

Sex Differentials in Mortality: A Corollary of Son Preference?

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INTRODUCTION

The issue of sex differentials in mortality received attention as early as 1901 when the Superintendents of Census remarked on the unusually high sex ratios found in the Indian subcontinent, particularly in the North West Census of India 1901. More thorough investigations of the phenomenon were begun in the Sixties when detailed examinations of sex ratios in India, Pakistan and Bangladesh attributed their excess to higher female mortality [Visaria (1967); Rukanuddin (1967); Bangladesh Retrospective Survey of Fertility and Mortality (BRSFM) (1977)]. A partial explanation was also found in the omission of female members of households from census counts because of culturally based reluctance to give out names of female household members to enumerators who were strangers plus understating of girls' ages as some form of 'protection' of nubile daughters from the outside world.

Most recently, the topic of female disadvantage in mortality at almost all ages in the South Asian subcontinent has received renewed and urgent attention both in research and in the press. The alarm is due to the fact that, despite falls in mortality levels, sex differentials in disfavour of females persist in this region. Also, this remains a peculiarity of the region: whereas females suffer higher female mortality at some ages in some countries, generally female mortality is found to be lower than that of males (Lopez and Ruzicka 1983).

The scarcity of females resulting from higher levels of mortality, deliberately created by the cultural ethos has frightening implications. Though the elimination of females through drastic measures such as infanticide is unheard of in the present day, female neglect to a degree which raises their mortality levels substantially, is acknowledged in the present day and is almost certainly an outcome of strong and deep-rooted preference for sons over daughters. Thus, unable to determine the sex of their off-spring, parents and families do their utmost to ensure the survival of sons whereas daughters, once born, may be given less love, health care and nutrition.

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In this regard the four hypotheses given below will be investigated:

1. Sex differentials in mortality have declined with general improvements in mortality but the female disadvantage of survival persists because female 'roles' have not changed substantially.
2. Neglect of female children, beyond the neonatal period, is apparent in mortality differentials.
3. High fertility, a major correlate of higher female mortality through the reproductive years, is almost definitely associated with the demand for one son or more
4. Improvements in levels of living are not necessarily associated with lesser discrimination against daughters.

For the purposes of this investigation we rely on data from the 1981 Census (Census Organization), the Population Labour Force and Migration Survey carried out jointly by the Pakistan Institute of Development Economics and the International Labour Organization, in 1979 and the Micro-Nutrient Survey conducted by the Planning and Development Division in 1978.

HISTORICAL IMPROVEMENT IN THE FEMALE DISADVANTAGE IN MORTALITY

A major shortcoming when analysing trends in mortality is the dearth of accurate data in this area. Vital registration is near to useless and either one relies on indirect estimates from inter-censal survivorship or on cross-sectional surveys done in the 1960's and 1970's. Sex ratios, a very rough measure of relative mortality of the two sexes, indicate a narrowing of the deficit of females in Pakistan over time (Table 1). Even so, the sex ratio according to the 1981 census is still much above the sex ratio at birth of about 104 male births to 100 female births. A sex ratio of 111 is notably high since 1981 was a peak year in relation to out-migration of about 1.8 million males to the Middle East which should have caused a necessary diminution of the overall sex ratio and the *dejure* estimate of population could be expected to yield an even higher sex ratio.

It is clear that overall levels of mortality have declined in Pakistan, even though it cannot be ascertained by what magnitude. Also, in particular adulthood differentials may have diminished¹ but female disadvantages particularly in childhood

¹ Sex differentials may also have been lowered as a result of a rise in male mortality, particularly at later ages. This rise in male mortality is likely to be due to changes in the epidemiological scenario in Pakistan. As we modernize and develop, the prevalence of heart disease, cancer, hypertension etc. is likely to rise in comparison to infectious diseases which should be on the decline. The former set of illnesses is likely to have higher incidence amongst males.

