

# PRENATAL DIAGNOSIS IS A MEDICAL TECHNOLOGY - Not a reality In india



## Original Research Article

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## ABSTRACT

**S**ex determination is illegal in India, there must be tampered means with the medical assistance available with the advancing technology. Women tend to live longer if given equal care and nutrition like the men. Even then, the men outnumber the women where the sex-ratio is not equal today. This has several effects not only upon the natural balance but also seeks to put the health of the women at risk. The value of a woman is realized with her ability to give birth to a son only still in countries like India. Medical advances through the advent of the USG Technology have made the tasks of the corrupters quite easier. Some demographers question whether sex-selective abortion or infanticide claims are accurate, because underreporting of female births may also explain high sex ratios. Female foeticide has been linked to the arrival, in the early 1990s, of affordable ultrasound technology and its widespread adoption in India. The focus of the paper is on how the technology is being misused every time to kill the girl child at the womb itself often without the consent of the mother. This is solely for the illogical preference for sons over their daughters. Pre-Conception and Pre Natal Diagnostics Techniques Act,1994 was formulated to put a check on the tendency to brutally kill the fetus at the womb. This makes the people dependent on the medical professionals and but unfortunately at times it has been possible to tamper their views against money defying all rules of nature with the help of technology.

## Keywords:

prenatal diagnosis,  
 foeticide,  
 induced abortion,  
 sex determination

## I. INTRODUCTION

Indian society has an old practice to prefer sons over their daughters. Girl children have often been considered as burden to many families. The scenario seems to have changed but in reality the crime rates towards the women is high in the present time. The oppression, domestic violence, sexual abuse to female foeticide is on rise at an alarming rate. There are laws today to combat these tortures against the women. The focus of this paper is when the contemporary India calls herself advanced with various forms of technology and how the same technology is used to put an end to endless lives. The “lives” are of the girl children who were never born. This technology is misused over and over again.

The technology was developed with the ultrasound since the 1990s. It became widespread in India and gained popularity amongst the doctors because that helps in determining the health of the foetus. This revelation affected the demography of the country suddenly. It did affect several lives. It would be appropriate to mention that the technology affected the lives of the “unborn” to the “still borns.”

*Female foeticide* is the process of abortion to terminate *female* foetus from the womb of mother before birth after the sex determination tests like ultrasound scan. *Female foeticide* and even any sex determination test is illegal in India.<sup>[1]</sup> This selective abortion of female fetuses--is on rise in India annually and has far-ranging tragic consequences. In some areas, the sex ratio of females to males has dropped to less than 8000:1000. It is quite a known fact that the Indian culture has not given the same consideration to the females in several cases. On occasions they are even denied the right to be born. In this reference, Amartya Sen's theory on, “Missing women phenomenon” is relevant here. As per the World Development Report of 2012, it was found that 1.5 million women from the world were missing and the maximum are from India and China.

### The misuse of technology to kill the "unborn"

This brutal practice has grown because of several factors. Primarily the practice to give dowry at their marriages becomes the most important predicament to accept the girl child as a part of many Indian families even today. Female infanticide is not a new trend in India but the female foeticide is, with the advancement of technology. Apart from this, the population of the country also experiences the burden till the male child is not born in many families. In a study it was mentioned in Bombay clinic that out of all 8000 abortions 7999 were due to female foetus determination with the advanced technology. The very typical conservative presumption in minds of many Indian families is difficult to be changed at all. They feel boys are their support in their old age and often are their financial support as well. They are believed to be the only ones to light their funeral pyre. The alarming thing is the culture which does not acknowledge the contribution of the girl child who is truly affectionate towards her family. The preference is also for something which is unknown to them. They want to secure something for the future which they would not even realize that is, lighting of the pyre after death.

The ‘grainy black and white image that results from Ultrasound Scan will be the baby’s earliest picture and a couple’s first chance to see the developing foetus.” This was referred by Nierenberg in 2014.<sup>[2]</sup> The most amazing part of the article mentions how the to-be-parents have planned the surprise celebrations for the new baby to be born. There might be other medical benefits to this Ultrasound Scan which might even check several diseases of the baby to be born but that often takes a backseat in many cases to the new parents.

The curiosity of sex-determination has helped the to-be-parents to decide on their names or plan for the nursery

time but that always not so for the Indian context since the technology was known to India.

