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Disparities in the Health and Well-being of Scheduled Tribes and Non-Scheduled Tribes Populations in India

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Abstract

This paper examines the persistent disparities between the Scheduled Tribes (STs) of India and the rest of the population in health and well-being. Despite worldwide progress in healthcare and social development, ST communities struggle with persistent challenges hindering their overall welfare. Through desk research and a systematic literature review of tribal health disparities in India, this study discusses the various aspects that lead to these disparities and provides a comprehensive set of policy recommendations. It becomes clear that closing these gaps in health and well-being requires an integrated strategy that includes poverty alleviation, improved educational access, strengthened infrastructure for health care, and the preservation of tribal cultural heritage. Taking insights from several sources, this article emphasises the urgency of the matter. It highlights the need for concerted efforts to achieve equitable health outcomes for ST communities, not only in India but also in similar contexts worldwide.

Keywords: Desk Research, Scheduled Tribes, Health Disparities, Well-Being, India

Introduction

In India, the indigenous communities known as Adivasi or Scheduled Tribes (STs) find themselves trapped in chronic poverty and marginalisation. Within these groups, a general feeling of hopelessness exists, and there is a limited capacity to aspire to improved conditions, leading to a disconnect between their health perceptions and actual healthcare needs (Kumar et al., 2020). Like indigenous peoples across the globe, India's Scheduled Tribes have little opportunity to express opinions based on their distinct cultural world views.

National-level data consistently reveals that Scheduled Tribes suffer from higher mortality rates compared to non-scheduled Tribes, even when accounting for differences in living standards (Seshadri et al., 2020; Haddad et al., 2012). Epidemiological research confirms the increased health risks faced by the ST populations, with findings indicating a higher prevalence of smoking and alcohol consumption and increased morbidity rates (Raushan and Acharya, 2018; Meher, 2007).

Despite over five decades of affirmative action and government initiatives aimed at reducing disparities, substantial gaps persist in the health and overall well-being of Scheduled Tribes compared to the rest of the population.

These disparities encompass various aspects of life, including access to healthcare, education, employment opportunities, and living conditions (Subramanian et al., 2006). This multifaceted challenge continues to demand focused attention and targeted interventions. In light of these challenges, this study aims to examine the persistent disparities in health and well-being between India's Scheduled Tribes (STs) and the rest of the population. The next section discusses the Methodology; Section 3 presents the discussion of the findings of the various studies; Section 4 deals with the policy recommendations and conclusion of the study.

Methodology

This study is based on Desk research. Desk research is the term for research conducted using secondary sources of data. The Annual Reports of the National Family Health Survey, National Sample Survey Office, Annual Reports of the Ministry of Tribal Welfare; Government of India, and Census of India, etc. were used in the study as secondary sources of data. This study also used articles that have been published in various online databases utilising search engines including Google Scholar, PubMed, and JSTOR. The literature was searched using the following keywords: Tribal health, Tribal health disparity, Tribal communities, Tribal and Non-tribal health, etc. After collecting all this information, the study used a careful and scientific approach to analyze it. The main goal in all of this was to learn more about tribal health disparities and the things connected to them.

Discussion of the Findings of the Various Studies Socio-economic Disparities

In India, tribal communities face a variety of socioeconomic challenges, Characterised by widespread poverty and limited access to higher education. These conditions present significant obstacles to obtaining healthcare services and catalyse the persistence of health disparities. These tribal people frequently struggle with the most basic needs, and, consequently, may prioritise their

basic needs over seeking medical care and treatment. Consequently, a substantial portion of tribal individuals and families face challenges in reaching healthcare facilities on time and maintaining health disparities. There exists a significant deficit in awareness regarding preventive healthcare measures among these tribal populations, compounding their vulnerability to preventable illnesses (Roy et al., 2023).

