

INVESTIGATING THE SPATIAL ASSOCIATION BETWEEN SUPERVISED CONSUMPTION SERVICES AND HOMICIDE RATES IN TORONTO, CANADA, 2010–2023: AN ECOLOGICAL ANALYSIS

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Background

Supervised consumption services (SCS) effectively reduce overdose mortality, yet their relationship with violent crime remains poorly understood. A notable gap exists in research specifically examining SCS and homicide. This study investigates homicide rates in areas surrounding SCS in Toronto, Ontario, Canada.

Methods

We conducted a spatial analysis using coroner-reported data on fatal shootings and stabbings from January 1, 2010, to September 30, 2023. Homicides were classified by geographic proximity to SCS: within 500 meters ("near"), between 500 meters and 3 kilometers ("far"), and beyond 3 kilometers ("out"). Most SCS in Toronto were implemented beginning in 2018. Poisson regression was used to calculate rate ratios (RR) across zones at 18, 36, 48, and 60 months pre- versus post-SCS implementation. Additionally, interrupted time series (ITS) analysis compared spatial homicide incidence before and after the opening of each SCS.

Results

A total of 956 homicides occurred during the study period, with 590 (62%) classified as fatal shootings and stabbings. There was no meaningful change in the rate of fatal shootings and stabbings within 3 km of SCS (near and far zones) following implementation. However, between 48 and 60 months post-implementation, a modest increase in homicide rates was detected in out zones (beyond 3 km). ITS analysis revealed a minimal reduction in monthly homicide incidence in near zones and a minimal increase in out zones.

Conclusions

SCS implementation was not associated with increased homicide rates; instead, a minimal reduction in monthly homicide incidence was observed near SCS. These findings counter claims by Ontario policymakers seeking to close SCS. While these findings may inform strategies to optimize public health and safety in overdose prevention, further research in other settings is needed to assess their generalizability. Based on current evidence, it appears unlikely that SCS implementation increases homicide rates.

Disclosure of Interest Statement

The authors declare no competing interests.