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Factors associated with admission to the intensive care unit and mortality in patients with COVID-19, Colombia

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Abstract

*Introduction:*Coronavirus disease 2019 (COVID-19) has affected millions of people worldwide, and several sociodemographic variables, comorbidities and care variables have been associated with complications and mortality.
Objective: To identify the factors associated with admission to intensive care units (ICUs) and mortality in patients with COVID-19 from 4 clinics in Colombia.
Methods: This was a follow-up study of a cohort of patients diagnosed with COVID-19 between March and August 2020. Sociodemographic, clinical (Charlson comorbidity index and NEWS 2 score) and pharmacological variables were identified. Multivariate analyses were performed to identify variables associated with the risk of admission to the ICU and death ($p<0.05$).
Results: A total of 780 patients were analyzed, with a median age of 57.0 years; 61.2% were male. On admission, 54.9% were classified as severely ill, 65.3% were diagnosed with acute respiratory distress syndrome, 32.4% were admitted to the ICU, and 26.0% died. The factors associated with a greater likelihood of ICU admission were severe pneumonia (OR: 9.86; 95%CI:5.99-16.23), each 1-point increase in the NEWS 2 score (OR:1.09; 95%CI:1.002-1.19), history of ischemic heart disease (OR:3.24; 95%CI:1.16-9.00), and chronic obstructive pulmonary disease (OR:2.07; 95%CI:1.09-3.90).The risk of dying increased in those older than 65 years (OR:3.08; 95%CI:1.66-5.71), in patients with acute renal failure (OR:6.96; 95%CI:4.41-11.78), admitted to the ICU (OR:6.31; 95%CI:3.63-10.95), and for each 1-point increase in the Charlson comorbidity index (OR:1.16; 95%CI:1.002-1.35).
*Conclusions:*Factors related to increasing the probability of requiring ICU care or dying in patients with COVID-19 were identified, facilitating the development of anticipatory intervention measures that favor comprehensive care and improve patient prognosis.

Attachments

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Troubleshooting

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