View Point

Doctors for Tribal Areas: Issues and Solutions

Dileep Mavalankar

Director, Indian Institute of Public Health, Gandhinagar, Ahmedabad, Gujarat, India

ABSTRACT

Health parameters of tribal population had always been a concern for India's march towards Millennium development Goals (MDG's). Tribal population contributes 8.6% of total population, in spite of efforts and commitment of Government of India towards MGD, India lagged far behind from achieving and optimal health of tribal population will be a concern for achieving Sustainable development Goals SDG's also. Some of the common health problems of the tribal population face are deficiency of essential components in diet like energy malnutrition, protein calorie malnutrition and micronutrient deficiencies. Goiter, Gastrointestinal disorders, particularly dysentery and parasitic infections are very common. High prevalence of genetic disorders like sickle cell anemia and others are endemic in few tribes of India. Tribal Health is further compounded issues by social issues like excessive consumption of alcohol, poor access to contraceptive, substance abuse and gender based violence. Besides other reasons, like poor budget allocation, difficult to reach, poor access to health care facility, severe shortage of qualified health workers and workforce led to poor governance of health sector in tribal areas. Present view point reflects on the issues of inadequacy of doctors in tribal area and suggests possible solutions.

Keywords: Health system, human resource, tribal health

Background

The Government of India (GOI) has committed to achieve Sustainable Development Goals (SDGs) but India is yet to achieve Millennium Development Goals (MDGs). Human resource (HR) is a key constraint in improving the health status in India.⁽¹⁾ Health parameters of tribal population have always been a concern for India's march toward MDGs and now toward SDGs as well. Tribal communities in India contribute to 8.6% of the total population and most of them live in forested areas. They suffer from extreme deprivation and economic underdevelopment. One of the key reasons identified for poorly designed and poorly managed health service in tribal areas, by a special committee on tribal issues constituted by GOI was "near complete absence of

Access this article online	
Quick Response Code:	
	Website: www.ijcm.org.in
	DOI: 10.4103/0970-0218.183587

participation of people from the Scheduled Tribes or their representatives in shaping policies, making plans, or implementing services in the health sector".⁽²⁾

Tribals suffer from nutritional deficiencies such as protein and/or energy malnutrition and micronutrient deficiencies (iodine). Gastrointestinal disorders (dysentery and parasitic infections) and malaria are common in them as well. High prevalence of genetic disorders such as sickle-cell anemia is endemic in a few of them. Tribal health is further compromised by social issues such as excessive consumption of alcohol and in some areas, tobacco consumption is rapidly increasing

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

How to cite this article: Mavalankar D. Doctors for tribal areas: Issues and solutions. Indian J Community Med 2016;41:172-6.

Address for correspondence:

Dr. Dileep Mavalankar, Indian Institute of Public Health - Gandhinagar, Drive in Road, Thaltej, Ahmedabad - 380 054, Gujarat, India. E-mail: dmavalankar@iiphg.org

Received: 17-05-2016, Accepted: 20-05-2016

as well. The triad of lack of health infrastructure, roads, and extreme poverty has further compelled many to ignore their health problems. Thus, understanding the dynamics of poor tribal health is a challenge as well as a means of understanding the public health in the tribal context.

General impression and some small studies in few tribal districts of Gujarat, India and Madhya Pradesh, India under Maternal Health India (MATIND) project showed that there are much less private or public doctors and obstetricians and gynecologists in tribal areas as compared to other/nontribal districts.⁽³⁾ It is additionally documented that, in most tribal districts, even in developed states such as Gujarat, India, the posts of specialists, Medical Officers (MO) and Lady Health Visitor (LHV) as well as grassroot workers including male workers and technicians are vacant on a large scale. On the contrary, the posts of health workers (female)/ Auxiliary Nurse Midwife (ANM) are more than required at the subcenter and Primary Health Centre (PHC) levels in tribal areas in several states.⁽⁴⁾ However, the fact being, many of the staff does not stay in their place of posting. Some of the reasons for vacancies of staff, though not adequately documented/researched, are:

- A sense of professional isolation in tribal areas: There is little scope for professional interaction or growth.
- Equal salary structure: The staff posted in tribal or nontribal areas get the same salary and perhaps even less due to lesser House Rent Allowance in tribal areas.
- Poor educational opportunities for the children: There are no good schools or high schools for children,
- Social and family isolation: No entertainment facilities are available for families.

