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Disease Burden, Health-belief and Treatment-seeking Behaviour among the Particularly Vulnerable Tribal Groups of India

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ABSTRACT Widespread health problems are prevalent among the Particularly Vulnerable Tribal Groups (PVTGs) of India, and they tend to incline towards their age-old traditional treatment practices. The PVTGs are relatively reluctant to accept modern bio-medical healthcare and treatment options available to them. The extent of interaction with and the level of exposure to the non-traditional domain directly impact the extent of acceptance of modern healthcare facilities by the tribal people. Based on the review of literature on health aspects of primitive tribal groups of India and some other relevant literature on health issues of indigenous peoples, the author tries to find out the disease burden among the particularly vulnerable tribal groups and perceptions of health, illness, and treatment-seeking behaviour prevalent among them. Further, using a conceptual framework, the author also analyses and discovers the gap in why these people are inclined towards traditional practices.

INTRODUCTION

Perception of Health

In the preamble to its Constitution, the World Health Organisation states health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." WHO also states that it is one of every human being's fundamental rights, without distinction of race, religion, political belief, economic or social condition to enjoy the highest attainable standard of health. Huber et al. (2011) define health as "a relative state where a person can function well physically, mentally, socially and spiritually and express a full range of unique abilities in the environment in which he or she lives."

However, the perceptions of health, well being and illness vary across cultures, territories and individuals. For instance, for some people, not experiencing any disease symptoms and having the ability to play social roles may indicate being healthy. The sociological and anthropological understanding of the perception of health and health-related behaviour has changed over a while. The earlier understanding of health belief emphasised that culture is related to people's health perception, and therefore, for effective health education, a change must be induced in those cultural features, which stood as symbols or indirect expression of the fundamental moral, religious and social relation code (Fabrega 1974; Glick 1977; Paul 1955). Beyond this 'cultural belief system', an ecological framework has been considered in recent anthropological thinking, emphasising a set of causal elements like environmental features, material or economic constraints, and political considerations, which has freed people from being passive followers of cultural wisdom, enabling them to choose and decide the course of behaviours by selecting various alternatives.

Napier (2012) and colleagues distinguished between narrowly biological notions of health and disease and the broader socio-cultural context in which people become sick, illness is experienced and managed, and health services and systems emerge and evolve.

The Concept of 'Disease' and 'Illness'

Scholars on health studies maintain a categorical conceptual difference between 'illness' and 'disease' mostly justified through anthropological and sociological studies, as Fabrega (1974) mentioned. Kleinman et al. (1978), while dealing with the 'explanatory model' of disease

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and illness, have emphasised that perceiving illness by an 'ill' person varies from person to person and culture to culture. While one can define a disease as the malfunctioning or maladaptation of biological and psychological processes in an individual, one may perceive an illness as 'the personal, interpersonal, and cultural reactions to the disease or discomfort'. Therefore, Fabrega (1972) and Litman (1974) see illness as a culturally constructed phenomenon shaped by cultural factors that influence or regulate perception, labelling, explanation and valuation of the discomforting experience. The cultural construction of illness is the crucial determinant that explains why researchers and scholars of tribal health observe a disagreement or mismatch of understanding between physicians' stated rationale for their action (treatment) and the rationale of the 'ill' person for the same, leading to a failure to assure healing, despite effective pharmacologic action (Stimson 1974). In a similar line of thinking, Mechanic (1972), Waxler (1974), and Yap (1974) maintain that these influence one's expectations and perceptions of symptoms, the way one attaches particular sickness labels to them, and the valuations and responses that flow from those labels and further the exhibition of the 'approved' way of 'illness behaviour'. Here, Kleinman's (1980) 'explanatory model' is relevant to understand perception and action regarding health aspects, which talks of 'notions about an episode of sickness and its treatment employed by those engaged in the clinical process'. Manasi et al. (2011) opine that people's social and cultural contexts and prior experiences influence people's explanatory model. The type of explanatory model held by a patient influences receptivity to health promotion messages and health behaviours, both preventive and treatment seeking. Studies have shown that EMs affect what type of healer or doctor patients will visit and what course of treatment they will follow. Napier et al. (2014) distinguished between health and disease notions based on a narrow biological notion and the broader socio-cultural context in which people become sick, illness is experienced and managed, and health services and systems emerge and evolve.

Health Issues of Tribal People in India

Social scientists have extensively studied the socio-cultural and ecological aspects of tribal health for a while, including the last two decades of the 20th century. One can mention the studies conducted by Mahapatra (1994), Singh (1994), Bhasin (2008), Nagda (2004), Guite and Acharya (2006), Jain and Agrawal (2005), Sonowal and Praharaj (2007), Roy at el. (2010) and Sonowal (2010, 2018). The findings generally agree that people's socio-cultural and religious beliefs and their immediate ecology influence the perceptions of health and treatment-seeking behaviour. These scholars explain the prevalence of traditional healthcare practices and the extent to which India's tribal people have been accepting modern healthcare practices. Moreover, these studies reveal that accessibility and affordability are the causes of non-reporting for modern healthcare in some cases.

