Stigma Towards Tuberculosis patients in Kassala, Sudan

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Abstract

***Background**: Stigma associated with TB is the major obstacle to TB control. The objective of this study was to examine stigma towards TB patients.*

***Methods**: Descriptive, cross-sectional study was held in chest department, Kassala Teaching hospital during April to October 2012.300 co-patients were fully interviewed. The collected data were analyzed using SPSS version (16).*

***Results**: Most of the participants were knowledgeable about the infectious nature of TB and route of transmission. Misconception was observed in the causes, symptoms and prevention methods of the disease. Stigmatizing attitude was cleared explained among the participants are 63% and 29.3% are moderate and high stigma respectively 69.7% were avoided the TB patients and (64.3%) were dislike to continue the social relationship. The participants were unwilling to: use the patients' utensils (82.3%), share drinking and food (69.0%), share same place of work (61.0%), even the patients on TB treatment. And also (63.0%) mentioned that they were not allowing marriage of their daughters / sons from a person who cured from TB. Both gender, young age and low level of education are high stigmatizing towards TB patients.*

***Conclusion**: The study note the high stigmatization attitude towards TB patients, that influences the effectiveness of TB control. Thus intensive and effective educational programs are needed to enrich the knowledge about TB and to eradicate the stigma associated TB.*

Keywords: Tuberculosis, stigma, Sudan

Introduction

Tuberculosis is infectious disease, and is the major cause of morbidity and mortality worldwide, especially in developing countries (Muniyandi et al 2007). Sudan is among the countries with high TB prevalence. The country has a high burden of tuberculosis (TB) with an estimated 50,000 incident cases during 2009 (Sharaf Eldin et al 2011).

Stigma is a major obstacle of TB control. Stigmatization of patients renders them to deny the disease and discourage health- seeking services that leads to serious symptoms, non-compliance to treatment and increase the spread of disease (WHO 2006). Also stigma leads to isolation from families, friends, loss of employment, exclusion from the community activities (Baral et al 2007; Long et al 2001).

Different studies from different countries showed that different population groups experienced negative attitude towards TB patients and their families (Aliss et al 2003, Edignton et al 2002, Bhatia et al 2000, Gelaw et al 2001).

Eradication of stigmatization and discrimination is very important to overcome the problem of TB prevalence. It is important to address TB related stigma among the community, because TB can be cured, proper treatment renders the TB-stricken individuals noninfectious. Few studies in Sudan was determined stigma among TB patients (Mohammed et al 2011). No previous study determined the stigma towards TB patients in Sudan. The present study was held to determine stigma of tuberculosis towards the patients.

Methods

Study design:

A descriptive, cross – sectional study was conducted in Kassala Teaching Hospital during April to October, 2012. The hospital is the biggest one in kassala State and most of the TB patients are treated in the chest department. This study was held to determine the stigma of tuberculosis towards patients.

Participants and Data collection

TB co-patients with age $\geq$ 17 years attended the chest department during the period of the study, were enrolled. The study uses purposive structured questionnaire. It pertained to demographic data, knowledge of disease and stigmatizing attitudes and avoidance behavioral intension.

Data analysis

The collected data was cleaned, coded and finally entered in a computer program for analysis using SPSS version (16.0). Results were expressed in number and percentage. The data was analyzed step-by-step, and cross tabulation was done to explain possible relationship between the variables, χ^2 test for categorical variables were calculated. The significance level was set at $p<0.05$ to find out the association between the stigma and the variables.

Ethical consideration

The ethical approval of this study was received from Research board Committee, Ministry of Health, Kassala State. Verbal consent was obtained from respondents; confidentiality was maintained by omitting name of the respondents. The

instrument and procedures used in this study did not cause any harm to the study subjects.

The study included 300 participants; 150 (50%) were males and 150 (50%) were females. Their age ranged from 17- 75 (mean 35.37±12.3) years. They belonged to different tribes, most of them 194 (64.7%) were from Eastern tribes and the remaining (35.3%) were from different tribes in Sudan. 209 (69.7%) were married. Their occupation varied; 107 (35.7%) were housewives, 73(24.3%) were non skill workers, 29 (9.7%) were students.