It is extremely difficult to deliver fair healthcare to tribal groups in this complex environment, which has been influenced by socioeconomic problems and a lack of healthcare resources. Effectively addressing these healthcare concerns necessitates a comprehensive approach that encompasses efforts to alleviate poverty and expand access to education, especially when it comes to preventive health (Islary, 2014).

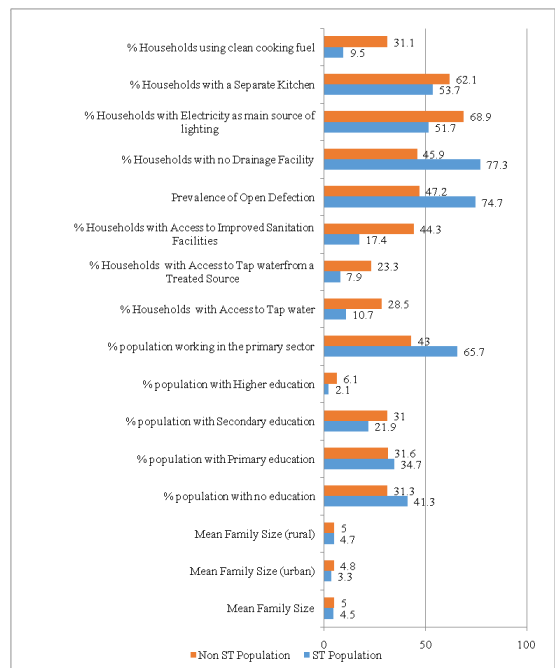


Figure 1 Socio-Economic Status of Scheduled Tribes Population and Others

Source: Tribal health report, MoTA, 2018



Table 1 Sex Ratio and % of people below the poverty line (ST and All India)

Indicator	ST Population	All India
Child sex ratio	957	914
% of people living below the poverty line (rural)- Tendulkar method	47.4	33.8
% of people living below the poverty line (urban)- Tendulkar method	30.4	20.9
Sex Ratio		
ST Population	Non-ST Population	
990	938	

Source: Tribal health report, MoTA, 2018

Availability of Amenities for Tribal Households

Access to basic amenities and services remains a significant challenge for tribal households in India. Only about 52% of these families utilise electricity as their main source of lighting. This usage of electricity varies considerably across states, with as low as 12% in Bihar and 16% in Odisha, in extreme contrast to nearly 95% in Himachal Pradesh and 94% in Goa (MoHFW & MoTA, 2018). In rural areas, nearly one percent of Scheduled Tribe (ST) households lack any source of lighting and more than 57% of ST households lack ownership of either landline or mobile phones, highlighting the digital divide within these communities. Census data from 2011 highlights the substantial disparities in access to essential resources among tribal populations. Tribal communities have noticeably less access to clean cooking fuels, sanitary facilities, drainage systems, and tap water. For instance, just 10.7% of tribal inhabitants have access to tap water, compared to 28.5% of non-ST groups of the population (Figure 1).

The availability of tap water exhibits significant regional differences, with states like Odisha having as low as 2%, while Goa follows 54%, and Sikkim follows closely at 49%. There is a substantial rural-urban gap in accessing improved sanitation facilities, with only 10% of rural ST households having such access, in contrast to 61% of urban households. In India, 74.7% of tribal people still defecate outside, with states like Jharkhand,

Rajasthan, and Odisha reporting more than 90% engagement in this practice (MoHFW & MoTA, 2018).

In comparison to non-tribal households, 77.3% of tribal households lack adequate drainage systems (Figure 1). Southern and Western regions of India tend to fare somewhat better in this regard. The use of clean cooking fuels shows a significant disparity, with non-STs using them more than three times as often as STs. States like Odisha, Rajasthan, Chhattisgarh, Madhya Pradesh, Jharkhand, Gujarat, and Meghalaya are particularly notable for this difference. According to Census 2011 data, about 90% of Indian tribal families use polluting fuels for indoor cooking, highlighting the urgent need for these groups to have better access to clean energy sources and necessities.

