

Socioeconomic Status and Health Gaps: A Baseline Study of India's Marginalized Population

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Abstract

Marginality is a manifestation of 'capability' deprivation that affects the 'functioning' of individuals. It is specific to race, ethnicity, religion, or socioeconomic background and leads to oppression and prejudice to a certain degree. Disparity in socioeconomic opportunities influences health, a prime indicator of the Human Development Index. India is a centre of marginalization, undergoing an epidemiological shift, and making slow progress towards universal health care. Under these circumstances, a detailed study of the healthcare system, with special reference to the marginal community, is worthwhile. The paper is descriptive in nature and uses secondary data from the NSSO, India, reports. The sample considered comprises people hospitalized in the last 365 days and examines disease incidence, healthcare utilization and financing patterns. The study reveals that there exist differences in morbidity pattern, access to and utilization of healthcare services, the magnitude of healthcare expenditures and insurance enrolment across socioeconomic groups. The pillars of egalitarian health care - availability, accessibility, and affordability - are gravely threatened, especially among the marginalized communities in India. The analysis is crucial in policy framing, as any anomaly between the development programs and the target groups can adversely affect the marginals and the deprived.

Keywords: diseases; healthcare; health insurance; hospitalization; marginal community.

¹ A functioning is an achievement, whereas a capability is the ability to achieve. Functioning in a sense, is more directly related to living conditions, since they *are* different aspects of living conditions. Capabilities, in contrast, are notions of freedom, in the positive sense: what real opportunities you have regarding the life you may lead (Sen 1987, 36).



Introduction

Marginalized groups within the socioeconomic framework include individuals who, on account of their race, ethnicity, religion, or economic status, face inequalities in opportunities, access to resources, and treatment. From the perspective of human development, one of the many ways that this manifests itself is through its effect on health indices. It gets reflected in the personal health status, perception and awareness of health, prevalence and type of diseases, availing of medical care and healthcare financing. The difference in social opportunities influences both individual and collective well-being throughout one's life and even has intergenerational effects.

India is a hub of marginalization, with discriminations found at multiple levels based on caste, creed, religion, ethnicity and language. As for the historically evolved caste system, there are thousands of castes in India, which the Constitution of India has broadly categorized into four groups: Scheduled Caste (SC), alias the *Harijan* (the untouchable), Scheduled Tribe (ST) or the *Adivasi*, Other Backward Class (OBC) and the General category. A closer glance at the latest statistics reveals that in India there are about 740 tribes (8.6%), 1108 castes (16.6%) and more than 5000 backward classes (42%) in the total population. In summary, about three-quarters of India's population belong to historically disadvantaged classes (NHFS, 2015).

The caste system has been a crucial part of India's internal politics and society even after globalization. There exists ample evidence of identity-based marginalization that results in the exclusion of sizable segments of the population from social, economic, and political domains. Disadvantage manifests in their per capita income, educational attainment, health indices and overall standard of living. In this paper we tried to highlight the health-related discriminations faced by the marginalized members of Indian society.

Literature (Adler and Newman 2002) claims that a significant portion of the variability in the rates of mortality and morbidity can be explained through an individual's or group's



access to basic resources to achieve good health or the Socioeconomic Status (SES). Even after discounting the effects of education and income (the two main indicators of SES), differences in morbidity and mortality have been noted to stem out of socioreligious stratification (Emberson et al. 2004; Nazroo 2004). In most cases the explanation is based on cultural and historical differences like genetic traits, acquired habits and socioreligious practices (Jackson 1991; Curtin 1992; Barghaus et al. 2007).

