

The effect of amphetamine-type stimulant use at start of treatment on substance use and treatment retention during treatment among clients enrolled in an opioid agonist program.

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Introduction: Research suggests amphetamine-type stimulant (ATS) use is associated with poorer treatment retention and mental health, and greater substance use; however, no studies have explored the association between frequency of ATS use at start of treatment and rates of change in subsequent substance use over time.

Methods: We analysed routinely collected outcomes data from clients commencing opioid agonist treatment programs in six local health districts in New South Wales, Australia. Inclusion required two or more observations during the first year within a single treatment encounter. We used Bayesian longitudinal methods to estimate the association between number of days ATS was used in the 28 days prior to start of treatment and (i) subsequent frequency of ATS use, (ii) frequency of heroin use and (iii) retention in treatment.

Results: 687 encounters met criteria for inclusion. Rate of change in ATS use over the first year of treatment was not notably different based on ATS use at start of treatment (estimate=-0.02, 95%CI: -0.10, 0.05), with clients using ATS at start of treatment using notably more at year's end those using no ATS at start of treatment (estimate=7.32, CI: 1.44, 18.54); however, overall, levels of ATS use reduced considerably. ATS at start of treatment was associated with notably more frequent heroin use at start of treatment (estimate=0.08, CI: 0.04, 0.13); however by year's end this association was no longer notable (estimate=0.02, CI: -0.02, 1.54). ATS use at start of treatment was associated with increased rate of treatment dropout (Hazard Ratio=1.02, CI: 1.00, 1.05).

Discussions and Conclusions: While overall levels of ATS and heroin decreased during treatment, it appears as though people who use more ATS at start of treatment are likely to still be using more ATS one year in and are more likely to drop out of treatment. Encouragingly, the correlation between ATS use and heroin use at start of treatment appears to reduce over time, and has all but disappeared one year in.

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