A Pre-experimental study to evaluate the effectiveness of planned teaching programme on knowledge regarding Measles Rubella (MR) vaccination among mothers of children aged below 15 years in selected rural areas of Gurugram Haryana.

Bharti[1], M.K Swapna[2], Binita mishra[3]

[1]*M.Sc. Nursing Community Health Nursing, Amity College of Nursing, Haryana)*
[2]*Assistant Professor, Amity College Of Nursing, Haryana*
[3]*Tutor, Amity College Of Nursing, Haryana*

ABSTRACT

A Present study was conducted to evaluate the effectiveness of planned teaching programme on knowledge regarding Measles Rubella (MR) vaccination among mothers of children aged below 15 years. A quantitative research approach and pre experimental research design one group pre test post test was used to assess the effectiveness of planned teaching program sample size was 100,sampling technique used was non probability purposive **Result:** The result reveals that 83% of mothers were having inadequate knowledge in pre test and 17% of the mothers were having moderately adequate knowledge. And in post test (62%) of mothers are having adequate knowledge and (37%)of mothers having moderately adequate knowledge. Pre-test mean score and SD was 4.45±3.198 and post- test mean score and SD was17.75±4.1 08, The calculated paired t test value is 37.871 and it was significant which is more than the table t-value at 0.05 level of significance. There is a significant relationship of knowledge regarding MR vaccination with education($x^{2=}$38.154),occupation($x^{2=}$25.346) and previous knowledge($x^{2=}$18.25) at 0.05 level of significance..**Conclusion:** The Planned Teaching Program was found to be effective in increasing the knowledge of mothers regarding MR vaccination

Key words: Effectiveness, Planned Teaching Program, Measles Rubella, vaccination.

INTRODUCTION

Measles is a highly infectious disease that continues to kill many of infants and young children. Rubella Infection in pregnant women disables a child for life with congenital rubella syndrome (CRS) that may result in deafness, blindness and heart defects. Measles and rubella can however, be prevented with a safe and effective measles-rubella (MR) vaccine that gives long term immunity. Measles immunization directly contributes to the reduction of under-five

child deaths and with combination of rubella vaccine will control rubella and prevent CRS(congenital rubella syndrome) in country population, thereby reducing the disabilities. [1]

LITERATURE SURVEY

The National Technical Advisory Group on Immunization(NTAGI) in June 2014,had recommended the advent of Measles-Rubella vaccine in routine immunization Programme, following a nation wide Measles Rubella campaign by government of India to eliminate Measles by 2020.The motive of the Measles-Rubella campaign is to shield the child and eliminate transmission of Measles and Rubella from the community[2].

Kirandeepkaur et.al(2019) had conducted a study to assess the level of knowledge regarding measles rubella vaccination among mothers of under 15 years children in rural area of Punjab. A quantitative research approach and non experimental research design and non probability purposive sampling was used, A structured questionnaire was used to assess the knowledge of mothers ,findings revealed that 53.33% had moderate adequate knowledge, 45.33% had inadequate knowledge and 1.33% had adequate knowledge regarding MR vaccination. Occupation, family income, religion was statistically associated with the knowledge of measles rubella vaccine among mothers of under 15 years of children[3].

STATEMENT OF THE PROBLEM

A study to evaluate the effectiveness of planned teaching programe on knowledge regarding Measles Rubella vaccination among mothers of children aged below 15 years in selected rural areas of Gurugram Haryana

OBJECTIVES

- To assess the existing knowledge among mothers of children aged below 15 years regarding MR vaccination before administration of planned Teaching Programme

- To evaluate the effectiveness of planned teaching programme on knowledge regarding MR vaccinations among mothers of children aged below 15 years.

- To find out the association between the pre-test knowledge score with the selected demographic variables

HYPOTHESIS

- **H$_1$ –**There will be a significant difference between mean pretest and post test knowledge score regarding MR vaccination programme among mothers of children aged below 15 years.

- **H_{01}**. There will not be a significant difference between mean pretest and post test knowledge score regarding MR vaccination programme among mothers of children aged
- **H_2-**. There will be a significant association between mean pretest knowledge scores of mothers of children aged below 15years with selected demographic variable.
- **H_{02}**. There will not be a significant association between mean pretest knowledge scores of mothers of children aged below 15years with selected demographic variable.

