague/care-giver in making the informed consent decision and in conveying their decision to medical personnel. The decision of the person to either give consent or refuse consent with the above supports, to the medical examination, should be respected.

E. People facing caste, class or religion based discrimination

Sexual violence is mostly perpetrated by those in a position of power upon those who are relatively vulnerable. This position of power may be a function of a person's gender, class, caste, religion, ethnicity, sexual orientation and/or other factors. In India, the caste or religion that a person belongs to impacts on the power and influence that they exercise. Women are seen as symbols of honour of their social community. Violating the bodily integrity of women is equated with violating the honour of the entire community and bringing disgrace to it. Health professionals should be aware that while women and girls are specifically targeted during communal or caste conflicts, other members of the targeted community (including young boys) may also be subjected to sexual violence.

Guidelines for examination:

- Do not pass any explicit or implicit comments, or in any other way communicate your personal opinion, about the person's caste or religion while medically treating them.
- Do not ask the person who is being given medical treatment any questions about her religion/caste, except those that are relevant to the nature of violence she has faced or the kind of treatment she requires.

- Do not make assumptions about the person's life, the number of children she has, the kind of treatment that she may be willing to undergo etc.
- In a situation of communal/caste conflict, health professionals should sensitively enquire about and look for signs and symptoms that suggest sexual violence, among all women and girls who access the health system, even where they do not explicitly claim to have suffered sexual violence.
- Some survivors may be willing to talk about the role that their religious or caste identity has played in the commission of the offence. The survivors experience should be listened to and recorded in the Medical Report.
- These are often reports that actions of the Police and other State/administrative functionaries are partisan during communal/caste and other kinds of conflict. This must be kept in mind while providing medical treatment to women in conflict situations, and the actions/instructions of the police/state functionaries should not interfere with the provision of medical treatment to the survivor and the documentation.

GUIDELINES FOR RESPONDING TO CHILDREN

The prevalence of child sexual abuse in India is known to be high. A National Study on Child Abuse conducted by the Ministry of Women and Child Development showed that more than 53 per cent children across 13 states reported facing some form of sexual abuse while 22 per cent faced severe sexual abuse. Both boys and girls reported facing sexual abuse.

Most commonly, abusers are persons who are well known to the child and may even be living in the household. Children are considered soft targets for sexual abuse because they may not realize that they are being abused. Abusers are also known to use chocolates and toys to lure children. Further, children are more easily threatened and less likely to speak out about the abuse.

While the principles of medical examination and treatment for children remains the same as that for adults, it is important to keep some specific guidelines in mind:

- In case the child is under 12 years of age, consent for examination needs to be sought from the parent or guardian.
- Children may be accompanied by the abuser when they come for medical treatment, so be aware and screen when you suspect abuse. In such situations, a female person appointed by the head of the hospital/institution may be called in to be present during the examination.
- Do not assume that because the child is young he/she will not be able to provide a history. History seeking can be facilitated by use of dolls and body charts.
- Believe what is being reported by the child. There are misconceptions that children lie or that they are tutored by parents to make false complaints against others. Do not let such myths affect the manner in which you respond to cases of child sexual abuse.
- Specific needs of children must be kept in mind while providing care to child survivors. Doses of treatment will have to be adjusted as required in terms of medical treatment. For psychological support, it is imperative to speak with the carer/s of the survivor in addition the survivor themselves.
- Health professionals must make a note of the following aspects while screening for sexual abuse. Assurance of confidentiality and provision of privacy are keys to enabling children to speak about the abuse. However genital and anal examination should not be

conducted mechanically or routinely. A few indicators for routine enquiry are –

- Pain on urination and /or defecation
- Abdominal pain/ generalized body ache
- Inability to sleep
- Sudden withdrawal from peers/ adults
- Feelings of anxiety, nervousness, helplessness
- Inability to sleep
- Weight loss
- Feelings of ending one's life

OPERATIONAL ISSUES

Every hospital must have a Standard Operating Procedure (SOP) for management of cases of sexual violence:

1. To provide comprehensive services.
2. For the smooth handling of the cases and clarity of roles of each staff.
3. To have uniform practice across all doctors in the hospital.

The SOP must be printed and available to all staff of the hospital.

- Any registered medical practitioner can conduct the examination and it is not mandatory for a gynaecologist to examine such a case. In case of a girl or woman, every possible effort should be made to find a female doctor but absence of availability of lady doctor should not deny or delay the treatment and examination. In case a female doctor is not available for the examination of a female survivor, a male doctor should conduct the examination in the presence of a female attendant. In case of a minor/person with disability, his/her parent/guardian/any other person with whom the survivor is comfortable may be present.
- In the case of a transgender/intersex person, the survivor should be given a choice as to whether she/he wants to be examined by a female doctor, or a male doctor. In case a female doctor is not available, a male doctor may conduct the examination in the presence of a female attendant.
- Police personnel must not be allowed in the examination room during the consultation with the survivor. If the survivor requests, her relative may be present while the examination is done.
- There must be no delay in conducting an examination and collecting evidence.
- Providing treatment and necessary medical investigations is the prime responsibility of the examining doctor. Admission, evidence collection or filing a police complaint is not mandatory for providing treatment.
- The history taking & examination should be carried out in complete privacy in the special room set up in the hospital for examination of sexual violence survivor. The room should have adequate space, sufficient lighting, a comfortable examination table, all the equipment required for a thorough examination, and the sexual assault forensic

evidence (SAFE) kit containing the following items for collecting and preserving physical evidence following a sexual violence:

- Forms for documentation
- Large sheet of paper to undress over
- Paper bags for clothing collection
- Catchment Paper
- Sterile cotton swabs and swab guards for biological evidence collection
- Comb
- Nail Cutter
- Wooden stick for finger nail scrapings
- Small scissors
- Urine sample container
- Tubes/ vials/ vaccutainers for blood samples [Ethylenediaminetetraacetic acid (EDTA), Plain, Sodium fluoride]
- Syringes and needle for drawing blood
- Distilled water
- Disposable gloves
- Glass slides
- Envelopes or boxes for individual evidence samples
- Labels
- Lac(sealing wax) Stick for sealing
- Clean clothing, shower/hygiene items for survivors use after the examination

Other items for a forensic/medical examination and treatment that may be included are:

- Woods lamp/Good torch
- Vaginal speculums
- Drying rack for wet swabs &/or clothing
- Patient gown, cover sheet, blanket, pillow
- Post-It notes to collect trace evidence
- Camera (35mm, digital with colour printer)
- Microscope
- Colposcope/ Magnifying glass
- Toluidine blue dye
- 1% Acetic acid diluted spray
- Urine Pregnancy test kit
- Surgilube
- Medications

- The collected samples for evidence may be preserved in the hospital till such time that police are able to complete their paper work for dispatch to forensic lab test including DNA.
- After the examination is complete the survivor should be permitted to wash up, using the toiletries and the clothing provided by the hospital if her own clothing is taken as evidence.
- Admission should not be insisted upon unless the survivor requires indoor stay for observation/treatment.
- Survivors of sexual violence should receive all services completely free of cost. This includes OPD/inpatient registration, lab and radiology investigations, Urine Pregnancy Test (UPT) and medicines. The casualty medical officer must label the case papers for any sexual violence case as “free” so that free treatment is ensured. Medicines should be prescribed from those available in the hospital. If certain investigations or medicines are not available, the social worker at the hospital should ensure that the survivor is compensated for investigations/ medicines from outside.
- A copy of all documentation (including that pertaining to medico-legal examination and treatment) must be provided to the survivor free of cost.

MEDICAL EXAMINATION AND REPORTING FOR SEXUAL VIOLENCE

The following guidelines are for health professionals when a survivor of sexual violence reports to a hospital. The guidelines describe in detail the stepwise approach to be used for a comprehensive response to the sexual violence survivor as follows:

- I. Initial resuscitation/ first Aid
- ii. Informed consent for examination, evidence collection, police procedures
- iii. Detailed History taking
- iv. Medical Examination
- v. Age Estimation (physical/dental/radiological) – if requested by the investigating agency.
- vi. Evidence Collection as per the protocol
- vii. Documentation
- viii. Packing, sealing and handing over the collected evidence to police
- ix. Treatment of Injuries
- x. Testing/prophylaxis for STIs, HIV, Hepatitis B and Pregnancy
- xi. Psychological support & counseling
- xii. Referral for further help (shelter, legal support)

Record the name of hospital where the survivor is being examined followed by the following:

2-5. Name, address, age and sex (male/female/other) of the survivor

6-7. Date and time of receiving the patient in the hospital and commencement of examination

8. Name of the person who brought the survivor and relationship to accompanying persons.

12. Informed consent: A survivor may approach a health facility under three circumstances:

- a) on his/her own only for treatment for effects of assault;
- b) with a police requisition after police complaint; or
- c) with a court directive.

- If a person has come directly to the hospital without the police requisition, the hospital is bound to provide treatment and conduct a medical examination with consent of the survivor/parent/guardian (depending on age). A police requisition is not required for this.
- If a person has come on his/her own without FIR, s/he may or may not want to lodge a Complaint but requires a medical examination and treatment. Even in such cases the doctor is bound to inform the police as per law. However neither court nor police can force the survivor to undergo medical examination. It has to be with the informed consent of the survivor/ parent/ guardian (depending on the age). In case the survivor does not want to pursue a police case, a MLC must be made and she must be informed that she has the right to refuse to file FIR. An informed refusal must be documented in such cases.
- If the person has come with a police requisition or wishes to lodge a complaint later, the information about medico-legal case (**MLC**) no. & **police station** should be recorded.
- Doctors are legally bound to examine and provide treatment to survivors of sexual violence. The timely reporting, documentation and collection of forensic evidence may assist the investigation of this crime. Police personnel should not be present during any part of the examination.

In all three circumstances, it is mandatory to seek an **Informed Consent/refusal** for examination and evidence collection. Consent should be taken for the following purposes: examination, sample collection for clinical and forensic examination, treatment and police intimidation.

Doctors shall inform the person being examined about the nature and purpose of examination and in case of child to the child's parent/guardian/ or a person in whom the child reposes trust. This information should include:

- a) The medico-legal examination is to assist the investigation, arrest and prosecution of those who committed the sexual offence. This may involve an examination of the mouth, breasts, vagina, anus and rectum as necessary depending on the particular circumstances.
- b) To assist investigation, forensic evidence may be collected with the consent of the survivor. This may include removing and isolating clothing, scalp hair, foreign substances from the body, saliva, pubic hair, samples taken from the vagina, anus, rectum, mouth and collecting a blood sample.
- c) The survivor or in case of child, the parent/guardian/or a person in whom the child reposes trust, has the right to refuse either a medico-legal examination or collection of evidence or both, but that refusal will not be used to deny treatment to survivor after sexual violence.
- d) As per the law, the hospital/ examining doctor is required/duty bound to inform the police about the sexual offence. However, if the survivor does not wish to participate in the police investigation, it should not result in denial of treatment for sexual violence.

Emphasize that seeking treatment is critical for the survivor's well-being.

- The survivor or guardian may refuse to give consent for any part of examination. In this case the doctor should explain the importance of examination and evidence collection, however the refusal should be respected. It should also be explained that refusal for such examination will not affect/compromise treatment. Such informed refusal for examination and evidence collection must be documented.
 - In case there is informed refusal for police intimation, then that should be documented. At the time of MLC intimation being sent to the police, a clear note stating “informed refusal for police intimation” should be made.
 - Only in situations, where it is life threatening the doctor may initiate treatment without consent as per section 92 of IPC.
 - The consent form must be signed by the person him/herself if s/he is above 12 yrs. of age. Consent must be taken from the guardian/ parent if the survivor is under the age of 12 years.
 - In case of persons with mental disability, please refer to section on “Persons with Disabilities”
 - The consent form must be signed by the survivor, a witness and the examining doctor.
 - Any major 'disinterested', person may be considered a witness
- 13.** Two marks of identification such as moles, scars, tattoos etc., preferably from the exposed parts of the body should be documented. While describing identification mark emphasis should be on size, site, surface, shape, colour, fixity to underlying structures. Left Thumb impression is to be taken in the space provided.

14. Relevant medical/surgical history

- Menstrual history (Cycle length and duration, Date of last menstrual period).If the survivor is menstruating at the time of examination then a second examination is required on a later date in order to record the injuries clearly. Some amount of evidence is lost because of menstruation. Hence it is important to record whether the survivor was menstruating at the time of assault/examination
- Vaccination history is important with regard to tetanus and hepatitis B, so as to ascertain if prophylaxis is required.

15. Sexual violence history

- Be sensitive to the survivor as she has experienced a traumatic episode and s/he may not be able to provide all the details. Explain to him/her that the process of history taking is important for further treatment and for filing a case if needed.
- Create an environment of trust so that the survivor is able to speak out. Do not pass judgmental remarks.

- A relative could be present with the consent of the survivor, if s/he is comfortable.
- Details of the date, time and location of incident of sexual violence should be recorded.
- In case of more than one assailant, their number should be recorded along with the names and relation if known.
- One must note who is narrating the incident- survivor or an informant. If history is narrated by a person other than the survivor herself, his/her name should be noted. Especially if the identity of assailants is revealed it is better to also have a counter-signature of the informant.
- The doctor should record the complete history of the incident, in survivor's own words as it has evidentiary value in the court of law.
- Use of any Physical violence during assault must be recorded with detailed description of the type of violence and its location on the body (eg. Beating on the legs, biting cheeks, pulling hair, kicking the abdomen etc.).
- Note history of injury marks that the survivor may state to have left on the assailant's body as it can be matched eventually with the findings of the assailant's examination.
- If any weapon(s) were used such as sticks, acid burns, gun shots, knife attacks etc.; if the use of drugs/alcohol was involved. Verbal threats should be recorded in survivor's words, eg. harming her or her near and dear ones.
- Information regarding attempted or completed penetration by penis/ finger/ object in vagina/ anus/ mouth should be properly recorded. There could also be other acts such as masturbation of the assailant by the survivor, masturbation of the survivor by the assailant, oral sex by the assailant on the survivor or sucking, licking, kissing of body parts. Information about emission of semen, use of condom, sucking or spitting along with the location should be clearly stated. Information about emission of semen outside the orifices should be elicited as swabs taken from such sites can have evidentiary value. Information regarding use of condom during the assault is relevant because in such cases, vaginal swabs and smears would be negative for sperm/semen.
- While recording history of sexual violence, it is important to enquire and record in simple language whether these acts occurred or not. A clear differentiation should be made between a 'negative' and 'not sure' history. If the survivor does not know if a particular act occurred, it should be recorded as "did not know".
- One should not feel awkward in asking for history of the sexual act. If details are not entered it may weaken the survivor's testimony. The details of history are what will also guide the examination, treatment and evidence collection and therefore seeking a complete history is critical to the medical examination process, sample collection for clinical & forensic examination, treatment and police intimation.
- In case of children, illustrative books, body charts or a doll can be used if available, to elicit the history of the assault. When it is difficult to elicit history from a child, please call an expert.
- Details of clothing worn at the time of assault should be recorded.
- Post assault Information should be collected on activities like changed clothes, cleaned clothes, bathed/ urinated/ defecated/ showered/ washed genitals (in all cases) and rinsing mouth, drinking, eating (in oral sexual violence)/ had sexual intercourse after the incident of sexual violence. This would have a bearing on the trace evidence collected from these sites.

- If vaginal swabs for detection of semen are being taken then record history of last consensual sexual intercourse in the week preceding the examination. It should be recorded because detection of sperm/semen is a valuable evidence. While seeking such history, explain to the survivor why this information is being sought, because the survivor may not want to disclose such history as it may seem invasive.
- Information related to past abuse (physical/sexual/emotional) should be recorded in order to understand if there is any health consequence related to the assault. This information should be kept in mind during examination & interpretation of findings.
- Relevant Medical & Surgical History: Relevant medical history in relation to sexually transmitted infections (gonorrhea, HIV, HBV etc.) can be elicited by asking about discharge per-urethra/per-anus, warts, ulcers, burning micturition, lower abdominal pain etc. Based on this information reexamination/ investigations can be done after incubation period of that disease. If there is vaginal discharge, record its type, i.e., texture, colour, odour, etc.

Relevant surgical history in relation to treatment of fissures/injuries/scars of ano-genital area should be noted.

16. General physical examination

- Record if the person is oriented in space and time and is able to respond to all the questions asked by the doctor. Any signs of intoxication by ingestion or injection of drug/alcohol must be noted.
- Pulse, B.P., respiration, temperature and state of pupils is recorded.
- A note is made of the state of clothing if it is the same as that worn at the time of assault. If it is freshly torn or has stains of blood/ semen/ mud etc.; the site, size, and colour of stains should be described.

17. Examination for injuries

- Presence of injuries is only observed in one third cases of forced sexual intercourse. Absence of injuries does not mean the survivor has consented to sexual activity. As per law, if resistance was not offered that does not mean the person has consented.
- The entire body surface should be inspected carefully for signs of bruises, physical torture injuries, nail abrasions, teeth bite marks, cuts, lacerations, fracture, tenderness, any other injury, boils, lesions, discharge specially on the scalp, face, neck, shoulders, breast, wrists, forearms, medial aspect of upper arms, thighs and buttocks
- Describe all the injuries. Describe the type of injury (abrasion, laceration, incised, contusion etc.), site, size, shape, colour, swelling, signs of healing, simple/grievous, dimensions. Mention possible weapon of infliction such as - hard, blunt, rough, sharp, etc. Refer to Annexure 2 for noting time of injury
- Injuries are best represented when marked on body charts. They must be numbered on the body charts and each must be described in detail.
- Describe any stains seen on the body - the type of stain (blood, semen, lubricant, etc.) its actual site, size and colour. Mention the number of swabs collected and their sites.