In a male-dominated culture of India it is unfortunate to state that girls have always been co-related with debts whereas the boys in the family with financial support. The mothers have before the advent of the ultrasound technology painfully supported the female infanticide to curb the sufferings of their daughters and waited for a son. So the crime of killing the daughters remains the same. It is only that the ultrasound technology even started curbing the birth of the daughters. The misuse of the advanced technology to support the illogical and inhuman practice is extremely unfortunate. It has been recorded that there has been advertisements before the clinics stating, “pay Rs500 now to save Rs.50,000 for the future.” This shows how the technology is being utilized by the educated medical professionals in many cases to extract money. In lieu of their sons, the parents kill their daughters in the womb itself not realizing the health factor of the mother during abortion, the inhuman act and even the status of the women where she repeatedly takes the toll on her to only use her reproductive ability to give birth to a son. She being a woman consequently does not find any way out to decide the future of her child almost in most of the cases. As cited in an article that the clinics became extremely profitable units on having the ultrasound machines. The Ultrasound machines have a far-reaching impact because even in the remote villages of India where they do not even have potable water, these machines have reached.

To confirm proper prenatal condition of the foetus to avoid any form of genetic disorder to curb against the congenital diseases was the major aim of the ultrasound scan once popularized by Indian medical professionals. This took a different shift when there were rampant abortions on basis of the same. Indian Government banned this diagnosis with the prenatal diagnosis techniques with the Regulation and Prevention of Misuse Act, 1994. The law also tried to give the prime importance to the mother’s health condition in case of allowing abortions. It would be still wrong to say that the diagnosis of the sex is restricted to the registered clinics only. It is because the low quality machines are available in the market at high rates and so USGs are possible at almost corners of the country for sex determination. In 2007, Hindustan Times stated that the medical practitioners use coded inks to reveal the sex of the fetus ie, by using red for a baby girl. As the sex cannot be determined before the second trimester, the risks of morbidity and mortality is high amongst the mothers. So the situation for the mothers is horrifying where her health has been disregarded always. She is supposed to be ready to have another son even when she was forced to meet with an abortion often illegally.

The problem is rooted with the structured pressure upon the Indian women immediately after their marriage is their motherhood. The additional pressure is to have sons which kinds of acts like a blessing to the Indian women.

With the changing pattern of the society and pressure to ideally have upto two children, families with one daughter at first only opt for fetus determination but families with two sons do not. This has been noted in a study in Punjab.

It is important to understand that the sex determination is not an illegal act of an individual, it has more dire consequences holistically. The skewed graph of the male to the female ratio is responsible for human trafficking in many cases. It is solely because of the shortage of grooms. It is important to have attitudinal changes towards the women in India else the crimes against them before and after they are even born are difficult to check with only laws. Automatically the boon of the technology will be exploited.

“When the firstborn child was a daughter, the sex ratio for second children among the 134,000 births in 1997 was just 759 girls for every 1000 boys. For a third child, just 719 girls were born per 1000 boys, if both the older children were girls. However, if the eldest children were boys, the sex ratios for the second and third child were about 50-50”.<sup>[3]</sup>

It would be interesting to note that the preference for boys and brutal killing of the girl child or even the fetus is embedded in the culture. It can be said so because in Latin America, Sub Saharan Africa and South-east Asia where children look after their old parents economically and in other ways equally exhibit equal sex ratio. Demographers have attributed that due to urbanization, westernization and economic independence of both the sexes thought processes are changing in many families. In a year, there has been an increase upto 20 percent of the girl children in the 1990s and early 2000.

It is very shameful for India to find that modernization of the technology has not helped balance the sex ratio even today. Ultrasound or ultrasonography is a medical imaging technique that emits high frequency sound waves, records the echos and transforms the readings into an image, which can be viewed in a video monitor. The ultrasound images provide valuable information about the shape, size and structure of the body part of which the image is taken. This information is used to understand the changes in the body that result from diseases and conditions. The procedure is usually done by placing transducer on the abdomen and is called abdominal ultrasound. The USG has many benefits like it denotes if there is abnormality in the fetus. Apart from it, it helps to detect the heartbeat of the fetus, single or multiple pregnancies and also calculates the estimated date of delivery and position of the baby with proper eye on placenta, ovaries, fallopian tubes, uterus and cervix. It checks the size of the baby at intervals. So the advent of the technology is truly beneficial to the unborn and the health of the mother. In this respect, it is upsetting to note that out of all benefits, a major part of the Indian population focuses on its only ability to determine the sex of the fetus. It even takes the health hazard of the mother into a backseat.

