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Knowledge Regarding Acute Respiratory Infection and Its Management among Mothers of Under Five Children Attending Pediatric OPD of Teaching Hospital, Birgunj

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ABSTRACT

Background: Respiratory infection account for the majority of acute illnesses in children.[1] Acute respiratory infections (ARIs) continue to be the leading cause of acute illnesses worldwide and remain the most important cause of infant and young children mortality, accounting for about two million deaths each year.[2] This research study was conducted to find out the knowledge regarding Acute respiratory infection and its management among mothers of under five children attending OPD of Teaching Hospital, Birgunj, Parsa.
Methods: A Descriptive cross sectional research design was used and a total of 116 mothers of under five children attending Pediatric OPD of National Medical College and Teaching Hospital were selected by using Non probability purposive sampling technique. Data was collected by using semi-structured knowledge questionnaires.
Results: The study results show that 60.3% of the respondents had inadequate knowledge and 39.7% of the respondents had adequate knowledge regarding oral Acute respiratory infection and its management. There is a significant association found between level of knowledge and previous source of information regarding acute respiratory infection and its management.
Conclusion: The research study concluded that the knowledge regarding Acute respiratory infection and its management among mothers of under five children attending OPD of Teaching Hospital was not satisfactory and had to improved significantly. Hence, education programmes regarding prevention and management of ARI should be organized and implemented in order to increase awareness among mothers of under five children.

Keywords: Acute respiratory infection, Knowledge, Management, Mothers, Under five children

INTRODUCTION

Respiratory illnesses are common in children under five years of age. Most children will develop three to eight colds or respiratory illnesses in a year. Children are more susceptible to cold because they have not yet developed resistance to many types of viruses.[1] Acute respiratory infection is acute inflammatory changes in any part of respiratory tract, from nasal mucosa to the alveoli with an alteration in respiratory physiology.[3]

The incidence of ARIs in children aged less than 5 years is estimated to be 0.29 and 0.05 episodes per child-year in developing and industrialized countries, respectively. [2]
About 13% of inpatient death in pediatric wards is due to ARI. The proportion of death due to ARI in the community is much higher as many children die at home.[4]

ARI contributes to about 75% of the child mortality in developing countries. Evidence shows that much of the mortality and morbidity from ARI is preventable. Most infections are caused by viruses, Respiratory syncytial virus (RSV) is the common virus. Other agents include group

A Beta hemolytic streptococci, staphylococci, Haemophilus influenza, Chlamydia trachomatis, Mycoplasma and pneumococci.[5]

More than 12 million children die every year due to acute respiratory illness in developing countries before they reach their fifth birthday, many during the 1st year of life.[6]

Mother is the primary caregiver for the child in almost all societies.[7] A significant determinant of child health is the knowledge of the child's mother toward the diseases. Hence, the purpose of this study is to identify the knowledge regarding Acute respiratory infection among the mothers of under five children so as to implement the various awareness programmes regarding prevention and management of ARIs.

MATERIALS AND METHODS

Descriptive cross-sectional research design was used for the study to achieve the study objectives. The population included the mothers of under five children attending Pediatric OPD of National Medical College and Teaching Hospital, Birgunj. Non probability Purposive sampling technique was used for sample selection and the total sample size of 116 mothers were selected from Pediatric OPD of National Medical College and Teaching Hospital, Birgunj. The researcher used semi-structured knowledge questionnaire to collect the data. The tool was developed in English language and then translated into Nepali and Bhojpuri language. The content validity of the research instrument was ascertained by extensive literature search, consultation with research advisors, a group of professionals from National Medical College Nursing Campus including other faculty members and subject experts before the data collection. The reliability of tool was determined by pre-testing it in 12 samples (10% of total sample) and was tested by using Split half method and the reliability of the tool was found 0.86 for knowledge items. The researcher herself collected the data from 16th February 2020 to 20th March 2020. The data was collected and recorded systematically and was organized in a way that facilitated computer entry.

RESULTS

The collected data were analyzed by using descriptive and inferential statistics with the support of SPSS version 23 at 0.05 level of significance. The results have been organized and presented as given below:

Section A: Description of the demographic characteristics of the respondents

The analyzed data revealed that majority 51.7% of the respondents were of 20-25 years of age and 12.1% were of 31-35 years of age. Most 35.4% of respondents were having child of 0-1 years of age and least 22.4% of the child were of age group 4-5 years. Regarding religion, majority 75.0% belongs to Hindu religion whereas least 4.3% were from Christian religion. Regarding educational qualification of mother, majority 44.8% of the respondents were having illiterate and least 4.3% were having qualification of secondary education and above. Majority 56.9% of the respondents belongs to Nuclear family and only 12.1% belongs to extended family. Regarding area of residence, majority 61.2% resides in rural area whereas 38.8% resides in urban area. Majority 68.1% of the respondents were having previous exposure to information regarding ARI and its management from Radio/ Television/ Internet.

