

PSYCHOLOGICAL WELL BEING AMONG TUBERCULOSIS PATIENTS

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Abstract

The present study was conducted to examine the psychological wellbeing among tuberculosis patients. The study was intentionally done on newly diagnosed tuberculosis patients since the follow up of patients to the hospital is not encouraging. The study was conducted on a sample of 182 newly diagnosed tuberculosis patients, among them 130 patients were males and 52 were females. They were administered Wellbeing questionnaire to measure anxiety, depression and energy. The treatment supporters who came along with the patients were administered a schedule to examine the type of support they would provide to the patient. The results indicate that younger patients as compared to their older counterparts experienced more depression and anxiety. There was no significant influence of gender on well-being. With regard to availability of treatment supporter, it is found that patients without treatment supporter had higher levels of anxiety. Significant interaction of the gender of the patient and availability of treatment supporter was obtained. Female patients without treatment supporter reported higher levels of depression, anxiety and low total general well-being.

Key Words: behaviour, depression, patients, psychology, research, significant, well-being

Introduction

Health Psychology is the branch of psychology that studies the psychological factors and behaviors that relate to physical and mental health. Health psychology studies the effect of behaviour on health and the effect of health issues on behaviour and psychological well-being. Health psychology examines behaviour related to wellness, illness, prevention of illness, and diagnosis.

Psychological well being is a subjective term that means different things to different people. From all of the research I've done for this answer the terms is used throughout the health industry as kind of a catch-all phrase meaning contentment, satisfaction with all elements of life, self-actualization (a feeling of having achieved something with one's life), peace, and happiness.

Tuberculosis (TB) is an infectious disease caused by a Bacterium, Mycobacterium tuberculosis. It is spread through the air by a person suffering from TB. A single patient can infect 10 or more people in a year.

Davis (1967), Davis et al (1967) reported that patient compliance depends on many psychological and sociological factors, including the age and educational level of the patient, the interaction between the patient and doctor, and patient's own attitudes and ideas about his disease. Pratt et al (1957), Wilmer (1949) and Barnes (1957) have reported the utility of psychological support, counselling and personality make-up of the patients as a helping factor in the therapeutic plan.

Tuberculosis was initially considered as a fatal disease and patients suffering from this illness were often segregated to protect the other members of the family and society from this disease. Many patients showed associated depression and apprehended death. This depression used to lead to retardation in general behavioural and emotional functioning (Wilmer, 1949). With the discovery of effective chemotherapeutic drugs, the gloomy picture has improved. Now the patients can be adequately treated at home. On the psychological front very few studies have been conducted so far, especially in India, where the nature of the work is limited.

Objectives

1. The objectives of the present study are the following:
2. To examine the sense of well being among tuberculosis patients
3. To study the influence of age and gender of the patients on their well-being

4. To examine the influence of the role of the treatment supporter on the patients' and their well-being.

Method

Sample

The study was conducted on a sample of 182 patients with Tuberculosis disease (Sputum positive) at the District Tuberculosis (TB) Centre, Visakhapatnam. The sample included those who had undergone sputum examination and were confirmed sputum positive. The total sample of the study consisted of 182 tuberculosis patients among them 130 patients were males and 52 were females. The mean age of the total patients is 38.61 years, while the mean age of male patients is 40.57, and the mean age of female patients is 33.71 years. When total patients' mean age is compared, the male mean age is high and female mean age is low.

Tools

The following research tool and schedule were used for the present study.

Well being Questionnaire

The Well-being questionnaire was developed by Bradley (1990), to provide a measure of depressed mood, anxiety and various aspects of positive well-being. The scale consists of the 22 items with four subscales i.e. depression, anxiety, energy and positive well being.

Treatment supporter schedule

This schedule was developed by the investigator and was administered to all the treatment supporters who had come along with the patients to the hospital. The information regarding the gender of the treatment supporters and their relationship to the patient was obtained. The schedule included questions regarding the following aspects: Knowledge about tuberculosis, Type of support to the patient, Responses to disease.

Procedure

The present study was conducted to examine the wellbeing among tuberculosis patients. The study was intentionally done on newly diagnosed tuberculosis patients since the follow up of patients to the hospital is not encouraging. The study was conducted on a sample of 182 newly diagnosed tuberculosis patients, who presented themselves at the District Tuberculosis Centre, Visakhapatnam. After the diagnosis of the disease, the doctor informs the diagnosis of the disease to the patients. The investigator approached these patients and requested them to participate in this study. The patients were made to feel at ease and an initial rapport was established. The questionnaire was given to patients and they were asked to fill it as per the instructions. The treatment supporters who came along with the patients were administered a schedule to examine the type of support they would provide to the patients. The data obtained from the sample of 182 patients were scored and analyzed with the help of computer. The analysis involved application of t-tests, ANOVA, MANOVA and Chi-square tests.

