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**BOOK OF EXTENDED
ABSTRACTS**



MOTHERS' KNOWLEDGE AND PRACTICE ON PREVENTION OF COVID-19 IN SINNA URANI AREA, BATTICALOA

Diyana Singarajah¹, Shiwangika GWS¹, Anuradha WPG¹, Bandara AMSR¹,
Shanmukanathan S²

¹*Nursing Students, Faculty of Health - Care Sciences, Eastern University, Sri Lanka*

²*Senior Lecturer in Nursing, Department of Supplementary Health Sciences, Faculty of Health Care Sciences, Eastern University, Sri Lanka*

Abstract

Introduction: The recent coronavirus disease 2019 (COVID-19) outbreak is the worst global crisis. Still, there is no specific treatment for this pandemic disease. Very recently, vaccination was started, so it would be controlled and prevented only by knowledge and practice on preventing COVID-19 in the community. Thus, this study aimed to assess knowledge and practice of preventing COVID-19 among mothers in Sinna Urani, Batticaloa in Sri Lanka

Methodology: A community-based cross-sectional quantitative study was conducted in Batticaloa from October 2020 to September 2021 among three hundred and five (305) mothers from Sinna Urani Public Health Midwife (PHM) area. Participants were selected using a simple random sampling method, and a pre-tested, interviewer-administered questionnaire was used to collect data. Statistical Package for the Social Sciences version 25 (SPSSV25) was used to enter and analyze the data.

Results: Among the 305 mothers, overall knowledge on prevention of COVID-19 was adequate in the majority (92.5%). Most of the mothers (87.2%) had adequate overall practice on the prevention of COVID-19. There is strong evidence of a significant association between educational level and overall knowledge on prevention of COVID-19 (Chi-square=14.922, df=6, p<0.05) and overall practice on prevention of COVID-19 (Chi-square=12.115, df=3, p<0.05) in this study.

Conclusion: Knowledge and practice on the prevention of COVID-19 among mothers in this study were adequate in many aspects.

Keywords: COVID-19, Mothers, Knowledge, Practice, Batticaloa, Sri Lanka

Introduction: The ongoing COVID-19 outbreak originated in the city of Wuhan in China (World Health Organization, 2021). Coronavirus disease 2019 (COVID-19) is an emerging respiratory disease (Akalu et al., 2020). Individuals with confirmed COVID-19 virus have symptoms of fever, dry cough, dyspnea, myalgia, sore throat, congested or running nose, and loss of taste or smell (Nanayakkara et al., 2020). The mode of transmission for SARS-COV-2 is mainly by respiratory droplets. (World Health Organization, 2020). The objectives of this study are to assess the knowledge and practice on the prevention of COVID-19 among mothers in Sinna Urani area and to identify the association between knowledge, practice, and socio-demographic factors among mothers.

Methodology: This is a community based descriptive cross-sectional quantitative study and has used a simple random sampling method to select study participants. A structured interviewer-administered questionnaire was validated by an expert panel consisting of 02 senior lecturers and clinical microbiologists who are in the COVID response team in Faculty of Health Care Sciences. Ethical clearance for this study was obtained from the Ethical Review Committee of Faculty of Health-care Sciences, Eastern University, Sri Lanka. Permission for collecting data was obtained from the medical officer of health (MOH), Batticaloa Town, and Public Health Nursing sister, Batticaloa Town and Public Health Midwife, Sinna Urani area after obtaining the ethical clearance. The written informed consent was obtained from each participant.

Results: Age distribution showed mothers in the age group under 18 years had the lowest percentage (3.0%) and the age group more than 50 years have the highest percentage (28.9%) of the population. The majority of the mothers were Tamil (99.0%). Most of the mothers had completed up to grade 5 (31.8%). Most of them had family income around Rs.10 000 – 25000 (44.9%). Nearly two-thirds of them live as a nuclear family (65.9%).

Regarding the symptoms of COVID-19, the majority (97.4%) had responded that COVID-19 has fever. The other symptoms mentioned were cough (95.1%), shortness of breath (92.1%), fatigue (67.2%), stuffy nose (72.5%), runny nose (66.2%), and sneezing (90.5%).

Most of the mothers have mentioned that people with chronic diseases (89.5%) and elderly people (93.1%) got more chances to develop complications from COVID-19.