The Particularly Vulnerable Tribal Groups in India

In India, after attaining independence, there was an effort to identify the more backward communities within and outside the scheduled tribe communities to prepare and implement welfare and development schemes for them. These communities were named the "Primitive Tribal Groups" (PTGs). The specific criteria used to identify these communities were as follows:

i. Pre-agricultural level of technology
ii. Very low literacy
iii. Stagnant and diminishing population

Considering the definitional contention (primitive) and their vulnerability to various risk factors, in 2006, these tribal groups got renamed as 'Particularly Vulnerable Tribal Groups' (PVTGs) in the place of 'Primitive Tribal Groups'. At present, there are 75 tribal groups in India recognised as 'Particularly Vulnerable Tribal Groups'. These groups live in 18 States and one Union Territory of India.

Objective of the Paper

The objective of the paper is to find out the gap of information regarding health beliefs and treatment-seeking behaviour among the PVTGs and the reason for the continuation of traditional healthcare practices and their reluctance in accepting modern healthcare practices and facilities considering their extent of exposure to

the non-traditional domain and level of the transition of their society.

MATERIAL AND METHODS

Tools and Technique

Since this is a review paper, the materials are the research reports, research articles and other literature. The researchers have used online articles, reports and print journals and books as resource materials. While library materials remained the sources of print materials, an extensive online search, using search 'keywords' remained other literary sources. The researchers utilised the Google search and institutional remote access to e-resources, especially in JSTOR, EPW, Sage Journals Online, Taylor and Francis, and Wiley Online, to collect articles. The researchers used the keywords like "health beliefs", "perception of health", "culture and illness", "tribal health" and the "treatment-seeking behaviour" to search the literature. The language criterion for selecting articles was English only. The searched materials were further filtered and classified under specific categories like "health literature", "tribal health issues", "development of PVTGs", and "health aspects of PVTGs".

Moreover, where available, literature as recent as possible was included containing health aspects of PVTGs. Eventually, the majority of the literature on PVTGs ranges from the year 2000 to 2020. Contrarily, literature related to theoretical aspects of health and treatment seeking was selected based on the content of the literature. The number of selected literature thus was 27 related to the health aspects of the PVTGs. Further, based on various resource materials collected and read, a conceptual framework was developed as a guideline to analyse and discuss the resources so collected. The analysis encompasses three broad areas of beliefs about the causes of illness, the prevalence of illness and diseases among the PVTGs and treatment-seeking behaviour, and the non-traditional world's influence on PVTGs health domain.

Conceptual Framework of the Study

Figure 1 represents the conceptual framework mentioned in the preceding section. The framework shows the following:

i. The tribal societies have been in transition due to their exposure to the non-tribal and non-traditional domains and changes in social and geophysical conditions around them.
ii. Transition leads to a change in the extent of their attachment to traditional health belief and treatment-seeking behaviour.
iii. Changes manifest in nature and extent acceptance of modern or bio-medical healthcare facilities and practices.

Further, one can investigate the health beliefs and treatment-seeking behaviour of tribal people through specific perspectives. The researchers may examine the characteristics of health-related aspects under each of these perspectives, considering the stages or levels of the transition of tribal societies.

The conceptual framework has identified seven such perspectives. In one extreme of transitional dynamics, there are lesser-exposed tribal communities who mostly follow the traditional health belief and treatment-seeking behaviours. At the other extreme, one may observe a blend of traditional and biomedical perceptions and actions. Based on this situation, one can expect in the second perspective, 'perception of health and well-being', that there will be a difference in perceiving and defining health and illness among the tribal people.

The third perspective of analysis is the 'aetiology' or the perception regarding the causes of illness. One may perceive that depending upon the transition level, the tribal people may attribute the causes of illness to supernatural entities or purely biomedical causes.

The fourth perspective is based on the 'physiopathology' that deals with the perception of nature, types and illness. People may perceive illness either as an ordinary and non-severe/common or severe/uncommon and a matter of worry. The nature and extent of attachment to a traditional domain and the exposure to a non-traditional domain may influence the physiopathological perspectives of tribal people.

One may perceive that the people's physiopathological perception about any illness leads them to decide whether, when, how and where to seek treatment. Thus the following perspective, 'normative treatment regimen', tells that depending on their understanding of the causes of ill-

ness, the tribal people must have some normative treatment regimens. Available information shows that when people perceive the causes of illnesses as supernatural and sorcery, the treatment may differ from those illnesses caused by physical and biomedical means.

Finally, from an ecological perspective, one may perceive that there is a particular influence of ecological components on the health belief and treatment-seeking behaviour of the tribal people. For instance, the relative isolation of tribal people in terms of physical accessibility and socio-cultural interaction may amount to traditional practices intact to a certain extent. In contrast, congenital physical and social contact of tribal people with non-tribal people will neutralise traditional forces, and such societies head towards medical pluralism.

OBSERVATIONS AND DISCUSSION

The observation made in the following part carries the result of a focused review of the selected literature in terms of health beliefs and treatment-seeking behaviour among the PVTGs in India.

Traditional Health Beliefs among PVTGs

Reviewed literature reveals that the tribal people have their unique way of believing what causes illness and why. These beliefs mostly centred on the concept of supernatural beings and their influence for one or the other reasons. PVTGs across the states have their own beliefs and perceptions about health-related issues.

