# A Pre-Experimental Study to assess the effectiveness planned teaching programme regarding TB and DOTS therapy among adults in Urban Area of district Jalandhar (Punjab)

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Abstract: India is the highest TB burden country according for one-fifth of global incidence estimate is 9.1 million cases out which estimates that 1.9 million cases are from India. India is 17<sup>th</sup> among 22 highest burden countries in terms of TB incidence rate. The revised national tuberculosis control programme based on the international recommended. A Pre-Experimental Study to assess the effectiveness planned teaching programme regarding TB and DOTS therapy among adults in Urban Area, Jalandhar (Punjab). The aim of the study is to assess the knowledge regarding TB and DOTS in urban area and to provide them knowledge and bring awareness regarding TB and DOTS therapy. The objectives of the study were to assess pre test knowledge regarding TB and DOTS among adults at selected urban area of district jalandhar, to assess post test knowledge regarding TB and DOTS among adults at selected urban area of district jalandhar, to compare pre test and post test knowledge score regarding TB and DOTS among adults at selected urban area of district jalandhar, to find out association of pre test knowledge with socio demographic variables of adults at selected urban area of district jalandhar. Sample size of present was 30 and purposive sampling technique was used for data collection. A self structured multiple choice questionnaire was used to assess the knowledge of adults regarding TB and DOTS therapy. Resultsshowed that in Pre test maximum adults have average knowledge (83.3%), good knowledge have (10%), and below average knowledge have (6.6%) and in Post test maximum adults have good knowledge(76.6%), average knowledge have (20%) and no one have below average knowledge 

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# I. Introduction

In this century most other infectious disease has likewise decreased in incidence and severity for similar reasons. The general decline leaves tuberculosis still at the top of the list as the leading cause of death among infectious disease. Tuberculosis remains a very serious health problem, according for 40,000 new illnesses every year in the United States.<sup>1</sup>

Tuberculosis is contracted by inhaling into the lungs bacteria that have been coughed into the air by a person with advanced disease. Once the bacteria are inhaled the body defenses are usually capable of isolating them into small areas within the tissues, thereby preventing any significance destruction or disease. However, though defenses are able to isolate the bacteria, they are not able to destroy all of them. Once active disease has appeared it usually involve the chest although it can develop anywhere in the body. There is gradual spread of inflammation within lungs. At any stage of this development organisms may find their way into the blood stream and new foci of disease can spring up throughout body. The sputum become loaded with the organism that is coughed into the air and go on to infect other individuals. The infected sputum from one area of the lung may gain access to other areas and cause development of disease tissue there as well.<sup>2</sup>

India has the highest TB burden country with World Health Organization statistics for 2011 giving an estimated incidence figure of 2.2 million cases of TB for India out of global incidence of 8.7 million cases. Tuberculosis is the biggest health issue that lies around India, but what makes it worse is the newly and recently discovered global phenomenon of TDR-TB- totally drug resistant tuberculosis. This issue of drug resistant TB started off with MDR-TB and moved on to XDR-TB.<sup>3</sup>

One of the main cause of acquiring TB is living a life with weak immune system, everything become fragile and easy target that's why a babies, children and senior adults have high risk of acquiring TB.<sup>2</sup>

The most commonly used diagnostic tool for TB is the simple montoux test, through blood test. A simple amount of substance called PPD (protein purified derivative) is injected just below the skin inside the forearm. A person may feel only slight needle prick. Within 48-72 hours a health care professional will check a

person's arm for swelling at the injection site. A hard, raised red bump means a person likely to have TB infection.<sup>2</sup>

There are more than 20 drugs that are currently used for the treatment of TB and almost all of them were developed some years ago. The drugs are used in different combination in different circumstances. For example: some TB drugs are only used for different treatment of new patients who are very unlikely to have resistance to any of the TB drugs.<sup>2</sup>

DOTS are composed of five distinct elements: political commitment; microscopy services; drug supplies; surveillance and monitoring systems and use of highly efficacious regimens; and directly observation of treatment. But the word DOTS is an acronym for directly observed therapy short course. DOTS is not an end in itself but mean to an end. It has two purposes to ensure that the patient with tuberculosis completes therapy to cure and to prevent drug resistance from developing in the community. DOTS offer the best means for the control of TB.<sup>4</sup>

The bacteria that cause TB can develop resistant to the antimicrobial drugs used to cure the disease. MDR TB is a TB that does not respond to atleast Isoniazid and Rifampin the most powerful drug or previous treatment of TB is an indicator of MDR-TB.<sup>5</sup>

One of the reason to find out reason regarding spreading Tuberculosis and to bring awareness among people.

