

Speaking for Ourselves

Socioeconomic inequalities and health outcomes in India

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INTRODUCTION

In the 1980s, a Brazilian leader, commenting on the economic reforms and structural adjustment in his country said ‘the economy does well, but the people do poorly’.¹ At the end of two decades of similar economic reforms in India, this statement is equally true for the majority of people in India. Structural adjustment policies have led to a widening of socioeconomic inequities in society. This has implications for health outcomes among different social groups. We use data from the National Family Health Survey (NFHS) and other sources to discuss issues related to health disparities based on class, caste and gender.

CONCEPTUAL FRAMEWORK TO UNDERSTAND EQUITY

It is widely recognized that ‘health outcomes’ depend on socioeconomic factors, and inequalities lead to differences in health status among individuals or social groups. Braveman defined ‘equity in health’ as ‘the absence of systematic disparities in health or in the major social determinants of health, between social groups who have different levels of underlying social advantage/disadvantage—that is, different positions in a social hierarchy’.² Further, ‘inequities in health systematically put groups of people who are already socially disadvantaged (for example, by virtue of being poor, female, and/or members of a disenfranchised racial, ethnic or religious group) at further disadvantage with respect to their health; health being essential to wellbeing and to overcoming other effects of social disadvantage.’² The ‘social group’ could be a category based on a social characteristic such as socioeconomic class, gender, race, ethnicity, religion and, in the Indian context, caste. This concept of ‘equity in health’ is in contrast to earlier attempts at measuring disparities in health simply between ‘ungrouped individuals’.^{3,4}

Health equity implies that social and economic policies should be designed to bridge disparities in health between different social groups. With the State increasingly using market-guided mechanisms, there has been a skewed social development of different sections of society. While the upper and the upper middle classes have cornered the lion’s share of social wealth, the lower classes have continued to remain disadvantaged.

Braveman draws a distinction between ‘health equity’ and ‘equality in health’. ‘Health equity’ deals with processes that determine the distribution of resources necessary for health

and the processes that lead to systematic disparities in health or social determinants of health between different social groups. On the other hand, ‘equality/inequality in health’ implies measurement of appropriate health indicators for different social groups which facilitate comparison between these social groups.⁵ Thus, while ‘health equity’ facilitates a judgement of health policies and social processes as being conducive or otherwise to achieving greater equality of health between different social groups, ‘equality in health’ helps in monitoring the impact of health policies. The levels of health enjoyed by the most advantaged groups could be a benchmark of what is possible for the other groups.

SOCIOECONOMIC INEQUITIES

The major socioeconomic inequalities that influence health outcomes include those due to income or social class, caste, gender, rural–urban setting and geographical region. There is considerable interaction between these factors, with additive effects. Thus, the health impairment for a lower class person belonging to a low caste may be much more than that for a lower class person of a high caste. Persons belonging to the scheduled castes (SC) and scheduled tribes (ST), and in some cases ‘other backward castes’, often live in relatively inaccessible areas and are more likely to be poor.⁶ Data from the 52nd round of National Sample Survey (NSS) on deciles of consumption expenditure (Table I) show that 65% of SC and ST households live below the poverty line, are uneducated and live in rural areas.⁷ The lower castes are thus disadvantaged because they cannot spend on healthcare, they are less educated and, because they live in rural areas, they have limited access to health services.

Our health policies place an emphasis on the allopathic system over indigenous systems, and on curative medicine over preventive medicine. There is also a concentration of medical

TABLE I. Socioeconomic correlates of poverty

Income decile	Proportion of SC/ST (%)	Proportion with less than primary education (%)	Proportion residing in rural areas (%)
1	52.6	84.0	82.7
2	47.4	79.9	80.6
3	41.1	75.9	77.8
4	38.2	72.6	74.0
5	33.2	68.0	69.6
6	30.9	63.8	64.5
7	27.2	58.9	58.7
8	24.0	53.6	52.5
9	21.2	48.7	46.0
10	13.9	41.5	37.2

Source: Gupta I, Datta A. *Inequities in health and health care in India: Can the poor hope for a respite* (with A. Datta). IEG Discussion Paper. Series No. 80/2003, Institute of Economic Growth, Delhi.
SC Scheduled castes ST Scheduled tribes

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facilities in urban centres with an overwhelming neglect of rural areas, and dominance of for-profit private healthcare over public facilities.⁸⁻¹⁰ Policy-makers place little emphasis on improving access to healthcare for the marginalized sections of the population.

