

## **What are the Socio-Economic Implications of a Higher Infant Mortality rate among girls in South Asia?**

Amartya Sen's<sup>i</sup> calculation that there were more than 100 million women missing due to the combination of pre and post natal practices shocked many people into a need for a greater understanding of why this travesty had occurred. It is important that the socio-economic implications of this are understood.

Infant mortality rate is defined as 'the ratio of infant deaths (children who die before their first birthday) in a given year to the total number of live births registered in the same year.'<sup>ii</sup> There have been a number of studies and accounts that have been conducted to show that high female infant mortality (FIM) occurs across many parts of Southern Asia, particularly with regards to exogenous mortality.

The main causes of this exogenous female infant mortality are sex biased health and nutritional behaviour favouring male children and disregarding the females.

This generally occurs in behavioural mechanisms of the adult i.e. differential parental care, intrafamily food distribution, feeding practices and utilization of healthcare services, *Chen et al (1981)<sup>iii</sup>*.

*Coale (1991)<sup>iv</sup>* states that where there are high female death rates, with in relation to male, particularly in areas associated with high FIM, then the male population outnumbers the female population by an exceptionally high margin. This creates a society of high masculinity and a female demographic disadvantage. This equates to an increasingly male dominated and biased society, which via influencing many factors, particularly of the socio-economic variety, leads to an amplified demand for male and not female offspring.

The main socio-economic inferences of the high FIM that will be investigated will be divided into two parts:

- Factors of development
- Socio-cultural factors

These two factors are not exhaustive of one another and form a very depressing situation in Southern Asia both with regards to the present and for the future of this region. Pre-natal methods, their causes and effects on sex ratios at birth will not be widely discussed: Economic assets and wealth of the family and fertility decline affects will also not be discussed.

The lack of data accessible in this field of enquiry is detrimental to its understanding of the magnitude of the problem. The acute lack of demographic data particularly at the local level implies that the majority of analysis has been carried out at a state level. The sources used by those investigating this topic include Census information, the Sample Registration System (SRS) and the National Sample Survey (NSS). The census of India does not publish sex ratios at birth, only the SRS does and this is only occasional and for a few states. Academics have therefore found it impossible to conduct analysis over time and space with any accuracy. There is also likelihood that a great number of births, specifically female, are not even reported to authorities, as the infant is not destined to live for any period of time e.g. infanticide. However some recent data is being published due to a slightly improved system, some of which is shown in this essay. (E.g. Sudha and Rajan's census comparisons 1981-91).

One of the main socio-economic implications of a high FIM and therefore a female demographic disadvantage is economic development. Female disadvantage has been particularly noticeable in more recent years. This area can be further divided up into a number of factors that will be discussed in this essay:

- Agrarian land reforms
- The green revolution
- Education

In a male dominated society, each of these has had serious implications for further FIM.

Agrarian land reforms in India occurred post-independence. *Agarwal 1994<sup>v</sup>* found that in the redistribution of land to those that did not own any, women were not taken into consideration in this process. Due to the high masculinity creating an increasingly gender biased society, it was the male head of every household of those that benefited these reforms (the landless) to which the land possession and rights were given. The women were given no official ownership rights in this process. He states that the only rights that the female in the household had were at the 'generosity' of her male kin. In a male dominated society, where women are seen as the subordinates what is the likelihood of male generosity?

'The introduction of new, more productive agricultural techniques'<sup>vi</sup> known as the Green Revolution has affected much of India and their farming methods. Before the green revolution, the major level of female work participation was in agriculture. With the introduction of the new techniques associated with the Green Revolution came a reduction in the need for labour, due to the 'high- technology' innovations, including high yielding crop varieties, pesticides and fertilizers. *Hirway (1979<sup>vii</sup>)* studied the effect of the Green Revolution on the farming methods in a state in India called Gujarat. He found that it was female working population who were most damaged by this movement. He shows how women were excluded from the training in the new tasks from the simple to the advanced and were therefore expelled from the agrarian labour workforce. *Sinha<sup>viii</sup> 1988* found that in Bihar, another Indian state, similar consequences occurred. It was discovered that in areas of increased irrigation, female involvement had been substantially reduced and the introduction of mechanized dehusking had displaced women from work in which their participation had been significant.

Using evidence from Punjab, Haryana, UP and Tamil Nadu, *Sudha and Rajan (1999)<sup>ix</sup>* stated that the Green revolution had 'narrowed the range of agrarian tasks, displaced women from traditional occupations and placed them at the bottom of labour hierarchies.' Women are increasingly concentrated in the unorganised, casual labour sector of rural districts *kapadia (1992)<sup>x</sup>*; *Nayyar (1989)<sup>xi</sup>*. This vast amount of women now in unorganised labour *Ramaswamy (1993)<sup>xii</sup>* has worked out stands at 94% of the total female workforce. Ramaswamy suggests that this huge proportion indicates a lack of planning by the authorities, with regards to women's labour and associated opportunities. This again points to a male dominated society, with regards to development strategies. This male dominance over the new areas of development caused by the increasingly high masculinity in these areas has led to the ever-deepening desire to have sons and not daughters in this male controlling society.

