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AWARENESS REGARDING ACUTE RESPIRATORY INFECTIONS AMONG THE MOTHERS OF UNDER FIVE YEAR CHILDREN OF KALIKA MUNICIPALITY-5, CHITWAN

Parita Shrestha*[1], Sushmita Shrestha[2] and Alisha Joshi[3]

[1]Department of Child Health Nursing, School of Nursing, Chitwan Medical College, Bharatpur Chitwan, Nepal.
[2]Department of Nursing, Chitwan Medical College-Teaching Hospital, Bharatpur Chitwan, Nepal.
[3]Department of Mental Health Nursing, School of Nursing, Chitwan Medical College, Bharatpur Chitwan, Nepal.

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***Corresponding Author**
Parita Shrestha
Department of Child Health Nursing, School of Nursing, Chitwan Medical College, Bharatpur Chitwan, Nepal.

ABSTRACT

Background: Acute Respiratory Infections has become a major killer disease worldwide under 5 years of age children. It is continuing to be the leading cause of acute illnesses worldwide and remains the most important cause of under five children morbidity and mortality in developing countries like Nepal. The study was carried out with the aim to find out the awareness regarding Acute Respiratory Infections among the mothers of under five children of Kalika Municipality, Chitwan. **Methods:** A descriptive, cross sectional research design was used to find out the level of awareness regarding acute respiratory tract infections among the mothers of under five children at Kalika Municipality-5, Chitwan. A total of 118 mothers of under five children were selected by using non-probability, purposive sampling technique. Structured face to face interview schedule was used for data collection from dated Dec 14th 2020 to Jan 10th 2021 and data were analyzed by using descriptive statistics and inferential statistics. **Results**: More than half of the respondents (56.8 %) were above and equal to 25 years of age and most of them (94.1%) follow hindu religion whereas only 59.3% of respondents' had completed secondary level education, while more than two third (75.4%) were homemaker. The study also found that only 35.6% of the respondents had adequate level of awareness regarding acute respiratory infections and there was no association between the level of awareness and demographic variables. This finding of the study creates a need to aware the mothers about acute respiratory infection through awareness program.

KEYWORDS: Awareness, Acute Respiratory Infections, Mothers, Underfive children.

INTRODUCTION

Acute Respiratory Infections (ARIs) is becoming the leading cause of acute illnesses worldwide and remains the most important cause of under five children morbidity and mortality in developing countries like Nepal. Pneumonia is the single largest infectious cause of death in children worldwide. Pneumonia affects children and families everywhere, but is most prevalent in South Asia and sub-Saharan Africa.[1] Pneumonia is the most serious outcome of acute respiratory infection (ARI) and kills more children than any other infectious disease, claiming the lives of over 800,000 children under five every year, or around 2,200 every day. Globally, there are over 1,400 cases of pneumonia per 100,000 children, or 1 case per 71 children every year, with the greatest incidence occurring in South Asia (2,500 cases per 100,000 children) and West and Central Africa (1,620 cases per 100,000 children).[2] Despite of the global efforts to develop and promote the health of underfive children the mortality and morbidity of underfive children in developing countries like Nepal is still high which can be prevented through simple interventions, like raising awareness to the caregivers i.e., mothers of underfive children and treated with low-cost, low-tech medication and care.

MATERIALS AND METHODS

Descriptive, cross-sectional study design by using non-probability purposive sampling technique was used to collect the data on awareness regarding ARI among the mothers of under five children. This study was conducted in Kalika Municipality-5, Chitwan. The population of the study were the mothers of under five children residing in Kalika-5, Chitwan. A total number of 118 mothers of underfive children were selected as the participants for the study. Data was collected after obtaining ethical clearance from Chitwan Medical College-Institutional Review Committee (Ref:CMC-IRC/077/078-134), and administrative approval from the ward office Kalika-5. Verbal informed consent was taken from each

respondent by explaining the purpose and significance of the study before data collection. The tool was translated into Nepali language for convenience. Data was collected by using structured questionnnaire through face to face inteview schedule to at least 4-5 respondents per day within period of 4 Weeeks (Dec 14th 2020 to Jan 10th 2021) ans was analyzed through descriptive and inferential statistics. All the data were coded and analyzed in Statistical Package for Social Science.

RESULTS

Table 1 shows that out of 118 respondents, 56.8% respondents' were above and equal to 25 years, majority (94.1%) follows Hindu religion, 60.2% were Brahmin/ Chhetri and 57.6 % belonged to joint family. Cent percent of respondents' were literate among them more than half (59.3%) of respondents' had completed secondary level, (75.4 %) were homemaker, (55.9%) had 1 child, and 59.3 % of respondents' age of youngest child is ≥24 whereas, majority (65.3%) of respondents' child had no history of ARI. Regarding annual income, 96.6% of respondent's income is sufficient for a year.

