Co-occurring mental disorders and retention in buprenorphine and methadone treatment for opioid use disorder: A retrospective data linkage cohort study

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Introduction: People with opioid use disorder (OUD) and co-occurring mental disorders may have a differing likelihood of being retained in opioid agonist treatment (OAT) than people with OUD only. Studies have also suggested that sex may be a contributing factor in OAT retention outcomes. This study examines the association between different co-occurring mental disorders and OAT retention outcomes by medication type and sex.

Methods: Cox proportional-hazard modelling was conducted using a retrospective cohort of all NSW residents initiating an OAT episode between 2002 and 2020 (N=42,662). Secondary mental health care administrative datasets were used to identify past-year mental disorders. OAT treatment cessation hazard ratios (HRs) by individual mental disorders and sex were calculated for 0-1, 1-3, 3-6, 6-12, and 12-24 months. HRs adjusted for sociodemographic characteristics, inpatient psychiatric admission and number of co-occurring mental disorders. Additionally, HRs were calculated to compare the OAT treatment cessation risk between males and females identified with each specific mental disorder.

Key findings: Compared to people with no identified psychotic disorders, people with any identified psychotic disorders were consistently more likely to cease buprenorphine between the first 3-12 months (HR_{3-6}: 1.49, 95%CI: 1.14-1.96; HR_{6-12}: 1.51, 95%CI: 1.14-2.02) and methadone treatment between the first 6-24 months (HR_{6-12}: 1.27, 95%CI: 1.02-1.58; HR_{12-24}: 1.27; 95%CI: 1.02-1.58). Additionally, females identified as engaged with self-harm or attempted suicide were more likely to cease methadone treatment between 12-24 months than their male counterparts (HR: 0.19; 95%CI: 0.04-0.93).

Discussions and Conclusions: People with co-occurring mental disorders were not significantly more likely to cease buprenorphine or methadone treatment in the first 24 months than people without, except for those with psychotic disorders.

Implications on communities, practice, policy and/or First Nations communities: Buprenorphine and methadone should be recommended for people initiating treatment for OUD with or without co-occurring mental disorders. Providing additional support can improve treatment retention among individuals identified with an increased risk of OAT treatment cessation.

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