Less number of mothers have responded that there is no effective treatment for COVID-19-76 (24.9%) and 23.3% of mothers don't know about it. Most of them have responded there is an effective treatment for COVID-19 (51.8%). The majority of mothers have mentioned there are vaccines for COVID-19 (97.4%).

Regarding the modes of COVID-19 transmission, the majority have responded touching or shaking the hands of the infected person spreads COVID-19 virus (89.8%). Other methods are touching the mouth, nose, or eyes with unwashed hands (85.2%) and through sneezing or coughing of an infected person (96.4%). Most of the mothers have responded that carriers have the ability to transmit COVID-19 (93.1%).

The majority of mothers know the risk of getting COVID-19 can be prevented by avoiding crowded places (98.7%) and maintaining social distance is an important measure to reduce the spreading of COVID-19 (99.7%). Regarding isolation methods to prevent COVID-19, the majority have responded infected people (98%) and people who have close contact with infected people (96.1%). All mothers (100%) have responded that wearing a mask when moving out is important to prevent COVID-19.

The majority of mothers (99.3%) have reported that washing hands with soap and water for at least 20 seconds is important in the prevention of COVID-19 and 95.1% of mothers agreed that usage of alcohol-based hand sanitizers frequently prevents COVID-19.

Regarding people who should be given more concern on precautions of preventing severe COVID-19 at home, mothers have responded as elderly (99.3%) people with Diabetes Mellitus (91.8%), people with cardiac diseases (91.1%), people with chronic lung diseases (92.8%), people with cancers (72.5%), children below 05 years (87.5%), young adults (63.3%), lactating mothers (97%) and pregnant mothers (98%).

Most of the mothers (92.5%) had an adequate level of knowledge, 6.9% had a moderate level of knowledge and 0.7% had an inadequate level of knowledge on the prevention of COVID-19. The majority of mothers (80.7%) won't touch their eyes, ears, and nose after touching the mask and 90.5% of them maintain social distance at least 1m in crowded places.

In our study, 63% of mothers clean themselves after coming back home from outside. But 37% do household activities. There is a differentiation in the

food items they consume daily to improve their immunity. They are fresh vegetables (98.7%), fresh fruits (92.5%), meat/egg/fish (91.1%) and dairy products (89.5%). All the study participants (100%) follow the directions of the government on the prevention of COVID-19.

Almost all mothers (99.7%) responded they wear masks when leaving home. Most of the study participants (89.5%) used surgical masks. Reusable masks were used by 54.4%. Most of the mothers (81.3%) wash reusable masks after one time use. Regarding surgical masks, 69.8% of mothers dispose of them properly after using them once. Regarding hand hygiene, mostly (91.8%) use water with soap and alcohol-based hand sanitizers (86.6%). Some used normal water only 15.4%). Most of the mothers (87.2%) had an adequate level of practice and 12.8% had a moderate level of practice on the prevention of COVID-19.

There is strong evidence of association between educational level with knowledge (Chi-square= 14.922, df=6, $p<0.05$) and practice (Chi-square= 12.115, df=3, $p<0.05$) about prevention of COVID-19.

Discussion: In this study, most of the mothers 282(92.5%) had an adequate level of knowledge on the prevention of COVID-19. As Sinna Urani was lockdown because of the high prevalence of COVID – 19 infected people, they must have got sufficient information from government authorities regarding the disease. Similarly, 91.2% of participants In China among the 2136 general population have average knowledge of COVID-19 (Gao et al., 2020) and workers in Nepal have appropriate practice on COVID-19 (Tamang et al., 2020).

In our study, we found that there is a significant association between educational level with increased knowledge and practice on the prevention of COVID–19. A study was done in South Western Iran. The prevalence of adequate practice among mothers was 87.2% and 12.8% had a moderate level of practice on prevention of COVID-19 in our study. But only 78.9% of frontline healthcare workers in Nepal.

Iran shows that level of education and social-economic status were significantly associated with knowledge regarding COVID-19 (Maharlouei et al., 2020). Another study done in Bangladesh shows gender, educational level, socio-economic class, and place of residence were significantly associated with practice related to COVID–19 (Banik et al., n.d.)

Conclusions: Overall knowledge and practice on prevention of COVID–19 among mothers in Sinna Urani area in Batticaloa are satisfactory. This

study shows a significant positive association between the educational level with knowledge and practice on prevention of COVID-19.

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