



VARIATION OF SELF-ESTEEM IN TUBERCULOSIS PATIENTS IN PUNE DISTRICT

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ABSTRACT

Background: The way one views and opines about himself is the self-esteem. Low self esteem is often said to be associated with depressive behaviour, decreasing self confidence and prone in giving up to illnesses. We aimed to assess the self esteem in tuberculosis patients in Pune district. **Material and Methods:** An observational cross-sectional study was conducted on tuberculosis patients from 1st April 2015 to 31st March 2017 in Mulshi block of Pune district. All the patients registered in DOTS program were interviewed using a preformed prevalidated Rosenberg self-esteem scale. **Results:** a total of 130 patients were included in the study. The mean age of the participants was 38.21 yrs. $\pm$ 15.39. Males comprised 53.1% of the study. The mean Rosenberg score was 17.15 $\pm$ 6.44 with 30% of participants with low self-esteem. mean Rosenberg self-esteem score in the patients with DM and TB was found to 11.1 $\pm$ 5.3 whereas the score with non-diabetic group was 18.39 $\pm$ 6.01 which was statistically significant. Comorbidity, presence of TB patients in family, Diabetes status and HIV status were found to be statistically significant with low self-esteem. Diabetes status was noted as independently associated with self-esteem. **Discussion:** TB being a chronic illness brings on a stressful condition in life leading to fear of spreading the illness to others, social isolation and stigma, helplessness, and lowered self-esteem. **Conclusion:** Tuberculosis along with comorbidities lower the self-esteem in individuals which may result in lower resilience

KEYWORDS : Self-esteem, Tuberculosis, Diabetes, Comorbidities

INTRODUCTION

Self-esteem is usually opined as how one views the self. Self-esteem is an oversimplified word for a wide range of intricate mental processes related to one's self-perception (Bailey, 2003). Self-esteem promotes healthy behaviour towards life and stressful conditions. Negatives critiques were taken positively and creative manner. It is believed self-esteem affects the interactions with others too.

The perception of oneself may decrease in chronic illness. Stigmatised diseases like leprosy and tuberculosis may even further hamper the self-esteem. Many studies have noted depressive changes in people with low self-esteem (Korrelboom et al., 2012). Losing self-confidence, poorer social interactions, decrease in willingness to live, decreased resilience have been noted in low self-esteem individuals (Erdem & Tasçi, 2003). Tuberculosis patients and determining the perception of their illnesses are important in increasing treatment adaptation. Decrease in self-esteem because of illness cause losing self-confidence, deteriorating social relations and giving up struggle against illness.

We aimed to assess the self-esteem in tuberculosis patients in rural area of Pune district. Most of the studies focus on depression with self-esteem. There are almost nil studies focusing on self-esteem in stigmatised diseases.

MATERIALS AND METHODS

An observational cross-sectional study was conducted on the tuberculosis patients who were registered under DOTS program from 1st April 2015 to 31st March 2017 in the Mulshi block of Pune district. The inclusion criteria included a. Patients above 18 years of age. b. Patients diagnosed with TB (Cat I & II, MDR-TB and XDR- TB). c. Patients residing in the study area and who were currently on treatment at any of the DOTS centre. Severely ill patients were excluded from the study. The list of the patients registered under RNTCP in the study area was obtained from Paud Tuberculosis Unit (TU). The patients were called over phone and were requested to visit their supervising Primary Health Care/ Sub Centre/ Rural Health and Training Centre/ DOTS centre. Data collection was started after obtaining permission from Institutional Ethics Committee. A written informed consent using a predesigned proforma was obtained. Confidentiality was maintained by assigning codes. Sociodemographic parameters were recorded. The self-esteem was assessed by using Rosenberg self-esteem scale (Tinakon & Nahathai, 2012). Patients were interviewed using this scale. Their answers were recorded as per the Likert scale.

After data collection, data were entered into Microsoft Excel 2013 The data was then analysed using SPSS (Statistical Package for Social Sciences) version 20.0 software. Chi-square test/ Fisher's exact test was used to find the association between various qualitative parameters. A two tailed test with P-value < 0.05 was considered as significant.

RESULTS:

In total 130 patients were included in the study. The minimum age in the study population was 18 years while the maximum age was 80 years with a mean age of 38.21 yrs. $\pm$ 15.39. The median age was 34.5 years. The maximum number of patients belonged to the age group of 21- 30 years comprising of 46/130 (35.4%) followed by 31 – 40 years which had 28/130 (21.5%).

Male preponderance was noted with males comprising 69/130 (53.1%) of the total study population. Illiteracy was noted in 28.5% participants which is worse than the national average due to rural part of country. Predominantly patients were diagnosed in the government sector. There were 20% participants who had other TB patients in the family as well. Comorbidity beside TB and Diabetes was present in 27.7%. Table 1 shows the socio-demographic data of the participants.