The failure to recognize links between different forms of socioeconomic disparity leads to ineffective implementation of various poverty alleviation as well as social and health programmes.¹¹ For example, it is not uncommon for village *anganwadis* or immunization booths to be located in upper caste localities, or an auxiliary nurse midwife to visit only the upper caste houses, neglecting the lower castes. Hence, there is a need for more public investment in quality healthcare in rural areas, an emphasis on providing preventive health services to the disadvantaged groups, and a sensitization of health services and healthcare providers to the barriers faced by the SC/ST groups and the poor in accessing health services, administrative steps to ensure equitable compliance and institution of measures to ensure participation of marginalized social groups in poverty alleviation programmes. These small steps will help increase awareness to equity issues and will also help create an atmosphere conducive to larger efforts such as a major redistribution of resources.

Health disparities by social class

Social class is widely recognized as an important determinant of health. Economic deprivation means denial of access to resources required for a life of dignity. Marginalization of such deprived populations leads to social disintegration and has implications for health. The theory of 'social support' has documented the effect of social integration on health.¹² Wilkinson has argued that the relative distribution of income is more important to the health of people than absolute deprivation of income.¹³

Several studies have shown a strong association between income inequality and mortality. Of these, the Black Report, prepared by a Research Working Group on Inequalities in Health in Great Britain has historical importance.¹⁴ It found large differences in mortality and morbidity that favoured the higher social classes and were not being redressed by health or social services.¹⁵ Other studies have reached similar conclusions.^{16,17} Kennedy *et al.* found a direct effect of income inequality on total mortality in a population.¹⁸ However, in India, no class-based data on health are available.

Globalization has led to the widening of various socio-economic disparities around the world. In India too, it has led to increasing social, regional and rural-urban disparities.^{10,19} The Arjun Sen Gupta Committee report on unorganized labour reported that 77% of Indians live on less than ₹20 a day.²⁰

Despite this, the welfare sectors such as education and health have been increasingly opened to the for-profit private sector. This is at a time when the gross domestic product (GDP) growth rates have consistently been above 7% and have even touched 9%. It has been calculated that poverty has actually increased in India during the period between 1993-94 and 2004-05, despite official claims to the contrary. Adverse changes in income distributions in most states have offset the beneficial effects of economic growth during this period.²¹ The poverty in rural areas has increased and has led to increasing disparities in access to healthcare¹⁰ as also the health outcomes.

The NFHS-II data show that the infant mortality rate for the poorest 20% of the population was 2.5-times higher than that for the richest 20%.²² Further, a child born in a tribal belt was 1.5-times more likely to die before the fifth birthday.²² A person from the poorest quintile of the population, despite more health problems, is 6-times less likely to access hospitalization than a person from the richest quintile. This means that the poor are unable to afford and access hospitalization in a very large proportion of illness episodes, even when it is required. The delivery of a mother, from the poorest quintile of the population is over 6-times less likely to be attended by a medically trained person than the delivery of a well-off mother, from the richest quintile of the population. A tribal mother is over 12-times less likely to be delivered by a medically trained person.²² A tribal woman is 1.5-times more likely to suffer the consequences of chronic malnutrition as compared to women from other social categories. A World Bank study published in 2001, quoted by Mukhopadhaya, found that the poor-rich risk ratio is 2.5 for infant mortality, 2.8 for under-5 mortality, 1.7 for childhood underweight and 2 for total fertility rate.²³ These figures bring to fore not only the unequal distribution of resources and its effect on public health parameters but also the intersection between caste, class and ethnicity.