#### **Imbalance in sex-ratio and alarming sex-selective abortions in India**

Easy access to sex-selective abortions has created imbalance in the sex-ratio of the country like India. One of the countries that is experiencing a high level of sex-selective abortions is India. As per the UNFPA, 2012, approximately 10 million girls are missing from India. It is certainly alarming. Pre-Conception and Pre-Natal Diagnostic Techniques Act (1994) and the Dowry Prohibition Act were passed but that did not completely erase the problems even today. The formulation of the laws took place with the situation where the women were undergoing dowry deaths in huge numbers and media coverage was high in this regard. The Government immediately took action but that was to check the worsening situation for the women as an outcast of marriage. Marriage has often been considered as an indispensable part of the woman's life and so there seemed a need to check the inhuman act of killing the unborn at the womb to strike a balance on the sex-ratio. So it is pertinent to note that these laws are interdependent and created because of the overlapping causes which connect the severe problem of female feticide. The platform of the women has remained at stake in all roles of their lives, ones who are living and the ones who cannot even choose to live.

To emphasize upon the risks associated with abortion a study by Finland Government stated that women tend to die earlier compared to the women who have completed their pregnancy term. The risks are many to the mothers who take up abortion by choice or by force. The maternal deaths are primarily due to hemorrhage, infection, embolism, anesthesia, and undiagnosed ectopic pregnancies. In spite of knowing about the

health hazard the problem is with the mental set up of several Indian families motivated by the age-old cultural practices, the women are forced to undergo abortion after selective diagnosis of the fetus on basis of sex. Approximately 45% of all abortions are for repeat aborters and consequently the women who undergo multiple abortions, experience the physical turmoil multiple times. It is very unfortunate to locate the fact in India where in the maximum cases the women undergo abortions in their second or their third time that is till the families can confirm that the unborn is a son. It is striking to note even that as post-abortion behavior women tend to practice child abuse towards their first child who is a woman. This affects the health, nourishment mental peace of both the mother and the child. Many psychological reports show that women in high rates go through the Post-traumatic stress disorder affecting the other relations of her life. Many women are forced into unwanted abortions by their in-laws quite frequently in the Indian context with the advent of the Ultrasound Technology. This is more detrimental to her health if the woman has repeatedly been a victim of such domineering abuse. This is a scar not only on their body but their minds and souls where her purpose of existence is under question. It is where she is perceived as an only source of reproduction.

So in the given situation, the women with history of abortion are likely to abort their current pregnancy more than the ones who do not have any. This increased risk is associated with the prior abortion and this further denounces a woman with her lowered self esteem, a force to call for another pregnancy, and be involved into an increased sexual activity post-abortion. This pushes a woman to the edges of disrespect and she as if needs to internalize the fact that whatever she might accomplish in her life, she is to compulsorily give birth to a son.

Technology has completely transformed the healthcare systems worldwide. India has not been an exception in this regard. Only the increase in the number of professionals and improved infrastructure is not the only way to attend all the unmet needs of the medical system in India. There is a requirement of the application of innovative medical technology which has checked loads of diseases through early diagnosis.

Of the 536,000 women who died during pregnancy or after childbirth in 2005 globally, India accounted for 117,000 which is upto 22 percent. IMR (Infant Mortality Rate) for India is 58 per 1000 births is more than the other Asian countries.(as cited by Confederation Industry of India, 2010 report) This is certainly an alarming situation for India. The other concern that is focused in this paper is about the advancement of the medical technology where the health hazard has grown for the women who are undergoing forceful abortions.

Upto 6 percent of fertility is affected for the next pregnancy after abortion states the Frank in 1993 through *British Journal of Obstetrics and Gynaecology*. In spite of this risk, the women in India are forced in the path of sexual activity often immediately after the abortion which includes their weakness, immense bleeding etc for another son. There has been studies which confirm that in 23 cases in the year 2003 there has been found a link between induced abortion and subsequent breast cancer upto 30 percent. This “induced abortion” is a worry to the society. It refers to efforts to terminate a pregnancy through alternative usually through the dangerous means. Such practices may present a threat to the health of the woman. The dangerous means range from piercing of the fetus with a knitting needle, crochet hook, hat pin, bobby pin or similar device inserted into the uterus through the cervix-to insertion of a rubber tube or catheter into the uterus to attempting to suck the fetus out, or, alternatively, blowing air into the uterus to cause a miscarriage. These forms of torture are common to the rural parts of India where if ever a woman denies to abort her child, the technology has been repeatedly used to put her down even causing harm to her health.

