



**A STUDY TO ASSESS THE KNOWLEDGE AMONG MOTHERS REGARDING
PREVENTION AND MANAGEMENT OF COVID-19 IN CHILDREN IN SELECTED
HOSPITAL AT KOLLAM DISTRICT**

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ABSTRACT

The research project undertaken was "A study to assess the knowledge among mothers regarding prevention and management of COVID-19 in children in selected hospital at Kollam district. The objectives of the study were to assess the knowledge of mothers regarding prevention and management of COVID-19 in children, to find out the association between knowledge regarding prevention and management of COVID-19 in children with selected demographic variables, to develop an informational booklet regarding prevention and management of COVID-19 in children. The selected demographic variables were age, education, occupation, number of children, gender of children, monthly income, type of family, previous knowledge about COVID-19 infection. Non experimental research design was adopted for the study. The study was conducted among 200 mothers in selected hospital at Kollam district in order to assess the knowledge of mothers regarding prevention and management of Covid 19 in children. The study sample was selected by non-probability convenient sampling technique. The tool used for the data collection consisted of demographic performa and knowledge questionnaire. The analysis of the data were done by descriptive and inferential statistics. The findings of the present study revealed that there is an association of knowledge with demographic variable, previous knowledge about COVID-19 infection, and no association with age, occupation, number of children, gender of children, type of family, monthly income.

KEYWORDS: Assess, knowledge, structured questionnaire, preventive measures of COVID-19.

INTRODUCTION

Coronaviruses are a family of viruses that can cause respiratory illness in humans. They are called "corona" because of crown-like spikes on the surface of the virus. Severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS) and the common cold are examples of coronaviruses that cause illness in humans. COVID - 19 is a respiratory disease caused by SARS-CoV- 2, a corona virus discovered in 2019. The virus spreads mainly from person to person through respiratory droplets produced when an infected person coughs, sneezes, or talks. some people who are infected may not have symptoms. For people who have symptoms, can range from mild to severe. corona viruses are a family of viruses that can cause respiratory illness in humans. They are called corona because of crown like spikes on the surface of the virus. Severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS) and the common called are example of corona viruses that cause illness in humans.^[1]

The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing global pandemic of

coronavirus disease 2019 (COVID-19) caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). The virus was first identified in December 2019 in Wuhan, China and was first isolated from three people with pneumonia connected to the cluster of acute respiratory illness cases in Wuhan. As SARS-CoV-2 spread both inside and outside China, it infected people who have had no direct contact with animals. That meant the virus is transmitted from one human to another. It's spreaded in U.S. and become a pandemic now.^[2]

The study is expected to yield a detailed picture of COVID-19 's effect on the overall health of children, dare development and immune responses two infection, and there overall quality of life in the years following infection.

STATEMENT OF PROBLEM

A study to assess the knowledge among mothers regarding prevention and management of COVID -19 in children in selected hospital at Kollam district.

OBJECTIVES

- To assess the knowledge of mothers regarding prevention and management of COVID- 19 in children.
- To find out the association between knowledge regarding prevention and management of COVID-19 in children with selected demographic variables.
- To develop an informational booklet regarding prevention and management of COVID-19 in children.

OPERATIONAL DEFINITION

Assess: refers to determining the knowledge of mothers regarding prevention and management of COVID 19 in children.

Knowledge: In this study, knowledge refers to the correct response of mothers to the structured questionnaire measured in terms of knowledge score which is categorised inadequate, moderate and adequate.

Prevention: refers to the action aimed at eradicating, eliminating or minimizing the impact of COVID 19 in children.

Management: refers to the process that facilitates recommended treatment plans at home for covid 19 in children.

Mothers: women who have children below 12 years of age.

COVID -19: refers to a respiratory disease caused by SARS- CoV-2, a new corona virus discovered in 2019.

Children: refers to an young human being below the age of 12.

ASSUMPTION

Mothers who have children below 12 years old, may have some knowledge regarding prevention and management of COVID-19 in children.