18. Local examination of genital parts/other orifices

- A. External genital area and Perineum is observed carefully for evidence of injury, seminal stains and stray pubic hair. Pubic hair is examined for any seminal deposits/ stray hair. Combing is done to pick up any stray hair or foreign material, and sample of pubic hair, and matted pubic hair is taken and preserved. If pubic hair is shaven, a note is made.
- B. In case of female survivors, the vulva is inspected systematically for any signs of recent injury such as bleeding, tears, bruises, abrasions, swelling, or discharge and infection involving urethral meatus & vestibule, labia majora and minora, fourchette, introitus and hymen.
 - Examination of the vagina of an adult female is done with the help of a sterile speculum lubricated with warm saline/ sterile water. Gentle retraction allows for inspection of the vaginal canal. Look for bruises, redness, bleeding and tears, which may even extend onto the perineum, especially in the case of very young girls. In case injuries are not visible but suspected; look for micro injuries using good light and a magnifying glass/ colposcope whatever is available. If 1% Toluidine blue is available it is sprayed and excess is wiped out. Micro injuries will stand out in blue. Care should be taken that all these tests are done only after swabs for trace evidence are collected.
 - Per speculum examination is not a must in the case of children/young girls when there is no history of penetration and no visible injuries. The examination and treatment as needed may have to be performed under general anaesthesia in case of minors and when injuries inflicted are severe. If there is vaginal discharge, note its texture, colour, odour.
 - **Per-Vaginum examination commonly referred to by lay persons as 'two-finger test'**, must not be conducted for establishing rape/sexual violence and the size of the vaginal introitus has no bearing on a case of sexual violence. Per vaginum examination can be done only in adult women when medically indicated.
 - The status of hymen is irrelevant because the hymen can be torn due to several reasons such as cycling, riding or masturbation among other things. An intact hymen does not rule out sexual violence, and a torn hymen does not prove previous sexual intercourse. Hymen should therefore be treated like any other part of the genitals while documenting examination findings in cases of sexual violence. Only those that are relevant to the episode of assault (findings such as fresh tears, bleeding, edema etc.) are to be documented.
 - Genital findings must also be marked on body charts and numbered accordingly.
- C. Bleeding/swelling/tears/discharge/stains/warts around the anus and anal orifice must be documented. Per-rectal examination to detect tears/stains/fissures/hemorrhoids in the anal canal must be carried out and relevant swabs from these sites should be collected.
- D. Oral cavity should also be examined for any evidence of bleeding, discharge, tear, odema, tenderness.

19. Collection of samples for hospital laboratory/ clinical laboratory

- If requested by police radiographs of wrist, elbow, shoulders, dental examination etc. can be advised for age estimation. Refer to **Annexure 3** for details on Age estimation.
- For any suspected fracture/injury- appropriate investigation for the relevant part of the body is advised.
- Urine Pregnancy test should be performed by the doctor on duty and the report should be entered.
- Blood is collected for evidence of baseline HIV status, VDRL and HbsAg.

20. Collection of samples for central/ State forensic science laboratory

- After assessment of the case, determine what evidence needs to be collected. It would depend upon nature of assault, time lapsed between assault and examination and if the person has bathed/washed herself since the assault. Please refer to Table in **Annexure 4** indicative of type of evidence to be collected in specific cases.
- If a woman reports within 96 hours (4 days) of the assault, all evidence including swabs must be collected, based on the nature of assault that has occurred. The likelihood of finding evidence after 72 hours (3 days) is greatly reduced; however it is better to collect evidence up to 96 hours in case the survivor may be unsure of the number of hours lapsed since the assault.
- The spermatozoa can be identified only for 72 hours after assault. So if a survivor has suffered the assault more than three days ago, please refrain from taking swabs for spermatozoa. In such cases swabs should only be sent for tests for identifying semen.
- Evidence on the outside of the body and on materials such as clothing can be collected even after 96 hours.
- The nature of swabs taken is determined to a large extent by the history and nature of assault and time lapse between incident and examination. For example, if the survivor is certain that there is no anal intercourse; anal swabs need not be taken.
- Request the survivor to stand on a large sheet of paper, so as to collect any specimens of foreign material e.g. grass, mud, pubic or scalp hair etc. which may have been left on her person from the site of assault/ from the accused. This sheet of paper is folded carefully and preserved in a bag to be sent to the FSL for trace evidence detection.
- Clothes that the survivor was wearing at the time of the incident of sexual violence are of evidentiary value if there is any stains/tears/trace evidence on them. Hence they must be preserved. Please describe each piece of clothing separately with proper labeling. Presence of stains - semen, blood, foreign material etc - should be properly noted. Also note if there are any tears or other marks on the clothes. If clothes are already changed then the survivor must be asked for the clothes that were worn at the time of assault and these must be preserved.
- Always ensure that the clothes and samples are air dried before storing them in their respective packets. Ensure that clothing is folded in such a manner that the stained parts are not in contact with unstained parts of the clothing. Pack each piece of clothing in a separate bag, seal and label it duly.

Body evidence:

- Swabs are used to collect bloodstains on the body, foreign material on the body surfaces seminal stains on the skin surfaces and other stains. Detection of scalp hair and pubic hair of the accused on the survivor's body (and vice-versa) has evidentiary value. Collect loose scalp and pubic hair by combing. Intact scalp and pubic hair is also collected from the survivor so that it can be matched with loose hair collected from the accused. All hair must be collected in the catchment paper which is then folded and sealed.
- If there is struggle during the sexual violence, with accused and survivor scratching each other, then epithelial cells of one may be present under the nails of the other that can be used for DNA detection. Nail clippings and scrapings must be taken for both hands and packed separately. Ensure that there is no underlying tissue contamination while clipping nails.
- Blood is collected for grouping and also helps in comparing and matching blood stains at the scene of crime.
- Collect blood and urine for detection of drugs/alcohol as the influence of drugs/ alcohol has a bearing on the outcome of the entire investigation. If such substances are found in the blood, the validity of consent is called into question. In a given case, for instance, there may not be any physical or genital injuries. In such a situation, ascertaining the presence of drug/alcohol in the blood or urine is important since this may have affected the survivor's ability to offer resistance. Urine sample may be collected in a container to test for drugs and alcohol levels as required.
- Venous blood is collected with the sterile syringe and needle provided and transferred to 3 sterile vials/ vaccutainers for the following purposes: Plain Vial/Vacutainer - Blood grouping and drug estimation, Sodium Fluoride - Alcohol estimation, EDTA - DNA Analysis.

Collect oral swab for detection of semen and spermatozoa. Oral swabs should be taken from the posterior parts of the buccal cavity, behind the last molars where the chances of finding any evidence are highest.

Genital and anal evidence

- In the case of any suspected seminal deposits on the pubic hair of the woman, clip matted portion of the pubic hair; allow drying in the shade and placing in an envelope.
- Pubic hair of the survivor is then combed for specimens of the offender's pubic hair. A comb must be used for this purpose and a catchment paper must be used to collect and preserve the specimens. Cuttings of the pubic hair are also taken for the purpose of comparison or to serve as control samples. If pubic hair has been shaved, do not fail to make a mention of it in the records.
- Take two swabs from the vulva, vagina, anal opening for ano-genital evidence. Swabs must be collected depending on the history and examination. Swabs from orifices must be collected only if there is a history of penetration. Two vaginal smears are to be prepared on the glass slide provided, air-dried in the shade and sent for seminal fluid/ spermatozoa examination.

- Often lubricants are used in penetration with finger or object, so relevant swabs must be taken for detection of lubricant. Other pieces of evidence such as tampons (may be available as well), which should be preserved.
- Swab sticks for collecting samples should be moistened with distilled water provided.
- Swabs must be air dried, but not dried in direct sunlight. Drying of swabs is absolutely mandatory as there may be decomposition/degradation of evidence which can render it un-usable.
- Vaginal washing is collected using a syringe and a small rubber catheter. 2-3 ml of saline is instilled in the vagina and fluid is aspirated. Fluid filled syringe is sent to FSL laboratory after putting a knot over the rubber catheter.
- While handing over the samples, a requisition letter addressed to the FSL, stating what all samples are being sent and what each sample needs to be tested for should be stated. For example, "Vaginal swab to be tested for semen". This form must be signed by the examining doctor as well as the officer to whom the evidence is handed over.
- Please ensure that the numbering of individual packets is in consonance with the numbering on the requisition form. Specimens sent to the Forensic Science laboratory will not be received unless they are packed separately, sealed, labeled and handed over.

21. Provisional clinical opinion

- Drafting of provisional opinion should be done immediately after examination of the survivor on the basis of history and findings of detailed clinical examination of the survivor.
- The provisional opinion must, in brief, mention relevant aspects of the history of sexual violence, clinical findings and samples which are sent for analysis to FSL.
- An inference must be drawn in the opinion, correlating the history and clinical findings.

The following section offers some scenarios about ways to draft a provisional and final opinion. However, this list is not exhaustive and readers are advised to form provisional opinions based on the examples given below.

It should be always kept in mind that normal examination findings neither refute nor confirm the forceful sexual intercourse. Hence circumstantial/other evidence may please be taken into consideration.

Absence of injuries or negative laboratory results may be due to:

- a. Inability of survivor to offer resistance to the assailant because of intoxication or threats
- b. Delay in reporting for examination
- c. Activities such as urinating, washing, bathing, changing clothes or douching which may lead to loss of evidence
- d. Use of condom/vasectomy or diseases of vas

This reasoning must be mentioned while formulating the opinion.

Genital injuries	Physical injuries	Opinion	Rationale why forced penetrative sex cannot be ruled out	What can FSL detect
Present	Present	There are signs suggestive of recent use of force/forceful penetration of vagina/anus. Sexual violence cannot be ruled out.	Evidence for semen and spermatozoa are yet to be tested by laboratory examinations in case of penile penetration.	Evidence of semen except when condom was used
Present	Absent	There are signs suggestive of recent forceful penetration of vagina/anus.	Evidence for semen and spermatozoa are yet to be tested in case of penile penetration. The lack of physical injuries could be because of the survivor being unconscious, under the effect of alcohol/drugs, overpowered or threatened. It could be because, there was fingering or penetration by object with or without use of lubricant - which is an offence under Sec 375 IPC	Evidence of semen or lubricant except when condom was used
Absent	Present	There are signs of use of force, however vaginal or anal or oral penetration cannot be ruled out.	The lack of injuries could be because of the survivor being unconscious, under the effect of alcohol /drugs, overpowered or threatened or use of lubricant.	Evidence of semen or lubricant
Absent	Absent	There are no signs of use of force; however final opinion is reserved pending availability of FSL reports. Sexual violence cannot be ruled out.	The lack of genital injuries could be because of use of lubricant. The lack of physical injuries could be because of the survivor being unconscious, under the effect of alcohol/drugs, overpowered or threatened. It could also be because, there was fingering or penetration by object with use of lubricant- which is an offence under Sec 375 IPC	Evidence of semen, lubricant and drug/alcohol

22. Treatment guidelines and psychosocial support

Sexually transmitted infections:

- If clinical signs are suggestive of STD, collect relevant swabs and start PEP. If there are no clinical signs, wait for lab results. For non-pregnant women, the preferred choice is Azithromycin 1gm stat or Doxycycline 100mg bd for 7days, with Metronidazole 400 mg for 7days with antacid.
- For pregnant women, Amoxycillin/Azithromycin with Metronidazole is preferred. Metronidazole should NOT to be given in the 1st trimester of pregnancy.

Hepatitis B. Draw a sample of blood for HBsAg and administer 0.06 ml/kg HB immune globulin immediately (anytime upto 72 hours after sexual act).

Pregnancy Prophylaxis (Emergency contraception)

- The preferred choice of treatment is 2 tablets of Levonorgestrel 750 µg, within 72 hours. If vomiting occurs, repeat within 3 hours. OR 2 tablets COCs Mala D - 2 tablets stat repeated 12 hours within 72 hours
- Although emergency contraception is most efficacious if given within the first 72 hours, it can be given for up to 5 days after the assault.
- Pregnancy assessment must be done on follow up and the survivor must be advised to get tested for pregnancy in case she misses her next period.

Lacerations: Clean with antiseptic or soap and water. If the survivor is already immunized with Tetanus Toxoid or if no injuries, TT not required. If there are injuries and survivor is not immunized, administer ½ cc TT IM. If lacerations require repair and suturing, which is often the case in minor girls, refer to the nearest centre offering surgical treatment.

Post Exposure Prophylaxis (PEP) for HIV should be given if a survivor reports within 72 hours of the assault. Before PEP is prescribed, HIV risk should be assessed.

Follow-up: Please emphasize the importance of follow up to the survivor. It is ideal to call the survivor for re-examination 2 days after the assault to note the development of bruises and other injuries; thereafter at 3 and 6 weeks. All follow ups should be documented.

- Repeat test for gonorrhoea if possible.
- Test for pregnancy.
- Repeat after six weeks for VDRL.
- Assess for psychological sequelae and re-iterate need for psychological support as per section 5 of the guidelines.

Psychosocial care: All survivors should be provided the first line support. The health professional must provide this support himself/herself or ensure that there is someone trained at the facility to provide this. Refer to section VII for details.

Signature and seal

After the examination the medical practitioner should document the report, formulate opinion, sign the report and handover the report and sealed samples to police under due acknowledgement.

- On the last sheet, mention how many pages are attached. Each page of the report should be signed to avoid tampering.
- It is important that one copy of all documents be given to the survivor as it is his/her right to have this information. One copy to be given to the police and one copy must be kept for hospital records.
- **All evidence needs to be packed and sealed properly in separate envelopes.** The responsibility for this lies with the examining doctor. **All blood samples must be refrigerated until handed over** to next in chain of custody. The hospital has the responsibility of properly preserving samples till handed over to police.
- Each envelope must be labeled as follows

Packet number.....

Name of the hospital & place

Hospital number & date

Police station with MLC number

Name of the person with age & sex

Sample collected

Examination required.....

Date & time signature of doctor with seal

- Chain of custody: The hospital must designate certain staff responsible for handling evidence and no one other than these persons must have access to the samples. This is done to prevent mishandling and tampering. If a fool-proof chain of custody is not maintained, the evidence can be rendered inadmissible in the court of law. A log of handing over of evidence from one 'custodian' to the other must be maintained.

Miscellaneous information

If a woman reports with a pregnancy resulting from an assault, she is to be given the option of undergoing an abortion, and protocols for MTP are to be followed. The products of conception (PoC) may be sent as evidence to the forensic lab (FSL) for establishing paternity / identifying the accused. The examining doctor/AMO/CMO is to contact the respective police station, ask them to collect the DNA Kit from the FSL and bring it to the hospital to coincide with the time of MTP. The DNA Kit is used to collect the blood sample of the survivor. The accompanying DNA Kit forms are to be filled by the examining doctor. A photograph of the survivor is required for this form, and should be arranged for prior to the MTP. The products of conception (PoC) are to be rinsed with normal saline (NOT completely soaked in saline) and collected in a wide-mouthed container with a lid. This sample is to be handed over immediately to the police along with the DNA Kit, or preserved at 4 degree Celsius. It is to be transported by the police in an ice-box, maintaining the temperature at around 4 degree Celsius (2 to 8 degree Celsius) at all times.

23. FINAL OPINION: To be formulated after receiving reports from the FSL

S.No.	Genital	Physical injuries/ diseases	FSL report injuries/ diseases	Final opinion
FOR PENILE PENETRATION				
1.	Present	Present	Positive for presence of semen	There are signs suggestive of forceful vaginal/anal intercourse.
2.	Present	Absent	Positive for presence of semen	There are signs suggestive of forceful vaginal/anal intercourse.
3.	Absent	Present	Positive for presence of semen	There are signs suggestive of forceful vagina/anal intercourse.
4.	Absent	Absent	Positive for presence of semen	There are signs suggestive of vagina/anal intercourse.
5.	Absent	Absent	Positive for drugs/ alcohol and semen	There are signs suggestive of vagina/anal intercourse under the influence of drugs/alcohol.
FOR NON-PENILE PENETRATION				
6.	Present	Present	FSL report is negative for presence of semen/ alcohol/ drugs/lubricant	There are no signs suggestive of vagina/anal intercourse, but there is evidence of physical and genital assault.
7.	Present	Absent	FSL report is negative for presence of semen/ alcohol/ drugs/ lubricant	There are no signs suggestive of vagina/anal intercourse, but there is evidence of genital assault.
8.	Absent	Present	FSL report is negative for presence of semen/ alcohol/ drugs/ lubricant	There are no signs suggestive of vagina/anal intercourse, but there is evidence of physical assault.
9.	Absent	Absent	FSL report is negative for presence of semen/ alcohol/ drugs/ lubricant	There are no signs suggestive of penetration of vagina/anal.
10.	Absent	Absent	FSL report is positive for presence of lubricant only	There is a possibility of vaginal/anal penetration by lubricated object.

