Research Article

A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING THE PREVENTION AND CONTROL OF PULMONARY TUBERCULOSIS AMONG ADULTS AT SELECTED AREA OF URBAN COMMUNITY, GUWAHATI, ASSAM

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A B S T R A C T

WHO estimated that 21.4 lakh TB cases notified in India in 2021,. India's TB incidence for the year 2021 is 210 per 100,000 population compared to the baseline year 2015, there has been an 18% decline which is 7 % points better than the global average of 11%. Worldwide, TB is the 13th leading cause of death and the second leading infectious killer after COVID-19. In 2022, an estimated 10.6 million people fell ill with tuberculosis (TB) worldwide, including 5.8 million men, 3.5 million women and 1.3 million children. But TB is curable and preventable. It estimated 75 million lives were saved through TB diagnosis and treatment between 2000 and 2021. **The present study Title:** "A study to assess the effectiveness of Structured Teaching Programme on knowledge regarding the prevention and control of Pulmonary Tuberculosis among adults at selected area of urban community, Guwahati, Assam." **Objectives:** To assess the knowledge on prevention and control on Pulmonary Tuberculosis, To evaluate the effectiveness of Structured Teaching Programme on prevention and control on Pulmonary Tuberculosis, To find out the association between pre- test level of knowledge with selected Socio-demographic variables. **Conceptual framework:** The study was based on general system model of "Ludwig Von Bertalanffy (1968)".**Approach:** Quantitative approach was adopted for this study. **Design**: Pre- experimental one group pre-test post-test design was taken for the study. **Setting**: The study was conducted at selected area of urban community, Odalbakra, Guwahati. **Sample:** The sample size was 60 adults. **Sampling Technique:** Non-probability purposive sampling technique was used. **Methods of data collection procedure:** Data were collected among adults to assess the level of knowledge by using structured knowledge questionnaire. The collected data were tabulated and analyzed by descriptive and inferential statistics. **Result:** The result shows, there was a significant difference between pre-test and post-test level of knowledge regarding prevention and control of Pulmonary Tuberculosis among adults. The calculated 't' value (19.88) was greater than the table value at 0.05 level of significance. **Conclusion:** The Structured Teaching Programme was effective (p<0.05) to improve the level of knowledge regarding Prevention and control of Pulmonary Tuberculosis among adults.

INTRODUCTION

"Live as if you were to die tomorrow, learn as if you were to live forever."

Mahatma Gandhi

BACKGROUND OF THE STUDY

Tuberculosis is one of the most vital diseases in the history of humanity, and remains as an out of the ordinary burdens on human health today. The Greek term 'phthisis' was used by the Hippocrates to illustrate the wasting disease, later known as Tuberculosis. The term 'Tuberculosis' was introduced in the early 19th century, resulting from the tubercles characterized in the study of pathological features of the disease. The first explanation of the tubercle bacilli as the cause of tuberculosis-Robert Koch on 1882 was scientific landmark. The finding of streptomycin by Schatz and Waksman in 1943 was a major triumph; hence both Robert Koch and Waksman received Nobel Prize for their hard work.

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Tuberculosis is a particular infectious disease caused by Mycobacterium tuberculosis. The disease mainly affects lungs and causes pulmonary tuberculosis, it can also affect intestine, meninges, bones and joints, lymph glands, skin and other tissues of the body. Tuberculosis remain a global public health problem despite the fact that the causative organism was discovered more than 100 years ago and highly effective drugs and vaccine are available making tuberculosis a preventable and curable disease. India is the highest TB trouble country in the world in terms of absolute number of happening cases that occur each year.

TB is an airborne disease that is transmitted by droplet nuclei, usually within the respiratory tract of an infected person who exhales during coughing, talking, sneezing or singing. When a risk person organism is carried into the lungs to the pulmonary alveoli. Person at increased rate for TB include close contacts of person with active TB, foreign-born persons(from Africa, Asia, Eastern Europe, Latin America and Russia), residents of high-risk congregate settings (correctional facilities, long-term care facilities, and homeless shelters), health care workers exposed to high-risk patients, infants and children or adolescents exposedto high risk adults.

