

Intranasal mucosal atomiser devices: a novel harm reduction intervention

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Background: Factors associated with diminished peripheral vein access, including age, prolonged history of injecting drug use and coadministration with other substances are all increasing among people who inject drugs in Australia. This exposes individuals to increased risk of injecting-related complications, including skin and soft tissue infection, neurovascular injury, and deep vein thrombosis. There is therefore a need to expand existing harm reduction interventions to better address the gamut of injection-related complications.

Description of Model of Care/Intervention: Internationally, intranasal mucosal atomising devices (MADs) are utilised within heroin assisted treatment (HAT) programs. Pharmacological studies of MADs demonstrate a similar peak plasma concentration and time to effect as IM injection. User experience suggests a similar “heroin typical”, “rush” effect as IV administration. Within HAT programs, the efficacy of MADs is supported by high rates of treatment retention, a favourable user report and 50% fewer injection episodes. However, they have not been evaluated in a harm reduction space for use with street heroin. Based on evidence within HAT, primary care/addiction medicine clinicians identified a series of consumers with difficult venous access and injecting-related complications to trial MAD devices with street heroin. Heroin was prepared as usual and administered intranasally via MAD when suitable venous access could not be obtained.

Effectiveness/Acceptability/Implementation: Consumers who trialed these devices reported positive use experiences, comparable to current methods of substance use (commonly IM injection) and so continued to utilise the devices. Rates of complication, such as skin and soft tissue infection reduced.

Conclusion and Next Steps: MADs for intranasal heroin administration represent a novel harm reduction intervention to reduce rates of injecting-related complications. They have not been widely evaluated for use outside of HAT programs, so further research is required in partnership with peer organisations and service users.

Implications on communities, practice, policy and/or First Nations communities: Using MADs, consumers have the capacity to reduce injecting-related complications and work towards their individual health goals without the mandate for abstinence.

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