"A STUDY TO ASSESS THE EFFECTIVENESS OF AN AWARENESS PROGRAMME ON KNOWLEDGE AND ATTITUDE REGARDING MULTI DRUG RESISTANT-TUBERCULOSIS (MDR-TB) AMONG TUBERCULOSIS PATIENTS VISITING SELECTED DIRECTLY OBSERVED TREATMENT, SHORT COURSE (DOTS) CENTRES AT MORADABAD U.P."

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ABSTRACT

Background: Multidrug resistant tuberculosis is caused by bacteria that are resistant to at the minimum two anti-tuberculosis medications: rifampicin and isoniazid. It can occur of a patient's treatment or as a result of a primary infection with resistant bacteria. It is a sprain of mycobacterium tuberculosis severely treated control of tuberculosis and effort of its prevention. It is the most important public health problem, with higher mortality rates than drug-sensitive tuberculosis, particularly in patients with compromised immune systems.

Method: The investigator had prepared awareness programme regarding multi drug resistant-tuberculosis and awareness was delivered by lecture cum discussion method by using lesson plan and AV aids. The study was conducted in selected DOTS centers at Moradabad. The samples were consisted of 60 tuberculosis patients and data was collected by using non-probability purposive sampling technique and the design used pre-experimental research (one group pre-post test design). Pre test was given with the help of self structured knowledge questionnaire and 5 point likert Scale. Subsequently, awareness program was delivered by using lesson plan and AV Aids, and post test was done after 7 days.

Results: Results of the study showed that most of the tuberculosis patient's knowledge that was 13(21.37%) and having Good knowledge, 47 (78.33%) were having average knowledge. And tuberculosis patients that 7 (11.67%) were having good attitude, and52 (88.33%) were having average attitude regarding MDR-TB. And post test knowledge score the mean was 20, standard deviation was 0.795, mean percentage was 66.67, there is significant difference in between mean pre test and post test knowledge score the value of the paired t test is 49.517*, And post test attitude score the mean was 60.93, standard deviation was 4.639, mean percentage was 60.93 and the paired t test value is 11.235*, Hence, the intervention was effective, and relationship between post test knowledge and attitude 0.704 significant; association with demographic variables revealed that there was no statistically significant association between the pre-test knowledge level with their selected demographic variables regarding multi drug resistant tuberculosis among tuberculosis patients.

Conclusion: There is significant improvement in post-test knowledge and attitude score among tuberculosis patients regarding multi drug resistant-tuberculosis after the intervention.

Keywords: Effectiveness, Knowledge, Attitude, Awareness Programme, Tuberculosis Patients, Multi drug resistant-Tuberculosis, Directly Observed Treatment short course.

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INTRODUCTION

Tuberculosis is a bacterial infection disease caused by Mycobacterium tuberculosis. It can influence on organs the human body including brain, renal, liver & skeleton but it usually effects on lungs. Tuberculosis is main cause of mortality in patients with human immunodeficiency virus infection. India has one fourth of the world tuberculosis cases although it has decreased rapidly over the years. India has highest cases for both tuberculosis and multi drug resistant tuberculosis. In 2015 about 2,800,000 cases were noted, 480,000 people died due to tuberculosis. An approximate 130,000 cases of multi drug resistant-tuberculosis are reported yearly in the country which includes 79,000 multi drug resistant-tuberculosis patients found among appraise pulmonary cases. An approximate 110,000 human immunodeficiency virus associated tuberculosis cases were noticed in 2015, which is second highest number in the world; in which as an estimated 37,000 died to 2015. Multi Drug Resistant-Tuberculosis is a dangerous problem for people who are treated by the success of directly observed treatment short course and tuberculosis eradication. It is therefore critical to understand this disease, and if patients receive high-quality care, we will have a nation free of tuberculosis.

BACKGROUND

Mycobacterium tuberculosis is a single infectious broker of tuberculosis cause of death. In 2018, Globally,10 million persons were infected. According to the World Health Organization, India is responsible for 27 percent of all tuberculosis cases worldwide. In addition, India is responsible for 27 percent of all rifampicin-resistant tuberculosis cases in the world. Multidrug-resistant tuberculosis was found in 3.4 percent of new cases and 18 percent of previously treated cases over the world. In the world, 78 % of the rifampicin resistant tuberculosis was multi drug resistant. According to survey of India government from 2014 to 2016 the cases of multi drug resistant-tuberculosis were estimated as a 2.84 percent in new and 11.6 percent in patients who had previously been treated. Isoniazid mono resistance was observed in 3.8 percent and 7.8 percent of new and already dealt with cases in India.