The Onges of the Andaman Islands exhibits the crudest form of religious beliefs related to their health aspects. They believe in and fear supernatural beings and assign illness to the action of such supernatural powers. They perceive pregnancy as the grace of spirit *Onkobowkwe*. They think that the soul enters the womb of a woman if she happens to take particular food items because the soul of the baby sent by *Onkobowkwe* enters some food items such as honey, roots, and tubers. The concept of soul is also present among the Kamars as '*Jiv*'. For them, a provoked

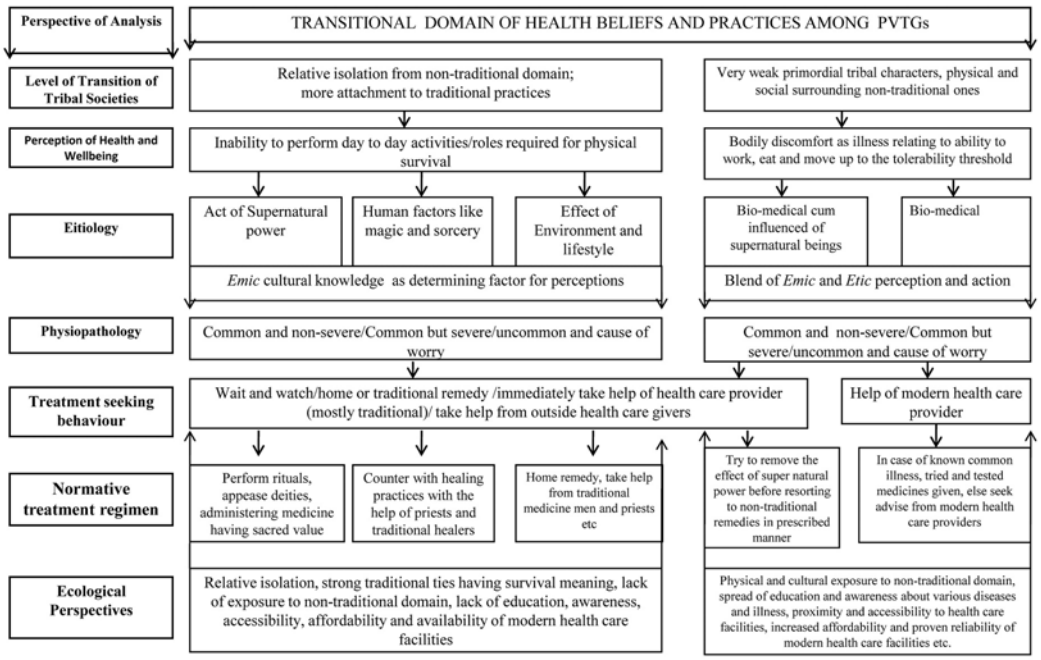

Fig. 1. Conceptual framework on health-belief and treatment-seeking behaviour among PVTGs
Source: Author

deity is the cause of certain illnesses, and properly appeasing them with the help of a traditional priest and taking medicine from a traditional medicine man is the ultimate way to get cured of such illness. Among the Totos of West Bengal, *Ispa* or *Sanja* is the highest deity. They also worship natural entities and are inclined to take preliminary treatment from their village traditional medicine man called *Jhantri*.

The Saharia tribe of Madhya Pradesh has a well-defined relation between various deities and the illnesses caused due to these deities. While they perceive *Bhagawan* as their supreme deity, they perceive illnesses like smallpox and chickenpox as the act of the deity called *Mata, Sitala Devi*, or *Sarda Devi*. People attribute the incidence of TB and tetanus to their ancestors' angry souls, and misfortunes happen due to several other hostile spirits and ghosts of the dead enemy souls. Similarly, the Saharia tribes relate the incidence of typhoid, snakebite and a tiger attack to the deities called *Molisugh, Tejajee* and *Naherdeo*, respectively.

A similar and exhaustive list of deities and the illnesses caused is present among the Hill Korwas (Khatua 2005). For instance, chickenpox occurs due to the deity called *Semaria* or *Badi Mata*, whereas smallpox occurs due to the deity called *Gund Mata* or *Choti Mata*, and the list goes on. They also believe in humans' evil act like bad eyes and a foul mouth called *Kayer guni*, inflicting harm to people.

Like the Saharias, the Hill Kharias also have the supreme god they call *Dharam Devta* or *Bhagawan*. With the help of a traditional healer called *Laya*, the hill Kharia people try to avert or get a remedy from illness, which they perceive as the cause of provoked supernatural beings. Contrarily, the Baigas of central India perceive *Dhartimata* as the chief goddess. They believe that many natural entities around them, like water, fire, forest, trees, specific animals, giant stones, sun and moon, possess spirits. When provoked, these spirits may cause illness among offenders.

Similarly, the Kutia Khonds also have a mother goddess called *Dharni*. They also perceive that most of the illness is the cause of the action of spirits. Further, the Reangs of Tripura and the Asurs and Saurias find a relation between supernatural beings and illness.