The mean Rosenberg self-esteem score amongst TB patients was found to be 17.15 $\pm$ 6.44. Out of the total patients, 39/130 (30%) of the patients were having a score of <15 indicating low self-esteem whereas normal self-esteem was found in the around two third of the patients 87/130 (66.9%) and only 4 (3.1%) were having high self-esteem.

The mean Rosenberg self-esteem score in the patients with DM and TB was found to be 11.1 $\pm$ 5.3 whereas the score in the other group was 18.39 $\pm$ 6.01. On applying the t test, the difference was found to be statistically significant (p-value <0.001). We can conclude that with the presence of 2 chronic diseases the self-esteem is lowered considerably.

In the present study, it was noted that 71.42% of the patients who had both DM and TB had a low self-esteem score compared to 28.57% who had normal or high score whereas 21.57% of the patients with TB had low self-esteem score. The difference was found to be statistically significant.

Comorbidity, presence of TB patients in family, Diabetes status and HIV status were found to be statistically significant with low self-esteem.

After using the logistic regression, diabetes status was found to be independently associated with self-esteem in TB patients.

DISCUSSION

To our knowledge, this study is the first study assessing the self-esteem in Tuberculosis patients and the variation with comorbidities. Lower self-esteem scores were noted in patients with tuberculosis and diabetes. Presence of comorbidities is as well associated with low self-esteem scores. Low esteem may be reflected as low resilience in patients. (Choi et al., 2019)

Similar observations were made by Weaver et al. (1997) 58 who noted lowered self-esteem and universal helplessness in patients with chronic illness (Weaver et al., 1997). Mathai et al. (1981) observed TB being a chronic illness brings on a stressful condition which leads to fear of spreading the illness to others, set back in occupation, social isolation with damaged status, helplessness brought out by incapacitation due to chronic illness, the social stigma attached to this illness and lowered self-esteem (Mathai et al., 1981). Self-esteem was found to be lower in patients suffering from TB and DM. This may affect their overall working and output. Measures like counselling of individuals should be frequently done to boost up their self-esteem. Health education about TB being a curable disease and DM, which can be managed well, should be imparted which can in turn increase the self-esteem.

CONCLUSION

Presence of Tuberculosis along with comorbidities lower the self-esteem in individuals which may result in lower resilience. Patients with other chronic diseases along with tuberculosis should be counselled to prevent depression and feeling of helplessness. Government and physicians should look into the psychological component too in such individuals.

CONFLICT OF INTEREST

None

FUNDING

The study was funded under RNTCP.

Table 1. Sociodemographic data of the participants

n = 130	
Male (%)	69 (53.1%)
Educated (%)	80 (61.5%)
Unemployed (%)	8 (6.2%)
Income <Rs. 1917 (%)	52 (40%)
Diagnosis at Govt centre (%)	84 (64.6%)
New TB case (%)	97 (74%)
Pulmonary TB (%)	112 (86.2%)
Intensive Phase (%)	107 (82.3%)
Comorbidity Present (%)	36 (27.7%)
TB in family (%)	26 (20.0%)
Smoking (%)	12 (9.2%)
Alcohol (%)	17 (13.1%)
Tobacco consumption (%)	31 (23.8%)
Underweight (%)	69 (53.1%)
Diabetic (%)	21 (16.2%)
HIV (%)	6 (4.6%)

Table 2. Distribution of patients according to the Rosenberg self-esteem score

RSE Score group	Number of patients	Percentage (%)
<15 (Low)	39	30.0
15 – 25 (Normal)	87	66.9
>25 (High)	4	3.1
Total	130	100.0

Table 3. Distribution of Rosenberg self-esteem score with respect to different parameters

		RSE Category		
Sociodemographic parameters		Low	Normal - High	p value
Gender	Female	18	43	0.91
	Male	21	48	

Education status	Literate	21	59	0.246
	Illiterate	18	32	
Education status	Unemployed	5	3	0.38
	Employed	34	88	
Income status	Rs1917 and above	20	58	0.18
	< Rs 1917	19	33	
Diagnosis place	Govt sector	25	59	0.94
	Private sector	14	32	
TB category	New TB	28	69	0.63
	Old/ Treated/ Drug-resistant	11	22	
	Extrapulmonary TB	3	15	
	Pulmonary TB	36	76	
Treatment phase	Continuation Phase	10	13	0.12
	Intensive Phase	29	78	
Comorbidity	Present	17	19	0.008
	Absent	22	72	
Presence of TB patient in family	Present	14	12	0.003
	Absent	25	79	
Addiction Status	Smoker	3	9	0.69
	Non-Smoker	36	82	
	Alcoholic	5	12	
	Non-Alcoholic	34	79	
	Tobacco consumer	10	21	
	Non-Tobacco user	29	70	
Health status	Underweight	25	44	0.09
	Healthy and above	14	47	
Diabetes status	Diabetic	15	6	<0.05
	Non-Diabetic	24	85	
HIV status	Negative	33	91	<0.05
	Positive	6	0	

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