Poverty and Health Challenges

The Commission on Macro-Economics and Health, established by the World Health Organisation (WHO) in 2000, made a compelling case for the complex relationship between poverty and health. It emphasised how individuals living in poverty bear a disproportionate burden of preventable deaths and suffering. Poverty renders people more vulnerable to diseases due to factors such as malnutrition, inadequate sanitation, and limited access to clean water. Poor people frequently may not have timely access to necessary medical care, compounding their health challenges (Divakar et al., 2012; Jain et al., 2015). The consequences of severe illness can be long-lasting, pushing families into further poverty as they struggle with income loss and the need to sell assets to cover treatment costs and debts. Moreover, illness disrupts children's education, reducing their prospects for a productive future (Sarkar and Singha, 2019). According to estimates made by the former Planning Commission, the proportion of Scheduled Tribes (ST) living in rural regions below the poverty line declined from 47.4% in 2009–10 to 45.3% in 2011–12. It decreased from 30.4% in urban areas in 2009–2010 to 24.1% in 2011–2012. However, the total poverty rate among the ST people in India remained significantly higher, at 40.6% in contrast to 20.5% among the non-tribal population.

A recent World Bank paper, based on calculations using the Indian Human Development Survey (IHDS) data from 2005 and 2012, revealed that the Scheduled Tribes in India are more prone to chronic poverty compared to other social groups (Thorat et al., 2017). This means that they tend to remain in poverty for more extended periods. The study found that considering someone was poor in 2005, an Adivasi (tribal) person was 25% less likely and a Dalit (another marginalized group) was 8% less likely to escape poverty by 2012 than someone from the Other Backward Classes (OBC), a group with a somewhat lower probability of escaping poverty. When considering someone who was non-poor in 2005, an Adivasi and a Dalit were 12% and 5% more likely to fall into poverty by 2012, respectively, than a Muslim, a group with a somewhat higher probability of falling into poverty. These findings persisted even after accounting for factors such as education, household size and composition, and urban or rural residence in 2005. Ultimately, the study concluded that the chronic poverty experienced by Adivasis is largely attributed to their disadvantaged geographical locations.

Scheduled Tribe Population and Health Disparities

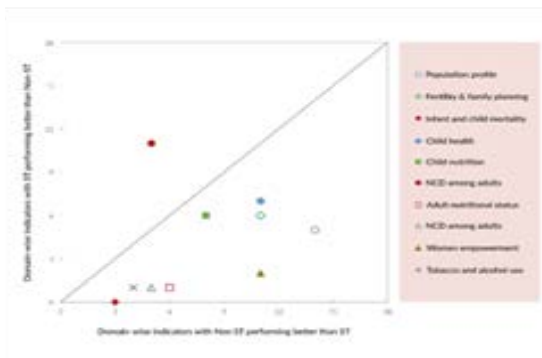


Figure 2 Relative performance of ST and Non-ST across domain indicators, NFHS 2019-21
Source: Subramanian and Joe (2023)

The scatterplot analysis examines the comparison of indicators across different domains, highlighting whether the Scheduled Tribes (ST) population performs better or worse than non-STs. Indicators of

Non-Communicable Diseases (NCDs) in adults are the only exception, it is evident that the Scheduled Tribes consistently face disadvantages in all other domains. This emphasises the need for focused policy efforts in domains where they are more vulnerable.

The death rate for children under the age of five among STs, which is 50 per 1000 live births, continues to be extremely high. A major issue is the prevalence of child under nutrition, which affects more than 40% of ST children under the age of five and results in stunted growth and underweight status for a comparable percentage. For the ST population, new difficulties are emerging. According to Subramanian and Joe in 2023, there was a significant growth in the proportion of ST men and women with high blood pressure between 2016 and 2021, rising by 7.5 and 8.9 percentage points, respectively. These evolving health trends highlight the importance of addressing the specific health disparities faced by the Scheduled Tribes through preventive policy measures.