Table 1: A: Socio-demographic Characteristics of Respondents.

n=118

Variables	Number	Percentage
Age (in completed years)		
< 25	51	43.2
≥ 25	67	56.8
Median= 25, IQR- 75-25 Min= 16, Max= 39		
Religion		
Hinduism	111	94.1
Non- Hindu	7	5.9
Ethnicity		
Brahmin/ Chhetri	71	60.2
Newar	3	2.5
Janjati	44	37.3
Types of family		
Nuclear	50	42.4
Joint	68	57.6
Educational level		
Basic level (upto 8 class)	33	28.0
Secondary level (9-12)	70	59.3
Bachelor and above	15	12.7
Occupation		
Homemaker	89	75.4
Agriculture	5	4.2
Daily wages/ labor	17	14.4
Business	7	5.9
Number of child		
One	66	55.9
Two	44	37.3
Three	6	5.1
Four	2	1.7
Age of youngest child (in completed months)		
< 24	48	40.7
≥ 24	70	59.3
Median = 24, IQR (Q3-Q1)=48-14=34 , min=1, max=54		
Child suffering from ARI		
Yes	41	34.7
No	77	65.3
Annual income of family		
Sufficient for year	114	96.6
Insufficient	4	3.4

Table 1B: Socio demographic Characteristics of Respondents' Husband.

n=118

Variables	Number	Percentage
Educational level of husband		
Basic level (upto 8 class)	40	33.9
Secondary level (9-12)	56	47.5
Bachelor and above	22	18.6
Occupation of husband		
Business	14	11.9
Agriculture	26	22.0
Service	33	28.0
Daily wages/ labor	26	22.0
Foreign employment	19	16.1

Table 1B reveals that cent percent of the respondents' husband were literate among them 47.5% had completed secondary level.

Table 2: Respondents' Sources of Information regarding ARI.

n= 118

Sources of Information	Number	Percentage
Family/ friends/ relatives	116	98.3
Neighbor	102	86.4
Health workers	80	67.8
Radio/ TV/ internet	84	71.2
Newspaper/ magazine	6	5.1

Table 2 reveals that 98.3% of the respondents received information on ARI from family/ friends/ relatives and 5.1% received from newspaper/ magazine.

Table 3: Respondents' Awareness Regarding ARI.

n = 118

Statements	Correct Response	
	Number	Percentage
ARI means infection of respiratory system	94	79.7
Lungs is mostly affected by ARI	109	92.4
Pneumonia is the most common respiratory tract infection in children	108	91.5
Micro-organism, exposure to cold, dust is the cause of ARI	98	83.1
Neonate is more common age group for ARI	43	36.4
Child with malnutrition is more likely to get ARI	112	94.9
Wheezing, cough, cold is the most common sign and symptoms of ARI	116	98.3
ARI is transmitted through air from one person to other	84	71.2
Home remedies used for ARI: give boiled water mixed with turmeric powder, ginger, tulsi and honey	118	100.0
Grunting, nasal flaring, convulsions, chest in-drawing are the danger signs of ARI	116	98.3
High fever, fast breathing, wheezing are the signs indicate to seek immediate medical help	114	96.6
Keep the child away from smoke, dust and dirt, seasonal clothing, proper nutrition are the measures to prevent from ARI	114	96.6
Pneumococcal vaccine prevents ARI	18	15.3

Table 3 represents respondent's awareness on acute respiratory infections, among a total of 118 respondents' 79.7% of respondents' answered meaning of ARI correctly. Likewise, 92% answered lungs mostly affected by ARI, 91.5% of respondents' answered the most common respiratory tract infection in children. Regarding the cause of ARI 83.1% of respondents' answered correctly. 36.4% of respondents' answered correctly on age group more common for ARI. Concerning condition where child more likely to get ARI, 94.9% of respondents' gave the correct response. Regarding sign and symptoms of ARI, 98.3% answered correctly. More than half of respondents' (71.2%) gave correct response on mode of transmission of ARI. Cent percent of the respondents' gave correct answered on home remedies of ARI. Concerning on danger signs, 98.3% of participants answered correctly. 96.6% of respondents' answered the signs to seek immediate medical help whereas only 15.3% knew pneumococcal vaccine as a preventive measures for ARI.