WHO estimated that 21.4 lakh Tuberculosis cases notified in India in 2021, 18% higher than 2020. Over 22 crore people screened for TB in 2021 across the country for early detection and treatment of TB. The ministry of health and family welfare has taken note of the WHO Global TB Report 2022 has clarified that India has, in fact compared to other countries over time. India's TB incidence for the year 2021 is 210 per 100,000 population compared to the baseline year 2015, there has been an 18% decline which is 7 % points better than the global average of 11%. These figures also place India at 36th position in terms of incidence rates. A total of 1.3 million people died from TB in 2022(including 167000 people with HIV). Worldwide, TB is the 13th leading cause of death and the second leading infectious killer after COVID-19.

- **WHO Global TB Report (2022)** study shows that 21.4 lakh TB cases notified in India in 2021, 18% higher than 2020. Over 22 crore people screened for TB in 2021 across the country for early detection and treatment of TB. In the year 2021, a total of 1.6 million people died from TB. Worldwide, TB is the 13 leading cause of death and the second leading infectious killer after COVID-19. In 2021, an estimated 10.6 million people fell ill with tuberculosis worldwide. Six million men, 3.4 million women and 1.2 million children.

- **Mrs. Rakhi John Moreshwar *et al*. (2022)** conducted a study to evaluate effectiveness of structured teaching programme regarding knowledge of tuberculosis and importance of drug regimen among tuberculosis patient visiting urban designated microscopy centres (DMC) by using quasi experimental study design. The subject was selected by using cluster sampling technique and the sample size was 60. The findings of the study showed that the post test knowledge score was higher than the pre test knowledge score range. The mean post- test knowledge score(13.91) also was higher than the pre-test knowledge score(8.41). The comparison of pre-test and post- test knowledge score showed that there was significant gain in knowledge of tuberculosis patient after structured teaching programme. This show that the structured teaching programme was effective.

- **Prabhanshu Vyas, Smriti G.Solomon (2023)** conducted a study to assess the knowledge regarding prevention of pulmonary tuberculosis among tuberculosis patient at Bawliya Khura rural urban area of Indore, Madhyapradesh by using quantitative evaluative approach with one group pre-test design for the study. Non probability purposive sampling technique was used to collect the sample and sample size was 60. The tools used for data collection was structured knowledge questionnaire of before and after self-instructional module. Data was analyzed by using descriptive and inferential statistics. The study shows that there was significant increase in the post-test knowledge score compare to pre-test knowledge score on prevention of tuberculosis. The mean knowledge score of pre-test was 1.80+-0.40 and mean knowledge score of post-test was 3.30+_0.46. The study reveals that self instructional module was effective in improving the knowledge of tuberculosis patient.

Tuberculosis is a genuine malady that spreads through the air. It is brought about by a bacterium called Mycobacterium tuberculosis. Tuberculosis generally influences the lungs. On the other hand, it can influence different parts of the body, for example, the focal sensory system. TB is completely curable if the correct drugs are taken for the correct duration of time.

PROBLEM STATEMENT

"A study to assess the effectiveness of Structured Teaching Programme on knowledgeregarding the prevention and control of Pulmonary Tuberculosis among adults at selected area of urban community, Guwahati, Assam."

OBJECTIVES OF THE STUDY

- To assess the knowledge regarding prevention and control of Pulmonary Tuberculosis.

- To evaluate the effectiveness of Structured Teaching Programme on prevention andcontrol of Pulmonary Tuberculosis.

- To find out the association between pre-test level of knowledge with selected socio-demographic variables.

HYPOTHESIS

H1: There will be significant difference between pre-test and post-test knowledge score onprevention and control of Pulmonary Tuberculosis among adults.

H2: There will be significant association between the pre test level of knowledge with selected socio-demographic variables.