RESEARCH METHODOLOGY

Research approach	Quantitative research design
Research design	Non experimental descriptive research design
Variables	Demographic Variables: Age, occupational status, number of children, gender of children, type of family monthly income, and previous knowledge about COVID -19
Setting of the study	Out- patient departments and pediatric wards of Bishop Benziger hospital, Kollam
Population	Mothers of children visiting Out-patient departments and pediatric wards Of Bishop Benziger hospital, Kollam
Sample	Mothers of children below 12 years of age.
Sample size	:In this study sample consists of 200 mothers
Sampling technique	Convenient Sampling technique

RESULT AND DISCUSSION

The data were tabulated, analyzed and interpreted using descriptive and inferential methods. The data were presented under following heading.

Section I: Description of demographic variables.

Section II: Description of knowledge among mothers regarding prevention and management of COVID 19 in children

Section III: Association between knowledge among mothers regarding prevention and management of Covid 19 in children with selected demographic variables.

The score is interpreted in the following manner:

Adequate	18-27
Moderate	10-17
Inadequate	less than 9

Section I: Description of demographic variables.

Table 1: Age.

SL.NO	AGE	LEVEL OF KNOWLEDGE		
		Adequate	Moderate	Inadequate
1.	< 20 Yrs	6	9	0
2.	21-30 Yrs	42	54	4
3.	31-40 Yrs	37	31	3
4.	40 Yrs	10	4	0

Table 1 shows that out of 100 sample, 7.5% were in the age group of <20 years and 50% were in the age group of 21-30 years and 35.5% were in the age group of 31-40 years, 7% were in the age group of > 40 years.

Table 2: Education of mother.

SL.NO	EDUCATION	LEVEL OF KNOWLEDGE		
		Adequate	Moderate	Inadequate
1.	Primary	5	10	2
2.	SSLC	33	41	3
3.	Degree	47	40	2
4.	Post graduate	10	7	0

Table 2 shows that out of 100 sample, 8.5% had primary education, 38.5% had secondary education, 44.5% had degree and 8.5% had post graduate degree and above.

Table 3: Occupation of mother.

SL. NO	OCCUPATION	LEVEL OF KNOWLEDGE		
		Adequate	Moderate	Inadequate
1.	Jobless	24	45	3
2.	Self employed	42	34	3
3.	Private employed	22	14	1
4.	Govt. employed	7	5	0

Table 3 shows that 36% were unemployed, 39.5% were self employed, 18.5% were private employed, and 6% were Government employed.

Table 4: Number of Children.

SL.NO	NO.OF. CHILDREN	LEVEL OF KNOWLEDGE		
		Adequate	Moderate	Inadequate
1	One	26	38	1
2	Two	46	48	4
3	Three	19	10	2
4	>Four	4	2	0

The table 4 shows that 32.5% have 1 child, 49% having 2 children, 15.5% having 3 children and 3% having >4 children.

Table 5: Gender of Child.

SL.NO	GENDER OF CHILD	LEVEL OF KNOWLEDGE		
		Adequate	Moderate	Inadequate
1	Male	53	48	3
2	Female	42	50	4

The table 5 shows that 52 % having male child and 48% having female child.

Table 6: Income of family.

SL.NO	INCOME OF FAMILY	LEVEL OF KNOWLEDGE		
		Adequate	Moderate	Inadequate
1	<10000	18	27	5
2	10000-30000	35	41	1
3	30000-50000	30	27	1
4	>50000	8	7	0

The table 6 shows out of 200 sample 25% have income of Rs <10000, 38.5% have income between Rs <10001 – 30000, 29% have income between 30001 – 50000 and 7.5% have monthly income of Rs>50000.

Table 7: Previous knowledge.

SL.NO	PREVIOUS KNOWLEDGE	LEVEL OF KNOWLEDGE		
		Adequate	Moderate	Inadequate
1	Yes	44	73	6
2	No	38	38	1

The table 8 shows out of 200 sample 61.5% had previous knowledge regarding COVID 19 and 38.5% had no previous knowledge.

Table 8: Type of family.

SL.NO	TYPE OF FAMILY	LEVEL OF KNOWLEDGE		
		Adequate	Moderate	Inadequate
1	Nuclear	71	53	5
2	Joint	22	41	1
3	Others	2	5	0

The table 9 shows that out of 200 samples 64.5% were from nuclear family, 32% belonged to joint family and 3.5% belonged to other categories.

