

“A descriptive study to assess the knowledge regarding MDR-TB among GNM IIND year student in Keshlata School of Nursing at Bareilly U.P.”

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ABSTRACT: Several cases of multidrug-resistant tuberculosis (MDR-TB) had been reported since 2005. By 2009, a least 259 cases of MDR-TB had been identified in a total population of about 1.8 million people.¹ Depsite having achieved a high detection rate of 84% and adopted the directly observed therapy short - course (DOTs) strategy, several cases of multidrug-resistant tuberculosis (MDR-TB) had been reported since 2005. By 2009, a least 259 cases of MDR-TB had been identified in a total population of about 1.8 million.² Objective of the study to assess the knowledge regarding MDR-TB among GNM 2nd year students to associate the knowledge regarding MDR-TB among GNM 2nd year students with their selected demographic variables age, sex, religion, marital, status source of information area of living and to develop an information booklet regarding MDR-TB. **Results:** Out of 30 sample, majority of 4.43(14.76%) had excellent knowledge regarding MDR-TB among GNM IInd year students, 2.86(9.53%) had very good knowledge regarding MDR-TB among GNM IInd year students and 7.73(25.76%) of GNM IInd year student had good knowledge regarding MDR-TB and 2.26(7.53%) had poor knowledge regarding MDR-TB among GNM IInd year students .The mean of coping strategies of MDR-TB among GNM IInd year students is 17.3 and the mean percentage is 57.66 **Conclusion:** There is excellent knowledge regarding MDR-TB among GNM IInd year students.

Keywords: Assess, Knowledge, MDR-TB, GNM student, knowledge regarding MDR-TB

INTRODUCTION

Imperative that health care provider in Lesotho be knowledgeable about MDR-TB Lesotho in one of the countries with the highest per capita incidence of tuberculosis (TB) in the world with 637 incident cases of TB per 100,000 peoples, it was the fifth most effected country by 2006.¹ Support and funding of national TB programmes, in which treatment is given as directly observed therapy

(DOT), is essential for all persons with TB if at all possible. Physicians should always use evidence - based treatment guidelines and drugs of proven bio- availability. The WHO recommend a 6 month initial treatment regimen of rifampicin, isoniazid, pyrazinamide and ethambutol for 2 months, followed by rifampicin and isoniazid for 4 months (2RHZE-4RH). if the pt. fails treatment (positive cultures or sputum smears in months 5 or 6 of treatment) or relapses, an 8month retreatment regimen is recommended. This consists of streptomycin, rifampicin, isoniazid, pyrazinamide, and ethambutol for 2 months, followed by rifampicin, isoniazid, pyrazinamide and ethambutol for 1 month followed by rifampicin, isoniazid and ethambutol for 5 months (2SRHZE- 1RHZE-5HRE).³

The accurate diagnosis of MDR-TB requires a positive culture of mycobacterium tuberculosis and drug susceptibility testing. However, genetic probes which detect drug resistance to rifampicin with >95% accuracy are very suggestive of MDR-TB, <10% of rifampicin resistance is nonresistant, and so rifampicin resistance is a marker for MDR-TB in >90% of cases.⁴

NEED OF THE STUDY:

Tuberculosis is the leading cause of death from a curable infectious disease. TB has affected mankind for over 5000 years, and still continues to be a leading cause of morbidity and mortality. In 2008, there were estimated 9.4 million new cases equivalent to 139 cases per 100000 population of TB globally. Most of the estimated cases in 2008 occurred in Asia (55%) and Africa (30%)¹. India is the highest TB burden country in the world, according for one fifth of the global incidence- an estimated 1.96 million cases annually. Approximately 2.9 million people die from tuberculosis each worldwide; about one fifth for them alone. Nearly 500,000 die from the disease – more than 1000 per day – one every minute. TB mortality in the country has reduced from in estimated 42 per lakh population in 1990 to 28 per lakh population in 2006, and the prevalence of TB in the country has reduced from 568 per lakh population in 1990 to 283 per lakh population by the year 2007.⁵

