

Treatment Seeking Behaviour of Tuberculosis Among Boro Tribe in India*

Pralip Kumar Narzary¹ and Birphung Narzary²

*1. International Institute for Population Sciences, Govandi Station Road,
Deonar, Mumbai 400 088, Maharashtra, India
E-mail: pknarzy@yahoo.com*

*2. North East Research and Social Work Networking (NERSWN), Kokrajhar, Assam
E-mail: birphung@rediffmail.com*

KEYWORDS Tribal; treatment seeking behaviour; tuberculosis

ABSTRACT The aim of present paper is to understand the treatment seeking behaviour and cost of tuberculosis treatment among Boro tribe. Data for the present study have been collected from 102 Boro Tribe Households in Kokrajhar District of Assam through both quantitative and qualitative techniques. It has been found that total of 12 individuals are suffering from tuberculosis in the study village, whereas 9 cases are defaulters, 7 have been cured and 2 have died. It should be noted that, irrespective of their social status and economic condition, once they know that they are suffering from tuberculosis, they never go to traditional healer. Most of the current tuberculosis patients go to other state for treatment for about 120KM because of inadequate infrastructure and poor accessibility of district tuberculosis Centre. Patients cannot complete the full course of medicine, mainly due to the financial constraints. Then, what happen to district tuberculosis Centre? Which is supposed to provide free service and medicine? Officials of the district tuberculosis Centre admits that many a times medicine is not available, staffs are not much competent to carry out certain test like sputum test and no facility thereof.

INTRODUCTION

Tuberculosis continues to be on the prowl, killing 2 million people around the world every year and about 4 lakh of them in India alone (ITCP, 2004). It accounts for world's foremost cause of death from a single infection (WHO, 1993). In India approximately 2 million tuberculosis cases are detected every year (Dye et al, 1999) and about 1000 die of tuberculosis every day (<http://www.tuberculosisindia.org/mtcp.asp>; Prabhakar, 2000).

In Assam during 1998-99 tuberculosis prevalence rate was 710 per lakh population, and it is considerably higher than the national prevalence rate of 544 per lakh population (IIPS, 2000). In the state tuberculosis prevalence rate has slightly increased over 1992-93 (640 per lakh) and it is higher in rural areas (721) than in urban areas (583) and higher for males (855) than for females (555).

Treatment seeking behaviour is a complex phenomenon. It depends not only on socio-economic factors, but also heavily on cultural factor. Perception on health problem and health care services plays additional influential role in treatment seeking behaviour.

Keeping in mind the high prevalence and recognizing that it is not only one of the major

disease but also as it disrupt social and economic condition; the present paper is an attempt to know the prevalence of Tuberculosis among Boros; to know the treatment seeking Behaviour; cost of treatment and availability of Tuberculosis treatment in the study area.

COMMUNITY

Boro is the single largest tribal community in North East India. The total population of Boro community varies with source. Census of India (Language Table 1991) puts Boro population as 12.21 lakhs, whereas Brahma et al. (2002) puts Boro population as high as 52 lakhs. In the study district, the dominant religions among the Boros are Brahma, Bathaw and Christian. Brahma religion is a well established religion among the Boros and the entire study population belongs to Brahma religion. Bathow on the other hand is traditional religion of Boros, who worship five divine powers.

For certain diseases/health problems like Jaundice, Bone Setting, Small Pox, etc Boros have very strong faith in traditional medicine. But for other diseases/health problems like Malaria, Cancer etc Boros believe mainly in modern medicine. Such differential faith in the different source of treatment must have been inherited through long period of practical experiences.

DATA

For the present study a Boro village – Bamun-khura, from Gossaigaon Sub-division of Kokrajhar district was selected purposively. Data was collected through household schedule, administered to all the head of the household. On the basis of the household information the tuberculosis patients, cured patients and default cases were identified and indepth interview were conducted. Indepth interview and also conducted with district Tuberculosis officer (DTC) and Doctors from Government health centre.

INCIDENCE AND PREVALENCE OF TUBERCULOSIS

From the complete house enumeration it was found that there are 30 tuberculosis related cases among 102 households in the study village, showing about one third of the households experiencing tuberculosis cases. Out of these 30 households, currently 12 households has tuberculosis patient, 9 households has defaulter, 7 households has persons recently cured from tuberculosis and 2 households has experienced death due to tuberculosis. It is very striking to note that the study population has 4.82 percent tuberculosis prevalence rate (total population 581) and 2.7 percent incidence rate; that is much higher than the national and state tuberculosis prevalence rate.

Profile of Tuberculosis Patients

Result exhibits that out of total 28 tuberculosis related cases, 26 are male (93%) and remaining are female. It indicates that male are more prone to tuberculosis infection in the study population, which may be because of various substance abuse and frequent contact with infected persons. However, no close relationship between education and tuberculosis is observed.

