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Health Challenges and Disparities Among Particularly Vulnerable Tribal Groups (PVTGs) in India: A Comprehensive Analysis

Mr. Jim Mmungthangha Reang[1]

[1]Research Scholar at Department of Political Science, Lovely Professional University, Punjab, India.

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1. INTRODUCTION

1.1 Definition and Significance of PVTGs

Particularly Vulnerable Tribal Groups (PVTGs) are a subset of the broader tribal population in India, classified as tribes that face extreme socio-economic challenges and are vulnerable due to a combination of isolation, underdevelopment, and cultural distinctiveness. PVTGs are a select group of tribes identified by the Government of India for targeted development and welfare interventions because of their unique vulnerabilities and the challenges they face in achieving sustainable development.

The Indian government, through its Tribal Affairs Ministry, has recognized the unique difficulties faced by these communities and has classified them as "particularly vulnerable" based on several socio-economic and health-related criteria. These tribes have been marginalized due to their geographic isolation, lack of access to education and healthcare, economic backwardness, and dependence on traditional ways of life. According to the Ministry of Tribal Affairs, the PVTG list comprises 75 tribes that are spread across various states in India. These include tribes like the Great Andamanese, the Jarwa, the Onge (Andaman and Nicobar Islands), the Baiga, the Chenchu, the Sahariya, and the Gonds (among others) (Ministry of Tribal Affairs, GoI, 2019).

The classification is also based on the following criteria, as Extreme Isolation is PVTGs often live in remote regions far from mainstream society, which severely limits their access to basic services, including health care, education, and government services. They have little or no contact with the outside world, which makes them more vulnerable to health issues. Small Population Size has many of these communities are small in numbers, and their population has declined significantly over time due to several factors like high mortality rates, forced displacement, and low birth rates. Health and Nutritional Vulnerabilities is health status of PVTGs is usually poor, with a high incidence of undernutrition, poor sanitation, and limited access to modern healthcare, resulting in high mortality and morbidity rates (Bhoi & Kumar Acharya, 2024). Cultural Distinctiveness having groups maintain distinct languages, customs, and traditions, which sets them apart from other tribal groups and mainstream society. However, their cultural practices often contribute to their health challenges, as their traditional lifestyles may not be conducive to dealing with modern health challenges (Economic and Social Council & Permanent Forum on Indigenous Issues, 2019). The significance of recognizing these groups is to ensure that targeted developmental and welfare initiatives are designed to address their specific needs, particularly in the domains of healthcare, education, and economic empowerment.

1.2 Socio-economic and Cultural Characteristics

The socio-economic and cultural characteristics of PVTGs play a crucial role in defining their vulnerability and health outcomes. These groups are often located in hilly, forested, or geographically isolated regions, which poses considerable challenges in providing them with adequate access to healthcare services, clean drinking water, education, and employment opportunities. The majority of PVTGs live in remote locations where transport infrastructure is either underdeveloped or completely absent. This isolation makes it difficult for the state to deliver basic services such as healthcare, education, and sanitation, contributing to a disproportionate burden of disease and mortality. For example, the Great Andamanese tribe, which was isolated on the Andaman Islands, faced devastating epidemics in the past due to their lack of immunity to outside diseases. The tribe's population had declined drastically by the 19th century, with only a few individuals surviving by the turn of the 20th century (Stock & Migliano, 2009). Traditional Livelihoods has Many PVTGs depend on subsistence-based economies, with livelihoods tied to agriculture, hunting, and gathering. i.e, the Baiga tribe of Madhya Pradesh and Chhattisgarh practice shifting cultivation, also known as "slash-and-burn" agriculture, which is not only environmentally degrading but also unsustainable in the long term. This form of agriculture often fails to yield sufficient food for these communities, leading to undernutrition and food insecurity (Devinder Sharma & Devinder Sharma, 2015). The Chenchu tribe in Andhra Pradesh, another PVTG, relies on hunting and gathering in forests for sustenance.

Their isolation from the economic mainstream leaves them economically backward, with very limited access to modern employment opportunities (Jinka Ramamurthy & Hoffman, 2023). Education levels among PVTGs are typically low, with illiteracy rates often surpassing 80-90%. The primary reasons for this educational disadvantage are cultural isolation, lack of educational infrastructure, and social prejudices (Maharana & Kumar Nayak, 2017). As of census data, many of these tribal groups do not participate in the formal education system, either due to distance from schools, the language barrier (many PVTGs speak languages not widely understood outside their community), or a lack of awareness of the importance of formal education. PVTGs maintain a strong connection to their cultural practices and indigenous knowledge systems. However, some of these traditional practices can conflict with modern health needs. i.e, some tribes resist vaccinations or modern medical treatments due to cultural beliefs or a preference for traditional healing methods. The Juang tribe of Odisha is known to follow practices that rely on shamanistic healers for physical and mental ailments, which limits the adoption of modern medicine (Sahoo et al., 2023). At the same time, these cultural traits are often a source of strength and social cohesion within the communities.

1.3 Importance of Addressing Health Disparities

Addressing the health disparities faced by PVTGs is of paramount importance not only from a human rights perspective but also in the broader context of national development. The Indian Constitution recognizes the need for the upliftment of tribal communities through affirmative actions, and health is a central pillar of this development (Sonowal, 2008). The health status of PVTGs is often much worse than the national average. These communities face higher rates of morbidity and mortality, with significant incidences of infectious diseases like tuberculosis, malaria, and leprosy. Nutritional deficiencies are common, leading to high levels of undernutrition and stunting in children. High maternal and infant mortality rates, along with poor access to maternal healthcare services, are also a concern. The Baiga tribe has one of the highest rates of malnutrition in India. Reports indicate that a large portion of the tribe's children suffer from stunting and underweight conditions, which is primarily due to inadequate food supply and poor nutritional intake (Chakma et al., 2009). Women, especially during pregnancy, are often anaemic due to inadequate iron intake, leading to high rates of maternal mortality. PVTGs often lag behind in terms of development indicators like access to education, employment, and clean drinking water. As the development of the nation progresses, these groups risk being left further behind, which will further entrench their social and economic exclusion. This disparity contributes to cycles of poverty and ill-health that are difficult to break. Given the historical neglect and isolation of these communities, special efforts must be made to include them in the development discourse. The Indian government has made strides in recognizing the health and development needs of PVTGs. Various government initiatives, such as the Tribal Sub-Plan (TSP) and the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, aim to uplift these communities by improving their access to healthcare, education, and economic opportunities (Ministry of Tribal Affairs, GoI, 2024). The National Health Mission (NHM) also targets these communities with specific interventions. However, despite these efforts, the implementation of such policies is hampered by logistical challenges, insufficient resources, and the unique needs of these groups (Golechha et al., 2024). One of the significant challenges is the distance and geographic isolation of PVTGs, which hinders the delivery of essential healthcare services. Mobile health units and outreach programs are often ineffective due to the rugged terrain and lack of infrastructure. Additionally, a lack of trained healthcare personnel who understand the socio-cultural dynamics of these groups means that interventions may not always be well-received or effective (Roy et al., 2023). From a broader perspective, addressing health disparities in PVTGs is crucial for social justice and equity. By focusing on improving the health outcomes of these marginalized communities, India can make substantial progress toward achieving the United Nations' Sustainable Development Goals (SDGs), particularly SDG 3 (Good Health and Well-Being), Reducing health inequalities ensures that all citizens, regardless of their socio-economic status or ethnicity, have the opportunity to live a healthy and productive life.

