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A STUDY TO ASSESS THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAMME ON KNOWLEDGE REGARDING MANAGEMENT OF MULTI DRUG RESISTANT TUBERCULOSIS AMONG FINAL YEAR GNM STUDENTS AT SELECTED INSTITUTE OF NURSING, HASSAN

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ABSTRACT

Multi drug resistant is a major public health problem that threatens the success of Direct Observation Treatment short course (DOTS).TheWorld Health Organization (WHO) recommended treatment approach for detection and cure of tuberculosis as well as global tuberculosis control. Multi drug resistant tuberculosis has been recorded at the highest rates ever**.**This study is mainly to assess the effectiveness of STP on knowledge regarding management of multi drug resistant tuberculosis among final year GNM students at selected institute of nursing, Hassan.The aim of this study isto assess the existing knowledge and assessing the effectiveness of structured teaching programme on knowledge regarding multi drug resistant tuberculosis among final year GNM Nursing students and also to find out the association between pre-test level of knowledgewith selected demographic variables.The research approach employed in the present study is Quantitative Evaluative Research Approach. The research design is One Group Pre-test and post test Pre-experimental Design. This study was conducted in N.D.R .K Institute of Nursing, Hassan. Sample size: 60 final year GNM Nursing students. Sampling technique: Purposive sampling technique was used. The mean % of post-test knowledge score (82.8%) was higher than the mean % of pre test knowledge score (41.0%). The calculated 't' value showed a significant difference between mean pre-test and post test knowledge scores. Calculated x^2 values showed significant association between age , gender, type of family, place of residence, education status of mother & father of respondents with their pre-test knowledge scores.

Keywords: Effectiveness, STP, Knowledge, Final year GNM Nursing Student.

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Introduction

Multi drug resistance tuberculosis(T MDR-TB),associated with high death rates of 50%-80%,spans for a relatively short term (4-6 weeks) from diagnosis to death. In most countries multi drug resistant tuberculosis has been increased in incidence and interferes with tuberculosis control program. Particularly in developing countries, projected cases of prevalence rates were as high as 48%. The high infection and death rates poses an urgent challenge to rapidly detect case.

Methodology:

The current study was conducted with the following Objectives; to assess the existing knowledge regarding multi drug resistant tuberculosis among final year GNM Nursing students, to assess the effectiveness of structured teaching programme on knowledge regarding multi drug resistant tuberculosis and to find out the association between pre-test level of knowledge among final year GNM Nursing students and their selected socio-demographic variables.

Hypotheses:

H1-There will be a significant difference between mean pre-test and post-test knowledge scores regarding knowledge scores regarding multi drug resistant tuberculosis among final year G.N.M. Nursing students.

H2- There will be a significant association between pre-test level of knowledge among G.N.M. Nursing students and their selected socio-demographic variables.

Research approach: Quantitative Evaluative Research Approach.

Research design: One group Pre-test and post test Pre-experimental Design.

Sample: final year GNM Nursing students who are studying in N.D.R.K.Institute of Nursing Hassan..

Sample size: sixty final year GNM Nursing students.

Sampling technique: Purposive sampling technique was used.

Inclusion Criteria Final year GNM Nursing students of N.D.R.K. Who are present at the time of data collection and willing to participate in the study.

Description of the Tool It consists of two parts. Part -1: Format to collect socio-demographic data of final year G.N.M Nursing students. It consists of 11 items related to socio-demographic data of the subjects such as age, religion, gender, type of family, place of residence, educational qualification of father, educational qualification of mother, living with, family income, family history of MDR-TB and source of information. Part -2: structured knowledge questionnaire to assess the knowledge Final year G.N.M Nursing students. It consists of 30 items on knowledge regarding management of MDR-TB.

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It consists of four aspects: Aspect-1 :Introduction And Difinition Regarding MDR-TB Aspect-2 :Causes,Signs And Symptoms .Diagnosis. Aspect-3 :Management of MDR-TB and Aspect-4: Prevention And Control of MDR-TB

Data Collection Procedure: Formal administrative permission was obtained from, Principal, N.D.R.K Institute of Nursing, Hassan. The main study was conducted from 01-05-2022 to 01-06-2022 at N.D.R .K Institute of Nursing, Hassan. The investigator conducted the pre-test to assess the knowledge of 60 Students regarding management of MDR-TB at N.D.R .K Institute of Nursing, Hassan. The purposes and objectives of the study were explained to students and confidentiality was assured.

Informed consent to participate in the study was obtained. Approximately 40 minutes was required for the data collectionusing knowledge questionnaire. The structured teaching programme regarding management of MDR-TB was conducted after pre-test on the same day. Post test was conducted on 7thday after pre-test and administration of structured teaching programme by using same structured knowledge questionnaire. Each subject took about approximately 40 minutes to complete the post- test. All the participants co-operated well with the investigator in both pre-test and post-test.

Results:

TABLE-1: Distribution based on knowledge level

(N=60)

Level of Knowledge	Percentage of Knowledge Scores	No. of Study Participants (Percentage)	
		Pre Test	Post Test
INADEQUATE	**≤50%**	12 (20)	0
MODERATE	**50-75%**	46 (76.67)	0
ADEQUATE	**>75%**	2 (3.33)	60 (100)

Inference: Table 1 shows the comparison between pre-test and post-test levels of knowledge regarding management of multi drug resistant tuberculosis among final year GNM nursing students.