OPINION FOR NON-PENETRATIVE ASSAULT

1.	Bite marks present and /or FSL detects salivary stains	There are signs suggestive of evidence of bite mark/s on _____ site(time the injury)
2.	Sucking marks (discoid, subcutaneous extravasation of blood, with or without bite marks) present and /or FSL detects salivary stains	There are signs suggestive of sucking mark/s on _____ site (time the injury).
3.	Forceful fondling, with presence of bruises or contusions with or without fingernail marks	There are signs suggestive of forceful physical injuries on _____ site (time the injury) (which may be due to fondling)
4.	Only forceful kissing and FSL detects salivary stains	There are signs suggestive of salivary contact (which may be due to kissing)
5.	If the history suggests forced masturbation of the assailant by the survivor and if there is evidence of seminal stains detected on the hands	There are signs suggestive of the survivor of seminal fluid contact (which may be due to masturbation)
6.	In case there are no signs of sucking, licking..... detected, but the history suggests some such form of assault	It is still important to document a good history because the survivor may have had a bath or washed him/herself.

PSYCHO–SOCIAL CARE FOR SURVIVORS/VICTIMS

Clinical guidelines for responding to IPV and sexual assault, WHO, 2013:

Health-care providers should, as a minimum, offer first-line support when women disclose violence. First Line support includes:

- *Ensuring consultation is conducted in private.*
- *Ensuring confidentiality, while informing women of limits of confidentiality.*
- *being non-judgmental and supportive and validating what the woman is saying.*
- *providing practical care and support that responds to her concerns, but does not intrude*
- *asking about her history of violence, listening carefully, but not pressuring her to talk (care should be taken when discussing sensitive topics when interpreters are involved)*
- *helping her access information about resources, including legal and other services that she might think helpful*
- *assisting her to increase safety for herself and her children, where needed*
- *providing or mobilizing social support-*

If doctors are unable to provide first-line support, they should ensure that someone else at the health facility is available to do so.

A set of guidelines based on the above:

Creating an enabling atmosphere and establishing trust

The health professional should

- Speak to survivor in a private space
- Recognize her courage in reaching you as she has overcome several barriers
- Recognise the dilemma faced by survivor in reporting violence. Do not label non-reporting to police as false case.
- Assure the survivor that her treatment will not be compromised
- Inform survivor of available resources, referrals, legal rights so that she can take an informed decision.

- a. Sexual violence is known to cause physical, emotional social and economic consequences which can jeopardize the well-being of survivors and their families. Fear of police investigation procedures, shame related to the sexual violence, lack of support from the community, fear that nobody will believe them and lack of information about negative health consequences may lead survivors to hide such incidents.
- b. Reasons for not wanting to report to police could range from fear about community reactions, fear that nobody would believe them, feelings of shame, threats from perpetrators. With children there could also be a possibility that survivor has not disclosed the assault to parents/guardians.

Facilitation and demystification of medical procedures

The health professional should:

- Prepare the survivor for an internal examination.
- Explain the various stages of the examination.
- Communicate the rationale for referral for X-ray, USG, age estimation amongst others.
 - a. Any incident of sexual violence leads to a feeling of powerlessness amongst survivors. It is therefore important to recognize such covert feelings and explain the purpose of medical examination. Explaining the purpose of internal examination and steps in conducting it can help survivors to make sense of what is happening to them. This can help in regaining control over the situation.
 - b. Currently each health setting may not have all the infrastructure for additional services such as age estimation, laboratory for assessing infections, sonography machines to detect internal injuries/ pregnancy and so on. While making referrals providers must ensure confidentiality and privacy of survivors so that they are not embarrassed due to being identified as a “survivor of sexual violence”.

Addressing survivor’s emotional wel-being

The health professional should:

- Recognise that survivors may present varied emotions.
- Encourage the survivor to express her feelings.
- Encourage survivors to seek crisis counseling.
- Assess for suicidal ideation.
- Make a safety assessment and safety plan.
- Involve family and friends in healing process of survivor.

- a. Each survivor copes with the assault differently. Coping is also dependent on whether survivors have parental/ spousal support, community support, job security, economic wherewithal for litigation and several such factors.
- b. Most survivors may not openly express their feelings. A good starting point is to explain range of feelings that survivors may experience such as sleeplessness, anxiety, nervousness, crying spells, feelings of ending one's life, anger and flash backs (RTS, emotional reactions post rape) after an assault. It must also be discussed that such reactions are normal after a traumatic episode.
- c. Crisis counseling can help in overcoming trauma. Providers must explain to the survivors that:
 - i. "rape" is a violation of bodily integrity and not a loss of honour.
 - ii. Assault is an abuse of power and not an act of lust.
 - iii. Positive messaging such as "you are not responsible for rape", "It is not about the clothes you wear"
 - iv. This would enable the survivor to discard feelings of self-blame as it is the perpetrator who should feel ashamed about the act and help in rebuilding survivor's confidence in self.

Safety assessment must be done:

If assessment reveals that she is unsafe and fears reoccurrence of sexual violence health professional must offer her alternate arrangements for stay such as temporary admission in the hospital or referral to shelter services. However some survivors may want to go home particularly if there are children or other dependents. A safety plan must be made which may include suggestions such as making a police complaint about threats received, building support strategy with neighbours/ community and temporary relocation from the old residence.

In situations, where a parent is the perpetrator of sexual abuse:

Survivors under 18 years, are likely to be accompanied by parents / guardians. If a health professional finds out that the perpetrator is the parent, it is critical to involve social worker/counselor from the hospital to discuss safety of the child. As per POCSO Act, 2012 social worker would have to speak with the child to assess whom the child trusts and can be called upon in the hospital itself. Simultaneously social worker would also have to contact police, who in communication with social worker should assess whether the child is in need of protection and care. Likewise the child may be admitted to the hospital for a period of 24 hours till a long term strategy for shelter or child welfare home is made.(Chapter 5, Procedure on reporting offence , POCSO Act, 2012)

Role of family, friends and community :

- Recovery from sexual violence is dependent on the extent of support received from family, friends and community. Health professionals are best suited to engage with family and discuss ways of promoting survivors' well-being. It must be discussed with all care givers that survivor should not be held responsible for the assault. Judgments such as; “she should have been careful”, “she should have resisted” make the survivors journey to recovery more difficult.

In situations of child sexual abuse :

Parents may experience anger, confusion, and guilt. Some may also blame themselves for not having taken adequate care or paid attention to the child. Reiterate that it is the perpetrator who misused their position.

Messages such as:

- Believe that recovery from abuse is possible
- Strategies such as good touch and bad touch can be taught to the child from a very young age, so that if the child is touched inappropriately, she should raise an alarm.
- Restricting child's mobility such as not being allowed to play with friends, not allowed to go to school, not allowed to visit friends, may be perceived by the child as punishment for something the child had no control on.
- Encourage the child to carry on with his/ her daily routine.
- Follow up with crisis counselling so that the child is able to deal with negative feelings and also heal from the abuse.

Dealing with adolescents:

- In cases of adolescent survivors, communicate that she was not at fault, encourage her to share feelings, fears and concerns. For an adolescent, acceptance by family and peers becomes a critical aspect in healing.
- Parents and friends should encourage survivor to seek counselling and crisis intervention support as adolescence is an age of turbulence and the survivor may not be comfortable talking about several issues with parents / carers such as “contraception”, “health sexual relationships”, fears of contracting infections such as STI/HIV, anxiety about how they are perceived by others in the school/ college.
- Carers should exercise caution and not become over protective and restrictive in their approach. This could occur due to fear of recurrence of the assault and fear for survivor's safety. These concerns need to be discussed openly with the survivor and encourage her to make informed decisions.

GUIDELINES FOR INTERFACE WITH OTHER AGENCIES SUCH AS POLICE AND JUDICIARY

Health professionals have to interface with other agencies such as the police, public prosecutors, judiciary and child welfare committees to ensure comprehensive care to survivors of sexual violence. Specific guidelines have been provided in this section for this interface for smooth interagency coordination.

Interface of health systems with police

- A standard operating procedure outlining the interface between the police and health systems is critical. Whenever a survivor reports to the police, the police must take her/him to the nearest health facility for medical examination, treatment and care¹. Delays related to the medical examination and treatment can jeopardize the health of the survivor.
- Health professionals should also ask survivors whether they were examined elsewhere before reaching the current health set up and if survivors are carrying documentation of the same. If this is the case, health professionals must refrain from carrying out an examination just because the police have brought a requisition and also explain the same to them.
- The health sector has a therapeutic role and confidentiality of information and privacy in the entire course of examination and treatment must be ensured. The police should not be allowed to be present while details of the incident of sexual violence, examination, evidence collection and treatment are being sought from the survivor.
- The police cannot interfere with the duties of a health professional. They cannot take away the survivor immediately after evidence collection but must wait until treatment and care is provided.
- In the case of unaccompanied survivors brought by the police for sexual violence examination, police should not be asked to sign as witness in the medico legal form. In such situations, a senior medical officer or any health professional should sign as witness in the best interest of the survivor.
- Health professionals must not entertain questions from the police such as “whether rape occurred”, “whether survivor is capable of sexual intercourse”, “whether the person is capable of having sexual intercourse”. They should explain the nature of medico legal evidence, its limitations as well as the role of examining doctors as expert witnesses.

¹CLA, 2013 and POCSO Act, 2012 both recognize that any registered medical practitioner can carry out a medico legal examination and provide treatment and records of that health provider will stand in the court of law (164A CRPC).

Interface of health systems and public prosecutors

- The doctor must review the notes of the case to equip him/herself with the history that has been provided by the survivor to the doctor, the police and the magistrate. In case there is a difference in the histories, the same should be clarified in advance with the public prosecutor. It is possible that a survivor revealed additional information to the doctor based on her comfort, than the police or the magistrate.
- Examining doctors should prepare themselves well in time with the case documents before reaching the court. Efforts must be made by doctors to dialogue with the public prosecutor and also ask them about the role that they need to play. This would help them to be well prepared and respond to questions asked in the court.

Interface of health systems and the judiciary

- Doctors are termed as “expert witness” by Law. As per 164 A, Cr.P.C., an examining doctor has to prepare a reasoned medical opinion without delay.
- A medical opinion has to be provided on the following aspects –
 - Evidence that survivor was administered drugs/psychotropic substance/alcohol, etc;
 - Evidence that the survivor has an intellectual, or mental disability;
 - Evidence of physical health consequences such as bruises, contusions, contused lacerated; wounds, tenderness, swelling, pain in micturition, pain in defecation, pregnancy, etc.
 - Age of the survivor if she / he does not have a birth certificate or if mandated by the court.
- Absence of injuries on the survivor has to be interpreted by the examining doctor in the courtroom based on medical knowledge and details of the episode provided by survivor to the doctor. Lack of injuries have to be based on the time lapse between the incident and reporting to hospitals, information pertaining to luring the child or adult survivor, or factors such as fear, shock and surprise or other circumstances that rendered the child or adult survivor unable to resist the perpetrator.
- The examining doctor will also have to provide a medical opinion on negative findings related to forensic lab analysis. Absence of negative laboratory results may be due to:
 - Delay in reaching a hospital / health centre for examination and treatment;
 - Activities undertaken by the survivor after the incident of sexual violence such as urinating, washing, bathing, changing clothes or douching which leads to loss of evidence;
 - Use of condom/vasectomy or diseases of vas of the perpetrator, or
 - Perpetrator did not emit semen if it was a penile penetrative sexual act.
- The examining doctor should clarify in the court that normal examination findings neither refute nor confirm whether the sexual offence occurred or not. They must ensure that a medical opinion cannot be given on whether 'rape' occurred because 'rape' is a legal term.

- Examining doctors must also ensure that comments on past sexual history, status of vaginal introitus must not be made as these are unscientific and the courts too have determined them as biased.
- In most health centres because of the constant turnover, the doctor appearing in the court room could be different from the one who carried out the medical management of the survivor. In such instances, it is critical that the doctor making the court appearance be thorough with the case file of the survivor, such as, documentation of history examination findings and clinical inference drawn by the examining doctor.

Interface of the health system with the child welfare committee

- Health professionals should communicate to the child the need for her/him (health professional) to disclose the abuse to the child welfare committee (CWC) so that the latter can take immediate steps to protect the child from abuse.
- Children may be referred for examination by the child welfare committees (CWC). Health professionals may have to orient the CWC about the health consequences of sexual abuse and the importance of provision of complete health care. At the same time they must explain the limitations of medical evidence, thus even if medical evidence of sexual violence is not found, this in no way should be construed as a child lying about sexual abuse.
- Mobile care units (MCUs) must include indicators for assessing whether a child has been subjected to sexual violence. Such an enquiry must be included as a component of routine medical checkups. A standard operating procedure for routine medical examination, care and management must be adopted by all child welfare homes and they must be asked to provide reports of these assessments to the child welfare committee. Health professionals may be called upon for doing this.

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Abbreviation

AIDS	Acquired immunodeficiency syndrome
AMO	Assistant Medical Officer
CEDAW	Convention on the Elimination of Discrimination against Women
CLA, 2013	Criminal Law (Amendment) Act, 2013
CMO	Chief Medical Officer
CRC	Convention of the Rights of the Child
Cr. PC	Code of Criminal Procedure
CRPD	Convention on the Rights of Persons with Disabilities
CWC	Child Welfare Committee
DNA	Deoxyribonucleic acid
EDTA	Ethylenediaminetetraacetic acid
FIR	First Information Report
FSL	Forensic Science Laboratory
HIV	Human immunodeficiency Virus (HIV)
ICESCR	International Covenant on Economic, Social and Cultural Rights
IO	Investigating Officer
IPC	Indian Penal Code
IPD	Indoor Patient Department
IPV	Intimate Partner Violence
JVC	Justice Verma Committee
LGBTI	Lesbian, Gay, Bisexual, Transgender and Intersex
MCUs	Mobile Care Units
MLC	Medico Legal Case
MTP	Medically Termination of Pregnancy
OPD	Outdoor Patient Department
POCSO Act, 2012	Protection of Children from Sexual Offences, 2012
PEP	Post exposure prophylaxis
PoC	Products of Conception
RMP	Registered Medical Practitioner
RTS	Rape Trauma Syndrome
SAFE	Sexual Assault Forensic Evidence
SOP	Standard Operating Procedure
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infections
TG/IS	Transgender and intersex persons
UPT	Urine Pregnancy test
USG	Ultrasonography
VDRL	Venereal Disease Research Laboratory
WHO	World Health Organization

Annexure 1

Legal definitions

List of offences under the IPC and Criminal Law Amendment Act 2013 and the punishment for the offence

Sr. No	Offence and description	Punishment
1.	Section 354 : Assault or criminal force to woman with intent to outrage her modesty	Imprisonment not less than 1 year but which may extend to 5 years and fine .
2.	Section 354 A (1): Sexual Harassment: A man committing any of the following acts: (i) Physical contact or advances which include unwanted sexual overtures, (ii) Request for sexual favours, (iii) Showing pornography against will, (iv) Making sexually coloured remarks.	Section 354 A (2): An offence specified in clause (i), (ii) or (iii) of sub-section (1) shall be punished with imprisonment which may extend to three years and/or fine. Section 354 A (3): An offence specified in clause (iv) of sub-section (1) shall be punished with imprisonment which may extend to one year and/or fine.
3.	Section 354 B: assault or use of criminal force to any woman or abetment to such act with the intention of disrobing or compelling her to be naked.	Section 354 B: imprisonment for a term not less than three years but which may extend to seven years, and shall also be liable to fine.
4.	Section 354 C: Voyeurism - Any man who watches, captures or disseminates the image of a woman engaging in a private act in circumstances where she would usually have the expectation of not being observed.	Section 354 C: on first conviction: imprisonment for a term not less than one year, but which may extend to three years, and fine. On a second or subsequent conviction: imprisonment of for a term not less than three years, but which may extend to seven years, and fine.
5.	Section 354 D: Stalking (1) Any man who: (i) follows a woman and contacts, or attempts to contact such woman repeatedly despite a clear indication of disinterest or (ii) monitors the use by a woman of the internet, email or any other form of electronic communication. Such conduct shall not amount to stalking if (i) it was pursued for the purpose of preventing or detecting crime by a man entrusted with such responsibility by the State (ii) it was pursued under any condition or requirement imposed by any person under any law; or (iii) in the particular circumstances such conduct was reasonable and justified.	On first conviction: with imprisonment for a term which may extend to three years, and fine. On a subsequent conviction: with imprisonment for a term which may extend to five years, and fine.

6. Section 375 - Rape: A man is said to commit "rape" if he— a) penetrates his penis, to any extent, into the vagina, mouth, urethra or anus of a woman or makes her to do so with him or any other person; or b) inserts, to any extent, any object or a part of the body, not being the penis, into the vagina, the urethra or anus of a woman or makes her to do so with him or any other person; or c) manipulates any part of the body of a woman so as to cause penetration into the vagina, urethra, anus or any part of body of such woman or makes her to do so with him or any other person; or d) applies his mouth to the vagina, anus, urethra of a woman or makes her to do so with him or any other person, under the circumstances falling under any of the following seven descriptions:— First.—Against her will. Secondly.—Without her consent. Thirdly.—With her consent, when her consent has been obtained by putting her or any person in whom she is interested, in fear of death or of hurt. Fourthly.—With her consent, when the man knows that he is not her husband and that her consent is given because she believes that he is another man to whom she is or believes herself to be lawfully married. Fifthly.—With her consent when, at the time of giving such consent, by reason of unsoundness of mind or intoxication or the administration by him personally or through another of any stupefying or unwholesome substance, she is unable to understand the nature and consequences of that to which she gives consent. Sixthly.—With or without her consent, when she is under eighteen years of age. Seventhly.—When she is unable to communicate consent.	Section 376 (1): Anyone who commits rape shall be punished with rigorous imprisonment which shall not be less than seven years, but which may extend to imprisonment for life, and shall also be liable to fine.

