

Health Status, Healthcare Barriers, and Policy Interventions for Tribal Women in India: A Comprehensive Review

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Abstract: *The health status of tribal populations in India presents a complex challenge shaped by various factors. Tribal women, in particular, experience significant health disparities, highlighting the need for a deeper understanding of their healthcare needs and challenges. This comprehensive review synthesizes findings from peer-reviewed articles, government reports, and scholarly studies published between 2005 and 2024. It examines their health status, healthcare access, and key barriers affecting health outcomes. This review highlights the complex barriers shaping the health status of tribal women in India, including Geographic Barriers, Socio-Cultural Barriers, Health System Gaps, Financial and Educational Barriers, and Implementation Challenges. Despite government initiatives, significant gaps in healthcare access persist, limiting the effectiveness of modern interventions. Findings indicate that inadequate healthcare infrastructure, economic constraints, and reliance on traditional healers hinder access to modern medical services. Despite government initiatives such as the ASHA program, service delivery gaps persist due to systemic inefficiencies and a lack of awareness. Addressing these challenges requires culturally sensitive interventions, improved healthcare infrastructure, and the integration of traditional and modern medical practices. Strengthening community-based healthcare, enhancing health literacy, and fostering trust in formal healthcare systems are essential for improving health outcomes among tribal women. This review underscores the urgent need for inclusive policies and targeted programs to bridge healthcare disparities in tribal communities, ensuring equitable access to quality healthcare services.*

Keywords: Tribal Women, Health Status, Healthcare Access, Healthcare Barriers, Policy Interventions.

1. Introduction

The health status of tribal populations in India presents a complex and multifaceted challenge, characterized by a unique set of determinants that significantly impact their overall well-being (Malyadri, 2020). Despite India having the world's second-largest tribal population, these communities often face significant disadvantages and social backwardness, hindering their progress in vital areas such as health, education, employment, and empowerment (Velusamy, 2021). Tribal communities, recognized as the original inhabitants of India, constitute a substantial portion of the nation's population and contribute significantly to its cultural diversity (Dash et al., 2019). India is home to a diverse tribal population, comprising 8.6% of the total population, with over 104 million individuals belonging to Scheduled Tribes (Census of India, 2011). Tribal communities, particularly women, face significant health disparities, as they are often located in remote and inaccessible regions (Chandana & Kumar, 2020). Despite various government initiatives aimed at improving healthcare access, the health status of tribal women remains poor (Jain et al., 2015; Panda & Subudhi, 2020). The scope of this review focuses on assessing the health status of tribal women in India, including the prevalence of communicable and non-communicable diseases, maternal and child health issues, and nutritional deficiencies. It also examines the barriers to healthcare access, such as socio-economic, cultural, and geographical factors, and evaluates the effectiveness of government healthcare initiatives and traditional healing practices. Despite extensive research on tribal health, significant gaps remain in understanding the unique challenges faced by tribal women. Existing studies often lack a comprehensive analysis of the interplay between socio-cultural practices, healthcare access, and health

outcomes. Additionally, there is limited evidence on the effectiveness of culturally sensitive interventions in improving healthcare access for tribal women. The purpose of this review is to provide a comprehensive overview of the health status and healthcare access among tribal women in India. It aims to synthesize findings from recent studies, identify research gaps, and propose recommendations for improving healthcare access and outcomes for this vulnerable population. This article is structured as follows: First, it reviews the health status of tribal women, including chronic illnesses, maternal and child health, and nutritional deficiencies. Next, it examines the barriers to healthcare access, such as geographical, cultural, and socio-economic factors. The article then evaluates the effectiveness of government healthcare initiatives and traditional healing practices. Finally, it concludes with recommendations for addressing the challenges faced by tribal women and improving their health outcomes.

Objectives

- 1) To evaluate the health status of tribal women in India, focusing on the prevalence of communicable and non-communicable diseases, maternal and child health issues, and nutritional deficiencies.
- 2) To evaluate the effectiveness of government healthcare initiatives and traditional healing practices in improving health outcomes among tribal women, while identifying the key barriers to their implementation and access.
- 3) To propose policy recommendations and strategies for improving healthcare access, service delivery, and overall health outcomes among tribal women in India.

