

A Pre-Post evaluation of heroin-related ambulance attendances within the vicinity of the Richmond medically supervised injecting room.

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Introduction: Injecting drug use is associated with many health and social harms and continues to be a significant health problem worldwide. Medically Supervised Injecting Rooms (MSIR) have been beneficial in reducing many harms including overdose and death. However, accurate and timely harm data surrounding an MSIR vicinity can be limited. This study utilised a novel population based surveillance system to identify ambulance attendances within the vicinity of the new MSIR in Richmond, Victoria and analysed data pre- and post-opening of the MSIR.

Method: A cross-sectional, retrospective analysis of all heroin-related ambulance attendances between July 2016 and June 2020 in Victoria was used. Paramedic notes were coded for drug involvement in the attendance. Attendances occurring in Richmond and within opening hours of MSIR were captured for this study.

Results: There were 12,875 heroin-related ambulance attendances recorded during the study period. In the two year pre-MSIR period, the number of heroin-related ambulance attendances were increasing by 1.6% per month (IRR 1.016; 95% CI [1.007-1.025], $p < 0.001$). Once the MSIR opened, the number of heroin-related attendances decreased by 2.6% per month (IRR 0.974; 95%CI [0.9645-0.9839], $P < 0.000$). Further changes in the number of heroin-related ambulances were noted during the study period when operating hours were examined.

Discussions and Conclusions: This study demonstrates the value of using coded ambulance surveillance records to track heroin related attendances around MSIR locations. This study indicates that heroin-related ambulance attendances decreased once the MSIR was introduced and that MSIR operating hours may impact the number of heroin-related ambulance attendances within the vicinity.

Implications for Practice or Policy: This study demonstrates there has been a reduction in ambulance attendances due to heroin overdose, within the MSIR vicinity. Public health strategies for new MSIR centres being open should consider and promote longer opening hours to enhance safety and further improve services for different populations.

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