	Explanation 1.—For the purposes of this section, "vagina" shall also include labia majora. Explanation 2.—Consent means an unequivocal voluntary agreement when the woman by words, gestures or any form of verbal or non-verbal communication, communicates willingness to participate in the specific sexual act: Provided that a woman who does not physically resist to the act of penetration shall not by the reason only of that fact, be regarded as consenting to the sexual activity. Exception 1.—A medical procedure or intervention shall not constitute rape. Exception 2.—Sexual intercourse or sexual acts by a man with his own wife, the wife not being under fifteen years of age, is not rape	
7.	Section 376 (2) In certain situations, the punishment for rape increases. These situations include: When rape is committed a) by a police officer within the limits of the police station to which such police officer is appointed; in the premises of any station house; on a woman in such police officer's custody or in the custody of a police officer subordinate to such police officer b) by a public servant, commits rape on a woman in such public servant's custody c) by a member of the armed forces deployed in an area by the Central or a State Government commits rape in such area d. by management or on the staff of a jail, remand home or other place of custody commits rape on any inmate of such jail, remand home, place or institution; or e) by management or on the staff of a hospital, commits rape on a woman in that hospital; or	Section 376 (2) Punishment not less than ten years, but may extend to imprisonment for life, which shall mean imprisonment for the remainder of that person's natural life, and shall also be liable to fine.

	f) by a relative, guardian or teacher of, or a person in a position of trust or authority towards the woman, commits rape on such woman; or g) during communal or sectarian violence h) on a woman who is pregnant, l) on a woman who is under sixteen years of age, j) on a woman who is incapable of giving consent; k) by a person being in a position of control or dominance over a woman l) on a woman who is suffering from mental or physical disability; When rape causes grievous bodily harm or maims or disfigures or endangers the life of a woman; When a man commits rape repeatedly on the same woman.	
8.	Section 376 (A) If in the course of commission of an offence under 376 (1) and (2), the man inflicts an injury which causes the death of the woman or causes the woman to be in a persistent vegetative state.	Section 376 (A) If in the course of commission of an offence under 376 (1) and (2), the man inflicts an injury which causes the death of the woman or causes the woman to be in a persistent vegetative state.
9.	Section 376 (B): Non-consensual sexual intercourse with wife during separation: Whoever has sexual intercourse with his own wife, who is living separately, whether under a decree of separation or otherwise, without her consent	Section 376 (B) Imprisonment for a term not less than two years but which may extend to seven years, and fine.
10.	Section 376 (C) Whoever, being in a position of authority or in a fiduciary relationship; or a public servant; or superintendent or manager of a jail, remand home or children's institution; or on the management or staff of a hospital abuses such position or fiduciary relationship to induce or seduce any woman under his charge or present to have sexual intercourse with him, such sexual intercourse not amounting to the offence of rape.	Section 376 (C) Rigorous imprisonment for a term not less than five years, but which may extend to ten years, and fine.

11.	Section 376 (D): Gang Rape Where a woman is raped by one or more persons constituting a group or acting in furtherance of a common intention, each of those persons shall be deemed to have committed the offence of rape.	Section 376 (D) Rigorous imprisonment for a term not less than twenty years, but which may extend to life which shall mean imprisonment for the remainder of that person's natural life, and fine.
12.	Section 376 (E): Repeat Offenders Whoever has been previously convicted of an offence punishable under section 376 or section 376A or section 376D and is subsequently convicted.	Section 376 (E): Imprisonment for life or death.

List of offences under the Protection of children from Sexual Offences Act 2012 (POCSO) and the punishment for the offence

Sr. No	Offence and description	Punishment
1.	Section 3: Penetrative Sexual Assault is defined as – • penetration of the penis to any extent into any vagina, urethra, or anus of a child's body, • insertion of an object to any extent into the vagina, urethra, or anus of a child, • manipulating the body of a child so as to cause penetration into the vagina, urethra or anus, and applying the mouth to the vagina, penis, anus or urethra of a child or making a child do any of the above with him or any other person.	Section 4: Not less than seven years of imprisonment which may extend to imprisonment for life, and liable to be fined.
2.	Section 5: Aggravated Penetrative Sexual Assault- Penetrative sexual assault by a police officer, member of armed forces, public servant, management or staff of remand home, jail, protection home, observation home, hospital (whether government or private) or management or staff of educational or religious institution. It includes penetrative sexual assault committed by any other person: through gang penetrative assault, penetrative sexual assault using deadly weapons, fire, heated substance or corrosive substance, penetrative sexual assault which physically incapacitates the child or causes child to become mentally ill or causes impairment of any kind so as to render the child unable to perform regular tasks temporarily or permanently, causing grievous harm or bodily hurt and injury or injury to the sexual organs of the child, making girl child pregnant as a consequence of sexual assault, inflicting child with HIV or any other life threatening disease or infection, penetrative sexual assault taking advantage of the child's mental or physical disability, penetrative sexual assault more than once, penetrative	Section 6: Not less than ten years of imprisonment which may extend to imprisonment for life, and liable to fine

	sexual assault on a child younger than 12 years, by a relative of the child through blood or adoption or marriage or guardianship or in foster care or having a domestic relationship with the parent of the child or who is living in the same or shared household with the child, by the owner / manager or staff of any institution providing services to the child, by a person in a position of trust or authority over the child in an institution or home of the child or anywhere else, committing penetrative sexual assault knowing the child is pregnant, committing penetrative sexual assault on a child and attempt to murder the child, penetrative sexual assault in the course of communal or sectarian violence, by a person previously convicted of having committed any offence under this act or any sexual offence punishable under any other law for the time being in force, penetrative sexual assault and making the child strip or parade naked in public.	
3.	Section 7: Sexual Assault includes - Touching the vagina, penis, anus or breast of the child with sexual intent or making the child touch the vagina, penis, anus or breast of such person or any other person, Any other act with sexual intent which involves physical contact without penetration.	Section 8: Not less than three years of imprisonment which may extend to five years, and liable to fine.
4.	Section 9: Aggravated Sexual Assault - Sexual assault by a police officer, member of armed forces, public servant, management or staff of remand home, jail, protection home, observation home, management or staff of hospital (whether government or private) or management or staff of educational or religious institution. It includes other acts of sexual assault by any person or in other circumstances as mentioned in the second part of section 5, except making a girl child pregnant.	Section 10: Not less than five years of imprisonment which may extend to seven years, and liable to fine.
5.	Section 11: Sexual Harassment of the Child-With sexual intent: Utters any word or makes any sound, or makes any gesture or exhibits any object or part of body with the intention that such	Section 12: Up to three years of imprisonment and liable to fine.

	word or sound shall be heard, or such gesture or object or part of body shall be seen by the child; or makes a child exhibit his body or any part of his body so as it is seen by such person or any other person; or shows any object to a child in any form or media for pornographic purposes; or repeatedly or constantly follows or watches or contacts a child either directly or through electronic, digital or any other means; or threatens to use, in any form of media, a real or fabricated depiction through electronic, film or digital or any other mode, of any part of the body of the child or the involvement of the child in a sexual act; or entices a child for pornographic purposes or gives gratification therefore.	
6.	Section 13: Use of Child for Pornographic Purposes: use of child in any form of media (including program or advertisement telecast by television, internet or electronic or printed form, whether or not such program or advertisement is intended for personal use or for distribution), for the purpose of sexual gratification which includes representation of the sexual organs of the child, usage of a child engaged in real or simulated sexual acts (with or without penetration), indecent or obscene representation of a child.	Section 14 (1): Imprisonment up to five years and fine and in the event of subsequent conviction, up to seven years and fine.
7.	Section 14 (2): Penetrative sexual assault (Section 3) by directly participating in pornographic acts.	Section 14 (2): Not less than ten years of imprisonment, which may extend to imprisonment for life, and fine.
8.	Section 14 (3): Aggravated penetrative sexual assault (Section 5) by directly participating in pornographic acts.	Section 14 (3): Rigorous imprisonment for life and fine.
9.	Section 14 (4): Sexual assault (Section 7) by directly participating in pornographic acts.	Section 14 (4): Not less than six years of imprisonment which may extend to eight years, and fine.
10.	Section 14 (5): Aggravated sexual assault (Section 9) by directly participating in pornographic acts.	Section 14 (5): Not less than eight years of imprisonment which may extend to ten years, and fine.

11.	Section 15: Storage of pornographic material in any form, involving a child for commercial purposes.	Section 15: Three years of imprisonment and/or fine.
12.	Section 16: Abetment of an offence: A person abets an offence if he • Instigates any person to do that offence • Engages with one or more other person/s in any conspiracy for the doing of that offence, if an act or illegal omission takes place in pursuance of that conspiracy, and in order to the doing of that offence Intentionally aids, by any act or illegal omission, the doing of that offence.	Section 17: If the act abetted is committed in consequence of the abetment, the person shall be punished with punishment provided for that offence.
13.	Section 18: Attempt to commit an offence	Section 18: Imprisonment of any description provided for the offence for a term which may extend to one half of the imprisonment for life, or one half of the longest term of imprisonment provided for that offence and/or with fine.
14.	Section 21: Punishment for failure to report or record a case by (i) Any person; (ii) Any person, being in charge of any company or an institution. (This offence does not apply to a child).	Section 21 (i) Imprisonment of either description which may extend to six months or with fine or with both, (ii) Any person, being in charge of any company or an institution (by whatever name called) who fails to report the commission of an offence under sub section (1) of section 19 in respect of a subordinate under his control shall be punished with imprisonment for a term which may extend to one year and with fine.
15.	Section 22: (1) Punishment for false complaint or false information in respect of an offence committed under sections 3, 5, 7 and section 9 solely with the intention to humiliate, extort or threaten or defame him. (3) False complaint or providing false information against a child knowing it to be false, thereby victimising such child in any of the offences under this Act. (This offence does not apply to a child)	Section 22: (1) Imprisonment for a term which may extend to six months or with fine or with both. (3) Imprisonment which may extend to one year or with fine or with both.

Annexure 2

Time since injury is as follows:

Abrasion

Fresh	Bright red
12 to 24 hours	Reddish scab
2 to 3 days	Reddish brown scab
4 to 7 days	Brownish black scab
After 7 days	Scab dries, shrinks and falls off from periphery

Contusion

Fresh	Red
Few hours to 3 days	Blue
4th day	Bluish black to brown (haemosiderin)
5 to 6 days	Greenish (haematoidin)
7 to 12 days	Yellow (bilirubin)
2 weeks	Normal

Note: This is a reference chart only, as many external and internal factors contribute in the healing of injuries.

If there is deep bruise or contusion, signs of injury will usually show after 48 hours. In case you see signs of injury on the follow up, please record them and attach the documentation to MLC papers.

Laceration: It becomes difficult to estimate exactly the time since injury based on the size and contamination. However, a rough estimate can be done based on signs of healing.

Incised injury:

Fresh	Hematoma formation
12 hours	Edges- red, swollen
24 hours	Scab of dried clot covering the entire area.
After this rough estimate can be based on signs of healing.	

Please do not mention old scars as they are identification marks rather than new injuries due to assault. If mentioning those seems pertinent, add a note on when they were acquired.

Annexure 3

Age estimation

Please bear in mind that age estimation is not required in every case. If there is enough documentary proof, age determination is not required

- Medical age is the mean of physical age, dental age and radiological age of the person.
- Physical age is estimated based on physical growth like height, weight, chest circumference etc and also based on secondary sexual characteristics.
- Tanner staging of breast and pubic hair should be used to determine stage of growth.

Breast Development using Tanner's Index:		
Stage 1	Pre- adolescent: Elevation of papilla only	Less than 9 years
Stage 2	Breast bud stage: Elevation of breast and papillaas a small mound. Enlargement of areola diameter	10-11 years
Stage 3	Further enlargement and elevation of breast and areola with no separation of their contours	12 years
Stage 4	Projection of areola and papilla to form a secondary mound above level of breast	13-14 years
Stage 5	Mature stage: projection of papilla only due to recession of the areola to general contour of breast	15-16 years

Pubic hair staging		
Stage 1	Preadolescent: Vellus over pubes is not further developed than that over the abdominal wall (ie. No pubic hair)	Less than 12 years
Stage 2	Sparse growth of long, slightly pigmented downy hair, straight or slightly curled, chiefly along the labia	12-13 years
Stage 3	Considerably darker hair, coarser, more curled. Hair spreading sparsely over the junction of the pubes	13-14 years
Stage 4	Hair now adult in type, but area covered is still considerably smaller than in adult. No spread over medial surface of thighs.	14-15 years
Stage 5	Adult in quantity and type with distribution to horizontal pattern. Spread to medial surface of thighs.	More than

Dental age is estimated by identifying the total number of teeth, how many and which among them are temporary and which are permanent. It is also essential to identify which is the last tooth erupted and based on charts we can estimate the dental age by noting the age corresponding to the tooth last erupted.

Count the total number of teeth and also differentiate which of them are temporary or permanent.

- 1. P - for permanent
- 2. T - for temporary
- 3. y - for erupted
- 4. X - not erupted

Eruption of teeth
Temporary teeth (Rule of halves)

- Lower central incisors - 5 to 6 months
- Upper central incisors - 6 to 7 months
- Upper lateral incisors - 7 to 8 months
- Lower lateral incisors - 8 to 9 months
- First molars - 1 year
- Canines - 1 ½ years
- Second molars - 2 to 2 ½ years

Permanent teeth

- First molars - 6 to 7 years
- Central incisors - 7 to 8 years
- Lateral incisors - 8 to 9 years
- First premolars - 9 to 10 years
- Second premolars - 10 to 11 years
- Canines - 11 to 12 years
- Second molars - 12 to 14 years
- Third molars - 17 to 25 years

Temporary teeth	Permanent teeth
Smaller	Larger
Shiny	Lusterless
Vertical upper incisors	Forward & downward upper incisors
Smooth incisor edge	Serrated incisor edge
Worn out cusps in molars	Prominent cusps in molars
Twenty - 2102 (Incisor, Canine, premolar, molar)	Thirty two - 2123 (Incisor, Canine, premolar, molar)

Note: This a reference chart only, as many external and internal factors contribute in the eruption of teeth.

Radiological age:

Radiological age is estimated by looking for appearance of ossification centers, fusion of those with the shaft, fusion of sutures etc. for this we have to take radiographs of various joints to look for these findings of ossification centers.

Important changes at various ages in joints visible radiologically.

12 years	Hip joint (center for lesser trochanter appears 10 to 12 yrs) Elbow joint (center for lateral epicondyle appears 11 to 12 yrs) Wrist joint (center for pisiform appears 10 to 12 years)
14 years	Hip joint (center for iliac crest appears 14 yrs) Elbow joint (center for radial tuberosity appears 14yrs)
16 years	Hip joint (center for ischial tuberosity appears 16 yrs)
18 years	Shoulder joint (all centers of upper end of humerus fuse with shaft) Wrist joint (all centers of lower end of radius and ulna fuse with shaft) Hip joint (center for iliac crest fuses with ilium)
21 years	Hip joint (center for ischial tuberosity fuses with the ischial body)

Note: This is a reference chart only, as many external and internal factors contribute in the fusion of ossification centers.

Annexure 4

Table indicative of type of evidence to be collected

History of sexual violence	Type of swab	Purpose	Points to consider
Peno-vaginal	Vaginal swabs	- Semen/sperm detection - lubricant - DNA	- whether ejaculation occurred inside vagina or outside - use of condom
	Body swabs	- semen/sperm detection - saliva (in case of sucking/licking)	- if ejaculation occurred outside
Peno anal	Anal swabs	- Semen/sperm detection - DNA - lubricant - faecal matter	- whether ejaculation occurred inside anus or outside - use of condom
	Body swabs	- semen/sperm detection - saliva (in case of sucking/licking)	- if ejaculation occurred outside
Peno oral	Oral swabs	- Semen/sperm detection - DNA - saliva	- whether ejaculation occurred inside mouth or outside - use of condom
	Body swabs	- semen/sperm detection - saliva (in case of sucking/licking)	- if ejaculation occurred outside
Use of objects	Swab of the orifice (anal, vaginal and/or oral)	Lubricant	Detection of lubricant used if any
Use of body parts (fingering)	Swab of the orifice (anal, vaginal and/or oral)	Lubricant	
Masturbation	Swab of orifice/body part	- Semen/sperm detection - DNA - lubricant	- whether ejaculation occurred or not - if ejaculated in orifice or body parts

Forensic evidence is likely to be found only upto 96 hours after the incident.