Section II: Description of knowledge among mothers regarding prevention and management of COVID 19 in children

Table 2: Frequency and percentage distribution of score on knowledge regarding preventive measures of COVID-19.

Score	Range	Frequency	percentage
18-25	adequate knowledge	18	9%
10-17	moderate knowledge	95	47.5%
<9	inadequate knowledge	87	43.5%

Table 2 shows that 9% of people had adequate knowledge regarding preventive measures of COVID-19, 47.5% had moderate knowledge, 43.5% had inadequate knowledge.

Section III

Table 3: Association between knowledge among mothers regarding prevention and management of COVID 19 in children with selected demographic variables.

Sl no.	Variables	Level of knowledge			X ² value	Table value	df	Level of significance
		Adequate	Moderate	Inadequate				
1.	Age of mother				6.49	12.59	6	NS
	<20 yrs	6	9	0				
	21-30yrs	42	54	4				
	31-40yrs	37	31	3				
	>40yrs	10	4	0				
2.	Education of Mother				7.97	12.59	6	NS
	Primary	5	10	2				
	SSLC	33	41	3				
	Degree	47	40	2				
	Post graduate	10	7	0				
3.	Occupation of Mother				9.81	12.59	6	NS
	Jobless	24	45	3				
	Self employed	42	34	3				
	Private employed	22	14	1				
	Govt. employed	7	5	0				
4.	No. of children				7.75	12.59	6	NS
	One	26	38	1				
	Two	46	48	4				
	Three	19	10	2				

Sl no.	Variables	Level of knowledge			X ² value	Table value	df	Level of significance
		Adequate	Moderate	Inadequate				
	>4	4	2	0				
5.	Gender of Child							
	Male	53	48	3	1.49	5.99	2	NS
	Female	42	50	4				
6.	Income of Family							
	<10000	18	27	5	11.07	12.59	6	NS
	10000-30000	35	41	1				
	30000-50000	30	27	1				
	>50000	8	7	0				
7.	Previous knowledge							
	Yes	44	73	6	6.65	5.99	2	S
	No	38	38	1				
8.	Type of family							
	Nuclear	71	53	5	7.35	9.49	4	NS
	Joint	22	41	1				
	Others	2	5					

0.05 – level of significance

S-Significant

NS-non significance

table 3 shows that association was computed by using chi square test. Regarding age, the calculated value 6.49 is less than table value 12.59 at 0.05 level of significance regarding the knowledge among mothers. Regarding gender the calculated value 1.49 is less than the table value 5.99 at 0.05 level of significance. Regarding education the calculated value 7.97 is less than the table value 12.59 at 0.05 level of significance regarding the knowledge among mothers. Regarding previous knowledge regarding preventive measures of covid 19 among mothers calculated value 6.65 is greater than the table value 5.99 at 0.05 level of significance. Regarding income of family the calculated value 9.81 is less than the table value 12.59 at 0.05 level of significance. Regarding type of family the calculated value 7.35 is less than the table value 9.49 at 0.05 level of significance. Regarding number of children calculated value 7.75 is less than the table value 12.59 at 0.05 level of significance. Regarding occupation of mother the calculated value 9.81 is less than the table value 12.59 at 0.05 level of significance. There was significant association between knowledge of mothers regarding prevention and management of COVID 19 in children and the demographic variable previous knowledge. There was no significant association between knowledge and the demographic variables such as age, gender of child, education, income, number of children, occupation, type of family.

DISCUSSION

The present study was aimed at assessing the knowledge among the mothers regarding prevention and management of COVID 19 in children in selected hospitals in kollam district. In order to achieve the objectives of the study Non-experimental descriptive design was adopted. There subjects were selected by the convenient sampling. The sample consisted of 200

mothers who met the inclusion criteria. The findings of the study had been discussed in relation to objectives and other similar studies.

The objectives of the study consist were to.

- To assess the knowledge of mothers regarding prevention and management of COVID 19 in children
- To find out the association between knowledge regarding prevention and management of COVID 19 in children with selected demographic variables
- To develop an informational booklet regarding prevention and management of COVID 19 in children

Discussion of findings with other studies based on objectives

To assess the knowledge of mothers regarding prevention and management of COVID 19 in children.