Genetics, the early environment and opportunities brought about by social mobility are three main factors that have a considerable impact on health. People belonging to a particular socioeconomic group are found to share similarities in a number of health indicators, such as self-rated general health, disability and the presence of a chronic illness. Multiple deprivations based on various parameters mentioned above can result in poor hygiene and poor nutrition, which in turn can lead to poor health and diseases (Nayar 2007). A study on the rural districts of Kerala (a developed state in Southern India) found women from lower castes reporting a higher prevalence of poor health than women from forward castes (Egede et al. 2006). Dasgupta and Thorat (2009), in their study, brought out the differentials in the rate of decline of the infant mortality rate or IMR² and maternal health between Scheduled Caste (SC)/Scheduled Tribe (ST) and other social groups. The study by Saroha et al. (2008) in Maitha, Uttar Pradesh (a large, prosperous state in Northern India), identified caste as a significant barrier to maternal healthcare service use among the rural women.

Among the chronicles penned by the marginalized in the community, the one that deserves special mention is the autobiographical narrative *Jina Amacha* (later translated by Maya Tyagi in English titled *The Prisons We Broke*) by Dalit (SC) activist and writer Baby Tai

² Infant Mortality Rate (IMR) refers to the number of deaths per 1000 live births of children under one year of age.

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Kamble, a member of the *Mahar* community of Maharashtra, in Central India. She gave firsthand information about the various discriminations and exploitations that the marginals face in their day-to-day lives. Among many things, she specifically narrated how the marginal caste lacked access to not only quality health care services but also the essential ones. Discrimination and oppression existed across the length and breadth of India. India's healthcare system was facing a critical moment in the period under consideration. The nation was going through an epidemiological transition characterized by the emergence of new diseases alongside those that already existed. The change in morbidity pattern coincided with a systemic movement towards universal health coverage, instigating major reforms across the healthcare sector in areas such as pharmaceuticals, pricing, and service delivery. In this context, a detailed study of the healthcare system in that period, with specific focus on its impacts on the marginal community, seemed worthy.

Objective

The objective of this study is to analyze the vicious cycle that was imprisoning the marginalized population in India between 2004 and 2014, leading to compromised health status and financial impoverishment. The goal is to provide a crucial baseline for evaluating subsequent healthcare reforms undertaken in India (specifically those implemented following the National Health Policy, 2017) in terms of their impact on the socioeconomically disadvantaged population.

Database and methodology

This study is based on a secondary analysis of unit-level data from two nationally representative rounds of the National Sample Survey Office (NSSO) on Health (the 60th Round published in 2004 and the 72nd Round in 2014). The data for two rounds are taken for comparative analysis and study of the progression of the key economic and social indicators related to the health of the sample population over the decade.



The decision to seek medical care is dependent on individual perception about their state of health, has human and economic costs and involves both patient and physician efforts. Accordingly, the health of the population can be studied through health status (perceived), nature of ailment and duration of stay in the hospital. Analyzing the effectiveness of healthcare services can be done by looking at how well-informed people are about the options for care and treatment available, as well as how affordable the services are. This study investigates the health status (morbidity pattern), availing and utilization of healthcare services (hospitalization) and healthcare financing (sources of finance and third-party coverage) among different social groups. A hint about the extent of distress in the event of hospitalization is given at the end of the study by reflecting on the disease burden (in terms of loss of household income) borne by the marginalized class. Cross-tabulation and descriptive statistics are used in the study to analyse the data from this perspective.

When faced with perceived or existing disease, individuals' social, economic, situational, and attitudinal characteristics determine their pattern of medical care utilization. With this intent the profile of the social groups has been created with demographic and socioeconomic characteristics of the sample, like income class, education level, residence (rural/urban), and gender. Literature shows that treatment seeking and cost burdens vary by the type of disease (Russell 2004; McIntyre et al. 2006). Therefore, we conducted our research with linkage to the morbidity of the sample population, as and when required.

<u>Morbidity Pattern</u>: Diseases have been classified following WHO guidelines with modifications as adopted in Mahal et al. (2010). Major diseases are grouped into Communicable Diseases (CD), Non-Communicable Diseases (NCD), and Other Conditions/Disabilities.



<u>Healthcare Utilization</u>: The incidence of ailments leading to hospitalization in the last 365 days has been used as a key indicator of utilization of formal healthcare services.

