# Tribal population in India: A public health challenge and road to future

### Mohan Kumar M<sup>1</sup>, Vineet Kumar Pathak<sup>1</sup>, Manisha Ruikar<sup>1</sup>

<sup>1</sup>Department of Community and Family Medicine, Medical College Building, All India Institute of Medical Sciences, Raipur, Chhattisgarh, India

### Abstract

India with 8.6% of tribal population is finding it difficult to bridge the gap that exists between tribal and non-tribal population in regards to healthcare. Tribal population suffers triple burden of disease; in fact it is quadruple, namely, communicable diseases, non-communicable diseases, malnutrition, mental health, and addictions complicated by poor health seeking behavior. With increasing needs, an Expert committee on Tribal health has given recommendations with the goal to bridge the current gap in the health status of tribal people latest by the year 2027. An entirely parallel health system has been proposed with key focus areas, governance, and financing. To summarize and report the present scenario in terms of disease burden, health-seeking behavior, healthcare delivery system, and a roadmap for the future along the importance of primary healthcare in achieving it. Mere establishment of more health facilities cannot overcome the poor health of tribal population and so the role of trained manpower to deliver quality healthcare, in which case the role of traditional healers, local Tribal boys and girls comes in handy. It is high time and states should act swiftly to assess the needs, priorities of their own tribal population and set goals, targets to achieve the same through proven public health strategies.

Keywords: Burden of disease, health care, health care delivery, public health systems, tribal health

### Introduction

India, one of the biggest low-middle income country has 8.6% of tribal population.<sup>[1,2]</sup> Even after seven decades of independence, India is finding it difficult to bridge the gap that exists between tribal and non-tribal population in regards to healthcare. They account for over a quarter of the country's poorest people. Although these groups have seen considerable progress over the years, poverty among tribal groups declined by more than a third between 1983 and 2005 and nearly half the country's Scheduled Tribes population remains in poverty, due to their low starting point. Rajasthan state has the largest population of Scheduled Tribes in India, constituting over 12% of the state's population.

Address for correspondence: Dr. Vineet Kumar Pathak, Department of Community and Family Medicine, Medical College Building, All India Institute of Medical Sciences, Room No 2112, 2<sup>nd</sup> Floor, Raipur - 492 099, Chhattisgarh, India. E-mail: pathakvineet2089@gmail.com

Received: 09-11-2019	<b>Revised:</b> 28-12-2019
Accepted: 06-01-2020	Published: 28-02-2020
Access this article online	
Quick Response Code:	Website: www.jfmpc.com

Healthcare indicators and ultimately health of a country in no way is going to improve leaving behind this socioeconomically disadvantaged population.

India, though far from achieving all the MDGs, adopted SDGs and is now committed toward Universal Health Care (UHC) and Universal Health Assurance (UHA).<sup>[3]</sup> Spurring progress on the lagging indicators is essential, and designing a healthcare delivery system appropriate, accessible, acceptable, and affordable for tribal population is of utmost importance; making it more imperative to have a health system that prioritizes tribal population, equity more than equality.

Though it has long been suspected that tribal people have poor health and huge unmet needs, healthcare for tribal people remained subsumed in rural healthcare settings. It was assumed that tribal people have same health problems, similar needs and

For reprints contact: reprints@medknow.com

**How to cite this article:** Kumar MM, Pathak VK, Ruikar M. Tribal population in India: A public health challenge and road to future. J Family Med Prim Care 2020;9:508-12.

10.4103/jfmpc.jfmpc 992 19

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

hence the uniform national pattern of rural healthcare would be applicable to them as well, albeit with some alteration in population: Provider ratio. The different terrain and environment in which they live, different social systems, different culture and hence different healthcare needs were not addressed. Not surprisingly health and healthcare in tribal areas remained unsolved problems.<sup>[4]</sup>

The aim of this article is to summarize and report the present scenario in terms of disease burden, health-seeking behavior, healthcare delivery system, and a roadmap for the future along the importance of primary healthcare in achieving it.

### Are They Substantial in Number?

Yes. One third of the world's tribal and indigenous population, that is, over 104 million tribal people live in India (8.6%). Spread across 705 communities, they represent unique cultural diversity. Out of the total Schedule Tribe population, approximately 2.6 million (2.5%) belong to "Particularly Vulnerable Tribal Groups" (PVTGs) known as the "Primitive Tribes." This classification is reserved for the most disadvantaged of all the Schedule Tribe communities. There are 75 identified PVTGs spread across 18 States and Union Territories in India. There are 90 districts or 809 blocks with >50% tribal population and they account for 45% of Schedule Tribe population. Paraphrasing it infers that 55% are outside Scheduled areas.<sup>[1,5]</sup>

### Present Scenario: Disease Burden

Tribal people are not integrated into the national mainstream of socioeconomic activities, invariably leading to their lower educational (41% Illiteracy) and economic attainment (41% Below Poverty Line); a life often marred by lack of material circumstances and lack of access to public utilities and services. Their geographically isolated habitats often compound their problems. Moreover, deleterious social beliefs and cultural practices that often remain entrenched in their practices have telling effects on their health and health-seeking behavior.