Disease Burden among the PVTGs

The research papers reviewed have revealed that the PVTG population has a heavy disease burden of various types with some bodily ailments. The findings have been categorised state-wise and described as follows.

Starting with Madhya Pradesh, an ICMR study has revealed the prevalence of rampant malnutrition, sickle cell anaemia, upper respiratory tract infection, and TB among the Abujhmarias, Baiga, Bharias, Hill Korwas, Kamars, Saharia, and Birhor tribes in the state of Madhya Pradesh (ICMR 2003). Specific health problems and genetic abnormalities like sickle cell anaemia, G-6-PD red cell enzyme deficiency, and some sexually transmitted diseases and malnutrition are also present among the PVTGs in Madhya Pradesh (Paliwal 2004; Chakma et al. 2014; Jain et al. 2015). Researchers like Thakur and Thakur (1994), Tiwari (1984), and Rajak (2016) have recorded low nutritional status and higher incidence of pulmonary tuberculosis among the Saharias. They have also revealed that most of the deaths have occurred due to pneumonia, malaria, tuberculosis, gastric problems, and diarrhoea. Similarly, Rao et al. (2012) recorded the prevalence of hepatitis viruses among the Saharia community.

In Chhattisgarh state, Nandi et al. (2012) have found a high mortality rate and malnutrition among the Baiga, Pahari Korwa and Kamar. Criticising the government's decision to put a restriction on using family planning measures to arrest negative population growth, the authors reveal that such a decision has deteriorated the already poor health of women PVTGs. Anaemia was extensively prevalent among women resulting in low BMI and underweight (Singh and Chakravarty 2016). The study conducted by Kujur (2014) among Hill Korwas and Mitra et al. (2007) among the Kamars reveals widespread malnutrition, anaemia, and underweight and stunting.

Social scientists have studied the six PVTGs inhabiting the Nilgiris of Tamil Nadu state, namely Toda, Kota, Irular, Kurumba, Kattunayakans and the Paniya (Saraswathi and Sathyamurthi 2016). The PVTGs living here have the burden of illnesses like optic neuritis, anaemia, goitre, infertility, dental cavity, and tuberculosis. Hypertension, arthritis, diabetes, anaemia, vision problems are some of the health problems enumerat-

ed by Samuel and Santhosam (2013). Incidence of chronic illness has been more among the Irular tribal women than their male counterparts in the Nilgiri region (Kumar 2017).

In Karnataka, a single study conducted by Prabhakar et al. (2009) among the Jenukurumbas reveals that people have the burden of anaemia of different grades.

In Jharkhand state, Das and Saha (2016) and Kumari (2006) have pointed out the prevalence of various illnesses among the PVTGs, namely, Asurs, Birhor, Birjia, Hill Kharia, Korwas, Mal Paharia, Parhaiyas, Sauria Parahia, and Savar. Health issues like malnutrition, anaemia, TB, various water-borne diseases have been prevalent among them. The authors also reveal that the government's welfare measures for the PVTGS do not reach them to the desired extent.

In Kerala state, Kakkoth (2005) has recorded tuberculosis, leprosy, cataract, jaundice, scabies, malnutrition, viral fever, typhoid and skin diseases as predominant disease burden among the Koragas. Saraswathi and Sathyamurthi (2016) found the prevalence of scabies, diarrhoea, and whooping cough among children of Kurumbar people. Further, TB, anaemia, scabies and malnutrition are widely prevalent among the Kadar population, and dental health issue was a cause of concern among Kerala's Paniya tribes.

In Gujarat, high morbidity among the Kotwalias is related to malaria. Water-borne or food-related ailments like diarrhoea, vomiting, typhoid and jaundice were widely prevalent. Problems related to malnutrition and the incidence of TB was insignificant (counterview.org 22/01/2014).

In Odisha, the cross-sectional study conducted by Kerketta et al. (2009) reveals the prevalence of high morbidity among four PVTGs of Dongaria Kondh, Kutia Kondh, and Langia Saora, and Paudi Bhuiyan. Genetic factors like high frequency of sickle cell haemoglobin, high incidence of anaemia were prevalent among the Kutia Kondh. Hypertensive older people among the Langia Saora community were prevalent. Hepatitis B surface antigen (HBsAg) was quite prevalent among the PVTGs like Lodha, Saora, Khadia, Mankidia, and Juang. Shaving by village barbers and the practice of tattooing is associated with the transmission of the virus, as revealed by Dwibedi et al. (2014). Further, malnutrition, energy deficiency, underweight and stunting, and vitamin deficiency-related ailments are very prevalent among Rajasthan's Saharias, as Rao et al. (2006) have indicated.

External Influence on PVTG's Health Domain

Development Initiatives Taken by Government Agencies

After recognising them as PVTGs, India's government has initiated lots of welfare and development schemes for their well being. Besides many other aspects, these schemes have unique concerns about these people's health and food security. As a result of government-sponsored rehabilitation programs, many of these tribal populations have exposure to the biomedical healthcare system leading to the acceptance of modern healthcare facilities to various extents.

