

## Associations between pain severity and opioid agonist treatment using the SuperMIX cohort data in Australia

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**Introduction:** Chronic pain is highly prevalent among people with opioid use disorder (OUD), yet their pain is often undertreated as a comorbid condition. Previous research shows that people with OUD and chronic pain are more likely to be older, unemployed, and living with a diagnosed mental illness compared with those with OUD but without chronic pain. However, pain severity is not well understood in people receiving opioid agonist treatment (OAT). This research aims to explore the correlates of pain and how pain severity changes with OAT status in a sample of people who inject drugs.

**Methods:** Data were drawn from the Melbourne Injecting Drug User Cohort Study (SuperMIX), comprising individuals with a drug injection history recruited from areas across greater Melbourne, Australia. Data were collected between 2008-2022. Eligible participants were adults who reported ever being in OAT for at least one time point. Participants were classified into four groups based on their pain severity. Ordinal logistic regression examined correlates of pain severity using baseline interview data.

**Key Findings:** A total of 1,091 participants were eligible for inclusion. Most were male and unemployed, with a mean age at baseline of 34.5 years. At baseline, 64.9% and 16.9% of the participants had any pain and severe pain in the past four weeks, respectively. Half of them were currently in OAT. The initial exploratory analysis revealed that pain severity was positively associated with higher age, female gender, and emotional problems (measured by the 8-item Short-Form Health Survey). No significant correlates were observed between pain severity and current OAT status.

**Conclusions:** Female gender, older age, and more severe emotional problems were associated with increased odds of having a higher level of pain severity among people with OUD. Longitudinal analysis is further needed to examine the relationship between current OAT status and pain severity.

**Implications for Practice:** Among people who inject drugs, those who are female and older are a priority for pain screening. Multidisciplinary supports may be needed to address the comorbid pain and mental health problems among this target population.

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