PART II

**PROFORMA FOR MEDICO-LEGAL EXAMINATION OF
SURVIVORS/VICTIMS OF SEXUAL VIOLENCE**

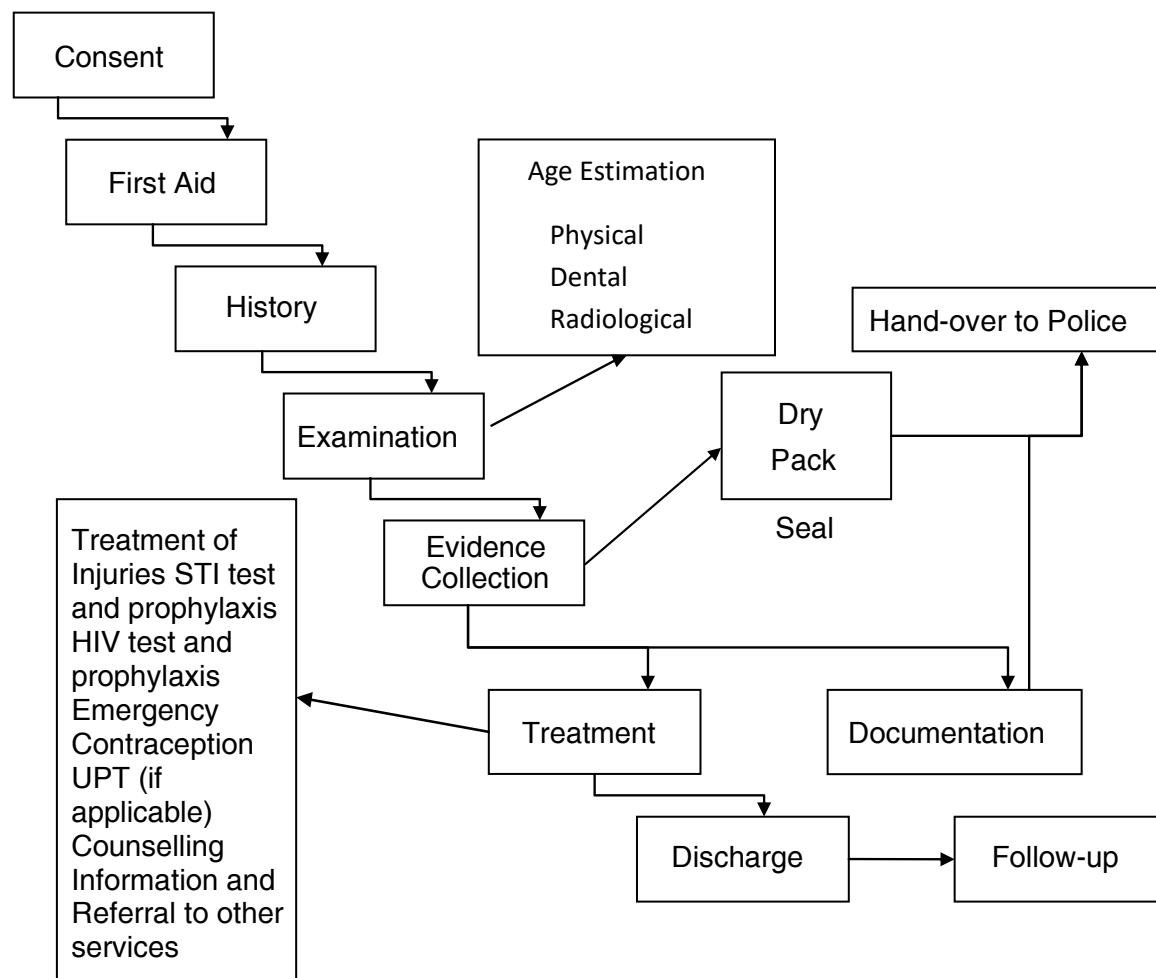
ONE PAGE INSTRUCTIONS FOR DOCTORS

The examining doctor should carefully read the Guidelines for responding to survivors of sexual violence issued by the MoHFW, and should be well aware of the comprehensive care to be provided.

1. **Informed consent:** Doctors shall inform the person being examined about the nature and purpose of examination and in case of child to the child's parent/guardian/person in whom the child reposes trust. This information should include:
 - a. The medico-legal examination is to assist the investigation, arrest and prosecution of those who committed the sexual offence. This may involve an examination of the mouth, breasts, vagina, anus and rectum.
 - b. To assist investigation, forensic evidence may be collected with the consent of the survivor. This may include removing and isolating clothing, scalp hair, foreign substances from the body, saliva, pubic hair, samples taken from the vagina, anus, rectum, mouth and collecting a blood sample.
 - c. The survivor or in case of child, the parent/guardian/person in whom the child reposes trust, has the right to refuse either a medico-legal examination or collection of evidence or both, but that refusal will not be used to deny treatment to survivor after sexual violence.
 - d. As per the law, the hospital/ examining doctor is required to inform the police about the sexual offence. However, if the survivor does not wish to participate in the police investigation, it will not result in denial of treatment for sexual violence. Informed refusal will be documented in such cases.
2. Per vaginum examination, commonly referred to by lay persons as 'two-finger test', must not be conducted for establishing an incident of sexual violence and no comment on the size of vaginal introitus, elasticity of the vagina or hymen or about past sexual experience or habituation to sexual intercourse should be made as it has no bearing on a case of sexual violence. No comment on shape, size, and/or elasticity of the anal opening or about previous sexual experience or habituation to anal intercourse should be made.
3. Injury documentation: Examine the body parts for sexual violence related findings (such as injuries, bleeding, swelling, tenderness, discharge). This includes both micro mucosal injuries which may heal within short period to that of severe injuries which would take longer to heal. Please refer to section VI Point 17 of the Guidelines.
 - Injuries must be recorded with details - size, site, shape, colour.
 - If a past history of sexual violence is reported, then record relevant findings. Sexual violence is largely perpetrated against females, but it can also be perpetrated against males, transgender and intersex persons.
4. The nature of forensic evidence collected will be determined by three main factors- nature of sexual violence, time lapsed between incident of sexual violence and examination and whether survivor has bathed or washed herself. Please refer to Section VI Point 21 of Guidelines.

5. Opinion: The issue of whether an incident of rape/sexual assault occurred is a legal issue and not a medical diagnosis. Consequently, doctors should not, on the basis of the medical examination conclude whether rape/sexual assault had occurred or not. Only findings in relation to medical findings should be recorded in the medical report.
- Drafting of provisional opinion should be done immediately after examination of the survivor on the basis of history and findings of detailed clinical examination of the survivor.
- It should be always kept in mind that normal examination findings neither refute nor confirm sexual violence. Hence circumstantial/other evidence may please be taken into consideration.
- Absence of injuries may be due to:
 - o Inability of survivor to offer resistance to the assailant because of intoxication or threats
 - o Delay in reporting for examination

The following are the components of a comprehensive health care response to sexual violence and must be carried out in all cases:



CONFIDENTIAL

Medico-legal Examination Report of Sexual Violence

- 1. Name of the Hospital OPD No. Inpatient No
- 2. Name D/o or S/o (where known).....
- 3. Address.....
- 4. Age (as reported) Date of Birth (if known).....
- 5. Sex (M/F/Others)
- 6. Date and Time of arrival in the hospital
- 7. Date and Time of commencement of examination.....
- 8. Brought by..... (Name & signatures)
- 9. MLC No. Police Station.....
- 10. Whether conscious, oriented in time and place and person.....
- 11. Any physical/intellectual/psychosocial disability

(Interpreters or special educators will be needed where the survivor has special needs such as hearing/speech disability, language barriers, intellectual or psychosocial disability.)

12. Informed Consent/refusal

I.....D/o or S/o.....

hereby give my consent for:

a) medical examination for treatment	Yes	☐	No	☐
b) this medico legal examination	Yes	☐	No	☐
c) sample collection for clinical & forensic examination	Yes	☐	No	☐

I also understand that as per law the hospital is required to inform police and this has been explained to me.

I want the information to be revealed to the police Yes ☐ No ☐

I have understood the purpose and the procedure of the examination including the risk and benefit, explained to me by the examining doctor. My right to refuse the examination at any stage and the consequence of such refusal, including that my medical treatment will not be affected by my refusal, has also been explained and may be recorded. Contents of the above have been explained to me in language with the help of a special educator/interpreter/support person (circle as appropriate)

If special educator/interpreter/support person has helped, then his/her name and signature.....

Name & signature of survivor or parent/Guardian/person in whom the child reposes trust in case of child (<12 yrs)

.....
.....
.....

With date, time & place
Name & signature/thumb impression of Witness

.....
.....
.....

With Date, time and place

13. Marks of identification (Any scar/mole)

(1)
(2)



Left Thumb impression

14. Relevant Medical/Surgical history

Onset of menarche (in case of girls) Yes No Age of onset.....
Menstrual history – Cycle length and duration Last menstrual period.....

Menstruation at the time of incident - Yes/ No, Menstruation at the time of examination - Yes/ No

Was the survivor pregnant at time of incident - Yes/No, If yes duration of pregnancy weeks

Contraception use: Yes/No..... If yes – method used:

Vaccination status – Tetanus (vaccinated/not vaccinated), Hepatitis B (vaccinated/not vaccinated)

15 A.History of Sexual Violence

(i) Date of incident/s being reported	(ii) Time of incident/s	(iii) Location/s
(iv) Estimated duration : 1-7 days..... 1 week to 2 months..... 2-6 months..... >6 months..... Episode: One..... Multiple Chronic (>6 months) Unknown.....		
(v) Number of Assailant(s) and name/s..... (vi) Sex of assailant(s).....Approx. Age of assailant (s)..... If known to the survivor – relationship with the survivor.....		
(vii) Description of incident in the words of the narrator: Narrator of the incident: survivor/informant (specify name and relation to survivor)		

If this space is insufficient use extra page

15 B. Type of physical violence used if any (Describe):

Hit with (Hand, fist, blunt object, sharp object)	Burned with
Biting	Kicking
Pinching	Pulling Hair
Violent shaking	Banging head
	Dragging
Any other:	

15 C.

- i. Emotional abuse or violence if any (insulting, cursing, belittling, terrorizing).....
- ii. Use of restraints if any
- iii. Used or threatened the use of weapon(s) or objects if any.....
- iv. Verbal threats (for example, threats of killing or hurting survivor or any other person in whom the survivor is interested; use of photographs for blackmailing, etc.) if any:
- v. Luring (sweets, chocolates, money, job) if any:
- vi. Any other:.....

15 D.

- i. Any H/O drug/alcohol intoxication:
- ii. Whether sleeping or unconscious at the time of the incident:

15 E. If survivor has left any marks of injury on assailant/s, enter details:

15 F. Details regarding sexual violence:

Was penetration by penis, fingers or object or other body parts (Write Y=Yes, N=No, DNK=Don't know) Mention and describe body part/s and/or object/s used for penetration.

	Penetration			Emission of Semen		
	By Penis	By body part of self or assailant or third party (finger, tongue or any other)	By Object	Yes	NO	Don't know
Orifice of Victim						
Genitalia (Vagina and/or urethra)						
Anus						
Mouth						

Oral sex performed by assailant on survivor	Y	N	DNK
Forced Masturbation of self by survivor	Y	N	DNK
Masturbation of Assailant by Survivor, Forced Manipulation of genitals of assailant by survivor	Y	N	DNK
Exhibitionism (perpetrator displaying genitals)	Y	N	DNK
Did ejaculation occur outside body orifice (vagina/anus/mouth/urethra)?	Y	N	DNK

If yes, describe where on the body			
Kissing, licking or sucking any part of survivor's body	Y	N	If Yes, describe
Touching/Fondling	Y	N	If Yes, describe
Condom used*	Y	N	DNK
If yes status of condom	Y	N	DNK
Lubricant used*	Y	N	DNK
If yes, describe kind of lubricant used			
If object used, describe object:			
Any other forms of sexual violence			

* Explain what condom and lubricant is to the survivor

Post incident has the survivor	Yes/No/Do Not know	Remarks
Changed clothes Changed undergarments Cleaned/washed clothes Cleaned/washed undergarments Bathed Douched Passed urine Passed stools Rinsing of mouth/Brushing/ Vomiting (Circle any or all as appropriate)		

Time since incident..... H/o vaginal/anal/oral bleeding/discharge prior to the incident of sexual violence.....

H/o vaginal/anal/oral bleeding/discharge since the incident of sexual violence.....

H/o painful urination/ painful defecation/ fissures/ abdominal pain/pain in genitals or any other part since the incident of sexual violence

16. General Physical Examination-

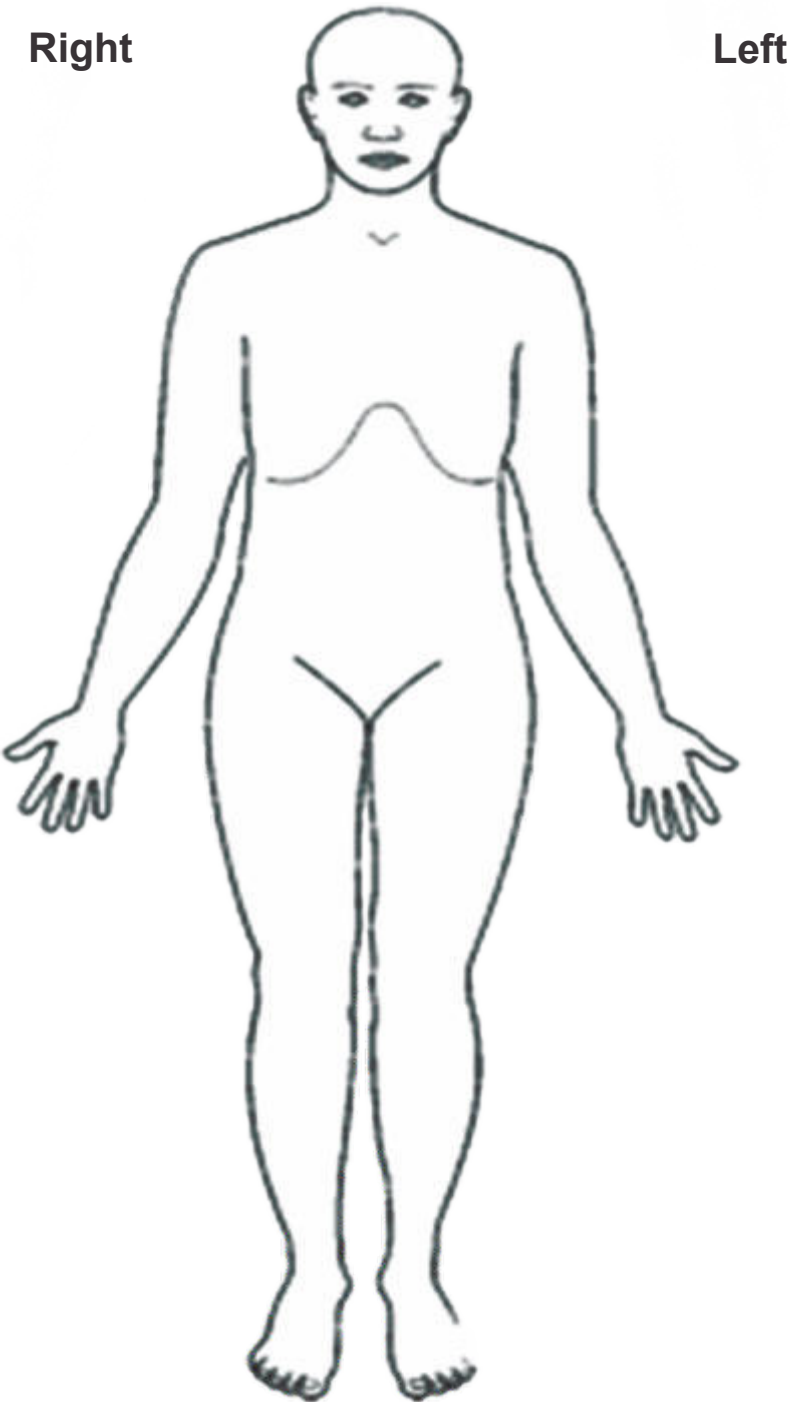
- i. Is this the first examination.....
- ii. Pulse..... BP.....
- iii. Temp.....Resp. Rate.....
- iv. Pupils
- v. Any observation in terms of general physical wellbeing of the survivor.....

17. Examination for injuries on the body if any

The pattern of injuries sustained during an incident of sexual violence may show considerable variation. This may range from complete absence of injuries (more frequently) to grievous injuries (very rare).