2. Methodology

This comprehensive review synthesizes findings from peer-reviewed articles, government reports, and scholarly studies published between 2005 and 2024. Data were sourced from PubMed, Google Scholar, and ResearchGate using keywords such as "tribal women health," "healthcare access," and "India." The review focused on three key areas: (1) health status, including chronic illnesses, maternal and child health, and nutritional deficiencies; (2) barriers to healthcare access, including socio-economic, cultural, and geographical factors; and (3) government initiatives addressing healthcare challenges. A thematic analysis was conducted to categorize findings, ensuring relevance to tribal women in India. Only studies with credible data were included to provide a holistic understanding of healthcare challenges and potential interventions for this vulnerable population.

3. Review of Studies and Findings

Health Status of Tribal Women in India

The health status of tribal women in India is marked by a high burden of communicable and non-communicable diseases, maternal and child health challenges, and widespread nutritional deficiencies. Studies indicate that while chronic illnesses are underreported due to limited healthcare access, general health issues remain prevalent (Chandana & Kumar, 2020). A study in Bhadradi Kothagudem district, Telangana, found that 75.8% of tribal women had not been diagnosed with chronic illnesses, while 35% reported general health concerns. However, the low prevalence of diagnosed chronic diseases among older women may be attributed to underdiagnosis rather than better health outcomes. Maternal and child health remains a significant concern. In Bhadradi Kothagudem, 71.6% of married tribal women had vaginal deliveries, and 70.8% underwent tubectomy for contraception (Chandana & Kumar, 2020). Despite these figures, high maternal and infant mortality rates, malnutrition, and low immunization coverage persist, reflecting inadequate healthcare infrastructure and socio-economic challenges (Jain et al., 2015; Panda & Subudhi, 2020). Nutritional deficiencies are widespread among tribal women, contributing to chronic energy deficiency (CED) and undernourishment. Research indicates that 51% of adult tribal women suffer from CED, and 45% of adolescent boys and 21% of girls are undernourished (Laxmaiah et al., 2007). Micronutrient deficiencies, particularly vitamin A and iron deficiencies, further exacerbate health issues (Balgir, 2006). The prevalence of non-communicable diseases (NCDs) is rising among tribal populations. A study in South India found that 36.5% of tribal adults had hypertension, and 7.4% had diabetes, with two-thirds of these cases being newly diagnosed (Shriraam et al., 2021). Another study reported a 16.7% prevalence of hypertension and 3.8% prevalence of diabetes among tribal adults, with a majority of cases newly detected (Sathiyarayanan et al., 2019). These findings suggest a growing NCD burden within tribal communities, necessitating increased healthcare intervention. Maternal and child health concerns among tribal populations are linked to multiple socio-cultural and economic factors. A qualitative study in Maharashtra identified harmful traditional practices, inadequate nutrition, and poor access to medical facilities as

major contributors to maternal and child health issues (Madankar et al., 2024). Malnutrition is particularly severe, with studies reporting that 83.5% of tribal children and 72.4% of mothers exhibit some degree of malnutrition (Sethuraman et al., 2006). The National Nutrition Monitoring Bureau found that tribal women's food intake is often below recommended levels, with a high prevalence of micronutrient deficiencies during pregnancy and lactation (Rao et al., 2010). Chronic energy deficiency is significantly higher among tribal non-pregnant, non-lactating women (56%) compared to their rural counterparts (Rao et al., 2010). In conclusion, tribal women in India face a dual burden of communicable and non-communicable diseases, alongside critical maternal and child health challenges and severe nutritional deficiencies. These health disparities are further exacerbated by poverty, geographical isolation, and limited healthcare access, highlighting the need for targeted interventions to improve their health outcomes.