Improving the health of PVTGs is not only a moral imperative but a strategic necessity for the holistic development of India. Through concerted efforts from the government, NGOs, and the PVTGs themselves, it is possible to address these health challenges, reduce disparities, and ensure that these communities benefit from the nation's progress (Government Of India et al., 2021). Recognizing their vulnerability and needs, understanding the historical context of their marginalization, and addressing the root causes of their poor health status are all key steps toward achieving meaningful and lasting change.

2. HISTORICAL CONTEXT

Particularly Vulnerable Tribal Groups (PVTGs) in India have historically existed in relative isolation, often residing in remote areas that are geographically difficult to access. These tribes, which number 75 in India, represent some of the most marginalized and socioeconomically disadvantaged groups in the country. Due to their geographic isolation and limited interaction with mainstream society, these groups have preserved unique cultural practices, languages, and systems of self-sustenance over centuries.

2.1 Evolution of PVTGs and Their Traditional Lifestyles

Particularly Vulnerable Tribal Groups (PVTGs) in India are defined by their distinct socio-cultural, economic, and environmental factors. These groups are often marginalized, not just geographically but also economically and politically. Historically, these tribes have lived in isolation, maintaining a way of life that is in stark contrast to the rest of the population in India.

2.2 Pre-Colonial and Colonial Era (Before and During British Rule)

Pre-Colonial Period: Many of India's tribal groups, including those that are classified as PVTGs today, lived in dense forests or remote hill areas. These groups often lived in harmony with nature, relying on traditional agricultural practices, hunting, and gathering for sustenance. Their societies were based on egalitarian principles, with self-governed village systems. These tribes lived in isolation, often avoiding contact with outsiders, preserving their cultural heritage and practices.

British Colonial Impact with the arrival of the British, many tribal groups were pushed further into the hills and forests as their traditional lands were encroached upon for agriculture, mining, and infrastructure development. The colonial administration created policies that sought to "civilize" these tribal groups, often leading to the loss of their traditional rights and access to resources. The British imposed taxes on forest produce and restricted their access to the forest, which was a vital resource for many PVTGs. The economic and social isolation of these tribes became more pronounced during British rule, setting the stage for health disparities that would persist for decades (Xaxa, 2011). These tribes were largely excluded from the mainstream health systems and development programs introduced by the British.

Post-Independence Period (1947 onwards) After India gained independence in 1947, the tribal population, including the PVTGs, continued to be marginalized. The government began developing policies aimed at integrating tribal groups into the broader national development agenda, but these policies often lacked an understanding of tribal-specific needs. Constitutional Recognition In 1950, the Constitution of India recognized tribal groups and gave them certain rights. The Scheduled Tribes (ST) status was created to address the socio-economic challenges faced by these populations. However, the Particularly Vulnerable Tribal Groups (PVTGs) were not formally recognized at this time. They were often subsumed under general "tribal" categories, but their distinct vulnerability was not fully understood. The Tribal Sub-Plan (TSP) launched in the 1970s aimed at integrated development for tribal communities but faced challenges in effective implementation (Ministry of Tribal Affairs, Government of India, 1976). PVTGs, due to their extreme isolation and traditional lifestyles, received fewer benefits from these initiatives.

2.3 Traditional Lifestyles of PVTGs

PVTGs in India have unique lifestyles that revolve around their environment, subsistence agriculture, and traditional knowledge systems. Agriculture and Food Security PVTGs are subsistence farmers who rely on shifting cultivation (also known as slash and burn agriculture) or sedentary agriculture. These practices are sustainable in low-population density areas but may result in soil degradation when population pressures increase or external agricultural systems are introduced. Forest-based livelihood is central to many tribes. For instance, the Baiga tribe in Madhya Pradesh traditionally practiced Podu (slash-and-burn) agriculture, relying heavily on forest resources for food and medicinal plants. Cultural and Social Structure of Tribal societies are generally organized around kinship networks and are governed by traditional customs. Decision-making often happens through a panchayat system or through elders, who play a pivotal role in maintaining societal norms. These tribes also often have distinct languages, religious beliefs, and customs that are deeply tied to their local environment. The Dongria Kondh, for example, are known for their religious worship of the Niyam Raja mountain in Odisha, which is integral to their identity. Traditional healthcare practices are integral to these societies. PVTGs often rely on local healers (vaidyas)and shamans for health-related issues. Herbal medicines from the forest are the primary form of treatment for illnesses. These healers possess deep knowledge of the forest's flora and fauna and use them for various ailments, from fevers to childbirth complications.

2.4 Impact of Modernization and Development on Their Health

While modernization and development brought some positive changes, they also had profound negative impacts on the health of PVTGs. Over time, these tribal communities have been exposed to new diseases, lifestyle changes, and socio-economic pressures, which have affected their traditional way of life and overall health. Colonial and Post-Colonial Interventions, The British did not prioritize healthcare in tribal areas. Instead, they focused on developing healthcare infrastructure in urban areas. Healthcare in tribal areas was rudimentary, and many tribal communities lived without access to formal medical services. Diseases such as malaria, cholera, and tuberculosis were rampant, with no effective prevention or treatment available to these groups. Post-Independence Health Policies, The National Tribal Health Program (NTHP), launched in the 1970s, aimed to improve health in tribal areas, but it failed to reach PVTGs effectively due to their geographic isolation. National Health Mission (NHM), launched in 2005, emphasized healthcare delivery to rural and tribal areas but faced barriers in terms of infrastructure, trained health professionals, and the inability to reach the most isolated tribal groups (Mavalankar et al., 2018).