Table 4: Respondents' Level of Awareness Regarding ARI.

n=118

Level of Awareness	Number	Percentage
Adequate ≥ 11	42	35.6
Inadequate <11	76	64.4
Total	**118**	**100.0**

Table 4 shows that more than half 64.4 % respondents' were inadequately aware regarding ARI and 35.6% had adequate level of awareness regarding ARI.

Table 5: Association between Respondents' Level of Awareness Regarding ARI and Selected Demographic Variables.

n = 118

Variables	Level of Awareness		X^2 value	*p* value
	Inadequate No (%)	Adequate No (%)		
Age of mother				
< 25	14(29.2)	37(70.8)	0.1458	0.227
≥ 25	28(40.0)	39(60.0)		
Median= 25, IQR- 75-25 Min= 16, Max= 39				
Educational level of respondent				
Upto secondary	38(36.9)	65(63.1)	-	0.569*
Bachelor and above	4(26.7)	11(73.3)		
Educational level of husband				
Upto secondary	32(33.3)	64(66.7)	-	0.327*
Bachelor and above	10(45.5)	12(54.5)		
Occupation of respondent				
Employee	4(23.5)	13(76.5)	-	0.412*
Self-employee	38(37.6)	63(62.4)		
Occupation of husband				
Employee	30(38.5)	48(61.5)	0.826	0.363
Self-employee	12(30.0)	28(70.0)		
Number of children				
1	20(30.3)	46(69.7)	1.828	0.176
2 or more	22(42.3)	30(57.7)		
Age of children				
< 24	14(29.2)	34(70.8)	1.458	0.227
≥ 24	28(40.0)	42(60.0)		
Child ever suffered from ARI				
Yes	14(34.1)	27(65.9)	0.57	0.811
No	28(36.4)	49(63.6)		

Level of significance < 0.05 ***** Fisher's Exact Test***

Table 5 depicts no statistical significant association between level of awareness regarding ARI and selected variables.

DISCUSSION

The findings of the present study reveals that 43.2% of the respondents' were below 25 years of age, which is supported by findings of another study conducted Malla (2020), which revealed that 51.7% of mothers were from below 25 years of age.[3] Possible reason could be as both of the studies were conducted in same country with similar sociocultural background.

Concerning the level of awareness, present study found that only 35.6 % respondents' were adequately aware regarding ARI whereas contradictory findings was reported from the study conducted by Kumar, Hashmi, Soomro and Ghouri, (2012), showed that 72.0% had adequate knowledge about ARI.[4] This variation might be because of different population setting i.e it was conducted in pediatric OPD. However, Malla (2020) found 39.7% of mothers had adequate level of knowledge on ARI which is consistent with the findings of the present study.[3] The possible reasons could be because of difference in the educational qualification of mothers i.e in Malla's study 44.8% mothers were illiterate and in the present study none of the mothers were illiterate.

The study found no statistical significant association between the level of awareness and socio-demographic variables which is consistent with the findings of another

study conducted by Rajan, Mathew and Raj, (2016), which shows no statistical significant association with age of mother, occupation of mother, education of mother and number of children.[5]

CONCLUSION

Based on finding of the study, the conclusion has been drawn. The study findings revealed that more than half of the mothers have inadequate level of awareness. Among the awareness related questions, respondents' have less knowledge about common age group for ARI, transmission of ARI, and vaccine for prevention of ARI. None of the variables were found to be associated with level of awareness. Hence, it is necessary to create awareness among mothers regarding prevention of ARI, so that healthy future builders and healthy nation could be developed.

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REFERENCES

1. World Health Organization. WHO fact sheets Pneumonia fact sheet. Retrieved from https://www.who.int/news-room/fact-sheets/detail/pneumonia, 2019.
2. The United Nations Children's Fund (UNICEF). Pneumonia. Retrieved from https://data.unicef.org/topic/child-health/pneumonia/, 2018.
3. Malla C. Knowledge regarding acute respiratory infection and its management among mothers of under five children attending pediatric OPD of Teaching Hospital, Birgunj. International Journal of Health Science Research, 2020; 10(7): 112-115. Retrieved from https://www.ijhsr.org/IJHSR_Vol.10_Issue.7_July2020/19.pdf.
4. Kumar R, Hashmi A, Soomro JA, Ghouri A. Knowledge Attitude and Practice about Acute Respiratory Infection among the Mothers of Under Five Children Attending Civil Hospital Mithi Tharparkar Desert. Primary Health Care: Open Access, 2012; *2*(1). doi:10.4172/phcoa.1000108.
5. Rajan SC, Mathew A, Raj KA. Awareness of mother regarding respiratory tract infections among children. Global Journal research, 2016; 5(7): 133-134.