

Review of Literature

The deficit of women in India's population has been documented ever since the first decennial enumeration of people was conducted in the British-occupied parts of India in the late nineteenth Century. Over the span of more than 100 years, the deficit of women has progressively increased as evident from the sex ratio of the population; the number of women per 1000 men more or less steadily declined from 972 in 1901 to 933 in 2001.

Along with China and few other South Asian countries, India exhibits the anomalous phenomenon of deficit of women in the population. These countries share certain features like being patrilineal in social structure, exhibiting strong son preference and where men traditionally enjoy higher social status relative to women.

With the 1991 Census results, it was observed that the deficit of girls or decline in the sex ratio at younger ages in India increased since 1981. The child female to male sex ratio, estimated for age group 0-6 years, for the country as a whole dropped by 4.5% between 1981 and 2001 or from 971 to 927 girls per 1000 boys.

To fully understand the implications of the deficit of women, it is important to examine the available recent data on sex ratio at birth and if girls are not allowed to be born, it is important to understand why, when, which of the female children and what means are used to avoid having daughters. There is some evidence from hospital births in major cities like Delhi that in recent years the sex ratio at birth has become more masculine (Raju and Premi, 1992). Some evidence of sex ratio at birth becoming increasingly masculine is also available from the recent sample registration surveys (SRS) and the National Sample Survey (NSS) as well as the two National Family Health Survey (NFHS) conducted in the 1990s. All these surveys have reported around 110 boys per 100 girls at birth or at age 0.

In a study conducted by the Christian Medical Association of India analysing the sex ratio at birth of hospitalized deliveries during 2000-2001 in Delhi indicated that if the first birth was a male child, the female to male sex ratio of the second birth was 959. But if the first birth was a female child, the sex ratio of the second birth was 542. Among the women who had delivered two daughters, the sex ratio of the third birth dropped to 219 (Literacy and Population Newsletter, 2005). These are clearly not chance occurrences.

a. Policy and Advocacy Measures

The fairly large body of research carried out in recent years and the efforts of the NGOs have brought out clearly the low sex ratio can be attributed to the age-old son preferential behaviour on the part of the parents. A reversal in the trend that undervalues daughters to that values daughters as equal to sons would require an overall structural change in the role, status and economic value of women.

The need is to aim at consciousness raising in both the parents about the value of daughters and understanding the cultural factors that undervalue girls (Leela Visaria, 2005).

A recently emerged factor that has a strong influence on the sex ratio at birth is the use of sex determination tests during pregnancy followed by abortion of fetuses of unwanted sex. Although conducting abortion became legal in India in 1971, it is only recently that pre-natal diagnostic techniques became widely available. Because of its relative rarity, information on the use of these techniques was not collected in NFHS-1. But in NFHS-2, this information was collected from the mothers who gave birth during the three-year period before the survey. In this survey, the use of PNDT (mainly ultrasound) was reported by mothers in 13% of 32 thousand live births that occurred during the three-year period before the survey. The sex ratio at birth in the reported cases of PNDT was 112 compared with 107 among live births to women who did not report the use of PNDT. Clearly, in a significant percentage of cases, PNDT was misused to abort female fetuses, since if sex-selective abortions were not practiced, the sex ratio at birth would have been close to 105. Even the reported sex ratio at birth for non-PNDT cases is relatively high indicating that some women may not have disclosed its use.

The reported use of PNDT declines as the order of birth increases. But the misuse of the technology increases with the birth order. The reported use is 21% for the first birth order but the estimated misuse, at the maximum, is only 8%. On the other hand, when the birth order is 4 or more, only 4% report the use of PNDT but nearly 40% resort to abortion if the fetus is female. Thus in the case of first birth, the predominant reason for the use of PNDT is to detect abnormalities, while at higher orders the main reason for the use is to detect the sex of the child. In particular, the misuse of the technology is highest when the woman has no son, but has two or more daughters. Among such women, the misuse is estimated to be 46-63%.

The analysis of NFHS data show that beyond the use of PNDT, several other factors influence the sex ratio at birth. The paternal age is found to reduce the probability of male birth while trained birth attendance is found to increase this probability (possibly by reducing incidence of still births). Maternal anaemia and obesity are found to decrease the sex ratio at birth. The sex ratio at birth is found to be lower at higher altitudes. Urban residence, educational level, standard of living, religion and cast/tribe failed to show significant or consistent relationships with sex ratio at birth. The sex ratio at birth was significantly higher among women who had earlier given birth to three or more children but all were daughters, indicating that such women misused the technology more than others. In spite of controlling many socio-economic and demographic factors, the sex ratio at birth was higher in north India, especially in north-western parts, indicating that women in these regions misused the technology more than others.

