



Healthcare Professional Wellness During Natural and Man-made Mass Casualty Incidents: COVID-19 Pandemic vs. October 7th War

A retrospective study

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CENTRAL FINDING: PRIOR EXPERIENCE AND RESILIENCE

In the post-October 7 war cohort, prior military service, reserve service, volunteer activity and previous mass casualty incident experience were each associated with higher resilience scores.

Study Overview

Background

Mass casualty incidents (MCIs) challenge both healthcare systems and healthcare professionals.

Limited quantitative evidence compares the emotional impact of natural versus man-made MCIs on healthcare professional wellness.

This study compared resilience, burnout, and secondary traumatic stress across two distinct crises.

Methods

Retrospective cross-sectional survey-based study.

Compared a COVID-19 cohort (n = 655) with a post-October 7 war cohort (n = 347).

Tools: CD-RISC-10 for resilience, adapted MBI for burnout, and modified ProQOL for secondary traumatic stress.

Analyses included Mann-Whitney U, Kruskal-Wallis, Chi-square, and Fisher's exact tests.

Prior Experience Associated with Higher Resilience

Prior military service

No: 6.79 Yes: 7.21

p = 0.010

Reserve military service

No: 6.95 Yes: 7.52

p = 0.002

Volunteer activity

No: 6.89 Yes: 7.26

p = 0.022

Previous MCI experience

No: 6.86 Yes: 7.28

p < 0.001

Cohort Comparison: Wellness Scores

Resilience

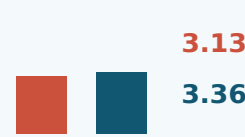
p = 0.112



COVID-19 / Post-October 7

Secondary traumatic stress

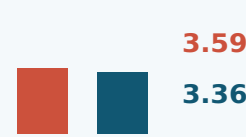
p = 0.020



COVID-19 / Post-October 7

Burnout

p = 0.010



COVID-19 / Post-October 7

Resilience did not differ significantly between cohorts. Burnout was higher in COVID-19; secondary traumatic stress was higher in the post-October 7 war cohort.

Additional Finding: Direct Patient Contact

In the post-October 7 war cohort, direct patient contact was associated with higher resilience (7.21 vs 6.80; p < 0.001) and higher burnout (3.60 vs 3.11; p = 0.021). There was no significant difference in secondary traumatic stress (3.34 vs 3.39; p = 0.905).

Key Conclusions

Although resilience did not differ significantly between the COVID-19 and post-October 7 war cohorts, prior military service, reserve service, volunteering and previous MCI experience were each associated with higher resilience in the latter cohort.

These findings highlight distinct emotional responses across crisis types and may inform targeted preparedness, resilience-building and staff support strategies for healthcare professionals.