2.5 Modernization and Health Challenges

Nutritional Decline and Malnutrition transition due to the shift from a traditional diet (largely based on natural, locally sourced food) to a diet that includes processed and market-purchased food has had a detrimental impact. Malnutrition rates have soared in many PVTG communities. i.e, the Kondh tribe in Odisha saw increasing rates of malnutrition after forest conservation laws reduced access to forest resources for their traditional subsistence practices (Shankar Behera, 2021). PVTGs were once protected from many modern-day diseases due to their isolation. However, increased contact with mainstream society, especially after the construction of roads and the introduction of modern agriculture, led to the spread of diseases like malaria, tuberculosis, and cholera. The Munda tribe, for instance, once had little contact with outsiders, but

over the years, migration and settlement patterns exposed them to diseases for which they had no natural immunity (Von Fürer-Haimendorf, 1982). The psychological impact of modernization has been considerable. The disruption of their traditional way of life has led to a sense of disempowerment and identity loss. Additionally, modern diseases such as depression and anxiety are becoming more prevalent, and many of these tribes do not have access to mental health services. i.e, the Juang tribe in Odisha, who traditionally lived without external interference, now faces social anxiety and depression due to increasing conflicts with external authorities over land rights and resource use (Sahoo, Nayak, et al., 2023).

2.6 The Changing Landscape: Policies and Modern Development

Conservation Laws and Tribal Displacement. In the late 20th century, policies such as Project Tiger (1973) and the Forest Conservation Act (1980) led to the displacement of many tribal communities, particularly those that relied heavily on forest resources for their livelihood. The Dongria Kondh tribe in Odisha, for example, has faced conflicts over land rights due to the expansion of mining projects that threaten their environment and health (Sahoo, Nayak, et al., 2023). These developments have caused significant social and economic stress, further exacerbating health disparities. Government Health Initiatives Programs like the National Rural Health Mission (NRHM) and the Integrated Child Development Services (ICDS) have made some strides in improving healthcare access. However, the challenges of remote locations, poor infrastructure, and traditional healthcare preferences have limited their effectiveness in reaching PVTGs. The government policies and development projects, while aimed at improving their conditions, have not fully addressed the unique challenges posed by the health needs of PVTGs.

3. INFECTIOUS DISEASES AMONG PVTGS

Infectious diseases have been a significant health challenge for PVTGs, and these diseases have persisted across generations due to a combination of environmental, socio-economic, and historical factors. The PVTGs' limited access to healthcare services, poor sanitation, and geographic isolation have made them highly vulnerable to these diseases. Furthermore, their traditional living conditions and lifestyle have contributed to the high burden of infectious diseases, including tuberculosis, malaria, and leprosy.

3.1 High Prevalence of Tuberculosis (TB)

Tuberculosis (TB) has been one of the most pressing health issues for PVTGs in India. Despite national and global efforts to control the spread of TB, these groups continue to experience high rates of infection, morbidity, and mortality. During British colonial rule, public health infrastructure in India was rudimentary, and tribal areas were largely neglected. There was minimal effort to track or manage diseases like TB in isolated populations. Poor sanitary conditions and inadequate nutrition during colonial times contributed to the spread of tuberculosis. Tribes living in poorly ventilated houses or in close-knit communities with limited access to medical care were particularly vulnerable to airborne infections like TB. Post-Independence (1947 onwards) After independence, the government made efforts to control TB through the National Tuberculosis Control Program (NTCP), but its impact was limited in remote tribal areas where infrastructure was poor, and healthcare access was restricted. Even though TB treatment became more widely available through the Revised National TB Control Program (RNTCP) in the late 1990s, tribal groups remained underserved due to geographic isolation and social stigma surrounding the disease. According to National Tuberculosis Prevalence Surveys (2019-2021), tribal populations in states like Odisha, Chhattisgarh, and Madhya Pradesh exhibit a higher incidence of TB compared to the general population (Ministry of Health and Family Welfare (MOHFW), GoI, 2021). A study in Odisha revealed that the tribal population's TB incidence rate was about 40% higher than the national average. The Kondh and Munda tribes in Odisha are particularly affected, with many living in poor, overcrowded conditions that exacerbate the transmission of TB (Balgir, 2004).

3.2 Malaria

Malaria remains a major health concern in many tribal areas, particularly in the forest regions of India, where vector control programs and healthcare access are limited. Malaria in Tribal Areas During British rule, malaria was a widespread problem, particularly in forested tribal regions. The British, in their attempt to control malaria, implemented vector control measures like drainage projects, but these measures were largely ineffective in tribal areas due to the inaccessibility of remote regions (Sharma et al., 2015). Tribes that lived in forested and low-lying areas, such as the Juang and Dongria Kondh tribes, were often exposed to anopheles mosquitoes, the vector responsible for malaria transmission. Post-independence India launched the National Malaria Eradication Programme (NMEP), followed by the National Vector Borne Disease Control Programme (NVBDCP) in the 1970s. These efforts led to a general reduction in malaria transmission across India, but the coverage was inadequate in tribal regions (Sam et al., 2024). Lack of access to malaria prophylaxis (e.g., bed nets, antimalarial drugs) and poor health-seeking behavior in these communities have kept malaria prevalence high in remote areas. According to the World Health Organization (WHO), tribal areas in central India (especially in Madhya Pradesh, Chhattisgarh, and Odisha) account for a significant proportion of the malaria burden in the country (World Health Organization: WHO, 2018). Studies have shown that malaria prevalence among tribes like the Gonds and Baigas is disproportionately higher compared to other populations, and the tribal populations often experience higher mortality rates from the disease due to delayed treatment. Madhya Pradesh has reported that malaria is endemic in tribal areas, with over 40% of the cases originating from forest and hilly regions (Sharma, Singh, et al., 2015).

3.3 Leprosy

Leprosy remains a health challenge in PVTGs, especially in states like Odisha, Chhattisgarh, and Jharkhand. This infectious disease, which primarily affects the skin, nerves, and mucous membranes, has been historically linked to social stigma and isolation, which has further hampered effective treatment and prevention (Singh & Sharma, 2022). Leprosy in Tribal Areas has been present in India for centuries, with tribal communities often being isolated and stigmatized due to the disease (Jacob & Franco-Paredes, 2008). The British colonial government's health infrastructure did not adequately address the spread of leprosy in tribal populations. Tribal groups, such as the Santhal and Ho tribes in Jharkhand, suffered from high rates of leprosy, but misunderstanding of the disease and lack of education in remote tribal communities delayed diagnosis and treatment. Despite the World Health Organization's (WHO) global elimination effort for leprosy, India still accounts for a significant proportion of global leprosy cases. Tribal populations have not benefitted from the national leprosy elimination programs to the same extent as non-tribal populations. In Chhattisgarh, Odisha, and Madhya Pradesh, studies have shown that leprosy prevalence is higher among tribes like the Munda, Kondh, and Gond (M. Sharma et al., 2022). i.e, Odisha has reported that tribal regions account for 40% of the state's leprosy cases (Singh & Sharma, 2022). The Santhal tribe in Jharkhand also has a high incidence of leprosy, with stigma and cultural practices making it difficult for individuals to seek early diagnosis or treatment.