Results and Discussion

Psychological wellbeing among tuberculosis was examined by studying the influence of the patients' age, gender and availability of treatment supporters on wellbeing. Tables 1, 2 and 3 provide the results regarding the influence of patients' age, gender and availability of treatment supporters on Well-being.

Table – 1
Influence of Age on Well-being

Variable	Group 1 (n=48)	Group 2 (n=62)	Group 3 (n=45)	Group 4 (n=27)	F Value	–

Depression	Mean	9.56	8.50	8.22	7.07	3.664**
	S.D.	4.16	2.73	3.10	2.46	
Anxiety	Mean	11.75	10.81	10.20	9.04	3.605**
	S.D.	4.46	3.16	3.60	2.58	
Energy	Mean	5.50	6.15	6.00	6.44	0.934
	S.D.	3.10	2.41	2.20	2.49	
Positive Well being	Mean	9.13	10.11	9.51	10.52	0.990
	S.D.	4.43	3.81	3.99	2.87	
Total General Well being	Mean	29.31	33.08	33.09	36.85	2.666*
	S.D.	14.55	10.31	10.95	6.93	

Note : Group 1 = Age below 30 yrs
 Group 2 = Age 31 to 40 yrs
 Group 3 = Age 41 to 50 yrs
 Group 4 = Age above 50 yrs

* = $p < .05$

** = $p < .01$

The sample of patients was divided into four groups on the basis of their age. Group 1 consists of patients aged below 30 years; Group 2 consists of patients between 31-40 years, Group 3 consists of patients between 41-50 years and Group 4 consists of patients above 50 years. The table indicates significant influence of the age of the patient on depression, anxiety and total general well being of the patient (significant F value).

A comparison of the individual groups (Scheffe's test) indicated that Group 1 patients (those aged less than 30 years) had significantly higher scores than Group 4 patients (those aged more than 50 years) on depression and anxiety ($p < .05$). On the other hand, the older patients (Group 4) had a significantly higher mean score on the total general well-being score ($p < .05$) than the younger patients (Group 1).

These two findings suggest that younger patients as compared to their older counterparts experience greater depression and anxiety but lesser general well-being. This is possible because the younger patients might react more to the diagnosis by virtue of their age. They are likely to experience higher levels of stigma attached to this disease and hence feel depressed and anxious. On the other hand, the older patients, in view of their present health and attitude towards work and life may not experience the effects of the diagnosis as much as their younger counterparts.

The findings indicate that the age of the tuberculosis patients significantly influence their levels of depression and anxiety, with the younger patients experiencing more of the same.

Table – 2
 Patients' Gender and Well-being

Variable		Male (n=130)	Female (n=52)	t – value
Depression	Mean	8.34	8.90	1.054
	S.D.	3.17	3.50	
Anxiety	Mean	10.75	10.38	0.601
	S.D.	3.37	4.33	
Energy	Mean	6.01	5.92	0.200
	S.D.	2.67	2.35	
Positive Well being	Mean	9.85	9.54	0.491
	S.D.	3.89	4.00	
Total General Well being	Mean	32.84	32.17	0.351
	S.D.	11.14	12.50	

Table – 3
 Availability of Treatment supporter and Well-being

Variable		Unavailable (n=74)	Available (n=108)	t – value
Depression	Mean	9.01	8.15	1.764
	S.D.	3.56	3.02	
Anxiety	Mean	11.38	10.14	2.269**
	S.D.	3.56	3.66	
Energy	Mean	5.93	6.02	0.221
	S.D.	2.70	2.50	
Positive Well being	Mean	9.30	10.08	1.335
	S.D.	3.98	3.85	
Total General Well being	Mean	30.84	33.89	1.766
	S.D.	11.82	11.18	

Note : * = p<.05

** = p<.01

A gender wise comparison showed that males have higher anxiety, energy, positive well-being and total general wellbeing and females were found to have higher depression only, but no significant difference was found (see table 2). The gender of the patients does not significantly influence their wellbeing to the disease.