These issues lead to poor motivation, which is further compounded by a lack of transparency in posting and transfer policy in the health departments. Hence, the staff posted in tribal areas remains in a tribal area for long without getting a chance of being posted in or around urban areas of the state.

Mere availability of public health workforce cannot improve the health status in tribal areas, as access to services due to geographical difficulties is an additional barrier. Access to health services becomes more difficult in tribal areas as the roads are poor or nonexistent. There is a lack of public/private transport and ambulance services and, additionally, telephone network does not reach many areas reliably. Language/social barriers and the lack of access to money etc. add to access problems.⁽²⁾ Of all the barriers, this paper discusses the lack of human resources, especially doctors and specialists in tribal areas of India. Public health care infrastructure pattern remains the same for tribal areas as for the rural areas, except for a lower population ratio. These norms for PHC and subcenter were set up by the planning commission in the 1980s and have not been changed yet. In spite of somewhat liberal norms to increase access to care centers, in tribal areas, these public health centers are much harder to reach than in rural areas given the hilly terrain, forests, poor roods, and the lack of transport.

Rural health statistics (2012) report of Health and Family Welfare, the GOI, reported a huge shortfall of physicians, pediatricians, or any other specialist at Community Health Centers (CHCs) and doctors at PHCs in tribal areas. Rao, Sundararaman, and Gupta^(5,6) as well as Rao and Ramani⁽⁷⁾ have reviewed strategies tried out in India to address this shortfall. Internationally, there are some papers and the World Health Organization (WHO) reports that have reviewed various strategies for the attraction and retention of doctors for rural and remote areas.⁽⁸⁻¹⁰⁾

Some effort areas highlighted here are noteworthy:

- a. Provision of additional salary to doctors posted in tribal areas. However, the incentive is too meager most of the times to attract and retain them for long.
- b. The Government of Tamil Nadu offers additional marks for each year of service in tribal areas. These are added to their Postgraduate entrance score and seems to be effective in attracting doctors to tribal areas.⁽¹¹⁾
- c. The Government of Chhattisgarh had developed a very innovative scheme where doctors accepting positions in remote, tribal, and Naxalism-dominated areas were allowed to negotiate their salaries. They were paid up to ₹ 70,000 in salary and an additional ₹ 30,000 performance-related bonus per month. This is about 2.5 times the regular salary. Under similar arrangements, specialists are offered about ₹ 2,00,000 salary per month. This scheme is reportedly successful, but needs in-depth evaluation.
- d. The Government of Gujarat recently passed a resolution to offer ₹ 25,000 extra to MOs per month and ₹ 35,000 extra to specialists for being posted in tribal blocks. They have additionally offered a special salary to an obstetrician to go to the district hospital in a remote tribal district. Under this incentive, an obstetrician has gone to the Dangs and has been reportedly working well. Many other state governments have been paying small amounts (₹ 1,000-5,000 per month) of extra salary for being posted in "difficult areas".⁽⁶⁾
- e. A few states are filling the vacant MO posts in the tribal areas by Ayurveda Unani Siddha and Homeopath (AYUSH) doctors who are more easily available than Bachelor of Medicine, Bachelor of Surgery (MBBS) doctors. Some states such as Odisha,

India have planned a 6-month bridge course for AYUSH doctors to learn modern medicine and to work effectively as PHC MO.