In conclusion, although the use of PNDT is now fairly widespread in India, only a minority of couples misuse it for aborting female fetuses. While income and education do increase the use of PNDT, its

misuse is governed more by cultural factors and sex composition of children already born. (Bhat and Zavier, 2005)

b. The Ultimate Sexual Discrimination: Female feticide

The abortion mentality has finally presented Neo-feminists with an ethical Gordian Knot. The shrill and relentless insistence of the NARAL and NOW types for abortion on demand for any reason has inevitably led to convenience abortions on a massive scale. And perhaps the ultimate in 'convenience abortions' is the selective killing of perfectly healthy unborn women solely because of their sex in other words, the ultimate sexual discrimination has been brought about by the Neo-feminists themselves.

Syndicated columnist Mona Charen has correctly pointed out that "Abortion on demand has given birth to boys on demand." [*Syndicated columnist Mona Charen. "Sex-Selected Abortions Hard to Defend." The Oregonian, January 6, 1989, page B5.*] The irony of this situation has not been lost on pro-lifer activists, who secretly smile as they watch NOW, NARAL, and other pro-abortion groups futilely attempt to untangle themselves from this insoluble dilemma.

c. The Background of Sex Selective Abortions

In 1973, American abortion pushers achieved victory beyond their wildest dreams abortion on demand for any reason whatever, and unlimited Federally-funded free abortions for poor women. At this time, only 1% of geneticists believed that abortion for sex selection was morally acceptable, and this small minority generally kept their opinions to themselves for obvious reasons. Abortion for selection of the baby's sex was recognized and criticized by many doctors even before the Supreme Court's *Roe v. Wade* decision of 1973. [*Eve Glicksman. "Breeding for Gender Encourages 'Shopping Mentality.'" The Oregonian, June 18, 1991, page B7.]*

By 1988, the number of geneticists approving of sex-selection abortions had jumped to 20%, and this trend shows no signs of abating.

d. The New Andrologists

Dozens of sex-selection clinics have sprung up all over the United States since the mid-1980s. These clinics offer amniocentesis solely for the purpose of determining the pre-born baby's sex by the 18th week of pregnancy. Chorionic villi sampling (CVS), a newer fetal diagnostic technique, can be used to detect fetal gender as early as eight weeks' gestation. [*Dr. Morton A. Stenchever's letter entitled "An Abuse of Prenatal Diagnosis" on page 408 the July 24, 1973 issue of the Journal of the American Medical Association.*] Most of these same clinics, 'coincidentally,' of course, offer abortions for babies of the 'wrong' sex. So a brand-new medical discipline has sprung up in response to public demand: Andrology. Those doctors who specialize in determining the sex of children are called andrologists.

Doctors who perform sonograms, but who abhor the practice of sex-selection abortions, say that it is common for pregnant women to lie in order to obtain an amniocentesis just to find out the gender of their preborn babies so they can abort. [Jeremy Knox, M.D. "Doctor's Dilemma: Abortion if Fetus is Wrong Sex." *Boston Globe*, August 11, 1976, page 1.]

Perhaps the medical "advance" of sex-selection abortion will itself be rendered obsolete by further advances in the near future. Physiologist Ronald Ericsson of Gametrics Ltd. in Sausalito, California has developed a technique by which it is possible to separate the X and Y chromosomes in human sperm with a 75% accuracy rate. Many scientists predict that this method will be refined to the point where parents will be able to select the sex of their children with 100% accuracy by the year 2000. [Dr. Morton A. Stenchever's letter entitled "An Abuse of Prenatal Diagnosis" on page 408 the July 24, 1973 issue of the *Journal of the American Medical Association*.]

Of course, this type of questionable 'business' can be colossally lucrative. As of September 1987, Dr. Ericsson had franchised 65 sperm separation clinics throughout the world for about \$10,000 apiece. The cost per sperm separation procedure is about \$2,500 in 1993 dollars. [Richard Lyons, *op.cit.*, Roberta Steinbacher, "Futuristic Implications of Sex Preselection," in Holmes, *et.al.* (editors), *The Custom-Made Child? Women-Centered Perspectives*. New Jersey: Human Press, 1981.]

e. The Demographic Impacts of Sex Selection

These technologies will undoubtedly have a colossal impact upon our country's population demographics. According to the results of a recent survey of a very large group of people who were willing to employ sex-preselection methods, 91% of the women and 94 % of the men polled stated that they would like their firstborn baby to be a boy. [Richard Lyons, *op.cit.*, Roberta Steinbacher, "Futuristic Implications of Sex Preselection," in Holmes, *et.al.* (editors), *The Custom-Made Child? Women-Centered Perspectives*. New Jersey: Human Press, 1981.]

