

A Study to Assess the Knowledge on Prevention and Management of Acute Respiratory Tract Infection among Mother of under Five Children, Attending Medical Paediatric OPD in JIPMER Hospital, Puducherry

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Abstract

Background and objective: The purpose of the study was to assess the knowledge on prevention and management of acute respiratory tract infection among mothers of under five children, attending Paediatric medical OPD of Jipmer, Puducherry.

Material and Methods: A cross sectional design was used in the study. Convenience sampling technique was used to select 100 samples. Structured questionnaire was used to collect the data. Descriptive statistics and inferential statistics were used to summarise the data.

Results: Only 5% of mothers had adequate knowledge. 48% had inadequate knowledge and 47% had moderately adequate knowledge.

Conclusion: The study concluded that adequate health education is needed for mothers and this will help to reduce morbidity and mortality among children.

Keywords: Knowledge; Acute Respiratory Infection; Mothers of Under Five Children.

Introduction

Park (2012) expressed that Acute Respiratory Tract Infection is one of the major causes of death among under-five children. On an average, children below 5 years of age suffer about 5 episodes of Acute respiratory tract infection per child per year. For children Acute respiratory tract infection is responsible for 30-50 percent of visits to health facilities and for about 20-40 percent of admissions to hospitals. It is also a leading cause of disabilities including deafness as a sequelae of otitis media.

Gupta (2010) quoted that Acute respiratory tract infection is classified into (i) acute upper respiratory tract infection (AURI) which includes common cold, pharyngitis, tonsillitis and (ii) acute lower respiratory tract infection (ALRI) which includes croup, bronchitis, bronchiolitis and pneumonia.

Sundarlal (2008) stated that Acute Respiratory

Tract Infection like whooping cough and diphtheria can be prevented by timely immunization. The other respiratory tract infections and pneumonia should be treated at the nearby facility. Rapid breathing and difficulty in breathing can be recognized by mother themselves and by health workers. If these gets treated at the earliest; many children can be saved from death.

Acute respiratory tract infection is mostly caused by both viruses and bacteria. Viral agents accounts for 90% of upper respiratory tract infection (URIs), however most of this infections do not results in fatal severe disease, they are mild and self-limited illness. While bacteria pulmonary infections are common in developing countries associated with a greater risk of death.

In order to reduce the mortality and morbidity among the future citizens the status of the knowledge on prevention and management of Acute respiratory infection was assessed among mothers.

Methodology

A cross sectional design was used in the study. The study consisted of 100 mothers with under-five children.

Inclusion Criteria

Included mothers of under-five children who attend medical paediatric OPD in Jipmer and who can understand and speak tamil and those who are willing to participate.

Exclusion Criteria

Included mothers of under-five children who had critically ill children.

Sampling: Convenience sampling technique was used.

Instruments: Subject data sheet had a set of questions that was oriented to the demographic data of subjects. Knowledge was assessed by using a questionnaire comprised of 20 questions.

Data Collection Procedure

Data collection was started after getting ethical committee permission & permission from hospital authority. Informed consent was taken from study participants. Subject data sheet information and knowledge on prevention & management of ARI was

collected by the investigator through structured interview schedule. The time duration to complete the questionnaire was 25-30 minutes.

Ethical Considerations

Research proposal was approved by Institute Ethical Committee and permission from hospital authority was obtained. Informed consent was taken from study participants. Assurance was given to the subjects that anonymity and confidentiality will be maintained.

Data Analysis

The distribution of background variables was expressed as frequencies and percentage. The knowledge levels were expressed as frequencies & percentage. The correlation of mean knowledge score with different variables were evaluated using the Kruskalwallis test.

Results

- Of the 100 women participated in the study, 60% were between 18-25 years. As for as religion is concerned, most of them (90%) were hindus.
- Regarding residence, 73% were from rural, with regard to family system 50% were from nuclear family.