Healthcare Financing and Burden: The sources of funding for medical expenses were examined to ascertain the out-of-pocket expenses and the rate of household income loss due to hospitalization was computed to account for the burden of illness. While analyzing the healthcare expenditure financing, we specifically concentrated on the various sources and their coverage to shed light on their potentialities in preventing catastrophic out-of-pocket expenditure³ and subsequent impoverishment. Impoverishment refers to the event of people being pushed below the poverty line⁴ due to household health expenditures. The financial burden was measured by assessing the household income lost during NCD-related hospitalization (which is reported to have the maximum impoverishing effect) using data available in the NSSO 2004 report (loss of household income not reported in the 2014 report). It is to be noted that the poverty line in India was INR 446.68 per capita per month in rural areas and INR 578.80 per capita per month in urban areas (the reference period is 2004-05). Judged by this yardstick, an income loss of more than INR 500 due to hospitalization can be counted as impoverishing for the low-income groups.

Therefore, the extent of impoverishment is studied using higher values than the poverty line income during that period. The data sets for the two rounds considered were loaded in STATA (version 12) and the conclusions are predicated on the basis of computed distributions and percentages for the different social groups in India. This has given a

³ Catastrophic out-of-pocket expenditure refers to direct payments by private households for health services that exceed 40% of households' capacity to pay.

⁴ Poverty line is the amount of per capita expenditure or income required to meet the basic needs of the population.



robust, evidence-based snapshot of the situation before the launch of major pan-India health insurance schemes.

Findings

Demographic Profile of the Marginalized

The relationship between race and disease is biological in effect rather than biological in origin. Marginalization affects the group's treatment, resources and jobs, living conditions, worldview, environmental exposures and the chances of reaching their full potential. These factors are said to enhance or limit opportunities for the health of an individual or a group (Duster 2006).

The analysis of NSSO data from 2004 and 2014 also revealed a clear pattern of disparity among the different groups under consideration (Table 1). This scenario of positive discrimination of the low-caste group in income, education and employment bred inequality and unfairness. The majority of people in this group lived below the poverty line, considered education an unattainable goal, and were frequently denied access to state-aided schools. They were unable to adapt, received unfair treatment, and are ill-prepared to compete with members of the higher caste, even when they were successful in enrolling in the formal educational system.



Table 1. Demographic Profile of the Sample (in %)

Socio- economic Indicators1	SC		S	Т	ОВС		
EDUCATION	60th 71st		60th	60th 71st		71st	
No Formal Education	51.19	40.05	47.89	40.15	34.27	39.61	
Primary or less	26.07	15.65	24.78	14.83	28.64	15.58	
Middle	11.40	12.45	14.06	12.24	17.30	12.58	
Secondary & HS	8.35	21.03	9.35	21.39	13.88	21.48	
Above HS	2.98	10.92	3.91	11.89	5.91	10.35	
INCOME CLASS							
Poorest	39.50	26.9	30.94	28.88	21.97	19.26	
Poor	24.82	27.06	25.73	25.17	22.68	23.84	
Middle	17.24	19.69	19.31	18.13	22.20	20.49	
Rich	12.17	16.45	14.41	16.25	18.82	21.24	
Richest	6.26	11.56	9.62	11.56	14.34	15.17	
SEX							
Male	47.68	51.13	53.40	51.09	53.54	51.01	
Female	45.80	48.87	46.60	48.91	46.46	48.99	
SECTOR							
Rural	86.22	63.19	71.06	74.62	68.54	55.55	
Urban	13.78	36.81	28.94	25.38	31.46	44.45	

The vulnerability of women in this context is worth mentioning. Most of the women from the backward communities in India lived under poor hygienic conditions and worked under physical and mental stress (physical abuse was common). They were uneducated, ill-fed and ill-informed about health and healthcare (a lack of basic facilities like proper schools, primary healthcare centres, qualified doctors and other amenities was common, especially in rural India). The results were high rates of infant mortality, miscarriage, reproductive