Besides the influx of non-tribal people into the PVTG domains, the government agencies and their plans and schemes are the major outside influencing factor in the PVTG's health domain. Due to such initiatives of the government, substantial changes have emerged among the PVTGs in their social, economic and other life aspects. The Ministry of Tribal Affairs (MoTA), Government of India, has been implementing several welfare and development schemes to better its PVTGs. All the 18 State Governments and the Union Territory of Andaman and Nicobar Islands have to prepare a long term 'Conservation-cum-Development (CCD) Plan' for each PVTG in their State based on requirement assessed through Baseline and other specific surveys conducted by them. Further, India's government has also established some development agencies for the development of the PVTGs, for instance, the Kutia Kondh Development Agency, Dongaria Kondh Development Agency, Langia Saora Development Agency, and Paudi Bhuiyan Development Agency.

Amidst the scarce information about development aspects of PVTGs, the effectiveness measurement report published by the Scheduled Caste, Scheduled Tribe Research and Training Institute, Bhubaneswar (SCSTRTI 2015) throws some light on the impact of development initiatives taken by the states in India for the PVTGs. The base of the study is conducted in nine states of India inhabited by PVTGs. Livelihood, educa-

tion, infrastructure development, and basic amenities and health aspects were taken as assessment criteria to measure the development initiatives' impact. The report reveals that the government has paid very little attention to the health issues of the PVTGs, barring a couple of states. For instance, in Andhra Pradesh, among the numerically dominant PVTG of Konda Reddy, the government is yet to take proper care to settle the health issues. Likewise, there is no particular health benefit intervention among the numerically smaller PVTGs like Thoty or Thoti. Except for some initiatives taken to control the spread of malaria in Chhattisgarh state, the development agencies have not taken any other significant health initiatives among the Baigas, a numerically dominant PVTG in the State. The study does not mention the health issues of PVTGs in Gujarat. Among the 9 PVTGs in Jharkhand, healthcare initiatives remain inadequate. The report reveals that many PVTGs' families compromise with morbidity and even rationalise mortality as The Almighty's wrath due to lack of proper medical facilities. However, the state government has established Health Sub-Centres in some remote PVTG areas where, for instance, in some Mal Paharia localities, free first aid treatments with free medicine are provided to the patients. Mal Paharias are numerically dominant PVTGs in the State. Among the smallest PVTG like Birjias, the state government has not taken up any health interventions. The report states that occasionally the ANM visit the villages and distributes medicines. For diseases, they treat with their own herbal medicine available in the forest.

In Kerala, the state government has initiated mobile medical units for PVTGs. These medical units are in Public-Private Partnership (PPP) model. The state government has targeted to organise 300 camps a year for each unit. Apart from this, the ITDP has launched an ambulance at the TDO office to meet the exigency.

In Maharashtra, among the numerically dominant PVTG of Ketkari, the team observed that people use all other interventions facilities except for the community toilet. There has been a lack of motivation to use the community toilet.

In Odisha, the report states, there are no regular health check-ups for Saoras. There is no mobile medical facility available for Saoras. There are no health awareness camps here. During the last five years, the TDA has not invested a single rupee in improving the health status of Saoras. Among the *Mankidia*, though the PHCs are present nearby, they visit PHC only when the illness becomes severe and where traditional herbal medicine remains unsuccessful in the healing process.

In Tamil Nadu, among the Irulas, the state government seems to remain least concerned about the health of PVTGs. The ITDA has not spent any amount on health security. There is no mobile medical facility for Irulas. The team could observe that the Irulas still have strong faith in their traditional religious-medico treatments for all types of diseases they encounter.

In West Bengal, Lodhas are one of the numerically dominant PVTGs. The report reveals that the PHCs are present in a distant place, and medicines are hardly available. There is no special provision from the district authority for the Lodhas with regards to health. The government has established some crèches in Lodha settlements to provide nutritious food and pre-school.

The Acceptance and Rejection of Biomedical Healthcare Facilities Among PVTGs

Several research reports have revealed the nature of the acceptance of modern healthcare facilities by the PVTGs in India. Various factors determine the nature and extent of healthcare practices among these people. For instance, Guthigar and Vaswani's (2013) study among the Koragas reveals that these people have utilised modern healthcare facilities to a great extent. The study found that, on average, nearly eighty percent of the women received antenatal and postnatal biomedical treatment and care, and almost all children under five years of age got immunised. Nevertheless, the study shows that despite encouragement to improve institutional deliveries, there are 17.7 percent of home delivery cases. The Health Department's mobile unit working at Kanangad, Kasaragode district, pays monthly visits to all Koraga colonies. The researcher also reveals that due to the insensitive nature of several of the welfare programs and schemes, they could not make an expected impact on the Koraga tribes. The Kattunayaka of Kerala people, to a large extent, are acquainted with modern healthcare. Doctors regularly visit

Pandalur hospital, and people can also get free of cost medicines (Kakkoth 2005). A similar observation was made among the Irular tribes of Nilgiri areas of Tamil Nadu by Kumar (2017), where the author provides the details of welfare activities conducted by an NGO called NAWA in Kollikarai. He also highlights the positive influence of the government and NGO's health facilities among the Irular tribes.