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TABLE-2: Effectiveness of structured teaching programme

(N=60)

ASPECTS	Mean & Mean %			Calculated Paired t-test value
	Pre Test	Post Test	Enhancement	
Aspect 1 : Introduction and definition regarding MDR-TB	3.10 (10.33)	5.80 (19.33)	2.70 (9)	14.87 **(S)**
Aspect 2 : Causes, Signs and symptoms, diagnosis of MDR-TB	5.62 (18.72)	9.40 (31.33)	3.78 (12.61)	30.17 **(S)**
Aspect 3 : Management of MDR-TB	6.30 (21.00)	10.48 (34.94)	4.18 (13.94)	19.38 **(S)**
Aspect 4: Prevention and control of MDR-TB	1.77	2.82	1.05	9.77 **(S)**
Overall Knowledge Scores	16.78	28.50	11.72	27.01 **(S)**

(S)= Significant at 0.05 level **t (0.05, 59df)=1.96**

Inference: Table 2 shows the Mean and Mean% of pre-test, post-test, and Enhancement knowledge scores regarding management of multi drug resistant tuberculosis among final year GNM nursing students.

TABLE-4: Association between the selected demographic variables and pre test knowledge level **(N=60)**

SNo	Socio demographic variables	Categories	Pre Test Knowledge Level			χ^2 Value	df	Level of significance
			In adequate	Moderate	Adequate			
1	Age in years	21 to 23	10	46	2	8.27 **(S)**	2	0.016
		24 to 26	2	0	0			
2	Gender	Male	1	10	1	2.23 **(NS)**	2	0.327
		Female	11	36	1			
3	Religion	Hindu	4	23	1	1.07 **(NS)**	2	0.586
		Muslim	0	0	0			
		Christian	8	23	1			
		Any other	0	0	0			
4	Type of the family	Nuclear family	11	41	2	0.29 **(NS)**	2	0.865
		Joint family	1	5	0			

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SNo	Socio demographic variables	Categories	Pre Test Knowledge Level			χ^2 Value	df	Level of significance
			Inadequate	Moderate	Adequate			
5	Place of residence	Joint family	1	5	0	7.52 **(S)**	2	0.023
		Urban	3	24	2			
		Rural	9	22	0			
6	Educational status of the father	No formal education	2	1	0	9.31 **(NS)**	8	0.317
		primary	2	14	2			
		Secondary	4	15	0			
		UG	3	14	0			
		PG	2	1	0			
7	Educational status of the mother	No formal education	1	2	0	7.52 **(NS)**	8	0.482
		primary	4	11	2			
		Secondary	3	19	0			
		UG	3	12	0			
		PG	1	2	0			
8	Family monthly income	Rs.5000 and below	3	6	1	4.45 **(NS)**	6	0.616
		Rs.5001-10000	2	15	0			
		Rs10001-20000	4	17	1			
		Above Rs 20001	3	8	0			
9	Presence of family history of TB	Yes	1	1	0	1.19 **(NS)**	2	0.552
		No	11	45	2			
10	Clinical experience in intensive care unit.	No experience	7	31	2	2.26 **(NS)**	6	0.895
		1month	5	13	0			
		2 Months	0	1	0			
		5 months	0	1	0			
11	Source of information to which previously exposed	Health care professionals	3	12	0	5.25 **(NS)**	6	0.512
		Massmedia and newspaper	6	20	1			

(NS)= Not Significant **(S) = Significant at 0.05 level**

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Inference: Table 4 shows the association between the selected demographic variables and pre test knowledge level. Only two demographic variables have shown the significant association with the knowledge level namely Age in years and place of residence.

Discussion

The continuing spread of drug-resistant tuberculosis (TB) is one of the most urgent and difficult challenges facing global TB control.The result of the present study can be supported by a cross-sectional study was conducted to assess the association between pre test knowledge and socio demographic variables at Rajshahi City, Bangladesh. A total of 384 MDR-TB patients were interviewed through a pretested, structured questionnaire using purposive sampling techniques. Logistic regression analysis was used to evaluate the effects of selected socio-demographic factors on TB knowledge level.The results revealed that pulmonary MDR-TB patients had greater knowledge than that of extra-pulmonary patients, and that sex, age, educational status and MDR-TB type were significantly associated with knowledge level In general, males and young adults, ages 21–35, had greater awareness about transmission and prevention ofMDR- TB than females and adults over 35. Individuals with higher education and urban area patients were comparatively better informed about MDR-TB infection. Patients with greater knowledge about MDR-TB were also less likely to experience delays in seekitng treatment.

Conclusion:

The aim of this study was to effectiveness of structured teaching programme on knowledge regarding management of multi drug resistant tuberculosis among final year G.N.Mnursing students at selected school of nursing, Hassan.

The present study explored existing knowledge of final year G.N.Mnursing student regarding management of multi drug resistant tuberculosis and provided the information with the aid of structured teaching programme, which included the various aspect of Multi Drug Resistant Tuberculosis such as Define of MDR-TB, incidence rate, causes, risk factors, sign and symptoms, diagnostic evaluation, management of MDR-TB and prevention of MDR-TB. Knowledge of final year G.N.M students regarding management of Multi Drug Resistant Tuberculosis was reassessed after structured teaching programme. The provided information helped the final year GNM Nursing students to improve their knowledge regarding management of Multi Drug Resistant Tuberculosis.

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