## The Impact of Covid-19 Outbreak on Nosocomial Infection Rate: A Case of Iran

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Background. Coronavirus disease-19 (COVID-19) is a new type of coronavirus that has caused a global pandemic. The disease is highly contagious, and all people are susceptible to the disease. therefore, extensive measures were taken to prevent the spread of the disease at the community and hospitals. This study aimed to investigate the impact of COVID-19 outbreak on nosocomial infection rate. Methods. This cross-sectional study was conducted in an educational hospital, southeast Iran. The nosocomial infection rates of critical/intensive care units (CCU/ICUs) and medical-surgical units were assessed during and before the COVID-19 outbreak.Results. There was a 19.75-point decrease in the total rate of nosocomial infection during the COVID-19 outbreak (P = 0.02). In addition, there was a 39.12-point decrease in the total rate of CCU/ICUs' nosocomial infection during the COVID-19 outbreak (P < 0.001). A 19.23 -point decrease was also observed in the total rate of medical-surgical units' nosocomial infection during the COVID-19 outbreak (P = 0.13). All kinds of CCU/ICUs' nosocomial infections had between 31.22- and 100-point decreases during the COVID-19 outbreak. Among medical-surgical units, 33.33- and 30.70-point decreases were observed only in UTI and SSI, respectively, during the COVID-19 outbreak, while BSI had a 40-point increase during the COVID-19 outbreak. Conclusions. Proper implementation of infection control protocols during the COVID-19 pandemic seems to reduce nosocomial infections.

**Keywords:** Bloodstream Infection, Covid 19, Nosocomial Infection, Pneumonia, Surgical Site Infection, Urinary Tract Infection, Ventilator Associated Events