

COVID-19 infection prevention and control practices and associated factors among nurses at National institute of infectious diseases hospital, Sri Lanka

Luxman K¹, Surenthirakumaran R², Viniththira J¹, Nivetha K¹

¹*Department of Nursing, Faculty of Allied Health Sciences, University of Jaffna*

²*Department of Community and Family Medicine, Faculty of Medicine, University of Jaffna*

Introduction and Objectives: COVID-19 is a communicable disease also known as SARS-cov-2 belongs to the family of coronaviruses. World Health Organisation declared the COVID-19 outbreak is a global pandemic. Nurses are the frontline workers in the health care system. They are the highest risk group for COVID-19 due to the nature of their occupation that exposed them to infectious people. Improper practice on personal protective equipment and infection prevention and control measures are the main reasons for acquiring COVID-19 among health care workers. This study aimed to assess the level of practice on prevention and control practices of COVID-19 infection, and the associated factors among nurses at National Institute of Infectious Diseases Hospital Sri Lanka.

Methods: A descriptive, cross-sectional study was conducted among 174 nursing officers who were working at the National institute of Infectious Diseases Hospital from October 2020 to November 2021. A validated self-administered questionnaire was used as a google form for data collection. SPSS 25 was used to analyze the data, and a Chi-Squared test was performed to identify the association of the factors with infection prevention and control practices.

Results: The response rate was 87%. The mean age of 33.57 years (SD = 5.271) ranged between 25 and 52 years. Nearly two-thirds of the nurses were female (64.4%). The majority of the nurses were Sinhalese (95.4%). Nearly half of the nurses had an adequate level of practice (52.3%). None of the Socio-demographic factors of the participants was significantly associated with the practice of personal protective equipment and infection prevention and control measures. Practice showed significant association with overall working experience ($p=0.038$), extra duty hours per day ($p=0.045$), night shifts per week ($p=0.002$) and take part in any training on Infection Prevention Control/ Personal Protective Equipment ($p=0.010$).

Conclusion: The practice of personal protective equipment and infection prevention and control measures are adequate among more than half of the nurses. The following factors were associated with the practice: their overall working experience, daily extra duty hours, the number of night shifts per week and involvement of training programs of personal protective equipment and infection prevention.

Keywords: COVID-19, Infection Prevention and Control (IPC), Personal Protective Equipment (PPE), Nurses, National Institute of Infectious Diseases hospital