



Knowledge and Practice Regarding Prevention of Covid-19 in Children among Mothers of Underfive Children

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ARTICLE INFO	ABSTRACT
Published Online: 08 April 2023	<p>Aim: A study titled “knowledge and practice regarding prevention of COVID-19 in children among mothers of underfive children” is a descriptive study conducted on 300 mothers of underfive children admitted in pediatric medical wards of Sree Avittam Thirunal Hospital, Thiruvananthapuram.</p> <p>Objectives: The objectives of the study were to assess the knowledge of mothers of underfive children regarding prevention of COVID-19 in children, to assess the practice of mothers of underfive children regarding prevention of COVID-19 in children, to find out the correlation between knowledge and practice of mothers of underfive children regarding prevention of COVID-19 in children, to determine the association between knowledge of mothers of underfive children regarding prevention of COVID-19 in children and selected socio demographic variables, to determine the association between practice of mothers of underfive children regarding prevention of COVID-19 in children and selected socio demographic variables and to prepare a module regarding prevention of COVID-19 in children.</p> <p>Materials and Methods: The theoretical framework of the study was based on Nola J. Pender’s Health Promotion Model. Data regarding mother’s knowledge were assessed using questionnaire and practice through rating scale.</p> <p>Results: The study revealed that of the 300 mothers, 51% mothers had overall good knowledge, 41.3% had average knowledge and 7.7% had poor knowledge regarding prevention of COVID-19 in children. Of the 300 mothers, 82.3% had good practice and 17.7% had average practice regarding prevention of COVID-19 in children.</p> <p>Conclusion: It was observed in the study that there was a weak positive correlation between knowledge and practice ($r= 0.265$, $p< 0.01$) and there was a significant association between knowledge of mothers and sociodemographic variables such as age, educational qualification, occupation and income of mother. It was also found that there was a significant association between practice of mothers and educational qualification of mother. The study findings inferred that, even though majority of mothers are following good practices, they lack scientific knowledge regarding preventive practices.</p>
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INTRODUCTION

A recent outbreak of corona virus occurred in December 2019 which was began in Wuhan, China. Since the present corona virus had not been previously identified, World Health Organization (WHO) named it as Corona Virus Disease 2019 or COVID-19. At the beginning of the outbreak, it was named as 2019 novel corona virus or 2019- n CoV. In March 2020, COVID-19 was officially declared as a pandemic by WHO ¹.

The impact of COVID-19 pandemic on children is always a growing concern. It has multifaceted impacts on children which may include physical, psychological, mental, social and cultural problems².

Children tend to be largely spared the direct mortality impacts of COVID-19. Still, it indirectly affects them due to disruption to life saving health services like immunization and antenatal care. Consequently, child mortality rates may increase. Also, there is high chance for rise in number of still

births due to COVID-19. It is estimated that approximately 200000 additional stillbirths could occur in 12 months since women have less opportunity to access healthcare services promptly. There exists a great threat before us that the reversal of progress made around the world toward eliminating preventable child deaths may occur due to this pandemic³.

Even though children and adolescents seem to have low risk of becoming severely ill from COVID-19 compared to adults, there are reports causing concern about serious life threatening complications that is occurring in children a few months after primary COVID attack which can be referred to as Multisystem Inflammatory Syndrome in Children (MIS-C)⁴.

The maternal and child health wing of Government Medical College, Thiruvananthapuram- Sree Avittam Thirunal Hospital reported an increased number of a rare but serious condition called Multisystem Inflammatory Syndrome in Children (MIS-C), in a span of 4 months. Before the outbreak of COVID-19, there was only one reported case every one or two months which had reached to a range of 48 cases between September 2020 and January 2021, at Sree Avittam Thirunal Hospital alone. According to doctors, this may have happened due to the effect of immune response of children to the novel corona virus⁵.

In order to protect the children and infants from the disease, contact with high risk communities needs to be avoided and social distancing should be practised. Importance should be given to personal hygiene, especially hand hygiene and potential environmental infection should be eliminated during this pandemic⁶.

OBJECTIVES OF THE STUDY

Primary objective

1. To assess the knowledge of mothers of underfive children regarding prevention of COVID-19 in children.
2. To assess the practice of mothers of underfive children regarding prevention of COVID-19 in children.

Secondary objectives

1. To find out the correlation between knowledge and practice of mothers of underfive children regarding prevention of COVID-19 in children.
2. To determine the association between knowledge of mothers of underfive children regarding prevention of COVID-19 in children and selected socio demographic variables.
3. To determine the association between practice of mothers of underfive children regarding prevention of COVID-19 in children and selected socio demographic variables.
4. To prepare a module regarding prevention of COVID-19 in children.

MATERIALS AND METHODS

Research approach

The research approach in this study is quantitative.

Research design

The research design used in this study is descriptive.

