Research Article

Comparative Study for the Assessment of Knowledge and Quality of Life in Alcoholics and Non-alcoholic Patients Receiving Anti-tubercular Therapy – A Prospective Observational Study

*Anil Pandit[1], Shetty Rashmitha Kumari [1], K. K. Shyamala[2], C. Suhas Reddy[1]

[1]Department of Pharmacy Practice, Acharya & B.M. Reddy College of Pharmacy, Bengaluru, Karnataka 560 107, India.

[2]Department of TB and Pulmonary Medicine, DR. B.R. Ambedkar Medical College and Hospital, Bengaluru, Karnataka-560045, India.

ABSTRACT:

Background: Tuberculosis is a global threat and has a very high prevalence every year. Knowledge regarding the tuberculosis is very significant for the detection, prevention and treatment at appropriate time and also to alleviate the quality of life of the patient. This study was undertaken to assess the knowledge and quality of life of the patients receiving anti-tubercular therapy. **Materials and Methods:** It was an observational study where 100 patients (50 alcoholics and 50 non-alcoholics) included in the study was asked a framed questionnaire to assess their knowledge regarding tuberculosis and quality of life. **Results:** Out of 100 patients the highest reported answer among alcoholics was cough (37) as compared to non-alcoholics cough (45). Both alcoholics (35) and non-alcoholics (32) reported air droplets as the prominent mode of acquiring of Tuberculosis, whereas covering mouth and nose (28) and good nutrition (44) were reported as the most known parameter for the prevention of Tuberculosis by alcoholics and non-alcoholics respectively. The Qualities Of Life of non-alcoholics patient were found better as compared to alcoholics. **Conclusion:** Our finding suggests that the quality of life of the alcoholic people is affected and is comparatively lower as compared to non-alcoholics and also the alcoholics possessed minimal knowledge regarding the disease.

Keywords: Quality of life, knowledge assessment, Anti-tubercular therapy

INTRODUCTION

Tuberculosis is and airborne disease and is mostly caused by a bacteria (*Mycobacterium tuberculosis*) that most frequently affects the lungs. Tuberculosis is curable and preventable if diagnosed and treated at right time. Usually patients with pulmonary TB present with constitutional and respiratory symptoms. Constitutional symptoms include tiredness, headache, weight loss, fever, night sweats and loss of appetite. Hemoptosis is also an important and often the presenting symptom of pulmonary TB. The most common respiratory symptoms of TB is cough which lasts for three or more than three weeks. Cough may be dry or productive. Tuberculosis can be present at pulmonary and extra-pulmonary sites. Various sites affected by tuberculosis are Central nervous system,

Lymphatics, Pleura, Bones and joints of spine and Genito-urinary system.[1]

About one third of the world's population has been infected by the latent TB bacteria but is not (yet) ill with the disease and cannot transmit the disease. People with TB bacteria have a 10% lifetime risk of falling ill with TB. However, person with compromised immune systems, such as people living with HIV, malnutrition or diabetes and people who use tobacco has a higher risk of falling ill.[2]

The knowledge possessed by the community refers to the understanding about the Tuberculosis and the treatment. Questionnaire surveys are the primary method of collecting quantitative data. Here we are collecting the data for our study by interviewing the TB patients using a questionnaires based on Knowledge of TB patients towards the disease.[3]

QOL refers to the Quality of Life. WHO defines Quality Of Life as individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns? It is a broad ranging concept affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, personal beliefs and their relationship to salient features of their environment.[4]

Here, in our study we have created a set of questionnaire with the aim of assessing the knowledge of the patients receiving anti-tuberculosis therapy.

METHODOLGY

Our objective was to compare the knowledge and quality of life of Alcoholic and non-alcoholic patients receiving anti-tubercular therapy. It was a prospective retrospective observational study which was carried out for a period of six months. We used a framed questionnaire to assess the knowledge and quality of life of the patients. Total of 100 patients were taken for this study.

RESULTS

The 100 patients included in the study were asked a framed questionnaire to assess their knowledge regarding the tuberculosis. The questionnaire consists of Sign and symptoms, mode of acquiring TB and mode of prevention. Out of the 100 patients who were asked regarding the sign and symptoms of TB the highest reported answer among non-alcoholic was cough (45) the least was Do not know (1) whereas in case of alcoholic the highest reported was cough (37) and the lowest reported cough more than 2> weeks. The information is given below:

Table 1:

QUESTIONNAIRE FOR KNOWLEDGE ASSESSMENT OF PATIENTS RECEIVING

Sign and Symptoms

Cough ☐
Cough> 2 weeks ☐
Fatigue ☐
Shortness of breath ☐
Weight loss ☐
Fever ☐
Do not know ☐