3.4 Contributing Factors to the Spread of Infectious Diseases

The high prevalence of infectious diseases among PVTGs can be attributed to several factors, both historical and contemporary. The PVTGs have lived in highly isolated and densely populated villages, with limited access to basic sanitation facilities. This lack of proper sanitation (clean water, waste disposal, etc.) has created an environment conducive to the spread of infectious diseases like TB, malaria, and leprosy. The Baiga tribe in Madhya Pradesh and the Kondh tribe in Odisha have seen their population densities rise, leading to the spread of communicable diseases due to poor living conditions. Geographic Isolation Many PVTGs reside in remote, hilly, and forested regions, which makes it difficult for healthcare providers to reach them. The lack of accessible roads and transportation exacerbates the delay in diagnosis and treatment of diseases. Limited Healthcare Access & Lack of trained healthcare professionals, especially doctors, nurses, and health workers, is a chronic issue in tribal areas. Many tribal communities rely on traditional medicine and shamanic practices that are insufficient to treat diseases like TB, malaria, and leprosy (Syed et al., 2013). The National Health Mission (NHM) and Revised National Tuberculosis Control Program (RNTCP) have made some progress, but outreach remains inadequate in the most isolated tribal regions.

Infectious diseases continue to be a major health challenge for PVTGs. While India has made significant strides in controlling diseases like TB, malaria, and leprosy in the general population, tribal communities remain disproportionately affected due to historical isolation, poor healthcare access, and socio-cultural factors. Efforts to improve healthcare infrastructure in these areas, alongside targeted public health interventions, are essential to reduce the burden of these diseases (Bhoi & Acharya, 2024). The government's initiatives like the National Malaria Control Programme and the Revised TB Control Program must be expanded and adapted to meet the unique needs of PVTGs, focusing on community-based approaches that respect their traditional knowledge while providing modern medical interventions.

4. NON-COMMUNICABLE DISEASES (NCDS) IN PVTGS

The rise of non-communicable diseases (NCDs) among Particularly Vulnerable Tribal Groups (PVTGs) in India marks a significant shift from their traditionally low rates of such diseases. Historically, these communities, including tribes like the Gonds, Baigas, and Kondhs, were less prone to conditions like hypertension, diabetes, and cardiovascular diseases due to their active lifestyles, diets based on natural foods, and limited access to processed foods. However, increasing urbanization, dietary changes, and reduced physical activity have contributed to the growing prevalence of NCDs among these tribes.

Hypertension, once rare in PVTGs, has surged due to a shift from active farming lifestyles to sedentary occupations. A study by the Indian Council of Medical Research (ICMR) found that hypertension rates in rural tribal populations were 25% higher than in urban areas, with certain regions like Chhattisgarh and Madhya Pradesh reporting a significant rise in blood pressure, particularly among those over 40 years old (Meshram et al., 2023). Type 2 diabetes, once uncommon in these communities, has also increased due to dietary shifts toward processed foods and refined grains, alongside a decline in physical activity. Data from surveys in Odisha and Madhya Pradesh show that diabetes prevalence in some tribal groups has risen to 5-7%, a significant increase from past decades. Cardiovascular diseases, including heart disease and stroke, were virtually nonexistent in tribal populations due to their low-fat, plant-based diets and active lifestyles (Sami, W., at el., 2017). However, modernization has introduced tobacco, alcohol, and processed foods, significantly increasing the risk of CVDs. (Aseri et al., 2024) A study in Chhattisgarh found a 30% rise in CVDs over the past two decades, with tribes like the Munda and Santhal seeing an increase in hypertensive heart disease.

The primary contributors to the rise in NCDs among PVTGs are lifestyle changes resulting from modernization. Reduced physical activity, once essential in traditional subsistence farming, has been replaced by sedentary jobs or migration to urban areas, leading to a decrease in overall physical exertion. Dietary changes, including increased consumption of sugar, refined grains, and processed foods, have replaced the traditional high-fiber, low-fat diets, further contributing to the rise of NCDs (Casari et al., 2022). Moreover, alcohol and tobacco use, which was once limited or moderate, has grown in prevalence due

to increased social and economic pressures.

Access to healthcare services remains a critical barrier in addressing the rising NCD burden in PVTGs. Many of these communities live in remote, forested regions, where healthcare facilities are scarce, and health workers often lack training in diagnosing and managing NCDs. Even when healthcare services are available, they are often under-resourced, lacking essential diagnostic tools and medications. Cultural barriers also impede the uptake of modern healthcare, as many tribal members rely on traditional healers for treatment. Consequently, NCDs often go undiagnosed until they reach advanced stages, resulting in increased morbidity and mortality (Kabir et al., 2022). the growing prevalence of NCDs among PVTGs is driven by the transition from traditional, active lifestyles to more sedentary ones, coupled with dietary changes and limited access to healthcare. Addressing this challenge requires targeted interventions, including health education, screening programs, and increased access to healthcare services in tribal areas. The need for culturally sensitive and community-based approaches to managing NCDs is critical to mitigating the impact of these diseases in PVTG populations.