An analysis of NFHS-3 data shows that health inequalities increased when rising average income levels of the population are accompanied by rising income inequalities.²⁴ Table II shows the trends in child malnutrition in India from 1975-79 to 2004-05.²⁵ More than 50% of children in India were under-weight and stunted in 2004-05, while the proportion of severely under-weight and stunted was as high as 18% and 25%, respectively. While there is a major decline, India still has a very high proportion of malnourished children (Table III) and is placed below even Afghanistan. According to the National Nutrition Monitoring Bureau (NNMB) data (2002) (weight for age), 94.5% children in the age group of 6-9 years, and 96.1% children in the age group of 10-13 years were suffering from mild-to-severe malnutrition.²⁶

TABLE II. Changes in nutritional parameters of children over time

Parameter	Proportion (%) of undernourished children					Percentage decline (1974-75 to 2004-05)
	1975-79	1988-90	1996-97	2000-01	2004-05	
<i>Weight for age (under-weight)</i>						
Below 2 SD	77	69	62	60	55	29
Below 3 SD	37	27	23	21	18	51
<i>Height for age (stunting)</i>						
Below 2 SD	79	65	58	49	52	34
Below 3 SD	53	37	29	26	25	53
<i>Weight for height (wasting)</i>						
Below 2 SD	18	20	19	23	15	17
Below 3 SD	2.9	2.5	2.5	3.1	2.4	17

Source: Reference 25

TABLE III. Countries with highest proportion of malnourished children

Country	Proportion of children underweight (%)
Nepal	48.3
Bangladesh	47.5
India	46.7
Timor-Leste	45.8
Yemen	45.6
Burundi	45.1
Madagascar	41.9
Sudan	40.7
Lao (People's Democratic Republic)	40.4
Niger	40.1
Eritrea	39.6
Afghanistan	39.3

Reproduced from reference 25. Figures apply to the most recent year for which data are available within the reference period. There is a significant margin of error for individual countries.

Similarly, despite a 41% and 31% decline in the proportion of men and women, respectively, with a body mass index (BMI) <18.5, from 1975–79 to 2004–05, the proportion for women in India with BMI <18.5 is higher than that in sub-Saharan countries such as Rwanda, Malawi, Zimbabwe, Gabon, etc.²⁵ Interestingly, Baru *et al.* have shown that the rate of decline of infant mortality and under-5 mortality decreased in the years when economic reforms were implemented.¹⁰

The increasing out-of-pocket expenditure on health during the past two decades has contributed to the increase in number of people below the poverty line (from 3.25% of the population in 1999–2000^{27,28} to 3.5% of the population in 2005–06; an additional 32 million people²⁹).

Income and social gradients are also seen across diseases. Acute diarrhoeal diseases (ADD) are among the main killers of children in India and follows a social gradient.³⁰ Analysis of data on cholera from Delhi shows that there is a gradient from planned colonies to slums; and among low-income colonies from 'legal' to 'illegal'.^{31,32} The notion of legality, especially, in the context of urban areas, means entitlement to access safe drinking water and healthier living conditions, which may be denied to illegal colonies.

A study meticulously documented the impact of economic status on maternal and child health among the residents of slum localities in Mumbai. It showed that the rate of marriage and conception in adolescents was less among women of higher socioeconomic quartile group (odds ratio 0.74, 95% CI 0.69–0.79, and 0.82, 0.78–0.87, respectively). It also found that as the socioeconomic status increased, there was a tendency to rely less on public sector healthcare (0.75, 0.70–0.79) for antenatal care and for institutional delivery (0.66, 0.61–0.71). Home deliveries were 5-times higher in the poorest group compared to the least poor group (0.17, 0.10–0.27) and deliveries in public sector facilities were about 4-times less likely in the least poor group compared to the poor group (0.27, 0.21–0.35). Higher socioeconomic status meant lower prevalence of low birth weight (0.91, 0.85–0.97). The neonatal mortality rates also fell, though non-significantly as socioeconomic status increased (0.88, 0.71–1.08).³³

Various rounds of National Sample Surveys have shown that a higher percentage of the poor do not seek care when ill.²³ Further, a much lower percentage of the poor seek institutional care. In the case of institutional deliveries as well the poorest 20%

have only 100 institutional deliveries per 1000 live-births compared with almost 700 deliveries for the richest 20%. Looking at the total illness episodes treated during the past 15 days, the poorest 20% obtained treatment 3-times less than the richest 20%. The difference in the hospitalization rates was 6-times between the rich and the poor, even though it is the poor who fall sick more often and are in need of hospitalization.³⁴ Inability to access healthcare on account of poverty and high out-of-pocket expenditure worsens health outcomes for poorer households. It has been estimated that over 20 million Indians are pushed below the poverty line every year because of out-of-pocket spending on healthcare.³⁵ With private healthcare having acquired the commanding position in the healthcare delivery, health services are increasingly skewed towards an urban bias, tertiary level health services, with profitability overriding equality, and rationality of care often taking a back seat.

