

A Study to Assess Knowledge, Attitude and Practice Regarding Tuberculosis among Tuberculosis Patients at Health Centre Nadiad

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Article History	Abstract
Received: 06 June 2023 Revised: 09 September 2023 Accepted: 12 October 2023	<i>Tuberculosis is well known contagious infection that spreads through the inhalation of droplet produced by the coughs or sneezes of and infected person. TB usually affects the lungs (pulmonary TB) but can also affect multiple other organs. Aims: To Assess the level of Knowledge, Attitude, and Practice among Tuberculosis Patients. Methodology: A quantitative study was conducted among 100 tuberculosis patients of selected health center Nadiad city by using purposive sampling technique. Data were obtained using knowledge questionnaire (19), Likert's attitude scale (10) and practice questionnaire (10) with interview technique. Descriptive statistics were used to analyze the demographic data. Result: In this study total 100 tuberculosis patients participated the result revealed that 14(14%) tuberculosis patients have good knowledge, 66(66%) tuberculosis patients have average knowledge, and 20(20%) tuberculosis patients have poor knowledge, about attitude the shows that 21(21%) tuberculosis patients have favorable attitude, 3(3%) tuberculosis patients have unfavorable attitude and 76(76%) patients have Moderate attitude about practice shows that 20(20%) tuberculosis patients have good practices, 1(1%) tuberculosis patients have poor practices and 79(79%) average practice. The finding tuberculosis patient having good knowledge, Moderate attitudes, and average practice. Conclusion: In this study, the knowledge of patients about TB were found within a low level of perception. Therefore, implementation of health education and awareness program are required to reduce the prevalence of TB.</i>
CC License CC-BY-NC-SA 4.0	Keywords: Knowledge, Attitude and Practice, Tuberculosis center.

1. Introduction

Even though tuberculosis is a treatable and preventable disease, it is the second most common cause of death attributed to infectious disease. Globally 9.4 million incidents and 14 million prevalent cases (Orainey, 2013). The global burden of tuberculosis is enormous. There were an estimated 8.7 million cases of TB in 2011 and 1.4 million TB deaths. Most of the cases were reported from Asia (59%) and Africa (26%). The millennium development goals set a target to hard and reverse the incidents of the disease by 2015. Global incident rate have been falling although slowly over the past few years in various region of the world (Al-Orainey et al., 2013).

Tb usually affects the lungs (pulmonary TB) but can also affect multiple organs. In 2020 the number of people infected with TB was estimated to be 9.9 million worldwide with drop of 18% from 2019 and an increased in mortality rate (Almalki et al., 2022). Furthermore, many visitors come from TB endemic

Ares to worship and practice their rituals under circumstances believed to increase the risk of TB transmission (Esmael et al., 2013). Standardizing the approach to tuberculosis diagnosis treatment that is recommended by the World Health Organization allowed more than 36 million people to be cured between 1995 & 2008, Averting up to 6 million deaths but TB remain severe global public health threat & scientist say superbug strains of the disease are gaining ground in some countries, according to series of studies in the lancet (Dorji et al., 2020).

Objectives

To assess the knowledge, attitude, practice regarding tuberculosis among tuberculosis patients at health center Nadiad. To association between selected demographic variable and knowledge.

2. Material and Methods

A quantitative descriptive study was conducted among tuberculosis patient from the selected health center Nadiad. A 100 sample were taken by purposive sampling technique. A structured questioner (19), Likert attitude scale (10), practice questionnaires (10) were developed to collect the data.

The inclusive criteria was tuberculosis patients who are willingly to participate in the study, tuberculosis patient who are available at the time of data collection, tuberculosis patient who are above 20 years of age, tuberculosis patient who are understand Hindi, Gujrati, English language. The exclusive criteria tuberculosis patient who are critically and mentally ill. The data was analyzed by using descriptive statistics such as a average and standard deviation. The collected data was represented in the form of table and figure.

3. Result and Discussion

Section-I

Analysis and Interpretation of Demographic Data

Table 1: Frequency and distribution of sample based on demographic data.
(N=100)

Demographic data	F	%
Age		
Below 30 years	21	21%
30-40 years	33	33%
40-50 years	24	24%
Above 50 years	22	22%
Gender		
Male	49	49%
Female	51	51%
Others	0	0%
Education		
Non formal education	9	9%
Primary education	43	43%
Secondary education	27	27%
Higher secondary	19	19%
Graduate or above	2	2%
Occupation		
Businessman	7	7%
Government	13	13%
Private	20	20%
Labor	33	33%
Farmer	24	24%
At home	3	3%
Religion		
Hindu	65	65%
Muslim	20	20%
Christian	12	12%
Others	3	3%