Government Healthcare Initiatives and Their Impact on Tribal Women in India

Key Government Healthcare Initiatives for Tribal Women

National Rural Health Mission (NRHM) and Janani Suraksha Yojana (JSY): Launched in 2005, NRHM aimed to improve rural healthcare infrastructure and services, focusing on reducing maternal and infant mortality. It emphasized institutional deliveries, antenatal care (ANC), and emergency obstetric care. JSY, a component of NRHM, provides cash incentives to pregnant women to promote institutional deliveries. Studies show JSY significantly increased institutional delivery rates among tribal women, particularly in states like West Bengal, where institutional deliveries rose to 73.1% (Panja et al., 2012). **Community Health Workers and ASHAs:** Accredited Social Health Activists (ASHAs) act as community health workers bridging the gap between tribal communities and healthcare services. They play a crucial role in promoting ANC, institutional deliveries, and immunization among tribal women (Kumar, 2005). **Maternal and Child Health (MCH) Services:** NRHM initiatives focus on improving maternal and child health outcomes through 24/7 primary health centers, emergency obstetric care, and distribution of iron-folic acid tablets. These efforts are particularly beneficial for tribal women, who often face malnutrition and anemia (Kumar, 2005). **Non-Communicable Disease (NCD) Prevention Programs:** The National Programme for Prevention and Control of Non-Communicable Diseases (NP-NCD) addresses the growing burden of NCDs among tribal populations. It emphasizes health education, screening, and early intervention for conditions like hypertension and diabetes (Raina et al., 2024).

Effectiveness of Government Initiatives

Increased Institutional Deliveries: The Janani Suraksha Yojana (JSY) has been instrumental in promoting institutional deliveries. A study in West Bengal found that women receiving JSY benefits were more likely to deliver in healthcare facilities (84.0%) compared to those who did not (53.0%) (Panja et al., 2012). Similarly, in Madhya Pradesh, the institutional delivery rate among tribal women increased

significantly to 73.1% after JSY implementation (Sharma et al., 2019). According to the National Family Health Survey (NFHS), institutional deliveries among Scheduled Tribes (STs) rose from 17.7% in 2005 - 06 to 82.3% in 2019 - 21 (Ministry of Tribal Affairs, 2022). Additionally, the Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM - JANMAN) aims to improve healthcare infrastructure among Particularly Vulnerable Tribal Groups (PVTGs), further enhancing access to maternal health services (Government of India, 2023).

Improved Antenatal Care (ANC) Services: Antenatal care (ANC) service utilization in tribal areas has improved, with 94.8% of mothers in Madhya Pradesh registering for ANC services. However, only 43.4% received the recommended four or more ANC visits, indicating gaps in service delivery (Sharma et al., 2019). A study focusing on the North Eastern Region of India found that socio - demographic factors significantly influence ANC service utilization among tribal women, highlighting disparities in access and awareness (Ghosal et al., 2024). Research in Odisha also revealed that PVTGs continue to experience lower coverage of maternal, newborn, and child healthcare services, underscoring the need for tailored interventions (Pathak et al., 2010). These findings emphasize the importance of culturally sensitive approaches to enhance ANC service uptake in tribal communities.

Reduction in Maternal Mortality: Government initiatives like the National Rural Health Mission (NRHM) and JSY have contributed to a decline in maternal mortality. However, challenges persist. A study in central India highlighted delays in seeking care, transportation issues, and suboptimal healthcare services as barriers to further progress (Jat et al., 2015). Nationally, India's Maternal Mortality Ratio (MMR) declined from 384 per 100, 000 live births in 2000 to 103 in 2020 (Government of India, 2023). Although specific national - level MMR statistics for tribal populations are limited, regional studies provide insights. For instance, in Odisha, a study on PVTGs reported that 77% of mothers received at least one antenatal check - up, and 68% had institutional deliveries, contributing to improved maternal health outcomes (Ghosal et al., 2024). Despite these advancements, disparities persist, and ongoing efforts are essential to further reduce maternal mortality among tribal communities.