Mode of Acquiring TB

Through air droplet ☐
Through shaking hands ☐
Through sharing dishes ☐
Do not know ☐

Mode of prevention of TB

Covering mouth and nose ☐
Avoiding hand shake ☐
Through good nutrition ☐
Closing Window ☐
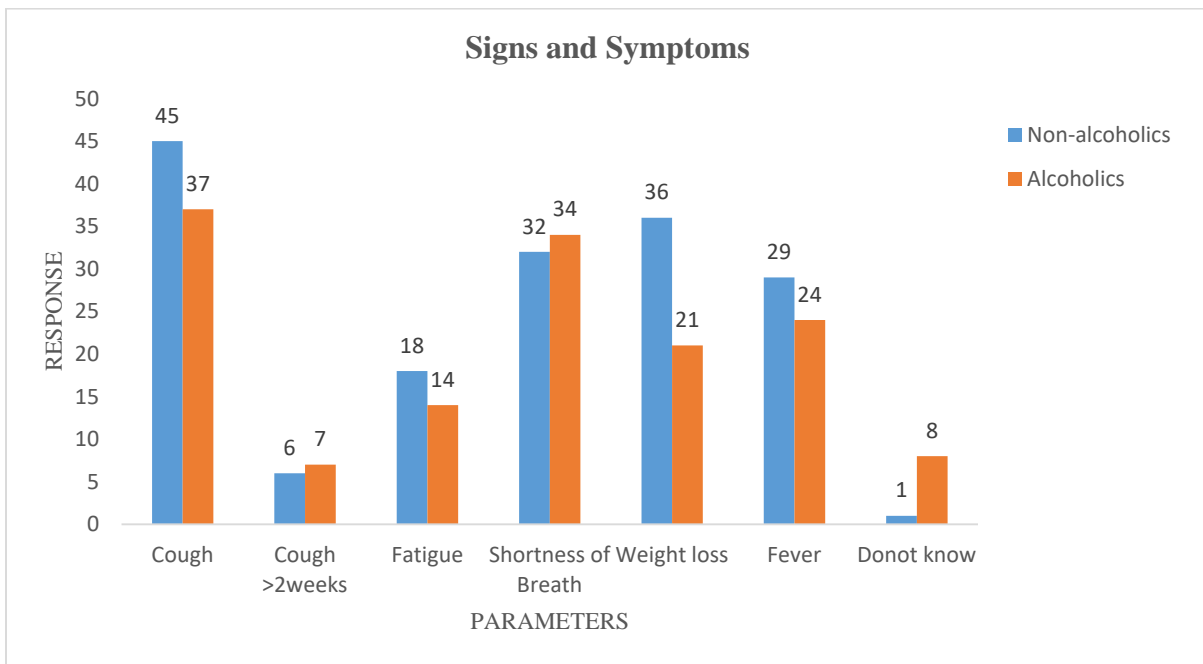
Signs and Symptoms

Fig 1: Knowledge Assessment on Signs and Symptoms

In mode of Acquiring TB the highest reported answer among non-alcoholics was through air droplets (35) and the lowest reported answer was do not know (6) whereas in case of alcoholics the highest reported answer was through air droplets (32) and the least was through shaking hands (8). The information is given in the table:

