Original Article

ARE URBAN SLUM DWELLERS AWARE ABOUT TUBERCULOSIS? – A CROSS SECTIONAL STUDY IN SURAT CITY

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ABSTRACT

Introduction: The global burden of TB mainly lies in the 22 high burden countries and about 50% of prevalence occurs in 5 countries of South East Asia, namely, India, Indonesia, Bangladesh, and Thailand, Myanmar. Perceptions regarding TB prevailing in the community influence the health seeking behavior of the community. It is important that basic knowledge about the disease and the availability of treatment is clear among community to prevent any undue delay in availing the service.

Methodology: A community-based cross-sectional study was conducted in urban slum in catchment area of urban health training centre, Varachha of the Surat District. A pretested, structured interview schedule was used to assess the KAP related to symptoms, causes, spread, and treatment of TB. Domains identified were knowledge about TB, symptoms, spread, diagnosis, treatment, and prevention of TB.

Result: According to participants view in relation to presenting symptoms it can be fever (84.4%), cough >14 days (66.2%), weight loss (69.72%), and hemoptysis (23.85%). Out of 218, 126 (57.8%) participants believed that TB can be transmitted through sneezing/ cough. But only 51.83% were aware about correct duration of treatment. 129 (59.17%) had knowledge regarding place of treatment for TB.

Conclusion: Knowledge about symptoms and treatment of tuberculosis among respondents was quite good; however, misconceptions about transmission of disease lead to discrimination. Knowledge about "free treatment" and "duration of treatment" has to be stressed during health education activities

Keywords: Urban slum, tuberculosis, cough, hemoptysis, awareness

INTRODUCTION

Tuberculosis (TB) is a public health problem in many developing countries including India. Worldwide there were 8.8 million new cases of TB in 2010.[1] With the increasing number of HIV infection and AIDS cases there is a threat of resurgence of TB as this is the most common opportunistic infection in them.[2] TB is the leading cause of death among all infectious diseases and WHO reported that in 2010 there were 1.1 million deaths among HIV negative people and an additional 0.35 million deaths from HIV associated tuberculosis.[1]

The global burden of TB mainly lies in the 22 high burden countries and about 50% of prevalence occurs in 5 countries of South East Asia, namely, India, Indonesia, Bangladesh, and Thailand, Myanmar.[1]

It is important that basic knowledge about the disease and the availability of treatment is clear among community to prevent any undue delay in availing the service.

The perceptions of TB prevailing in the community influence the health seeking behavior of people for their symptoms. While care seeking behavior of chest symptomatic has been explored in deferent studies, there is dearth of information on community perceptions of TB. [3] The current study was done to determine knowledge of general people about tuberculosis and their perception of the illness.

METHODOLOGY

A community-based cross-sectional study was conducted in urban slum in catchment area of urban health training centre, Varachha of the Surat District.

The study area is an urban slum and part of urban field practice area of the Department of Community Medicine of a teaching institute. It is a slum about 2 km from the institution. The majority of population in the study area was laborer. An urban health center run by a premier teaching institute (SMIMER) at about 2 km is the nearest health facility for this area.

A pretested, structured interview schedule was used to assess the KAP related to symptoms, causes, spread, and treatment of TB. Domains identified were knowledge about TB, symptoms, spread, diagnosis, treatment, and prevention of TB.

House to house visit was done in the study area, and there were about 250 households in the slum part of study area. Thirty-two houses were locked during visit and 218 households were approached for an interview. An adult member in the house present at the time of visit and who was willing to participate in the study were interviewed.

Data was entered and analyzed using appropriate SPSS version.

RESULTS

According to table 1, total number of respondents was 218 constituting 121 (55.51%) male and 97(44.49%) female, respectively, and more than half of them were within 15–29 years. One fourth of them were illiterate, about 70% have formal education or studied in any institution, mean family size was 4.70 ± 1.5 and 5.13 ± 1.3 among male and female, respectively.

According to table 2, major source of information was TV 48.16%, doctors' chamber 14.67%, radio 10.55%, relatives/friends 12.38% etc.

According to table 3, good awareness regarding cardinal symptoms of TB was found. According to participants view in relation to presenting symptoms it can be fever (84.4%), cough >14 days (66.2%), weight loss (69.72%), and hemoptysis (23.85%).