The tribal community lags behind the national average on several health indicators, with women and children being the most vulnerable. Total Fertility Rate is 2.5% and only 15% complete their ANC visits. In spite of this, what is more disheartening is the lack of MMR data pertaining to tribal population. The children having full immunization coverage is only 56% which reflects in IMR as 44.4% and the Under-five Mortality Rate as 57.2%.<sup>[1,6]</sup>

Tribal population suffers triple burden of disease; in fact it is quadruple, namely, communicable diseases, non-communicable diseases, malnutrition, mental health, and addictions. 8.6% tribal population constitutes 30% of all cases of malaria, >60% P. falciparum and as much as 50% of the mortality associated with malaria. The estimated prevalence of TB (per 100,000) was 703 cases against 256 in non-tribal population. Also, only 11% pulmonary TB gets treated based on smear positive reporting (Remember End TB Strategy 2025 goals in India). The proportion of new leprosy cases was found to be 18.5% (India declared to have reached the WHO target of elimination as a public health problem less than 1/10,000 cases by the end of 2005). The percentage of children underweight is found to be 42% and about 77% under-five children are anemic. It has been reported that malnutrition and child deaths are in spurts, reported mostly during rainy seasons. Almost 50% adolescent ST girls are having BMI less than 18.5 and about 65% tribal women (15–49 years age) suffer from anemia (non-tribal 47%), a vicious cycle. More than 72% tribal men 15–54 years of age use tobacco and more than 50% consume alcohol against 56% and 30% non-tribal men, respectively.<sup>[1,7-9]</sup>

### Health-seeking behavior

Only availability of healthcare facility does not indicate a good health of the people of that particular area, if the people do not utilize this facility. Many studies have found that utilization of modern healthcare facilities is very poor among tribal population. A study conducted on tribal women at Odisha, India by Mahapatra M, et al.[10] in 2000 have reported only 6% of participants exclusively use the allopathic type of treatment and 49% of them use traditional measure of treatment mainly provided by local quacks. It was also reported that 21.2% of women considered their illness not so serious and can be cured by home remedy or by traditional therapy. Also 11% of them have a belief that illness is God's wish and nobody can do anything about it. Other studies<sup>[11,12]</sup> also came up with the similar findings that a disease is always caused by hostile spirits, ghosts, breach of some taboos, and curse of gods. Therefore, they seek remedies through religious and magical practices to propitiate the supernatural powers. They do not come to avail modern system of medicines and on the other hand, herbal medicine or indigenous medicines are their next preference of treatment which is obtained through local people. So, the gap is not only to the availability of modern and quality healthcare but also to develop behavior change model to motivate them to use both quality Indian system of medicine with allopathic treatment.

### Status of healthcare delivery system

To add to the burden of disease, the healthcare infrastructure and the number of specialist posted in tribal areas is worse than scarcity. The shortfall of healthcare infrastructure across 18 states and 3 Union Territories is found to be 27% Health Sub-Centres (HSCs), 40% Primary Health Centres (PHCs), and 31% Community Health Centres (CHCs), lacking penetration of primary healthcare services. In India, across 10 states with sizable tribal population, the percentage surplus/deficit of healthcare providers in tribal areas is found to be +64% ANMs at HSCs and PHC, -33% Allopathic doctors at PHC, and -84% specialists at CHC which depict the huge deficiency of specialist doctors and thus quality healthcare, lacking Human Resources for Health (HRH) in the existing primary healthcare system. This is the state of healthcare delivery system in tribal areas despite having more than 50% and 66% of tribal population being dependent on public health system.

### Road map for the future

Finally after 11 five year plans, Government of India recognised the need to view tribal people's health with a serious and special concern and constituted an Expert committee on Tribal Health jointly by Ministry of Health and Family Welfare and Ministry of Tribal Affairs in 2013.

The objectives were as follows:

- To review the existing situation of health in tribal areas, suggest interventions, formulate strategic guidelines for states, and make recommendations on the requirement of additional resources
- To develop a national framework and roadmap to improve the appropriateness, access, content, quality, and utilization of the health services among the tribal population, particularly those living in scheduled areas.

Having set the goal to bridge the current gap in the health status of tribal people and to bring the health coverage and outcome indicators at par with the state's average latest by the year 2027, the Expert committee has given certain recommendations. These recommendations are essentially based on strengthening the primary healthcare system: To reach the unreached.