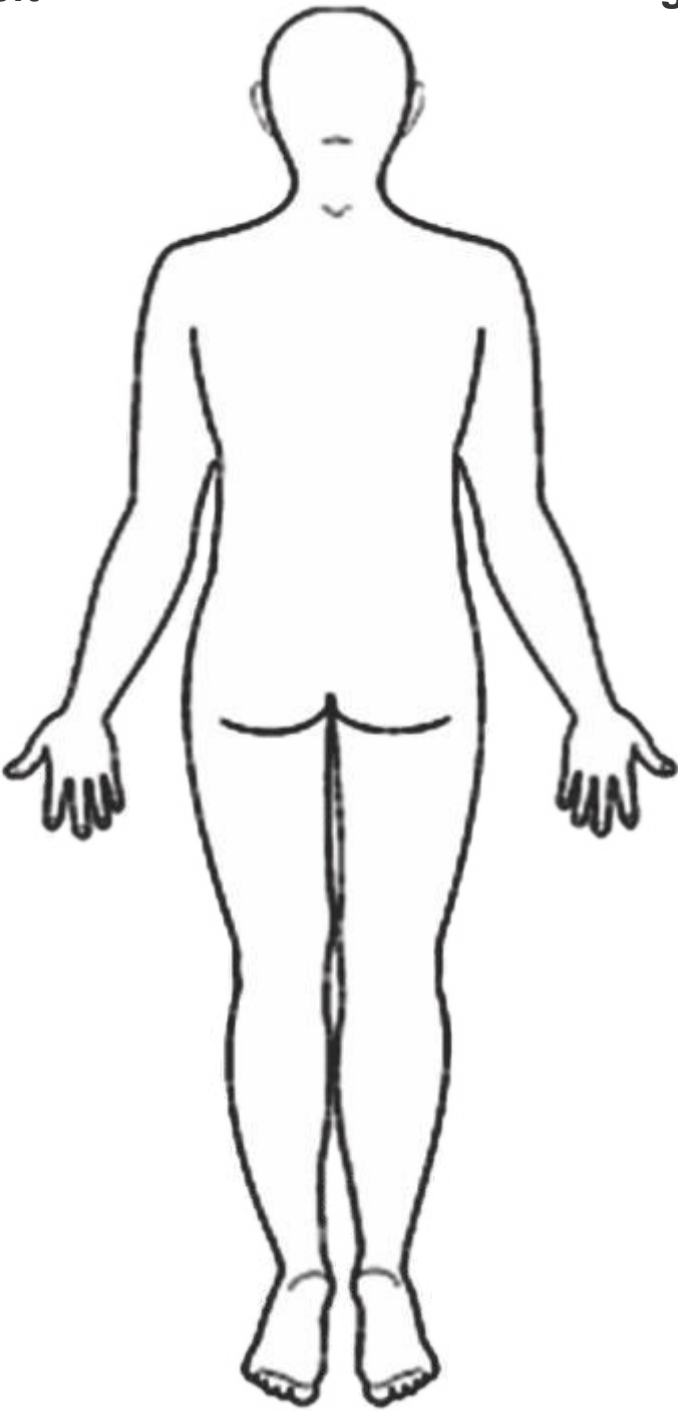
(Look for bruises, physical torture injuries, nail abrasions, teeth bite marks, cuts, lacerations, fracture, tenderness, any other injury, boils, lesions, discharge specially on the scalp, face, neck, shoulders, breast, wrists, forearms, medial aspect of upper arms, thighs and buttocks) Note the Injury type, site, size, shape, colour, swelling signs of healing simple/grievous, dimensions.)

Scalp examination for areas of tenderness (if hair pulled out/ dragged by hair)	
Facial bone injury: orbital blackening, tenderness	
Petechial haemorrhage in eyes and other places	
Lips and Buccal Mucosa / Gums	
Behind the ears	
Ear drum	
Neck, Shoulders and Breast	
Upper limb	
Inner aspect of upper arms	
Inner aspect of thighs	
Lower limbButtocks	
Other, please specify	



Left

Right



18. Local examination of genital parts/other orifices*:

A. External Genitalia: Record findings and state NA where not applicable.

Body parts to be examined	Findings	
Urethral meatus & vestibule		
Labia majora		
Labia minora		
Fourchette & Introitus		
Hymen Perineum		
External Urethral Meatus		
Penis		
Scrotum		
Testes		
Clitoropenis		
Labioscrotum		
Any Other		

* Per/Vaginum /Per Speculum examination should not be done unless required for detection of injuries or for medical treatment.

P/S findings if performed
P/V findings if performed
Record reasons if P/V of P/S examination performed

C. Anus and Rectum (encircle the relevant)

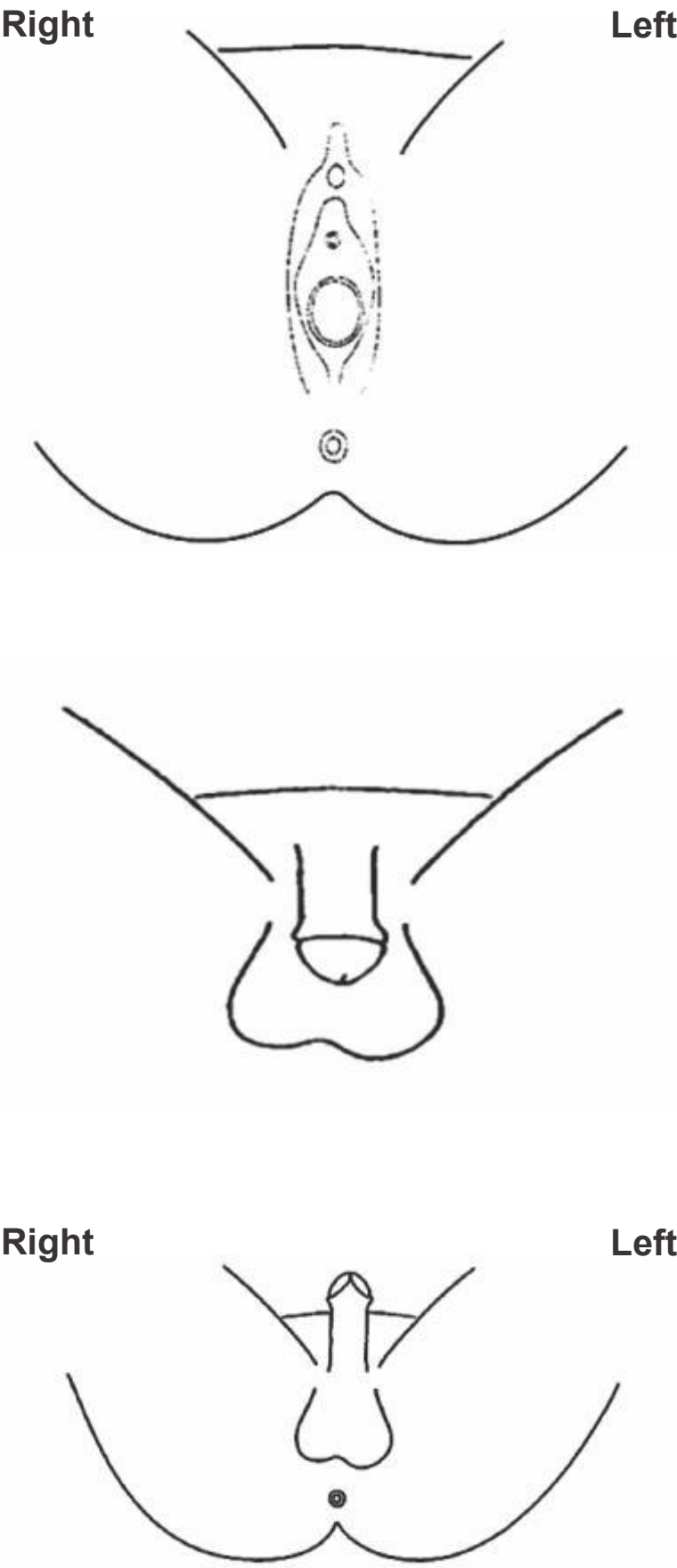
Bleeding/ tear/ discharge/ oedema/ tenderness

D. Oral Cavity - (encircle the relevant)

Bleeding/ discharge/ tear/oedema/ tenderness

19. Systemic examination:

Central Nervous System:
Cardio Vascular System:
Respiratory System:
Chest:
Abdomen:



20. Sample collection/investigations for hospital laboratory/ Clinical laboratory

- 1) Blood for HIV, VDRL, HbsAg
- 2) Urine test for Pregnancy/
- 3) Ultrasound for pregnancy/internal injury
- 4) X-ray for Injury

21. Samples Collection for Central/ State Forensic Science Laboratory

- 1) Debris collection paper
- 2) Clothing evidence where available – (to be packed in separate paper bags after air drying)

List and Details of clothing worn by the survivor at time of incident of sexual violence

3) Body evidence samples as appropriate (duly labeled and packed separately)

	Collected/Not Collected	Reason for not collecting
Swabs from Stains on the body (blood, semen, foreign material, others)		
Scalp hair (10-15 strands)		
Head hair combing		
Nail scrapings (both hands separately)		
Nail clippings (both hands separately)		
Oral swab		
Blood for grouping, testing drug/alcohol intoxication (plain vial)		
Blood for alcohol levels (Sodium fluoride vial)		
Blood for DNA analysis (EDTA vial)		
Urine (drug testing)		
Any other (tampon/sanitary napkin/condom/object)		

4) **Genital and Anal evidence** (Each sample to be packed, sealed, and labeled separately-to be placed in a bag)

* Swab sticks for collecting samples should be moistened with distilled water provided.

	Collected/Not Collected	Reason for not collecting
Matted pubic hair		
Pubic hair combing (mention if shaved)		
Cutting of pubic hair (mention if shaved)		
Two Vulval swabs (for semen examination and DNA testing)		
Two Vaginal swabs (for semen examination and DNA testing)		
Two Anal swabs (for semen examination and DNA testing)		
Vaginal smear (air-dried) for semen examination		
Vaginal washing		
Urethral swab		
Swab from glans of penis/clitoropenis		

*Samples to be preserved as directed till handed over to police along with duly attested sample seal.

22. **Provisional medical opinion**

I have examined (name of survivor).....M/F/Other.....aged..... reporting_ (type of sexual violence and circumstances)....., XYZ days/hours after the incident, after having (bathed/douched etc)..... My findings are as follows:

- Samples collected (for FSL), awaiting reports
- Samples collected (for hospital laboratory)
- Clinical findings
- Additional observations (if any)

23. Treatment prescribed:

Treatment	Yes	NO	Type and comments
STI prevention treatment			
Emergency contraception			
Wound treatment			
Tetanus prophylaxis			
Hepatitis B vaccination			
Post exposure prophylaxis for HIV			
Counselling			
Other			

24. Date and time of completion of examination

This report contains number of sheets and number of envelopes.

Signature of Examining Doctor
Name of Examining Doctor
Seal

Place:

25. Final Opinion (After receiving Lab reports)

Findings in support of the above opinion, taking into account the history, clinical examination findings and Laboratory reports of bearing identification marks described above, ... hours/ days after the incident of sexual violence, I am of the opinion that:

Signature of Examining Doctor
Name of Examining Doctor
Seal

Place:

COPY OF THE ENTIRE MEDICAL REPORT MUST BE GIVEN TO THE SURVIVOR/ VICTIM FREE OF COST IMMEDIATELY

Supreme Court of India

Lillu @ Rajesh & Anr vs State Of Haryana on 11 April, 2013

Bench: B.S. Chauhan, Fakkir Mohamed Kalifulla

REPORTABLE

IN THE SUPREME COURT OF INDIA
CRIMINAL APPELLATE JURISDICTION

CRIMINAL APPEAL NO. 1226 OF 2011

LILLU @ RAJESH & ANR.

Appellants

VERSUS

STATE OF HARYANA

Respondent

O R D E R

1. This criminal appeal has been preferred against the impugned judgment and order dated 20.9.2010 passed by the High Court of Punjab & Haryana at Chandigarh in Criminal Appeal No. 243-DB of 2002, by way of which the High Court has affirmed the judgment and order dated 4.3.2002 passed by the Additional Sessions Judge, Jind in Sessions Case No. 37 of 2001, by way of which the appellant no. 1 has been convicted under Section 376 of the Indian Penal Code, 1860 (hereinafter referred to as 'IPC') and awarded the sentence of seven years rigorous imprisonment with a fine of Rs. 5,000/- and in default of making payment, to further undergo imprisonment for two years. Further he has been convicted under Section 506 IPC and awarded the sentence of two years rigorous imprisonment. Both the sentences have been directed to run concurrently. The other co-accused, namely, Manoj, Satish @ Sitta and Kuldeep have been convicted separately under sections 376, 506, 366 and 363 IPC. Kuldeep Singh alone has been found guilty under Section 376 (2) (g) IPC, and has been awarded sentence of life imprisonment. Out of these four convicts, Kuldeep Singh and Manoj did not prefer any appeal against the High Court's judgment, while appellant nos.1 and 2 preferred the present appeal. Appellant no.2 had died during the pendency of this appeal in jail, therefore, we are concerned only with the case of appellant no.1 i. e. Lillu @ Rajesh.

2. Mr. J.P. Singh, learned counsel for the appellant, submitted that the prosecution has failed to prove the date of birth of the prosecutrix and that she was about 17-18 years of age on the date of incident. Thus, it was a clear cut case of consent. The statement of Raj Bala, prosecutrix has not been corroborated by any of

the witnesses and has not got corroborated by the medical evidence. Dr. Malti Gupta (PW-1), who had examined Raj Bala, prosecutrix medically had deposed that there was no external mark of injury on any part of her body. The possibility of prosecutrix being habitual to sexual intercourse could not be ruled out. There was no bleeding. Thus, in such a fact-situation, the statement of the prosecutrix that she was unmarried and had never indulged in sexual activity with any person, or was below 16 years, could not be relied upon.

3. On the other hand, the State of Haryana, as usual, remained unrepresented as the government counsel duly appointed by the State considered it their privilege not to appear in court and become the burden on public exchequer. So, the court has to examine the case more consciously going through the record and examine the correctness of the findings recorded by the courts below.

4. The trial court has examined the issue on age and after examining the school certificate (Ext. P-N), which stood duly proved by Lakhi Ram (PW-11), Science teacher, Government High Court, Badhana and Gajraj Singh, teacher, Govt. Primary School, Badhana, came to the conclusion that her date of birth as per the school register was 4.6.1987. So on the date of incident i.e. 7.3.2001, she was 13 years 9 month and 2 days old. She was a student of 6th standard. To refute the same, no evidence worth the name has been led by the accused- appellant. The said finding stood affirmed by the High Court and in view thereof, it remains totally immaterial whether the prosecutrix was a consenting party or not.

5. So far as the medical evidence is concerned, Dr. Malti Gupta (PW-

1), Medical Officer, Civil Hospital, Jind, has deposed that Raj Bala, prosecutrix was habitual in sexual activities and such a statement was made in view of the medical examination. Relevant part thereof reads as under:

"Bilateral breast were moderately developed; There was no external mark of injury seen any where on the body. Axillary hair was not developed. Public hair were partially developed.

On local examination labia majora and labia minora were moderately developed.

There was no bleeding P/V. Whitish discharge was present. Hymen was completely torn.

Vagina admitted two fingers cervix was normal, uterus was of null parous by lateral FF were normal.

....Two swabs were taken from cervix vagina. Public hair were taken and sent for examination. Salwar worn by Raj Bala was taken and sealed following were handed over to the police. It is correct that I have given my opinion that hymen was completely torn.

....It is also correct that the margins were completely healed. I cannot give the exact time.

....I cannot say whether it was torn one year back 2 years back or 10 days back.

....I cannot say whether there was any sign of semen on the swabs taken by me." She further deposed:

".... Since there was no matting of hair so I did not opine whether there was any semen on the public hair.

....I do not remember whether I enquired from Raj Bala whether she came to me for medico legal examination after washing clothes and taking bath or not. However, the salwar worn by her was taken into custody. I cannot say from how many days Raj Bala was having sexual activities. The possibility of Raj Bala of habitual sexual intercourse cannot be ruled out."

6. In fact, much has been argued by Mr. J.P. Singh on two fingers test. Admitting very fairly that in case she was a minor, the question as to whether she had been habitual to sexual activities or not, is immaterial to determine the issue of consent.
7. So far as the two finger test is concerned, it requires a serious consideration by the court as there is a demand for sound standard of conducting and interpreting forensic examination of rape survivors.
8. In *Narayanamma (Kum) v. State of Karnataka & Ors.*, (1994) 5 SCC 728, this Court held that fact of admission of two fingers and the hymen rupture does not give a clear indication that prosecutrix is habitual to sexual intercourse. The doctor has to opine as to whether the hymen stood ruptured much earlier or carried an old tear. The factum of admission of two fingers could not be held adverse to the prosecutrix, as it would also depend upon the size of the fingers inserted. The doctor must give his clear opinion as to whether it was painful and bleeding on touch, for the reason that such conditions obviously relate to the hymen.
9. In *State of U.P. v. Pappu @ Yunus & Anr.*, AIR 2005 SC 1248, the Court held that a prosecutrix complaining of having been a victim of an offence of rape is not an accomplice after the crime. There is no rule of law that her testimony cannot be acted upon without corroboration in material particulars, for the reason, that she stands on a much higher pedestal than an injured witness.

This Court while dealing with the issue in *State of Uttar Pradesh v. Munshi*, AIR 2009 SC 370, has expressed its anguish and held that even if the victim of rape was previously accustomed to sexual intercourse, it cannot be the determinative question. On the contrary, the question still remains as to whether the accused committed rape on the victim on the occasion complained of. Even if the victim had lost her virginity earlier, it can certainly not give a licence to any person to rape her. It is the accused who was on trial and not the victim. So as to whether the victim is of a promiscuous character is totally an irrelevant issue altogether in a case of rape. Even a woman of easy virtue has a right to refuse to submit herself to sexual intercourse to anyone and everyone, because she is not a vulnerable object or prey for being sexually assaulted by anyone and everyone. A prosecutrix stands on a higher pedestal than an injured witness for the reason that an injured witness gets the injury on the physical form, while the prosecutrix suffers psychologically and emotionally.

