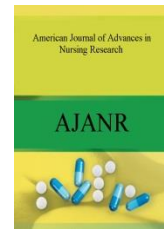




## AMERICAN JOURNAL OF ADVANCES IN NURSING RESEARCH

Journal homepage: [www.mcmed.us/journal/ajanr](http://www.mcmed.us/journal/ajanr)



# A PRE-EXPERIMENTAL STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME ON KNOWLEDGE REGARDING TUBERCULOSIS AND DOTS THERAPY AMONG STAFF NURSES WORKING IN SELECTED HOSPITALS AT JODHPUR

**Narendra Pal Singh Choudhary\***

<sup>1</sup> H.O.D, Community Health Nursing, Govt. College of Nursing, Jodhpur, India

### Article Info

Received 25/01/2021

Revised 15/02/2021

Accepted 23/02/2021

### Key word:

Knowledge, staff nurse,  
planned teaching  
programme.

### ABSTRACT

Introduction: India is one of the largest and the most important developing countries of the world. In this country, public health emphasizes more on communicable disease, malnutrition and reproductive health care. Tuberculosis (TB) is one of the most common infectious diseases known worldwide. It is the seventh leading cause of Global Disability Adjusted Life Year (DALY) lost. 8.9 million People are living with TB in India alone. India accounts for 1/5<sup>th</sup> of world. Tuberculosis kills over 1.50 million people each year. India is home in the largest number of TB cases in the world. Aim Of The Study: Assess knowledge regarding tuberculosis and dots therapy among staff nurses. Material And Method: A pre-experimental one group pre-test post-test study was used in order to evaluate effectiveness of planned teaching programme (the Independent variable) on knowledge regarding tuberculosis and dots therapy (the dependent variable) among staff nurse of selected by non-probability purposive sampling technique MDM Hospital, of Jodhpur. Each participant was informed about the study and that they could withdraw at any time and a written consent was also obtained. Result: The findings of the study reveals that in pre-test majority (53.33%) of the sample had average knowledge regarding Tuberculosis & DOTS therapy, followed by 23.33% had good knowledge and only few (18.33%) samples had poor knowledge regarding Tuberculosis & DOTS therapy. Conclusion: It can be concluded that staff nurse had average knowledge regarding tuberculosis and dots therapy as per current research recommendations. They require education and to enhance their knowledge regarding tuberculosis and dots therapy, planned teaching programme can be used.

Corresponding Author

**Narendra Pal Singh Choudhary**

Email:- [npchoudhary81@gmail.com](mailto:npchoudhary81@gmail.com)

### INTRODUCTION & BACKGROUND OF THE STUDY

Tuberculosis is one of common infectious disease known worldwide. It is the seventh leading course

of Global Disability Adjusted Life Year (DALY) lost. Around 8.9 million cases occurred in the year 2007 with 1.8 million TB cases in India alone. India accounts for 1/5<sup>th</sup> of word. TB kills over 1.5 million people each year. India is the home to largest number of TB cases in the world. More than 30% of Global burden of TB is born by India. Each day in India, More than 20,000 people in India get infection with the tuberculosis bacillus, 5000



people develop TB, and more than 1000 die- that is nearly one person per minute. The annual number of TB deaths in India is 421,000 [1]. India needs to put at least 3500 (70%) of these new TB patients on DOTS each day, cure 2975 out of these (85%) in order to reduce the death rate by half by the year 2010. - (RNTCP Report, 2010)

TB mortality in the country has reduced from over 42/100,000 population in 1990 to 24/100,000 population in 2008 as per the WHO Global TB control-updated 2009 Report. The prevalence of TB in country has reduces from 568/100,000 population to 185/100,000 population by the year 2008. (WHO Report, 2008)

Tuberculosis is a worldwide problem in 21<sup>th</sup> century. Globally, 1.7 to 2.0 billion people are infected with tuberculosis bacilli [2]. Around 8.0 million people develop tuberculosis disease ever year and 3.0 million people die every year. India accounts for nearly one fifth of the global problem, 40% of population is infected with tuberculosis bacilli. Around Rs. 12,000 crores is the economic loss to the Govt. of India every year. – (According to Indian scenario)

Based on self-experience of investigator as DOTS Provider and sector DOTS supervisor, expert opinion and available review literature on topic, the investigator decided to this global problem as the topic of research study because the staff nurse are the main DOTS provider and guide of other health workers i.e. ASHA, anganwadi workers etc. at sub centre level [3].