Avoidance behavioral intension was clear among more than half of the co-patients even, the patients were on treatment. The study approved that; 69.7% of the participants avoided the patients and 64.3% were dislike to continue social relationship and 62.3% dislike to live with the patient in the same room. They were unwilling to: use the TB patients' utensils, share food and drinking and work on the same place (82.3%), (69.0%), 61.0%

Results

respectively). (63.0%) mentioned that; marriage of their daughter/ sons from a person who cured from TB is unaccepted which is significantly associated with their ethnicity (P= 0.04), Table (1). The study identified the stigma among the participants, 29.3 % of them is highly stigmatized and 63% had moderate stigma so about 92.3% of participants appeared to have high stigmatizing attitude towards TB patents, table (2) . As shown in table (3) both males and females had the same feelings towards TB patients. Stigma was significantly associated with age group of studied participants. Young age groups more stigmatized than the other age groups, table (4). As shown in table (5) stigma was significantly associated educational level of participants. Primary education level more stigmatized than the other Secondary and university education level.

Avoidance behavioral intension	**Stigmatized**	
	Frequency	**%**
Willing to deal with TB patients on treatment.	209	69.7
Willingness to continue social relationship.	193	64.3
Willing to live with the patient on treatment in the same room	187	62.3
Sharing utensils with TB patients on treatment	243	82.3
Sharing drinking and food with patient on treatment	207	69.0
Willing to work with patient on treatment in the same place	183	61.0
Acceptance of marriage from a person who cured from disease	189	63.0

Table (1): Avoidance behavioral intention towards TB patients in Kassala

Stigma classifications	Frequency	Percent
Normal	23	7.7
Moderate stigma	189	63
High stigma	88	29.3
Total	300	100

Table (2): classifications of participants according to their stigmatization:

Stigma level	gender		Total
	male	female	
Normal	13 (4.3%)	10 (3.3%)	23 (7.7%)
Moderate stigma	95 (31.7%)	94 (31.3%)	189 (63.0%)
High stigma	42 (14.0%)	46 (15.3%)	88(29.3%)
Total	150 (50%)	150(50%)	300(100%)

Table (3): Stigmatizing attitudes and gender

Stigma classifications	age of participants					Total
	15 - 24	25 - 34	35 - 44	45 - 54	55+	
Normal	6 (2.0%)	4(1.3%)	7(2.3%)	5(1.7%)	1(.3%)	23(7.7%)
Moderate stigma	40(13.3%)	53(17.7%)	48(16.0%)	30(10.0%)	18(6.0%)	189(63.0%)
High stigma	16(5.3%)	24(8.0%)	28(9.3%)	11(3.7%)	9(3.0%)	88(29.3%)
Total	62 20.7)%	81(27%)	83(27.7%)	46(15.3%)	28(9.3%)	300(100%)

Table (4): Stigmatizing attitude and age group of participants

Stigma level	education			Total
	primary	Secondary and university	missed	
Normal	16 (5.3%)	4(1.3%)	3(1.%)	23 (7.7%)
Moderate stigma	132(44.0%)	40(13.3%)	17(5.7%)	189(63.0%)
High stigma	56(18.7%)	23(7.7%)	9(3%)	88(29.3%)
Total	204(68%)	67(22.3%)	29(9.7%)	300(100%)

Table (5): Stigmatizing attitude education level of participants

Discussion

The study approved that 63% of participants were moderate stigmatized and 29.3% high stigmatized towards the patients even he/ she is on treatment. Thus 93% of participants are stigmatized as general. Stigmatizing attitudes among educated and uneducated participants appeared in their avoidance of patient in the work place and living with him / her in the same room. They were unwilling: to deal with patient, to share utensils, food and drinking. Moreover, marriage from a person who cured from TB is unaccepted. Stigmatization attitude has negative impact on both TB patients and the community. Fear of isolation, exclusion from community activities and loss of work forced the patients to deny the infection, delay of health –seeking care, or discontinue the treatment. Discrimination of patients increase the transmission of disease in the community and also increase the financial burden of the family. Moreover, Stigmatization attitude may be related to misconception to TB symptoms and preventive methods that result in negative impact on TB control (Kipp et al 2011). Negative behavioral intension related to TB was reported in different countries (Atre et al 2011, Khan 2000, Zhang et al 2007 , Baral et al 2007, Macq et al 2006, Aliss et al 2003, Edignton et al 2002,). Participants who belonged to eastern tribes appeared to be more stigmatized than those belonged to others. Low level of education and socioeconomic status which significantly associated with stigma as reported by Abioye (2011) in Nigeria, rendered the eastern tribe more stigmatized compared to others.

Conclusion:

The study revealed participants were high stigmatized towards TB patients, that influences the effectiveness of TB control. Thus intensive and effective educational programs are needed to enrich the knowledge about TB and to eradicate the stigma associated TB.

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