

# Effectiveness of Planned Teaching Programme on Knowledge among Mothers Regarding Prevention of Acute Respiratory Tract Infection of Under 5 Children in Selected Rural Areas of Kanpur, U.P.

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## ABSTRACT

The Sustainable Development Goals (SDGs) set the target to end deaths from preventable diseases among new-borns and children under five years old by 2030. India is one of the 15 highest burdened countries in terms of total pneumonia episodes and related childhood mortality. In India, around 400 000 children aged below five years die every year from ARI-related diseases. Title of the study was to evaluate effectiveness of planned teaching programme on knowledge among mothers regarding prevention of acute respiratory tract infection of under 5 children in selected rural areas of Kanpur, U.P.” objective of the study was to assess the pretest knowledge regarding prevention of acute respiratory tract infection of under 5 children in selected rural areas of Kanpur, U.P. To assess the post-test knowledge regarding prevention of acute respiratory tract infection of under 5 children in selected rural areas of Kanpur, U.P. To assess the effectiveness of planned teaching programme on knowledge regarding prevention of acute respiratory tract infection of under 5 children in selected rural areas of Kanpur, U.P. To find out the association between pretest knowledge scores with their selected demographic variables. “Methodology adopted for the study was quantitative research approach with a pre-experimental one group pretest and posttest was adopted. In this study, the sample consists of 30 mothers of under 5 children who fulfilled the inclusion criteria for the study. The convenience sampling technique was used for this study. A structured Socio demographic variables and Knowledge questionnaire on prevention of acute respiratory tract infection were selected based on the objectives of the study. The tools are prepared in two sections. Section A was socio- demographic data, and the Section –B was Knowledge questionnaire on prevention of acute respiratory tract infection. Validity of the tool was established with experts. Pilot study was conducted on young adults from 03-04-2024 to 20-04-2024 to assess the tools feasibility and it was found to be feasible to collect the required information. For the main study the data collected from 25-05-2024 to 25-06-2024 from mothers of under 5 children who fulfilled the inclusion criteria. The collected data was tabulated according to various parameters and the complete analysis was done with descriptive and inferential statistics. Paired t test used to assess the effectiveness of STP on knowledge regarding prevention of acute respiratory tract infection and the obtained value was 23.38 and the table value was 1.68 at 0.05 level of confidence. Since the obtained value greater than the table value STP was effective So, the H1 hypothesis was accepted. The investigator concluded the planned teaching programme was effective. The chi-square calculation explains that there was a significant association between pre test knowledge level and the sociodemographic variables such as educational status and occupational status as the chi-square value was greater than the table value at 0.05 level of significance.

**KEYWORDS:** *planned teaching program, knowledge among mothers, prevention of acute respiratory tract infection, under 5 children, kanpur*

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### **Need for the study: -**

Acute respiratory infection (ARI) is the major cause of mortality among children aged less than 5 years, especially in developing countries like India. Lower respiratory tract infections (LRTIs) are the leading cause of under-five morbidity globally. ARI poses a major challenge to the health system in developing countries because of high morbidity and mortality. It is estimated that Bangladesh, India, Indonesia, and Nepal together account for 40% of the global ARI mortality. In India, ARI accounts for 30-50% of visits to health facilities and 20-40% of hospital admissions. In urban slum areas, ARI constitutes over two-thirds of all childhood illnesses. Despite these statistics, majority of the reported evidences underestimate the actual burden of ARI in the community. By reviewing this all article researcher come to a conclusion to construct a problem statement to evaluate effectiveness of planned teaching programme on knowledge among mothers regarding prevention of acute respiratory tract infection of under 5 children in selected rural areas of Kanpur, U.P.”

### **Objectives**

1. To assess the pretest knowledge regarding prevention of acute respiratory tract infection of under 5 children in selected rural areas of Kanpur, U.P.
2. To assess the post-test knowledge regarding prevention of acute respiratory tract infection of under 5 children in selected rural areas of Kanpur, U.P.
3. To assess the effectiveness of planned teaching programme on knowledge regarding prevention of acute respiratory tract infection of under 5 children in selected rural areas of Kanpur, U.P.
4. To find out the association between pretest knowledge scores with their selected demographic variables.

### **Material and method:-**

**Research approach and design:** - Quantitative approach with pre experimental one group pretest post-test design was adopted.

**Setting of the study:** - Selected rural areas of Kanpur, U.P.

**Study population:** - mothers of under 5 children

**Accessible population:** - mothers of under 5 children residing in selected rural areas Kanpur U.P.

**Sample size:** - 30

**Sampling technique:** - Non probability convenient sampling technique.

### **Inclusive criteria:**

1. Who were residing in selected rural areas of Kanpur
2. Who were willing to participate
3. Who knows to read and write Hindi or English.

