



## “Knowledge About Tuberculosis And Its Treatment Among Nursing Students At Selected Colleges, Kanpur U.P.”

Ms. Pratibha Srivastava<sup>1\*</sup>, Dr. Archana Selvan<sup>2</sup>

<sup>1\*</sup> Ph.D Scholar, Nursing department, SRK University, Bhopal. MP

<sup>2</sup> Dean and Principal, Department of Nursing, SRK University Bhopal. MP

**\*Corresponding Author:** Ms. Pratibha Srivastava<sup>1</sup>

<sup>1</sup> Ph.D Scholar, Nursing department, SRK University, Bhopal. MP

### ABSTRACT

Nurses play an important role in health sector. Tuberculosis is an infectious disease and spread from person to person via droplets, in order to prevent and control Tuberculosis, community participation is needed on priority basis. Health workers create awareness among people and motivate them to participate in national health programs run by government for prevention and control of various communicable, non-communicable diseases, welfare programs etc. TB control strategies will be successful when health workers will be well known about this disease, Direct Observation Therapy and administration of anti-tuberculosis medications, its side effects etc. The purpose of this study was to assess knowledge of nursing students about Tuberculosis and its treatment at selected colleges, UP. It was a descriptive cross-sectional study 160 nursing students were involved in this study. Data were collected through questionnaires, which include demographics variables and knowledge based questionnaires with yes–no options related to TB and its treatment.

CC License  
CC-BY-NC-SA 4.0

### INTRODUCTION

TB remains a main cause of morbidity and death in developing countries. India has the highest rate of Tuberculosis (TB) globally, with an estimated 2.59 million cases in 2020. Per day, more than 6775 cases are noticed and approx. 436,000 people die yearly due to this disease in India. Among the top five countries globally India stands more than half of the global missing cases. By knowing the urgency and intensity, in 2020, the Government of India has set up target of TB elimination by 2025. A finding of the past experiences, a further refined and revised strategy was put in place by renaming RNTCP as National TB Elimination Program (NTEP) in same year.

**Problem Statement:** A descriptive study to assess the Knowledge about Tuberculosis and its treatment among nursing students at selected colleges, Kanpur U.P.

### Objective:

1. To assess the knowledge about Tuberculosis and its treatment among nursing students at selected colleges, Kanpur U.P
2. To examine association of knowledge about tuberculosis with selected socio demographic variables among nursing students at selected colleges, Kanpur U.P.

## Research Methodology

**Research approach:** Quantitative research approach

**Research design:** Descriptive research design

**Setting of the study:** Study was conducted at selected colleges, Kanpur U.P.

**Population and samples:** The population of this study consisted of 190 students who were studying at selected colleges Kanpur, U.P. All students were included in this study, however 30 students were excluded from the sample group, as they were included in the pilot study to test the questionnaire in this study. Thus, our sampling included 160 students.

**Sampling technique:** convenient sampling technique

**Research variable-** Knowledge about tuberculosis and its treatment

**Description of the tool:** Study tool consist of 2 section

### Section A:

**Socio Demographic variables-** Age, sex, educational status, monthly income of family, clinicalexperience in DOTs center.

### Section B:

This section consists of 15 questions, out of that 8 questions were related to tuberculosis and 7 were related to drugs used in tuberculosis treatment and its side- effects with true–false options.

During the initial phase of developing questionnaire was submitted to nursing experts and physician. Based on their comments and suggestions, the questionnaires were revised.

### Scoring and interpretation:

The scoring pattern adopted was 1 mark for each correct answer and 0 mark for each wrong answer, Maximum score was 10. The knowledge score was divided into 3 areas:

- Inadequate knowledge= 0-5
- Moderate knowledge= 6-10
- Adequate knowledge= 11- 15

### Analysis and Interpretation:

The data collected from the subjects were organized and presented for analysis according to the objectives of the study under the following sections

### Section I: Findings related to socio-demographic variables of students.

**Table 1:** Frequency and percentage distribution of socio-demographic variables N=160

S.No	Demographic variables	N	%
1	Age Groups		
	18-20	60	37.5
	21-23	57	35.6
	23-above	43	26.9
2	Sex		
	Female	103	64
	Male	57	36
3	Qualification		
	Intermediate	128	80
	Graduate	32	20
4	Experience in DOT's center		
	Yes	120	57.7
	No	40	42.3
5	Family income per month		
	Rs. >60000	6	3.8
	Rs.50000-59000	24	15
	Rs.40000-49000	31	19.4

Rs.30000-39000	70	43.8
<Rs.29000	29	18.1

**Table 1** shows the demographic Variables of the study participants. Majority of students(37.5%) were in age group of 18-20, 64 % of participants were female students, Most of the participants (80%) had intermediate qualification, 57.7 % students had experience in dotscenter, Most of the student's family income were around 30,000-39,000 Rs.