Contrary to such findings, Kakkoth (2005) mentions that the doctors and social workers working among the Koragas find them superstitious and reluctant in taking medicine given by healthcare providers. Adding to the instances of such reluctance of accepting biomedical treatment by various PVTGs, Nandi et al. (2012) have revealed that the access of PVTGs (Baiga, Pahari Korwa, and Kamar) families to various health services is very much limited. Though health and nutrition issues were very severe among these groups, they were the ones with the least access to health and nutrition services, manifested in high malnutrition and mortality rates prevalent.

Similarly, the study conducted by Kujur (2014) shows that nearly two-thirds of Hill Korwa tribes prefer treatment by folk healers to modern healthcare. Besides, distance from PHC and lack of income and vehicle facilities are also other reasons for such practices. Almost all women have delivered their babies in *Kumba*, a specifically constructed house for child delivery.

Saraswathi and Sathyamurthi (2016) find that the PVTGs in Tamil Nadu have no clear health concept. The author reveals that the unfriendly habitat of the tribal people compels them to compromise with health for procuring food. Thus these tribal people hardly concern themselves about common and non-serious health conditions. Women hardly avail of antenatal and postnatal care under biomedical facilities. People hardly get admitted to a medical centre.

Among the Paniya, Kattunayakan, and Bettakurumbas in the Nilgiri district of Tamil Nadu, Gandhi et al. (2017) found that the cultural beliefs and practices of these PVTG people dissuade them from accepting modern healthcare facilities and practices. People are seen uncomfortable with utilising the available healthcare facilities provided by the government agencies, and they find it difficult to believe in the biomedical treatment regimen. Instead, they prefer the traditional mode of treatment to the modern biomedical one. Further, the authors have attributed the rift between patients and healthcare providers to the language barrier, discriminatory behaviour of outsiders towards tribal people, and bitter experiences of tribal people in the past regarding healthcare from medical professionals. The degree of geographic remoteness from modern healthcare facilities also plays an important role here.

The authors have asserted that behaviour related to incessant alcohol and tobacco consumption, delay in seeking care after the onset of disease, fear of modern medicine, and profound faith in traditional medicine determine healthcare practices among the PVTGs. Mahant's (2015) findings amongst the PVTGs in South Bastar in Chhattisgarh support such findings, where he finds that more than two-thirds of the villager's first preference is to seek care from a traditional healer for the treatment.

Irregular and uncertain service provided by biomedical health caregivers in tribal areas may negatively affect their accessing the biomedical healthcare facility, as revealed by Samuel and Santhosam (2013) in their study among the Irular tribes. In such a situation, the tribal people chose home remedies using indigenous medicine and traditional treatment instead. The cost factor of medicine also determines if they have to take treatment in any non-government clinic. One can find a similar observation in a report published in a blog of 'counterview.org' (22/01/2014), which states that among the Kotwalias of Gujarat, as many as fifty percent of respondents use traditional treatment methods like magico-religious practices mainly because of inability to afford the cost of modern medical treatment. As these people are a seasonal migrant community, when they stay in native villages, they visit their houses and provide healthcare services. However, when they are away from home for work, healthcare services are mostly inadequate.

The study conducted by Kerketta et al. (2009) has revealed that the PVTG people hardly take some ailment symptoms seriously. They do not consider symptoms such as body pain, weakness, cough, mild fever, and wounds as a cause of concern. The distantly placed health facility's location in inaccessible areas makes it difficult for ill and older people to get treatment. Nandi et al. (2012) have revealed that PVTGs'

(Baiga, Pahari Korwa, and Kamar) families have limited access to various health services are very much limited. Though health and nutrition issues were very severe among these groups, they were the ones with the least access to health and nutrition services, manifested in high malnutrition and mortality rates prevalent.

Traditional Treatment Seeking Behaviour among PVTGs

There has been evidence that PVTGs also use herbs and other materials as medicine blending it with many cultural and religious beliefs and practices are attached to such medicinal practices. For instance, the traditional medicine men among the Kolams of Andhra Pradesh state collect herbs and roots at a particular time of the day (usually just before sunset), and while administering the medicine, he recites the hymns and takes the names of their gods and goddess (Rao et al. 2012).

Brumot's (2008) study on Kadar Tribe of Indira Gandhi Wildlife Sanctuary in Tamil Nadu reveals that the Kadar has a rich knowledge of ethnomedicine, and they depend upon it for their healthcare. Kadars have preserved their divination techniques, spells and curing rituals as the community's sole property.

Regarding treatment-seeking behaviour, the author reveals that generally, Kadars do not pay attention to the disease situation. Their unfriendly habitat compels them to do hard work to get food. So, only when somebody falls seriously ill is he supposed to take rest. There may be five categories of magico-religious acts through which harm gets inflicted on a person, namely sorcery, breach of taboos, intrusion by spirits, objects, and causes of evil eyes.

The indigenous treatment method using herbal medicinal plants is prevalent among Kolams of Adilabad district of Andhra Pradesh. A study conducted by Rao et al. (2012) reveals that for various ailments, including some lethal diseases like TB, the local herbal specialist '*Vaidyalak*' administers herbal medicine. He follows specific ritualistic observances before collecting parts of the medicinal plants just before the sunset.

