Indian J Med Res 149, March 2019, pp 313-316
DOI: 10.4103/ijmr.IJMR_2079_18

Quick Response Code:

Editorial

Health of tribal populations in India: How long can we afford to neglect?

In today's globalized and inter-connected world, India's population including those belonging to scheduled tribes (ST) is undergoing demographic, socio-economic and health transformation. According to the 2011 census, the tribal population in India was 104 million, constituting 8.6 per cent of country's population, up from 8.2 per cent in 2001 census[1]. Belonging to some 705 different ethnic groups, they are scattered across 30 States and Union Territories of India, and having diverse cultural and life practices[2].

The tribal population primarily inhabits rural and remote areas and is among the most vulnerable and marginalized section of the society. Moreover, they lag behind all other social groups in various social, health and developmental indicators[1,3]. Without addressing the concerns of vulnerable population, India's socio-economic transformation will remain incomplete and it will not be possible to achieve the UN Sustainable Development Goals for which India is committed itself along with other countries[4].

Why tribal health matters

In 2011, while 40.6 per cent tribals were below the poverty line, the proportion among the rest was 20.5 per cent[1]. In the health area, the key indicators among tribes remain very poor. For example, according to the National Family Health Survey 4 (NFHS-4) (2015-2016), the under-5 mortality among the tribal population was 57.2 per 1000 live births compared to 38.5 among others, and the infant mortality rate (IMR) 44.4 per 1000 live births versus others of 32.1[5,6]. A child born to a ST family in India has 19 per cent higher risk of dying in the neonatal period and 45 per cent greater risk of dying in the post-neonatal period compared with other social classes[7].

One telling example of disparity for tribals relative to rest of the population comes from Kerala State where in 2013 the lowest IMR of 7 per 1000 live births was reported[8]. The rate in tribal community of Wayanad, the district having the largest tribal population in Kerala, was 41.47, according to a UNICEF-assisted study[9]. This was cited also in the comptroller and auditor general (CAG) of India, 2014 report[10].

Child malnutrition rates are also significantly higher and poverty more common for tribal populations compared with other populations[3]. In a cross-sectional study conducted in 2015, three-fourths (76.6%) of the 2926 under-5 children surveyed among tribal district of Melghat in Maharashtra, India, were found to be severely or moderately undernourished[11]. The situation of undernutrition is extremely worrisome in most tribal areas[12]. For example, according to the NFHS-4 data, 94.7 per cent of children below five years of age and 83.2 per cent of women between the age of 15 and 49 in tribal district of Lahaul and Spiti in Himachal Pradesh were suffering from anaemia[13].

The prevailing situation is in large part due to the fact that ST population has for centuries suffered from neglect from policy point of view. Even today, areas where tribals live, the health services remain grossly underdeveloped and population access to good quality health services is at best abysmal[14].

Disease burden

A relatively limited data set available on the health conditions and disease profile of the tribal groups across the country shows that the diseases affecting tribal population vary from area to area, depending on the environmental and social conditions and cultural practices prevalent in each area[15]. Especially vulnerable are the primitive tribes who have some unique health problems and challenges, needing special attention by the government.

The vector-borne diseases such as malaria have a huge and disproportionate adverse impact on the tribal population. The tribal districts (having ≥30% of the

population considered as tribal) which comprise about eight per cent of the country's population contribute to 70 per cent of the dangerous malaria strain *Plasmodium falciparum* and 47 per cent total malarial deaths in the country[16,17].

Available evidence indicates that the prevalence of tuberculosis (TB) is significantly higher among tribal populations; 703 per 100,000 compared to the national average (256 per 100,000)[18]. The *Saharias*, a primitive tribe in Madhya Pradesh, is particularly vulnerable to TB, with alarmingly high prevalence of 1518 per 100 000 population[19]. To achieve End TB by 2025 as envisaged by the Prime Minister[20], focus on TB hotspots in tribal areas must receive urgent priority attention.

Conditions such as haemoglobinopathies and thalassaemia are unique and important health challenges for tribal population living, in particular, in the North-East, West Bengal, Odisha and Andaman and Nicobar islands and Madhya Pradesh[21]. Better understanding of the problem including its management and control is critical. Glucose-6-phosphate dehydrogenase (G6PD) deficiency is also high in tribal communities[21].

