Seroprevalence of COVID-19 and psychological distress among front liners at the Universiti Malaysia Sabah campus during the third wave of COVID-19

ABSTRACT

In 2020, the COVID-19 pandemic struck the globe and disrupted various aspects of psychological wellbeing, more so in frontline workers. Research on assessing the seroprevalence of COVID-19 has been scarce; in addition, there are limited studies assessing the association between the seroprevalence of COVID-19 and psychological distress. Therefore, this study aimed to determine the seroprevalence of COVID-19 and the prevalence of psychological distress and to determine whether sociodemographic variables, occupational information variables, coping styles, and psychological processes might contribute to the development of psychological distress. A cross-sectional study involving 168 Universiti Malaysia Sabah (UMS) front liners was carried out to assess these issues. The Depression, Anxiety and Stress Scale (DASS-21) was employed to assess psychological distress, together with the COVID-19 Rapid Test Kit Antibody (RTK Ab) and a series of questionnaires, including a sociodemographic and occupational information questionnaire, the Balanced Index of Psychological Mindedness (BIPM) questionnaire, the Mindfulness Attention and Awareness Scale (MAAS), the Acceptance and Action Questionnaire (AAQ-II), and the Brief COPE questionnaire. The results demonstrated a seroprevalence of COVID-19 at 8.3% (95% CI = 5.0–14.0). Non-healthcare workers (HCWs) had a higher COVID-19 prevalence. Meanwhile, the prevalence of depression, anxiety, and stress among front liners was low (3.0%, 3.6%, and 1.2%, respectively). Younger people (aged 30 years old or less) and HCWs had a higher prevalence of psychological distress; being a HCW was significantly associated with a higher level of anxiety. Dysfunctional coping and psychological inflexibility were consistently found to be predictors for higher levels of the three psychological distress variables. This study suggested some alternatives that could be explored by mental health providers to address mental health issues among front liners at universities.