Health Indicators Life Expectancy

To assess life expectancy and the infant mortality rate (IMR) for both the Scheduled Tribe (ST) and non-ST populations in India, the Indian Institute of Population Sciences (IIPS) carried out an analysis utilising data from the 2011 national census (Kalkonde et al. 2023). According to these estimates, which were published in *The Lancet* in 2016, the ST population in India has a life expectancy at birth of 63.9 years, compared to a life expectancy of 67 years for the general population and this life expectancy estimate for tribal people may be somewhat exaggerated due to certain factors. Child deaths are often underreported among tribal communities, more so than in the general population. Many elderly tribal members don't know their exact age or date of birth, so it may be a guess when their age is recorded in the Census. This could lead to an overestimation of their age and, as a result, of the life expectancy of tribal members.

Tribal Communities and Maternal Health

Maternal health among tribal women in India faces significant challenges, including high maternal mortality rates. Limited recent data on maternal

mortality among tribal women is available, but factors contributing to this issue include early marriages, early childbirth, low BMI, and a high prevalence of anemia. According to NFHS 3, tribal teenage girls had the highest rate of childbearing among all social groups, with more than 30% initiating childbirth. Almost 50% of adolescent tribal girls aged 15 to 19 were underweight or had a BMI below 18.5, a higher proportion than in other populations. Anemia, combined with obstetric hemorrhage, accounts for a substantial portion of maternal deaths, with 65% of tribal women suffering from anemia compared to 46.9% of non-tribal women. Access to adequate antenatal care (ANC) and safe delivery services is crucial to address these challenges (Nagda, 2004). However, full ANC coverage remains poor among tribal women, with only 15% receiving complete ANC. Tribal women are less likely to seek private healthcare facilities for ANC, with the majority receiving care at Anganwadi centers or government facilities. Institutional delivery rates have improved, possibly due to the Janani Suraksha Yojana (JSY) program, but concerns exist about its effectiveness and equitable distribution of benefits.

Barriers to institutional delivery include the cost, transportation issues, and long distances to health centers. Many tribal women still deliver at home, often due to the unfriendly attitudes of health workers, communication gaps, and cultural differences in perceptions of health and childbirth. Despite increased institutional deliveries, postnatal care (PNC) coverage remains inadequate, with only 37% of tribal women receiving PNC within 48 hours of delivery. A significant proportion of women do not receive home visits from healthcare workers after giving birth. Assessing the quality of maternal healthcare in tribal areas is challenging due to the lack of documented process indicators and outcomes. Incidents of poor-quality care have been reported in tribal regions, suggesting that maternal mortality and outcomes may be worse than reported. Tribal women in India face multiple challenges related to maternal health, including early pregnancies, anemia, limited access to healthcare, and cultural barriers (Sogarwal and Dwivedi, 2008). Improving maternal health outcomes in these communities requires addressing these issues comprehensively and ensuring the

delivery of quality healthcare services adapted to their particular requirements.

Child Health

The child health indicators of scheduled tribes are poor and worse than those of the general population.

Table 2 Comparison of IMR in ST and Others

	IMR in ST	IMR in Others	% Excess IMR STs
NFHS-1 (1998)**	82.2	90.5	10%
NFHS-2 (1994)**	61.8	84.2	36%
NFHS-3 (2004)**	48.9	62.1	27%
NFHS-4 (2014)**	32.1	44.4	38%

Source: Tribal health report, MoTA, 2018

Note: Others compare the population excluding STs, SCs, OBCs

**The IMR estimated by NFHS pertains to the midpoint of the period of inquiry of Birth histories.

Table 2 provides an insightful comparison of the Infant Mortality Rate (IMR) within the Scheduled Tribe (ST) population in India when contrasted with the others category, which includes individuals other than ST, Scheduled Castes (SC), and Other Backward Classes (OBCs). Using others as the reference group, the data reveals a tragic reality. In 2014, the IMR among the ST population was 38% higher than that of the others. This significant disparity reflects the current health divide between tribal communities and more advantaged social groups. It offers a glimpse into the evolving trend of this disparity across four rounds of the National Family Health Surveys (NFHS). It is noteworthy that in 1988, the gap in IMR between the ST population and the others was just 10%. However, over the years, this gap has widened substantially, reaching 38% in 2014.