## II. CONCLUSION

The use of the Ultrasound technology has often acted subtly as a weapon used upon her body to kill another “her” that is her unborn girl child. The various reports and census of India over the decades show how there is a positive correlation between abnormal sex ratio and better socio-economic status and literacy. This renounces how the age-old dowry system in India is the cause for several deaths. This is also a very important reason for the parents to consider the girl child as their financial burden as that often puts the families to debts for years. So having more than one girl child is never an acceptable thing to the families. So the change in idea and to put a complete check to the dowry system by valuing the women is essential. This in turn would end the fear of the parents to accept the girl child in their families as a burden. This would take time till the advancing medical technology would be able to completely eradicate the disrespect of the women right from their time of birth and no longer the technology would be used to kill them.

Many renowned research institutes like the Indian Institute of Technology are gradually trying to put up techniques to eradicate the misuse of the USG technology. This would be possible with the application of certain jammers in the USG where the genitals of the baby would be hidden. In spite of this it is important for us to understand that the jammers still will not be beneficial until we put a 'jammer' to such primitive thoughts of biasness towards the girl children.

## REFERENCES

- [1] **Krishan SN. Sex Selection & Abortion: India[Internet].** Library of Congress. 2009 June. Available from <https://www.loc.gov/law/help/sex-selection/india.php>
- [2] **Nierenberg C. Am I Having a Boy or Girl? Ultrasound & Sex Prediction[Internet].** LiveScience. 2014 December 9. Available from <https://www.livescience.com/45582-boy-or-girl.html>.
- [3] **Bhattacharya S. India is missing 10 million daughters[Internet].** New Scientist. 2006 January 9. Available from <https://www.newscientist.com/article/dn8551-india-is-missing-10-million-daughters/>
- [4] **Ahmad N. Female feticide in India.** Issues in Law & Med. 2010; 26(1):13-29.
- [5] **Thomson A. Why are potential women being killed?.** Midwifery. 1993;9(4):181-2.
- [6] **Venkatakrishnan H. Ultrasound During Pregnancy[Internet].** MedIndia. 2014 October 6. Available from <http://www.medindia.net/patients/patientinfo/ultrasound-during-pregnancy.htm>.
- [7] **Canadian Medical Association Journal.** The impact of sex selection and abortion in China, India and South Korea[Internet]. ScienceDaily. 2011. Available from <https://www.sciencedaily.com/releases/2011/03/110314132244.htm>
- [8] **Katz NS. Abortion in India: Selecting by Gender[Internet].** Religion News Service.2006 May 20. Available from <http://www.washingtonpost.com/wp-dyn/content/article/2006/05/19/AR2006051901219.html>.
- [9] **Elliot Institute. Physical Dangers Associated With Abortion[Internet].** Abortion Risks and Complications. 2012. Available from <http://afterabortion.org/2012/abortion-risks-abortion-complications-abortion-dangers-abortion-side-effects/>.
- [10] **Sehgal C. Medical technology industry in India-Riding the growth curve[Internet].** Deloitte. 2010 July. Available from <https://www2.deloitte.com/content/dam/Deloitte/in/Documents/life-sciences-health-care/in-lshc-medical-technology-in-India-noexp.pdf>.
- [11] **Self-induced abortion[Internet].** Wikipedia. 2005 June 15[ updated 2017 Sept. 21]. Available from [https://en.wikipedia.org/wiki/Self-induced\\_abortion](https://en.wikipedia.org/wiki/Self-induced_abortion).
- [12] **Summary of Women's Health After Abortion[Internet].** The deVeber Institute for Bioethics and Social Research. Available from <http://www.deveber.org/summary-womens-health-after-abortion> [accessed 22nd Jul. 2017]
- [13] **Gender disparities in health [Internet].** Wikipedia. 2013 March 18 [ updated 2017 Aug. 3]. Available from [https://en.wikipedia.org/wiki/Gender\\_disparities\\_in\\_health](https://en.wikipedia.org/wiki/Gender_disparities_in_health).
- [14] **Female foeticide in India [Internet].** Wikipedia. 2012 May 6 [ updated 2017 Aug. 31]. Available from [https://en.wikipedia.org/wiki/Female\\_foeticide\\_in\\_India](https://en.wikipedia.org/wiki/Female_foeticide_in_India)

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