AIM

This study is aim to improve the knowledge and attitude regarding Multi Drug Resistant-Tuberculosis among tuberculosis patients visiting selected directly observed treatment, short course centers at Moradabad U.P. providing awareness programme can further enhance the knowledge and will develop an approving attitude towards on multi drug resistant-tuberculosis among tuberculosis patients.

OBJECTIVE OF THE STUDY

- To assess the knowledge and attitude regarding Multi Drug Resistant-Tuberculosis (MDR-TB) among tuberculosis patients visiting selected directly observed treatment, short course (DOTS) centers at Moradabad.
- To evaluate the effectiveness of awareness programme on knowledge and attitude regarding Multi Drug Resistant-Tuberculosis (MDR-TB) among tuberculosis patients visiting selected directly observed treatment, short course (DOTS) centers at Moradabad.
- To find out the relationship between the knowledge and attitude regarding Multi Drug Resistant-Tuberculosis (MDR-TB) among tuberculosis patients visiting selected directly observed treatment, short course (DOTS) centers at Moradabad.
- To find out the association between the level of knowledge and attitude regarding Multi Drug Resistant-Tuberculosis (MDR-TB) among tuberculosis patients with their selected socio demographic variables.

MATERIALS AND METHODS

***Research approach*:** Quantitative research approach

***Research design*:** Pre-Experimental research (one group pre-test post-test)

Setting of study: Research study was carried out at selected DOTS Centre of Moradabad.

Population: Tuberculosis patients visiting selected directly observed treatment, short course centers of Moradabad.

Sample and sample technique: The 60 tuberculosis patients were selected the sample size using a non-probability purposive sampling technique was used to selecting directly observed treatment, short course centers at Moradabad

ETHICAL CONSIDERATIONS

- Prior to the data gathering, formal organization permission was asked the medical superintendent of Teerthanker Mahaveer hospital and research center Moradabad, and MOIC katghar DOTS centre Moradabad.

- Administrative permission was obtained the Prof. and HOD Department of Pulmonary Medicine TMMC&RC Moradabad and MOIC katghar DOTS centre Moradabad.
- Informed written consent obtained from the all participants of the study.

DATA ANALYSIS:

Section A1: The Distribution frequency and percentage with their Demographic variable among tuberculosis patients.

Table 1: Demographic variable among tuberculosis patients

Sl. No	Demographic variables	Category	Frequency (f)	Percentage (%)
1.	Age in years	15-30 years	35	58.33%
		31-45	10	16.67%
		46-60	11	18.33
		>60 year	4	6.67%
2.	Gender	Male	30	50%
		Female	30	50%
		Transgender	0	00%
3.	Religion	Hindu	32	53.33%
		Muslim	28	46.67%
		Christian	0	0.00%
		Any other	0	0.00%
4.	Marital Status	Married	33	55%
		Unmarried	26	43.33%
		Divorced	1	1.67%
		Window/widowed	0	0 %
5.	Education Status	Non-formal education	14	23.33%
		Primary education	22	36.67%
		Secondary education	19	31.67%
		Graduate education	5	8.33%
6.	Occupation	Employed	35	58.33%
		Self employed	16	26.67%
		Private employed	4	6.67%
		Government	5	8.33%
7.	Type of Family	Nuclear	23	38.33%
		Joint	28	46.67%
		Extended	4	6.67%
		Blended	5	8.33%
8.	Monthly income in rupees	<10000	41	68.33%
		10001- 15000	7	11.67%
		15001 – 20000	8	13.33%
		>20000	4	6.67%
9.	Place of residence	Rural	19	31.67%
		Semi-urban	13	21.67%
		Urban	28	46.67%

A.2 Distribution frequency and percentage of clinical performa among tuberculosis patients

Table 2: Clinical performa among tuberculosis patients

S.NO	DEMOGRAPHIC VARIABLES	CATEGERY	FREQUENCY (f)	PERCENTAGE (%)
1.	Duration of Illness	< 1 year	55	91.67%
		1.5 – 2 year	5	8.33%
		– 3 year	0	0%
		>3year	0	0%
2.	Duration of taking treatment of Tuberculosis.	< 6 months	41	68.33%
		9 months	15	25%
		12 months	4	6.67%
		>12 months	0	0%
3.	CO-morbid condition with multi drug resistant-tuberculosis.	With COPD	0	0%
		With HIV	0	0%
		Combined with other disease.	21	35%
		No combined disease	39	65%
4.	Sources of information related to MDR-TB	Family	5	8.33%
		Health Personnel	25	41.67%
		Friends	18	30.00%
		Mass media	12	20.00%