Variables

In this study, outcome variables include: .

- Mother's knowledge on prevention of COVID-19 in children
- Mother's practice on prevention of COVID-19 in children

Setting of the study

This study was conducted in paediatric medical wards (ward 3, 4 and 14) of Sree Avittam Thirunal Hospital, Thiruvananthapuram.

Study population

In this study, population refers to mothers of underfive children attending Sree Avittam Thirunal hospital, Thiruvananthapuram.

Sample and sampling technique

The sample of the present study consisted of mothers of underfive children admitted in pediatric medical wards of Sree Avittam Thirunal Hospital, Thiruvananthapuram. Mothers who satisfied the inclusion criteria were consecutively selected as participants of the study.

Sample size

A total of 300 mothers were selected.

Tools and techniques

Tools used in this study were structured questionnaire and rating scale; the technique used is self reporting.

Description of the tool

Questionnaire

A questionnaire was used to assess the knowledge of mothers regarding prevention of COVID-19 in children.

Rating scale

A rating scale was used to assess the practice of mothers regarding the prevention of COVID-19 in children.

Data collection

The duration of data collection was 6 weeks from 01/02/2022 to 12/03/2022. Data collection process started after obtaining ethical clearance from institutional ethics committee After obtaining permission for data collection, mothers who met the inclusion and exclusion criteria and who were willing to participate in the study were identified. Objectives of the study was explained and Participant Information Sheet (PIS) was given. Informed consent was taken by ensuring COVID-19 safety protocol. The participants were assured confidentiality of the data when consent was taken.

The data was collected from mothers of underfive children admitted in pediatric medical wards (ward 3,4 and 14), using a structured questionnaire and a three-point rating scale. The tool was given to participants after obtaining their consent.

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After 30 minutes of administration, the questionnaire and rating scale were collected back. Then a module regarding prevention of COVID-19 in children was prepared.

Data analysis

Quantitative variables were expressed as frequency and percentage. Chi square test was used to find out the association between variables and the correlation between knowledge and practice of mothers was estimated using Spearman Rank Correlation Coefficient.

RESULTS

Of the 300 mothers, 51% mothers had overall good knowledge, 41.3% had average knowledge and 7.7% had poor knowledge regarding prevention of COVID-19 in children [Figure 1]. Among the 300 mothers, 82.3% had good practice and 17.7% had average practice regarding prevention of COVID-19 in children [Figure 2]. The present study shows

a weak positive correlation between knowledge and practice scores ($r=0.265$, $p < 0.05$) [Figure 3]. The study shows a significant association between age of mother ($\chi^2=16.8$, $p=0.032$), educational qualification ($\chi^2=90.6$, $p<0.001$), income ($\chi^2=13.7$, $p=0.001$) and occupation ($\chi^2=26.8$, $p=0.008$) with knowledge of mothers regarding prevention of COVID-19 in children. The study also shows a significant association between educational qualification of mother ($\chi^2=22.2$, $p<0.001$) and their practice regarding prevention of COVID-19 in children.

Figure 1 shows that 51% mothers had overall good knowledge, 41.3% had average knowledge and 7.7% had poor knowledge regarding prevention of COVID-19 in children

Figure 2 shows that 82.3% had good practice and 17.7% had average practice regarding prevention of COVID-19 in children

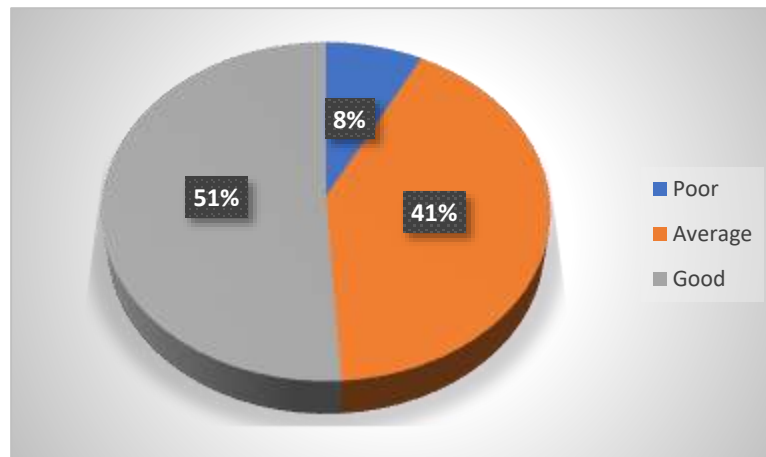


Figure 1: Distribution of knowledge of mothers regarding prevention of COVID-19 in children (n = 300)