Study reveals that most of current tuberculosis patients are in the broad age group of 35 – 54 years of age and few cases are in below 25 years of age (Table 1). It shows that most of the tuberculosis patients are in the productive years of life, which is definite to affect the economic condition of the family. Defaulters are mainly from the age group below 35 and between 45-54 years of age. Concentration of defaulters in middle age group (45-54) infers that the heavy economic burden on the patient forces the patient to stop spending money on buying medicine,

Table 1: Distribution of tuberculosis related cases by broad age groups.

Age group	Current Cases	Default	Cured	Total
Below 25	3	2	0	5
25 – 34	0	2	1	3
35 – 44	5	0	1	6
45 – 54	4	4	1	9
55 – 64	0	0	3	3
Above 65	0	1	1	2
Total	12	9	7	28

which he may prefer to spend his earning for the betterment of his children/family. Among the respondents who are recently cured are distributed evenly with an exception at the age group 56-65. The higher concentration of cured cases in the older age group may be due to the fact that in the Boro society children, especially sons are socially expected to look after their old parents. In case if the parents are not looked after well, the community blames the children.

Treatment Seeking Behaviour: Table 2 shows that when they had some health problem, they mainly went to Private health care provider (46.4%), followed by PHC (35.7%) and Civil Hospital (32.1%). Proportionately high percentage of people went to PHC to get treatment because of lack of other competent source of treatment. But other patients might have suspected of tuberculosis and thereby went to private doctors directly. Boros believe that tuberculosis can be easily detected by doctors from government health center whereas contrasting to this believes; they believe that it can be cured mainly by private practitioner doctors.

From the qualitative study it has come out that, patients'/family economic condition, lack of proper knowledge on disease and treatment is contributing to delay in seeking treatment and default cases. Study also reveals that in the initial stage of the health problem they went to pharmacies or medical stores. But when they were not cured, went to see doctor, and while the doctor diagnosed them of tuberculosis, they started having medicine from competent doctor. Most of

Table 2: Place of first Treatment before diagnosis

Place of First Treatment	Frequency	Percent
Primary Health Centre	10	35.7
Private (local)	9	32.1
Private (outside state)	4	14.3
Civil Hospital	4	14.3
District Tuberculosis Hospital	1	3.6
Total	28	100.0

the tuberculosis patients once are diagnosed, went to Koch Bihar in West Bengal for about 120 KM for treatment mainly because of inadequate infrastructure and poor accessibility of district tuberculosis Centre (DTC). Among the 12 current tuberculosis patients, 8 are taking treatment from Koch Bihar, 3 from local doctor and 1 from DTC.

Nijwm Hajwary (changed name) about 37 years old, literate farmer living with wife and three children, who is currently a tuberculosis patient said, *“after about one week of constant chest pain and body ache, I thought it is because of heavy work. So I went to ojha for medicine but it did not help me. So, I went to pharmacy, it also did not help. In the process about two months went but further I started having heavy dry cough, especially in the night. One of the neighbors told me that, I should go to Koch Bihar and seek treatment In Koch Bihar doctor diagnosed me of tuberculosis. Now it is one month I am continuously having medicine. But it is very costly, I am not sure whether I can still continue to have medicine”*.

Ringkhang Bwisumatiary (changed name), one of the 22 years college student said that, *“I was having dry cough for about three weeks. In the first few days, I thought I am coughing may be because I take bath in the evening. So I went to one pharmacy and asked for medicine, but I was not cured. Slowly even I started getting fever quite often and started losing weight as well. I got frightened and after about three months I went to see a doctor. The doctor told me to go for X-ray. From the X-ray report, I was confirmed of tuberculosis. He prescribed me with few medicines, and told me to see him for about three months. It was very heavy burden for my parents to buy medicine and at the same time to support my studies. On the other hand, after having medicine for about one month, I felt well again. So I stopped having medicine and seeing doctor. I think I am completely cured now”*.

One of the 67 years old respondent, educated upto high school who have recently been cured of tuberculosis says that, *“while kept on coughing for quite a long period, and in few occasion blood came out in sputum, I suspected myself of tuberculosis. Immediately I rushed to Koch Bihar for check up. Because treatment in Koch Bihar is very good. I completed the course of medicine, and now I am doing well”*.

Above statements by the respondents indicates that initial source of treatment depends

on the perception and believe of the cause of health problem. If the first source of treatment cannot cure the health problem, they go to another source. The continuity of the treatment mainly depends on the economic condition of the treatment and the lack of knowledge of the duration of treatment and danger of drugs resistance in the process.

Direct Cost: In the present study cost of medicine, consultation fee, various tests fee etc. are considered as direct cost of treatment. Table 3 shows that in the study area the direct cost patients incurred ranges from less than Rupees 4000 to more than Rupees 8000. It is clear from the table that about one third (4 cases) have spent less than Rupees 4000, whereas about 17 percent (2 cases) have spent between 4000 – 8000 and about half have spent above Rupees 8000.

Table 4 indicates that there is clearly strong positive relationship between duration of treatment and direct cost incurred in the treatment.