Table 1

Sex Ratios

1901	1911	1921	1931	1941	1951	1961	1972	1981
117.9	121.5	122.4	122.3	119.9	116.4	115.3	114.3	110.6

Source: Rukanuddin and Farooqui, (1986, Table 19, p. 51).

mortality, still persist (Table 2). This may be due to the fact that no substantial improvement in the status of females has occurred. Apart from a small minority of urban women who have truly departed from the constraints of conventional status, the majority of women continue to lag behind in educational attainment and in participation in work especially outside the home. Though most women do work in the rural areas, especially during harvesting and in fetching water, and in urban areas in family enterprises or informal sector jobs and to some extent even in the modern sector, women's work is by and large unenumerated in labour force surveys and Censuses for example, see the Draft Report of the National Training Workshop on Statistics and Indicators on Women and Development. (Federal Bureau of Statistics, 1986). In most instances, women may not even receive any remuneration because the head of the household for whom they work withholds and manages household finances. Early marriages are still considered desirable, though the age at marriage has risen substantially in the past two decades (Sathar and Kiani 1986).

One factor which may be more crucial than age at marriage in terms of women may be the dowry system. Adopted from Hindu customs, most ethnic groups in Pakistan give dowry for their daughter's marriage. The economic rationale is that since the share of inheritance of daughters is half or less than sons, a girl is often

Table 2

Expectation of Life for Males and Females

Sex	1962-65 ¹	1968-71 ²	1976-79 ³	1981 ⁴
Male	52.4	53.6	56.1	53.4
Female	48.7	47.6	57.0	53.3

Sources: ¹Population Growth Experiment (LR).
²Population Growth Survey I.
³Population Growth Survey II.
⁴1981 Census Estimate of J. Blacker (n.d.).

gifted a substantial proportion of moveable assets of family wealth upon her marriage which she takes to her husband's home. There is some evidence that rising dowry demands may be exerting inflationary pressures on many parents of daughters and may be one factor behind the rising age at marriage. The dowry system, as compared to bride price, has been related to higher rates of female mortality, (Miller 1981). Thus, a family may be acting upon sound economic grounds when it treats a daughter who is unlikely to work or to contribute to family income and, in addition, who will also take away part of the family wealth upon her marriage, as a liability. Perhaps, the mortality differentials by gender will only disappear when this chain is broken.

NEGLECT OF FEMALE CHILDREN

Son preference could be a benign bias if it did not also lead to the neglect of daughters. The evidence most certainly points to the fact that higher morbidity and mortality amongst female children is an outcome of some involuntary, but most certainly, malevolent behaviour of parents. In Table 3 it can be seen that whereas boys suffer higher neonatal mortality, from the post-neonatal period until early childhood, it is girls who are at a disadvantage. The neonatal period is a time when factors such as congenital malfunctions, neonatal tetanus etc. are responsible for deaths, and male babies throughout the world suffer higher risk of death in early life. But the post-neonatal period is more susceptible to differential care in terms of health attention and nutrition. It is most likely that since most babies in Pakistan are breast-fed for at least one year, differences in weaning may be responsible for gender differences in post-neonatal mortality. If, let's say, girls are weaned later and with less nutritious food then that would introduce a disadvantage in terms of their nutritional status. There is no concrete evidence about full and partial breast-feeding and existing data show no significant differences in length of breast-feeding of boys and girls.

Table 3

Neonatal, Post-neonatal and Childhood Mortality Rates by Gender of Child (1965-79)

	Boys	Girls
Neonatal	79	70
Post-neonatal	41	47
Between 1 and 2	22	24
Between 1 and 5	44	48

Source: Population, Labour Force and Migration Survey, 1979.

The area of exploring differential behaviour of parents towards children of different gender is indeed difficult, if not impossible. This is because differential behaviour may not be regarded as anything out of the ordinary since it is so deeply ordained in the culture. In many households, men and boys eat first followed by children, and lastly, by women. By virtue of adult females and female children eating toward the end must mean that they are likely to get less of a share of the better portions of the meal. Also, in terms of health care, since there is a large degree of seclusion and segregation of females in society, fathers who are more mobile and with easier accessibility to health care facilities may prefer to take sons to the hakim or doctor when they are unwell but less so daughters. As women's movements are restricted, due to societal prejudices the daughter's health which is basically the mother's concern may suffer accordingly. There is some limited evidence which shows that male children are more likely to be given health care than female children.

Another source of support for the contention that parents do adopt behaviour which leads to the neglect of female children is seen in Table 4 which shows that post-neonatal mortality of two girls born in succession is higher than when a girl follows a boy or a boy follows a girl. This is indicative of the distinctly greater neglect of the second daughter than a first daughter found also in Punjab, India (Das Gupta 1987). Post-neonatal mortality is lowest for the second son born after another boy whereas neonatal mortality, more closely related to genetic and physiological factors, is highest for that combination of children.