### OBJECTIVES OF THE STUDY

- To assess the pre-test knowledge score of staff nurses regarding Tuberculosis and DOTS therapy.
- To find out association between pre-test knowledge score and selected demographic variables.
- To find out the effectiveness of planned teaching programme on the post-test knowledge score of staff nurses regarding Tuberculosis and DOTS therapy [4].

### HYPOTHESIS OF THE STUDY

- **H<sub>1</sub>** - There will be significant association between pre-test knowledge score and selected demographic variables at the level of  $p \leq 0.05$ .
- **H<sub>2</sub>** - There will be significant difference in pre-test and post-test knowledge score of staff nurses regarding Tuberculosis and DOTS therapy at the level of  $p \leq 0.05$  [5].

### OPERATIONAL DEFINITION

- **Effectiveness:** Refers to improvement in post-test knowledge score among staff nurse compared to the pre-test knowledge score after administration of planned teaching program.
- **Knowledge:** It refers to the correct responses obtained from the staff nurses regarding the

tuberculosis and DOTS therapy in terms of gain in knowledge score as measured by structured knowledge questionnaire.

- **Staff Nurse:** Refers to the registered nursing personnel who have successfully completed their basic education in nursing like diploma in nursing or B. Sc. nursing and to provide health services to people in the community setting.
- **Planned Teaching Program:** It refers to the teaching giving to staff nurse on Tuberculosis and DOTS therapy by using different A.V. aids [6].

### Assumption

- Staff Nurses do have knowledge regarding Tuberculosis and DOTS therapy.
- Planned teaching is an accepted method of improving knowledge.

### Delimitation

- Staff nurses working at selected hospital.
- Nurses having at least 1 year of experience.
- Age group between the 21-60year.

## RESEARCH METHODOLOGY

### Research Approach

A pre experimental approach was used in the study to evaluate the effectiveness of planned teaching programme on tuberculosis and dots therapy among staff nurses

### Research Design

A pre-experimental design, one group pre-test post-test design was adopted for the study [7].

### Research Variable

- **Independent variable:** planned teaching programme on Tuberculosis and DOTS therapy.
- **Dependent variable:** knowledge of staff nurses was the dependent variables.

### Demographic variable:

Demographic variables are the characteristics and attributes of the study sample. In my study the demographic variables are age, education, monthly income, marital status, DOTS training, experience from where they are working.

### Population

In this study target population staff nurses working at MDM and KN chest hospital Jodhpur District. In this study population consist of all 21-60 years staff nurses.

### Sampling Size

In this study, the sample consist 60 staff nurse



working in MDM and KN chest hospital, Jodhpur.

### Sampling Technique

The sampling technique used in this study was purposive method of sampling. This entails the use of the most readily available persons in a study. Sample who meet the criteria for sample selection were selected.

### Reliability of the Tool

The tool was tested for reliability on 12 staff nurse during pilot study by using split half method and Spearman brown coefficient formula. Correlation coefficient  $r=0.780$ .

The reliability coefficient of structured knowledge questionnaire was, which showed that the tool was reliable.

### Major Finding of the Study

Table 1 Depicted that the staff nurse participated in the study, Age 21 - 30 years (28, 47%), Marital status unmarried (32, 53%), Education high secondary (29,

48%), Professional education GNM (45, 75%), Clinical experience Less than 5 years (38, 64%), Monthly income below 10,000 (22, 37%), Training attended on TB & DOTS Yes (32, 53%).

Table 2 Depicted that the pretest majority (53.33%) of the sample had average knowledge regarding Tuberculosis & DOTS therapy, followed by 23.33% had good knowledge and only few (18.33%) samples had poor knowledge regarding Tuberculosis & DOTS therapy.

Table No.3 Depicted that the after giving the planned teaching programme to the staff nurses regarding Tuberculosis & DOTS therapy post-test mean knowledge score was apparently higher (26.10) with the mean difference of 5.78. the computed 't' value shows that there is highly significant difference between pre-test and post-test mean knowledge score [ $t_{(59)}=7.352$ ,  $P<0.0001$  level]. These finding indicated that there was a significant improvement on the post-test knowledge of staff nurses due to planned teaching programme.