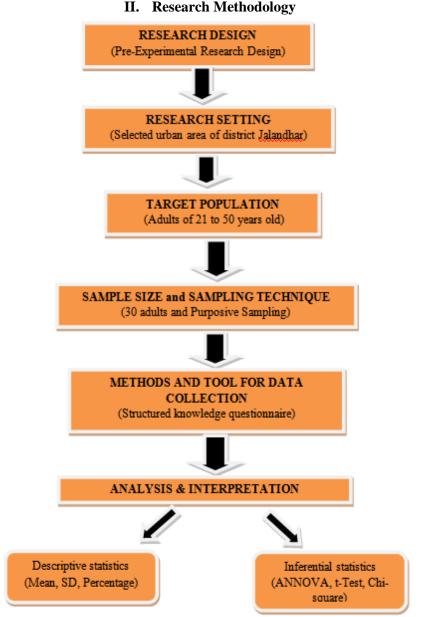


Figure 1. Schematic presentation of research methodology

Study Design: Pre- Experimental research design was used in this study
Study location: Selected urban area of district Jalandhar
Study Duration: Study was conducted in the month of Jan 2016
Sample size: Sample size was 30
Subject and selection method: Adults of 21 to 50 years old and purposive sampling technique was used.

#### Inclusive criteria

- **1.** Sample who are willing to participate
- **2**. Who are able to communicate
- **3.** Who are present at the time of data collection
- 4. Who understands Punjabi

#### Exclusion criteria

**1.** Who are not present at the time of data collection

- 2. Who are not willing to participate
- 3. Who don't understand Punjabi

### **Procedure Methodology**

After written informed consent was obtained, a structured questionnaire was prepared and used to collect the data of adults. The tool was divided into two parts.

**1**. Socio demographic variables such as: age, gender, marital status, occupation, education, income per month and source of information regarding knowledge TB and DOTS.

**2**. Structured questionnaire consist of 30 questions which was further divided in to 6 areas .i.e. definition, etiology, clinical manifestations, diagnosis, treatment, DOTs therapy.

Each question has 4 options and one question carry 1 mark

#### **Statistical Analysis**

Data Analysis was done by descriptive and inferential statistics such as mean, median, mode, percentage, standard deviation, degree of freedom and "t" test value and Chi-square.

# III. Result

# Table 1: Comparison of pre test and post test knowledge according to frequency and percentage distribution

Level of knowledge	Pre test		Post test	
	Ν	%age	Ν	%age
Good	3	10	23	76.6
Average	25	83.3	6	20
Below average	2	6.6	0	0

Maximum score= 30 Minimum score=0

**Table 1:** depicts that in Pre test maximum adults have average knowledge (83.3%), good knowledge have (10%), and below average knowledge have (6.6%) and in Post test maximum adults have good knowledge(76.6%), average knowledge have (20%) and no one have below average knowledge.

# **IV.** Discussion

**Objective 1:** To assess the pre test knowledge of adults regarding TB and DOTS therapy. In the present study results showed that out of 30 adults, 3.3% have poor knowledge, 10% have good knowledge, and 86.6% have average knowledge regarding TB and DOTS therapy.

**Objective 2** To assess the post test knowledge of adults regarding TB and DOTS therapy. In the present study results showed that out of 30 adults, no one has below average knowledge, 20% have average knowledge and 76.6% have good knowledge.

**Objective 3:** To compare the pre and post test knowledge score among adults regarding TB and DOTS therapy. In the present study results showed that mean % of pre test knowledge score were 50.76 where as mean % of post test score were 73.77. It is included that there is effect of structured teaching plan on adults regarding TB and DOTS.

**Objective 4:** To find out association of pre test knowledge with socio demographic variables of adults at selected urban area of district Jalandhar. The present study showed that there were association between the

knowledge score with socio demographic variables i.e. age, gender, type of family, marital status, occupation, education, income per month, source of information. It showed that these socio demographic variables put effect on knowledge of respondents.

# V. Conclusion

#### The conclusion drawn on basis of findings of the study was as follows:

The conclusion drawn from findings of the present study revealed that in pre test, out of 30 adults, 3.3% have poor knowledge, 10% have good knowledge, and 86.6% have average knowledge regarding TB and DOTS therapy. In Post test, no one has below average knowledge, 20% have average knowledge and 76.6% have good knowledge. It showed the effectiveness of structured teaching programme. All the variables including the study i.e. age, gender, type of family, marital status, occupation, education, family income, source of information, are found to be non significant on knowledge of adults regarding TB and DOTS therapy.

#### References

- [1]. American lung cancer society, tuberculosis and treatment documentation. www.comonhealthcentreonline.com preview 2008
- [2]. Brunner and Suddarth, "text book of medical surgical nursing" Philadilphia Lippincot Williams and with ins. 2004 Pp533-38
- [3]. WHO, Principles and example for organization joining the fight against Tuberculosis Pp-9
- [4]. State TB central society, Punjab "Module for MPW's and other DOTS providers" Pp:5-23
- [5]. Swaminaathan et.al. multi drug resistant tuberculosis more wide spread, health action, june 2003, Pp-36-38

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