This section show that Majority of the participant (58.33%) were belonged to the age group between 15 -30; Equal Majority of the participant (50%) were female and male, Majority of the participant (53.33%) were Hindu religion. Majority of the participant (55%) were married person. Majority of the participant (36.67%) were primary education. Majority of participant (58.33%) were unemployed. majority of the participant (46.67%) were belonged to the joint family. Majority of the participant (68.33%) were less than 10000.Majority of the participant (46.67%) were urban area. Majority of the participant (91.67%) were duration of illness less than 1 year. Majority of the participant (68.33%) were duration of taking treatment of tuberculosis. majority of the participant (65%) were co-morbid condition with multi drug resistant tuberculosis and majority of the participant (41.67%) were sources of information related to MDR-TB.

Section B: To Assess the level of knowledge regarding Multi Drug Resistant-Tuberculosis among tuberculosis patients.

Table 3.1**: Pre – test Knowledge** **N=60**

Sl. No.	CRITERION	RANGE OF SCORE	FREQUENCY (f)	PERCENTAGE (%)
1.	Good knowledge	21 – 30	0	0%
2.	Average knowledge	11 – 20	21	35%
3.	Poor Knowledge	0 – 10	39	65%

Table 3.2: Post – test Knowledge **N=60**

Sl. No.	CRITERION	RANGE OF SCORE	FREQUENCY (f)	PERCENTAGE (%)
1.	Good knowledge	21 – 30	13	21.67%
2.	Average knowledge	11 – 20	47	78.33%
3.	Poor knowledge	0 – 10	0	0%

Table 3: depicts that in the pre test knowledge among tuberculosis patients 0% are having Good knowledge, 21 (35%) are having average knowledge and39 (65%) are having poor knowledge. And post test knowledge among tuberculosis patients 13 (21.37%) are having Good knowledge 47 (78.33%) are having average knowledge and (0%) are having poor knowledge.

Section C: To assess the level of attitude regarding Multi Drug Resistant-Tuberculosis among tuberculosis patients.

Table 4.1: Pre – test Attitude **N=60**

S. No.	CRITERION	RANGE OF SCORE	FREQUENCY (f)	PERCENTAGE (%)
1.	Good Attitude	71 – 100	0	0%
2.	Average Attitude	46 – 70	55	91.67%
3.	Poor Attitude	20 – 45	5	8.33%

Table 4.1: Post – test Attitude **N=60**

Sl. No.	CRITERION	RANGE OF SCORE	FREQUENCY (f)	PERCENTAGE (%)
1.	Good Attitude	71 – 100	7	11.67%
2.	Average Attitude	46 – 70	53	83.33%
3.	Poor Attitude	20 – 45	0	0.00%

This tables shows that among tuberculosis patients, 5 (8.33%) have a negative attitude toward the test, whereas 55 (91.67%) have an average attitude regarding MDR-TB and in post test among tuberculosis patients 7 (11.67%) are having good attitude, and 52 (88.33%) are having average attitude.

SECTION D: To compare the effectiveness of an awareness programme between pre test and post test of knowledge and attitude regarding Multi Drug Resistant-Tuberculosis among tuberculosis patients visiting selected directly observed treatment short course centers at Moradabad. The independent't' test statistic was computed to determine statistical inference, and the null hypothesis ($H0_1$) was given.

Table 5: Knowledge Score

Sl. No	Test	Mean	Standard Deviation	Mean%	DF	PAIRED t test, P value
1.	Pre	10.13	1.231	33.78	59	49.517 *
2.	Post	20	0.795	66.67		0.001

Table 5: depicted that Effectiveness of awareness programme regarding multi drug resistant tuberculosis. The knowledge findings suggested that there had been a substantial improvement from pre test score the mean was 10.13, standard deviation was 1.231, and mean percentage was 33.78 %. And post test knowledge score the mean was 20, standard deviation was 0.795, mean percentage was 66.67. There is significant difference in between mean pre test and post test. the value of the paired t test is 49.517*. Hypothesis H_1 is so accepted.