Researcher Dr. Roberta Steinbacher said that "I asked people if they would use the [sex selection] method if it were available and about one quarter said they would. I then asked the members of this second group which sex they would prefer, and 91% of the women and 94 per cent of the men said they would prefer their firstborn to be a boy. I think this overwhelming preference for firstborn males would, if widely carried out, institutionalize a second-class status for women because of their ranking in the birth order". [Richard Lyons, *op.cit.*, Roberta Steinbacher, "Futuristic Implications of Sex Preselection," in Holmes, *et.al.*, (editors), *The Custom-Made Child? Women-Centered Perspectives*. New Jersey: Human Press, 1981.]

Dr. Steinbacher's survey confirmed other polls that showed that the American preference is predominantly for firstborn males, and that the resulting sex ratio for *all* children (including subsequent

births) would be as high as 122 boys to 100 girls. In fact, other studies have shown that women said that they preferred boys by a ratio of 126 to 100. [Charles F. Westoff and Ronald R. Rindfuss. "Sex Preselection in the United States: Some Implications." *Science*, May 10, 1974, pages 633 to 636.] Dr. Linda Fidell of California State University even found that 85% of women college students, who have been subjected to the full range of Neofeminist propaganda, said that they wanted their firstborn child to be a boy. [Dr. Linda Fidell's survey of 710 women undergraduates, *The Toronto Sunday Star*, June 1, 1980.]

If such sex pre-selection could be accomplished without a messy and morally questionable abortion procedure, it is quite possible that our population gender balance could be thrown seriously out of kilter especially considering that the kind of people who would 'special-order' their children are the same type of people who would probably have only one child in the first place. (American Life League)

f. India going gender awry

While in the rest of the world, women outnumber men by 3 to 5%, in India there are seven per cent more men than women and the number of females continues to decline, says a new book. Neither education nor affluence has brought any significant change in the attitudes towards women. In fact, the increase in the deficit of young girls noticed in the 1981, 1991 and 2001 censuses was indicative of a strong possibility that the traditional methods of neglect of female children were being increasingly replaced by not allowing female children to be born, the book, *Sex-selective Abortion in India. Gender, Society and New Reproductive Technologies*, says.

The sex ratio figure in 1921 of 972 women in India for every 1000 men and its decline to 933 in 2001 questions the relationship between social development and sex ratio, the book edited by Tulsi Patel, a Professor in Sociology at the Delhi School of Economics, says.

In 80% of India's districts, a higher proportion of boys are born every year than a decade ago as a result of the growing availability of fetal sex- testing services, the study showed. The imbalance in gender ratio has become especially noticeable in the India's wealthier regions, where couples can easily afford to pay for an ultrasound examination. The Indian government expressed alarm at the report, describing the results as unexpected.

"It was a surprise because there is so much awareness being generated about the need to cherish the girl child," said Deepa Jain Singh, secretary to the Ministry of Women and Child Development. "We have to address this in a big way. We have no option."

The Unicef findings are based on an analysis of Indian census data and are in line with a study published by the British medical journal *The Lancet* earlier this year, which estimated that as many as 10 million female fetuses had been aborted in India over the past 20 years by families trying to secure a male heir.

Even after birth, girls are at much higher risk of childhood death than boys. Female babies are less likely to survive the first year than their male counterparts, according to Unicef's infant mortality research.

"After birth, son-preference continues to persist leading to the neglect of girls and their lack of access to nutrition, health and maternal care in these critical early years," the report said.

In India, girls continue to be regarded as liabilities who saddle their parents with the costs of expensive weddings and dowry payments, before moving to live with their husband's family.

Boys are preferred because, traditionally, they remain in the family home to look after the parents in their old age. Neither laws nor the government's "Save the Girl Child" campaign have had much impact in changing these perceptions. (Unicef, 2007)

"Squeeze on family size is fuelling the trend of 'disappearing' daughters. For households expressing preference for one child only, they want to make sure this is a son," says ActionAid researcher, Jyoti Sapru.