## Organisation of primary healthcare and human resources for health (HRH)

The committee has given a structure for organisation of primary healthcare in tribal areas [Figure 1] for which the proposed Health and Wellness Centres (HWCs) known as the Tribal Health and Wellness Centres (THWCs) will be the centre of gravity.

Most importantly the committee has recommendations for people living outside scheduled areas. The significant ones are to have ST subsample in national surveys, a new cadre of social facilitators (1 per 2,000 ST families), providing ST health cards to enable them to avail special benefits, formulating health Self Help Groups (SHGs) as Panchayats (Extension to Scheduled Areas) Act (PESA) 1996 is not applicable outside scheduled areas and introducing Aadivasi Aarogya Bima Yojana.

Human Resources for health are the building blocks for sustaining the primary healthcare system and adequate efforts have been made to address this. Considerable recommendations are to select, train, and deploy local boys and girls from tribal areas as Arogya Mitras, defining the role of traditional healers, introducing Mid-Level Health Providers (MLHPs) trained through bridge courses at HWCs, introducing 3-year courses in BSc Community Medicine or Rural Health, weightiness of multitasking and task shifting being stressed, making the posts in tribal areas "empanelled" and appointing Prime Minister's Tribal Health Fellows for a period of 5 years. This is in addition to having a flexible recruitment and contracting system, making avenues for professional growth, creating dedicated medical colleges in tribal districts and having reserved seats for tribal people willing to serve in tribal areas.

### Focus areas

The committee has identified 10 special problems pertaining to tribal areas and has set goals and targets for the same. The significant ones are to control malaria, use of additive substances, reduce malnutrition, child mortality, ensuring safe motherhood and health of women, timely treatment of animal bites and accidents, providing family planning services along with infertility care, addressing sickle cell disease, health literacy and the health of children in Ashramsalas.

#### Governance, participation, and financing

An entirely parallel system of governance has been proposed [Figure 2] for tribal health with both Ministry of Tribal affairs (MOTA) and Ministry of Health and Family Welfare (MOHFW) at the top of the tree. There is no getting away from the absolute necessity of increasing public health expenditure in tribal areas and for tribal health; need for equity.<sup>[13]</sup>

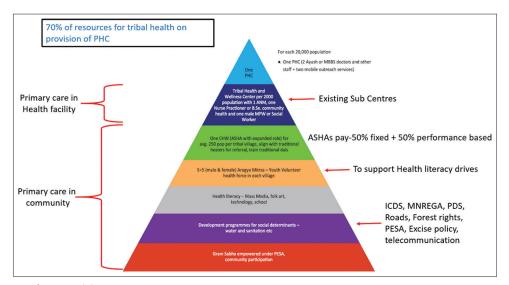


Figure 1: Organisation of service delivery

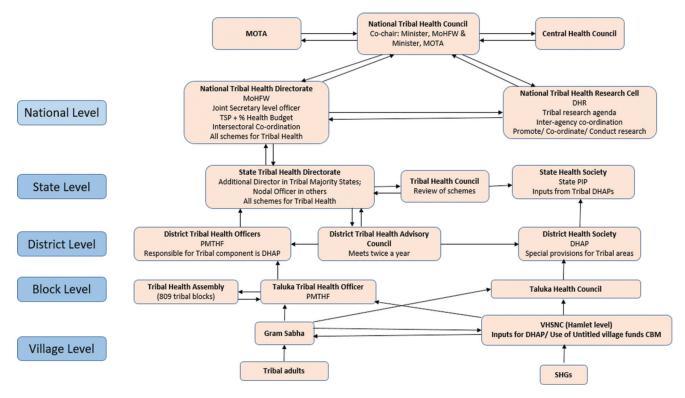


Figure 2: Proposed governance structure of Tribal health

The significant recommendations are to:

- Increase public expenditure on health to at least 2.5% of the GDP and to increase the allocations for tribal health to at least 8.6% of health budget.
- 2. Adhere to Tribal Sub Plan (TSP) guidelines.
- 3. Earmark percentage of MOTA's allocation for health.

It is important to note the principle of additionality; regular activities and expenditure in the tribal areas by the MoHFW are not a part of the stipulated 8.6%. These are in addition to providing health insurance for all tribal people, encouraging public private partnerships in health selectively, corporate social responsibility (CSR) funding, having special central assistance to tribal areas and tax exemptions.

