

Impact of easing COVID-19 Level 4 lockdown restrictions on trauma presentations to a major trauma centre in the North West of England

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Introduction

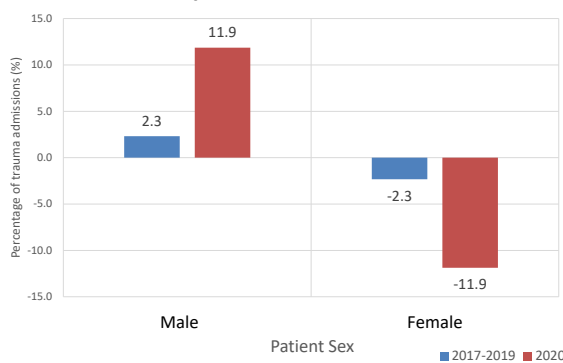
Epidemiological studies have delineated trauma patterns and outcomes at a major trauma centre during the COVID-19 lockdown (Rajput et al, 2020). The impact of easing restrictions on trauma presentations has not been studied and has important implications for service provision. The expectation that re-exposure to potential hazards will increase trauma presentations is logical. However, does the evidence support this?

Method

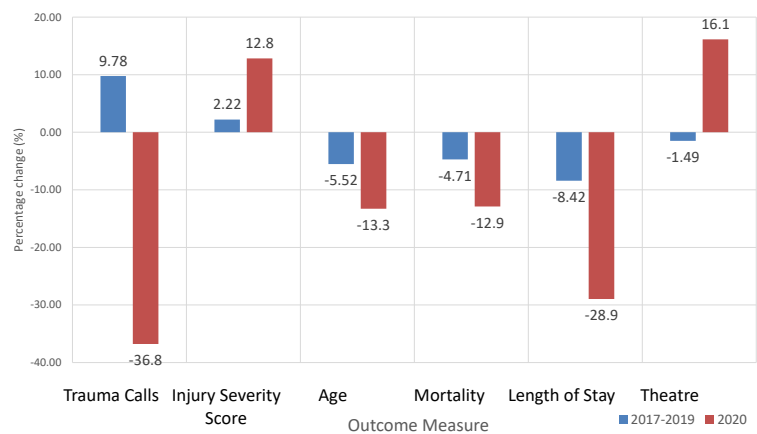
Retrospective cohort study using the Merseyside and Cheshire Trauma Audit and Research Network (TARN) database. A 3-month sample (January – March 2020) from the 'lockdown period' was compared to a 3-month sample (May – July 2020) from the 'easing period'. The outcomes investigated were frequency, demographics, severity, mechanisms, length of stay, operations and mortality. Net impact was calculated with reference to control samples taken from 2017 – 2019, accounting for confounders.

Results

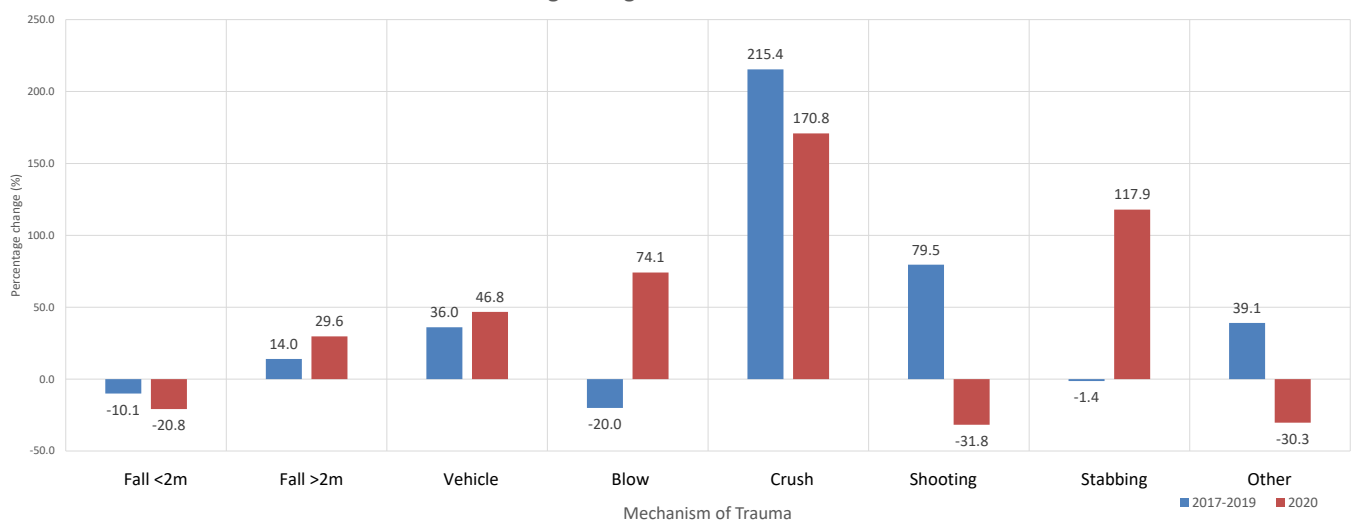
Net percentage change in sex of trauma patients admitted



Percentage change in outcome measures



Percentage change in mechanism of trauma



Conclusions

Trauma calls decreased by net 47%; contrary to expectations and pre-COVID trends. The younger mean patient age in the 'easing period' (mean decrease by net 5 years) may explain the decreased falls <2m, increased falls >2m, and increased vehicle injuries. The mean Injury Severity Score (ISS) increased only slightly (10.6%). The mean length of stay decreased significantly, perhaps due to bed pressures. Despite greater emphasis on conservative management, operations increased significantly. Overall mortality decreased slightly, but still remains higher than pre-COVID levels.