Addressing Non - Communicable Diseases (NCDs): Tribal women face increasing health risks from NCDs like hypertension and diabetes. Programs such as the National Programme for Prevention and Control of Non - Communicable Diseases (NP - NCD) have been implemented, but their effectiveness depends on community engagement and cultural sensitivity (Majgi et al., 2024). A study in Kerala revealed that the prevalence of NCDs among tribal communities was comparable to or higher than that of non - tribal populations, with cardiovascular diseases being notably prevalent (Haddad et al., 2012). Additionally, the prevalence of tobacco use is 44.9% among tribal men and 24% among tribal women, contributing to higher rates of NCDs (Utkal University, n. d.). Initiatives like the Non - Communicable Disease Prevention and Management program by MANT focus on promoting preventive care,

early diagnosis, and sustainable management practices to empower tribal communities toward long - term health (MANT, n. d.). Despite these efforts, disparities persist, underscoring the need for culturally sensitive interventions to effectively address NCDs among tribal women.

Evaluating Government Healthcare Initiatives and Traditional Healing Practices

Government Healthcare Programs: Government initiatives such as the National Rural Health Mission (NRHM) have improved tribal healthcare literacy, but program failures and regional disparities necessitate innovative, context - specific solutions (Swamy, 2010; Velusamy, 2021). Issues such as personnel shortages, inadequate infrastructure, and high out - of - pocket expenditures significantly hinder the effectiveness of these programs (Kumar & Kumar, 2023). ASHAs serve as a crucial link between tribal women and formal healthcare systems, disseminating information and facilitating medical access (Chandana & Kumar, 2020). However, their outreach remains inconsistent due to socio - cultural challenges.

Role of Traditional Healing Practices: Many tribal women continue to rely on traditional healers due to the inaccessibility of modern medical facilities and deeply rooted cultural beliefs (Balgir, 2011). However, government - led health interventions often take a top - down approach that disregards the role of indigenous knowledge systems, making them culturally unaccommodating (Akter et al., 2018). Overcoming these barriers requires integrating traditional healing practices with modern healthcare systems, fostering community trust, and recognizing their significance in holistic health (Contractor et al., 2018).

Healthcare Accessibility and Health Literacy: A significant proportion of tribal women are interested in accessing health - related information through public libraries, yet most public libraries (72.8%) do not offer specialized services tailored for tribal engagement (Yesmin et al., 2023). Addressing this gap through community - based health literacy programs could enhance awareness and empower tribal women in making informed healthcare decisions. To improve healthcare outcomes for tribal women, culturally competent services must be developed. This includes increasing their participation in healthcare planning, strengthening clinical governance, expanding service availability, and incorporating traditional knowledge into formal medical frameworks (Gwynne et al., 2018). Additionally, addressing social determinants such as food sovereignty and community - driven health initiatives can further bridge healthcare disparities (Debruyn et al., 2020; Donatuto et al., 2016).

Barriers to Healthcare Access for Tribal Women in India: Challenges and Policy Implications

Tribal women in India face significant barriers to healthcare access, primarily stemming from geographical, socio - economic, cultural, and systemic challenges. Geographical remoteness, poor road infrastructure, and inadequate transportation prevent timely medical intervention (Chaudhary et al., 2023). In Bhadradi Kothagudem, 80% of tribal women report transportation difficulties in reaching

healthcare facilities, emphasizing the need for better infrastructure and mobile healthcare services (Chandana & Kumar, 2020). Socio - cultural factors further restrict access, as traditional beliefs and gender norms discourage healthcare - seeking behavior. Many tribal women rely on traditional healers and magico - religious practices due to mistrust in modern healthcare systems (Bindhani & Nayak, 2021; Sonowal & Konc, 2021).

Health system gaps exacerbate these challenges. Primary Health Centers (PHCs) and Community Health Centers (CHCs) in tribal areas often lack medical infrastructure, trained personnel, and essential medicines, reducing healthcare quality (Kumar, 2005). The shortage of female healthcare providers discourages women from accessing maternal and reproductive health services. Additionally, long waiting times, negative interactions with hospital staff, and inadequate facilities deter tribal women from seeking institutional healthcare (Boro & Saikia, 2020; Kyriopoulos et al., 2014).

Financial and educational barriers also play a critical role. Poverty, unemployment, and low household incomes limit access to medical care and transportation (Boro & Saikia, 2020; Kyriopoulos et al., 2014). Limited education and low literacy levels hinder health awareness and the ability to

make informed healthcare decisions, despite financial incentives like the Janani Suraksha Yojana (JSY) (Sharma et al., 2019; Cáceres et al., 2023; Madankar et al., 2024). Cultural restrictions, such as early marriage and limited mobility, further reduce healthcare utilization (Debnath, 2016).