Section B: Knowledge of respondents regarding Acute respiratory infection and its management

Table 1: Frequency and percentage of level of knowledge regarding Acute respiratory infection and its management among mothers of under five children n=116

Level of knowledge	Frequency	Percentage (%)
Inadequate knowledge (>50 %)	70	60.3
Adequate knowledge (≤ 50)	46	39.7
	116	100

Section C: Association between level of knowledge regarding Acute respiratory infection and its management among mothers of under five children and socio-demographic variable of respondents

Table 2: Association between level of knowledge and socio-demographic variable of respondents n=116

Variables	Frequency of level of knowledge		χ^2	df	p-value
	Inadequate	Adequate			
Age of the mother (completed years)					
20-25 years	35	25			
26-30 years	26	16	0.235	2	0.088
31-35 years	9	5			
Age of the child (completed years)					
0-1 years	25	16			
2-3 years	28	21	0.493	2	0.782
4-5 years	17	9			
Religion					
Hindu	56	31			
Muslim	7	11	4.062	3	0.255
Christian	3	2			
Others	4	2			
Educational qualification of mother					
Illiterate	30	22			
Able to read and write	27	19	5.263	3	0.154
Primary education	8	5			
Secondary education and above	5	0			
Type of family					
Nuclear	41	25			
Joint	22	14	0.722	2	0.697
Extended	7	7			
Area of residence					
Urban	31	14			
Rural	39	32	2.243	1	0.134
Previous exposure to any source of information					
Newspaper/ Magazine/ Posters	13	1			
Radio/ TV/Internet	43	36	7.342	2	0.025
Family/ Friends/Relatives/ Health workers	14	9			

*P < 0.05 statistically significant values

Data presented in table 2 shows that there is no significant association between level of knowledge regarding Acute Respiratory infection and its management with age of the mother, age of the child, religion, mother's education , family type and area of residence whereas a significant association was found between level of knowledge regarding acute respiratory infection and its management with previous source of information regarding acute respiratory infection with p- value 0.025 at 95% level of significance.

DISCUSSION

Regarding socio-demographic characteristics, majority 51.7% of the respondents were of 20-25 years of age. Most 35.4% of respondents were having child of 0-1 years of age. Regarding religion and educational qualification, majority 75.0% belongs to Hindu religion and 44.8% of the respondents were illiterate. Majority (56.9%) of the respondents belongs to Nuclear family and 61.2% resides in rural area. Majority (68.1%) of the respondents were having previous exposure to information regarding ARI and its management from Radio/ Television/ Internet.

The study results show that 60.3% of the respondents had inadequate knowledge and 39.7% of the respondent had adequate knowledge regarding Acute respiratory infection and its management among mothers of under five children. The present study finding is consistent with the cross sectional study of Gyawali M.(2016) which was conducted to assess the Knowledge on acute respiratory infection among Mothers of under five year children of Bhaktapur District, Nepal, which revealed that 83.9% of respondent had satisfactory level of knowledge and 10.7% had poor level of knowledge and only 5.5% had excellent level of knowledge regarding ARI.[2]

The present study shows that there is no significant association between level of knowledge regarding Acute Respiratory infection and its management with age of the mother, age of the child, religion, mother's education, family type and area of residence whereas a significant association was found between level of knowledge regarding acute respiratory infection and its management with previous source of information regarding acute respiratory infection with p- value 0.025 at 95% level of significance.

CONCLUSION

Acute respiratory infections (ARIs) continue to be the leading cause of acute illnesses worldwide and remain the most important cause of infant and young children mortality, accounting for about two million deaths each year.[2] The present study concluded that the knowledge regarding ARI and its management among mothers of under five children attending Pediatric OPD of selected hospital was found inadequate, which directly implies on the increasing incidence of ARI among under five children, health status and survival of the child.

Most of the morbidity due to acute respiratory diseases is such that, they can be adequately managed at home. Therefore, comprehensive health education is utmost important on the etiology or causation, prevention and management of ARI in order to increase the capability of the mother and families to identify the danger signs of acute respiratory diseases in children and to encourage appropriate and early care seeking behaviors and to prevent them from further complications thus in turn controlling the rates of morbidity and mortality among under five children.

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