The present study revealed that 9% of people had adequate knowledge regarding preventive measures of COVID-19, 47.5% had moderate knowledge, 43.5% had inadequate knowledge about prevention and management of COVID 19 in children.

The above findings are supported by a cross sectional study conducted from March 10 to April 25, 2020. Data were collected with a semi-structured questionnaire to assess knowledge about preventive measures of COVID-19 among 200 mothers who have children below 12 years of age. The findings showed that only 25.36% of the respondents had good knowledge of COVID -19 preventive measures. The majority 48.7% of them knew that washing hands with soap could prevent the disease, but contrarily, the highest 26% did not know that avoidance of touching mouth, nose and eyes without

washing hands was a preventive measure. Only 28.4% and 36.9% of the respondents knew that maintaining physical distancing and avoiding mass gatherings were measures of prevention of COVID-19 respectively.

To find out the association between knowledge regarding prevention and management of COVID 19 in children with selected demographic variables.

Association was computed by using chi square test. Regarding age, the calculated value 6.49 is less than table value 12.59 at 0.05 level of significance regarding the knowledge among mothers. Regarding gender the calculated value 1.49 is less than the table value 5.99 at 0.05 level of significance. Regarding education the calculated value 7.97 is less than the table value 12.59 at 0.05 level of significance regarding the knowledge among mothers. Regarding previous knowledge regarding preventive measures of covid 19 among mothers calculated value 6.65 is greater than the table value 5.99 at 0.05 level of significance. Regarding income of family the calculated value 9.81 is smaller than the table value 12.59 at 0.05 level of significance regarding the knowledge among mothers. Regarding type of family the calculated value 7.35 is smaller than the table value 9.49 at 0.05 level of significance. Regarding number of children calculated value 7.75 is smaller than the table value 12.59 at 0.05 level of significance. Regarding occupation of mother the calculated value 9.81 is smaller than the table value 12.59 at 0.05 level of significance regarding the knowledge among mothers. There was significant association between knowledge of mothers regarding prevention and management of COVID 19 in children and the demographic variable previous knowledge. There was no significant association between knowledge and the demographic variables such as age, gender of child, education, income, number of children, occupation, type of family.

The above findings are supported by a convenient cross-sectional survey was conducted to assess the knowledge and practice towards COVID-19 among people living in Mosul-Iraq. A cross sectional online survey of 909 participants was conducted among a sample of the Mosul-Iraq population between 20th June to 1st July 20. The study showed that the majority of 558 (61.4%) were females, and 351 (38.6%) were males. More than half of the participants, 495 (54.5%), aged 30–49 years. Around 549 (60.4%) of respondents were married, while 288 (31.7%) and 72 (7.9%) were single, and others (divorced and widows), respectively. About 567 (62.4%) were holding a bachelor's degree, while 234 (25.7%), 108 (11.9%) were holding postgraduates and diploma or below, respectively. Moreover, almost 585 (64.4%) were employed, while a smaller number of participants, 198 (21.8%), 126 (13.9%), were unemployed and students, respectively. The results indicated that females had a higher mean score of knowledge (13.19±1.70) and practice (21.85±2.61) than males, aged group of participants above 50-years-old having the highest score

of knowledge (14.11±0.87) and practice (22.50±2.32) compared with other age groups. Moreover, widows and divorced women's knowledge (13.37±1.32) were higher than singles and married participants; however, there were no significant differences in practice. The mean score of knowledge (13.26±1.51) and practice (21.75 ±2.77) of participants with high education degrees were better than participants with lower educational degrees. Employed respondents showed a higher-level score of knowledge (13.12±1.61) than non-employed and students' participants. While there were no significant differences in employment status in practice, neither education levels nor employment status had any significant differences in practice.

CONCLUSION

The present study was aimed to assess the knowledge of mothers regarding prevention and management of COVID-19 in children in selected hospital at Kollam district. The study was conducted on a relatively small sample of 200 mothers.

There was significant association between knowledge of mothers regarding prevention and management of COVID 19 in children and the demographic variable previous knowledge. There was no significant association between knowledge and the demographic variables such as age, gender of child, education, income, number of children, occupation, type of family.

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