The declines in parameters such as infant mortality rate, under-5 mortality, maternal mortality and different measures of malnutrition, etc. that have taken place are a result of technological interventions put into operation in programme mode, e.g. vaccination campaigns, maternal and child health and reproductive health interventions, water and sanitation campaigns, etc.

There has been no change in policy to redistribute societal resources to decrease socioeconomic inequities. A persistent decline in the calories consumed by different household consumption categories has been documented in successive NSSO surveys, resulting in a rise in poverty as measured by the minimum nutritional criterion. The Tendulkar Committee appointed by the Planning Commission to determine the levels of poverty in the country has sought to un-peg the old nutritional criterion as a determinant of poverty.³⁶ Rising poverty, improper nutrition and inability to access healthcare due to its increasing commercialization and privatization have put into jeopardy the gains made so far. India is placed at 134 among 182 countries in the United Nation's Human Development Index of 2009 in the category of 'medium human development'. We are nowhere near Brazil, China, Mexico and South Africa.³⁷

Health disparities by caste

In India, class is not the only factor for health-related inequities. Caste and class inequities often go together. As mentioned above, the 'lower' castes are also lower economic classes, and the trajectories of health outcome indicators across caste groups and classes are similar. Table IV shows the distribution of various health indicators as per the NFHS-3 data and follow a similar gradient across castes/tribes and economic class by wealth index.³⁸ It can be seen that as with lower class, the lower castes and the tribes have much poorer health outcomes.

Mohindra *et al.* studied the impact of caste and socioeconomic status on women's health in Kerala—a state with generally good health standards and progressive policies. They showed that both caste and socioeconomic status were associated with inequality in health and also accentuated each other's effect. Interestingly, higher castes had a cushioning effect on the adverse effects on health of lower socioeconomic status.³⁹ These results reinforce the need for policy-makers to be sensitive towards caste issues in health.

Health disparities by gender

The nature of health problems faced by men and women and their health needs differ. In India, mortality is higher among women in all age-groups, negating the biological advantage of

TABLE IV. Health outcome indicators disaggregated by caste/tribe and economic class

Factor and category	Infant mortality rate (per 1000 live-births)	Under-5 mortality (per 1000 live-births)	Chronic malnutrition (low height for age) in children under 5 (% of children below 2SD)	Anaemia in children 6–59 months of age (%)	15–49-year olds with anaemia		15–45-year olds with BMI<18.5		Deliveries in health facilities (%)	Households covered by health scheme/insurance (%)
					Women (%)	Men (%)	Women (%)	Men (%)		
<i>Caste/tribe</i>										
SC	66.4	88.1	53.9	72.2	58.3	26.6	41.1	39.1	32.9	3.3
ST	62.1	95.7	53.9	76.8	68.5	39.6	46.6	41.3	17.7	2.6
OBC	56.6	72.8	48.8	70.3	54.4	22.3	35.7	34.6	37.7	3.8
Others	48.9	59.2	40.7	63.8	51.3	20.9	29.4	28.9	51.0	7.8
<i>Wealth index</i>										
Lowest	70.4	100.5	59.9	76.4	64.3	37.9	51.5	48.3	12.7	0.1
Second	68.5	89.6	54.3	73.6	60.3	30.2	46.3	42.4	23.5	0.7
Middle	58.3	71.9	48.9	69.3	56.0	24.8	38.3	37.4	39.2	2.2
Fourth	44.0	51.2	40.8	64.8	52.2	18.8	28.9	29.6	57.9	5.1
Highest	29.2	33.8	25.3	56.2	46.1	14.2	18.2	19.1	83.7	16.4

Source: Compiled from National Family Health Survey (NFHS-3), 2005–06, India, Volume I.³⁸ SD Standard deviation BMI Body mass index
 SC Scheduled caste ST Scheduled tribe OBC other backward caste

TABLE V. Average medical expenditure on inpatient treatment by gender, Maharashtra 1995–96 and 2004

Gender	Mean medical expenditure on inpatient care (in ₹)					
	1995–96			2004		
	Public	Private	Total	Public	Private	Total
Men	1572	4845	3845	2948	9642	7960
Women	910	3451	2549	2265	8444	6794

Source: Reproduced from reference 42

women. The reproductive health needs of men and women are different. How are these differences to be understood? Can they be explained only on the basis of the biological differences between sexes, or factors such as poverty, education, etc.? Can these differences be addressed by similar policy initiatives for men and women or there is a need for a more nuanced approach specific to men and women separately?