The lack of female education is a development factor that has come under much discussion in the academic world. With the ever-increasing masculinity and associated male dominance in the South Asian societies, comes a lack of parental desire to educate their daughters. This is particularly with regards to exogamic marriages, which will be discussed later in the essay. As a result many females, are unable to get the skills and qualifications for work in the organized sector, where there are few opportunities for women. There are debates over whether increased education in females is directly related to infant mortality rate. E.g. *Simmons et al (1982)<sup>xiii</sup>* found that in households with better-educated females, excess infant mortality is reduced between females and males and a more 'normal' ratio is observed, due to improved awareness in healthcare, hygiene and nutrition. However in Punjab, India, *Das Gupta (1987)<sup>xiv</sup>* and in Matlab, Bangladesh, *Bhuiya & Streatfield (1991)<sup>xv</sup>* found that in households of a higher female education, there is a higher infant mortality rate. In particular *Das Gupta* concludes that improved education is not enough to surpass the circumstances surrounding family's son preference and gender bias and that in some cases it even domesticates women rather than releases them. Some studies including *Sathar (1984)<sup>xvi</sup>* and *Weinberger & Heligman (1987)<sup>xvii</sup>* have concluded that female education is irrelevant regarding female infant mortality. From these findings it is difficult to decipher whether or not there is a direct relationship between female education and female infant mortality. It may however point to education interacting with other socio-economic factors, which may interact to further influence FIM and therefore future trends. E.g., cultural issues discussed in the next part of this essay.

*Agnihotri (1996)<sup>xviii</sup>*; *Kishor (1993)<sup>xix</sup>*; *Murthy et al. (1996)<sup>xx</sup>* all found that areas that showed increased 'typical' development e.g. agricultural productivity, urbanization and industrial output had a higher FIM.

It appears that much development in Southern Asia has been greatly affected by the manifestation of sex biases that has occurred due to and creating high levels of female infant mortality. As the diagram at the beginning of this essay shows the effects of these sex biases particularly on factors of 'development' are likely to exacerbate female infant mortality rate, so the situation appears to be on a downward spiral.

In the second part of this essay, the implication of female infant mortality under discussion will be the cultural influences. The areas discussed will be

- Kinship structure
- Dowry influences
- Female autonomy

This section should show the huge influence that culture has on Southern Asia and its practices, particularly with regards to Female Infant Mortality. The fundamental problem again stems from the masculinity of the population and its effect on the 'sub ordinate' females in the methods of treatment and perceptions of them.

A major study in this area conducted by *Dyson & Moore (1983)<sup>xxi</sup>* was influential in this field. It discovered that there was a difference in rates of female infant mortality between the South and North of India. The northern states of Punjab, Haryana and Uttar Pradesh all have a considerably high male to female infant mortality ratios at 1.38, 1.24 and 1.36 respectively. In contrast to this the Southern Indian states had a 'normal' ratio, reflecting the female survival advantage 'norm' experienced by most societies, developed or developing.

Their reasoning behind this difference was the different cultural traditions experienced between the two regions. Aspects of which are discussed below.

The north Indian cultural system has three major principles that are defined by Dyson & Moore. 1) Exogamic marriages, where the bride and groom are unrelated in terms of kin. 2) Male cooperation with one another in terms of blood relations (patrilineal system). 3) Women have no property rights i.e. cannot transfer or inherit property. These three conditions formulate a society that is completely male dominated and where female autonomy is very low. A fundamental part of this system is the use of the dowry, where members of a lower status group, the bride's natal family, must pay male members of generally higher status groups to 'take the women off their hands'. Women normally have absolutely no control over marriage and once the marriage has taken place, often have no contact with their blood relatives. The burden of the dowry, coupled with the lack of care help that the female is able to give to the parents once married, leads to son preference over females and consequently high female infant mortality rate via exogenous mortality methods discussed previously. These cultural trends leave the bride socially excluded and are associated with a much lower status and autonomy. The female demographic disadvantage experienced in these areas, leaves little hope for these cultures to ever change and the ever-increasing subordination of women, leaves them powerless to try.

At the time of the Dyson and Moore study, the southern IM ratio was 'normal' as described above. This was due to endogamous marriages (often cross-cousins), male relations with non-blood kin and some property rights for women. This often meant that women had contact with their natal home and dowry was less important. In this society women enjoyed a much higher autonomy, revealed by increased participation, literacy and education levels (although not always beneficial). Unfortunately *Sudha and Ragan*<sup>ix</sup> (1999) have noted an increase in practices of female infanticide and increased infant mortality in general within a number of southern Indian states e.g. Tamil Nadu. They also provide evidence in *Sudha and Ragan* (2000)<sup>xxii</sup> that the state of Kerala, which has always been depicted as an example of low FIM, normal male/female ratios and high female autonomy, (*Basu* (1986; 1999) )<sup>xxiii</sup> is beginning to show higher male/female ratios. As the following table suggests, twelve of the fourteen districts have smaller child mortality ratios in 1991 than taken in the 1981 census and five show trends similar to those observed in Northern Indian states.

This change has been thought to be due to the spread of the dowry system to regions it has never previously been in use and there has been a movement towards the patrilineal systems, and importance placed on kin networks for acquisition and power relations that had previously only displayed by the northern states. This cultural shift may have been caused by the factors of development previously discussed creating an unstable and male dominated environment for which women are powerless against.

This essay has attempted to show the some of the socio-economic implications of a high female infant mortality rate, particularly in comparison to males. India in particular appears to have a highly abnormal ratio, due to increasing son preference in a masculine environment. Some academics suggest that the high male/ female sex ratio will one day lead to a greater demand for women and therefore respect. Sudha and Rajan however propose that this will lead to tighter restrictions being placed on the female population as well as increased violence towards them leading to a further decline in their status. At present the situation looks desperate. The only answer to this appears to promote female autonomy as much as possible, however in the male dominated climate, this seems a very unlikely task indeed. South Asia appears to be caught in a downward spiral, which it appears unable to escape.

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