Mode of Acquiring TB
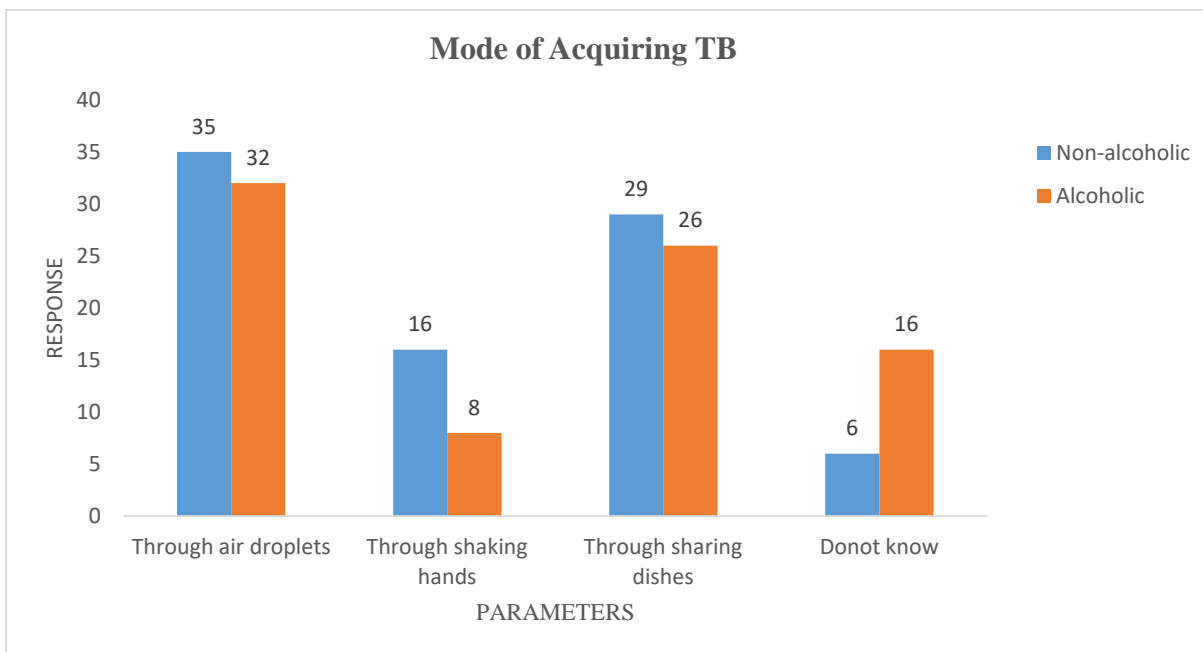

Fig 2: Knowledge Assessment on Mode of Acquiring TB

In mode of prevention of TB the highest reported answer among non-alcoholics was through good nutrition (44) and the lowest reported answer was closing window (1) whereas in case of alcoholics the highest reported answer was covering mouth and nose (28) and the least was avoid hand shake (10). The information is given in the table.

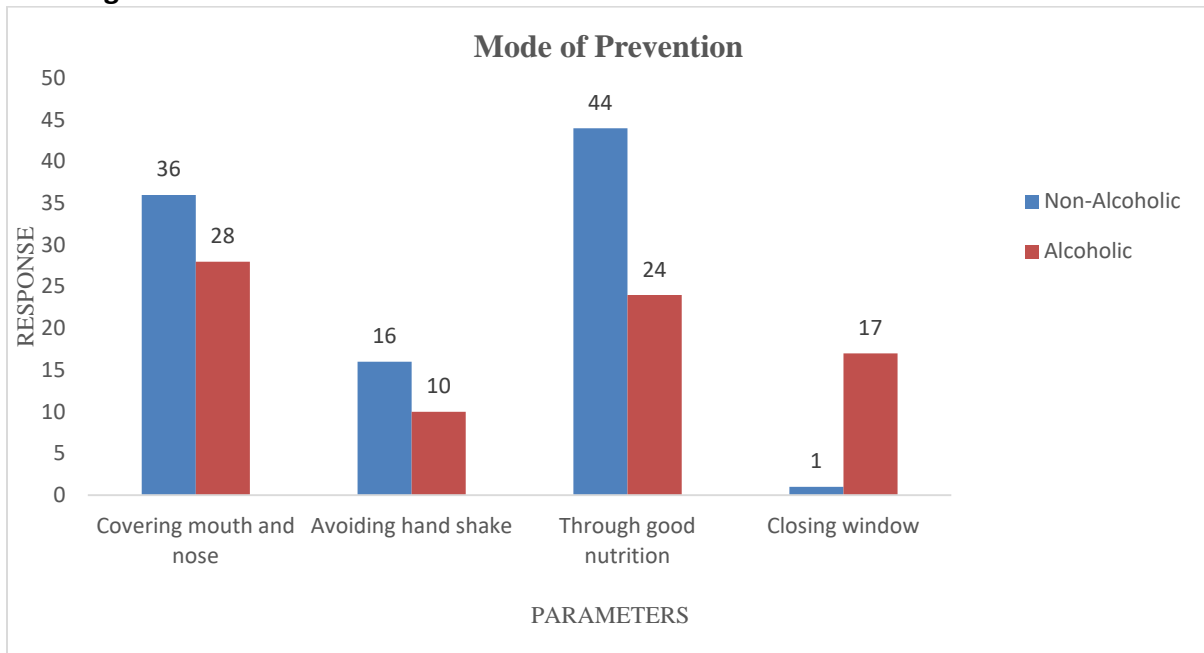**3: Knowledge Assessment on Mode of Prevention**

Figure 3:

Quality of life consists of questionnaire for symptoms, socio-psychological and exercise adaptation score. The questionnaire used is given in table (2).