10. In *Narender Kumar v. State (NCT of Delhi)*, AIR 2012 SC 2281, this Court dealt with a case where the allegation was that the victim of rape herself was an unchaste woman, and a woman of easy virtue. The court held that so far as the prosecutrix is concerned, mere statement of prosecutrix herself is enough to record a conviction, when her evidence is read in its totality and found to be worth reliance. The incident in itself causes a great distress and humiliation to the victim though, undoubtedly a false allegation of rape can cause equal distress, humiliation and damage to the accused as well. The Court further held as under:

“Even in cases where there is some material to show that the victim was habituated to sexual intercourse, no inference of the victim being a woman of “easy virtues” or a woman of “loose moral character” can be drawn. Such a woman has a right to protect her dignity and cannot be subjected to rape only for that reason. She has a right to refuse to submit herself to sexual intercourse to anyone and everyone because she is not a vulnerable object or prey for being sexually assaulted by anyone and everyone. Merely because a woman is of easy virtue, her evidence cannot be discarded on that ground alone rather it is to be cautiously appreciated. (Vide: *State of Maharashtra & Anr. v. Madhukar Narayan Mardikar*, AIR 1991 SC 207; *State of Punjab v. Gurmit Singh & Ors.*, AIR 1996 SC 1393; and *State of U.P. v. Pappu @ Yunus & Anr.*, AIR 2005 SC 1248).

In view of the provisions of Sections 53 and 54 of the Evidence Act, 1872, unless the character of the prosecutrix itself is in issue, her character is not a relevant factor to be taken into consideration at all”.

11. In *State of Punjab v. Ramdev Singh*, AIR 2004 SC 1290, this court dealt with the issue and held that rape is violative of victim's fundamental right under Article 21 of the Constitution. So, the courts should deal with such cases sternly and severely. Sexual violence, apart from being a dehumanizing act, is an unlawful intrusion on the right of privacy and sanctity of a woman. It is a serious blow to her supreme honour and offends her self-esteem and dignity as well. It degrades and humiliates the victim and where the victim is a helpless innocent child or a minor, it leaves behind a traumatic experience. A rapist not only causes physical injuries, but leaves behind a scar on the most cherished position of a woman, i.e. her dignity, honour, reputation and chastity. Rape is not only an offence against the person of a woman, rather a crime against the entire society. It is a crime against basic human rights and also violates the most cherished fundamental right guaranteed under Article 21 of the Constitution.

12. In view of International Covenant on Economic, Social, and Cultural Rights 1966; United Nations Declaration of Basic Principles of Justice for Victims of Crime and Abuse of Power 1985, rape survivors are entitled to legal recourse that does not retraumatize them or violate their physical or mental integrity and dignity. They are also entitled to medical procedures conducted in a manner that respects their right to consent. Medical procedures should not be carried out in a manner that constitutes cruel, inhuman, or degrading treatment and health should be of paramount consideration while dealing with gender-based violence. The State is under an obligation to make such services available to survivors of sexual violence. Proper measures should be taken to ensure their safety and there should be no arbitrary or unlawful interference with his privacy.

13. Thus, in view of the above, undoubtedly, the two finger test and its interpretation violates the right of rape survivors to privacy, physical and mental integrity and dignity. Thus, this test, even if the report is affirmative, cannot ipso facto, be given rise to presumption of consent.

14. In view of the above, the facts and circumstances of the case do not present special features warranting any interference by this Court. The appeal lacks merit and is accordingly dismissed.

.....J. (Dr. B.S. CHAUHAN)
.....J.

(FAKKIR MOHAMED IBRAHIM KALIFULLA) NEW DELHI;

April 09, 2013.

Government of Rajasthan
Directorate Medical, Health and Family Welfare, Jaipur

S.No. HA/OSC/2019/407

Dated: 30-08-2019

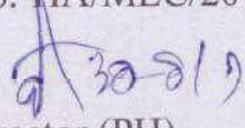
All Joint Directors,
All CMHOs,
All PMOs
Rajasthan

Subject: Guidelines & protocols on medico legal care for
survivors/victims of sexual violence.

In compliance of the order (copy attached) passed by Honourable Supreme Court of India in the case of Nipun Saxena & ANR versus Union of India & Others in Writ Petition (Civil) Number 565 of 2012, guidelines and protocols on (i) medico legal care for survivors/victims of sexual violence which have been issued by the Ministry of Health & Family Welfare, Government of India, (ii) functioning of "One Stop Centre" are attached with this letter for strict compliance.

The guidelines and protocols on medico legal care for the survivors/victims of sexual violence, issued by the Ministry of Health & FW, GoI were sent to you earlier also vide letter no. HA/MLC/2018/796 dated 13-12-2018.

Enclosures: 4 (as above) pdf files.


Director (PH)

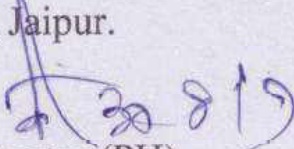
Medical and Health Department
Rajasthan, Jaipur

S.No. HA/OSC/2019/407

Dated: 30-08-2019

Copy:

1. PS to Additional Chief Secretary, Home, GoR, Jaipur.
2. PS to Director General of Police, PHQ, Jaipur.
3. PS to Additional Chief Secretary, Medical and Health, GoR, Jaipur.
4. PS to Secretary, Medical Education, Rajasthan, Jaipur.
5. PS to Secretary, WCD, GoR, Jaipur.
6. Principals, All Medical Colleges.


Director (PH)

Medical and Health Department
Rajasthan, Jaipur

राजस्थान सरकार
निदेशालय चिकित्सा एवं स्वास्थ्य सेवाएँ, राजस्थान, जयपुर

क्रमांक विप्र/सांसा/2021/721

दिनांक 6/12/21

1. डॉ० बन्धन चौधरी, पत्नी डॉ० सहदेव चौधरी, नागौर।
2. डॉ० राजेश मिश्रा, पत्नी डॉ० शिवा शर्मा, नागौर।
3. डॉ० राशि चौधरी, पत्नी डॉ० विजय चौधरी, नागौर।

माननीय उच्च न्यायालय में दायर एनपीसिविल रिट पिटोशन संख्या 1470/2021 में पारित आदेश दिनांक 13.08.21 के अनुपालना में।
सदस्य-आयुक्त आवेदन पत्र दिनांक 24.08.2021 के तम में।

उपरोक्त विषयान्वयित संबंधित आवेदन पत्र के द्वारा माननीय न्यायालय द्वारा पारित आदेश दिनांक 25.08.2021 के विरुद्ध रिट दायर कर अभ्यावेदन प्रस्तुत किया है।

Operational Protocols on Medico-legal care for Survivors/victims of sexual violence के बिना operational issue के कोई प्रतीकृत चिकित्सक व्यवसायी परीक्षण कर सकता है। परीक्षण के लिए महिला रोग विशेषज्ञ का होना आवश्यक नहीं है, लेकिन बालिका को महिला के प्रकरण में हर संभव महिला चिकित्सक से ही परीक्षण करवाया जाना है, लेकिन महिला चिकित्सक की अनुपलब्धता में पीड़िता के उपचार एवं परीक्षण में इन्कार और विलम्ब नहीं करना है। पुरुष चिकित्सक द्वारा महिला परिचारक की उपस्थिति में पीड़िता बालिका का परीक्षण किया जाय।

अतः प्रस्तुत अभ्यावेदन को निरस्त करते हुए वर्णित आधार पर मेडिको-लीगल जांच जा जाना सुनिश्चित कर।

क्रमांक विप्र/सांसा/2021/721

निलंबित-निम्नलिखित को सूचनाएँ एवं आवश्यक कार्रवाई हेतु प्रेषित है-

1. निजी सचिव, शासन सचिव, चिकित्सा एवं स्वास्थ्य विभाग, जयपुर।
2. उपाय सचिव, चिकित्सा एवं स्वास्थ्य (ग्रुप-2) विभाग, शासन सचिवालय, जयपुर।
3. निदेशक (जन स्वा) मुख्यालय, जयपुर।
4. संयुक्त निदेशक चिकित्सा एवं स्वास्थ्य सेवाएँ जयपुर।
5. सहायक निदेशक।

निदेशक (जन स्वास्थ्य)
चिकित्सा एवं स्वास्थ्य सेवाएँ
राजस्थान जयपुर
दिनांक 6/12/21

निदेशक (जन स्वास्थ्य)
चिकित्सा एवं स्वास्थ्य सेवाएँ
राजस्थान जयपुर

राजस्थान सरकार
निदेशालय, चिकित्सा एवं स्वास्थ्य सेवायें, राजस्थान, जयपुर

क्रमांक : F.53(1)HA/PART-1/SEXUAL VIOLECE/2023/464

दिनांक 15/02/2024

समस्त मुख्य चिकित्सा एवं स्वास्थ्य अधिकारी,
राजस्थान।
समस्त प्रमुख चिकित्सा अधिकारी,
राजस्थान।

विषय:—Judgment Passed by Hon'ble High Court of Delhi Bail application No.2128/2023 relating to "Guidelines and Examination Proforma for Medico legal cases of victims of Sexual Violence-reg.

संदर्भ:—Government of India Ministry of Health & Family Welfare (Hospital-II Section) का पत्रांक C.18018/31/2023-H –II Date 03.10.2023 के क्रम में।

उपरोक्त विषयान्तर्गत एवं संदर्भित पत्र के क्रम में लेख है कि स्वास्थ्य एवं परिवार कल्याण मंत्रालय भारत सरकार द्वारा जारी Judgment Passed by Hon'ble High Court of Delhi Bail application No.2128/2023 relating to "Guidelines and Examination Proforma for Medico legal cases of victims of Sexual Violence-reg. के अनुसार कार्य कर पालना रिपोर्ट निदेशालय की मेल आईडी adhadmhs@gmail.com पर भिजवाया जाना सुनिश्चित करे।

निदेशक (जन० स्वास्थ्य.)
चिकित्सा एवं स्वास्थ्य सेवायें
राजस्थान जयपुर

क्रमांक : F.53(1)HA/PART-1/SEXUAL VIOLECE/2023/464

दिनांक 15/02/2024

प्रतिलिपि: निम्न को सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित है:—

1. निजी सचिव, गृह मंत्रालय भारत सरकार, राज० जयपुर।
2. निजी सचिव, अति० मुख्य सचिव महोदय, चिकित्सा एवं स्वास्थ्य राज० जयपुर।
3. शासन सचिव, चिकि० स्वा० एवं परिवार कल्याण विभाग,(अस्पताल—द्वितीय अनुभाग)राज० जयपुर।
4. निजी सचिव, निदेशक (जन. स्वा.) चिकित्सा एवं स्वास्थ्य सेवायें, राजस्थान जयपुर।
5. समस्त संयुक्त निदेशक चिकित्सा एवं स्वास्थ्य सेवाएँ, जोन राजस्थान।
6. प्रभारी सर्वर रूम, मुख्यालय को भेजकर लेख है कि उक्त पत्र के साथ सलंगन गार्डलाईन को विभागीय वेब साईड पर अपलोड करें।
7. रक्षित पत्रावली/आदेश पत्रावली।

RajKaj Ref
5048939

Signature Not Verified

Digitally Signed by RAVI
PARKASH MATHUR
Designation : Director
Date :13-02-2024 04:25:33

2023:DHC:5596



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* **IN THE HIGH COURT OF DELHI AT NEW DELHI**

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Reserved on: 31.07.2023
Pronounced on: 09.08.2023

+ **BAIL APPLN. 2128/2023**

NABAL THAKUR (IN J.C.) Petitioner

Through: Mr. Sunil Kumar and Mr. Giri
Raj Singh, Advocates

versus

THE STATE Respondent

Through: Mr. Manoj Pant, APP for State
with SI Meenu, PS Kirti
Nagar.**CORAM:****HON'BLE MS. JUSTICE SWARANA KANTA SHARMA****JUDGMENT****Index to the Judgment**

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ii. Duty Of The Doctors To Take Precautions In Cases Of Medical Termination Of Pregnancy Of Sexual Assault Victims	7
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**SWARANA KANTA SHARMA, J.**

1. The instant application under Section 439 of the Code of Criminal Procedure, 1973 ('Cr.P.C.') has been filed on behalf of applicant seeking regular bail in case FIR bearing no. 472/2020, registered at Police Station Kirti Nagar, Delhi for the offence punishable under Section 363 of the Indian Penal Code, 1860 ('IPC').

FACTS OF THE CASE

2. Briefly stated, the facts of the present case are that the father of prosecutrix had lodged a complaint with the police, whereby he had stated that upon returning home on 24.11.2020 at 1:30 PM, he had found that his daughter had gone missing. Thereafter, about two months later, the father of prosecutrix had produced her daughter i.e. prosecutrix before the investigating officer on 30.01.2021, after which, medical examination of prosecutrix was conducted at DDU Hospital, Hari Nagar. During the medical examination, UPT of prosecutrix was found to be positive and in her MLC, the prosecutrix stated that the present applicant/accused, i.e. Nabal Thakur had established physical relations with her without her consent. The statement of prosecutrix under Section 164 Cr.P.C. was recorded on 03.02.2021 and the present accused/applicant was arrested on 04.02.2021. Thereafter, the counselling of prosecutrix was conducted and she was produced before the Child Welfare Committee (CWC), Hari Nagar, and on 04.02.2021, permission for medical termination of pregnancy of prosecutrix was given by CWC and she was taken to

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DDU Hospital, Hari Nagar for carrying out the procedure. After investigation, chargesheet was filed by the police and charges were framed by the learned Trial Court under Sections 363/366/376(2)(n) of IPC.

SUBMISSIONS OF THE APPLICANT AND THE STATE

3. Learned counsel for the accused/applicant states that the applicant has been falsely implicated in the present case and he has been in judicial custody for more than 2 years and 5 months. It is stated that the prosecutrix and her father have already been examined before the learned Trial Court. It is argued that there are material contradictions in the statement of prosecutrix given to the concerned doctor at the time of her medical examination and in her examination-in-chief recorded before the learned Trial Court. It is further stated that the medical examination of the prosecutrix was not conducted properly and hence there is no material evidence which supports the case of the prosecution. It is further submitted that the brother of the present applicant, who is co-accused in the present case, has already been granted bail *vide* order dated 13.01.2022 passed by learned ASJ POCSO-01, Tis Hazari Court, Delhi.

4. *Per contra*, learned APP for the State argues that the allegations against the accused/applicant are serious in nature. It is stated that the medical examination of the prosecutrix supports the case of prosecution. It is further stated that the testimonies of the prosecutrix and her father clearly establishes the involvement of the applicant/accused in the present case.

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ANALYSIS AND FINDINGS

5. This Court has heard arguments addressed by both sides and perused the material on record.

6. Succinctly, the case of prosecution is that the present accused/applicant, who used to reside near the house of prosecutrix, had called the prosecutrix to his house on some false pretext on 24.11.2020 and had then told her that he would not let her go till she attains the age of majority. It is alleged by the prosecutrix that she had stayed in the house of applicant/accused for about two months and the applicant had established physical relations with her on several occasions. Thereafter, on 22.01.2021, the brother of present applicant, i.e. co-accused Rajiv Thakur had brought the prosecutrix to her parent's house in Delhi, after which the father of prosecutrix had taken her to the police station.

7. In the present case, a perusal of record reveals that the prosecutrix was only 16 years of age at the time of incident. Further, when her medical examination was conducted, the prosecutrix was found to be pregnant. Further, the prosecutrix had informed the concerned doctor during her medical examination, as recorded in the MLC, that the present applicant had forcibly established physical relations with her. This Court also notes that the testimonies of the material witnesses i.e. the prosecutrix and her father have been recorded and both the witnesses have supported the case of prosecution. As regards the contention raised on behalf of applicant that co-accused Rajiv Thakur has already been granted bail, it can be noted that the role attributed to co-accused is different than that of the

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present accused/applicant and thus, bail cannot be granted to the applicant on grounds of parity.

8. Considering the overall facts and circumstances of the case, and the fact that the prosecutrix who was a minor at the time of commission of offence, was repeatedly raped by the present applicant, this Court finds no ground for grant of bail at this stage.

CONCERN OF THE COURT

9. While disposing of this application, this Court notes with dismay that in this case, the prosecutrix, who was aged about 16 years, had conceived allegedly due to sexual assault. During the course of her medical examination after she was recovered, her UTP was found positive and was recorded in her MLC dated 31.01.2021. In the MLC, the doctor mentions the duration of pregnancy as four weeks and five days. She was referred to Department of Obstetrics and Gynaecology (OBG) department for further evaluation and the history of sexual assault was duly mentioned. The concerned doctor of Department of Obstetrics and Gynaecology mentions that she had been produced before the concerned doctor for termination of pregnancy. However, this Court notes that there was no order for termination of pregnancy from CWC till that time. Thus, she was discharged after three days on 02.02.2021 and was asked to visit the hospital again after two weeks for review. However, it is not mentioned in the discharge summary as to why she was discharged without termination of pregnancy and whether she was informed about dangers of losing the fetus.

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i. Negligence on the part of Doctor resulting in Loss of Crucial Piece of Evidence

10. Thereafter, the order for termination of pregnancy of the prosecutrix was passed by CWC on 04.02.2021, and she had again visited the hospital on 09.02.2021 for the said purpose, where she remained admitted for four days. In the discharge summary dated 12.02.2021, the period of pregnancy at that point of time is mentioned as six weeks, but it is not mentioned as to why the prosecutrix remained admitted in the hospital for four days but the termination of pregnancy did not take place. She was, thus, again discharged from the hospital and was asked to come back to the hospital after one week when termination of pregnancy will be planned.