Implementation challenges persist despite government initiatives. Accredited Social Health Activists (ASHAs) play a crucial role in increasing health awareness and facilitating institutional deliveries. However, inadequate training, resource constraints, and operational inefficiencies limit their effectiveness (Syamala, 2004). Language barriers and cultural differences also hinder trust - building between ASHAs and tribal communities.

Addressing these multifaceted barriers requires a culturally sensitive, community - driven approach. A "bottom - up" strategy that strengthens healthcare infrastructure, expands mobile healthcare services, and promotes education and awareness about modern healthcare practices is essential (Cáceres et al., 2023). Expanding healthcare facilities in remote tribal areas and ensuring culturally competent healthcare delivery can help bridge these disparities, ultimately improving health outcomes for tribal women in India (Madankar et al., 2024).

Table 1: Thematic Analysis of Challenges and Key Barriers in Implementing Healthcare Initiatives for Tribal Women

S. No	Themes	Categorizations
	<i>Challenges</i>	<i>Key Barriers</i>
1	Geographic Barriers	1. Remote locations 2. Poor road infrastructure 3. Inadequate transportation
2	Socio - Cultural Barriers	4. Traditional beliefs discourage medical help 5. Gender norms limit healthcare - seeking behavior 6. Preference for traditional healers
3	Health System Gaps	7. Shortage of trained personnel (especially female providers) 8. Lack of essential medicines & infrastructure in PHCs/CHCs 9. Poor quality maternal & reproductive health services
4	Financial & Educational Barriers	10. Poverty limits healthcare affordability 11. Low literacy impacts health awareness 12. Difficulty understanding medical terminology
5	Implementation Challenges	13. Inadequate training & resources for ASHAs 14. Operational inefficiencies in programs 15. Cultural & language barriers affecting trust

Source: Author estimation

4. Discussion

This review finding highlights the complex barriers shaping the health status of tribal women in India, including geographic, socio - cultural, health system, financial, and implementation challenges. Despite government initiatives, significant gaps in healthcare access persist, limiting the effectiveness of modern interventions. Many tribal women still rely on traditional healing due to cultural beliefs and distrust in formal healthcare. However, ASHAs have improved healthcare - seeking behavior by raising awareness and promoting maternal care. Yet, gaps remain in service accessibility, quality, and cultural adaptability. Strengthening ASHA training, improving healthcare infrastructure, and building trust in modern healthcare are crucial for ensuring lasting health improvements. A comprehensive review of studies from 1995 to 2023

identified several barriers to healthcare utilization among tribal women, including low socio - economic status and poor health indicators compared to non - tribal populations (Abedin, 2024). Similarly, the National Family Health Survey (1998 - 99) highlighted the poor health status of tribal women, marked by high infant and child mortality rates and poor nutritional status (Singh & Negi, 2019). A narrative review further emphasized the limited access to healthcare facilities among Indian tribes and their continued reliance on traditional healing practices (Soman et al., 2023). Additionally, a systematic review stressed the need for culturally sensitive interventions to improve healthcare access and outcomes for tribal populations (Behera & Kumbhar, 2023).

Regional disparities significantly affect the health status of tribal women across India. In Odisha's Koraput district, a study among the Paraja tribes found that cultural norms and

limited healthcare access negatively impact reproductive health - seeking behaviors (Swain & Nayak, 2022). Similarly, research in Mayurbhanj, Odisha, revealed that the average age at menopause among tribal women was 43.58 years, lower than the national average, indicating potential health disparities (Satapath et al., 2018). In Maharashtra, spatial analyses highlighted significant variations in the nutritional status of tribal women, with some regions experiencing higher malnutrition rates (Center for Epidemiology & Global Health, 2020). Meanwhile, a study in Arunachal Pradesh's urban areas found that traditional beliefs and socio - economic factors heavily influence healthcare practices among tribal women (Semantics Scholar, n. d.). These findings underscore the need for region - specific and culturally appropriate health interventions to address these disparities.