These, then, are some instances of evidence which clearly points to the neglect of female children. Although adolescent women who marry early and women during the reproductive period also experience disadvantages in terms of health and nutrition as compared to men, the bias against little girls is of particularly serious concern.

Table 4

*Post-neonatal and Neonatal Mortality of Index Child by Gender of
Previous and Index Child*

Sex of Previous Child	Sex of Index Child	Post-neonatal Mortality	Neonatal Mortality
Boy	Boy	39	75
Boy	Girl	44	63
Girl	Boy	37	76
Girl	Girl	50	69

Source: Sathar (1987b, Table 6).

Considering that child deaths comprise more than 50 percent of all deaths and infant child mortality has reached alarming levels in Pakistan, girls then bear the main brunt of mortality.

SON PREFERENCE AND HIGH FERTILITY

Persistently high levels of fertility in Pakistan have been attributed to the desire on the part of parents and families to ensure a certain number of living children and in particular, sons, Khan and Sirageldin (1977). The average desired family size is four or more children and the average number of births borne by women over their reproductive span are six. Thus, women spend a substantial proportion of their lives in child-bearing and child-rearing. Frequent pregnancies followed by an average breast-feeding period of about 19 months is one of the major reasons for high levels of anaemia, substantial levels of maternal mortality and high levels of morbidity faced by women in the reproductive period which stretches from the late teens until the late 40's, Sathar (1987a).

High fertility need not be a sufficient reason for higher levels of female mortality in the reproductive period if women were allocated adequate health care and nutrition during their pregnancies and particularly at child birth. Sadly this is not the case in Pakistan, as health care facilities are meagre and especially so in the rural areas where 75 percent of the population resides. Even physical inaccessibility may not be the sole reason why women may not be able to avail of health care as much as the social or psychological barriers that they face to go to clinics or hospitals. Based on the seclusion of women in society, and the need for male family members or elder females to escort them, many women are left with the only choice of consulting locally based indigenous health workers. Not surprisingly, more than 90 percent of women deliver babies at home attended by female relatives or *dais*.

But women are usually compelled to reproduce and continue to do so until they have at least one or two living sons, regardless of hazards to their health. Use of contraception in Pakistan remains one of the lowest in Asia despite an official programme since 1965. Amongst the tiny minority who do adopt some form of contraception, the decision to do so is more likely to be influenced by the number of living sons than to be influenced by the health status of the mother. As seen in Table 5, contraceptive use is higher with at least one living son while such a positive association is not seen in the case of a living daughter. Also the proportion who want no more additional children is associated negatively with one or two living sons but not with the corresponding number of daughters.

GENDER AND CLASS: WHICH AFFECTS MORTALITY MORE?

It would appear that differences in mortality by gender are likely to be quite closely related to the socio-economic position of females. Unfortunately, not much

Table 5

Proportions who want no More Children and Proportions Currently using Contraception by Sex Composition of Living Children

Number of Girls	Number of Boys						
	0	1	2	3	4	5	6+
Proportion who Want no More Children							
0	.00	.05	.16	.35	.65	.78	.65
1	.04	.20	.45	.69	.82	.89	.85
2	.06	.30	.67	.76	.88	.88	1.00
3	.10	.50	.73	.78	.88	.93	.97
4	.12	.65	.84	.83	.89	.89	1.00
5	.14	.63	.91	.84	.81	1.00	.80
6+	.20	.66	.55	.91	.79	1.00	1.00
Proportion Currently using Contraception							
0	.00	.01	.04	.04	.07	.09	.22
1	.01	.05	.06	.10	.10	.12	.18
2	.02	.05	.07	.10	.10	.13	.04
3	.02	.03	.09	.09	.11	.07	.12
4	.02	.05	.08	.12	.05	.17	.13
5	.00	.02	.10	.20	.03	.10	.25
6+	.11	.03	.05	.07	.21	.00	.00

Source: Population, Labour Force and Migration Survey, 1979.

information is available to do a thorough analysis of gender differentials in adult mortality by socio-economic classes in Pakistan. However, purely on theoretical grounds it can be asserted that there are substantial reasons why women of a higher socio-economic status are less likely to suffer from as high mortality as lower status women. The reasons why their mortality risks are more favourable are the very same ones which lead us to believe that higher status women will probably experience lesser differentials *vis-à-vis* men of their socio-economic standing. Poor nutrition, poor housing conditions, a contaminated water supply, difficulties in access to health care, and poor or no education, emerge as the major explanations for the generally high mortality of the majority of males and females. When combined with the large

number of children women bear, as well as certain cultural patterns, these factors also explain the higher mortality of females.