Table 6: Attitude Score

Sl. No	Test	Mean	Standard Deviation	Mean%	DF	PAIRED t test, P value
1.	Pre	51.33	3.59	51.33	59	11.235 *
2.	Post	60.93	4.639	60.93		0.001

Table 6: depicted that effectiveness of awareness programmes on attitude in pre test score the mean was 51.33, standard deviation was 3.59, and mean percentage was 51.33 %. And post test attitude score the mean was 60.93, standard deviation was 4.639, mean percentage was 60.93 and the paired t test value is 11.235*, Hence, hypothesis H_1 is accepted.

SECTION E: To find out the relationship between knowledge and attitude on multi drug resistant-tuberculosis among tuberculosis patients selected directly observed treatment short course centers at Moradabad.

Table No 7.1: Relationship between pre test knowledge and Attitude

Sl.No	Variables	Mean	Standard Deviation	Mean%	r
1.	Knowledge	10.13	1.231	33.78	0.762*
2.	Attitude	51.33	3.59	51.33	

Table 7.2: Relationship between post test knowledge and attitude

Sl.No	Variables	Mean	Standard Deviation	Mean%	r
1.	Knowledge	20	0.795	66.67	0.704*
2.	Attitude	60.93	4.639	60.93	

Table 7.2: depicted that relationship between knowledge pre-test score the mean is 10.13, standard deviation is 1.231, and mean percentage is 33.78 %.and between knowledge post test score the mean is 10.13, standard deviation is 1.231, and mean percentage is 33.78 %. And attitude pre test score the mean is 51.33, standard deviation 3.59, and mean percentage is 51.33 and post-test attitude score the mean is 60.93, standard deviation is 4.639, mean percentage is 60.93 and the paired t test value is 0.704*.Hence hypothesis H_2 is accepted.

SECTION F: To find out the association between the level of knowledge and attitude regarding Multi Drug Resistant-Tuberculosis (MDR-TB) among tuberculosis patients with their selected socio demographic variables association of pre-test level of knowledge with their demographic variables.

Table 8:

Sl. No	Demographic variables	Category	Knowledge level				Total	Chi square value, Critical value	Df	Inference
			Poor		Average					
			f	%	f	%				
1	Age in Year	15 -30	21	60	14	40	35	0.959 7.822	3	Ns P=.811
		31 – 45	7	70	3	30	10			
		46 – 60	8	72.73	3	27.27	11			
		>60 year	3	75	1	25	4			
2	Gender	Male	19	63.33	11	36.67	30	0.073 3.84	1	Ns P=0.073
		Female	20	66.67	10	33.33	30			
		Transgender	0	0.00	0	0	0			
3.	Religion	Hindu	18	56.25	14	43.75	32	2.307 3.84	1	Ns P=0.128
		Muslim	21	75	7	25	28			
		Christian	0	0	0	0	0			
		Any other	0	0	0	0	0			
4	Marital status	Married	26	78.79	7	21.21	33	7.355 5.99	2	Significant P=0.025
		Unmarried	12	46.15	14	53.85	26			
		Divorced	1	100	0	0	1			
		Widow/widowed	0	0	0	0	0			
5	Education	No formal education	11	78.57	3	21.43	14	8.265 7.82	3	Significant P=0.04
		Primary education	12	54.55	10	45.45	22			
		Secondary education	15	78.95	4	21.05	19			
		Graduate education	1	20	4	80	5			
6	Occupation	Unemployed	23	65.71	12	34.29	35	0.941 7.82	3	Ns 0.81
		Self-employed	10	62.50	6	37.50	16			
		Private employed	2	50	2	50	4			
		Government	4	80	1	20	5			
7	Type of Family	Nuclear	16	69.57	7	30.43	23	3.964 7.82	3	Ns P=0.26
		Joint	17	60.71	11	39.29	28			
		Extended	4	100	0	0	4			
		Blended	2	40	3	60	5			
8	Monthly income in rupees	< 10000	25	60.98	16	39.02	41	1.809, 7.82		Ns P=0.612
		10001-15000	6	85.71	1	14.29	7			
		15001-20000	5	62.50	3	37.50	8			

		>20000	3	75	1	25	4		3	
9	Place of residence	Rural	10	52.63	9	47.37	19	4.255, 5.99	2	Ns P=0.119
		Semi urban	7	53.85	6	46.15	13			
		Urban	22	78.57	6	21.43	28			

