

ABSTRACT

Introduction: COVID-19 pandemic has been a major cause of morbidity and mortality globally. Good coverage of a safe and effective vaccine is essential to control it. Despite being at a higher risk of contracting the disease, the COVID-19 vaccine uptake had been poor among Asian nurses. The level of vaccine compliance and its predictors has not been explored among Sri Lankan nursing officers.

Objective: To describe the knowledge, attitude, and uptake of the COVID-19 vaccine and to determine the factors associated with vaccine compliance among nursing officers in District General Hospital (DGH), Matara.

Methods: A hospital-based cross-sectional study was conducted in January 2022, among 378 nurses selected through simple stratified sampling. Data collected using a structured self-administered questionnaire were summarized with descriptive statistics. The associations were presented with odds ratio and 95% confidence interval. The statistical significance considered as $p < 0.05$ was evaluated with the chi-square test.

Results: With a 91.1% response rate, the results showed a predominance of poor knowledge (53.7%), neutral attitude (79.6%) and 51.8% of uptake for all three doses. For the first dose of the COVID-19 vaccine, active demand had been 84.7% and it had declined to 70.9% and 26.7% by the second and booster dose respectively. Higher nursing educational qualifications (OR=1.8; 95% CI=1.1-3.0; $p=0.019$), senior grades (OR=2.1; 95% CI=1.4-3.2; $p=0.001$) and good knowledge on vaccine (OR=2.0; 95% CI=1.3-3.0; $p=0.001$) were positively associated with full compliance. Negative associations were detected with age ≤ 41 years (OR= 0.5; 95% CI=0.4-0.8; $p=0.004$), lower hierarchy in job title (OR=0.2; 95% CI=0.1-0.7; $p=0.006$), and having been investigated for COVID-19 (OR= 0.6; 95% CI=0.4-0.9; $p=0.01$).

Conclusions and Recommendations: Regarding the COVID-19 vaccine, overall knowledge had been poor, and the attitude was neutral among nurses in DGH Matara. Though most were fully compliant, the demand was reducing. Higher nursing education, senior grades, and good knowledge of COVID-19 vaccination made them more compliant. Targeted interventions should aim to improve knowledge and empower nursing officers of younger age groups, and lower hierarchy.

Keywords: COVID-19 vaccine uptake, knowledge, attitude, nursing officers