

# **ABSTRACT**

## **Introduction**

COVID-19 pandemic resulted in a massive impact on global health, economy and social networking denoting the most widespread pandemic during the recent past. Public health and social measures are the cornerstone of controlling the pandemic. Among the preventive measures, proper use of personal protective equipment is crucial for health workers to prevent transmission and to assure safety and sustainability of health services.

## **Objectives**

To assess knowledge, attitudes and practices related to the use of personal protective equipment in managing COVID-19 patients, among health care workers in Base Hospital Homagama.

## **Methods**

A cross-sectional study was conducted at Base Hospital Homagama.

A sample of 317 health care workers were recruited using stratified random sampling, including doctors (n=106) nursing officers (n=105) and health assistants. (n=106)

A self-administered questionnaire was used to assess the knowledge, attitudes and practices among health care workers related to the use of personal protective equipment in management of COVID-19 infected patients. Statistical data analysis was conducted using the Statistical Package for Social Sciences (SPSS) 21 software. A scoring system was developed based on the responses of the questionnaire and mean score was calculated in each category to measure knowledge, attitudes and practices. A score of more than mean score was considered satisfactory and score less than mean score considered as unsatisfactory.

## **Results**

Out of 317 study participants, 305 health care workers responded to the questionnaire with a response rate of 96.2%. Majority 181 (55.0%) were in 25-45 age group, females 186 (61.9%), had a degree/diploma 137 (43.2%), had a work experience of more than 10 years 172 (54.3%) and employed in COVID unit 241 (76.0%).

Majority 261 (82.4%) showed unsatisfactory overall knowledge and poor knowledge on areas of types of PPE 259 (85.3%), level of protection 297 (93.9%). Work experience and unit employed was associated with all three aspects knowledge, practices and attitudes while occupation, educational level was associated with knowledge and attitudes. Gender was associated with level of knowledge. The study population had good overall practices 200 (63.0%) and good overall attitude 262 (82.6%).

## **Conclusion and recommendations**

The study revealed unsatisfactory knowledge, good practices and positive attitudes among health care workers in base hospital Homagama on use of PPE in management of COVID 19 infected patients. There was a deficit of knowledge observed in areas of types and level of protection by PPE.

Planning and organization of training programs for raising knowledge with special focus on deficit areas is suggested. Sustainable efforts to monitor and maintain good practices and attitudes is recommended to respond effectively in similar future epidemics.

*Keywords: personal protective equipment, health care workers, knowledge, attitudes, practices*