### **Exclusion criteria**

1. Who was not available at the time of data collection.
2. Who have already attended this type of study.

### **Variables under study**

**Independent variable:** The planned teaching programme is the independent variable.

**Dependent variable:** The knowledge among mothers of under 5 children in selected rural areas of Kanpur is the dependent variable.

**Socio demographic variables:** The socio demographic variables consist of items on background data of the participants. It includes data age in year, religion, educational status, occupational status, monthly income of family, previous knowledge regarding acute respiratory infection, sources of information

### **Description of Tools**

Socio demographic variables and Knowledge questionnaire on prevention of acute respiratory infection of under 5 children among mothers was constructed by the investigator which contains items in the following aspects.

Section – A: The socio demographic variables consist of items on background data of the participants. It includes It includes data age in year, religion, educational status, occupational status, monthly income of family, previous knowledge regarding acute respiratory infection, sources of information

Section – B: The Knowledge questionnaire on prevention of acute respiratory tract infection consist of 30 questions.

Scoring for Knowledge questionnaire on prevention of acute respiratory tract infection of under 5 children.

Minimum score = 0

Maximum score = 30

### **Data collection procedure: -**

For the main study the data collected from 25-05-2024 to 25-06-2024 from mothers of under 5 children who fulfilled the inclusion criteria. The investigator distributed knowledge questionnaire along with demographic variables and after filling the questionnaire investigator collected it and provided

Structured teaching program on prevention of acute respiratory tract infection among the participants. After 1 week investigator conducted the posttest

among the same participant to assess the level of knowledge they retain after STP on prevention of acute respiratory tract infection.

### Limitations of the study

1. Only 30 samples are used for this study.
2. Only samples form selected rural areas from Kanpur

### Analysis and interpretations

#### Section I:- Base line characteristics of participants.

**Table 1: - Baseline characteristics of the participants**

Sl. no	Demographic variables	Frequency	Percentage
1	<b>Age in years</b>		
	19-30 years	18	60
	Greater than 30 years	12	40
3	<b>Educational status</b>		
	None	12	40
	Primary education	8	26.7
	Secondary education	4	13.3
	Graduation and above	6	20
4	<b>Employment status</b>		
	Employed	11	36.7
	House wife	19	63.3
5	<b>Gravida status</b>		
	Primi gravida	12	40
	Multigravida	18	60
6.	<b>History of previous preterm delivery</b>		
	yes	7	23.3
	No	23	76.7
7.	<b>Gestational age at the time of delivery</b>		
	7 month	4	13.3
	8 month	9	30
	9 month	17	56.7

#### Section II: - Effectiveness of STP on weaning

**Table no 2: - Effectiveness of STP on weaning.**

Knowledge level	Poor	Average	Good
<b>Pre test</b>	24	6	0
<b>Post test</b>	0	24	6

Paired t test used to assess the effectiveness of STP on knowledge regarding weaning and the obtained value was 23.38 and the table value was 1.68 at 0.05 level of confidence. Since the obtained value greater than the table value STP was effective So, the H1 hypothesis was accepted. The investigator concluded the structured teaching programme was effective.

**Assess the association between pre test knowledge score with selected demographic variables.**

**Table no: - 3 Chi square showing association between pre test knowledge with selected demographic variables.**

Sl. no	Demographic variables	Knowledge regarding weaning			Obtained value	Table value	Interference
		Poor	Average	Good			
1	Age of the participants						
	19-30 years	15	3	0	.31	5.99	NS
	31 and above	9	3	0			
2	Educational status						
	None	12	0	0	30	12.59	S
	Primary education	8	0	0			
	Secondary education	4	0	0			
	Graduation and above	0	6	0			
3	Employment status						
	House wife	19	0	0	12.95	5.99	S
	Employed	5	6	0			
4	Gravida						
	Primi	12	0	0	5.0	5.99	NS
	Multi	12	6	0			
5	History of previous preterm delivery						
	Yes	5	2	0	.41	5.99	NS
	No	19	4	0			
6	Gestational age at the time of delivery						
	7 month	4	0	0	2.38	9.48	NS
	8 month	8	1	0			
	9 month	12	5	0			

**S=Significant, NS = Not Significant**

2= 5.99, 4=9.48, 6= 12.59.

The chi-square calculation explains that there was a significant association between pre test knowledge level and the sociodemographic variables such as educational status and occupational status as the chi-square value was greater than the table value at 0.05 level of significance.

#### **Conclusion: -**

The study concluded that the planned teaching program was effective to bring good knowledge among mothers of under 5 children regarding acute respiratory tract infections.

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