Impacts of COVID-19 pandemic on organ donation and transplantation activities in Iran

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Background: COVID-19 pandemic has had a great impact on reducing organ transplantation activities. The aim of this study was to determine the donation and transplantation activities before and after COVID-19 era in Iran.

Methods: This was a retrospective study which compares two specific 9-month periods from March–December 2019–2018 and March–December 2020. The questionnaire included the number of brain death confirmation, number of family consent, number of organ recovery, number of transplanted solid organs. Questionnaire was sent by email to the chief executive of the organ procurement unit.

Results: A total of 15 organ procurement units responded to the survey. The largest reduction was seen in tissue transplantation (62.5%) during two-time intervals. Brain death due to head trauma was decreased significantly in two-time intervals and suicide increased by 14.44% during the COVID-19 pandemic compared to 2018–2019 period time. Significant reduction between median of donation ($P=0.0187$), median of potential donor ($P=0.005$), median of family consent ($P=0.002$), and median of eligible donor ($P=0.009$) during two time periods were observed.

Conclusions: In COVID-19 era significant reduction was shown in organ donation and transplantation. Working on protocols and establishing new strategies for evaluation of organ donation to ensure the safety of recipients and safety medical staff is necessary.

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