

Technology and its Impact on Child Sex Ratio in India

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ABSTRACT

As result of technological advancement, rapid decline in child sex ratio (number of female per 1000 male in the age of 0-6 years) recorded in India. In recent decades, the techniques of prenatal diagnosis are used in India to sex selective abortions for eliminating female babies. At present, amniocentesis, chronic villi biopsy (CVB) and ultrasonography are the three main pre-natal diagnostic tests that are being used to determine the sex of a fetus. Amniocentesis is meant to be used in high-risk pregnancies, in women over 35 years. CVB is meant to diagnose inherited diseases like thalassaemia, cystic fibrosis and muscular dystrophy. Ultrasonography is the most commonly used technique. It is non-invasive and can identify up to 50 per cent of abnormalities related to the central nervous system of the fetus. But, it has been extensively used to identify the sex of the abort female fetus and reported both in the international media as well as in scientific publications since the 1990s. The recent Census of India 2011 data shows that the ratio of girls to boys below the age of 6 years continues to decline at an alarming rate (914). Since its publication, this topic has again received international attention. The objective of this article is to examine the impact of prenatal technology on female feticide there by skewed child sex ratio in and its consequences in India based on census data and other published sources. It has been found that the practice of female feticide is wide spread throughout India irrespective of region, religion, caste, class and literacy status, but magnitude of practice vary. The sudden fall in the number of girls in the youngest age group is believed to be proof of the increased incidence of sex-selective abortions or female feticide. Most of these abortions are the result of the misuse of sex determination technologies such as ultrasound scanning and amniocentesis. Apart from, social pressures in India, and the presence of low-cost technologies like ultrasound, have led to sex-based abortion of female fetuses, and an increasingly smaller number of girls born every year. In this article an attempt is made to discuss briefly the possible causes, consequences, and solutions.

1. Introduction

In the present society, female are on far with male in almost every field even greater than males some times, still there people who accord a lower status to women. Even today in Indian society, some of the community, a childless woman is conceived as incomplete and the woman who has given birth to female children is partially complete. Further, only the woman who has given birth to male child enjoys all sorts of status. The problem of gender biased of children is closely related to the institution of dowry. The perception among the most of the people is that "If it's a girl child, they have to spend money throughout her life (on education, marriage, dowry, delivery and every year formalities like giving cloths etc. In this context a proverb is that having "a girl child is plating and watering a sapling in another's garden", While, if it is a boy, there is no such expenses and also an asset in the form of economic return through employment and old age security.

Socio-cultural powers that prevails in India and the access of low-cost technologies like ultrasound causes to sex-selective abortion of female fetuses, there by declining number of female per male every year. This bias against female children is also related to fact that male children are treated in economic point of view as security in old age. Moreover, Hindu religion has been biased towards females. According to Manu, a female has to reborn as a male to get

moksha (redemption). It also states that a man cannot get moksha unless he has a son to light his funeral pyre. Also, it says a woman who gives birth to only daughters may be looses her life at eleventh year of marriage. The commonly known concept in India is that "it's a fool who loses his male child and the fortunate one who loses a girl child". Certainly, it shows the status of girl child in our Indian male-dominated patriarchal society. There is a talk regarding sex-selective abortion between public and medical person is that "A Boy for You, a Girl for Me".

2. Methodology

The paper is based on secondary data and aiming at study the technology and its impact on child sex ratio in India. Also examines the reasons for Female Feticide and suggests some measures for elimination of gender braise towards children and eradicate female feticide.

3. Studies on Sex selective abortions

Some of the studies conducted in India revealed the incidence sex selective abortions and reviewed briefly hereunder.

India is also the heartland of sex-selective abortion and found in many studies. A study on the Community Service Guild of Madras in Tamil Nadu by MalavikaKarlekar, reveals

that "female infanticide is rampant" in the state, only among Hindu (rather than Moslem or Christian) families. "Of the 1,250 families surveyed, 740 had only one girl child and 249 agreed directly that they had done sex-selective abortion to avoid unwanted girl child. Further, the study reveals that more than 213 of the families had more than one male child whereas and half the respondents had only one daughter." (MalavikaKarlekar, 1995).