5. MATERNAL AND CHILD HEALTH IN PVTGS

Maternal and child health remains a critical concern for Particularly Vulnerable Tribal Groups (PVTGs) in India, with these communities experiencing disproportionately high rates of maternal and infant mortality. Despite various governmental health initiatives, PVTGs face significant barriers such as inadequate healthcare infrastructure, poor maternal nutrition, limited access to trained medical personnel, and deep-rooted socio-cultural practices that discourage seeking modern medical care. Maternal and infant mortality rates in these regions are higher than the national average due to these factors. According to the National Family Health Survey (NFHS-5) data (2019-2021), while India's maternal mortality rate stands at 113 deaths per 100,000 live births, tribal areas report significantly higher rates (Ministry of Health and Family Welfare, GoI, 2021). i.e, in Odisha, maternal mortality rates among tribal populations are about 50% higher than the national average, with tribes like the Kondh and Dongria Kondh facing some of the highest mortality rates. Additionally, the infant mortality rate in tribal regions, such as Chhattisgarh, is reported at 45 deaths per 1,000 live births, compared to the national rate of 32. Historical neglect and inadequate healthcare services have compounded the issue. Pre-colonial tribal communities had relatively low maternal and infant mortality rates due to traditional midwifery, but these practices lacked the medical knowledge to handle complications (Meh et al., 2021). During the British colonial period, tribal health was largely ignored, exacerbating these issues. Post-independence health programs aimed at improving maternal and child health, like the National Family Planning Program and the National Rural Health Mission (NRHM), have been less effective in tribal areas due to their remote locations and poor infrastructure. Barriers to accessing healthcare services include geographic isolation, as many PVTGs live in remote, inaccessible areas, making it difficult to reach health centers for prenatal care, delivery, and postnatal care. Limited transportation options further exacerbate this issue (Nair, H., & Panda, R. 2011). The lack of trained medical personnel is another major obstacle. Although programs like midwifery training and community health worker initiatives exist, they have not been widely effective in PVTG areas due to poor infrastructure and reluctance to work in these remote locations. In many communities, traditional birth attendants, who are not formally trained, still assist in childbirth, leading to risks if complications arise. Cultural barriers also discourage women from seeking medical care, with home births being common, sometimes leading to life-threatening complications when problems occur (Kumar & Kumar, 2022). Nutritional deficiencies play a significant role in poor maternal and child health outcomes. Pregnant women in tribal areas often experience malnutrition, leading to low birth weight, anemia, and other complications. Studies in Madhya Pradesh show that over 60% of pregnant women in tribal areas suffer from iron deficiency anemia, contributing to higher maternal mortality (Pandit et al., 2021). Furthermore, approximately 35-40% of children under five in tribal areas suffer from stunting, and more than 30% are underweight. These conditions are linked to the inadequate nutritional intake of mothers, which affects fetal health and child development (Gragnolati et al., 2006). Government initiatives like the Janani Suraksha Yojana (JSY), Integrated Child Development Services (ICDS), and the National Health Mission (NHM) aim to reduce maternal and infant mortality in tribal areas. However, these programs face challenges such as low participation due to cultural barriers, poor infrastructure, and insufficient outreach in the most isolated tribal regions. While JSY has helped increase institutional deliveries, tribal areas still show low participation (Ministry of Health and Family Welfare, 2024). The ICDS program, focused on improving maternal nutrition and child health, faces similar hurdles in tribal regions, where service delivery remains limited.

6. MENTAL HEALTH IN PVTGS

Mental health issues, including depression, anxiety, and stress-related disorders, have become significant concerns among Particularly Vulnerable Tribal Groups (PVTGs) in India. These problems are often exacerbated by factors such as social isolation, economic instability, historical trauma, and a lack of access to mental health services. Cultural stigma surrounding mental health further complicates the situation, discouraging individuals from seeking help. Historically, mental health was not widely recognized in these communities, and traditional methods such as spiritual practices and community support were used to cope with psychological stress. However, modernization and social disruptions have contributed to rising mental health conditions (Ahad et al., 2023). i.e, during the colonial period, policies like land dispossession and forced labor led to psychological stress that went unaddressed due to the absence of medical infrastructure and cultural sensitivity. Post-independence, mental health was largely neglected in favor of physical health, and although the National Mental Health Program (NMHP) was introduced in the 1970s, its impact in tribal areas remained limited due to insufficient funding and

infrastructure. Recent studies show a concerning rise in mental health issues among PVTGs. For example, about 35.2% of the Juang tribe in Odisha experience moderate to severe depression, while 25-30% of adults in Chhattisgarh suffer from anxiety disorders (Hemant Kumar Rout & Hemant Kumar Rout, 2024). These rising rates are linked to disruptions in traditional lifestyles, economic stress, and integration into the national market economy. Additionally, many tribal communities still attribute mental health problems to spiritual or supernatural causes, which leads to further stigma. Economic instability, including the shift from subsistence farming to market economies, contributes to ongoing stress and deteriorating mental health.

The lack of mental health services in these areas remains a major barrier. While the NMHP aimed to address mental health concerns, its outreach has been limited due to infrastructure challenges and cultural barriers. Mental health professionals are scarce, and the population is largely unaware that conditions like depression and anxiety are treatable medical issues. Efforts to integrate community-based mental health programs have been infrequent and underfunded, resulting in minimal impact in remote populations (Meghrajani et al., 2023). To address these challenges, there is a need to increase mental health awareness, reduce stigma through community-based education, and integrate traditional healing practices with modern care. Training healthcare workers in culturally appropriate practices and improving access to mental health professionals is critical to improving the mental well-being of PVTGs. Healthcare access for PVTGs is further hindered by geographic isolation, economic constraints, and reliance on traditional healing practices (Wainberg et al., 2017). Many PVTGs live in remote areas, making it difficult to reach healthcare services, and during the colonial period, tribal communities were largely excluded from modern healthcare systems. Post-independence, efforts to improve healthcare access have been slow, despite initiatives like the Tribal Sub-Plan (TSP) and National Health Mission (NHM). Healthcare utilization in tribal areas is lower than in urban regions, with states like Madhya Pradesh, Odisha, and Chhattisgarh reporting lower rates of antenatal care and higher infant mortality rates (Eswarappa, 2022). Additionally, PVTGs often depend on traditional healers, using herbal remedies and spiritual practices, which delays diagnosis and treatment of preventable diseases like malaria and tuberculosis. In Odisha, for example, 60% of PVTG individuals sought treatment from traditional healers before accessing modern healthcare, exacerbating health conditions.

Government programs such as NHM and ICDS have had limited success in reaching PVTGs due to poor implementation, insufficient healthcare infrastructure, and a lack of trained professionals in remote areas. Despite these efforts, tribal areas continue to face high rates of maternal and child mortality, and healthcare utilization remains low (Bhattacharya et al., 2024). i.e, maternal healthcare utilization in tribal regions of Madhya Pradesh is 50% lower than in urban areas. Addressing these challenges requires targeted healthcare policies, improved infrastructure, and culturally sensitive health interventions that are better implemented and tailored to the needs of PVTGs (Madankar et al., 2024). Government policies aimed at improving the health and welfare of PVTGs include the National Health Policy (NHP), the Tribal Sub-Plan (TSP), and initiatives like Janani Suraksha Yojana (JSY) and Integrated Child Development Services (ICDS). While these initiatives have improved maternal and child health in some areas, challenges like poor healthcare infrastructure, shortages of trained health professionals, and cultural reliance on traditional healing practices persist. Despite the introduction of the National Mental Health Program (NMHP) and the Tribal Health Care and Public Health Program, health outcomes in tribal areas remain poor, with rising rates of non-communicable diseases (NCDs) like hypertension and diabetes, alongside continued high infant mortality rates. To address these issues, more targeted policies, better implementation, and culturally sensitive approaches are needed to ensure equitable healthcare access for PVTGs.

Community-based healthcare approaches have proven effective in improving health outcomes for PVTGs by emphasizing participation, cultural sensitivity, and integrating traditional practices with modern healthcare. These approaches involve local leaders and traditional healers, helping bridge the gap between modern healthcare and cultural beliefs. Programs like the Tribal Health Initiative (THI) in Tamil Nadu and Kerala have successfully integrated preventive care, including vaccination and nutrition education, with traditional healing practices, leading to better health outcomes for tribes like the Gond and Kondh in Odisha (Roy et al., 2023). The government's Health and Wellness Centres (HWCs) also combine primary healthcare services with community engagement, using community health workers and tribal leaders to increase participation. Empowering PVTGs to participate in health decision-making, and integrating traditional governance structures into health planning, ensures that interventions are culturally appropriate and well-received (Lahariya, 2020). This community-driven approach can improve healthcare access and utilization, leading to better long-term health outcomes for PVTGs.