Table 9: Association of pre-test level of knowledge with their clinical performa

Sl.No	Demographic variables	Category	Knowledge level				Total	Chi square value, Critical value	Df	Inference
			Poor		Average					
			f	%	f	%				
1.	Duration of illness	< 1 year	35	63.64	20	36.36	55	0.539, 3.84	1	Ns P=0.46
		1.5- 2 year	4	80	1	20	5			
		2.5 – 3 year	0	0	0	0	0			
		>3 year	0	0	0	0	0			
2.	Duration of taking treatment of tuberculosis.	< 6 months	26	63.41	15	36.59	41	2.364, 5.99	2	Ns P= 0.30
		9 months	9	60	6	40	15			
		12 months	4	100	0	0	4			
		>12 months	0	0	0	0	0			
3.	Co-morbid condition with multi drug resistant tuberculosis.	With COPD	0	0	0	0	0	1.78, 3.84	1	Ns P=0.18
		With HIV	0	0	0	0	0			
		Combined with other disease	16	76.19	5	23.81	21			
		No combined disease	23	58.97	16	41.03	39			
4.	Sources of information related to MDR-TB	Family	2	40	3	60	5	1.934, 7.82	3	Ns P=0.58
		Health personnel	16	64	9	36	25			
		Friends	12	66.67	6	33.33	18			
		Mass media	9	75	3	25	12			

The research analysis results revealed that there was no statistically significant association between the pre-test knowledge level with their selected demographic variables regarding multi drug resistant tuberculosis among tuberculosis patients.

Hence the H_3 is rejected in terms age, sex, religion, occupation, family type, income of months in rupees, place of residence, illness duration, duration of taking treatment of tuberculosis, co-morbid condition with multi drug resistant tuberculosis and sources of information related to MDR-TB and accepted in terms of marital status and education status.

Association between level of Attitude with selected socio demographic variable of among tuberculosis patients.

Table 10 **N=60**

Sl. No	Demographic variables	Category	Knowledge level				Total	Chi square value, Critical value	Df	Inference
			Poor		Average					
			F	%	F	%				
1.	Age in year	15 -30	1	2.86	34	97.14	35	8.902, 7.82	3	NS P=0.0306
		31 – 45	0	0	10	100	10			
		46 – 60	3	27.27	8	72.73	11			
		>60 year	1	25.00	3	75.00	4			
2.	Gender	Male	4	13.33	26	86.67	30	1.963, 3.84	1	NS P=0.161
		Female	1	3.33	29	96.67	30			
		Transgender	0	0.00	0	0	0			
3.	Religion	Hindu	3	9.38	29	90.63	32	0.097 3.84	1	NS
		Muslim	2	7.14	26	92.86	28			

		Christian	0	0	0	0	0			P=0.755
		Any other	0	0	0	0	0			
4.	Marital status	Married	4	12.12	29	87.88	33	1.396, 5.99	2	NS P= 0.497
		Unmarried	1	3.85	25	96.15	26			
		Divorced	0	0	0	100	1			
		Widow/widowed	0	0	0	0	0			
5.	Education	No formal education	3	21.43	11	78.57	14	5.717, 7.82	3	NS P=0.126
		Primary education	0	0	22	100	22			
		Secondary education	2	10.53	17	89.47	19			
		Graduate education	0	0	5	100	5			
6.	Occupation	Unemployed	2	5.71	33	94.29	35	2.75, 7.82	3	NS P=.431
		Self-employed	1	6.25	15	93.75	16			
		Private employed	1	25	3	75	4			
		Government	1	20	4	80	5			
7.	Type of Family	Nuclear	3	13.04	20	86.96	23	2.753 7.82	3	NS P=0.431
		Joint	1	3.57	27	96.43	28			
		Extended	0	0	4	100	4			
		Blended	1	20	4	80	5			
8.	Monthly income in rupees	Less than 10000	4	9.76	37	90.24	41	2.962, 7.82	3	NS P=0.397
		10001-15000	0	0	7	100	7			
		15001-20000	0	0	8	100	8			
		More than20000	1	25	3	75	4			
9.	Place of residence	Rural	2	10.53	17	89.47	19	0.179. 5.99	2	NS P=0.194
		Semi urban	1	7.69	12	92.31	13			
		Urban`	2	7.14	26	92.86	28			

Table 11: Association between level of Attitude with selected clinical proforma among TB patients.