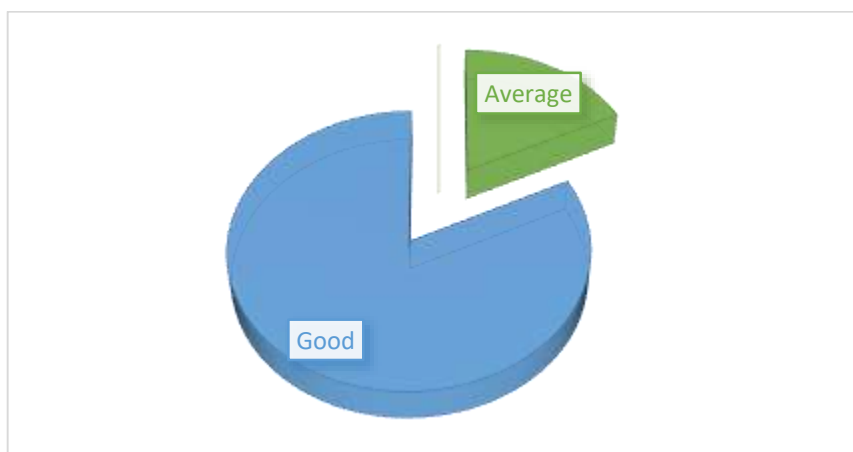


Figure 2: Distribution of practice of mothers regarding prevention of COVID-19 in children (n = 300)

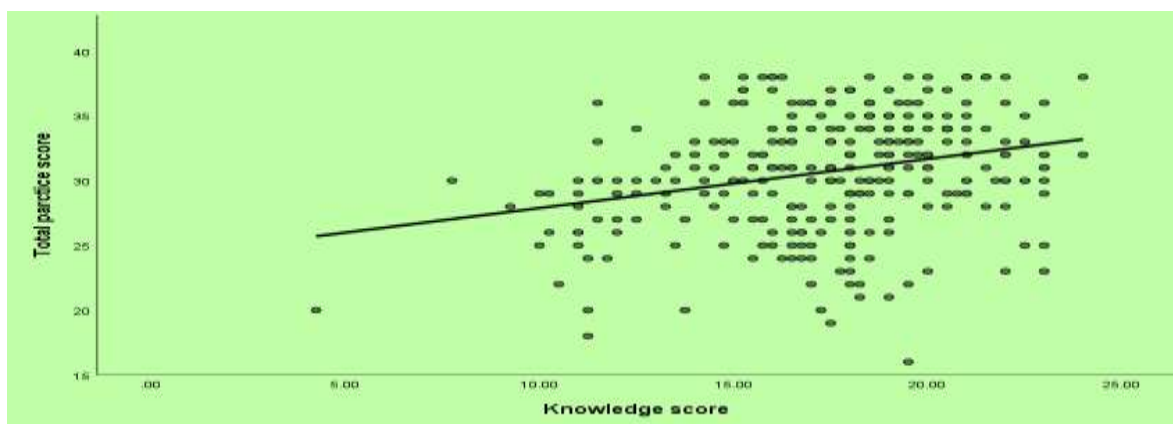


Figure 3: Correlation between knowledge and practice scores of mothers regarding prevention of COVID-19 in children (r value 0.265 and p value <0.05).

The scatter diagram (figure 3) shows a weak positive correlation between knowledge and practice scores (r value 0.265 and p value <0.05).

DISCUSSION

The present study reported that 51% mothers had overall good knowledge regarding prevention of COVID-19 which was supported by a community based cross sectional study conducted in Jimma to assess knowledge, attitude and practice and associated factors of COVID-19, which implies that 56.1% of the participants had good knowledge about COVID-19⁷.

The present study also revealed that 82.3% mothers had good practice whereas 17.7% had average practice regarding prevention of COVID-19 in children, which is supported by a cross-sectional study conducted in China which shows an overall correct rate of knowledge and practice of 61.9% and 68% respectively⁸.

The present study shows a significant association between knowledge score and sociodemographic factors such as age, educational qualification, occupation and income of mother, which is supported by a study conducted in Bangladesh among mothers of under two children and adult males, which identified significant association of education, household monthly income and access to television with knowledge of participants regarding COVID-19⁹.

The present study showed a significant association between practice score and educational qualification of mother. The study finding is supported by a study conducted in Osogbo, among pregnant women, regarding COVID-19, which states that there was a significant association between education level of participants with practice of preventive measures towards COVID-19 (p<0.005)¹⁰.

The present study result reveals a weak positive correlation between knowledge and practice scores (Correlation coefficient, r= 0.265, p<0.01). The study finding is supported by a study conducted in Saudi Arabia which identified a very weak correlation between knowledge and practice. The

variables of knowledge and practice are strongly associated but correlation is found to be weak¹¹.

CONCLUSION

Proper knowledge of mothers regarding the COVID-19 is important in prevention of corona virus infection in children. Scientific knowledge behind their practice helps in preventing complications like Multisystem Inflammatory Syndrome in Children (MIS-C), associated with COVID-19.

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