7. CONCLUSION

The health disparities faced by Particularly Vulnerable Tribal Groups (PVTGs) in India are extensive and multifaceted, affecting almost every aspect of their well-being. Key findings from this research highlight the severe challenges these communities face, including malnutrition, the persistent burden of infectious diseases such as tuberculosis and malaria, a rising incidence of non-communicable diseases (NCDs) like hypertension and diabetes, and the ongoing struggles related to poor maternal and child health outcomes. For example, data from the National Family Health Survey (NFHS-5) reveals that maternal and child mortality rates in tribal regions are significantly higher than the national average, with limited access to skilled care during pregnancy and childbirth. Additionally, mental health issues like depression and anxiety are increasingly prevalent, often exacerbated by social isolation and economic instability. These health disparities are

compounded by geographic isolation, limited healthcare infrastructure, and cultural factors that impede the effectiveness of health interventions. Given the severity and breadth of these health disparities, there is an urgent need for comprehensive and targeted interventions to address the healthcare challenges of PVTGs. The development of tailored health policies that account for the unique needs of these communities is critical, as well as increasing healthcare access through better infrastructure and more robust healthcare delivery systems. In particular, community-based approaches, which involve local leaders, healers, and the integration of traditional practices with modern healthcare, have shown promise in improving healthcare access and trust. The Tribal Health Initiative (THI) and Health and Wellness Centres (HWCs) are examples where such approaches have led to better maternal health outcomes and disease prevention efforts. To address these urgent health challenges, collaborative efforts between policymakers, healthcare providers, and researchers are essential. Policymakers need to craft inclusive healthcare policies that provide targeted healthcare interventions, while healthcare providers should focus on delivering services that are culturally sensitive and geographically accessible. Research is crucial to understanding the health needs of PVTGs and developing effective solutions that take into account both medical and social factors affecting health. Only through such collaborative, culturally appropriate, and inclusive approaches can the pressing health issues faced by PVTGs be effectively addressed and long-term improvements in their health outcomes achieved.

REFERENCES

[1] *A&N Administration*. (N.D.). Andaman State Government. Retrieved February 16, 2025, From Https://Www.And.Nic.In/Andaman/Tribes.Php

[2] Ahad, A. A., Sanchez-Gonzalez, M., & Junquera, P. (2023). Understanding And Addressing Mental Health Stigma Across Cultures For Improving Psychiatric Care: A Narrative Review. *Cureus*. Https://Doi.Org/10.7759/Cureus.39549

[3] Aseri, R., Aseri, M., Tandon, R., Goya , A., Singh, B., Aslam, N., Mohan, B., Singh Wander, G., & Takkar, S. (2024). A Comparative Study Of Risk Factors In Patients With Coronary Artery Disease With Their Siblings In Tertiary Care Hospital In North India. *The European Journal Of Cardiovascular Medicine*, *14*(4), 737–743. Https://Doi.Org/10.61336/Ejcm

[4] Balgir, R. S. (2004). Tribal Health Problems, Disease Burden And Ameliorative Challenges In Tribal Communities With Special Emphasis On Tribes Of Orissa. In *Proceeding Of National Symposium On Tribal Health* (P. 162).

[5] Bhattacharya, S., Saleem, S. M., Garg, S., Varshney, S., Grover, A., Gupta, P., & Singh, A. (2024). Building A Sustainable Healthcare System For Tribal Communities Through Apex Medical Institutions. *Indian Journal Of Community Medicine*, *49*(3), 461–463. Https://Doi.Org/10.4103/Ijcm.Ijcm_407_23

[6] Bhoi, N., & Acharya, S. K. (2024). Health Status Of Particularly Vulnerable Tribal Groups (Pvtgs) Of Odisha: A Narrative Review. *Journal Of Health Population And Nutrition*, *43*(1). Https://Doi.Org/10.1186/S41043-024-00671-8

[7] Bhoi, N., & Kumar Acharya, S. (2024). Health Status Of Particularly Vulnerable Tribal Groups (Pvtgs) Of Odisha: A Narrative Review. *Journal Of Health, Population And Nutrition*, *43*(176). Https://Doi.Org/10.1186/S41043-024-00671-8

[8] Casari, S., Di Paola, M., Banci, E., Diallo, S., Scarallo, L., Renzo, S., Gori, A., Renzi, S., Paci, M., De Mast, Q., Pecht, T., Derra, K., Kaboré, B., Tinto, H., Cavalieri, D., & Lionetti, P. (2022). Changing Dietary Habits: The Impact Of Urbanization And Rising Socio-Economic Status In Families From Burkina Faso In Sub-Saharan Africa. *Nutrients*, *14*(9), 1782. Https://Doi.Org/10.3390/Nu14091782

[9] Chakma, T., Meshram, P., Rao, P., Singh, S. B., & Kavishwar, A. (2009). Nutritional Status Of Baiga – A Primitive Tribe Of Madhya Pradesh. *The Anthropologist*, *11*(1), 39–43. Https://Doi.Org/10.1080/09720073.2009.11891077

[10] Devinder Sharma, & Devinder Sharma. (2015, July 3). *Baiga Agriculture Can Solve Problems That Plague Modern Systems*. Down To Earth. Https://Www.Downtoearth.Org.In/Environment/Baiga-Agriculture-Can-Solve-Problems-That-Plague-Modern-Systems-4442

[11] Economic And Social Council & Permanent Forum On Indigenous Issues. (2019). Indigenous People's Traditional Knowledge Must Be Preserved, Valued Globally, Speakers Stress As Permanent Forum Opens Annual Session | Meetings Coverage And Press Releases. In *UN*. UN. Retrieved February 16, 2025, From Https://Press.Un.Org/En/2019/Hr5431.Doc.Htm

[12] Eswarappa, K. (2022). The Complexity Of The "Tribal" Question In India: The Case Of The Particularly Vulnerable Tribal Groups. *Journal Of Asian And African Studies*, *59*(3), 858–875. Https://Doi.Org/10.1177/00219096221123748

[13] Golechha, M., Bohra, T., Rana, R., & Panchamia, J. (2024). Impact Of India's Flagship National Health Mission On Governance, Human Resources For Health, And The Health System: A Scoping Review. *World Medical &*