**Table 1. Frequency and percentage distribution of demographic variables among staff nurse (N=60)**

S. No	Socio-demographic variable		Frequency	Percentage
1	Age (in years)	21 - 30 years	28	47 %
		31 - 40 years	22	37 %
		41 - 50 years	7	12 %
		51 - 60 years	3	5 %
2	Marital status	Married	28	47 %
		Unmarried	32	53 %
3	Education	Higher Secondary	29	48 %
		Graduate	24	40 %
		Post Graduate	7	12 %
4	Professional education.	GNM	45	75 %
		B.Sc. Nursing	12	20 %
		Post basic b.sc nursing	3	5 %
5	Clinical experience	Less than 5 years	38	64 %
		6 - 10 years	20	33 %
		11-15 years	0	0 %
		More than 15 years	2	3 %
6	Monthly income	Below 10,000	22	37 %
		10,001 – 15,000	17	28 %
		15,001 – 20,000	08	13 %
		Above 20,000	13	22 %
7	Training attended on TB & DOTS	Yes	32	53 %
		no	28	47 %

**Table 2. Frequency and percentage distribution of the staff nurses level of knowledge regarding Tuberculosis & DOTS therapy. (N=60)**

Level of knowledge	Frequency (f)	Percentage (%)
Poor	11	18.33%
Average	32	53.33%
Good	17	28.33%



**Table 3. Effectiveness of planned teaching programme on pretest and post-test knowledge score (N=60)**

Knowledge	Mean	SD	Mean Difference	df	't' Value	Table Value
Pre-test	20.31	4.56	5.78	59	7.352*** S.	4.173***
Post-test	26.10	3.12				

## DISCUSSION

The hypothesis made in the study is there is significant association between the level of knowledge regarding Tuberculosis and DOTS therapy of staff nurse with selected socio- demographic variables among staff nurse such as Age 21 - 30 years (28, 47%), Marital status unmarried (32, 53%), Education high secondary (29, 48%), Professional education GNM (45, 75%), Clinical experience Less than 5 years (38, 64%), Monthly income below 10,000 (22, 37%), Training attended on TB & DOTS Yes (32, 53%).

The two assumptions were made in this study. The first one was the finding of the study reveals that significant association between pre-test knowledge score and selected demographic variables

The second assumption was significant difference in pre-test and post-test knowledge score of staff nurses regarding Tuberculosis and DOTS therapy

## CONCLUSION

The finding shows that the staff nurse are having average knowledge regarding Tuberculosis and DOTS

therapy. However, The staff nurses have some improvement in knowledge regarding Tuberculosis and DOTS therapy. They require further education and continuously update to enhance their knowledge regarding Tuberculosis and DOTS therapy.

There was a highly significant increase in the knowledge of the subjects after introduction of planned teaching, the paired 't' test computed between mean pre-test and post-test knowledge score was 7.35, which indicate a highly significant difference in the knowledge score in most of the areas.

Thus, it is concluded that the planned teaching programme on Tuberculosis and DOTS therapy is effective in improvement of knowledge. Most of the demographic variables do not show a significant association with the knowledge of the staff nurses regarding Tuberculosis and DOTS therapy. Hence, on the basis of above cited findings, it can be concluded undoubtedly that the written material prepared by the investigator in the form of planned teaching programme helped the staff nurses regarding Tuberculosis and DOTS therapy to improve their knowledge.

## REFERENCES

1. Basavanthappa. (2008). Community health nursing 2<sup>nd</sup> ed. Jaypee Brothers, Medical Publishers.
2. Clement I. (2009) Basic Concepts of Community Health Nursing. 1<sup>st</sup> ed. Jaypee Brothers Medical Publishers.
3. Col. Bhalwar Rajvir. (2009) Text Book of Public Health and Community Medicine, 1st Edition; Publisher - Department of, Armed Forces Medical College (AFMC), Pune, India.
4. Denise F, Polit, Cheryl Tatano Beck. (2004) Nursing research: Principles and methods. 7<sup>th</sup> ed. Philadelphia: Lippincott Williams & Wilkins.
5. Gulani K K. (2012) Community Health Nursing Principles & Practices 1<sup>st</sup> edition, Kumar Publishing House, Delhi.
6. Kerlinger FN. (2000) Foundations of behavioral research. 4th ed. Fort Worth, TX: Harcourt College Publishers.
7. Kothari CR. (2004) Research methodology methods & techniques. New Age International Publishers New Delhi.