METERIALS AND METHODS

The study was adopted quantitative research approach. The research design used was Pre-experimental one group pre-test post-test research design. The study was carried out at Urban community, Odalbakra, Guwahati, Assam. The sample were selected by using Non- probability Purposive sampling technique. The sample size comprised of 60 adults. Pilot study was conducted on 6 samples, from 12th September to 20th September 2023, using Non- probability Purposive sampling technique. It was initiated by using self-structured knowledge questionnaire to assess their knowledge regarding prevention and control of Pulmonary Tuberculosis and was analyzed by Descriptive and analytical statistics. All 6 samples were given health education followed by knowledge questionnaire. The average time taken by each sample for answering the question was 30 minutes. The pilot study was found feasible for further study regarding prevention and control of Pulmonary Tuberculosis among adults at selected area of urban community, Guwahati, Assam. For the study, the reliability of the tool was established by using 'Karl Pearson's correlation-coefficient'. The reliability of the tool was found to be r= 0.8, which indicates an acceptable level of reliability. The data collection was done from 16th October 2023 to 10th November 2023. Formal written permission was obtained from the concern authority prior to the study. Data was collected by administering self structured knowledge questionnaire. On the 1st day, self structured knowledge questionnaire of 30 multiple choice questions was assessed to collect the data on knowledge regarding Pulmonary Tuberculosis. On the same day helath education was taught for a period of 35 minutes after pre-test. After 7 days, investigator administered post-test and assessed their knowledge regarding prevention and control of Pulmonary Tuberculosis on same samples by using same questionnaires.

RESULTS

The data collected from the adults of the selected urban community has been analyzed under the following sections:

SECTION 1: Distribution of samples according to their Socio-demographic Variables.

SECTION 2: Analyze of pre-test and post-test knowledge among adults regarding prevention and control of Pulmonary Tuberculosis before and after Structured Teaching Programme.

SECTION 3: Evaluate the effectiveness of Structured Teaching Programme regarding prevention and control of Pulmonary Tuberculosis by comparing pre-test and post-test knowledge score among adults.

SECTION 4: Association between pre-test level of knowledge score in selected socio- demographic variables.

SECTION 1: Distribution of samples according to their Socio-demographic Variables.

Table 1: Frequency and percentage distribution of socio-demographic variables:

(n=60)

Sl. No.	Socio-demographic variables	Frequency (f)	Percentage (%)
1	**Age** 20-29 years 30-39 years 40-49 years 50 -59 years	32 13 10 05	53.3% 21.7% 16.7% 8.3%
2	**Gender** Male Female	28 32	46.7% 53.3%
3	**Educational Level** Primary Middle High school Graduated Post graduated	04 15 09 25 07	6.7% 25% 15% 41.6% 11.7%
4	**Occupation** **Unemployed** **Housewife** **Government employee Private employee Business / self employed Agriculture** **Others**	06 15 06 09 10 00 14	10% 25% 10% 15% 16.7% 0% 23.3%
5	**Monthly Income** **10000 -20000** **20000-30000** **30000-40000** **40000 above Nil**	06 07 08 04 35	10% 11.7% 13.3% 6.7% 58.3%
6	**Types Of Family** **Joint Nuclear Extended**	14 42 04	23.3% 70% 6.7%
7	**Number Of Children** **No One Two Three** **More than three**	19 12 20 06 3	31.7% 20% 33.3% 10% 5%
8	**Source Of Information** **Electronic media Health personnel** **Newspaper**	18 18 11	30% 30% 18.3%
	Family members/ Relatives **Others**	06 07	10% 11.7%
9	**Personal Habits**		
	Alcohol	11	18.3%
	Smoking	15	25%
	Tobacco and Gutaka	05	8.3%
	All of the above	04	6.7%
	None of the above	25	41.7%
10	**Duration Of Habits**		
	Below 1 year	15	25%
	1-2 years	08	13.3%
	3-5 years	07	11.7%
	More than 5 years	05	8.3%
	Null	25	41.7%

Data presented in the table 1 show the distribution of socio-demographic variables of the adults are shown as:

The above table shows that among the adults the highest percentage were belong to the age group of 20-29 years 32

(53.30%), 13 (21.70%) were falling under the age group of 30-39 years, 10 (16.70%) were from 40-49 years and 5 (8.30%) were from 50-59 years.

Majority of the adults were Females adults 32 (53%) and 28 (47%) were males.

Majority of the adults education, 25(41.60%) were graduated, 15(25%) were Middle school education, 09(15%) were High school education, 07(11.70%) were post graduated and 04(6.70%) were Primary school education.