### **Innovation interventions**

There were many innovative strategies adopted in different states to increase its acceptance by involving the local people and educate them by the means which they can easily accept. Like, for raising the awareness of health issues in state of Rajasthan, health messages were most commonly disseminated using live performances by drummers, dancers, folk musicians, magicians, puppeteers, etc., to appeal to tribal populations and also incentives were linked for the same to the ASHAs after successful completion of activities. In Tamil Nadu, in addition to posters, hoardings, bus boards, and personalized letters of communication for the literate members of a family, radio jingles and video broadcasts featuring popular film stars were found to be effective means for disseminating health messages to the state's tribal people. Medical outreach camp, mobile health clinic can also help to bring health services to remote populations. Providing emergency transportation for expectant mothers, employing health workers from tribal communities, and establishment of tribal counsellor who pay weekly visits to tribal hamlets to raise awareness about health issues and promote healthy behaviors can help to increase the tribal people attendance at health facilities.<sup>[14]</sup>

### Conclusion

Primary healthcare has been proven to be a highly effective and efficient way to address the main causes and risks of poor health and well-being today, as well as handling the emerging challenges that threaten health and well-being tomorrow. There is evidence that quality primary healthcare reduces total healthcare costs and improves efficiency by reducing hospital admissions: A good value investment.<sup>[15]</sup> More importantly, mere establishment of PHCs and sub-centres cannot overcome the poor health of tribal population. Scarcity of trained manpower to deliver quality health services is the major problem and an obstacle to the extension of health services to rural and tribal areas. Traditional healers, who are often the first point of care, can be sensitized and trained to deliver simple interventions and to assess when to refer to higher centres. Tribal boys and girls with minimum education can be trained as community health worker and incentivized to work in their own community; primary healthcare system as a whole, infrastructure and HRH, has to be strengthened. More research needs to be done on the traditional herbal medicines used by tribal people and their use encouraged, wherever beneficial. It is high time and states should act swiftly to assess the needs, priorities of their own tribal population and set goals, targets to achieve the same through proven public health strategies.

### **Financial support and sponsorship**

Nil.

### **Conflicts of interest**

There are no conflicts of interest.

### References

- 1. Executive Summary Tribal Health Report, India. Available from: http://tribalhealthreport.in/ executive-summary/. [Last accessed on 2019 Nov 20].
- 2. Mavalankar D. Doctors for tribal areas : Issues and solutions. Indian J Community Med 2016;41:172-6.
- 3. India's Commitment to the SDGs | NITI Aayog. Available from: https://niti.gov.in/indias-commitment-to-the-sdgs. [Last accessed on 2019 Nov 20].
- 4. Anderson I, Robson B, Connolly M, Al-Yaman F, Bjertness E, King A, *et al.* Indigenous and tribal peoples' health (The Lancet-Lowitja institute global collaboration): A population study. Lancet 2016;388:131-57.
- 5. Bhatia V, Behera P. Tribal health care : The unaddressed aspect in Indian health system. Indian J Community Fam Med 2017;3:2-3.
- Government of India Ministry of Tribal Affairs. Annual Report 2017-18. Available from: https://tribal.nic.in/writereaddata/ AnnualReport/AR2017-18.pdf. [Last accessed on 2019 Nov 20].

- 7. Narain J. Health of tribal populations in India: How long can we afford to neglect? Indian J Med Res 2019;149:313.
- 8. Ghosh K, Colah RB, Mukherjee MB. Haemoglobinopathies in tribal populations of India. Indian J Med Res 2015;141:505-8.
- 9. Rao VG, Bhat J, Yadav R, Muniyandi M, Sharma R, Bhondeley MK. Pulmonary tuberculosis-a health problem amongst Saharia tribe in Madhya Pradesh. Indian J Med Res 2015;141:630-5.
- 10. Mahapatro M, Kalla AK. Health seeking behaviour in a tribal setting. Health Popul Perspect Issues 2000;23:160-9.
- 11. Patra P, Mondal J. Health care system among tribal peoples in urban settings: An ethnographic study in North 24 Parganas, West Bengal. Int J Human Soc Sci Res 2016;2:10-6.
- 12. Jacob I. Health and health seeking behaviour among tribal communities in India: A socio-cultural perspective. J Tribal Intellect Collect India 2014;2:1-16.
- 13. Report No. 33 of 2015-Performance Audit on Tribal Sub-Plan, Ministry of Human Resource Development, Ministry of Health and Family Welfare and Ministry of AYUSH | Comptroller and Auditor General of India. Available from: https://cag. gov.in/content/report-no-33-2015-performance-audit-trib al-sub-plan-ministry-human-resource-development. [Last accessed on 2019 Nov 20].
- 14. Innovations in Development. Ministry of Finance Department of Economic Affairs. The World Bank of India. Available from: http://siteresources.worldbank.org/ INDIAEXTN/Resources/295583-1320059478018/INTribal Health.pdf. [Last accessed on 2019 Nov 20].
- 15. Primary Health Care. Available from: https://www.who.int/ news-room/fact-sheets/detail/primary-health-care. [Last accessed on 2019 Nov 20].