

Gender Difference in Awareness about Tuberculosis from Patients Belongs to Slum area of Punjab, Pakistan.

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Abstract:

Tuberculosis (TB) is still a major public health concern of the developing and poor nations including Pakistan. Pakistan ranks fifth on the global list of high tuberculosis countries and has contributes to about 63% of TB burden in the Eastern Mediterranean Region. Better understanding about disease, among both genders will help to cut down the magnitude of this leading public health problem. The panic and disgrace linked with TB seems to have a greater impact on women than on men, often putting them in an economically or socially uncertain position. Because the health and wellbeing of children is closely associated to their mothers, TB in women can have serious consequences for families and society.

Objective:

To assess Gender difference in Awareness about tuberculosis from patients belongs to slum area of Punjab, Pakistan.

was (49.2%). Overall patients (41.9.0%) knew that bacteria or germs are the causes of TB. Among those (76.3%) were male patients while (23.7%) were females. Awareness has closed link to literacy level.

Methods:

The descriptive cross-sectional research design was used. A convenient sampling method was used, 286 patients was selected from Gulab Devi Hospital; a TB public tertiary care hospital of Lahore. Level of awareness among both genders was evaluated through self-administered questionnaire.

Conclusion:

The findings of the current study revealed that level of awareness among TB patients from slum areas is poor, that is leading to multiple drug resistant(MDR) TB as well as extensively drug resistant(XDR) TB. Awareness among male patients was far better than females patients. Hence, health care professionals should focus more on imparting knowledge about the TB symptoms, transmission, prevention, and treatment in both genders especially in females.

Results:

More than half (51.8%) of the study participants were male patients while females were (48.2%). Illiteracy among males was (18.3%) where in females this

Keywords:

Direct observation therapy, multiple drug resistance, extensively drug resistant.

INTRODUCTION AND LITERATURE REVIEW

The World Health Organization reported that nearly twice as many men as women have been diagnosed with TB globally (1). The imbalance in incidence is usually explained by social-cultural-economical factors. The financial dependence and cultural inequality of women result in a lack of autonomy in some areas, which may reduce medical accessibility and treatment adherence (6, 8, 9). Gender-specific social roles may also require men to have more social contact, thereby increasing the risk of TB exposure (5, 10). Of note, most of these hypotheses were based on observations from areas with limited medical resources and also with significant socio-cultural differences between genders. Meanwhile, the possible impact of sexual hormones and the differences between men and women in immunological reactions have also been proposed as factors causing men to be more susceptible to *Mycobacterium tuberculosis* infection (11, 12).

Of different methods of disease prevention, health education and awareness programmes can empower people regarding several aspects of disease management and thereby enabling them in accessing the right treatment, in right time, at right place. This can only be done if we already know the level of awareness in our society. The level of knowledge and behavior of tuberculosis

(TB) patients and the vulnerable population can affect the control of TB in a particular community. Tuberculosis (TB) is a public health problem in many developing countries including Pakistan. 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

Pakistan, with 179.2 million people (3), is ranked fifth among the twenty-two countries that are extremely burdened by TB and accounts for 63% of the TB cases in the Eastern Mediterranean Region [4]. Moreover, the National TB Control Program (NTP) (5) estimates that approximately 413,450 TB cases (all types) occur in Pakistan every year, with an incidence of 231/100,000 people. According to the NTP (5), the prevalence of TB in Pakistan is 630,000 cases (at 364/100,000 people), with mortality rates in the range of 60,000 (34/100,000 people). TB cases in different provinces of Pakistan are documented via notifications, and these notifications are considered to be a proxy for incidence rates (6).

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 Gender differences in awareness about TB in patients belonging to rural areas of Lahore, Pakistan.

METHODOLOGY

Objectives

To assess Gender difference in Awareness about tuberculosis from patients belongs to slum area of Punjab, Pakistan.

Study Design

Descriptive, cross-sectional study design was used to assess level of awareness.

Study Population

The study population comprised of young adults (age \geq 18 year of age) with Pulmonary TB, taking DOTS therapy. A sample of 286 patients was selected from Gulab Devi Hospital, a tertiary care public hospital of Lahore.