Residency		
Urban	24	24%
Rural	76	76%
Habit		
Smoking	18	18%
Tabaco chewing	37	37%
Alcohol consumers	13	13%
All the above	29	29%
No any	3	3%
Marital status		
Married	68	68%
Unmarried	22	22%
Divorced	7	7%
Widows	3	3%
Monthly income		
Less than 10,000 Rs	46	46%
10,000 to 20,000 Rs	31	31%
20,000 to 30,000 Rs	9	9%
Above 30,000 Rs	14	14%
Number of the family		
2	22	22%
3	18	18%
4	27	27%
More than 4	33	33%
Previous history of TB		
Yes	46	46%
No	54	54%
When did you get tuberculosis?		
6 months	52	52%
1 years	31	31%
2 years	9	9%
More than 2 years	8	8%
Family history of TB		
Yes	30	30%
No	70	70%
Other chronic illness		
HIV/AIDS	3	3%
Diabetes mellitus	14	14%
COPD	15	15%
Hypertension	21	21%
Not any	40	40%
Others	7	7%

The table 1 shows that out of 100 samples 33% patients belongs to age between 30 to 40 years, 49% male patients, 43% was primary education, 33% patients occupation is labor work, 65% belongs to Hindu religion, 76% patients from rural residency, 37% patients have a bad habit i.e. Tabacco chewing, 68% patients are married, 46% patients has a less than 10,000Rs monthly income, 33 %patients have a more than 4 family members, 54% patients have no pervious history of tuberculosis, 52% patients get tuberculosis in 6months, 70% patients have no family history of TB, 40% patients have not presents any other chronic illness.

Section-II

Analysis and Interpretation of the Data of Structured Knowledge Questionnaires

Table 2: Distribution of sample based on knowledge score.
(N=100)

Grade	Score	Frequency	%
Poor	<50	14	14%
Average	50-60	66	66%
Good	>60	20	20%
Total		100	100%

Table 2 shows that out of 100 samples 14% patients' poor knowledge regarding tuberculosis, 66% patients have a average knowledge regarding tuberculosis, 20% patients have a good knowledge regarding tuberculosis.

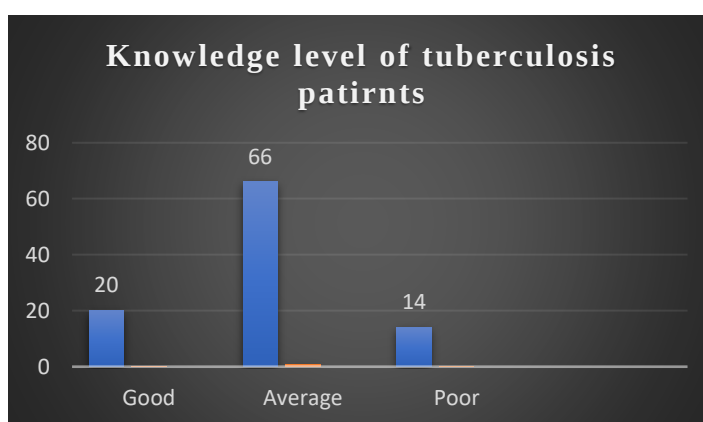


Figure 3: frequency and percentage distribution of sample according to knowledge

Section-III

Analysis and interpretation of the data collected Likert's attitude scale

Table 3: Distribution of score on Likert's attitude scale of regarding tuberculosis patients.
(N=100)

Attitude	Score	Frequency	%
Unfavorable	<50	3	3%
Moderate	50-75	76	76%
Favorable	>75	21	21%

Table 3 shows that 3 % Unfavorable attitude, 76% Moderate attitude and 21% Favorable attitude.

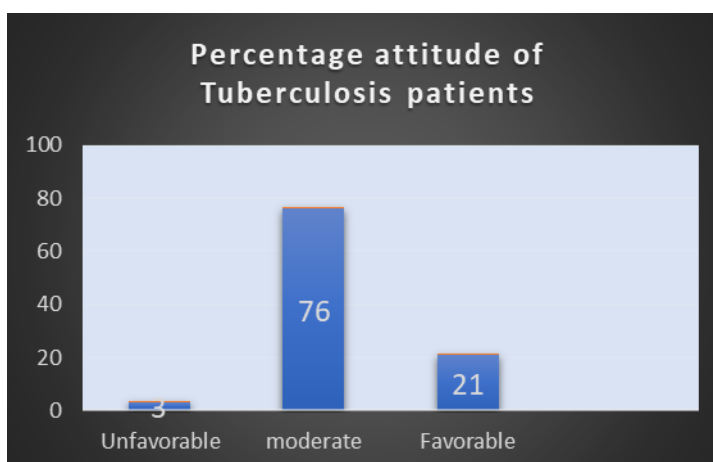


Figure 4: Frequency and percentages distribution of samples according to attitude.

Section-IV

Analysis and interpretation of the data Practice questionnaires

Table 5: Distribution of sample based on practice score.
(N=100)

Practice	Score	Frequency	%
Poor	0-33	1	1%
Average	33-65	79	79%
Good	>65	20	20%

Table 4 shows that 1% tuberculosis patients follow poor practice, 79% patients follow Average practice and 20 % patients follow Good practice.