Health Policy. Https://Doi.Org/10.1002/Wmh3.636

[14]GOVERNMENT OF INDIA, MINISTRY OF SCIENCE AND TECHNOLOGY, & DEPARTMENT OF SCIENCE AND TECHNOLOGY. (2021). ACCELERATED DEVELOPMENT OF PARTICULARLY VULNERABLE TRIBAL GROUPS (PVTGS): Call For Project Proposals Under Tribal Sub Plan Scheme (TSP) Of Science For Equity Empowerment And Development (SEED) Division. In *DEPARTMENT OF SCIENCE AND TECHNOLOGY* (Pp. 3–10). Retrieved February 16, 2025, From Https://Dst.Gov.In/Sites/Default/Files/Accelerated%20Development%20of%20Particularly%20Vulnerable%20Tribal%20Groups%20%28pvtgs%29_0.Pdf

[15]Gragnolati, M., Bredenkamp, C., Shekar, M., Das Gupta, M., Lee, Y.-K., & THE WORLD BANK. (2006). India's Undernourished Children. In *Health, Nutrition, And Population Series*. THE WORLD BANK. Https://Documents1.Worldbank.Org/Curated/Ru/552991468042034521/Pdf/368050REVISED0101OFFICIAL0USE0ONLY1.Pdf

[16]Hemant Kumar Rout, & Hemant Kumar Rout. (2024, October 10). *Tribals In Odisha At Greater Risk Of Mental Health Issues, Says BHU Research*. The New Indian Express. Https://Www.Newindianexpress.Com/States/Odisha/2024/Oct/10/Tribals-Of-State-Have-Mental-Health-Issues

[17]Jacob, J. T., & Franco-Paredes, C. (2008). The Stigmatization Of Leprosy In India And Its Impact On Future Approaches To Elimination And Control. *Plos Neglected Tropical Diseases*, *2*(1), E113. Https://Doi.Org/10.1371/Journal.Pntd.0000113

[18]Jinka Ramamurthy, M., & Hoffman, D. M. (2023). "Development" Definitions Of Internally Displaced People And The Government: A Study Of The Chenchu Tribe In The Nallamala Forest Of Southern India. *Frontiers In Conservation Science*, *4*, 4:1126168. Https://Doi.Org/10.3389/Fcosc.2023.1126168

[19]Kabir, A., Karim, M. N., & Billah, B. (2022). Health System Challenges And Opportunities In Organizing Non-Communicable Diseases Services Delivery At Primary Healthcare Level In Bangladesh: A Qualitative Study. *Frontiers In Public Health*, *10*. Https://Doi.Org/10.3389/Fpubh.2022.1015245

[20]Kumar, V., & Kumar, D. (2022). Issues, Challenges And Opportunities In Accessing Primary Health Services In Tribal-Rural Setting In India: A Decadal View. *International Journal Of Community Medicine And Public Health*, *10*(1), 515. Https://Doi.Org/10.18203/2394-6040.Ijcmph20223583

[21]Lahariya, C. (2020). Health & Wellness Centers To Strengthen Primary Health Care In India: Concept, Progress And Ways Forward. *The Indian Journal Of Pediatrics*, *87*(11), 916–929. Https://Doi.Org/10.1007/S12098-020-03359-Z

[22]Madankar, M., Kakade, N., Basa, L., & Sabri, B. (2024). Exploring Maternal And Child Health Among Tribal Communities In India: A Life Course Perspective. *Global Journal Of Health Science*, *16*(2), 31. Https://Doi.Org/10.5539/Gjhs.V16n2p31

[23]Maharana, R., & Kumar Nayak, J. (2017). Educational Status Among The Particularly Vulnerable Tribal Groups Of Odisha. *International Journal Of Applied Research*, *3*(4). Https://Www.Allresearchjournal.Com/Archives/2017/Vol3issue4/Parth/3-4-114-367.Pdf

[24]Mavalankar, D., MD, Drph, Goleccha, M., MS, Phd, Maheshwari, S., Phd, Chandwani, R., MD, Phd, Panchamia, J., Phd, Bohra, T., MPH, Indian Institute Of Public Health, Gandhinagar, & Indian Institute Of Management, Ahmedabad. (2018). National Health Mission – Impact And Learnings For The Future. In *Draft Report*. Retrieved February 16, 2025, From Https://Www.Niti.Gov.In/Sites/Default/Files/2023-03/Impact%20of%20NHM%20on%20Health%20Systems%20Governance%20%26%20Human%20Resources.Pdf

[25]Meghrajani, V. R., Marathe, M., Sharma, R., Potdukhe, A., Wanjari, M. B., & Taksande, A. B. (2023). A Comprehensive Analysis Of Mental Health Problems In India And The Role Of Mental Asylums. *Cureus*. Https://Doi.Org/10.7759/Cureus.42559

[26]Meh, C., Sharma, A., Ram, U., Fadel, S., Correa, N., Snelgrove, J., Shah, P., Begum, R., Shah, M., Hana, T., Fu, S., Raveendran, L., Mishra, B., & Jha, P. (2021). Trends In Maternal Mortality In India Over Two Decades In Nationally Representative Surveys. *BJOG An International Journal Of Obstetrics & Gynaecology*, *129*(4), 550–561. Https://Doi.Org/10.1111/1471-0528.16888

[27]Meshram, N., Verma, N., Shrivastava, N., Prasad, M. A., Jain, K., & Shinkar, S. V. (2023). Assessment Of Prevalence Of Hypertension And Its Risk Factors Among Adult Tribal Population Residing In Lohandiguda Block Of Bastar District Of Chhattisgarh. *Indian Journal Of Community Medicine*, *48*(4), 588–594. Https://Doi.Org/10.4103/Ijcm.Ijcm_936_22

[28]Ministry Of Health And Family Welfare (MOHFW), Goi,. (2021). National TB Prevalence Survey In India 2019 - 2021. In *Ministry Of Health And Family Welfare (MOHFW), Government Of India,*. Retrieved February

16, 2025, From Https://Tbcindia.Mohfw.Gov.In/Wp-Content/Uploads/2023/05/25032022161020natbpsreport.Pdf

[29]Ministry Of Health And Family Welfare, Goi. (2021). National Family Health Survey (NFHS-5) 2019-21. In *Ministry Of Health And Family Welfare, Goi*. Retrieved February 16, 2025, From Https://Mohfw.Gov.In/Sites/Default/Files/NFHS-5_Phase-II_0.Pdf

[30]Ministry Of Health And Family Welfare. (2024, December 6). *Steps Taken By The Government For Maternal And Child Health Of Scheduled Castes (SC) And Scheduled Tribes (ST) Population* [Press Release]. Retrieved February 16, 2025, From Https://Pib.Gov.In/Pressreleasepage.Aspx?PRID=2081484

[31]Ministry Of Tribal Affairs, Goi. (2019). [State-Wise List Of Particularly Vulnerable Tribal Groups (Pvtgs)]. In *Ministry Of Tribal Affairs, Goi*. Retrieved February 16, 2025, From Https://Tribal.Nic.In/Divisionsfiles/Swlpvtgs.Pdf

[32]Ministry Of Tribal Affairs, Goi. (2024, October 3). *Empowering Tribal Communities Government Initiatives For Tribal Welfare In India*. Ministry Of Tribal Affairs. Retrieved February 16, 2025, From Https://Pib.Gov.In/Pressnotedetails.Aspx?Noteid=153230&Moduleid=3®=3&Lang=1

[33]*Ministry Of Tribal Affairs, Government Of India*. (1976). Ministry Of Tribal Affairs, Goi.