Table 1: Level of knowledge of mother

(N=100)

Knowledge Score	Frequency	Percentage	Level of Knowledge
0-50%	48	48%	Inadequate
51-75%	47	47%	Moderately adequate
76-100%	5	5%	Adequate

Table 2: Association of knowledge score with demographic variables

(N=100)

S. No.	Demographic Variables	Frequency	Mean	Standard deviation	P Value	T or F value
1.	Age					
	18-25 years	60	10.2	2.9	0.84	0.94
26-40 years	40	10.8	2.8			
2.	Number of children				0.79	0.35
	One	45	10.5	3.0		
	Two	37	10.5	2.8		
	Three	16	10.3	2.9		
	Four and above	2	10	4.2		
3.	Educational Status				0.40	1.00
	Illiterate	12	10.7	2.2		
	Primary School	41	10.5	2.8		
	Secondary school	38	9.5	2.7		
	Graduate	9	14	2.1		

4.	Occupation					
	Working women	9	10.7	4.2	0.17	1.83
	Housewife	70	10.4	2.9		
	Labourer	21	10.5	2.4		
	Others	Nil	Nil	Nil		
5.	Religion					
	Hindu	90	10.3	2.9	0.42	0.88
	Christian	7	12.1	3.2		
	Muslim	3	10.7	1.2		
	Others	Nil	Nil	Nil		
6.	Type of family					
	Joint family	50	10.5	2.7	0.26	1.38
	Nuclear family	50	10.4	3.1		
7.	Domicile					
	Urban	27	11.7	2.8	0.89	0.94
	Rural	73	10	2.8		
8.	Monthly Income					
	<1000	37	9.7	2.9	*	4.35
	1000-5000	49	10.9	2.4	0.0072	
	6000-10,000	8	10.5	3.9		
	10,000 and above	6	11.3	4.7		

*P<0.05

Table 3: Aspect of Good knowledge N = 100

Statement	Frequency	Percentage
Type of food to be given to children during ARI	89	89
Personnel to consult for Medication	81	81
Season in which ARI is common	79	79
Management of Nasal block	81	81

Table 4: Aspect of poor knowledge N = 100

Statement	Frequency	Percentage
Mode of ARI transmission	20	20
Management of common cold	29	29
Management during cough	17	17
Home remedy for sore throat	12	12

- The educational status of the women revealed that 41% had Primary education. Regarding the occupational status, the analysis showed that 70% of the participants were housewives.
- Only 5% had adequate knowledge and 48% had inadequate knowledge. There was a significant association between the mothers knowledge and monthly income and there was no significant association with other demographic variables.

Table 1 shows that 48% of mothers of under-five children were having inadequate knowledge. 47% had moderately adequate knowledge and 5% had adequate knowledge.

Table 2 shows that there was a significant association between the mothers knowledge and monthly income and there was no significant association with other demographic variables.

Discussion

This study findings showed that 48% had inadequate knowledge, 47% had moderately adequate knowledge and only 5% had adequate knowledge.

The above findings were supported by the following study.

Valdes et al conducted a study among mothers to identify their knowledge, attitude and practices concerning respiratory infections in Havana. Two groups of mothers were interviewed. Mothers of children seen in a polyclinic in the province of Havana (n=221) and mothers whose children were hospitalized in the respiratory unit of a paediatric hospital in the city of Havana (n=200).

The results showed that the mothers of hospitalized children had less knowledge than mothers who attended the polyclinic.

Nursing Implications

- Nurses in OPD and wards, in addition to treating the patient should provide health education to all the mothers.
- Adequate pamphlets should be made and this should be distributed to all.
- Nurses should participate in video session on health messages and make sure that they are telecasted in OPD's and wards regularly.

Conclusion

The study concluded that only 5% of the mothers had adequate knowledge. To rectify this problem, adequate information should be disseminated to the mothers to reduce morbidity and mortality among children.

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