Districts surveyed in Rajasthan and Madhya Pradesh show a dip in sex ratio as families move from first to second or third child. The biggest drop recorded is in Morena (MP) with 844 girls for every 1000 boys amongst first born, but just 715 by the third child.

"Mortality rate for girls increases dramatically according to birth order. There are more 'missing' girls among the second and third born, as families pursue their preference for boys through abortion or neglect of their sisters," says Sapru.

Sex selective abortions and increase in the number of female infanticide cases have become a significant social phenomenon in several parts of India. It transcends all castes, class and communities and even the North South dichotomy. The girl children become target of attack even before they are born. Numerous scholars have observed that the latest advances in modern medical sciences – the tests like Amniocentesis and Ultra-sonography which were originally designed for detection of congenital abnormalities of the foetus, are being misused for knowing the sex of the foetus with the intention of aborting it if it happens to be that of a female. The worst situation is when these abortions are carried out well beyond the safe period of 12 weeks endangering the women's life. (S L Tandon, & Renu Sharma, 2006)

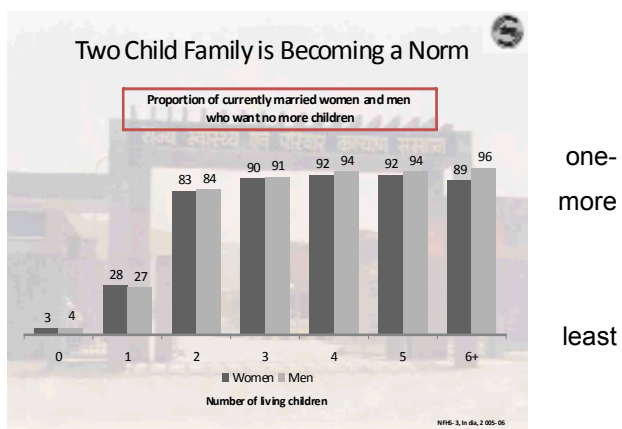
Using the data from the National Family Health Survey (1998-99), Arnold, Kishore and Roy (2002) provide evidence on the widespread use of ultrasound for sex-selective abortions in India, and for particular states. Firstly, an evaluation of sex ratios at birth provides the extent of sex-selective abortions because in general (without any sort of intervention) the sex-ratios at birth are usually between 103 and 106 males per 100 females in most societies (United Nations, 1998). If the sex ratios at birth are above 106, it is implied that pre-birth interventions are further reducing the chances of a female birth. As per

NFHS-2, the sex ratio at birth in India was 106.9. It was 105.1 five years before as per NFHS-1. Interestingly, the sex ratio at birth varies from 107 to 121 in different states of India; this clearly illustrates the reality that in many parts of India, the female births are avoided successfully by using (or misusing) the modern technology. Women with no sons are more likely to undergo these tests than other women. There is a difference in the pattern of adoption of these technologies between northern and southern states of India.

Several studies suggest that cultural factors have played an important role in determining fertility trends. (Basu, 1992; Jeffery and Jeffery 1997; Das Gupta, 1987). While attention has been drawn to the importance of cultural factors in studying demographic behaviour, few studies have examined in detail the relations between cultural and economic aspects. One important cultural (and economic) feature is the value attached to sons. Many social scientists have argued that with increasing welfare and economic development the importance of factors such as son preference would decline. However, some recent studies have shown that son preference has, in fact, increased alongside lower fertility and rising economic and social welfare. Hence, it is important to further analyse the nexus of economic, social and cultural factors that underlie daughter discrimination, thus shifting the focus from son preference to daughter discrimination.

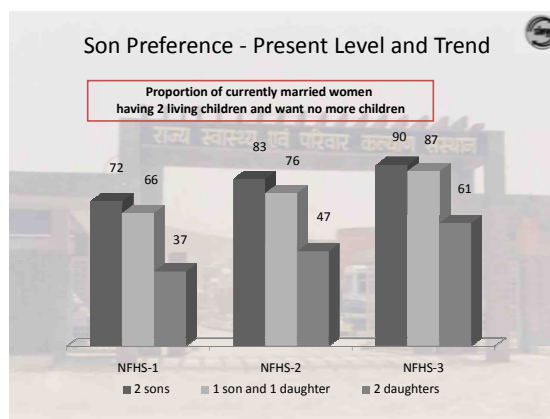
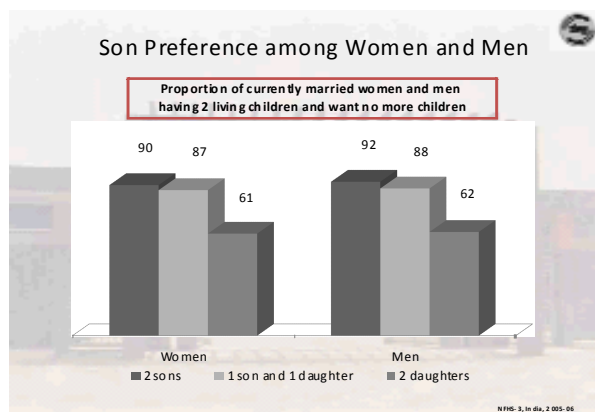
g. Findings from NFHS-3