Dahlburg (1994) notes that "In Jaipur, capital of the western state of Rajasthan, prenatal sex determination tests result in an estimated 3,500 abortions of female fetuses annually," according to a medical-college study. (Dahlburg, "Where killing baby girls is no big sin"). Most strikingly, according to UNICEF, "A report by Zeng Yi et al from Bombay reveals that "in 1984 on abortions after prenatal sex determination stated that 7,999 out of 8,000 of the aborted fetuses were females. Sex determination has become a lucrative business" (Zeng Yi et al., 1993).Essays, UK quoted the findings of Chloe, 2011 that there have been 4 to 5 million sex selective abortion performed during last three decades and the problem is still worsening (Essays, UK, 2013).

As per NFHS-II, in 16 of India's 26 states, sex ration of male to female child is abnormally high that is 107-121 males per 100 females. An extensive use of ultrasound technology and amniocentesis during pregnancy has been found particularly in Gujarat, Haryana and Punjab. In another study by Fred Arnold et al estimate that in the late 1990s more than 1,00,000 sex-selective abortions of female fetuses were being done annually in India (Fred Arnold et al, 2004). MacPherson estimates that 100,000 sex-selective abortions every year continue to be performed in India (Michel Garenne, 2004).

Professor Amartya Sen also points out: "The wide use of new techniques such as ultrasound scans for determining the sex of foetuses has led to huge and growing numbers of selective abortions of female foetuses, offsetting the gains in declining difference in mortality rates.... a kind of high-tech manifestation of a preference for boys." (Amartya Sen, 2014)

4. Prevalence, Spread and Practice of Female Feticide

In India, the practice of sex-selective abortion or female feticide (in which female babies are aborted or killed before birth) is not only the recent expression, but also a long history of gender bias. It is evident in the history with low and declining population sex ratio. Moreover, the medical community in India has been made sex-selective abortions as commercial opportunities in catering to the insatiable demand for a male child. Until recently, the technology for female feticide was prohibitively expensive. At present, amniocentesis, chronic villi biopsy (CVB) and ultrasonography are the three principal pre-natal diagnostic tests that are being used to determine the sex of a foetus. Amniocentesis is used like for women over 35 years with high-risk pregnancies. CVB is intended to detect inherited diseases like thalassaemia, cystic fibrosis and muscular dystrophy. Usually, ultrasonography technique is used as a non-invasive and can detect up to half of the abnormalities related to the central nervous system of the fetus. However, sex of the fetus can be perfectly identified through its application. As per a study

conducted in 2001, obstetric ultrasonography, either transvaginally or transabdominally, checks for various markers of foetal sex. It can be performed at or after week 12 of pregnancy. At this point, three-fourths of fetal sexes can be correctly determined. Accuracy for males is approximately 50 percent and for females almost 100 percent. Moreover, ultrasonography gives an accurate result in almost 100 percent of cases, when performed after week 13 of pregnancy ban on sex detection of foetus in the government institutions causes to commercialization of the technology by private clinics by providing with sex determination tests through amniocentesis increased rapidly and extensively. These tests are made available even in small areas that do not even have minimum basic amenities, access to poor people with minimum prices to abort their female fetuses in order to save the future expenditure on girl, especially the cost of dowry. Moreover, the portable ultrasound machine has easily access and allowed doctors to go from door to door in even in small towns and major villages. In a democratic country like India, is very difficult to restrict the right to business and livelihood if the customary parameters are fulfilled.

