## Debate

# Exploring the possibilities for stabilizing the sex ratio in India 

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#### Abstract

The sex ratio is an important demographic indicator for a nation. A wide range of adverse social consequences have been observed because of a skewed sex ratio in India. If India as a nation is to achieve the Millennium Development Goal - 3 (which promotes gender equality and ensures the empowerment of women), the primary target should be involve all those involved, so that a collective and comprehensive approach can be developed to counter the public health menace of an asymmetrical sex ratio. In conclusion, the nation's program managers should prioritize the issue of a skewed sex ratio and work towards developing a coordinated response.


Key Words: Sex ratio, policy makers, India.

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# Hindistan'da cinsiyet oranının dengelenmesi için olasılıkların incelenmesi 


#### Abstract

Özet Cinsiyet oranı, bir ulus için önemli bir demografik göstergedir. Hindistan'da çarpık cinsiyet oranından kaynaklanan olumsuz sosyal sonuçlar geniş bir yelpazede görülmektedir. Hindistan bir ulus olarak Binyıl Kalkınma Hedefi-3'e (Toplumsal cinsiyet eşitliğinin teşvik edilmesi ve kadını güçlendirilmesi) ulaşmak istiyorsa, öncelikli hedef, bütün tarafların bir halk sağlğ̆ı tehdidi olan asimetrik cinsiyet oranına karşı ortak ve kapsamlı bir yaklaşım geliştirmek için birlikte hareket etmesi olmalıdır. Sonuç olarak, ülkelerin program yöneticileri çarpık cinsiyet oranı konusuna öncelik vermelidirler ve bu tehdidi aşmak için daha güçlü ve eşgüdümlü bir yanıt geliştirmeye çalışmalıdırlar.


Anahtar Kelimeler: Cinsiyet oranı, politika yapıcılar, Hindistan.

## Introduction

The sex ratio is defined as the number of females per thousand males. ${ }^{1}$ The sex ratio in India has shown a slight improvement in 2011 with the ratio being 943 females/ 1000 males in contrast to 933 females per 1000 males in 2001. ${ }^{1}$ The trends in the sex ratio in India over a period of a century is shown in Figure 1. The child sex ratio refers to the total number of females per thousand males in the 0-6 year age group in a welldefined period in a specific region. ${ }^{1}$ In India, the child sex ratio has deteriorated from 927 females/ 1000 males in 2001 to 919 females/1000 males in $2011 .{ }^{1}$ In general, four determinants, namely sex selective mortality, sex selective migration, sex selective omission on enumeration, and sex ratio at birth, eventually determine the magnitude of the child sex ratio. Negative trends have also been observed for the sex ratio at birth (that is, the ratio of male to female children at the time of birth). ${ }^{1}$ These trends have been observed despite the fact that the percentage of male fetuses lost is higher than for female fetuses, when taken for the whole of the gestational period. ${ }^{2}$ The aim of this manuscript is to identify the determinants for a skewed sex ratio in India
and thereby suggest recommendations for its stabilization.

Many factors working together are responsible for a declining trend in the sex ratio in India. These include the undercount of women in the census; the low status of women in society; discrimination against women in various ways, including minimum levels of nutrition, access to health, education and employment and other amenities; widespread female illiteracy; neglect of the female child and a deep rooted preference for sons. ${ }^{2,3}$ Gender discrimination is evident from the fact that proportion of women employed in the nonagricultural sector is only $19 \%$. The proportion of seats held by women in parliament is a meagre $11 \%$ and the rate for female participation in the labour force is also very low at just $29 \%{ }^{4}$ Even, the earning gap between women and men is wider in Asian countries compared to developed countries. ${ }^{5}$ The percentage of married women participating in intra-household decision-making is low in Asia. ${ }^{5}$ Violence against women is a well known phenomenon. The proportion of women having experienced physical violence by any perpetrator during their lifetime is 21 per cent in India. ${ }^{5}$

Serious social consequences can arise because a major section of men have to drop the idea of marriage due to lack of women. This itself can result in


Figure 1. Trends in sex ratio in India from 1901 to 2011.
destabilization, and may eventually precipitate class-based tensions in the society. The problem of powerless women, resulting in their harassment, especially in a male dominant society is relevant as is the remarkable rise in the incidence of crime and evidence of marital disharmony, which has started to appear in the Indian society due to the asymmetrical child sex ratio. ${ }^{2,3}$

## Discussion

Investigators have developed a wide range of genetic models to systematically assess the dynamics of the sex ratio. ${ }^{6}$ However, the primary reason for the abnormal sex ratio has been attributed to the widely prevalent sex selective practices in society. ${ }^{3}$ In modern society, where having fewer children is the usual practice, there is also a greater preference for a male child, often parents tends to have a bias for ensuring the survival of the male child rather than the female child. ${ }^{2,7}$ Thus, a preference for a son has indirectly worked against the daughter Turk J Public Health 2015;13(3)
(as in the abandonment of a girl child, fewer months of breast feeding, minimal attention towards their nutrition, recreation, medical attention, etc.), especially in their infancy and early childhood. In these ways in some of the settings even the existence of a girl child in society is challenged. The preference for a male child is deeply entrenched in Indian society and is due to both social factors (as sons have an important role in family rituals, and even support the parents in their old age) and economic factors (as sons are generally considered to be the bread winner, while daughters generally go to their future husband's house). ${ }^{3,7}$

Owing to the recent technological development in the field of medical diagnostics, the preference for sex begins now even before the birth of the child. The employment of various technologies for detecting the sex of a child in the antenatal period and using this information to decide for a selective abortion, affects especially a female child. Among all these diagnostics, ultrasound machines are mostly misused, resulting in pre-birth elimination of female children. ${ }^{2,3}$ However, this has mainly occurred because of the poor implementation of the provisions available under the pre-conception and pre-natal diagnostic techniques (PCPNDT) act, and hence the malpractice of sex detection has become rampant.