[34]Nair, H., & Panda, R. (2011). Quality Of Maternal Healthcare In India: Has The National Rural Health Mission Made A Difference?. *Journal Of Global Health*, 1(1), 79–86.

[35]Pandit, P., Galande, S., & Iris, F. (2021). Maternal Malnutrition And Anaemia In India: Dysregulations Leading To The 'Thin-Fat' Phenotype In Newborns. *Journal Of Nutritional Science*, *10*. Https://Doi.Org/10.1017/Jns.2021.83

[36]Roy, A. D., Das, D., & Mondal, H. (2023a). The Tribal Health System In India: Challenges In Healthcare Delivery In Comparison To The Global Healthcare Systems. *Cureus*. Https://Doi.Org/10.7759/Cureus.39867

[37]Roy, A. D., Das, D., & Mondal, H. (2023b). The Tribal Health System In India: Challenges In Healthcare Delivery In Comparison To The Global Healthcare Systems. *Cureus*. Https://Doi.Org/10.7759/Cureus.39867

[38]Sahoo, K., Nayak, S. R., & Khurana, P. (2023). The Pattern Of Health-Seeking Behavior Among Juang Tribe-A Particularly Vulnerable Tribal Group Of Odisha, India. *Indian Journal Of Community Medicine*, *48*(5), 696–701. Https://Doi.Org/10.4103/Ijcm.Ijcm_821_22

[39]Sahoo, K., R Nayak, S., & Khurana, P. (2023). The Pattern Of Health-Seeking Behavior Among Juang Tribe-A Particularly Vulnerable Tribal Group Of Odisha, India. *Indian Journal Of Community Medicine : Official Publication Of Indian Association Of Preventive & Social Medicine*, *48*(5), PMC10637596. Https://Doi.Org/10.4103/Ijcm.Ijcm_821_22

[40]Sam, A. K., Karmakar, S., Mukhopadhyay, S., & Phuleria, H. C. (2024). A Historical Perspective Of Malaria Policy And Control In India. *IJID Regions*, *12*, 100428. Https://Doi.Org/10.1016/J.Ijregi.2024.100428

[41]Sami, W., Ansari, T., Butt, N. S., & Hamid, M. R. A. (2017). Effect Of Diet On Type 2 Diabetes Mellitus: A Review. *International Journal Of Health Sciences*, 11(2), 65–71.

[42]Shankar Behera, R. (2021, February 22). Kalahandi's Kutia Kondhs: Subsistence A Struggle For This Tribe Of Nature Worshippers. *Down To Earth*.

[43]Sharma, M., Dwivedi, P., & Singh, P. (2022). Current Situation Of Leprosy In Tribal Areas Of India In The Post-Elimination Era. *Indian Journal Of Dermatology Venereology And Leprology*, *88*, 450–451. Https://Doi.Org/10.25259/Ijdvl_1380_20

[44]Sharma, R. K., Singh, M. P., Saha, K. B., Bharti, P. K., Jain, V., Singh, P. P., Silawat, N., Patel, R., Hussain, M., Chand, S., Pandey, A., & Singh, N. (2015). Socio-Economic & Household Risk Factors Of Malaria In Tribal Areas Of Madhya Pradesh, Central India. *The Indian Journal Of Medical Research*, *141*(5), 567–575. Https://Doi.Org/10.4103/0971-5916.159515

[45]Sharma, R. K., Thakor, H., Saha, K., Sonal, G., Dhariwal, A., & Singh, N. (2015). Malaria Situation In India With Special Reference To Tribal Areas. *The Indian Journal Of Medical Research*, *141*(5), 537–545. Https://Doi.Org/10.4103/0971-5916.159510

[46]Singh, P., & Sharma, M. (2022). Epidemiological Scenario Of Leprosy In Marginalized Communities Of India: Focus On Scheduled Tribes. *The Indian Journal Of Medical Research*, *156*(2), 218. Https://Doi.Org/10.4103/Ijmr.Ijmr_3247_21

[47]Sonowal, C. (2008). Indian Tribes And Issue Of Social Inclusion And Exclusion. *Studies Of Tribes And Tribals*, *6*(2), 123–134. Https://Doi.Org/10.1080/0972639X.2008.11886586

[48]Stock, J. T., & Migliano, A. B. (2009). Stature, Mortality, And Life History Among Indigenous Populations Of The Andaman Islands, 1871–1986. *Current Anthropology*, *50*(5), 713–725. Https://Doi.Org/10.1086/605429

[49]Syed, S. T., Gerber, B. S., & Sharp, L. K. (2013). Traveling Towards Disease: Transportation Barriers To Health Care Access. *Journal Of Community Health*, *38*(5), 976–993. Https://Doi.Org/10.1007/S10900-013-9681-1

[50]Von Fürer-Haimendorf, C. (1982). *Tribes Of India: The Struggle For Survival* [English]. UNIVERSITY OF CALIFORNIA PRESS. Http://Ark.Cdlib.Org/Ark:/13030/Ft8r29p2r8/

[51]Wainberg, M. L., Scorza, P., Shultz, J. M., Helpman, L., Mootz, J. J., Johnson, K. A., Neria, Y., Bradford, J. E., Oquendo, M. A., & Arbuckle, M. R. (2017). Challenges And Opportunities In Global Mental Health: A Research-To-Practice Perspective. *Current Psychiatry Reports*, *19*(5). Https://Doi.Org/10.1007/S11920-017-0780-Z

[52]World Health Organization: WHO. (2018, March 14). *In Its Quest To Eliminate Malaria, India Focuses On Odisha And The Tribal States*. Https://Www.Who.Int/News-Room/Feature-Stories/Detail/In-Its-Quest-To-Eliminate-Malaria-India-Focuses-On-Odisha-And-The-Tribal-States

[53]Xaxa, V. (2011). The Status Of Tribal Children In India: A Historical Perspective. *IHD - UNICEF Working Paper Series Children Of India: Rights And Opportunities*, *Working Paper No. 7*. Https://Www.Ihdindia.Org/Pdf/IHD-UNICEF-WP-7-Virginius_Xaxa.Pdf