The population is divided into the large rural majority and the urban poor in contrast to the very small proportion of largely urban-based elites. The elites enjoy markedly higher standards of living than the vast majority. They have much higher incomes, consume much more calories, attain higher levels of education and enjoy easier access to the largely urban-based health facilities. The women of the disadvantaged groups are likely to have a more unfortunate position as regards the distribution of food, education, health care etc. In contrast, women belonging to the more privileged sections of society are less likely to have insufficient food mainly because there is no shortage of it in the household. Also, with the easier access to health care especially during pregnancy and with access to better hospitals and clinics, women of this class are less likely to suffer death as a result of obstetrical complications and abortions and miscarriages. Sex differentials in educational attainment are also much lower in urban areas in Pakistan and the more favourable educational standards would also help women to be better equipped to take care of their children's and their own health. Thus, we do have strong reason to believe that the sex differential in adult mortality should be smaller amongst the urban, educated groups than the urban and rural poor groups. However, as yet data are not available to test this contention.

Data are available to test the above argument on patterns of infant-child mortality using household information from the PLM combined with birth histories to compare gender differentials across social and economic classes. In Table 6 we present post-neonatal mortality rates, mortality between ages 1 and 2 and between 1 and 5 years across selected socio-economic characteristics in urban and rural areas separately. Ratios of male to female death rates are also presented by each category. For one, the mortality rates are much higher in rural than urban areas and also the pattern of gender differentials found differ notably in the two areas. Particularly with reference to mother's education, which as already pointed out is negatively associated with infant-child mortality, it is interesting to note that whereas there is no clear pattern of gender differentials the post-neonatal mortality rate, for mortality between ages 1 and 2 and between 1 and 5 the gender pattern is contradictory in urban and rural areas. *A priori* expectations would be that more educated mothers, themselves from households where there may be less gender discrimination, would treat male and female children less differentially and the ratio of male to female death rates would be around unity. This is not the case as male children with mothers who had some education in urban areas faced much lower mortality both between ages 1 and 4 and between 1 and 2 whereas their rural counterparts faced higher mortality than their sisters.

In the case of father's education, no clear perceptible association emerged between level of educational attainment and mortality. consequently ratios of male

Table 6
Gender Differentials in Infant-child Mortality by
Selected Socio-economic Measures

	Post-neonatal Mortality Rate				Mortality Between 1 & 2				Mortality Between 1 & 5									
	Urban		Rural		Urban		Rural		Urban		Rural							
	Male	Female	Ratio	Male	Female	Ratio	Male	Female	Ratio	Male	Female	Ratio						
Mother's Education																		
None	46	50	.92	40	47	.85	23	23	1.00	20	24	.83	48	44	1.09	41	50	.82
Some	32	38	.84	35	34	1.03	6	7	.86	23	21	1.09	8	16	.50	50	38	1.32
Father's Education																		
None	47	51	.92	40	46	.87	24	25	.96	23	23	.96	49	50	.98	47	50	.94
Primary & Less	30	59	.51	39	54	.72	27	20	1.35	19	31	.61	51	20	2.55	42	58	.72
More than Primary	42	38	1.11	38	40	.95	13	12	1.08	13	23	.57	24	27	.88	24	39	.62
Total Household Income																		
500	55	85	.65	56	46	1.22	24	32	.75	28	29	.97	44	50	.88	45	60	.75
500-999	46	41	1.12	33	45	.73	21	25	.84	18	14	.75	43	44	.98	41	48	.85
1000-1499	40	56	.71	42	42	1.00	17	17	1.00	30	26	1.15	32	34	.94	47	47	1.00
1500+	33	54	1.58	33	54	.61	12	11	1.09	17	21	.81	28	25	1.17	29	41	.71
Occupation of Father																		
Professional	38	34	1.18	-	-	-	9	7	1.29	-	-	-	17	26	.65	-	-	-
Sales	38	50	.76	-	-	-	16	23	.70	-	-	-	36	36	1.00	-	-	-
Skilled	47	46	1.02	-	-	-	23	22	1.05	-	-	-	43	37	1.16	-	-	-
Unskilled	42	51	.82	-	-	-	23	14	1.64	-	-	-	43	40	1.08	-	-	-
Agriculture	64	40	1.60	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Land																		
Landless	44	45	.98	-	-	-	-	-	-	-	-	-	21	29	.72	-	-	-
<10 acres	39	47	.83	-	-	-	-	-	-	-	-	-	13	24	.59	-	-	-
10-20	32	48	.67	-	-	-	-	-	-	-	-	-	24	20	1.20	-	-	-
20-30	12	38	.32	-	-	-	-	-	-	-	-	-	36	12	3.00	-	-	-
30+	19	41	.46	-	-	-	-	-	-	-	-	-	29	9	3.20	-	-	-
Agricultural Status																		
Owner-cultivator	33	44	.75	-	-	-	-	-	-	-	-	-	19	22	.86	-	-	-
Share Cropper	30	49	.61	-	-	-	-	-	-	-	-	-	18	16	1.13	-	-	-
Contract Lessor	21	67	.31	-	-	-	-	-	-	-	-	-	42	23	1.82	-	-	-
Not on Farm	44	45	.98	-	-	-	-	-	-	-	-	-	21	30	.70	-	-	-