Table 2:

Quality of life Questionnaire:

Patient Name: _____

Symptom score (score I)

Sr. No.	Parameters	1	2	3	Result
I	Cough and sputum	Throughout the day	Sometimes of the day	None	
II	Hemoptysis	>One episode	One episode	None	
III	Fever	Throughout the day	Only on the evening	None	
IV	Breathlessness	At rest	On exercise	None	
V	Chest Pain	Frequent	Occasionally	None	
VI	Anorexia	Severe	Moderately/Mild	None	
VII	Weight loss (Patient perception)	>5kg	<5kg	None	

Patient Score: _____

Socio-Psychological & exercise adaptation Score (Score II)

Sr. No.	Parameters	1	2	3	Result
I	Emotional symptoms/depression	Severe	Moderate/Mild	None	
II	Interest in work	Complete loss	Indifferent	Normal	
III	Household activities	Extremely Troubled	Moderately/Mildly troubled	No trouble	
IV	Exercise activities (running/climbing stairs)	Extremely troubled	Moderately/Mildly troubled	No trouble	
V	Social activities	No interest	Tries to avoid	Normal	

Patient Score: _____

When the non-alcoholic patients were asked regarding their symptoms the most reported parameter was Cough and sputum sometimes of the day (37). The information is given in the table (3):

Table 3: Symptoms score (Score I) in non-alcoholic patient

Parameters	1		2		3	
Cough and sputum	Throughout the day	13	Sometimes of the day	37	None	0
Hemoptosis	>1 episode	0	1 episode	0	None	50
Fever	Throughout the day	6	Only on the evening	21	None	23
Breathlessness	At rest	0	On exercise	34	None	16
Chest pain	Frequent	7	Occasionally	25	None	18
Anorexia	Severe	0	Moderately/mild	14	None	36
Weight loss	>5 kg	0	<5 kg	9	None	41

The most reported Socio-psychological and exercise symptoms was no loss in interest to work (36) and the lowest reported was no severe emotional symptoms (0). The information is given in the table (4):

Table 4: Socio-psychological and exercise adaptation score (Score II) in non-alcoholic patient

Parameters	1		2		3	
Emotional symptoms	Severe	0	Moderate/mild	26	None	24
Interest in work	Complete loss	1	Indifferent	13	None	36
Household activities	Extremely troubled	1	Moderately troubled	18	No trouble	32
Exercise	Extremely troubled	1	Moderately troubled	34	No trouble	15
Social activities	No interest	2	Tried to avoid	4	Normal	44

When the alcoholic patients were asked regarding their symptoms the most reported parameter was breathlessness on exercise (29). The information is given in the table (5):

Table 5: Symptoms score (Score I) in alcoholic Patients

Parameters	1		2		3	
Cough and sputum	Throughout the day	23	Sometimes of the day	26	None	0
Hemoptosis	>1 episode	0	1 episode	1	None	49
Fever	Throughout the day	12	Only on the evening	24	None	14
Breathlessness	At rest	4	On exercise	29	None	17
Chest pain	Frequent	16	Occasionally	20	None	14
Anorexia	Severe	4	Moderately/mild	26	None	20
Weight loss	>5 kg	3	<5 kg	25	None	22

The most reported Socio-psychological and exercise symptoms was they had no problem in conducting social activities (30) and the lowest was severe depression (1). The information is given in the table:

Table 6: Socio-psychological and exercise adaptation score (Score II) in alcoholic patient

Parameters	1		2		3	
Emotional symptoms/depression	Severe	1	Moderate/mild	43	None	6
Interest in work	complete loss	3	Indifferent	37	None	10
Household activities	Extremely troubled	4	Moderately troubled	38	None	8
Exercise	Extremely troubled	9	Moderately troubled	35	None	6
Social activities	No interest	5	Tries to avoid	15	None	30

DISCUSSION

Numerous studies have been done and published regarding the quality of life and knowledge assessment of the patients receiving anti-tubercular therapy. However, the comparison of quality of life and knowledge assessment between alcoholics and non-alcoholic patients receiving anti-tubercular therapy is a something new and interesting study. Knowledge of patients regarding tuberculosis and anti TB treatment were assessed with the help of knowledge questionnaire taken from *Ahmed Esmael et al.*, (*2013)* conducted study on patients knowledge, attitude, and practice regarding pulmonary tuberculosis in eastern Amhara regional state, Ethiopia.[5] The study which we conducted consists quality of life questionnaire for symptoms and socio-psychological and exercise adaptation score and was assessed by giving scores to the subject's response to QOL questionnaire. Health education during diagnosis and family support may reduce social stigma and improve the mental components of QOL. The need for monitoring quality of life of patient is essential as every aspect of the treatment period or stay in hospital may affect the quality of life of patient .in our study the quality of life was assessed through questionnaire with a goal to improve patient overall quality of life during the treatment*.*

CONFLICT OF INTEREST

The authors have no conflict of interest

CONCLUSION

A proper vigilance and governmental efforts are required for improving the knowledge and quality of life of the patients receiving Anti-tubercular therapy and the people must also be made aware with the fact that the alcohol consumption has a signification effect leading to low medication adherence and low quality of life as compared to non-alcoholics.

ACKNOWLEDGEMENT

ABBREVIATIONS

TB: Tuberculosis; **WHO:** World Health Organization; **QOL:** Quality Of Life**;**

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