56% of women and 59% of men consider the ideal family size to be two children or less. There is a strong preference for sons in Rajasthan. About third of women and one-quarter of men wants sons than daughters, but only 2% want more daughters than sons. However, most men and women would like to have at least one son and at one daughter.



one-
more

least



h. Findings from DLHS-RCH 2 (2002-04)

Among the women who had no living children, 46% wanted a boy as the first child and only 2% desired for girl whereas overall around 57% desired son and only 7% desired for daughter. With increasing number of living children, male is dominating preferred sex of the next child (57%).

i. Alwar

Around 26% couples who want another child, wanted the next child to be a son. None of them say that they want a daughter. This shows a strong son preference in the district and this is not affected by the background characteristics of the couples.

The percentage of women who desire next child to be a boy is 42 and 37% of husbands also desire the same. This shows the strong preference of son among the people.

ii. Ganganagar

Around 35% couples, who want another child, wanted the next child to be a son. Surprisingly none of them say that they want a daughter. This shows a strong son preference in the district and this is not affected by the background characteristics of the couples.

The percentage of women who desire next child to be a boy is 45% and additionally 41% of husbands also desire the same. This shows the strong preference of son among the people.

iii. Jaisalmer

Around 25% couples who want another child, wanted the next child to be a son. Less than 1% of them say that they want a daughter. This shows a strong son preference in the district.

Further, the percentage of women who desire next child to be a boy is 43 and 35% of husbands also desire the same.

iv. Jhunjhunu

Around 22% couples, who want another child, wanted the next child to be a son. A mere 0.2% of them say that they want a daughter. This shows a strong son preference in the district. Besides, women who desire next child to be a boy is 31% and 34% of husbands also desire the same. This shows the prevalence of son preference among the people.

v. Pali

Around 30% couples, who want another child, wanted the next child to be a son. Only 3% of them say that they want a daughter. In addition, the percentage of women who desire next child to be a boy is 46 and 36% of husbands also desire the same. This shows the level of son preference among the people.

Although it is widely acknowledged that the preference for sons is a barrier to a decline in fertility, considerable disagreement exists as to what actually happens to this preference when fertility declines in a region of low female autonomy. By analyzing the data from the National Family Health Survey (NFHS), we present evidence from northern India to show that the preference for sons is reduced when the ideal

family size becomes small, even though it does not completely disappear. This finding appears to contradict trends in the juvenile sex ratio and the incidence of female feticide that suggest the intensification of gender bias. We argue that the anomaly is the result of a diffusion of prenatal sex-diagnostic techniques in regions where there is a large unmet demand for such methods. Using the NFHS data, we estimate that in northern India, girls currently constitute about 60% of the unwanted births and that the elimination of unwanted fertility has the potential to raise the sex ratio at birth to 130 boys per 100 girls. The existence of a strong preference for sons in India, particularly in northern India, has now been thoroughly established through a wide variety of data (Bhat and Zavier, 2003).

A new study in *Proceedings of the National Academy of Sciences* reports on a sex ratio that favors boys among U.S.-born children in Indian, Korean, and Chinese families. Using the 1990 and 2000 decennial censuses, the study found that the ratio of male to female births is much higher if the first child is a girl and even higher, by as much as 50%, if the first two children are girls. The normal ratio of males to females at birth is 1.05:1. However, if the first child is a girl, the ratio increases to 1.17:1, and if the first *and* second children are girls, the ratio increases more dramatically to 1.51:1 in favor of boys. The authors note that this is not evident with white parents and that the trend among the base group was not evident in the 1990 census.

The phenomenon is not unique to Asian immigrants in North America. In 2007, an Oxford University study suggested a similar phenomenon among Indian-born mothers in both England and Wales. It found that the proportion of male to female newborns increased from 103 male births per 100 female births in the 1970s to 114.4 by the end of 2005 (Mossaad, 2008).