Source: Population Labour Force & Migration Survey, 1979.

to female death rates showed no regular pattern either. However, only in the case where fathers had some education, the male advantage in mortality (between ages 1 and 2 and 1 and 5) was much higher than in cases where he had no education. It has been argued that since childhood mortality is associated very closely with health and nutrition findings here would imply that educated fathers in both urban and rural areas, are likely to show greater preferential treatment to boys. Perhaps they, unlike uneducated fathers, are more likely to provide critical health care to their children but even then especially tending to the needs of their sons.

Perhaps of great interest is the relationship between differentials in mortality and total household income. In general, there is an inverse association between mortality and total household income particularly in the urban areas. Boys seem to experience much lower mortality (between years 1 and 2 and 1 and 5) as compared to girls in the lower income groups; about equal levels of mortality in the middle income groups; and at the highest income group the advantage in mortality is experienced more so by girls than boys. Since it could be argued that higher income levels are associated with greater resources and subsequently greater likelihood of health care and nutrition of children of both sexes but in the case of poorer families, boys are given preferential treatment. Gender differentials in mortality by land-size holdings rather than total household income in rural areas also generally support this contention.

CONCLUSIONS

The data available to investigate the general hypotheses that sex differentials in childhood mortality are a likely outcome of deliberate behaviour on the part of parents is limited. However, there is enough evidence to support this contention particularly in rural areas. Although sex differentials in mortality show diminution, this is largely due to general improvements in mortality and to some extent also recent rises in male mortality at later ages. Thus, as far as the record for tackling the particular problem of discrimination against women, beginning from the disappointment felt at their birth, to their lesser chances for education, paid employment and inheritance, progress is unsatisfactory. Subsequently girls and women continue to suffer and gender differentials in mortality continue to persist.

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**Comments on
“Sex Differentials in Mortality:
A Corollary of Son Preference?”**

Let me first admit that although I have been associated with various aspects of women-related research, I am less equipped academically than any of you on the technical aspects of research. My only qualification for comment on the paper under discussion is some experience in the planning of women's development programmes, which has involved direct contact with women in both rural and urban situations, and indirect feedback through field personnel. My observations on Zeba's hypotheses are based mainly on this experience, which to a large extent substantiates the findings of this paper.

The conclusions arrived at appear to be valid when viewed along with the findings of various micro level socio-economic researches, but in a few instances in the paper, one comes across statements which are not fully discussed. One, therefore, gets the feeling of having been provided with insufficient, and consequently seemingly contradictory, or mildly inaccurate information which weakens the overall argument. There is an overreliance on a few data sources, when other references to later and more in-depth researches might have reinforced the arguments. For this one sympathizes with the writer on the data limitations because not only is there a shortage of relevant data, its dissemination is also poor. In fact, one significant contribution of the paper is, that it indirectly highlights further areas for investigation, in a more disaggregated manner according to regions and age groups.

Two glaring examples of inaccurate data are the 1981 Census figures for the median age of marriage and labour force participation (LFP). That the age of marriage has risen generally is substantiated by micro research and informal observations. Yet, there are definite indications that it is considerably lower in many rural areas, where child marriages are still prevalent and girls are sent to the husband's home soon after reaching puberty. As for the definition of LFP, that in itself symbolizes the lower status of women, in that their work is not only uncompensated in monetary terms, it is unrecognized and unquantified.