11. The prosecutrix again visited the hospital on 19.02.2021 and remained admitted there till 23.02.2021, when she was carrying pregnancy of about seven weeks and three days. She remained admitted in the hospital for five days, however, it is mentioned in the discharge summary dated 23.02.2021 that she had suffered a complete abortion of fetal tissues expelled at home. It is mentioned that due to the same, the sample could not be preserved.

12. As regards the medical records of the case, only discharge summaries are available before this Court. It is not mentioned in the discharge summaries as to what treatment was administered to the prosecutrix when she was admitted in the hospital for the purpose of medical termination of pregnancy. The most crucial admission date is

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of 09.02.2021 to 12.02.2021 as the Child Welfare Committee had directed for termination of pregnancy by way of order dated 04.02.2021. However, the prosecutrix had not been produced before the concerned doctor till 09.02.2021. On 09.02.2021, when she was admitted for termination of pregnancy, the medical record does not reveal what transpired during that period and why the pregnancy was not terminated and as to why she was discharged from the hospital though, there were clear directions for preservation of the fetus. It was duty of the doctor concerned to have complied with the order of CWC with care, caution and seriousness as the fetus was one of the most crucial pieces of evidence in a sexual assault case. This evidence has now been lost due to the negligence of the doctor concerned. It was the duty of the doctor to have not discharged the victim till the termination of pregnancy and preservation of the fetus.

13. Needless to say, abortion at home would have posed one of the gravest risks to the life of the victim child as well as the risk of evidence being lost, as in the present case.

ii. Duty of the Doctors to take Precautions in cases of Medical Termination of Pregnancy of Sexual Assault Victims

14. Doctors play a crucial role in such sensitive cases, especially when minors are involved. It is essential for doctors to uphold the highest standards of medical ethics, compassion, and professionalism. In such cases, doctors must prioritize the health and well-being of their patients while being mindful of the legal and ethical complexities surrounding the procedure.

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15. When a minor seeks a medical termination of pregnancy, doctors must ensure that the process is conducted in compliance with the prevailing laws and regulations, with utmost sensitivity to the minor's age and maturity level. Such cases must be approached with empathy, ensuring that the minor feels safe and supported throughout the process. Additionally, doctors must maintain confidentiality and privacy to protect the patient's dignity and safeguard them from potential harm or coercion. Doctors also have a duty to communicate effectively with such minor patients, explaining the medical procedures, potential risks, and available alternatives.

16. Post-procedure care and follow-up are critical components of a doctor's responsibility in cases of medical termination of pregnancy. After the procedure, the patient's well-being and recovery must be carefully monitored to ensure they heal physically and emotionally. Doctors should also provide clear instructions on post-operative care, including any necessary medications, activity restrictions, and signs of potential complications.

iii. Directions

17. This Court notes with a sense of disappointment that despite repeated directions, standing orders and several judgments, the Courts are still confronted with instances as the present one. In such circumstances, this Court is constrained to pass directions, while exercising judicial restraint from passing any order against the doctors concerned, which read as under:

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- (i) **Circulation of existing guidelines and SOPs:** The Department of Health and Family Welfare, Government of NCT of Delhi and Ministry of Health and Family Welfare, Government of India is directed to ensure that the existing guidelines/Standard Operating Procedure for conducting examination of the victims of sexual assault are circulated in all the hospitals in Delhi;
- (ii) **Regarding additional directions issued vide this judgment:** The abovesaid Ministries are also directed to circulate the additional directions contained in the present judgment which be added to the existing SOPs, that in case the victim is pregnant and there are orders for medical termination of pregnancy including for preservation of fetus, the investigating officer will place such order before the Superintendent of the hospital concerned, who will ensure that the doctor concerned who is assigned the duty of medical termination of pregnancy conducts the same with utmost caution;
- (iii) **Producing the victim within 24 hours of order of competent authority before the hospital even in pregnancy of less than 20 weeks:** The investigating officer concerned will produce the victim for the purpose of medical termination of pregnancy within 24 hours of passing of such order before the Superintendent of the concerned hospital, even in cases where the gestation

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period of the pregnancy is less than 20 weeks as in the present case;

- (iv) **Preservation of fetus:** It is directed that the doctor concerned will ensure that the fetus is preserved and the victim is not discharged in a hurry, resulting in putting the life of the victim in danger and loss of evidence in a sexual assault case;
- (v) **Recording of reasons for discharge without termination of pregnancy:** The doctor concerned will also mention, in case the victim is discharged without termination of pregnancy, the reasons for the same so that the crucial evidence in the form of fetus is not lost;
- (vi) **Recording of details of treatment for medical termination of pregnancy:** It shall be duty of the doctor concerned also to mention in detail, the treatment given to the victim of sexual assault including any medicines given or procedure carried out for the purpose of termination of pregnancy;
- (vii) **Difficulty faced by the Courts in reading MLCs and need to file typed MLC in sexual assault cases:** The Courts experience difficulty in reading or making out the observations in the MLCs or discharge summaries as they may not be comprehensible due to illegibility of the handwriting of the concerned doctor, medical abbreviations

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and terminology used, etc. This Court remains aware of the fact that when the MLC is being prepared by the doctor, due to various constraints and reasons of privacy etc., it has to be handwritten.

Therefore, it is directed that in cases where medical examination of a victim of sexual assault is conducted, all the hospitals concerned will ensure that alongwith the original MLC as well as discharge summary of such victim, a **typed copy** of the same is also prepared by the concerned hospital and provided to the investigating officer within a period of one week.

It is essential to do so since though at the time of recording of evidence and trial, the doctor concerned may appear, read and depose about the contents of MLC, when the Court has to read and appreciate it at the stage of consideration of **bail** or framing of **charge**, it poses difficulty to the Court;

- (viii) **Typed copy of MLC may be sent by electronic mode to the IO:** The typed MLC can also be sent to the investigating officer through electronic means to save the time of the investigating officer and the concerned hospital;

18. These guidelines will be read in addition to the guidelines issued by this Court in *Minor R Thr Mother H v. State NCT of Delhi*, W.P. (CRL.)221/2023 decided on 25.01.2023.

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19. The aforesaid directions of this Court be circulated, within 15 days of issuance of this order and its receipt by the Ministry of Health and Family Welfare, Government of India, and Department of Health and Family Welfare, Government of NCT of Delhi in all the hospitals in Delhi. Compliance report be filed within 2 months before this Court.

20. In view of the above, the present application stands disposed of.

21. It is, however, clarified that nothing expressed herein above shall tantamount to an expression of opinion on merits of the case.

22. A copy of this judgment be forwarded by the Registry to (i) Ministry of Health and Family Welfare, Government of India, (ii) Department of Health and Family Welfare, Government of NCT of Delhi, (iii) Commissioner of Police, Delhi, for information and compliance.

23. The judgment be uploaded on the website forthwith.

SWARANA KANTA SHARMA, J

AUGUST 9, 2023/ns

(7) Payment for the service of an interpreter, translator, special educator, expert or support person whose name is enrolled in the register maintained under sub-rule (1) or otherwise, shall be made by the State Government from the fund maintained under Section 105 of the Juvenile Justice Act, 2015 (2 of 2016), or from other funds placed at the disposal of the DCPU.

(8) Any interpreter, translator, special educator, expert or support person engaged for the purpose of assisting a child under this Act, shall be paid a fee which shall be prescribed by the State Government, but which, shall not be less than the amount prescribed for a skilled worker under the Minimum Wages Act, 1948 (11 of 1948).

(9) Any preference expressed by the child at any stage after information is received under sub-section (1) of Section 19 of the Act, as to the gender of the interpreter, translator, special educator, expert or support person, may be taken into consideration, and where necessary, more than one such person may be engaged in order to facilitate communication with the child.

(10) The interpreter, translator, special educator, expert, support person or person familiar with the manner of communication of the child engaged to provide services for the purposes of the Act shall be unbiased and impartial and shall disclose any real or perceived conflict interest and shall render a complete and accurate interpretation or translation without any additions or omissions, in accordance with Section 282 of the Code of Criminal Procedure, 1973 (2 of 1974).

(11) In proceedings under Section 38, the Special Court shall ascertain whether the child speaks the language of the court adequately, and that the engagement of any interpreter, translator, special educator, expert, support person or other person familiar with the manner of communication of the child, who has been engaged to facilitate communication with the child, does not involve any conflict of interest.

(12) Any interpreter, translator, special educator, expert or support person appointed under the Act shall be bound by the rules of confidentiality, as described under Section 127 read with Section 126 of the Indian Evidence Act, 1872 (1 of 1872).

6. Medical aid and care.—(1) Where an officer of the SJPU, or the local police receives information under Section 19 of the Act that an offence under the Act has been committed, and is satisfied that the child against whom an offence has been committed, and is satisfied that the child against whom an offence has been committed is in need of urgent medical care and protection, such officer, or as the case may be, the local police shall, within 24 hours of receiving such information, arrange to take such child to the nearest hospital or medical care facility center for emergency medical care:

Provided that where an offence has been committed under Sections 3, 5, 7 or 9 of the Act, the victim shall be referred to emergency medical care.

(2) Emergency medical care shall be rendered in such a manner as to protect the privacy of the child, and in the presence of the parent or guardian or any other person in whom the child has trust and confidence.

(3) No medical practitioner, hospital or other medical facility center rendering emergency medical care to a child shall demand any legal or magisterial requisition or other documentation as a pre-requisite to rendering such care.

(4) The registered medical practitioner rendering medical care shall attend to the needs of the child, including:

- (a) treatment for cuts, bruises, and other injuries including genital injuries, if any;
- (b) treatment for exposure to sexually transmitted diseases (STDs) including prophylaxis for identified STDs;
- (c) treatment for exposure to Human Immunodeficiency Virus (HIV), including prophylaxis for HIV after necessary consultation with infectious disease experts;
- (d) possible pregnancy and emergency contraceptives should be discussed with the pubertal child and her parent or any other person in whom the child has trust and confidence; and
- (e) wherever necessary, a referral or consultation for mental or psychological health needs, or other counselling, or drug de-addiction services and programmes should be made.

(5) The registered medical practitioner shall submit the report on the condition of the child within 24 hours to the SJPU or Local Police.

(6) Any forensic evidence collected in the course of rendering emergency medical care must be collected in accordance with Section 27 of the Act.

(7) If the child is found to be pregnant, then the registered medical practitioner shall counsel the child, and her parents or guardians or support person, regarding the various lawful options available to the child as per the Medical Termination of Pregnancy Act, 1971 and the Juvenile Justice (Care and Protection of Children) Act, 2015 (2 of 2016).

(8) If the child is found to have been administered any drugs or other intoxicating substances, access to drug de-addiction programme shall be ensured.

(9) If the child is divyang (person with disability), suitable measure and care shall be taken as per the provisions of the Rights of Persons with Disabilities Act, 2016 (49 of 2016).

7. Legal aid and assistance.—(1) The CWC shall make a recommendation to District Legal Services Authority (hereafter referred to as “DLSA”) for legal aid and assistance.

(2) The legal aid and assistance shall be provided to the child in accordance with the provisions of the Legal Services Authorities Act, 1987 (39 of 1987).

8. Special relief.—(1) For Special relief, if any, to be provided for contingencies such as food, cloths, transport and other essential needs, CWC may recommend immediate payment of such amount as it may assess to be required at that stage, to any of the following—

- (i) the DLSA under Section 357-A; or;

प्रेषक :- विशिष्ट न्यायाधीश,
लैंगिक अपराधों से बालकों का संरक्षण अधिनियम
जालोर (राजस्थान)

प्रेषिणी :- 1. मुख्य चिकित्सा एवं स्वास्थ्य अधिकारी, जालोर
2. प्रमुख चिकित्सा अधिकारी, राजकीय सामान्य अस्पताल जालोर

विषय :- लैंगिक अपराधों से बालकों का संरक्षण अधिनियम 2012 की धारा 27(2) की पालना सुनिश्चित किये जाने हेतु।

उपरोक्त विषयान्तर्गत लेख है कि इस न्यायालय द्वारा प्रकरणों का विचारण करते समय यह तथ्य ध्यान में आया है कि दण्ड प्रक्रिया संहिता की धारा 164(क) के प्रावधानों के तहत बलात्कार पीड़ित बालक की शारीरिक परीक्षा मेडिकल बोर्ड गठित कर की जा रही है और इस मेडिकल बोर्ड में पुरुष डॉक्टर को सम्मिलित किया जा रहा है। उक्त धारा के तहत शारीरिक परीक्षण किये जाने हेतु मेडिकल बोर्ड गठित किये जाने की आवश्यकता नहीं है। धारा 27(2) लैंगिक अपराधों से बालकों का संरक्षण अधिनियम 2012 के प्रावधानों के अनुसार यदि पीड़ित कोई बालिका है तो चिकित्सीय परीक्षा किसी महिला डॉक्टर द्वारा ही की जायेगी लेकिन उक्त आज्ञापक प्रावधान की अवहेलना करते हुये ऐसे मेडिकल बोर्ड द्वारा पीड़ित बालिकाओं का चिकित्सीय परीक्षण किया जा रहा है जिसमें महिला डॉक्टर के साथ पुरुष डॉक्टर भी सम्मिलित है। इसलिए आप निर्देशित किया जाता है कि उक्त कार्यप्रणाली को परिवर्तित कर धारा 27(2) की पालना किया जाना सुनिश्चित है।

यह भी देखा गया है कि पीड़िता के चिकित्सीय परीक्षण की रिपोर्ट में यह अंकित किया जा रहा है कि संभोग के संबंध में अंतिम राय एफएसएल रिपोर्ट प्राप्त होने के बाद दी जायेगी लेकिन उक्त राय भारत सरकार के स्वास्थ्य एवं परिवार कल्याण मंत्रालय द्वारा वर्ष 2014 में जारी Guidelines & Protocols Medico-legal care for survivors/ victims of Sexual Violence के विपरित है। इसलिए उक्त गाइडलाइन में प्रदत्त निर्देशों के अनुरूप राय प्रदान की जाती है, साथ ही उक्त गाइडलाइन में परीक्षण के पश्चात् रिपोर्ट तैयार करने का जो प्रारूप निर्दिष्ट है उसी प्रारूप में रिपोर्ट तैयार की जाये।

प्रतिलिपि:-

1. जिला पुलिस अधीक्षक जालोर एवं सांचौर को पत्र की प्रति प्रेषित कर निर्देशित किया जाता है कि पीड़ित बालिकाओं के चिकित्सीय परीक्षण हेतु जारी की जाने वाली तहरीर में मेडिकल बोर्ड गठित कर परीक्षण की जाने की मांग न किये जाने हेतु संबंधित अनुसंधान अधिकारियों को निर्देश प्रसारित करें।




न्यायाधीश
विशेष न्यायालय लैंगिक अपराधों से बालकों
का संरक्षण अधिनियम 2012 तहत बालक अधिकार
संरक्षण आयोग अधिनियम 2005, जालोर


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संरक्षण आयोग अधिनियम 2005, जालोर

कार्यालय: विशिष्ट न्यायाधीश, विशेष न्यायालय, लैंगिक अपराधों से बालकों
का संरक्षण अधि. 2012 तथा बाल अधिकार संरक्षण आयोग अधि. 2005
सिरौही

दिनांक: 27.06.2023

क्रमांक: 313

प्रेषित: प्रमुख चिकित्साधिकारी,
जिला चिकित्सालय, सिरौही।

विषय: स्पष्टीकरण पेश करने बाबत।

आपके चिकित्सालय में स्त्री रोग विशेषज्ञ चिकित्सक पदस्थापित होने के बावजूद लैंगिक अपराधों से संबंधित प्रकरणों में विशेषज्ञ चिकित्सको से परीक्षण नहीं करवाकर समान्य चिकित्सको से करवाया जा रहा है। जो पोक्सो अधिनियम की धारा 39 तथा उक्त धारा के प्रावधानों के अनुसरण में महिला एवं बाल कल्याण द्वारा जारी मॉडल गाईडलाइन 2013 की अवेहलना की श्रेणी में आता है। आपकी उक्त उपेक्षा का पोक्सो प्रकरणों पर प्रतिकूल प्रभाव पड़ रहा है तथा न्यायालय के समक्ष विशेषज्ञीय साक्ष्य नहीं आ पा रही है, जो गम्भीर विषय है। अतः आपको निर्देश दिया जाता है कि भविष्य में पोक्सो अधिनियम की दुष्कर्म पीडिताओं का परीक्षण विशेषज्ञ चिकित्सक द्वारा करवाया जाना सुनिश्चित करें तथा विशेषज्ञ चिकित्सक पदस्थापित होने के बावजूद उनसे परीक्षण नहीं कराने के संबंध में अपना स्पष्टीकरण 5 दिवस में प्रस्तुत करें।



[Signature]
27/06/2023
(अनूप कुमार पाठक)

विशेष न्यायाधीश,
विशेष न्यायालय अपराधों
से बालकों का संरक्षण अधि.
लैंगिक अपराधों से बालकों का संरक्षण अधि.
2012 तथा बाल अधिकार संरक्षण आयोग 2005,
सिरौही (राज.)