Pattern of Comorbidities and the Impact on Outcomes in Patients With COVID-19 in Babel Governorate, Iraq, in 2020

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Abstract

Background: Comorbidities pose a major clinical challenge to the care and treatment of patients with COVID-19.

Objective: This study aimed to evaluate the effects of common comorbidities on the severity, outcome, and length of stay in the hospital for patients with COVID-19 in Babel Governorate, Iraq, in 2020.

Methods: All laboratory-confirmed cases of COVID-19 in the 2 COVID-19 hospitals in Babel Governorate from March through September 2020 were included. We developed a form to document sociodemographic data, clinical presentation, severity, comorbidities, length of hospital stay, and outcomes.

Results: A total of 2574 patients were included; 1581 (61.4%) were men. The mean age was 48.7 (SD 16.4) years. There were 1212 (47.1%) severe cases and 489 (19%) critical cases. There were 1543 (59.9%) patients with no comorbidity, 536 (20.9%) patients with 1 comorbidity, and 495 (19.2%) patients with 2 or more comorbidities. The most common comorbidity was diabetes mellitus (643/1599, 25%), followed by hypertension (598/1599, 23.4%). The proportion of severe or critical cases among the patients with comorbidities was 84% (865/1031) compared to 54.1% (836/1543) among the patients with no comorbidity (P<.001). About 12% (125/1031) of patients with comorbidities had a mean hospitalization time >2 weeks compared to the 8% (123/1543) of patients with no comorbidity (P<.001). The case-fatality ratio was 26.4% (272/1031) in patients with comorbidities compared to 10.6% (163/1543) in patients with no comorbidity (P<.001).

Conclusions: Comorbidity is a significant predictor of serious hospital course and fatal outcomes in patients with COVID-19. Patients with comorbidities must be vigilant with preventive measures and should be prioritized for COVID-19 vaccination.

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KEYWORDS
comorbidities; COVID-19; Iraq; hypertension; diabetes; 2020