For the Pakistani child, health problems start early. Because of the mother's poor health status and inadequate antenatal care between, 25 – 30 percent of infants are low birth weight (less than 2.5 kg). The problem is aggravated by lack of

care during and after child birth. While the genetically weaker male child is more at risk in this period, later the female child has less chances to make up the initial deficiency, because the child's sex also determines its share of nutritional/health care. Various micro level socio-economic researches in all regions have found an uneven distribution of family food, based on perceived priorities, including those of mothers. Incidental findings of many MCH and Nutrition Surveillance Programmes confirm this.

Son preference is so well documented and acknowledged that it does not need much research to verify it. In a society which is 70 percent rural, mainly agricultural, and because of the feudal and tribal cultural overtones indisputably patriarchal, it is not surprising that son preference is the norm and priorities and resource allocations at all levels – from the domestic to the national are heavily biased in favour of males.

Attitudes towards females of all ages are fashioned, not because of the innate callousness of relatives, but as pointed out in the paper, because of a mix of factors – economic, cultural and environmental. Regarding neglect of female children, inspite of loud protestations which are always raised, this is a fact which manifests itself in various ways – in the allocation of food, health care, expenditure on education, clothing, and other essential items. One fact that the paper does not mention in relation to nutrition, is the prevalent perception about the relative needs of girls and boys. Most people believe that boys need better and more food than girls. In fact, some foods are withheld from girls as they lead to an early puberty. This is considered undesirable, as the psychological pressures on a girl's parents are caused not only because she is perceived as an economic liability, but also because of her vulnerability to possibilities of rape and seduction, she carries with her a potential threat to their honour.

There is an observation on page 6, which says that “particularly in adulthood differentials may have diminished . . .” The question is whether the disadvantages have diminished sufficiently. It is well established that the adult married female still faces high risks of both morbidity and mortality and her access to both preventative and curative knowledge and services is poor. The statement under reference, read along with observations on *page one* and others about the under enumeration of females might lead to the conclusion that the problem lies with the data rather than in reality. Related research is inadequate and outdated, but existing surveys and clinic records indicate generally low health standards among women. Reasons include poverty, inadequate or improper food intakes, lack of awareness of basic health principles, adverse living conditions, heavy work loads, early marriages, frequent pregnancies and lack of preventative/curative medical support services. Malnutrition, vitamin and iron deficiencies are common among women all over the country, and iodine deficiency is prevalent in several areas. Maternal mortality,

computed largely from urban hospitals, is estimated at 6–8, per 1000 live births. Since only about 5 percent of deliveries take place in hospitals under medical supervision, it is safe to assume a generally high incidence, especially in rural areas where only 32 percent of the population lives within a two mile radius of any health centre and ante-and post-natal services are negligible.

One aspect of sex-related mortality which is not sufficiently recognized and researched, relates to the footnote on page 6, which briefly refers to the difference in incidence of certain diseases among men and women. A more in-depth analysis needs to be based on a clearer distinction between various categories of factors contributing to mortality differentials. Our research also takes little account of death or disability due to unnatural causes, which affect males more than females. These include for example, accidents outside the home and deaths due to tribal, feudal and factional disputes or street violence. Viewed in this context, the hypothesis put forth in this paper would have gained further credibility, if it had specified that it was dealing only with physiological and socio-cultural factors influencing mortality – such as congenital attributes, low birth weight, malnutrition, low immunity to infections, poor health and hygiene, exposure to insanitary living and working conditions, lack of fresh air and exercise, reproductive responsibilities, neglect of health and nutritional needs, poor access to health services etc.

The paper highlights a very important issue, but it states that it does not intend to raise any further alarm on the situation. However there is a need for it to mention more clearly the implications for national development. The impact of the female factor is high on the socio-economic situation, not only because of their numerical strength, but also because of their multi-dimensional roles which encompass both the reproductive and productive aspects of life. In the interest of national well-being it is imperative to break the vicious cycle of low health standards for women, and because of their vital child-bearing role, for the community at large. Since this situation is a manifestation of a deeper, more complex problem, the question remains open as to whether the situation can be changed by trying to tackle the manifestation without focusing attention and action on the underlying reasons.