f. Assam, India, West Bengal, India, and Chhattisgarh, India developed a 3-year trained rural health practitioner cadre some time ago.⁽¹⁾ However, the model had some success, briefly, in Assam, India but not in Chhattisgarh, India due to the lack of required legal provisions for their independent practice in the latter. A 3-year degree program called "BSc in Community health" was proposed by the earlier central government, wherein those graduating could be posted at subcenters to provide clinical and public health services in rural and tribal areas. Although, Medical Council of India (MCI) had no objection, it was strongly opposed by the Indian Medical Association (IMA) and not pursued further by the subsequent national or state governments.⁽¹²⁾

While various states are trying to come up with solutions to the shortage of doctors on *ad hoc* manner based on their best understating of the problem, there is no guidance from the central government on this matter.

After reviewing various strategies in India and internationally and taking into account Indian social and political realities, the following options are suggested for the consideration of policymakers and Community Medicine experts for generating a debate on this critical issue.

Possible Solutions for the Shortage of Doctors in Tribal Areas

Financial incentive

Most young doctors want to earn well and live a comfortable life in cities. Hence, Indian doctors migrate to the Western world and Gulf countries where earnings are much higher. So why not follow a model tried by Chhattisgarh, India and pay higher salaries, depending on the remoteness of the area and any other special difficulties (Naxalism-affected areas). Will this option be very costly for the States or the central government to fund? No. Suppose the doctors working in tribal areas are paid twice as compared to those working in nontribal areas and we assume that the state has 40% of PHCs of a state are in tribal areas, then the total salary bill of MOs will increase by 40%. If no other cadre's salary is increased then the total state health budget will increase by about 5-10% only. This is not such a major increase, especially for the central government, because only 9% of the population lives in tribal areas.

Mandatory Tribal Service with Fair Posting and Transfer Policies

Another option could be compulsory posting for 3-5 years in tribal areas of young MBBS doctors after

graduation. These years of service in a tribal area will change from state to state depending on the percentage of PHCs in the tribal area. If a state has 50% of PHCs in tribal areas then the MO will have to spend 50% of his/her total career in a tribal PHC that will be about 15 years out of 30. This system has to be transparent and fair. Once the policy is made it has to be followed very strictly. But experience is that in the Indian sociopolitical system, governments are unable to develop and adhere to such policies.

Special Separate Cadre for Tribal Areas

Another solution worth exploring, but yet not tried out is to create a special and separate cadre for staffing tribal and difficult areas by the states or the central government, with separate recruitment, much higher pay, additional facilities, special training, higher status, but with a clause to stay full time at the center for 20 years without being transferred out and without being allowed to practice privately. This would be similar in some ways to the "commando force" in the Indian army or "special operations forces" in other armed forces or elite cadres such as the Indian Administrative Service (IAS), the Indian Forest Service (IFS), or the Indian Police Service (IPS) etc. Such doctors should be trained to do all minor and routine surgery and delivery, provide emergency obstetric care (EmOC) etc., as they will not have easy access to specialist doctors in remote tribal areas. Higher pay is justified due to difficult living conditions and special training and skills. Early voluntary retirement after 15-20 years with full pension can be one form of incentive as well, so then they can work in other private hospitals in cities and enjoy a better quality of life after service for 20 years in tribal areas. They can be recruited on nationally competitive basis through the Union Public Service Commission (UPSC) system and then deputed to the states with tribal areas via the ministry of tribal affairs.

Other Alternates

Countries in Africa are using trained "Clinical Officers" in PHC, subcenters, and hospitals to carry out outdoor patient and primary care work. They are trained for 3 years and are not fully qualified doctors but are allowed to give basic medicines. They are complemented by fully qualified midwives who conduct deliveries and manage its minor complications. Sri Lanka has apothecary doctors providing primary care in rural areas for the last several years. In India, pharmacists can be trained to become apothecary doctors or clinical officers. Another approach could be a short-term course for AYUSH doctors to practice in tribal areas using allopathic medicines. Odisha, India has already planned for this. This should be done with due consultation with the MCI, IMA, and the legal system. Regulations should ensure that such doctors be banned from practicing privately, which is the main constituency and concern of IMA.