In relation to the occupation, 15(25%) were Housewife, 14(23%) were had other occupation, 10(17%) were Business/ self employed, 09(15%) were private employees, 06(10%) were Government employees and 06(10%) were Unemployed.

In relation to the distribution of subjects by family income (Rs)/month, 06(10%) were having monthly income of Rs 10000-20000/month, 07(11.70%) were having monthly income of Rs 20000-30000/month, 08(13%) were having monthly income of Rs 30000-40000/month, 04(6.70%) were having monthly income of Rs 40000 above/month and 35(58.30%) were having no income (Nil).

In relation to distribution of samples according to type of family, majority 42(70%) were belongs to nuclear family, 14(23.30%) were belongs to joint family and 04(6.70%) were from extended family.

Majority of the samples, 20(33%) of samples had Two children, 19(32%) of samples had No children, 12(20%) of samples had One child, 06(10%) of samples had Three children and 03(5%) of samples had more than Three children.\

Majority of the samples i.e. 18(30%) were from electronic media and Health personnel, 11(18.30%) were from newspaper, 07(11.70%) were from others and 06(10%) were from Family members/Relatives.

In relation to personal habits, 25(42%) samples were had no any personal habits, 15(25%) were had smoking habits, 11(18%) were had habit of consuming alcohol, 05(8%) were had habit of taking Tobacco and gutaka and 04(7%) had all the habits.

With regards to the duration of habits, 05(8.30%) samples had duration of more than 5 years, 07(11.7%) had for 3-5 years, 08(13.30%) had for 1-3 years, 15(25%) had for below 1 year and 25(41.70%) had no duration of personal habits.

SECTION 2: Analyze of pre-test and post-test knowledge among adults regarding prevention and control of Pulmonary Tuberculosis.

Table 2 Overall knowledge score on Pulmonary Tuberculosis among adults: pre-test

n=60

Questions	Mean	SD	Mean %
Overall pre-test knowledge	12.78	4.09	42.6%

FIGURE 1 Overall knowledge score on Pulmonary Tuberculosis among adults: Pre-test

The above table 2 and figure 1 shows that the overall mean knowledge score of adults are found to be 12.78 with standard deviation of 4.09.

Table 3 Overall knowledge score on Pulmonary Tuberculosis among adults: Post- test

Questions	Mean	SD	Mean %
Overall post-test knowledge	23.81	3.84	79.36%

n=60

FIGURE 2: Overall knowledge score on Pulmonary Tuberculosis among adults: post-test

The above table 3 and figure 2 shows that the overall mean knowledge score of adults are found to be 23.81 with standard deviation of 3.84

SECTION 3: Effectiveness of Structured Teaching Programme regarding prevention and control of Pulmonary Tuberculosis among adults.

Table 4 Comparison of pre-test and post-test knowledge score among adults regarding prevention and control of Pulmonary Tuberculosis.

n=60

Area of Knowledge	Pre-test		Post-test		Paired t- test	Inference
	Mean	SD	Mean	SD		
Define Pulmonary Tuberculosis	2.66	1.02	4.51	0.69	13.21	S
Discuss on Incubation period of pulmonary Tuberculosis	0.45	0.48	0.8	0.4	7.69	S
List out the sources of infection of Pulmonary Tuberculosis	0.4	0.48	0.8	0.4	6.49	S
Enlist the Risk factors of Pulmonary Tuberculosis	1	0.083	1.51	0.69	4	S
Discuss the Causes of Pulmonary Tuberculosis	0.41	0.48	0.81	0.37	5.55	S
Explain Mode of transmission of Pulmonary Tuberculosis	1.08	0.70	1.51	0.62	3.42	S
List down the Signs and Symptoms of Pulmonary Tuberculosis	0.8	0.72	1.6	0.54	6.62	S
Enumerate the Diagnostic evaluation of Pulmonary Tuberculosis	0.85	0.7	1.51	0.61	7.42	S
Discuss the Treatment of Pulmonary Tuberculosis	1.36	1	3.56	1	13	S
Explain about Prevention and control of Pulmonary Tuberculosis	3.83	1.74	7.15	1.54	13.81	S

To find the significance difference between pre-test and post-test level of knowledge of adults, the following research hypothesis was stated:

*H1: There will be significant difference between pre- test and post-test knowledge score on prevention and control of Pulmonary Tuberculosis among adults.

