

# A Study to Assess the Effectiveness of Planned Teaching Programme on Knowledge Regarding Management and Prevention of Respiratory Tract Infections among Mothers of Under 5 Children in Selected Hospital of Srinagar Kashmir

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**Abstract:** *Introduction:* Children under 5 years of age are immature and their all systems are in developing stage. Respiratory tract infections are the most common cause of illness and death in children under 5 years of age. Respiratory infection means an infection of any part of the respiratory tract which includes nasal cavity, pharynx, larynx, trachea, bronchi, lungs etc. WHO (2009) report stated that children below five years of age suffer about 5 episodes of ARI per child per year. *Objectives of Study:* 1. To assess the pre-test knowledge score regarding management and prevention of respiratory tract infections among mothers of under 5 children. 2. To assess the post-test knowledge score regarding management and prevention of respiratory tract infections among mothers of under 5 children. 3. To compare pre test and post test knowledge scores regarding management and prevention of respiratory tract infections among mothers of under five children. 4. To determine the association of pre test knowledge scores regarding management and prevention of respiratory tract infections among mothers of under five children with their demographic variables. *Hypothesis:* H1: There is significant difference between pre-test knowledge and post-test knowledge scores regarding management and prevention of respiratory tract infections among mothers of under 5 children at  $\leq 0.05$  level of significance. H2: There is significant association between pre-test knowledge scores with selected demographic variables at  $\leq 0.05$  level of significance. *Research Methodology:* *Research approach:* Quantitative research approach, *Research Design:* One group pre-test post- test design, *Research setting:* Paediatric wards of SKIMS hospital Srinagar Kashmir, *Sample size & technique:* 60 mothers of under 5 children who were admitted in selected wards (pediatric medicine and pediatric surgery) of SKIMS hospital Srinagar by Purposive sampling technique. *Method of data collection and tool:* Self structured Interview schedule. *Results:* The Planned Teaching Program was found effective. In pre-test majority 43 (71.7%) were having inadequate knowledge, 12 (20.0%) moderate & 5 (8.3%) were having adequate knowledge regarding management and prevention of respiratory tract infections. In post test 31 (51.7%) were having moderate knowledge, 18 (30.0%) were having inadequate knowledge and 11 (18.3%) were having adequate knowledge regarding management and prevention of respiratory tract infections after planned teaching programme. The results of the study revealed that there was significant association between pre-test knowledge score of mothers of Under 5 children with selected demographic variable i.e Monthly family income, Mothers Education, Residence. And Mothers Occupation evidenced that there was statistically association at  $p \leq 0.05$  level. No significant association was found with Age, Number of under 5 children and Type of family. *Conclusion:* Planned teaching programme on management and prevention of respiratory tract infections was effective in improving the knowledge level of the mothers of under 5 children.

**Keywords:** Effectiveness, Planned teaching programme, Respiratory tract infections, management, preventive, Mothers of fewer than 5 children

## 1. Introduction

Children are an embodiment of our dreams and hopes for future. They are wet clay in potter's hands, handled with care they become something beautiful else they break and become discarded. They are the most vulnerable group in the society. Children are not only our future, they are our present and we need to start taking their voices very seriously. Children are priceless resource and any nation which reflects them would do so as it perils. Children's health reflects the National health and wealth. Today's children are tomorrow's citizens.<sup>1</sup>

A well-developed child's contribution to the National welfare and children are the priceless resources of the Nation. Children under 5 years of age are immature and their all systems are in developing stage. Because of immaturity of immune system causes recurrent attacks of infections like diarrhoea, gastroenteritis, febrile convulsions etc.<sup>2</sup>

Respiratory tract infections are the most common causes of illness and death. Respiratory tract infection means an infection of any part of the respiratory tract which includes nasal cavity, pharynx, larynx, trachea, bronchi, lungs etc. Respiratory tract infections are classified as upper respiratory tract infections and lower respiratory tract infections.<sup>3</sup>

**In India:** A survey conducted on Causes of neonatal and child mortality in India. A registrar general of India surveyed all death Occurred in 2001-03 in nationally representative homes. Field staff interviewed house hold members and completed standard questions about events that preceded the death. There were 10,892 deaths in neonates and 12,260 in children aged 1-59 months identified in the study. Two causes accounted for 50% of all deaths in children from 1-59 months that is respiratory tract Infections and diarrheal diseases.<sup>4</sup>