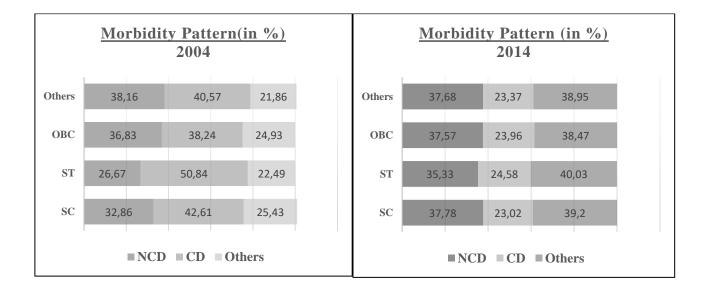


tract disorder, multiple pregnancies, anaemia, tuberculosis, mental depression and even chronic conditions like diabetes and hypertension.

The Dual Burden of Disease

Evidence of mortality, nutritional status, and morbidity from several all-India-level data sets, gathered by various government agencies at various times, makes it abundantly evident that the nation's socio-economic disparities are reflected in the state of health. The study here tried to reflect on the morbidity pattern using data on inpatient hospitalization due to various diseases in the period considered. Figure 1 depicts India's epidemiological transition, where the incidence of non-communicable diseases (NCDs) is seen to be rising across all groups, including the most marginalized.

Figure 1. Percentage variation in disease-specific hospitalization across social groups in India in 2004 and 2014





Examining the main NCDs (cancer, heart disease, neurological and psychological conditions) minutely revealed that the percentage of NCD-related hospitalizations was high for all the diseases and was rising over the decade (Table 2).

Crucially, the SC and OBC communities had been severely impacted by NCDs (what was formerly thought to be a disease of the wealthy). The finding is important, as chronic diseases necessitate costly, long-term care, which places a significant financial strain on low-income households, which is a matter of serious concern and will be discussed later in the study.

Table 2. Major NCDs categorized by social group (in %)

Social Group	Cancer		CVD		Hypertension		Neuro Disorder		Psycho Disorder	
	60th	71st	60th	71st	60th	71st	60th	71st	60th	71st
ST										
SC	7.69	13.74	2.89	12.94	3.03	13.98	3.03	13.98	7.12	12.58
0.70	17.58	18.41	11.46	16.21	15.7	18.5	15.7	18.5	16.48	20.75
OBC										
	25.27	34.86	33.99	38.19	33.59	35.32	33.59	35.32	35.96	34

Note: The table includes the percentage of hospitalization as inpatients due to the relevant NCDs and is based on data as available in NSSO, 2004, Report No. 507; NSSO, 2014, Report No. 574.



The increasing prevalence of non-communicable diseases (NCD) among marginalized groups was attributed to factors such as inadequate nutrition, occupational hazards, and genetic factors from endogamous marriages. It has been found that the tradition of marriages within the community for the marginalized groups (often close relatives) promotes consanguinity and increases the prevalence of specific autosomal recessive diseases such as diabetes, hypertension, ischaemic heart disease, mental impairments, mental illness, spinocerebellar ataxia, thalassaemia, and sickle-cell diseases. Also, men from a backward community were most likely to work as labourers in the field (in rural areas) or as construction workers (in the urban areas), lived in unhygienic conditions, ate lots of raw meat (mostly those portions not eaten by the upper castes), had alcohol addictions and chewed tobacco frequently. These habits made them vulnerable to many NCDs, and matters worsened the longer they lived and the traits got passed on to the next generation.

Healthcare Utilization and Barriers to Access

The study examined healthcare utilization to assess the accessibility of institutional care for different social groups, focusing on hospitalization rates in the last 365 days and the reasons for forgoing medical services.