Foreign Trained Doctors not Passing Indian Test

In recent years, more than 5,000 young students went to China, Russia, Philippines etc. and did 5-6 year modern medicine courses that are equivalent of MBBS courses, in WHO-recognized medical colleges. However, they are not able to pass the test conducted by the National Board of Examinations (NBE) to get registration in India under the MCI act, to practice in India. Such doctors could be given a temporary assistant MO's license if they agree to serve in tribal areas for 5 years. After which, they can be offered a simpler and more practical test of competencies rather than current knowledge-oriented tests. If they pass that test, then they can be offered a general/unrestricted registration with the state medical council. This type of provision is done by Australia to staff the remote areas in that country where no Australian doctor is ready to go. Such doctors will be perhaps better than AYUSH doctors as they are trained under the allopathic system that the PHCs are following. These doctors may need short training in tropical diseases such as malaria, tuberculosis, leprosy etc. as these diseases are not covered in much detail in medical courses in Russia, China, or Philippines. Such an offer of a general MCI registration after 5 years may be a very good incentive for such young doctors to go to tribal areas. This will not need any more money and will be a low cost option but the government and MCI should be convinced of this solution.

Task Shifting

Short-term training programs can be planned to empower nurses, ANMs, male multipurpose workers, and pharmacists for primary care diagnosis and treatment at PHCs. These staff can be supported by mobile phones to communicate with nearby MBBS doctors at CHCs or district hospitals. MBBS doctors can provide specialty care such as EmOC, anesthesia, and newborn care after due training. This has been tried out under Child Survival and Safe Motherhood (CSSM) and Reproductive and Child Health (RCH) programs.⁽¹³⁾ Such task shifting or task sharing can improve the access to care in tribal areas with very little cost.

Integrating Tribal Medicine and Modern Medicine

Pilot projects can be taken up to see if PHCs in tribal areas can offer herbal traditional medicines along with modern medicines. The Chinese have done this successfully. Modern medicine can be offered by a nurse or pharmacist if the doctor is not available. Traditional medicine can be offered by a local traditional healer in the same PHC with a formal or informal arrangement with the local community.

Telemedicine and Mobile Van

Health service of a higher level in terms of specialized diagnosis and prescription of medicine can be facilitated by installing Telemedicine terminals operated by trained technicians or nurses. Doctors and specialists in cities can offer their services by telemedicine. Such models are working for some years under "E-health point" in Punjab, India and "Sky Clinics" by World Health Partners in Bihar, India — both are social enterprise models. Mobile vans can be given for tribal areas to provide outpatient care facilities weekly/fortnightly.

Camp-based Approach

Periodic surgery camps can be arranged for chronic problems with the involvement of surgeons, physicians, or other specialists who are normally not available in tribal areas. Many specialists from the cities are willing to give such services in tribal areas if proper arrangements are made and the frequency of such camps is once or twice in a year. This has been done by several Nongovernmental Organizations (NGOs) and the government for sterilization and cataract operations. This can be extended to other specialties and complex medical procedures.

Public Private Partnership (PPP) Approach

Staffing and/or operations of tribal PHC and CHC can be handed over to reliable NGOs or private companies or a group of doctors. This has been done in some states with help of Karuna Trust, Wish Foundation, and other NGOs. Some NGOs are providing health HR in urban and rural areas as well but this has not been done in tribal areas. But it is a real option that needs to be seriously explored, documented, and evaluated.

Where will the Additional Money Come From?

Funding is a very important aspect to be considered for public health workforce planning in tribal areas, as many options discussed earlier require additional funds. The central government — health, tribal welfare, tribal subplan funds can bear the additional costs. As northeastern states as well as Jammu & Kashmir, India get special funds from the central government, tribal areas as well should receive a much higher level of funds and flexibility to organize health services.