**In Kashmir: Abid Ali in, Imtiyaz A Mir, AnjumFazili, JaveedIqbal, RohulJabeen, Anjali Salathia in jul-sep (2012)<sup>12</sup>** conducted cross-sectional study in Department of Community Medicine and Department of paediatrics SKIMS SOURA Sgr by using multistage sampling procedure to study 1644 children. A house to house survey was carried out in the defined geographical region in order to determine the prevalence of respiratory tract infections among children less than 5 years of age. Among 1644 children, 886 (53.89%) were males and 758(46.11%) were females. Overall prevalence of Respiratory tract infections was found to be 21.41% under the age of 5 years in Kashmir valley. The prevalence of Respiratory Tract Infection being 19.3% in the age group of 0-1 year, 23.0% in the age group of 1-3 years and 20.4% in the age group of 3-5 years. The prevalence was higher among male children that is 22.5% as compared to female children that is 20.05%.<sup>5</sup>

## 2. Need of Study

Children are our future and their energy and hope inspires the older generation. Acute Respiratory Tract Infections (ARI) in children less than five years old is the leading cause of childhood mortality in the world. Acute Respiratory Tract Infections is the most common cause of hospitalization and death in children living in developing countries. The statistics shows that respiratory tract Infections in infants and children is a major health problem that is responsible for large number of childhood mortality and morbidity.<sup>6</sup>

A report by Director General of Health Services, Government of India, indicated that ARI contributes towards about one-third to one-fourth of all under five deaths in India and it stands at 52nd rank in the global scenario of under-five mortality in the world.<sup>7</sup>

It is sad to learn that in our global community, almost 10.5 million children die every year i.e., 30,000 children die a day, 21 children die in a minute everyday before reaching their fifth birthday due to various infections. Ninety percent of these under five children have died due to ARI.<sup>8</sup>

## 3. Objectives

- 1) To assess the pre-test knowledge score regarding management and prevention of respiratory tract infections among mothers of under 5 children in selected hospital of Srinagar Kashmir.
- 2) To assess the post-test knowledge score regarding management and prevention of respiratory tract infections among mothers of under 5 children in selected hospital of Srinagar Kashmir.
- 3) To compare pre-test and post-test knowledge scores regarding management and prevention of respiratory tract infections among mothers of under 5 children in selected hospital of Srinagar Kashmir.
- 4) To determine the association of pre-test knowledge scores regarding management and prevention of respiratory tract infections among mothers of under 5 children in selected hospital of Srinagar Kashmir with their demographic variables i.e., Age, Education, Occupation, Family income, Type of family, Number of under 5 children & Residence .

## Hypothesis:

- **H1:** There is significant difference between pre-test knowledge and post-test knowledge scores regarding management and prevention of respiratory tract infections among mothers of under 5 children at  $\leq 0.05$  level of significance.
- **H2 :** There is significant association between pre-test knowledge scores with selected demographic variables that is Age , Education , Occupation , Family income , Residence , Type of family and number of under 5 children at  $\leq 0.05$  level of significance.

## Operational definitions

- **Effectiveness:** In this study it refers to the desired change brought about by the teaching programme prepared by researcher and is measured by significant gain in post-test knowledge.
- **Planned teaching programme:** In this study it refers to the information or awareness given to mothers of under-5 children regarding respiratory tract infections with the help of lecture , posters and flip books.
- **Under 5 children:** In this study it refers to children who are in the age group of 0-5 years and are admitted in pediatric wards.
- **Respiratory tract infections:** In this study it refers to the infection of any part of the respiratory tract like nasal cavity, pharynx, larynx, trachea, bronchi, lungs etc. in under 5 children.
- **Mother:** In this study it refers to the women having children of age group 0-5 years and are admitted in pediatric wards .

## Conceptual Framework

The present study is based on Ludwig Von Bertalanffy's General Systems Theory (1950) or system model.

## 4. Review of Literature

Based on the objectives of the present study, the review of literature has been categorized and organized in four major headings.

- Studies related to incidence of respiratory tract infections among under 5 children.
- Studies related to risk factors of respiratory tract infections.
- Studies related to knowledge of mothers regarding management and prevention of respiratory tract infections.
- Studies related to effectiveness of planned teaching programme on knowledge of mothers regarding respiratory tract infections.

## 5. Methodology

Research methodology is a way to systematically solve the research problem. Research methods are the techniques used by the researcher to structure a study, gather & analyze the information relevant to the research questions.<sup>9</sup>

**Research approach**

In view of the nature of the problem under study and to accomplish the objectives of the study, quantitative approach was found to be appropriate.