5. Female Feticide and Law

Government of India's Ministry of Health and Family Welfare has undertaken several measures to implement the 'Pre Conception & Pre Natal Diagnostics Technique Act (PC & PNDT Act). The Act prohibits sex selection and prevents the misuse of diagnostic techniques for sex detection leading to female foeticide. It also bans advertisements about available services of pre-natal determination of sex of the fetus. All clinics which are using pre-natal diagnostic techniques in the country require to be registered. Violation of the Act is punishable with imprisonment. The State Medical Council of Punjab recently suspended the registrations of four doctors for violating the rules and regulations of PC & PNDT Act. Thus, in spite of many efforts taken by the government, the people are approaching the medical persons for sex selective abortions and doctors are secretly aborting female foetus in greed of getting more money. It leads to rapid decline in child sex ratio in every census in recent decades (Table: 1).

Table: 1 - Child Sex ratio in India

Census Year	1961	1971	1981	1991	2001	2011
Child Sex ratio	976	964	962	945	927	914
Overall Sex ratio	941	930	934	927	933	940

6. The Ground Reality

In India, irrespective of class, caste, religion, region and residence, all are biased against the women especially girl child in recent decades, illegal sex selective abortions are rampant thereby great fall in child sex ratio. As per the 2001 Census, the Child Sex Ratio (CSR the number of girls per thousand boys in the age group of 0 to 6 years) has declined sharply from 945 in 1991 to 927 in 2001. It indicates a continuing preference for male child in society instead of a girl. The child sex ratio in India has further dropped to 914 females against 1,000 males recorded in 2011 Census. Even

though a slew of laws to prevent female foeticide and many schemes to inspire families to have girl child, the ratio has further declined from 927 females against 1,000 males in 2001 to 914 in 2011, which was described as a "matter of grave concern". Though an increasing trend in the child sex ratio (0-6 years) from 2001 to 2011 Census has been seen in **Arunachal Pradesh**, Punjab, Haryana, Himachal Pradesh, Gujarat, Tamil Nadu, Mizoram, Andaman and Nicobar Islands and Chandigarh in all remaining 22 states and 5 Union Territories, the child sex ratio shows decline over Census 2001 (Table 2). In 2011 census, **among the Indian states, Arunachal Pradesh has the highest child sex ratio i.e. 972**, while Haryana has the lowest child sex ratio i.e. 834 girl children per thousand males. On the other hand, since the last two decades there has been slight increase in the overall

sex ratio (Number of females for 1000 males: 927/1991, 933/2001, 940 /2011). Since the last five decades the sex ratio has been moving around 930 of females to that of 1000 of males (946/1951 and 940/2011). The main cause for decline of the sex ratio in India is due to the unfair attitude which is meted out to the women. The foremost cause of this gender bias is being insufficient education. Since 1951, in every census, the overall sex ratio and child sex ratios have gone more or less hand in hand, dropping steadily except in the late 1970s. Increased incidence of sex-selective abortions or female foeticide is believed to be proof for the sudden fall in the number of girls in the youngest age group. Most of these sex selective abortions are the outcome of the misuse of sex determination technologies such as amniocentesis and ultrasound scanning.

Table: 2 –Sex ratio and Child Sex ratio in India(2001-2011)

S.No.	State/ Union Territory	(2011)		(2001)	
		Child Sex Ratio	Sex Ratio	Child Sex Ratio	Sex Ratio
1	Kerala	959	1084	960	1,058
2	Pondicherry	965	1037	967	1,001
3	Tamil Nadu	943	996	942	987
4	Andhra Pradesh	939	993	961	978
5	Chhattisgarh	969	991	975	989
6	Meghalaya	970	989	973	972
7	Manipur	936	985	957	974
8	Odisha	941	978	953	972
9	Mizoram	970	975	964	935
10	Goa	920	973	938	961
11	Karnataka	948	973	946	965
12	Himachal Pradesh	906	972	896	968
13	Uttarakhand	890	963	908	900
14	Tripura	957	960	966	948
15	Assam	962	958	965	935
16	West Bengal	956	950	960	934
17	Jharkhand	948	948	965	941
18	Arunachal Pradesh	972	938	964	893
19	Nagaland	943	931	931	900
20	Madhya Pradesh	918	931	932	919
21	Maharashtra	894	929	913	922
22	Rajasthan	888	928	909	921
23	Gujarat	890	919	883	920
24	Bihar	935	918	942	919
25	Uttar Pradesh	902	912	916	898
26	Punjab	846	895	798	876
27	Sikkim	957	890	963	875
28	Jammu and Kashmir	862	883	941	892
29	Haryana	834	879	819	861
30	Lakshadweep	908	946	959	948
31	Andaman & Nicobar Islands	968	876	957	846
32	Delhi	866	868	868	821
33	Chandigarh	867	818	845	777
34	Dadra and Nagar Haveli	926	774	979	812
35	Daman and Diu	904	618	926	710

