The relationship between opioid agonist therapy and reduced injecting frequency amongst people who inject drugs: Evidence from a prospective cohort study

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Introduction:

Opioid agonist therapy (OAT) is an effective treatment for opioid use disorder, with evidence showing a range of benefits for those engaged in treatment. However, the causal path by which these effects occur is ambiguous, but it is likely that reduced injecting frequency plays a role. We modelled the impacts of OAT exposure on self-reported injecting frequency over time in a community-based cohort of people who inject drugs.

Methods:

We analysed data on OAT engagement in the past 12-months and frequency of drug injecting in the past-week (total injections, not injecting, less than daily or daily or more frequent) from annual SuperMIX a prospective cohort study interviews with people who inject drugs in Melbourne (n=899 participants, n=3589 participant-interviews). Directed Acyclic Graphs set out how a causal effect between OAT engagement and injecting drug use frequency between annual interviews could be tested. Sequential conditional mean modelling (SCMM) was used to estimate the total causal effect of any recent OAT on injecting frequency.

Results:

Initial analysis shows around one third of SuperMIX participants reported past 12-month OAT use across interviews. Amongst the group of people who reported daily injecting, at their next interview 16% reported no injecting, 42% decreased to less than daily injecting and 42% reported no change or some increase at their next interview. Preliminary SCMMs show that any OAT engagement in the past 12-months reduced, at the next interview, past-week injecting frequency (total injections) by 19% (aIRR = 0.81, 95%CI=0.71,0.94) and reduced the risk of injecting 'daily or more' frequently compared to 'not injecting' by 34% (aRRR=0.66, 95%CI=0.51,0.85). Compared to 'not injecting' OAT engagement was not associated with reporting injecting 'less than daily' (aRRR=1.22, 95%CI=0.94,1.58).

Conclusion:

Preliminary analyses highlight how OAT reduces injecting frequency, particularly high frequency injecting, amongst people who inject drugs, likely underpinning reduced exposure to risk and improved health outcomes for those engaged in OAT.

Implications on policy:

Understanding how injecting frequency drives the benefits of OAT should be reflected in guidance for OAT policy.

Declarations of interests:

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