S. No	Demographic variables	Category	Knowledge level				Total	Chai square value, Critical value	Df	Inference
			Poor		Average					
			F	%	F	%				
1.	Duration of illness	< 1 year	4	7.27	51	92.73	55	0.971, 3.84	1	NS P=0.324
		1.5- 2 year	1	20	4	80	5			
		2.5 – 3 year	0	0	0	0	0			
		>3 year	0	0	0	0	0			
2.	Duration of taking treatment of tuberculosis.	< 6 months	4	9.76	37	90.24	41	2.927, 5.99	2	NS P= 0.231
		9 months	0	0	15	100	15			
		12 months	1	25	3	75	4			
		>12 months	0	0	0	0	0			
3.	Co-morbid condition With multi drug resistant tuberculosis.	With COPD	0	0	0	0	0	4.855, 3.84	1	Significant P=0.0275
		With HIV	0	0	0	0	0			
		Combined with other disease	4	19.05	17	80.95	21			
		No combined disease	1	2.56	38	97.44	39			
4.	Sources of information related to MDR-TB	Family	0	0	5	60	5	2.167, 7.82	3	NS P=.538
		Health personnel	3	12	22	36	25			
		Friends	2	11.11	16	33.33	18			
		Mass media	0	0	12	25	12			

Table 11: The analysis results revealed that there was no statistical significant association established between the pre-test levels of attitude with their selected demographic variables regarding multi drug resistant tuberculosis among tuberculosis patients. Hence the H_3 is rejected for sex, religion, marital status, education, occupation, family type, income of month in rupees, place of residence, illness duration, duration of taking tuberculosis treatment, and sources of information related to MDR-TB and accepted in terms of age, co-morbid condition with multi drug resistant tuberculosis.

DISCUSSION

Majority of the participant (58.33%) were belonged to the age group between 15 -30. Equal no of participant (50%) were female and male. Majority of the participant (53.33%) were Hindu religion. The participants (55%) were married person. The participants (36.67%) were primary education. Majority of the participant (58.33%) were unemployed. majority of the participant (46.67%) were belonged to the joint family. The participants (68.33%) were less than 10000.Majority of the participant (46.67%) was urban area. The participants (91.67%) were duration of illness less than 1 year. Majority of the participant (68.33%) were duration of taking treatment of tuberculosis. majority of the participant (65%) were co-morbid condition with multi drug resistant tuberculosis and majority of the participant (41.67%) were sources of information related to MDR-TB and in the study paired t test shows the intervention is highly effective and attitude paired t test shows difference in pre post mean and paired t value t value 11.235 which is significant, DF=59 and P value is 0. 001. Hence, the t test shows highly significant results hence the intervention is highly effective and posttest knowledge among tuberculosis patients 13 (21.37%) were having Good knowledge, 47 (78.33%) were having average knowledge and (0%) were having poor knowledge. Post test among tuberculosis patients 7 (11.67%) were having good attitude, and 52 (88.33%) were having average attitude.

CONCLUSION

This study concluded that awareness programme was an effective way to teach regarding multi drug resistant tuberculosis among tuberculosis patients. It enhances the knowledge and attitude regarding multi drug resistant tuberculosis that will reduce the tuberculosis infection, save life of the people and improve health outcomes.

IMPLICATION OF THE STUDY

Nursing Practice

The important of health care team, who provides a main role in health promotion and health care. Awareness programme on knowledge and attitude regarding multi drug registrant tuberculosis is way of educating patients with tuberculosis disease and staff nurses regarding multi drug resistant tuberculosis. So, the knowledge of TB ward will increase regarding multi drug resistant tuberculosis.

Nursing Education

Awareness programme is very useful for nursing students to attain increase level of knowledge and attitude regarding multi drug resistant tuberculosis. Work based Awareness programme could help nursing students enhance their knowledge and attitude with multi drug resistant tuberculosis.

Nursing Administration

Prevention is better than care" and early investigate and treat of any abnormalities in body systems in respiratory system by the awareness programme regarding multi drug resistant tuberculosis among tuberculosis patients. We had enhanced the knowledge and attitude of tuberculosis patients by implementing structured teaching in terms of awareness programme.

Nursing Research

This study finding can be added to the research reviews regarding effectiveness of knowledge and attitude regarding Multi Drug Resistant-Tuberculosis. A research study in this field is required to identify various methods to enhance the knowledge and attitude regarding Multi Drug Resistant-Tuberculosis among tuberculosis patients.

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