Source: Census of India 2011

7. Reasons for sex selective abortions

Some of the reasons for sex selective abortions are male preference in society and the belief that it is only the son who can perform the last rites, that lineage and inheritance runs through the male line, sons will look after parents in old age, men are the bread earners etc. Exorbitant dowry demand is another reason for female foeticide/infanticide. Small family norm coupled with easy availability of sex determination tests may be a catalyst in the declining child sex ratio, further facilitated by easy availability of Pre-conception sex selection facilities. Dowry is the property that parents of a female transfer at her marriage. It is an ancient practice, has been common in many cultures in the world and which is today prevalent especially in South Asia including India.

8. Efforts by Government

- As a part of the awareness campaign, religious and spiritual leaders have been approached to speak against sex selection, video spots on girl child and sex selection aired on national and private television networks. Brand ambassadors have been used for the Government's 'Save the Girl Child' campaign. 'Atmaja', a serial on the plight of the girl child has been telecast on the National Network.
- The Department of Women and Child Development has supported workshops to raise awareness on the issue of the girl child, while the Registrar General's Office has been promoting birth registration and introduced mechanisms to monitor sex ratio at birth among institutional deliveries.
- However, despite the efforts of the government, civil society organizations, NGOs, UN agencies and the media to keep the issue of female foeticide high on the public and policy agenda, little or no desired results have been forthcoming. There is a dire need

to review the strategies and re-examine the efforts to arrest the declining sex ratio.

- The new pet project launched by Prime Minister Shri Narendra Modi "Beti bachao beti Padhao" (BBBP) Yojana (save daughter, educate daughter) to save and empower the girl child is making waves all over the nation.

9. Suggestions

- Providing old age security by the government.
- Performance of the death rites by female children where only girls children in the families.
- Brining changes in attitudes of the public towards girl children.
- Treating girl children on par with male children in several aspects
- Encouraging Institution of matrilocal residence (Illarik am literally means bridegroom goes to the bride family and lives permanently with them. It is a custom observed in some rich families where the bride is the only child to their parents) and
- Surprise visits and strict vigilance should be made to private health clinics especially which are register under PC&PNDT Act to detect illegal practice sex selective abortions.

10. Conclusion

Inspite of increase in literacy rate, rise in living standards, awareness programmes, incentives for enhancing girl children in India, still continues decline in girl child population recorded in recent decades also.

References

1. AmartyaSen, 2014:The lost girls: Girls are still aborted in states with more educated women, by AmartyaSen
2. Fred Arnold et al (2004) Sex-Selective Abortions in India, *Population and Development Review*, 27 January 2004.
3. MalavikaKarlekar, 1995:"The girl child in India: does she have any rights?," *Canadian Woman Studies*, March, 1995.
4. Zeng Yi *et al.*, 1993: "Causes and Implications of the Recent Increase in the Reported Sex Ratio at Birth in China," *Population and Development Review*, 19: 2 [June,1993], p. 297.
5. Michel Garenne,2004: Southern African Journal of Demography, Vol. 9, No. 1 (June 2004), pp. 91-96.
6. Dahlburg,1994: "Where killing baby girls 'is no big sin'," *The Los Angeles Times* [in *The Toronto Star*, February 28, 1994.
7. Essays, UK, 2013: The Sex Selective Abortions In India. Nov, 2013, Retrieved from <https://www.ukessays.com/essays/theology/the-sex-selective-abortions-in-india>