This hypothesis was tested using paired 't' test.

Table 5 Determination of overall mean knowledge score on pre-test and post-testknowledge score

n=60

Knowledge	Pre-test	Post-test	Mean of difference	Paired t-test
Overall mean knowledge score	12.78	23.81	11.03	19.88

Figure 3: Overall knowledge Pre & Post-test Mean score and Standard Deviation

From the above table 5 and figure 3 the overall mean knowledge score of pre-test was 12.78 and post-test was 23.81 and mean difference was 11.03. The calculated 't' value 19.88 is greater than the table value at 0.05 level of significant. Therefore 't' value is found to be significant. It shows that there is significant difference between pre-test and post-test knowledge score of adults regarding prevention and control of Pulmonary Tuberculosis. Thus, the research Hypothesis (H1) is accepted.

SECTION 4: Association between the Pre-test level of knowledge with selected Socio- Demographicvariables.

(NS- Non Significant, S- Significant: P- 0.05* level)
The above table 6 shows that significant association between the pre-test level of knowledge with selected socio-demographic variables like age (χ^2=7.661), gender (χ^2=2.86), Monthly income (χ^2= 6.479), no. of children (χ^2=4.111), source of information (χ^2= 6.882), personal habits (χ^2=2.68), duration of habits (χ^2=5.323) were not significant at 0.05 level of significance. Thus it can be interpreted that there is no significant association between the pre-test level of knowledge with selected socio-demographic variables. Thus the research hypothesis is rejected. Educational level (χ^2=11.032), occupation (χ^2=8.416), types of family (χ^2=13.744) were significant at 0.05 level of significance. Thus it can be interpreted that there is significant association between the pre-test level of knowledge with selected socio-demographic variables. Thus research hypothesis is accepted. The findings of this study support the need for conducting awareness on Pulmonary Tuberculosis among adults at selected urban community. The study proves that majority of the adults had gained adequate knowledge regarding prevention and control of Pulmonary Tuberculosis.

DISCUSSION AND CONCLUSION

Majority 32(53.30%) were in the age group of 20-29 years. Majority of the adults were Females 32 (53%) and 28 (47%) were males. Majority of the adults education, 25(41.60%) were graduated. In relation to the occupation, 15(25%) were Housewife, 14(23%) were had other occupation, 10(17%) were Business/ self employed, 09(15%) were private employees, 06(10%) were Government employees and 06(10%) were Unemployed. Majority of the family income (Rs)/month 35(58.30%) were having no income (Nil), 06(10%) were having monthly income of Rs 10000-20000/month, 07(11.70%) were having monthly income of Rs 20000- 30000/month, 08(13%) were having monthly income of Rs 30000-40000/month, 04(6.70%) were having monthly income of Rs 40000 above/month. Majority 42(70%) were nuclear family, 14(23.30%) were joint family and 04(6.70%) were from extended family. Majority 20(33%) had Two

children, 19(32%) had No children, 12(20%) had One child, 06(10%) had Three children and 03(5%) had more than Three children. Majority 18(30%) were from electronic media and Health personnel, 11(18.30%) were from newspaper, 07(11.70%) were from others and 06(10%) were from Family members/Relatives. In relation to personal habits, 25(42%) were had no any habits, 15(25%) smoking, 11(18%) were consuming alcohol, 05(8%) were taking Tobacco and gutaka and 04(7%) had all the habits. With regards to the duration of habits, 05(8.30%) had more than 5 years, 07(11.7%) had 3-5 years, 08(13.30%) had 1-3 years, 15(25%) had below 1 year and 25(41.70%) had no any habits.

The percentage distribution of pre-test and post-test level of knowledge shows that 2(3.3%) had Good knowledge, 39(65%) had average knowledge and 19(31.7%) had poor knowledge before Structured Teaching Programme. 44(73.3%) had Good knowledge, 16(26.7%) had average knowledge and 0% had poor knowledge after Structured Teaching Programme.