There has been a nearly 50% reduction in the absolute IMR levels within the tribal population throughout a quarter-century, the gap in health outcomes between tribal communities and more privileged social groups has significantly expanded,

evolving from a 10% difference to a substantial 38% disparity. This underscores the persistent challenges and disparities in healthcare access and outcomes faced by tribal populations in India (Narain, 2019).

Disease Condition of the Scheduled Tribe Population in Comparison to Others

An examination of the National Sample Survey Office (NSSO) 2014 data, conducted by the Public Health Foundation of India, brings to light a notable finding. It shows that when it comes to reported health issues such as fever, tuberculosis, vector-borne diseases, blood disorders, and respiratory ailments, the highest proportions are observed among the Scheduled Tribes (STs) in comparison to other demographic groups. This underscores the greater prevalence of these health challenges within the ST communities, highlighting the urgent need for targeted healthcare interventions and support in addressing these specific health concerns (Kaur et al., 2013).

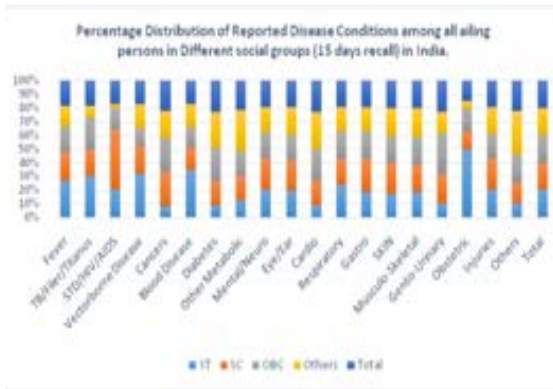


Figure 3 Percentage Distribution of Reported Disease Conditions among all ailing persons in Different social groups (15 days recall) in India
Source: NSSO, 2014

These findings are further represented here in two diagrams Fig 4 and 5. The Fig 4, shows the proportional distribution of reported illness groups.

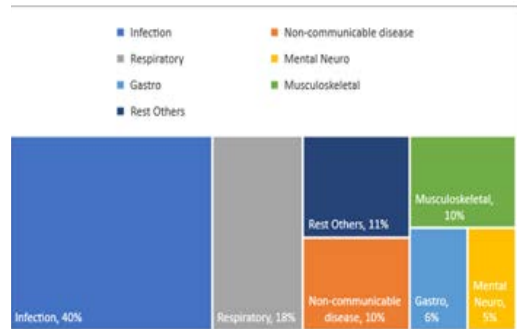


Figure 4 Proportion of different illness groups in the ST population
Source: Tribal Health Report, MoTA, 2018

Fig 5 shows the comparison of the different types of illness groups in ST versus the total population.

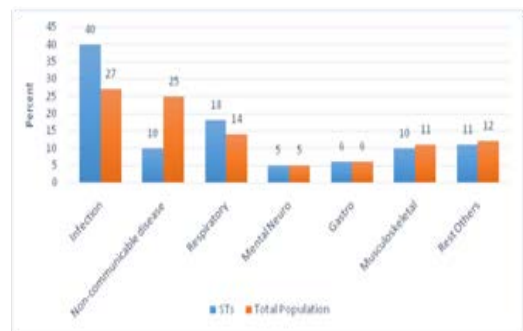


Figure 5 Comparison of reported illness groups in ST vs Total population
Source: Tribal Health Report, MoTA, 2018

The NSSO data clearly show that a) while the infections still constitute the larger proportion, (40%), b) the reported proportion of noncommunicable diseases like Cancer, Diabetes, and Cardiac ailments though lower among the tribal population (10%) in comparison to the other population groups (25%), it is sizable and needs attention. c) A substantial percentage of respiratory (18%), mental/neurological (5%), and musculoskeletal (10%) disorders are reported by tribal members. The obstetric ailments were three times the national average.