Sampling Technique

Convenient sampling technique is used for data collection

Selection and Development of the Tool

The tool used for the present study was a self-administered questionnaire. The questionnaire form was divided into three parts: part-I (demographic data), part-II (awareness of TB), Part-III (Assessment of Communities about Public Health Importance of Tuberculosis). Questionnaires were distributed among general public of infected patients of TB taking DOT therapy.

Validity and reliability of the tool

The study tool was reviewed and validated by experts in public health and statistician. The questionnaire was then pilot tested amongst a group of patient ($n = 20$). This process ensured that questionnaire were understandable and concise. Reliability of the tool was computed using Cronbach's. The results of the pilot study showed an internal consistency of 0.726 which showed that the tool was reliable for data collection.

Data Analysis

Statistical analysis was carried out using statistical package for the social sciences (SPSS)20.0 respectively. Analysis using mean and median cut-off levels for the age, income and education of respondents was done to establish associations between respondent characteristics and awareness about TB. For all of the calculations the level of the significance was set at 0.05 as the confidence limit was 95%.

Table-1 Gender & Age Group

Variable	Frequency	Percent (%)
Gender		
Male	148	51.8
Female	138	48.2
Age		
18-30	72	25.1
31-45	95	33.2
46-60	77	26.9
61-75	42	14.6
Total	286	100.0

Table-1 illustrates that 51.8% of the participants were male & most of them about 33.2% were in the age group of 31-45 years.

Table- 2: Level of Education

Variable	Male		Female	
	Frequency	Percentage(%)	Frequency	Percentage(%)
Illiterate	27	18.3	68	49.2
Primary	61	41.2	41	29.7
Secondary	38	25.7	24	17.4
Matric	14	9.4	04	2.9
Other (Higher)	08	5.4	01	0.7
Total	148	100.0	138	100.0

Table-2 shows difference among both genders based upon level of education. Result shows quite alarming results, almost half of the study participant among females were illiterate, and only 0.7% were above matric.

Literacy level among males was better then females. only 18.3% were illiterate. On contrary only few among males were above matric(5.4%). Bulks of the participants were between primary to secondary level of education.

Table -3: Gender difference in Awareness about Tuberculosis

Gender	Frequency	Level of Awareness
Male	148	41%
Female	138	23%
Total	286	64%

Table-3 describes the gender difference in awareness about TB. Level of awareness was assessed on the basis of administered questionnaire answers. Level of awareness among males was almost twice as compared to females.

DISCUSSION AND CONCLUSION

No systematic attempts have been made to discover the scale of this problem in Pakistan. Young women are vulnerable, because they are often socially and economically marginalized in Pakistani society. In poorer communities, women often care for the young, elderly, and sick in the home, creating the potential for sustained transmission of the mycobacterium. There is also evidence that females in Pakistan delay seeking healthcare and will seek out low-quality care compared with males.

Large prevalence surveys have suggested that the sex bias observed in pulmonary TB cases may result partly from genuine biological differences in male and female susceptibility to *M. tuberculosis* infection or the development of TB disease(11)(16).Unfortunately, still in

Pakistan females are not considered equal to males, in almost every aspect of life. Tuberculosis is still a major health problem that is accountable for the significant morbidity and mortality in developing world and low socio-economic communities (10). In recent confirmations it is indicated that high rates of TB are causing morbidity and mortality among almost all age groups (18). Gender differentials in social and economic roles and activities may lead to differential exposure to tuberculosis bacilli. The general health/nutritional status of TB-infected persons affects their rate of progression to disease in areas where women's health is worse than men's(07). The fear and stigma associated with TB seems to have a greater impact on women than on men, often placing them in an economically or socially precarious position. Because the health and welfare of children is closely linked to that of their mothers, TB in women can have

serious repercussions for families and households (14).

Literacy level in women belonging to slum area is much poor than males. Females are not provided equal opportunity to go to school. Likewise in the situation of any disease or sickness females are given less medical attention compared with males. This condition has given birth to lot of social issues. TB has lot of myths in rural areas, and if a female is diagnosed with this disease, she is being treated as trash, making it even harder to approach and give appropriate medical care. Stigma attached to this disease has affected female a lot.

Special attention program should be launched at community level, involving the key figures of that particular society. Female workers should access female patients and all of the quarries of female patients should be given answered. Similarly males should be given enough information that TB is curable and treatable disease. By enhancing this basic information and awareness at community/ rural areas this deadly disease can be fought well.

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