## Section II: Findings related to knowledge about tuberculosis and its treatment among nursing students.

**Table 2:** Knowledge regarding tuberculosis and its treatment among nursing students with mean  $N=160$

S. No.	Knowledge	F	%	Mean	SD
1	Inadequate	0	0	7.77	0.549
2	Moderate	38	23.8		
3	Adequate	122	76.2		

Data on table 2 shows that majority 122(76.2%) had adequate knowledge and 38(23.8%) had moderate knowledge with mean score of  $7.77 \pm 0.549$ .

## Section-3: Association of knowledge about tuberculosis and its treatment with selected socio demographic variables among nursing students.

This section deal with the association between the knowledge about tuberculosis and its treatment with selected socio demographic variables among nursing students. to determine the association, the following research hypothesis was stated:

H1: There is significant association of knowledge about tuberculosis and its treatment with selected socio demographic variables among nursing students at selected colleges, Kanpur U.P.

**Table 3:** Association of knowledge about tuberculosis and its treatment with selected sociodemographic variables among nursing students.  $N=160$

S.No	Demographic variables	Knowledge		Chi square	df	P value
1	Age Groups	Moderate	Adequate	2.10	2	0.348 <sup>NS</sup>
	18-20	10	50			
	21-23	7	50			
	23+	10	33			
2	Sex			1.279	1	0.259 <sup>NS</sup>
	Female	13	90			
	Male	17	40			
3	Qualification			4.176	1	0.041*
	Intermediate	26	102			
	Graduate	12	20			
4	Experience in DOT's center			1.368	1	0.242 <sup>NS</sup>
	Yes	20	100			
	No	10	30			
5	Family income per month			16.36	4	.003*
	Rs. >60000	0	6			
	Rs.50000-59000	6	18			
	Rs.40000-49000	1	30			
	Rs.30000-39000	18	52			

<Rs.29000	13	16
-----------	----	----

\* $P < 0.05$  Level of Significance NS-Non significance.

Data depict in the table: 3 shows significant association with respect to qualification and family income per month.

Available online at: <https://jazindia.com>

**Discussion:**

This study support a study conducted Nilakshi Devi, Sangita Kalita (2013) to assess the knowledge regarding DOTS Regimen and Factors Related to Non Compliance among Pulmonary Tuberculosis Patients and to find the association between knowledge score with selected socio demographic variables. Study was found that majority 122(76.2%) had adequate knowledge and 38(23.8%) had moderate knowledge.

The present study finding contrast with the study conducted by Babu T, Ramasamy R, Nazeem T, among 113 tuberculosis patients across DOTS centre in and around Bengaluru, South India (2016) to assess the knowledge on DOTS therapy among the tuberculosis patients. Study found that out of the 113 patients 46.9% were found to be had poor knowledge, 52.2% were found to had medium knowledge and 0.88% Of the patients were found to had high knowledge.

**Conclusion:**

Tuberculosis treatment strategies will be more successful by community participation and awareness program. Study result found that maximum of the participants had adequate knowledge regarding the tuberculosis and its treatment. Out of 160 participants only 10 participants were having less information about side effects of drugs used in treatment of TB. So we can conclude the study that if students will get more exposure in TB clinics, active involvement of the students nurses for implementation of dots program will be much more helpful for health sector as well as for up gradation of students' knowledge.

**References:**

1. [www.tbcindia.nic.in/index1.php?lang=1&level=1&sublinkid=4160&lid=2807](http://www.tbcindia.nic.in/index1.php?lang=1&level=1&sublinkid=4160&lid=2807)
2. <https://reports.nikshay.in/>
3. [https://apps.who.int/iris/bitstream/handle/10665/208894/stci\\_book.pdf?](https://apps.who.int/iris/bitstream/handle/10665/208894/stci_book.pdf?)
4. [www.tbcindia.nic.in/index1.php?lang=1&level=1&sublinkid=4160&lid=2807](http://www.tbcindia.nic.in/index1.php?lang=1&level=1&sublinkid=4160&lid=2807)
5. Gulani KK. Community health nursing (principles & practice): 3rd ed. Delhi: Kumar publishing house; 2019. p.329.
6. Estanol TH. (2018). Symptom of tuberculosis. Us national library of medline. National institute of health; 2020. Available from <https://medlineplus.gov/tuberculosis.html>
7. Park. K. Park textbook of preventive and social medicine: 25th ed. Jobalpur: M/s Banarshidas Bhanot; 2019. p.188.
8. Tuberculosis [document on internet]. WHO online; 2020 [cited 2020 March 18]. Available from: <https://www.who.int/news-room/fact-sheets/detail/tuberculosis>.
9. Mason JO. Opportunities for the elimination of tuberculosis. Am Rev Respir Dis 1986; 134:201. Available from <https://www.uptodate.com/contents/adherence-totuberculosis-treatment#H1>
10. <https://www.researchgate.net/publication/235714354>