Table 3: Direct cost of tuberculosis treatment

Range of Cost (in Rs)	Frequency	Percent
Below 4000	4	33.33
4000 – 8000	2	16.67
Above 8000	6	50.00
Total	12	100.00

Patients who have been taking treatment for about one moth have spent below Rupees 4000, half of the patients who have been taking treatment for 2-3 months have spent about Rupees 4000 – 8000 and half have spent above Rupees 8000. Among the patients who have been taking treatment for more than 4 months have spent above Rupees 8000.

Indirect Cost: In terms of indirect cost incurred, one of the respondents said *“Tuberculosis is very dangerous disease which forced me to lie down on the bed for more than a month and out of work for about three months”*. Another respondent lamented that; *“I went to Koch Bihar, West Bengal for tuberculosis treatment. I visited*

Table 4: Direct cost of treatment by duration of treatment

Duration of Treatment (in months)	Cost of treatment (in Rs)			Cases
	Below 4000	4000- 8000	Above 8000	
1 month	3	0	0	3
2 – 3 months	1	0	0	1
3 – 4 months	0	2	2	4
More than 4 months	0	0	4	4
Total	4	2	6	12

doctor ten times for my treatment, besides consultation fee and medicine, I had to spend about Rupees 600 per visit as travel cost, food, etc besides that my whole day goes in travelling. Also I had to buy good food and could not work for about one month. Tuberculosis made me poor for which I had to sale even my land”.

Available Source of Tuberculosis Treatment in the Study Area: In the study area, there are few pharmacies and few private health practitioners within a radius of about 2 KM. There is a PHC at a distance of about 3KM, a Sub-divisional Civil Hospital of 100 bedded within a distance of about 12 KM. But there is no specific health center catering to tuberculosis disease nearby. The District Tuberculosis Centre (DTC) and only source nearby is located at a distance of about 55 KM. The available PHC is not equipped to diagnose tuberculosis. One of the doctors of nearest PHC said that, *we do not have equipment for sputum test, the easiest way to diagnose tuberculosis; also our X-ray machine is not functioning. We just try to diagnose patients from their reported symptoms. If we doubt of tuberculosis, we refer patient to District tuberculosis Centre or Koch Bihar.*

Official of the district tuberculosis Centre admits that many a times medicine is not available, staffs are not much competent to carry out certain test like sputum test and no facility thereof and for last five years no staff went for any further training. On the other hand, people do not rely on DTC services and another reason is DTC is located in the District head quarter, which is not easily accessible to people of the village.

CONCLUSION

Study reveals that irrespective of social and economic condition, Boros seek tuberculosis treatment only from modern medical care. Study shows that tuberculosis weakens the economic condition of the people and poor economy is the main reason of discontinuation of the treatment.

The existing health facility in the region is not only inadequate but also not reaching to people those who are in need. The staffs in the DTC are also not competent. Kokrajhar district is not yet covered by RNTCP (Revised National Tuberculosis Control Program). The delay in extension of RNTCP or upgradation of DTC will result into high number of default cases and morbidity in the Bodo community.

(Footnotes)

NOTES

Earlier version of the paper has been presented at International Workshop on Population Dynamics and Infectious Diseases in Asia held at Asia Meta Centre, Singapore, during 27-29 October 2004.

REFERENCES

- Bodoland Movement 1986-2001. 2001. *A Dream and Reality*. Compiled by Yamao Zwhwlaio Brahma; Reo Reoa Narzihari; Urkhao Gwra Brahma; Uthrisar Khunggur Basumatary and Damasu Brahma. All Bodo Students' Union, Kokrajhar.
- Chauhan, L. S. 2004. Status Report on DOTS Expansion and Implementation during the 4th Quarter 2003. *J. Ind. Med Ass.*, 102: 5.
- Dye, C., Shiheele, S., Dolin P., Pathania, V. and Raviglione, M. C. 1999. Consensus Statement, Global burden of tuberculosis: estimated incidence, prevalence and mortality by country. *Jr of the American Med Ass.*, 282: 677—686.
- International Institute for Population Sciences. 2000. *National Family Health Survey 1998-99, Assam Final Report*. IIPS, Mumbai.
- ITCP; India Tuberculosis Control Project. 2004. <http://Inweb18.worldbank.org/sar/sa.nsf/Countries/India/A9A0CF9B36513E9185256E5F0070FF34?OpenDocument>
- Ministry of Health and Family Welfare. Tuberculosis Control –India. <http://www.tuberculosisindia.org/>
- Prabhakar, R. 2000. Tuberculosis Control in India – Past, Present and Future. *J. Ind. Med Ass.* Vol. 98. No. 3. Tuberculosis Control – India. <http://www.tuberculosisindia.org/mtcp.asp>
- WHO. 1993. *Treatment of Tuberculosis, Guidelines for National Programmes*. Geneva: World Health Organization.
- WHO. 2004. *WHO Report 2004, Global Tuberculosis Control, Surveillance, Planning, Financing*. Geneva: World Health Organization.