While there is an increasing trend in the prevalence of chronic diseases such as diabetes, hypertension and cancer throughout India, associated with the use of tobacco, lack of physical activity and consumption of unhealthy diet, a similar increase is also being experienced by the tribal populations in India. At the same time, the level of awareness and knowledge and health-seeking behaviour among tribals were found to be low[22]. There are, however, examples to show that with political commitment and concerted efforts, a difference in the lives of the tribal population can be made[23].

Opportunities and the way forward

The following steps are urgently needed to address the prevailing health situation of the tribal population:

First, the governments both at the Centre and States must recognize improvement in the health status of the tribal population as among the topmost priorities from policy point of view and ensure adequate budget allocations made including under the National Tribal Plan. The Government of India (GOI) constituted Expert Committee on Tribal Health has recommended that the government per capita expenditure on tribal health should be substantially enhanced and that 70 per cent of this should be spent on primary health care[6]. Allocation of at least eight per cent of the national budget assigned for tribal welfare in accordance with population size, a dedicated focus on infrastructure development and ensuring service delivery in an efficient manner will make a difference. Besides augmenting resource allocation, the common practice in the governments of diverting the scant resources meant for tribal development for other purposes, as indicated also by CAG report[24] must be stopped.

Second, the government at the Centre should consider establishing the National Institute for Tribal Health with field stations at different locations in tribal areas. By coordinating and networking with all existing institutions working on tribal health, this institute could facilitate information exchange and assist in conducting action research and in policy dialogue. Within the Ministry of Tribal Welfare, a health section/department should be established to coordinate with other agencies.

Third, a tribal health policy and a joint coordinated action plan need to be framed and its speedy implementation is to be ensured. Special attention is to be paid to the tribal populations while planning and implementing national programmes. The poor health infrastructure exemplified by the absence of doctors or specialists in the health facilities must be tackled on an emergency basis. The governments must make use of information technology such as telemedicine and mobile technology to improve efficiency and quality of health services by linking the district hospital staff with a specialist or a consultant based in a medical college or higher level facility for expert advice and guidance in the management of difficult cases or for critical care.

Fourth, prioritise and fast track on a priority basis collection and analysis of data about health situation and underlying factors. At present, the national data are scant thereby providing a fragmented picture of tribal health and obscuring tremendous diversity among tribal groups scattered across the country. Disaggregated data by specific tribal groups and assessing the social, cultural and economic determinants of health is, therefore, urgently needed. Such research data will have a crucial role in designing and initiating evidence-based health policies, strategies and public health action suited to their unique social, cultural and geographic environments.

The Indian Council of Medical Research since 1984 has established a Regional Medical Research

Centre for Tribals (now National Institute of Research in Tribal Health) in Jabalpur, Madhya Pradesh, India, which carries out research relating to the health aspects of tribals in the country (*www.nirth.res.in*). Such research serves as the basis for evidence-based health policy making and developing health programmes directed at the tribal population.

Fifth, it is also important to have experts belonging to STs in policy-making bodies including those dealing with health. The problem of non-representation has been highlighted by the special committee on tribal issues constituted by the GOI, stating that one of the key reasons for poor health service in tribal areas, is 'near complete absence of participation of people from the ST or their representatives in shaping policies, making plans, or implementing services in the health sector'[3]. Finally, it is imperative to focus on enhancing the overall development of tribals to try and bridge the prevailing inequalities and disparities in the country.

***Conflicts of Interest*:** None.

Jai Prakash Narain*
Formerly at WHO Regional Office for
South-East Asia, New Delhi 110 002, India
narainjp88@gmail.com