RESEARCH METHODOLOGY

RESEARCH APPROACH – Quantative research approach
RESEARCH DESIGN - Pre-experimental research design
DEPENDENT VARIABLE – knowledge of mothers
INDEPENDENT VARIABLE - Planned teaching program
STUDY SETTING – Panchgoan village Haryana
SAMPLE SIZE -100
STUDY SAMPLES-Mothers of children aged below 15 years .
SAMPLING TECHNIQUE- Non probability purposive sampling.
DATA COLLECTION TOOL

Section -1 Demographic Characteristics: It Consist of 7 question containing Demographic Data of Samples.

Section - 2 Structured Multiple choice Knowledge questionnaire: It consist of 25 structured knowledge questionnaire on Measles Rubella vaccination.

Table1 :SCORING KEY

S. No.	Score	Grade
1	1-8	Inadequate knowledge
2	9-16	Moderately adequate knowledge
3	17-25	Adequate knowledge

Reliability- Structured knowledge questionnaire reliability was checked by split half technique using Karl Pearson's coefficient of co relation and result was found 0.81 To ensure the content

 Content Validity of the tool- It was submitted to seven subject experts for their opinion and advice. Their corrections and suggestions were implemented.

Development of Planned Teaching Program: It is based on the objectives ,review of related literature ,sample size method of teaching ,information obtained by experts, and personal experience of the investigator.

RESULT

<center>Section-1</center>

Table 2 Frequency and percentage distribution of mothers based on demographic variables. N=100

Variables	Categories	Frequency (f)	Percentage (%)
Age in years	<20 years	1	1.0
	20-25 years	42	42.0
	26-30 years	29	29.0
	31-35 years	28	28.0
	>35 years	0	0.0
Religion	Hindu	89	89.0
	Muslim	10	10.0
	Sikh	1	1.0
	Christian	0	0.0
	Any other	0	0.0
Education	No Formal Education	15	15.0
	Primary Education	23	23.0
	Secondary Education	25	25.0
	Senior Secondary Education	25	25.0
	Graduate and Above	12	12.0
Type of Family	Nuclear family	38	38.0
	Joint family	62	62.0
	Extended family	0	0.0
Occupation	Private Employee	15	15.0
	Government Employee	6	6.0
	Self employee	28	28.0
	Home-Maker	51	51.0
Previous Knowledge regarding MR Vaccination	Yes	47	47.0
	No	53	53.0
Source of Information about MR Vaccination.	No Information	1	1.0
	Mass Media	16	16.0
	Friends and Relatives	8	8.0
	Health Workers0-	23	23.0
Do you Believe Vaccination programme are worth ?	Yes	100	100.0
	No		0.0

Table 1 depicts that most of the mothers were in the age group between 20-25 years (42%). Religion wise most of the mothers were Hindu religion (89%). Education wise (25%) of the mothers were having secondary education and (25%) were having senior secondary education .Family wise (62%) of the mothers were staying in the joint family. Occupation wise (51%) of the mothers were home maker. Most of the mothers (51%) were having previous knowledge regarding MR vaccination. Source of information for majority (23%)of mothers were health workers. All the mothers believe that vaccination programme are worth (100%).

SECTION 2

Table 3-PRE-TEST KNOWLEDGE SCORE OF MOTHERS REGARDING MR VACCINATION

SCORE LEVEL	PRE-TEST (%)
Inadequate Knowledge.(1-8)	83(83%)
Moderately Adequate Knowledge.(9-16)	17(17%)
Adequate Knowledge.(17-25)	0(0%)
Maximum Score=25 Minimum Score=0	

Table 3 depicts that 83% of mothers were having inadequate knowledge in pre test.17 % of the mothers were having moderately adequate knowledge.

SECTION 3

Table 4 – Post-test score of mother's knowledge regarding MR vaccination.

N=100

Score Level (N= 100)	POST-TEST (%)
Inadequate Knowledge.(1-8)	1(1%)
Moderately Adequate Knowledge.(9-16)	37(37%)
Adequate Knowledge.(17-25)	62(62%)
Maximum Score=25 Minimum Score=0	

Table no 4 depicts that 37% of the mothers having moderately adequate knowledge and 62% of mothers were having adequate knowledge in the post test .

