

Characteristics of 12-week readmission after COVID-19 hospitalization among patients with chronic kidney disease

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ABSTRACT

Introduction: Evidence on characteristics of 12-week readmission after initial COVID-19 hospitalization among chronic kidney disease (CKD) patients is limited. This study aimed to describe the demographics and readmission characteristics in this specific population. **Methods:** This retrospective cohort study included CKD patients admitted to Hospital Raja Perempuan Zainab II and Hospital Universiti Sains Malaysia from December 2020 to August 2021 with a primary diagnosis of COVID-19. Patients with age over 18 years old, eGFR of equal and below 60mL/min/1.72m², and confirmed COVID-19 infection were included in this study. Readmission status within 12 weeks after the first (index) hospitalization was checked for every patient. **Results:** Thirty-four patients (24%) out of a total of 140 patients analyzed were readmitted. The mean age of those who were readmitted was 59 years with 59% of them being men. Comorbidities included diabetes 29(85%), hypertension 28(82%), cardiac disease 13(38%), and chronic lung disease 3(9%). Only 3(8.8%) patients received a complete vaccination while 28(82.4%) patients had never been vaccinated. CKD Stage 4 (32.4%) and end-stage renal disease (ESRD) (23.5%) were more common compared to other CKD stages. The median duration of hospitalization was 7 days (IQR 8). Only 7(20.6%) patients were readmitted due to COVID-19. Among 7(20.6%) patients who passed away, three of them were due to COVID-19. **Conclusion:** People aged 50 years old and older and those with ESRD were more likely to be readmitted. However, the majority (79.4%) of CKD patients were readmitted for causes other than COVID-19. Its long-term effects, especially on the extrapulmonary system still need to be elucidated.