The overall mean knowledge score of pre-test was 12.78 with SD of 4.09 and post-test was 23.81 with SD of 3.84 and mean difference was 11.03. The calculated 't' value is 19.88 which is greater than the table value at 0.05 level of significant. Therefore, 't' value is found to be significant. It shows that there is significant difference between pre-test and post-test knowledge score of adults regarding prevention and control of Pulmonary Tuberculosis. Therefore research hypothesis is accepted.

Association between pre-test level of knowledge with selected socio-demographic variables shows that age (χ^2= 7.66), gender (χ^2=2.86), monthly income (χ^2= 6.47), number of children (χ^2= 4.111), source of information (χ^2= 6.882),personal habits (χ^2= 2.68), duration of habits (χ^2= 5.323) were not significant at 0.05 level of significance. Thus, it can be interpreted that there is no any significant association betweenthe pre-test level of knowledge with selected socio- demographic variables. Thus, research hypothesis is rejected.

Variables Educational level (χ^2=11.032), occupation (χ^2=8.416), types of family (χ^2= 13.744) were significant at 0.05 level of significance. Thus, it can be interpreted that there is association between the pre-test level of knowledge with selected socio-demographic variables. Thus, the research hypothesis (H2) is accepted.

IMPLICATIONS OF THE STUDY

Nursing Education

Nursing education should focus attention in teaching the students regarding care of TB patients. An effective educations or guidance to most will have the better results in caringof patients who are at risk of spreading disease to others. The curriculum should emphasis on students to gain knowledge and to develop skills in care of TB patents. Nursing care can be well prepared by utilizing this structured teaching programme. Structured teaching programme on "Tuberculosis treatment" can be used on newly recruited nursing staff to care for patients with TB and provide appropriate nursing intervention.

Table 6 Association between the Pre-test level of knowledge with selected Socio-Demographic variables.

n=60

Variables		No. of adults	Level of knowledge			Df	Chi-squaree test (χ^2)	Table value (χ^2)	Inference
			Good knowledge	Average knowledge	Poor knowledge				
Age	20-29 years	32	1	21	10	6	7.661	12.59	NS
	30-39 years	13	1	9	3				
	40-49 years	10	0	8	2				
	50-59 years	5	0	1	4				
Gender	Male	28	0	17	11	2	2.86	5.99	NS
	Female	32	2	22	8				
Educationnal level	Primary	4	1	2	1	4	11.032	9.49	S
	Middle	15	0	12	3				
	High school	9	1	5	3				
	Graduated	25	0	15	10				
	Post-graduated	7	0	5	2				
Occupationon	Unemployedd	6	1	4	1	12	8.416	21.03	S
	Housewife	15	1	10	4				
	Governmentt employee	6	0	4	2				
	Private employee	9	0	5	4				
	Business/selff employed	10	0	5	5				
	Agriculture	00	0	0	0				
	Others	14	0	11	3				
Monthly Income	10000-20000	06	0	2	4	8	6.479	15.51	NS
	20000-30000	07	0	5	2				
	30000-40000	08	0	5	3				
	40000 Above	04	0	2	2				
	Nil	35	2	25	8				
Types of Family	Joint	14	0	4	10	4	13.744	9.49	S
	Nuclear	42	2	32	8				
	Extended	04	0	3	1				
Number of Children	No	19	0	12	7	8	4.111	15.51	NS
	One	12	1	7	4				
	Two	20	1	14	5				
	Three	06	0	4	2				
	More than three	03	0	1	2				
Source of Informationon	Electronic media	18	0	11	8	8	6.882	15.51	NS
	Health personnel	18	2	11	5				
	Newspaper	11	0	8	3				
	Family members/ Relatives	06	0	5	1				
	Others	07	0	4	3				
Personal Habits	Alcohol	11	0	6	5	8	2.68	15.51	NS
	Smoking	15	1	10	4				
	Tobacco and Gutaka	05	0	4	1				
	All of theabove	04	0	3	1				
	None of the above	25	1	16	8				

Duration of habits	Below 1year	15	1	10	4	8	5.323	15.51	NS
	1-2 years	08	0	4	4				
	3-5 years	07	0	4	3				
	More than 5 years	05	0	5	0				
	Null	25	1	16	8				

Nursing Administration

Nursing administrators may use the discoveries of this study to enhance the nature of patient's care. The nursing personnel working in general and TB speciality hospitals should be given in-service education and continuing education regarding communicable diseases especially highly infectious TB disease. This should enable them to build their confidence and provide appropriate care to patients. Encourage nurses by providing planned teaching programme or better reading materials and ensure that nurses make use of them.