The Hill Korwas have their traditional medicine men called *Ojha*, an expert in identifying the nature and cause of illness and relating it to the concerned deities. This identification is crucial to ward off the illness because different treatment regimens are mandatory for illness caused by different deities. A *Baiga* is an expert in driving out epidemics, natural calamities as a religious priest. A *Panda* cures diseases with spells and rituals, and he treats smallpox, chickenpox, and spirit intrusion. A *Deovar* is the village medicine man, and he treats the common illness among the people.

As per Kumar (2017), the Irulars in the Nilgiri area of Tamil Nadu perceives that minor or short-term illnesses occur due to physical causes like rain and climate change. They perceive long-term illnesses leading to the inability to perform usual duties and eat as major illnesses and attribute the causes of such illnesses to supernatural power. Thus, they are concerned about the extent of bodily discomfort while perceiving health and well-being and subsequent remedial measures.

Having observed the health belief, health situation and treatment-seeking behaviour among the PVTGs, one can discuss them in details as follows.

There have been two different ways to discuss the results derived from the review. One, compare and validate the findings with the help of research findings worldwide, and the other, analysing and contextualising them with the 'conceptual framework' prepared and described in the methodology.

The literature reviewed has explicitly pointed out the unique nature of the PVTGs' social and cultural domains where perceiving health and well being are intimately related to the concept of supernatural entities' existence and their influence on people's health. The studies conducted in India among the tribal people also reveal a similar pattern of beliefs and practices related to health and well being. One can mention the works of Mahapatra (1994), Bhasin (2008), Nagda (2004), Jain and Agrawal (2005), Sonowal and Praharaj (2007), Roy et al. (2010) and Sonowal (2018). The findings generally agree that people's socio-cultural and religious beliefs and their immediate ecology influence the perception of the health and treatment-seeking behaviour of tribal people.

The studies included for review do not contain a critical examination of the perception of

illness, but instead, most of the literature emphasised the causes of illness the tribal people perceive. The literary evidence discussed in the introductory section explains how the cultural construction of illness plays its role in determining the nature and the extent of the disagreement or mismatch of understanding between physicians' stated rationale for their action (treatment) and the rationale of the 'ill' person for the same, which leads to a failure to assure healing despite effective pharmacologic action (Stimson 1974; Mechanic 1972; Waxler 1974; Yap 1974).

The relation between the perceived cause of illness and the treatment-seeking behaviour has been evident in the literature reviewed, though this has not been the focus of the discussed literature. This crucial aspect is very much lacking in these studies. Nevertheless, researchers worldwide have theoretically and empirically examined the link between the two, thereby explaining why tribal or indigenous people tend to incline towards their traditional healthcare practices.

Othon (2011) has explicitly described the contribution made by medical anthropologists regarding the influence of cultural factors in healthcare, particularly towards understanding the illness and diseases among human beings. Several anthropologists have mentioned the influence of local culture on the interpretation of causes and symptoms of illness, which to a great extent, influence the onset of treatment seeking among people (Ngamvithayapong et al. 2000; Liefooghe et al. 1997; Auer et al. 2000). The perceived causes of illness are found significant in that based on the cause of illness, the expectation of treatment and curative practices are conditioned in society, as has been mentioned by Pronyk et al. (2001), Eastwood et al. (2004) and Viney et al. (2014). Medical anthropologists have also explained the non-compliance and non-adherence to a particular biomedical treatment regimen by indigenous people while they indicate that traditional, non-Western practice offers the patients meaning for their illness and emotional support (de Villiers 1991; Liefooghe et al. 1997; Shrestha-Kuwahara et al. 2017), which the biomedical practitioner cannot provide. In these lights, it can be prudent to say that it is beneficial for social researchers to have a concrete insight into the inherent folk perception prevalent among the PVTGs about causes of illness, health and treatment-seeking expectations.

Next, there is a discussion to contextualise the conceptual framework with the help of information derived from the literature reviewed. Looking at the first perspective, that is, the level of the transition of the PVTGs in India, it may be observed that several of the PVTGs have been rehabilitated in government constructed colonies, away from their native and natural habitats. The government has established several development authorities for the PVTGs, and these agencies are directly involved in the welfare and development activities of the PVTGs in various spheres. Thus, there is a clear indication of different interaction levels and exposure to non-traditional domains amongst India's PVTGs. Compared to the PVTGs living in their natural habitats, the PVTGs living in rehabilitated localities are more exposed to the non-traditional domain and have relatively more access to modern healthcare facilities. These factors have influenced their health belief and treatment-seeking behaviour. Nevertheless, there are PVTG habitats that are still relatively aloof from non-traditional domains. Considering these factors, one may look at the transition of PVTGs, especially in terms of acceptance of biomedical health practices.

The analysis made under the second perspective, that is, perceiving health and well being among the PVTGs, has revealed no delineation about this issue. The slight mention of this issue suggests that tribal people perceive illness as per their understanding and life-ways. They hardly pay attention to some commonly and seasonally occurred diseases like cold, cough, fever and body ache. Inability to do typical day-to-day activities remains the indicator for ill health among them. Thus they seek treatment only when their body becomes unable to perform usual duty.