Multidrug-resistant tuberculosis (MDR-TB) is the resistance to at least isoniazid and rifampicin. In 2008 globally there were an estimated 3.6% of MDR-TB, of which 2.9% in new cases and 15.3% in previously treated cases. It was estimated that 440000 case emerged in 2008. In the year 2009, about 5260 number of suspected cases were detected as MDR TB and 12% of tuberculosis cases have been detected with HIV positive in 2009.⁶

MATERIALS AND METHODS

Non experimental descriptive design was conducted. The study will conducted in selected rural areas. Study was conducted at Keshlata School of Nursing at Bareilly U.P. The sample size used was 30 people. Non randomized purposive sampling technique was used for the present study. A structured questionnaire and the consent form given to respondents. Data collection was done from December 2020 to February 2021

MAJOR FINDINGS OF THE STUDY

TABLE -1: Frequency and Percentage Distribution of the student based on Demographic Data.

S. NO	VARIABLES		FREQUENCY (n)	PERCENTAGE (%)
1.	AGE(years)	1. 18-20	16	53.33%
		2. 21-22	10	33.33%
		3. 23-24	4	13.33%
		4. 25-26	0	0%
2.	Religion	➤ Hindu	12	40%
		➤ Muslim	4	13.33%
		➤ Sikh	5	16.66%
		➤ Christian	9	30%
3.	Marital status	1. Married	2	6.66%
		2. Unmarried	28	93.33%
4.	Area of living	➤ Urban	20	66.66%
		➤ Rural	10	33.33%
5.	Source of information	1. Mass media	9	30%
		2. Friends	7	23.33%
		3. Family	7	23.33%
		4. Others	7	23.33%

Table no 1 shows that Highest number of GNM IInd year students (53.33%) were in the age group of 18-20 years. Highest number of GNM IInd year student were Hindu (religion)

(40%).Highest number of GNM IInd year students (93.33%) were unmarried .Highest number of GNM IInd year student get information from mass media were (30%).Highest number of GNM IInd year students were (66.66%) belonged from urban area.

SECTION -2

Table 2: Frequency and percentage distribution of level of knowledge of GNM IInd year students regarding MDR-TB

S.N O	Level of knowledge	Frequency	Percentage	Mean	Mean %	SD
1.	Excellent: 76-100% (25-30)	05	16.66%	4.43	14.76 %	9.05
2.	Very good : 51-75% (19-24)	4	13.33%	2.86	9.53%	6.83
3.	Good: 26-50% (13-18)	15	50%	7.73	25.76 %	5.46
4.	Poor : >25% (below 12)	6	20%	2.26	7.53%	4.07

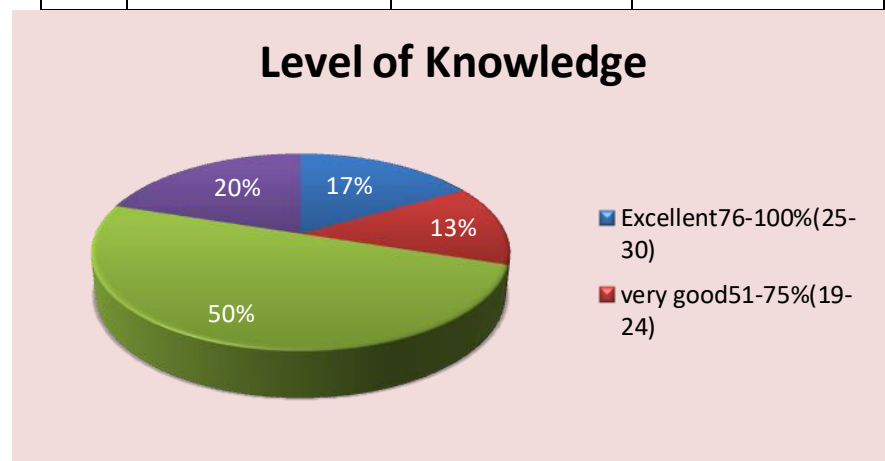


Figure 1 Percentage distribution of level of knowledge of GNM II year students regarding MDR-TB