Other sources could be Corporate Social Responsibility (CSR) funds, philanthropy, or special tax exemptions to

companies/ individuals donating funds for tribal areas. There are huge tax exemptions being given to industries for locating in remote/backward areas, similarly, the central government can give special funds to states to upgrade the health services in tribal areas. Some of the earning from mining businesses can be diverted to tribal areas as most mines are in tribal-dominated areas. Foreign government aid programs/United Nations (UN) organization funds can be focused on tribal areas to supplement government funds.

Conclusion

It is a shame that after many years of independence, the nation is still not able to provide reliable health care in vulnerable tribal areas. A comprehensive, wellresourced national policy with the highest level of political commitment is needed to ensure health HR in tribal areas. The public health sector needs to redesign appropriate compensation packages with monetary and nonmonetary incentives to encourage qualified doctors and health workers to work in remote tribal areas. Such a policy can additionally encourage task shifting and mainstreaming of traditional medicine practitioners in tribal areas to augment HR in health. India needs to learn from various experiments done in several states and globally and then take locally appropriate steps to solve the problem of the lack of doctors in tribal and remote areas. Here were some suggestions presented that need serious consideration, debate, and urgent action.

Acknowledgement

Gratefully acknowledge Dr. Deepak Saxena and Mr. Bhaskar Purohit for their assistance in preparing the script.

Financial support and sponsorship Nil.

Conflicts of interest

There are no conflicts of interest.

References

- 1. Rao M, Rao KD, Kumar AK, Chatterjee M, Sundararaman T. Human resources for health in India. Lancet 2011;377:587-98.
- 2. Report of the High-level Committee on Socio-economic, health and educational status of the tribals of India. Report of high level committee of GOI; 2014.
- 3. Iyer V, Sidney K, Mehta R, Mavalankar D. Availability and provision of emergency obstetric care under a public-private partnership in three districts of Gujarat, India: Lessons for Universal Health Coverage. BMJ Global Health 2016;1:e000019.
- Rural Health Statistics in India 2012. GOI. Available from: http:// mohfw.nic.in/WriteReadData/l892s/492794502RHS%202012. pdf. [Last accessed on 2016 May 12].
- Rao KD, Gupta G, Sundaramanan T. Human resources for health in India: Strategies for increasing the availability of qualified health workers in underserved areas. PHFI & NRHM 2011. (Unpublished).
- 6. Sundararaman T, Gupta G. Indian approaches to retaining skilled health workers in rural areas. Bull World Health Organ 2011;89:73-7.
- Rao KD, Ramani S. What works, where and how well? Lessons from a comparative assessment of current rural retention strategies for doctors in India. (Human Resources Background Paper 2). Public Health Foundation of India, Undated.
- 8. WHO. Increasing access to health workers in remote and rural areas through improved retention. (Background paper for the first expert meeting to develop evidence-based recommendations to increase access to health workers in remote and rural areas through improved retention). Geneva: World Health Organization; 2009. p. 13-17.
- 9. World Health Organization. Increasing access to health workers in remote and rural areas through improved retention: Global policy recommendations. Geneva: World Health Organization; 2010.
- Dolea C, Stormont L, Braichet JM. Evaluated strategies to increase attraction and retention of health workers in remote and rural areas. Bull World Health Organ 2010;88:379-85.
- Bruno Mascarenhas JM. Overcoming shortage of doctors in rural areas: Lessons from Tamil Nadu. Natl Med J India 2012;25:109-11.
- 12. IMA protests BSc nursing in community health. The Hindu, 2015. Available from: http://www.thehindu.com/news/national/other-states/ima-protests-bsc-course-in-community-health/article7815885.ece. [Last accessed on 2016 May 12].
- Mavalankar D, Sriram V. Provision of anaesthesia services for emergency obstetric care through task shifting in South Asia. Reprod Health Matters 2009;17:21-31.