In addition, a wide range of sociodemographic and other medical related factors have been identified, all of which play a crucial role in determining the sex ratio of a population over a specific period of time. These factors include:

- Opinion of the stakeholders, especially political leaders about women. For instance, are there any schemes for the welfare of women or their empowerment? If there are, are these schemes implemented strictly with adequate financial support and to what extent are the political leaders
committed to stabilize the skewed trends of the sex ratio.
- Limited employment of mass media to create awareness about the social and medical consequences of sex selection or illegal abortions.
- Persistence of negative socio-cultural and religious beliefs which discourages the empowerment of women.
- Compelling women to undergo abortion on detection of a female fetus during pregnancy, especially by the husband and the in-laws.
- Birth order of the child.
- Total fertility rate and rising trend towards small families, as a result of which the couple might undergo the practice of repeated abortion till they get the desired sex of the child.
- Socioeconomic status of the family (viz. if a family is financially very weak, they never wish to have a female child as they might have to spend a lot of money for a dowry at the time of her marriage).
- Age of the mother at the time of fertility (viz. if a female becomes pregnant at an advanced age, they often do not undergo abortion as there is a high risk to her health. And in the future they might not conceive; however, a woman who becomes pregnant at an early age, has the option to undergo abortion till the child with the wanted sex is delivered).
- Rampant practice of female feticide.
- Abuse of prenatal diagnostic techniques by the radiologists and other persons trained in ultrasonography.
- Practice of performing illegal abortions by doctors/untrained persons because of detection of a female child through sex detection technique.
- No sensitization of the health professionals regarding the various norms proposed under the PCPNDT act.
- Existence of lacunae in the provisions under PCPNDT act.
- Failure of the Indian legislative system to punish the offenders promptly so that they can set an example and thus discourage other medical practitioners from performing the sex selection procedure.
- Rising incidence of inability of a couple to conceive through normal procedures (because of which a large number of couples have opted for assisted reproductive techniques, under which most of the couples often select the sex of the child).
- No availability of precise and comprehensive evidence on sex selection practices (as a result of which policy makers have no proof available with them to pinpoint one specific reason for the skewed child sex ratio). In-fact, the estimates available in India assist the program managers to have an understanding about the juvenile sex ratio rather than the sex ratio at birth, which is a crucial indicator.
- Lack of information on cast, culture and lifestyles of those who practice feticide practices, and
- Dearth of research work, especially epidemiological studies, the findings of which can allow the stakeholders to understand the determinants of sex selection at community level (this in turn will enable political leaders to frame evidence-based policies so that sex ratio can be improved). ${ }^{2,3,8-11}$ Figure 2 summarizes the major determinants and consequences of skewed sex ratio.

Major determinants of skewed sex ratio

- Sex selective mortality; sex selective migration
- Sex selective practices; Female foeticide; infanticide
- Gender discrimination
- Preference for male child; Neglect towards girl child
- Female illiteracy; lower status of women in society

Consequences of skewed sex ratio

- Increase in sexual crimes directed towards women (viz. Molestation; rape; eve teasing; abuse; etc.)
- Increase in social class based violence
- Increase in marital disharmony
- Increase in incidence of harassment of women

Figure 2. Determinants and consequences of skewed sex ratio.

If India as a nation is to achieve the Millennium Development Goal-3 (which promotes gender equality and ensures empowerment of women), the primary target should be to involve political leaders, the medical fraternity, law enforcers, media, non-governmental organizations, the community, etc.), so that a collective and comprehensive approach can be developed to counter the public health menace of a skewed sex ratio. ${ }^{2}$ The policy should be formulated so that it can address all the identified parameters which augment the practice of sex selection. However, several components are important:

- Strengthening the information-education-counseling package of services to raise awareness about the consequences of sex selection among both the general population \& the medical fraternity;
- Sensitizing doctors regarding the provisions and punishments under the PCPNDT act
- Motivating doctors to refrain from the practice of sex selection/illegal abortion/feticide;
- Formulating guidelines to ensure appropriate usage of medical diagnostic tools; appointing a team of qualified professionals to monitor and supervise the usage of sex selection techniques;
- Ensuring that prompt and strict punishment is given to the culprits. $3,8-11$ Figure 3 below highlights the MDG-3 and its commitment towards gender equality.

It is important that program managers should recognize that he problem of a skewed sex ratio cannot be sorted out simply by delaying marriage, because of the cumulative impact of the skewed sex ratio over successive generations. ${ }^{2}$ In addition, measures should be taken to ensure that all the information pertaining to sex selection can be obtained in a comprehensive manner. ${ }^{2}$

MILLENNIUM DEVELOPMENT GOAL - 3

PROMOTE GENDER EQUALITY AND EMPOWER WOMEN

## Target 3.A:

Eliminate gender disparity in primary and secondary education, preferably by 2005, and in all levels of primary, secondary, higher secondary, graduation and professional levels of education no later than 2015.

Figure 3. Millennium Development Goal - 3 with its target.

This indirectly motivates qualitative studies in heterogeneous settings to obtain information about the opinion of people who have undergone sex selection procedure. Also, all the opportunities should be explored to involve non-governmental organizations so that they can help the public health sector in the implementation
of the standardized policies and in creating awareness. 2,10

In conclusion, the program managers should prioritize the issue of a skewed sex ratio and hence appeal for a more intense and coordinated response from the stakeholders to overcome this menace.

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