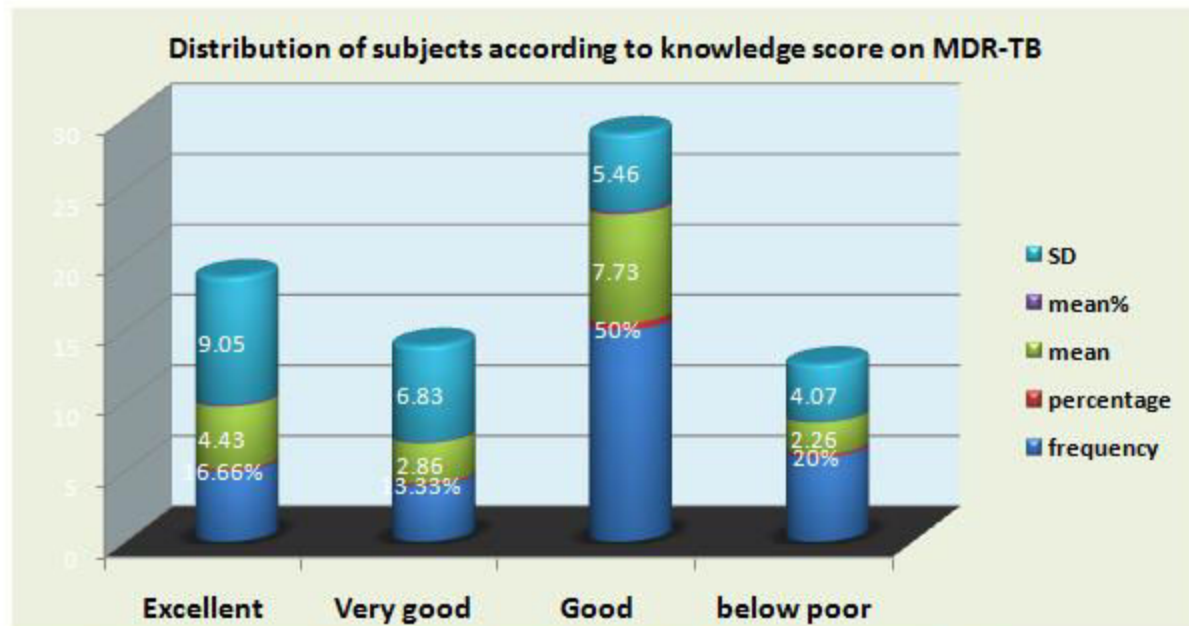


Figure 2 Frequency and percentage distribution of subjects according to knowledge score on MDR-TB

Its shows the frequency and percentage distribution of level of knowledge of GNM IInd year students regarding MDR-TB. 16.66 % of GNM IInd year students obtained Excellent score (76-100%), 13.33% of GNM IInd year students obtained Very good score (51-75%), 50% of GNM IInd year student scored good marks(26-50%), 20% of GNM IInd year students obtained poor score(>25%) .Thus, it is referred that maximum of GNM IInd year students had very good knowledge regarding MDR-TB followed by least of them had good knowledge.

DISCUSSION:

Out of 30 sample, majority of 4.43(14.76%) had excellent knowledge regarding MDR-TB among GNM IInd year students, 2.86(9.53%) had very good knowledge regarding MDR-TB among GNM IInd year students and 7.73(25.76%) of GNM IInd year student had good knowledge regarding MDR-TB and 2.26(7.53%) had poor knowledge regarding MDR-TB among GNM IInd year students .The mean of coping strategies of MDR-TB among GNM IInd year students is 17.3 and the mean percentage is 57.66%. In demographic variables, education of father has significant relationship with knowledge of students regarding MDR-TB and there was not significant association of GNM IInd year students is age, type of family , religion, marital status , area of living ,source of information area . Hence researcher's H₁ is accepted at some instant.