According to table 4, out of 218, 126 (57.8%) participants believed that TB can be transmitted through sneezing/ cough. 24.77% participant did not have any knowledge regarding mode of transmission.

According to table 5, 201 (92.2%) participants knew that TB can be cured completely. 198 (90.82 %) had knowledge of DOTS. But only 51.83% were aware about correct duration of treatment. 129 (59.17%) had knowledge regarding place of treatment for TB.

Table 1: Sociodemographic characteristics of the participant

Variables	Male (n= 121) (%)	Female (n=97) (%)
Level of education		
Illiterate	27	24.5
Literate	73	75.5
Family Size		
Mean ±SD	4.70 ± 1.5	5.13 ± 1.3

Table 2: Sources of information about Tuberculosis among participants

Sources of information	Frequency (%)
TV	105 (48.16)
Radio	23 (10.55)
Relatives/friends	27 (12.38)
Hoardings and posters	10 (04.58)
Government hospital doctors chamber	32 (14.67)
Private health facility	03 (01.37)
Through NGOs	18 (08.25)

Table 3: Knowledge regarding most common symptoms of Tuberculosis

Symptoms	Frequency (%)
Cough > 14 days	144 (66.2)
Fever	184 (84.4)
Weight loss	152 (69.72)
Hemoptysis	52 (23.85)

Table 4: Opinion on ways of transmission of disease (TB)

Opinion on transmission of disease	Frequency (%)
Do not know	54 (24.77)
Through sneezing/cough	126 (57.8)
Use of tobacco	17 (7.79)
Dust	9 (4.12)
Poor hygiene	7 (3.21)
Hand shake with patients	4 (1.83)
Poor nutrition	2 (0.92)
Sharing of food or cloths etc	1(0.46)

Table 5: Awareness about TB treatment

Knowledge on TB treatment	Frequency (%)
TB could be cured completely	201(92.2)
Modes of treatment	
DOTS	198 (90.82)
Free treatment	65 (29.81)
Correct duration of treatment	113(51.83)
Knowledge of place of treatment facility	129 (59.17)
Do not know	49(22.47)

DISCUSSION

In our study good awareness about symptoms of TB is found except for some component like diagnosis of TB. A high level of literacy in this slum area and geographical proximity to the tertiary care hospital might be reasons for the in general good level of awareness.

Mean per capita income of study population was 2192, and it is much lower compared to mean per capita income All India (5081 rupees).[4]

Of the respondents, 82% participants believed that TB is a serious disease, an important determinant of health care seeking behavior of general population. Regarding modes of spread, 57.8% were aware of cough/sneezing as an important mode of spread compared to a 20% in a study done in rural Tamil Nadu. But 24.77% participant did not have any know-

ledge regarding mode of transmission which is our concerned. [5]

About only 29.81% were aware of the free treatment for TB. Population of slums is more vulnerable for getting infection of TB because of number factors like overcrowding and poverty etc and should be more aware of the free treatment. Treatment for TB is generally costlier in private settings pushing the family into poverty trap, and it may lead to treatment default after few weeks of treatment. [6]

Many studies identified literacy as a key factor that affect the level of awareness. [7, 8]

In our study, we found that 92.2% participants knew that TB is completely curable disease and 90.8% participants knew about DOTS treatment but only 29.81% participants were aware that treatment is free in government health centres.

"Free diagnostic facility and free treatment by Government" of TB patients should be known to all, and it will help in improving the health seeking behavior and adherence to treatment of TB. Social issues such as stigma associated with TB, misconception regarding transmission, treatment and isolating the TB patients have to be dealt during health education sessions.

In relation to prevention of spread of TB, though 57.8% were aware of spread by cough, large number of people is disposing their sputum in front or back of the house. There exists a knowledge-practice gap, which should be focused during health education sessions.

WHO recommends KAP surveys related to Tuberculosis related knowledge, attitude, and practice, which will help in advocacy building, communication, and social mobilization strategy and planning. [9]

CONCLUSION

Knowledge about symptoms and treatment of tuberculosis among respondents was quite good, however, misconceptions also exist. Misconceptions about transmission of disease lead to discrimination like separate utensils for food or drink. Mass media can be better utilized to remove misconceptions. Knowledge about "free treatment" and "duration of treatment" has to be stressed during health education activities.

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