Migrant Tribal People and Health

The rapid deforestation, along with strict forest regulations limiting access to forest resources, has

severely impacted several tribal communities. These communities have been deprived of necessities like food, fodder, shelter, and sources of livelihood. The migration and displacement of tribal populations, caused by several factors such as loss of livelihoods, natural calamities like floods and famines, and extensive infrastructure and mining projects, have profound implications for their well-being.

This situation profoundly impacts the security, safety, and both the mental and physical health of tribal individuals. It limits their access to important facilities like the Integrated Child Development Services (ICDS) and educational institutions. What makes matters worse for these tribal migrants is their dual vulnerability, as they are often excluded from the specialized schemes and programs designed for Scheduled Tribes (STs) in designated areas. A study on poverty and healthcare access in Hyderabad, conducted by the National Institute of Nutrition between 2011 and 2014, brought to light a significant finding, 21.7% of the migrants belonged to the ST community. The data also revealed that, regardless of their background, nearly half of the migrants sought medical treatment from private physicians (50%), followed by unlicensed local healthcare providers (28.7%), private nursing homes (11%), and government hospitals (8.7%).

This preference for private healthcare providers was largely attributed to the reported difficulties faced by more than half of the respondents when attempting to access treatment from government hospitals during their previous illnesses. These challenges underscore the critical need for improved public healthcare services and accessibility for marginalized migrant populations, especially those who come from tribal communities.

Conclusion and Policy Recommendations

The persistent disparities in health and well-being between Scheduled Tribes (STs) and the rest of the population in India are deeply concerning and require urgent attention. These differences in health are primarily caused by socioeconomic disparities. Poverty, limited education, and constrained access to basic amenities force tribal communities to prioritise basic needs over essential medical care, resulting in delayed interventions and

worsened health challenges. Moreover, the tribal population lacks awareness of preventive healthcare measures, making them vulnerable to preventable illnesses. Tribal households face difficulties in accessing basic amenities such as electricity, tap water, sanitation facilities, and clean cooking fuels. Poverty, coupled with these deficiencies, increases their vulnerability to diseases. Despite some poverty reduction progress among STs, their poverty rate remains significantly higher than that of the non-tribal population. Health disparities among tribal people in India are evident in life expectancy, maternal health, and child health indicators. Life expectancy among STs is lower than that of the general population, which may be exaggerated because child mortality is not properly reported. Further, uncertain age reporting among elderly tribal individuals is prevalent. Maternal health challenges include high maternal mortality rates, early pregnancies, anemia, and limited access to quality healthcare services. Child health indicators, including the Infant Mortality Rate (IMR), remain poor among STs, with a widening gap compared to other social groups over the years.

Addressing these disparities, the government must invest in building healthcare facilities and ensure healthcare workers are accessible in tribal regions. Mobile health units and telemedicine services can bridge the gap. Special attention should be given to improving maternal and child health by increasing awareness, providing nutrition support, and expanding maternal care programs in tribal areas. Education programs that are adapted to the needs of STs should be implemented. This includes building schools in tribal areas, recruiting teachers from these communities, and offering scholarships. Efforts to protect tribal lands and cultural heritage should be intensified. Involving ST communities in conservation efforts can help to establish a balance between development and preservation. Development projects in tribal areas should prioritise sustainability and consider the ecological impact. Communities should be actively involved in decision-making regarding resource utilisation.

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