Exploring the Factors Associated with Mortality among Tuaran's Elderly Covid-19 Patients During Malaysia 3rd Covid-19 Wave

Mokti Khalid^{1*}, Madrim Mohd Faizal¹, Bakri Noraziah², Daud Dayang Maryama Awang¹, Ibrahim Mohd Yusof¹, Rahim Syed Sharizman Syed Abdul¹, Jeffree Mohammad Saffree¹, Musa Mazlinda¹, Woon Fui Chee¹, Saupin Sahipuddin¹, Deligannu Pravina¹, Lukman Khamisah Awang¹

¹Faculty of Medicine and Health Sciences, Universiti Malaysia Sabah ²Tuaran District Health Office, Ministry of Health Malaysia *Corresponding author's email: khalid.mokti@ums.edu.my DOI: https://doi.org/10.51200/bjms.v18i.5034

Abstract: The COVID-19 pandemic has significantly impacted global health, with more than a hundred million cases and millions of deaths reported worldwide. The elderly are disproportionately affected by COVID-19, facing higher risks of severe illness and death. Despite the pandemic's widespread impact, limited attention has been given to geriatric patients with COVID-19 in the existing literature, especially in Malaysia. Thus, this study identified the prevalence and the associated factors for mortality in elderly patients with COVID-19. This retrospective cohort study was based on assessing the COVID-19 data in the district of Tuaran between November 2020 and October 2021 (1-year duration). All eligible patients were monitored until they recovered or died. A census sampling method was used, and 996 elderly (> 60 years old) diagnosed with COVID-19 patients were included in this study. Data analysis was done using SPSS version 27, with the final result obtained using multiple logistic regression with a significant value <0.05. The prevalence of mortality of elderly COVID-19 patients was 7.4%. The significant associated factor mortality cases of elderly COVID-19 patients included elderly with age>80 (aOR: 1.05, 95% CI: 1.021-1.084), dyspnoea (aOR:4.13, 95% CI:2.19-7.77), lethargy (aOR: 6.12, 95% CI: 3.01-12.44), chest pain/discomfort (aOR:4.72, 95% CI: 1.15-19.37), headache (aOR:2.39, 95% CI: 1.01-5.69) and cardiovascular disease (aOR 4.05, 95% CI: 1.92-8.53). Several intervention strategies to reduce the risk of death from COVID-19 in the elderly include early detection of the infection, addressing alarming symptoms and comorbidity as early as possible and educating older adults on the importance of maintaining good health and avoiding risk factors, especially elderly with age>80.

Keywords: COVID-19, mortality, elderly, associated factors