While looking through the third perspective, 'aetiology' or 'perception regarding the causes of illnesses', it becomes evident that the PVTGs assign different illnesses to the effect of different deities and spirits and human actions. Some researchers have provided a detailed list of illnesses and the deities/spirits responsible for those illnesses. Contrarily, there is no literature found to understand well whether the PVTGs who resort to biomedical treatment assign caus-

es of those illnesses to supernatural beings and human action or not.

The fourth perspective, the 'physiopathological' perception regarding nature, types, and illness course, has not been adequately researched or described in the reviewed papers. Some of the related delineations in this regard have revealed that tribal people do not pay attention to common illness or illness with non-severe symptoms as per their perception. As they do not pay attention, they hardly seek treatment for such illness. Perceiving the severity of any illness again is dependent on people's understanding of the progression and susceptibility to it. As shown in the conceptual framework, the perception of the severity and susceptibility leads to remedial action.

While examining the resources under the fifth perspective, 'treatment seeking behaviour', it has been revealed that to understand the treatment-seeking behaviour of PVTGs, it is always essential to understand the cause of illness they assign to and its course of progression. The PVTGs believe that one cannot treat supernaturally induced illness with natural remedies. Treatment of illness using material things like biomedical treatment provides no logic for PVTG people who perceive and believe the causes of illness to be supernatural or non-physical.

The sixth perspective, the 'normative treatment regimen' among the PVTGs in responding to the illness, depends on the causes of illness they perceive. Once they feel the need for treatment for an illness, the normative way of treatment regimen follows. The literature reviewed has extensively described various traditional methods of treating illness. Appeasing deities and spirits, performing rituals, and chanting hymns are the usual practice among the PVTGs if they find illness due to supernatural power. People rely on counter-magic when someone tries to harm them with magic and sorcery. In the case where 'the climate' and 'eating' are the cause of illness, they administer herbal and indigenous medicine given by the traditional medicine men. Research shows that where the biomedical treatment facilities are available, they may blend the traditional and biomedical regimen. Reviewed papers have shown that all PVTGs are not reluctant to accept modern healthcare practices. A particular section of their population is accepting it to various extents. Nevertheless, there are only a few examples of substantial acceptance of modern biomedical treatment among these people. In other cases, either the treatment seeking is the combination of the two or based on a traditional system only.

In terms of the ecological perspective, one can say that most of the papers mention the distance of public health centres from the habitats of the concerned PVTGs and problems of transportation. Further, the irregular services or the absence of health workers and their behaviour toward the PVTGs, work as the dissuading reason among the PVTGs, leading to non-acceptance or reluctance to use the modern healthcare system. Lack of education and awareness about the benefits and availability of modern healthcare facilities among the PVTGs have been cited as a compounding reason for the non-acceptance of modern healthcare by these people. Besides, loss of traditional livelihood resources due to destruction of the forest, shrinking of land resources, and infusion of diseases and vectors unknown to them as a result of exposure to non-traditional domain adds to the health problems of the PVTGs as mentioned by a few researchers, but without substantial investigations. For positive factors, the initiatives through welfare and development activities taken by the government and NGOs are responsible for accepting modern healthcare practices by a section among the PVTGs to a certain extent.

CONCLUSION

The discussion made above points out that one can see the influence of traditional beliefs and practices of PVTGs, which have a crucial impact on their health and well-being. Malnutrition, diseases related to viral and bacterial infection, and several lifestyle diseases have been widely prevalent. The majority of the PVTGs either ignore perceived non-severe illness or treat them with traditional practices. The modern healthcare facilities are primarily inaccessible to them, and in most cases, they find it a mismatch to their perception of causes of illness and expected treatment regimen. The available studies on health and treatment-seeking behaviour among the PVTGs are not fully compatible to explain and deal with the issues related to emerg-

ing situations in and around the domain of the PVTGs. There is a need to extend the study to relate the health domain of PVTGs with contemporary welfare and development initiatives. There is also a need to understand why the PVTGs still find meaning and justification in relating illness to supernatural entities and the treatment regimen, far opposite to the modern biomedical treatment regimen. There is also an urgent need to find out the suitable way to make these people aware of the biomedical causes of diseases prevalent among them and the benefit of accepting modern healthcare practices to treat those diseases. The available literature thus is unable to throw light on several crucial issues of tribal health aspects. One can see the lack of proper methodologies to conduct and analyse the studies in the selected papers. There is a need to conduct a study among the PVTGs with a detailed delineation on why people resort to traditional practices, what are the shortcomings of biomedical facilities provided for which the PVTGs are not accepting it wholeheartedly, and finally, what should one do to make the welfare and development programs successful in terms of their utilisation by the PVTGs.

RECOMMENDATIONS

i. A nationwide integrated study is required to determine the social determinants of health and treatment-seeking behaviour among the PVTGs.
ii. While planning and implementing the healthcare programme for PVTGs, the outcome of such a nationwide study must be incorporated, and the healthcare professionals should be made aware of the same.
iii. Develop heath awareness programmes based on the local context, making it possible to address the local specific issues of the PVTGs and where the PVTGs find meaning in such programmes.

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