



Comparing road traffic accident and COVID-19 casualties in Iran: A call to action

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Dear Editor

Road traffic accidents in Iran significantly contribute to morbidity and mortality, thereby profoundly impacting public health. According to 2019 World Health Organization (WHO) data, Iran ranks 130th out of 191 countries in traffic-related mortality rate due to accidents and impacts 21 per 100,000 individuals. In contrast, countries like Switzerland, Singapore, and Norway demonstrate admirable metrics by having less than 3 deaths per 100,000 individuals. Indeed, Iran's road traffic accident rate surpasses global benchmarks by 20%. Comprehensive studies undertaken within Iran have identified the primary contributors to road traffic accidents as: human error during driving, vehicular technical failures, suboptimal road infrastructure, and environmental conditions. Additionally, a scarcity of medical equipment and post-accident emergency medical care services exacerbate an already high mortality rate. An unfortunate reality is that road traffic accident-induced injuries rank among the top five causes of death in Iran, with highest number of fatalities recorded in 2004, accounting for 27,000 lives.^[1,2]

At the onset of the COVID-19 pandemic in Iran during 2020 and 2021, quarantine and travel restrictions led to a temporal decline in road traffic accidents (approximately 15,000 individuals annually). However, as 2022 witnessed a resurgence in intercity travel, the transient nature of this trend saw an escalation of accidents to over 19,000 (a 14.5% increase from the prior year) [Figure 1]. On average,

50 individuals were fatally injured on a daily basis due to road traffic accidents in 2022 (approximately 2 deaths per hour); which was amplified tenfold for those that were either injured or disabled. Yet the COVID-19 outbreak in 2020 and 2021 overshadowed road traffic accident data, and became the primary public health emphasis (prevention and treatment) during the pandemic. Despite a daily mortality rate of 50 individuals from road traffic accidents, a peak of over 500 daily COVID-19 deaths in Iran rendered the former public health concern all but inconspicuous. Certainly, such a disparity could be attributed to travel restrictions and the rapid escalation and unknown nature of the SARS-CoV-2 virus, the lack of vaccines and targeted treatments initially, or the extraordinary surge in mortality rates.^[3,4]

Fatalities from road traffic accidents historically have failed to evoke the same magnitude of public alarm as did the considerably higher mortality rates from COVID-19. Despite global initiatives that have substantially controlled death from COVID-19 (sometimes reaching zero in Iran), road traffic accident rates remain largely unchanged. This is a call to action for road traffic accident casualties to cease in Iran. We urge Iranians to adopt vehicular safety behaviors (avoiding speeding, not wearing seat belts, reckless driving, drowsiness, and distractions) with the same vigor as pandemic precautions. We appeal to the Iranian Ministry of Roads and Urban Development and National Road Safety Commission along with automotive manufacturing sectors to work together and continue to

prioritize and enhance efforts to address this escalating crisis. Envisioning a safer and traffic accident-free Iran

remains a challenge, but is a challenge worth confronting.

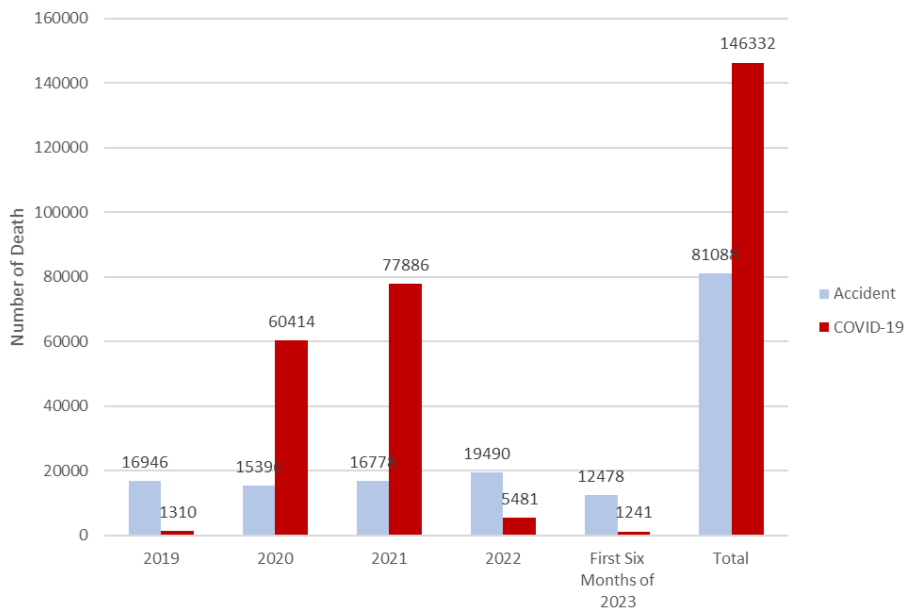


Figure-1. Comparing the number of casualties caused by road traffic accidents and COVID-19 in Iran over the last 5 years (2019-2023).

Acknowledgment

None.

Competing interests

None.

Abbreviations

Coronavirus disease 2019: COVID-19;

Severe acute respiratory syndrome coronavirus 2: SARS-CoV-2;

World Health Organization: WHO.

Authors' contributions

The authors read and approved the final manuscript. They takes responsibility for the integrity of the data and the accuracy of the data analysis.

Availability of data and materials

The data used in this study are available from the corresponding author on request.

Ethics approval and consent to participate

None.

Consent for publication

By submitting this document, the authors declare their consent for the final accepted version of the manuscript to be considered for publication.

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