The findings revealed stark disparities in healthcare access. Hospitalization rates for the Scheduled Tribe (ST) group were 12%, significantly lower than the rates for the Other Backward Classes (OBC) at 31.47% and for upper-caste groups, which exceeded 50%. The majority of the underprivileged population mentioned financial constraints, geographic inaccessibility, and subpar service quality as reasons for not using government facilities or medical advice. The data suggested that substantial structural and financial obstacles kept underprivileged communities from receiving the institutional care they required.



Access to modern medical care was further impeded by a combination of factors, including lower literacy levels, prevailing cultural norms, and religious beliefs. Moreover, reported reluctance and discriminatory attitudes from medical personnel emerged as a significant deterrent, preventing individuals from seeking institutional medical care. The findings indicate that historical patterns of social exclusion remained powerful even in the early 21st century.

The Financial Catastrophe of Healthcare

The extent of affordability of institutional healthcare in our study revealed that the proportion of the population who could spend in the range of INR 200,000 to INR 500,000 annually for hospitalization was negligible. The reimbursement received for these expenditures was significantly lower and often amounted to nothing.

In India public investment in health was minimum in the period considered here and only 5% of the population had any insurance coverage or third-party backup. As a result, the majority of health care expenditures (more than 50.6%) were out-of-pocket payments and roughly 18% of households faced catastrophic health costs. Even later, in the period 2011-12, health spending alone impoverished about 63 million people in India (GOI, 2014).

The study indicated that more than 70% of households in all groups relied on household savings as the main source of financing medical expenses, with borrowings contributing 16% - 17% of the funding and a nominal contribution from the sale of assets. The low initial endowments and the near-total absence of effective risk-pooling mechanisms for the marginalized population made this evident. The outcome indicated a significantly elevated level of Out-of-Pocket Expenditure (OOPE) that led to further impoverishment among the already vulnerable social groups. The share of NCDs in OOPE incurred by households increased over time, from 31.6 percent in 1995-96 to 47.3 percent in 2004 (Mahal et al. 2010).



The impact of hospitalization and morbidity on both the individual and their family has been of significant concern. The reduction in household income resulting from inpatient hospitalization quantified the burden. Our data indicated that the revenue loss linked to non-communicable diseases (NCDs) was often twice that associated with communicable diseases (CDs), attributable to prolonged hospital stays and increased costs. Figure 2 illustrates that a significant proportion of marginalized households experienced income losses exceeding INR 10,000, which can be detrimental for families near or below the poverty line.

Loss of Household Income due to NCDs (in %) 60 50 40 H-UC 30 · · H-SC 20 - H-ST • H-OBC 10 No loss More More More More More More than 500 than 1000 than 5000 than than than 10000 20000 50000

Figure 2. Loss of household income due to NCD-related hospitalization across social groups

Note: The poverty line in India in 2004-5 was INR 446.68/capita/month in rural areas and INR 578.80/capita/month in urban areas. The calculations are based on NSSO, 2004, Report No. 507.



For SC, ST, and OBC categories, the proportion of the population that experienced an income loss of over INR 10,000 was higher compared to that of the upper castes. This demonstrates that the socially disadvantaged not only experienced higher rates of illness but also incurred higher expenses in relation to their income, thereby exacerbating their poverty.

Non-communicable diseases (NCDs) are inherently chronic and frequently exhibit a pattern of recurrence, leading to multiple hospitalizations. This can significantly undermine the financial stability of households, potentially resulting in impoverishment. Over the past decade, the treatment costs for non-communicable diseases (NCDs) have risen fivefold in rural areas and nearly tripled in urban locations. While rural households were more vulnerable to catastrophic health expenditures, urban households were more likely to experience destitution as a result of out-of-pocket medical expenses (Yadav et al. 2021). Under such circumstances, the results that we have shown are not surprising.

Discussion

Our interest in the topic stemmed from the fact that, apart from genetic or biological links, it is the social and economic exclusion that fosters inequality in health status, healthcare-seeking behaviour and healthcare financing across social groups. Marginality becomes synonymous with discrimination and oppression in the context. There were some intriguing insights from the study undertaken on disease prevalence and consequent hospitalization for the socioeconomically marginal groups in India for the decade considered (2004 to 2014).