**Research Design**

Pre Experimental One Group Pre Test Post Test Design.

**Sample size & technique**

60 mothers of under 5 children who were admitted in selected wards (pediatric medicine and pediatric surgery) of SKIMS hospital Srinagar by Purposive sampling technique.

**Method of data collection and tool**

Self structured Interview schedule.

**Data Analysis**

The data was analyzed by descriptive and inferential statistics

**6. Result**

**Section I:** Description of demographic variables of study subjects.

**Section II:** Assess the knowledge of study subjects regarding management and prevention of respiratory tract infections.

- 1) Comparison of pre & post test mean knowledge scores of study subjects regarding management and prevention of respiratory tract infections.
- 2) Comparison of pre & post test level of knowledge score (inadequate, moderate, adequate) of study subjects regarding management and prevention of respiratory tract infections.
- 3) Area-wise enhancement of mean % age knowledge scores of study subjects regarding management and prevention of respiratory tract infections.
- 4) Comparison of correct responses as per the items in pre test and post test knowledge scores of study subjects regarding management and prevention of RTIs .

**Section III:** Association between pre test knowledge scores of study subjects with selected demographic variables.

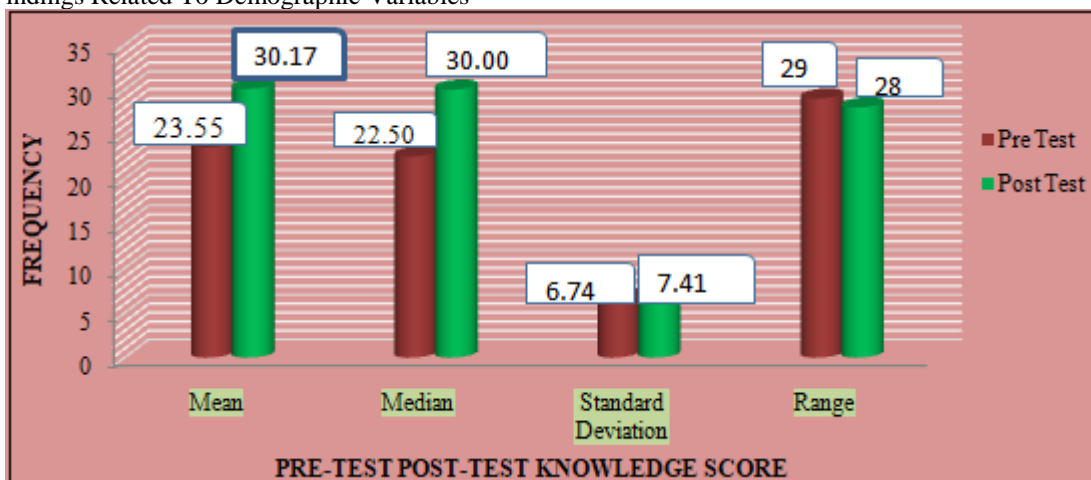
**Section I:** Findings Related To Demographic Variables

**Table 1:** Frequency and percentage distribution of Study subjects according to their demographic variables, N=60

Demographic Variables	Category	Frequency	Percentage
Age	Below 20	0	0
	21-25	4	6.7
	26-30	30	50
	31-35	22	36.7
	36-40	4	6.7
Mothers Education	Above 40	0	0
	Illiterate	7	11.7
	Middle Pass	6	10
	Secondary	16	26.7
	Higher Secondary	14	23.3
No. of under five children	Graduate	13	21.7
	P.G and above	4	6.7
	1	29	48.3
	2	31	51.7
	3	0	0
Monthly family income	4 and more	0	0
	< 15,000	11	18.3
	15000-30000	30	50.0
Type of family	> 300000	19	31.7
	Nuclear	25	41.7
	Joint	35	58.3
Residence	Extended	0	0
	Urban	19	31.7
	Rural	41	68.3
Mothers Occupation	House wife	42	70.0
	Government employee	16	26.7
	Private employee	2	3.3

**Section II: (a)** Analysis and Interpretation of Knowledge of Study Subjects Regarding Management and Prevention of Respiratory Tract Infections among Mothers of Under 5 Children, N=60