The term ‘sex’ refers to biological differences between men and women, whereas ‘gender’ refers to ‘socially constructed roles and responsibilities that women and men carry out which are differentially and hierarchically located and valued in various cultures’.⁴⁰ The differential valuation of roles played by men and women, which is determined by the prevalent values and belief systems, can be seen in society across institutions, e.g. marriage, family, communities, caste, class, etc. Such a differential valuation often places women at a disadvantage vis-à-vis men and leads to their subordination in society.⁴⁰

This has important implications towards women’s health issues. In India, the vast differences between health outcomes among men and women are often attributed to inequities in education or income. However, the maternal mortality rate in Vietnam is 160 with a per capita GDP of US\$ 1860, whereas in India it is 407 with a per capita GDP of US\$ 2248.⁴¹ Likewise, economically prosperous states such as Punjab and Haryana have sex ratios of 874 and 861, respectively, whereas it is 972 in Odisha, a much poorer state.⁴¹ These data reinforce the need for a gender perspective to health.

There is empirical evidence on the adverse impact of gender on women’s health. As per NFHS-3 (2006–07), 46.6% of urban and 51% of rural women aged 15–49 years are anaemic (Fig. 1);

these proportions are much higher than those for men.⁴² Likewise, both inpatient and outpatient expenditure on health of women is much lower than that for men in all age groups even in a state like Maharashtra (Tables V and VI).

There is an urgent need to sensitize healthcare professionals about gender analysis tools, to help them understand the

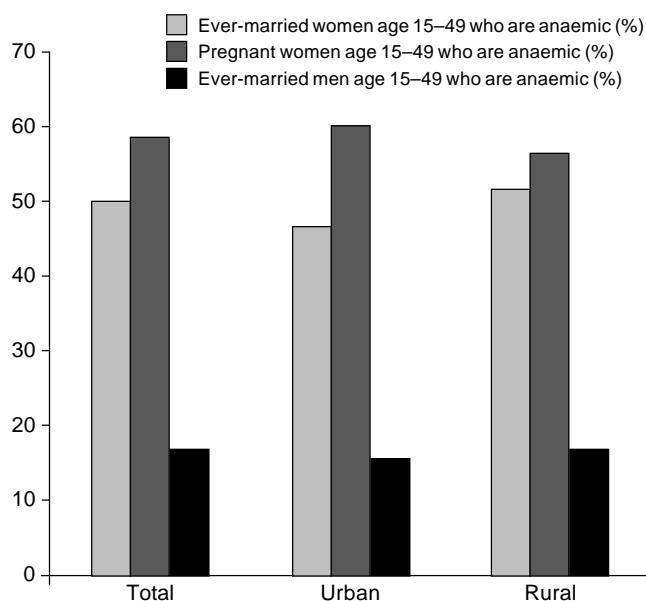


FIG 1. Anaemia among ever-married and pregnant women and ever-married men (reproduced from reference 40)

TABLE VI. Average medical expenditure for non-hospitalized treatment per ailing person during a period of 15 days by age and gender, Maharashtra 2004.

Age (years)	Average expenditure (in ₹)		
	Male	Female	Total
0–15	251	166	213
16–39	318	228	267
40–59	336	297	313
≥60	313	246	279

Reproduced from reference 42

differences in health outcomes between men and women, in an attempt to bridge the gender gap. The term 'gender analysis' implies a 'systematic examination of the roles, relations and the processes that focus on the imbalance of power, wealth, workload opportunities and constraints as experienced by women and men in a given community'.⁴¹ Gender gaps in health result from the inequality in decision-making leading to unequal access to resources for women and girls as compared with men and boys.

CONCLUSION

Socioeconomic disparities are an important determinant of health outcomes. No more can we ignore health disparities. We as healthcare professionals need to ensure a more equitable healthcare system for the poor and disadvantaged. Is universal healthcare the answer? Only time will tell.

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