Firstly, marginalized communities faced a dual disease burden, being afflicted by both communicable and a rising incidence of non-communicable diseases, the latter impoverishing in its effects. Apart from genetic disposition, discrimination on ethnoreligious grounds seemed to be acting strongly in such cases.



Secondly, significant barriers related to cost, distance, and quality of care limited the marginal's access to institutional health services. The case was particularly grim for the ST group. The tribes in India have specific health problems and genetic abnormalities and are affected by ignorance, illogical religious beliefs, poor living environments and lack of proper health education. The vulnerability was more because of ineffective coverage of nutritional and health services for the tribes in India. Also, the low hospitalization rates, particularly for the Scheduled Tribes, should not be misinterpreted as better health. Instead, they likely reflected severe barriers to healthcare in India. The health and economic disparities documented here reflect the jeopardized state of two major sustainable development goals: 'good health and well-being' and 'no poverty'.

Thirdly, the overwhelming reliance on out-of-pocket payments for healthcare led to catastrophic financial consequences and significant loss of household income, particularly for the marginalized groups. It corroborated the fact that ill health deteriorates the quality of life of the patients both economically and socially. It led to a significant loss of productivity and income. Again, loss in income led to a consequent loss in investments in human capital, especially education for the children, which in turn reduced future incomeearning possibilities. The poor family thus got caught in a vicious cycle of morbidity and impoverishment.

Conclusion

It is estimated that catastrophic health expenditure impoverished 3.3% of Indians every year (Swetha et al. 2020). India fared worst among countries where OOP contributes to the highest degrees of impoverishment (Peters et al. 2002; Sriram et al. 2022). This tendency is growing and is now being estimated to be one of the major contributors to poverty.

Empowering the weak is the key to solving any socioeconomic issue, and this is precisely what Indian experts and policymakers have attempted to do. The Indian



government has introduced policies and initiatives to improve health, education, employment, and living conditions in the decade post the review period mentioned in the paper. The paper attempted to provide a benchmark for evaluating the effectiveness of these health and insurance programs.

There has been an increase in government health expenditure (from 1.13% in 2014-15 to 1.9% in 2023-24) and social security expenditure on healthcare including government-funded health insurance and social health programs (8.7% of total health expenditure in 2014-15 to 9.3% in 2020-21), contributing to a decline in OOPE in India (NHA 2021-22). Government investment in public health infrastructure, training of healthcare workers and development of healthcare facilities in rural and backward regions of India have been witnessed, thereby improving the availability and accessibility of quality healthcare to all.

Guided by the National Health Policy 2017, the Indian government had implemented numerous programs to achieve 'Universal Health Coverage' and prevent poverty caused by healthcare costs. The central program is *Ayushman Bharat*, which has two parts: *Health and Wellness Centres* (HWCs) for primary care and the *Pradhan Mantri Jan Arogya Yojana* (PM-JAY) for financial protection. In addition, several other state-aided insurance schemes, such as the *Pradhan Mantri Suraksha Bima Yojana* and *Jeevan Jyothi Bima Yojana*, were launched to provide financial security to vulnerable populations. The roles of Microfinance Institutions (MFIs), Self-Help Groups (SHGs), and Non-Government Organizations (NGOs) have also been profound. The programs have been effective in reducing the severity of illnesses, improving health outcomes and lowering the overall burden on the healthcare system in India. The government response to the COVID-19 pandemic has also been instrumental in developing a long-term health strategy for India.

The present study has a limited scope. Future research employing more recent data is necessary to formulate effective, evidence-based solutions for targeted healthcare delivery.



Governmental efforts can then only become instrumental in lowering out-of-pocket costs, enhancing healthcare utilization, and reducing financial impoverishment. The procedure is intricate and demands consistent and rigorous efforts from all ends. The gestation period is long, but the wait is worth it for establishing an egalitarian healthcare system for all.



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