The frequency and percentage distribution of level of knowledge of GNM IInd year students regarding MDR-TB. 5 % of GNM II year students obtained Excellent score (76-100%), 16.66% of GNM II year students obtained very good score (51-75%), 13.33% of GNM II year student scored good marks(26-50%) 50% of GNM II year students obtained poor marks(>25%) 20% The mean knowledge score and percentage 10.46(34.86%) of GNM IInd year students in age group 18-20 year, followed by mean knowledge score percentage 7.16 (23.86%) of GNM IInd year students in age group of 21-22. 3 (10%) mean knowledge score and percentage of GNM IInd year students of 23-24 years, and 0 (0%) mean knowledge score and percentage of GNM IInd year students of 25-26 years. The difference in mean knowledge score GNM II year students according to Age was tested and found statistically significant at 17.95 level (p value 16.92%). The mean knowledge score and percentage 4.56(15.2%) of GNM IInd years students were belonged to joint family followed by mean knowledge score and percentage 8.03(36.76%) of GNM IInd year students were belonged to nuclear family followed by mean knowledge score and percentage 3.46(11.53%) of GNM IInd year students were belonged to extended family followed by mean knowledge score and percentage 4.56(15.2%) of GNM IInd year students were belonged to single family . The difference mean knowledge score GNMI IInd year students according to type of family was tested and found statistically significant at 18.98 level (p value 16.92%) The mean knowledge score and percentage 1.33(4.33%) of GNM IInd year students were married, followed by mean knowledge score percentage 19.3(64.33%) of GNM IInd year students unmarried . The difference in the mean knowledge score of GNM IInd year students according to marital status was tested and found statistically not significant at 2.44 level (p-value (7.89)). The maximum mean knowledge score & percentage 8.66 (28.86%) of GNM IInd year students were Hindu followed by mean knowledge score of 2.43(8%) GNM IInd year students were Muslim followed by mean knowledge score of 2.86(9.53%) of GNM IInd year students are Sikh followed by mean knowledge score of 6.66(22.2%) of GNM IInd year students were Christian. The difference in the mean knowledge score of GNM IInd year students according to religion was tested and found statistically not significant at 9.68 level (p-value 16.92).The. Maximum mean knowledge score & percentage 6.3(21%%) of GNM IInd year students gain information by mass media followed by mean knowledge score of 5.06(16.86%)of GNM IInd year students gain information by friends , mean knowledge score of 4.63(15.43%)of GNM IInd year students gain information family and 4.63(15.43%) of GNM IInd year students gain information by others. The

difference in the mean knowledge score of GNM IInd year students according to source of information was tested and found statistically not significant at 6.39 level (p-value 16.92). The mean knowledge score and percentage that 13.63(45.43%) of GNM IInd year students were from urban area and mean knowledge score and percentage of 7(23.33%) of GNM IInd year students were belonged to rural area. The difference in mean knowledge score was tested and found statistically significant at 8.82 level at p value 7.89

CONCLUSION: There is excellent knowledge regarding MDR-TB among GNM IInd year students. majority of 4.43(14.76%) had excellent knowledge regarding MDR-TB among GNM IInd year students, 2.86(9.53%) had very good knowledge regarding MDR-TB among GNM IInd year students and 7.73(25.76%) of GNM IInd year student had good knowledge regarding MDR-TB and 2.26(7.53%) had poor knowledge regarding MDR-TB among GNM IInd year students. The mean of coping strategies of MDR-TB among GNM IInd year students is 17.3 and the mean percentage is 57.66.

There is always a scope for the existing research to be reviewed so as to keep it updated. Promote more research in those Colleges where the more need of MDR-TB to the students. Nursing researcher can conduct interactive sessions for increasing the knowledge towards the MDR-TB among nursing students at School Of Nursings.

CONFLICT AND INTEREST:

Researcher has no conflict during the research work. Also they have interested in community area for doing research.

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