Among the Baiga tribe in Madhya Pradesh, a study found low awareness and underutilization of maternal and child health (MCH) services. Women often relied on traditional practices due to cultural beliefs and a lack of access to formal healthcare (Kumar et al., 2016). In Andhra Pradesh, research highlighted the poor performance of health workers in providing MCH services. Both health workers and traditional birth attendants lacked adequate knowledge and skills, limiting the effectiveness of healthcare delivery (Syamala, 2004). In Eastern India, a study in Jharkhand and Odisha found that community mobilization through women's groups improved health behaviors, such as handwashing and birth spacing, but did not significantly reduce child undernutrition (Saxton, 2013). In Southern India, a study in Chamarajanagar, Karnataka, reported a high prevalence of hypertension and dyslipidemia among tribal women. Waist circumference was identified as a significant predictor of diabetes in this population (Majgi et al., 2024). These findings reinforce the urgent need for region - specific, culturally sensitive healthcare policies and interventions.

Government healthcare initiatives like the National Rural Health Mission (NRHM) and Janani Suraksha Yojana (JSY) have improved maternal and child health outcomes among tribal women. However, challenges such as geographic isolation, cultural barriers, and health system gaps persist. To enhance healthcare access and outcomes for tribal women, culturally responsive maternal health services should be prioritized by integrating traditional health providers into formal healthcare systems to build trust (Contractor et al., 2018). Supporting domiciliary deliveries while preserving beneficial traditional practices can improve maternal health outcomes. Comprehensive health education programs should provide evidence - based information on maternal health, nutrition, and hygiene while respecting cultural beliefs and addressing harmful traditional practices (Madankar et al., 2024).

Expanding mobile health units, telemedicine, and well - equipped centers in remote areas, alongside strengthening transportation infrastructure, can enhance accessibility (Algur et al., 2023). Nutritional support programs should be expanded to reduce maternal and child mortality, with a focus on community - based interventions (Madankar et al., 2024). Engaging tribal communities in healthcare planning

through community - based participatory approaches fosters acceptance and sustainable impact (Isaacson, 2018).

Key recommendations for improving healthcare access and outcomes for tribal women include:

- **Strengthening Healthcare Infrastructure:** Investing in healthcare facilities in tribal areas to ensure access to quality care, including emergency obstetric services.
- **Enhancing Community Engagement:** Training and empowering Accredited Social Health Activists (ASHAs) and community health workers to support tribal women effectively.
- **Addressing Cultural and Educational Barriers:** Developing culturally sensitive health education programs to promote maternal and child health services.
- **Promoting Multi - Sectoral Collaboration:** Engaging local governments, NGOs, and tribal leaders to improve healthcare implementation and accountability.

By addressing these challenges, India can achieve greater health equity for tribal women and fulfill global health commitments.

5. Conclusion

The health status of tribal women in India remains a critical concern, characterized by high maternal and infant mortality, malnutrition, and a rising burden of non - communicable diseases such as hypertension and diabetes. Limited healthcare access, socio - economic constraints, cultural beliefs, and systemic gaps in service delivery continue to impede health outcomes. Still tribal women rely on traditional healers due to mistrust in modern healthcare, while poverty and low literacy further hinder healthcare utilization. Infrastructural challenges, including long travel distances and insufficient medical facilities, exacerbate these disparities. Despite government initiatives such as the ASHA program and JSY, service delivery gaps persist, particularly in remote tribal regions. Limited awareness, high healthcare costs in private hospital, and the cultural disconnect between tribal communities and formal healthcare systems contribute to underutilization of services. Traditional healing practices remain integral but lack structured integration with modern healthcare. To improve health outcomes for tribal women, a holistic approach is necessary. Strengthening healthcare infrastructure, expanding mobile health services, and integrating traditional practices with modern healthcare can bridge existing gaps. Culturally sensitive health education programs and community - driven solutions must be prioritized to enhance trust and awareness. Equitable access to healthcare, improved nutrition programs, and sustainable, community - based health models are essential for long - term progress. Future policies should focus on inclusive healthcare systems that address tribal - specific challenges, ensuring that tribal women receive the healthcare they need while preserving their cultural identity.

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