SECTION 4

TABLE NO 5: FINDINGS RELATED TO COMPARISON OF MEAN, STANDARD DEVIATION AND T VALUE OF PRE TEST POST TEST KNOWLEDGE SCORE OF MOTHERS REGARDING MR VACCINATION

N=100

Paired T Test	Mean±S.D.	Mean %	Range	Mean Difference	Paired t- test	P value	Table Value at 0.05
PRETEST KNOWLEDGE	4.45±3.198	17.8	1-15	13.3	37.871	<0.001	1.98
POSTTEST KNOWLEDGE	17.75±4.108	71	8-25				
* Significance Level 0.05　　Maximum=25 Minimum=0							

Table no 5 shows pretest mean score and SD was 4.45±3.198 and post test mean score and SD was17.75±4.1 08 .The calculated paired t test value is 37.871 which is more than the table t-value at 0.05 level of significance. Thus it is established that Planned Teaching Program was effective in increasing the knowledge. **Hence the null hypothesis H_{01} was rejected and research hypothesis H_1 was accepted.**

SECTION 5

Table no 6: Association Of Pretest Test Knowledge Scores Of With Selected Socio-Demographic Variables.

Variables	Options	Adequate Knowledge	Moderately Adequate Knowledge	Inadequate Knowledge	Chi Test	P Value	df	Table Value	Result
Age in years	<20 yrs		0	1					
	20-25 yrs		12	30					
	26-30 yrs		3	26					
	31-35 yrs		2	26					Not Significant
	>35 yrs		0	0	7.029	0.071	3	7.815	
Religion	Hindu		17	72					
	Muslim		0	10					
	Sikh		0	1					
	Christian		0	0					Not Significant
	Any other		0	0	2.531	0.282	2	5.991	

Variable	Category				x^2 cal	p	df	x^2 tab	Result
Education	No Formal Education		0	15					
	Primary Education		1	22					
	Secondary Education		1	24					
	Senior Secondary Education		6	19					
	Graduate and Above		9	3	38.154	0	4	9.488	Significant
Type of Family	Nuclear		8	30					
	Joint		9	53					Not Significant
	Extended		0	0	0.713	0.398	1	3.841	
Occupation	Private Employee		5	10					
	Government Employee		5	1					
	Self employee		2	26					
	Home-Maker		5	46	25.346	0	3	7.815	Significant
Previous Knowledge regarding MR Vaccination	Yes		16	31					
	No		1	52	18.254	0	1	3.841	Significant
Source of Information about MR Vaccination.	No Information		1	0					
	Mass Media		6	10					
	Friends and Relatives		0	8					Not Significant
	Health Worker		9	14	6.473	0.091	3	7.815	
Do you Believe Vaccination programme are worth ?	Yes		17	83					
	No		0	0	NA				

TABLE NO 6: Shows that the association between the level of score and socio demographic variable. Based on the 3rd objective   chi-square test used to associate the level of knowledge and selected demographic variables. the chi-square value shows that there is significance association between the score level and demographic variables (with education $x^{2=}$ 38.154,occupation $x^{2=}$ 25.346 and previous knowledge $x^{2=}$18.25 at 0.05 level of significance therefore the null hypothesis is Ho_2 stands statistically rejected.

CONCLUSION

- Measles and Rubella is a dangerous communicable disease in children. It is preventable disease with timely immunization with MR vaccine. The main objective of the study was to assess the mothers knowledge regarding MR vaccination and to assess the effectiveness of structure teaching program. On the basis of the findings of the study, the following conclusion were drawn

- The pre-test mean score and SD was 4.45 ± 3.198 and post- test mean score and SD was17.75 ± 4.1 08, The calculated paired t test value is 37.871 and it was significant which is more than the table t-value at 0.05 level of significance.

- There is a significant relationship of knowledge regarding MR vaccination with education ($x^{2=}$ 38.154), occupation ($x^{2=}$ 25.346) and previous knowledge($x^{2=}$18.25) Whereas knowledge regarding MR vaccination is not significant with age, religion, type of family and source of information.

- It suggested that the structure teaching program was effective in improving the mothers knowledge regarding MR vaccination

DELIMITATIONS

- The study is limited to the mothers of having children aged below 15 years of selected village.
- The sample size is limited to 100 selected mothers of village.

RECOMMENDATIONS

- A comparative study can be conducted between rural and urban mothers on knowledge regarding Measles Rubella vaccination.
- A similar study can be conducted in other setting with large and different age group to generalize the findings
- A similar study can be conducted in different setting with different teaching program like video assisted teaching program. Pamphlets and leaflets

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Page | 42