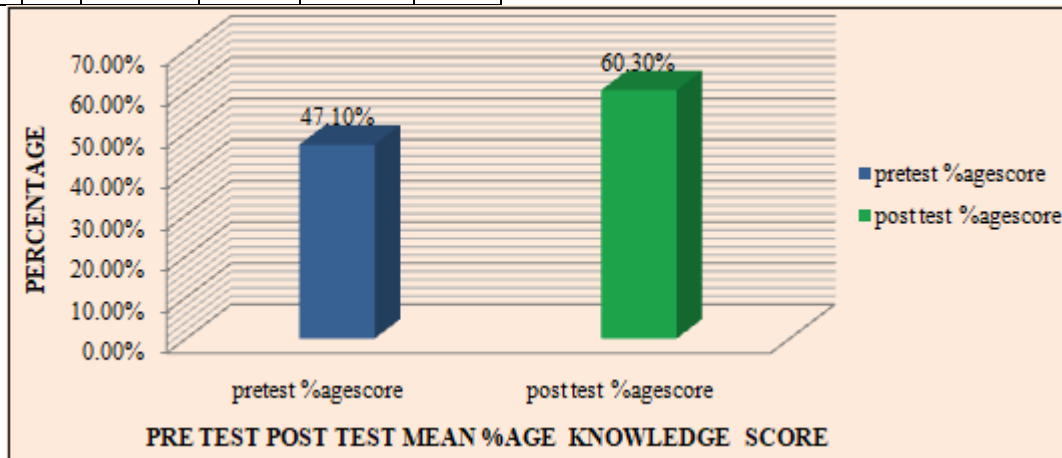
	Pre Test Score	Post Test Score
Mean	23.55	30.17
Median	22.50	30.00
Mode	24	32
Std. Deviation	6.746	7.418
Range	29	28
Minimum	12	18
Maximum	41	46



(b) Comparison of Pre and Post Test Mean %Age Knowledge Scores of Study Subjects Regarding Management and Prevention of Respiratory Tract Infections, N=60

	score	(%)	Deviation	Difference	
Pre test score	23.55	47.1 %	6.74	13.2	≤0.001
Post test score	30.17	60.3 %	7.41		

Group	Mean	Mean score	Standard	Mean	P Value
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**Section III-** Association between Pre –Test Knowledge Scores Of Study Subjects With Selected Demographic Variables, N=60

Variables	Category	Freq	Pretest Knowledge			df	Chi Sq. Test $\chi^2$	P Value
			Inadequate	Moderate	Adequate			
Age	21-25	4	1	3	0	6	10.368	0.110 NS
	26-30	30	23	5	2			
	31-35	22	15	4	3			
	36-40	4	4	0	0			
Mothers Education	Illiterate	7	7	0	0	10	93.235	0.000 Sig
	Middle Pass	6	6	0	0			
	Secondary	16	16	0	0			
	Higher Secondary	14	13	1	0			
	Graduate	13	1	11	1			
No. of under five children	1	29	19	6	4	2	2.317	0.314 NS
	2	31	24	6	1			
Monthly family income	< 15,000	11	10	1	0	4	10.024	0.040 Sig
	15000-30000	30	24	5	1			
	> 300000	19	9	6	4			
Type of family	Nuclear	25	19	4	2	2	0.461	0.794 NS
	Joint	35	24	8	3			
Residence	Urban	19	9	6	4	2	9.552	0.008 Sig
	Rural	41	34	6	1			
Mothers Occupation	House wife	42	34	7	1	4	11.838	0.019 Sig
	Government employee	16	9	4	3			
	Private employee	2	0	1	1			

**Note:** N.S–Not significant.  
S\* -Significant at  $p \leq 0.05$  level

The data presented in Table revealed that significant association was found between Monthly family income ( $p \leq 0.040$ ), Mothers Education ( $p \leq 0.000$ ) Residence ( $p \leq 0.008$ ) and Mothers occupation ( $p \leq 0.019$ ) of study subjects with their pre-test knowledge scores; While as no association was found between Age, Number of under 5 children and Type of family of study subjects with their pre-test knowledge scores ( $p \geq 0.05$ ).

## 7. Conclusion

The findings of the study concluded that the Planned teaching programme on management and prevention of respiratory tract infections was effective in improving the knowledge level of the mothers of under 5 children. The present study shows that Monthly family income, Mothers Education, Residence, and Mothers occupation shows association with knowledge while as no association was found between Age, Number of under 5 children and Type

of familyof study subjects with their pre-test knowledge scores.

## 8. Recommendations

On the basis of the findings of present study the following recommendations have been made:

- 1) A similar study can be conducted on a large sample in order to draw more definite conclusions and generalizations.
- 2) A similar study can be replicated on large sample with different demographic characteristics.
- 3) A quasi-experimental study can be conducted with control group.
- 4) A similar study can be recommended by using different method of teaching.

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