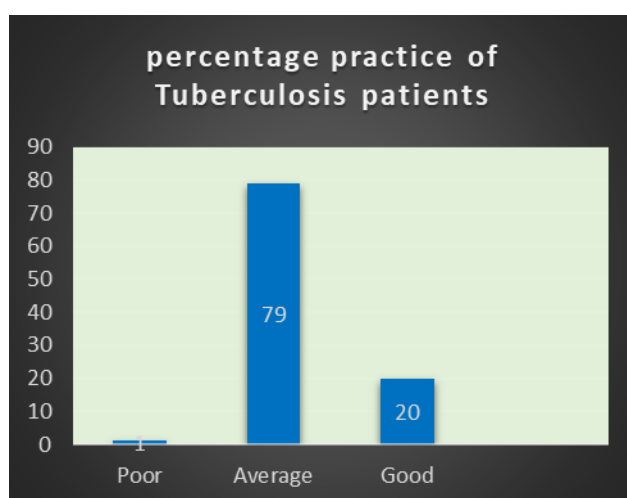


Figure5: Frequency and percentage distribution of samples according practice.

Section-V

To assess association between selected demographic variable and the knowledge among tuberculosis patients

Table 5: Association between knowledge among tuberculosis patients with their selected demographic variables

Demographic variables	Score			Total	Chi Square DF	P-Value
	Good	Average	Poor			
Age						
Below 30year						
30-40 year	6	10	5	21	8.149 DF- 6	0.227
40-50 year	5	24	4	33		
Above 60year	4	15	5	24		
	5	17	0	22		
Gender						
Male	12	35	2	49	8.148 DF-2	0.017
Female	8	31	12	51		
Transgender						

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Education						
Nonformal education	4	4	1	9		
Primary					11.340	0.183
Secondary	5	31	7	43	DF-8	
Higher secondary	6	15	6	27		
Graduate or above	5	14	0	19		
	0	2	0	2		
Occupation						
Businessmen						
Government	1	6	0	7		
Private					7.975	0.63
Labor	5	5	3	13	DF-10	
Farmer						
At home	3	14	3	20		
	6	22	5	33		
	5	16	3	24		
	0	3	0	3		
Religion						
Hindu	10	49	6	65		
Muslim	6	10	4	20	13.414	0.036
Christian	3	7	2	12	DF-6	
Other	1	0	2	3		
Residency						
Urban	5	15	4	24	0.229	0.89
Rural	15	51	10	76	DF-2	
Habit						
Smoking	5	11	2	18		
Tobacco chewing	7	23	7	37		
Alcohol consumer	3	9	1	13	3.607	0.89
All of the above	5	20	4	29	DF-8	
No any	0	3	0	3		
Marital status						
Married	8	51	9	68		
Unmarried	9	10	3	22	15.308	0.017
Divorced	3	2	2	7	DF-6	
Widows	0	3	0	3		
Monthly Income						
< 10,000 Rs						
10,000 -20,000 Rs	9	24	13	46		
20,000- 30,000 Rs					18.984	0.004
> 30,000 Rs	9	22	0	31	DF-6	
	1	7	1	9		
	1	13	0	14		
No. family member						
2						
3						
4	6	13	3	22	11.248	0.080
More than 4	3	9	6	18	DF-6	
	6	21	0	27		
	5	23	5	33		

Previous history of TB							
Yes	11	32	3	46	4.219	0.121	
No	9	34	11	54	DF-2		
When did you get TB							
6 Month	6	40	6	52	10.666 DF-6	0.099	
1 Year	8	17	6	31			
2Years	4	3	2	9			
More than 2 years	2	6	0	8			
Family history of TB							
Yes					3.348	0.187	
No					DF-2		
	3 17	21 45	6 8	30 70			
Other chronic illness							
HIV/AIDS							
Diabetes mellitus							
COPD	1	2	0	3	17.842	0.057	
Hypertension					DF-10		
No any	3	8	3	14			
Others	2	9	4	15			
	6	9	6	21			
	6	34	0	40			
	2	4	1	7			

Note: S-Significant At 5% Level (I.E., <0.05) NS Not Significant At 5% Level (I.E., P>0.05). The above 4.5 despite statistical significant association of knowledge with gender and monthly family income among tuberculosis patients. There was not significant association with other demographic variables.

4. Conclusion

In knowledge that found 14(14%) tuberculosis patients have good knowledge, 21(21%) have favorable attitude, 20(20%) tuberculosis patients have good practice. There is a statistical significance association of knowledge with gender and economical status of tuberculosis patient.

Ethic Declaration and Consent

Dinsha Patel College of Nursing institute ethics committee review this study and granted ethical approval. Consent has been obtained from all participants.

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