The study will create new and possibly more practical showing strategies and their impacts on understudies learning results and conduct including the exchange of information.

Nursing Practice

The nurse has a key role in health care delivery system mainly in primary prevention including health promotion. One of the methods of health promotion is by health education. In the clinical area as well as in the community area nurses will have direct contact with patients and family. This opportunity should be used by health personnel who are responsible for them, therefore providing health education and family care giver will help in better understanding regarding TB disease and preventing its spread to others and reducing higher death rates. The nurse should have continuing and in-service education programme to enhance the nature of consideration to the patients. The attendant ought to take part in preparing learning resource materials that can be helpful to the patients, family members to understand the condition and helping giving care to TB patients in a better way

Nursing Research

In India, just couples of research studies have been done on evaluation of learning on anticipation and executives on tuberculosis. All nursing work force must hold hands to give deductively tried materials or projects to develop time headed arrangement for tuberculosis control customized. This investigation uncovered that there is shortage in learning among tuberculosis customers subsequently they are at high danger of contracting sickness, so there is requirement for expanded nursing research on aversion and executives of tuberculosis. There is need of tremendous assortment of information utilizing exploration ponders.

Limitation of the Study

- The study is limited to only the adults who are interested to participate in the study.
- The study is limited to 60 adults only.
- The study did not use a control group.

Recommendation

Based on the findings of the study, the following recommendations are made for further research:

- Replication of the same study on a larger sample may help to draw more definite conclusions and make generalization.
- A relative study can be directed to survey the learning disposition and practices of focuses with respect to tuberculosis in an urban region.
- A similar study can be conducted in large sample in different areas.
- A comparative study can be conducted in different settings like rural and urban areas.
- A Structured Teaching Programme can be conducted among other groups regarding prevention and control of Pulmonary Tuberculosis.
- A similar study can be conducted by using Quasi-experimental research.

Conflict of interest

I **MRS KSH. SOFIA DEVI,** corresponding author, on behalf of all authors confirm that this manuscript is original and has not been published elsewhere and is not under consideration by any other journals. We agree with submission to international journal of current advance research. We have no conflict of interest to declare.

References

1. Richard E.Chaisson, Jean B.Nachega. Oxford Textbook of Medicine (5edn), doi:10.1093/med/9780199204854.003.070625-update-001, available from: https://academic.oup.com/book-27861/chapter- abstract/198529073?redirectedFrom=fulltext
2. K. Park, "Park's textbook of preventive and social medicine", 27th edition 2023, M/s Banarsidas Bhanot publication, page no:207-223
3. Lippincott, "Lippincott manual of medical surgical Nursing", Editor Suresh K. Sharma, Wolters Kluwer publisher, page no. – 229-233.
4. Pooja Singh, Surya Kant et.al. Extra Pulmonary Tuberculosis: An Overview and Review of Literature. Article. International Journal life Science, Scientist and Research Doi:10.21276/ijlssr.2018.4.1.5, available from: https://www.ijlssr.com
5. WHO Global TB Report 2022 https://pib.gov.in

6. WHO recommendation on Tuberculosis. https://www.who.int/news.room/factsheets/detail/tuberculosis

7. Prabhanshu Vyas *et al*. Knowledge regarding prevention of pulmonary tuberculosis among tuberculosis patient. IP International Journal of Forensic Medicine and Toxicological Science 2022;7(4):134-141,available from: https://www.ijfmts.com/html-article/18182#idm139738888445776/

8. Mrs Rakhi John Moreshwar 1, Mrs Jessica N.Waghmare 2. A study to evaluate the effectiveness of structure teaching programme regarding knowledge of tuberculosis and importance of drug regimen among TB patient visiting urban designated microscopy centres (DMC). 2022 IJRTI/Volume 7, Issue 7/ISSN: 2456-3315, available from: https://ijrti.org/papers/IJRTI2207080.pdf.

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