Received November 14, 2018

References

1. Office of Registrar General & Census Commissioner India. *CensusInfo*. Ministry of Home Affairs, Government of India; 2011. Available from: *http://www.censusindia.gov.in/2011census/HLO/HH14.html*, accessed on September 2, 2018.
2. Ministry of Tribal Affairs. *Statistical Profile of Scheduled Tribes in India 2013*. Government of India; 2014. Available from: *https://www.tribal.nic.in/ST/StatisticalProfileofSTs2013.pdf*, accessed on August 29, 2018.
3. Ministry of Tribal Affairs. *Report of the high level committee on socio-economic, health and educational status of tribal communities of India*. Available from: *http://www.indiaenvironmentportal.org.in/files/file/Tribal%20Committee%20Report,%20May-June%202014.pdf*, accessed on August 29, 2018.
4. NITI Aayog. India's commitment to the SDGs: PM's statement at the UN Summit for the adoption of Post-2015 Development Agenda. Available from: *https://niti.gov.in/india-s-commitment-to-the-sdgs*, accessed on November 13, 2018.
5. International Institute of Population Sciences. *National family health survey (NFHS-4) 2015-16*. Mumbai: IIPS; 2017. Available from: *http://rchiips.org/NFHS/NFHS-4Reports/India.pdf*, accessed on September 7, 2018.
6. Ministry of Health & Family Welfare and Ministry of Tribal Affairs. *Report of the expert committee on tribal health, tribal health in India: Bridging the gap and roadmap for the future-Policy brief*; 2018. Available from: *http://nhsrcindia.org/news/report-expert-committee-tribal-health*, accessed on September 7, 2018.
7. 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.
8. The New Indian Express. Kerala has lowest infant mortality rate. Available from: *http://www.newindianexpress.com/states/kerala/2018/nov/03/kerala-has-lowest-infant-mortality-rate-1893598.html,* accessed on November 13, 2018.
9. The Economic Times. Maternal deaths high among tribal communities in Wayanad: Comptroller and Auditor General; 13 June, 2014. Available from: *https://economictimes.indiatimes.com/news/politics-and-nation/maternal-deaths-high-among-tribal-communities-in-wayanad-comptroller-and-auditor-general/articleshow/36488526.cms*, accessed on November 13, 2018.
10. Press Trust of India. Maternal deaths high among tribal communities in Wayanad: CAG. Available from: *https://www.msn.com/en-in/news/other/maternal-deaths-high-among-tribal-communities-in-wayanad-cag/ar-AA1Hgry*, accessed on November 13, 2018.
11. Dani V, Satav A, Pendharkar J, Ughade S, Jain D, Adhav A, *et al*. Prevalence of under nutrition in under-five tribal children of Melghat: A community based cross sectional study in Central India. *Clin Epidemiol Global Health* 2015; *3* : 77-84.
12. Sahu D, Nair S, Singh L, Gulati BK, Pandey A. Levels, trends & predictors of infant & child mortality among scheduled tribes in rural India. *Indian J Med Res* 2015; *141* : 709-19.
13. International Institute of Population Sciences. *National Family Health Survey-4, 2015-16. District fact sheet Lahul and Spiti. Himachal Pradesh*. Mumbai: IIPS; 2015-16. Available from: *http://rchiips.org/NFHS/FCTS/HP/HP_Factsheet_25_Lahul%20and%20Spiti.pdf*, accessed on November 13, 2018.
14. Mavalankar D. Doctors for tribal areas: Issues and solutions. *Indian J Community Med* 2016; *41* : 172-6.
15. Basu S. Dimensions of tribal health in India. *Health Popul Perspectives Issues* 2000; *23* : 61-70.
16. Sharma RK, Thakor HG, Saha KB, Sonal GS, Dhariwal AC, Singh N. Malaria situation in India with special reference to tribal areas. *Indian J Med Res* 2015; *141* : 537-45.
17. Sharma VP, Dev V, Phookan S. Neglected *Plasmodium vivax* malaria in Northeastern states of India. *Indian J Med Res* 2015; *141* : 546-55.
18. Thomas BE, Adinarayanan S, Manogaran C, Swaminathan S. Pulmonary tuberculosis among tribals in India: A systematic review & meta-analysis. *Indian J Med Res* 2015; *141* : 614-23.

19. 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.

20. We in India are working towards eliminating TB by 2025: PM Modi. Available from: *https://www.narendramodi.in/text-of-pm-s-address-at-the-inaugural-session-of-end-tb-summit-539297*, accessed on November 13, 2018.

21. Ghosh K, Colah RB, Mukherjee MB. Haemoglobinopathies in tribal populations of India. *Indian J Med Res* 2015; *141* : 505-8.

22. Singh N. Understanding poor man's diseases in contemporary perspective. *Indian J Med Res* 2015; *141* : 501-4.

23. Narain JP, Jain SK, Bora D, Venkatesh S. Eradicating successfully yaws from India: The strategy & global lessons. *Indian J Med Res* 2015; *141* : 608-13.

24. Comptroller and Auditor General of India. *Performance Audit of Tribal Sub-Plan*. Report no. 33; 2015. Available from: *https://cag.gov.in/sites/default/files/audit_report_files/Union_Performance_Tribal_Sub_Plan_33_2015.pdf*, accessed on November 13, 2018.