The influence of the availability of a treatment supporter on the patients' wellbeing to the disease was examined and the result is provided in table 3. It can be observed that patients who are accompanied by somebody showed significantly lower anxiety than the patients who came alone and unavailability of treatment supporter gives higher depression and anxiety. It shows treatment supporter plays a major role in their well being. The table also shows that availability of treatment supporter help the patients to enhance their energy, positive well being and total general well being. It indicates that unavailability of treatment supporter leads to some problems in the patients and availability of treatment supporter leads to more positive wellbeing. But, no significant differences were found only mean differences were observed.

Table - 4
 Interaction of Age and Treatment supporter on well-being

Variable	Group	Unavailable (n=74)		Available (n=108)		F – value
		Mean	S.D.	Mean	S.D.	
Depression	Group 1	10.29	4.22	8.55	3.95	0.872
	Group 2	8.39	3.10	8.59	2.44	
	Group 3	8.30	2.45	8.20	3.18	
	Group 4	7.63	2.88	6.84	2.32	
Anxiety	Group 1	12.61	4.09	10.55	4.78	1.322
	Group 2	10.96	3.11	10.68	3.25	
	Group 3	9.70	3.68	10.34	3.61	
	Group 4	10.63	1.30	8.37	2.71	
Energy	Group 1	5.54	3.31	5.45	2.87	0.316
	Group 2	5.96	2.28	6.29	2.54	
	Group 3	6.60	2.22	5.83	2.19	
	Group 4	6.38	2.39	6.47	2.59	
Positive Wellbeing	Group 1	8.54	4.32	9.95	4.55	1.114
	Group 2	10.04	3.83	10.18	3.85	
	Group 3	10.00	4.00	9.37	4.03	
	Group 4	8.50	3.16	11.37	2.34	
Total General Well being	Group 1	27.18	14.37	32.30	14.65	0.892
	Group 2	32.64	10.15	33.44	10.57	
	Group 3	34.60	10.20	32.66	11.26	

	Group 4	32.63	6.35	38.63	6.51	
Unavailable :	Group 1 (n=28)	Available : Group 1 (n=20)				
	Group 2 (n=28)	Group 2 (n=34)				
	Group 3 (n=10)	Group 3 (n=35)				
	Group 4 (n=08)	Group 4 (n=19)				

Table – 5
 Interaction of Gender and Treatment supporter on Well-being

Variable		Unavailable (n=74)		Available (n=108)		F – value
		Male (n=61)	Female (n=13)	Male (n=69)	Female (n=39)	
Depression	Mean	8.44	11.69	8.25	7.97	9.254**
	S.D.	3.13	4.35	3.23	2.64	
Anxiety	Mean	11.08	12.77	10.45	9.59	3.746*
	S.D.	3.27	4.57	3.45	3.99	
Energy	Mean	6.03	5.46	5.99	6.08	0.490
	S.D.	2.71	2.70	2.65	2.24	
Positive Wellbeing	Mean	9.67	7.54	10.01	10.21	2.679
	S.D.	3.77	4.61	4.01	3.51	
Total General Well being	Mean	32.18	24.54	33.42	34.72	4.652*
	S.D.	10.72	14.95	11.54	10.65	

Note: * = p<.05
 ** = p<.01

The interactive influence of age, gender and availability of treatment supporter on well-being of patients was examined. Two multiple analysis of variances were performed to examine the interactive influence. They are the influence of age and treatment supporter (table 4), gender and treatment supporter (table 5). However, significant findings were observed as far as the interaction of gender and availability of treatment supporter was observed.

Table 5 shows that gender and availability of treatment supporter together influence the depression, anxiety and total general well-being of patients. The mean values indicate that depression and anxiety are highest for females for whom treatment supporter was unavailable. The least amounts of depression and anxiety are observed for female patients who had treatment support. The findings with regard to Total general well-being are in line with the above findings. The mean values regarding this variable indicate that general well-being is highest for female patients with treatment supporter and least for those without treatment supporter.

The results of the multivariate analysis suggest that the gender of the patient and availability of treatment supporter are critical for their mental state and well-being, and this is all the more critical in the case of female patients.

Conclusions

The younger patients as compared to their older counterparts experienced more depression and anxiety. There was no significant influence of gender on well-being. With regard to availability of treatment supporter, it is found that patients without treatment supporter had higher levels of anxiety. There was significant interaction among gender of the patient and availability of treatment supporter. Female patients without treatment supporter reported higher levels of depression, anxiety and low total general well-being. It is possible that over time, the patients would be able to adjust to the disease and its restrictions on their life style and make the necessary changes.

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