

The predictive value of craving in treatment switching and retention under buprenorphine/naloxone or methadone models of care for prescription-type opioid use disorder

Category: Poster Presentation (in person)

Abstract Body

Background: Opioid agonist therapy is the main treatment for opioid use disorders, but retention remains suboptimal. Identifying predictors of treatment attrition may help target interventions to those at higher risk of stopping treatment. Whether craving strongly predicts attrition is debated in the literature and is not yet clear.

Hypotheses: We hypothesized that opioid craving would predict a greater risk of dropping out of treatment, or of switching to a different opioid agonist during a 6-month treatment period.

Methods: We used data from the OPTIMA study, a pan-Canadian, pragmatic, randomized controlled trial that compared flexible, early take-home buprenorphine/naloxone (n=137) to the standard methadone (n=132) model of care with daily witnessed ingestion in treating people with prescription-type opioid use disorder over a period of 24 weeks. We used Cox proportional hazards regression to perform a survival analysis with craving as a time dependent covariate, and treatment attrition or switch as the dependent variable, controlling for assigned treatment group (BUP/NX or methadone), province, and lifetime history of heroin use, clustered within participants. Craving was measured using the Brief Substance Craving Scale (BSCS) at baseline, week 2, 6, 10, 14, 18 and 22.

Results: Each 1-point increase in craving on the BSCS was associated with a 15.4% increased risk of switching treatment (HR = 1.154, 95% CI = 1.050-1.268, p=0.003), and 15.3% increased risk of treatment attrition (HR = 1.153, 95% CI = 1.065-1.248, p=<0.001). There was no interaction between craving and treatment group for either treatment attrition (HR = 0.999, 95% CI = 0.857-1.163, p=0.986) or treatment switching (HR = 1.203, 95% CI = 0.993-1.456, p=0.058).

Conclusions: Opioid craving predicted treatment drop-out and switches to other opioid agonist treatments, even when controlling for treatment randomization group. Craving provides critical feedback during opioid agonist therapy that should be considered when making treatment decisions in collaboration with people with prescription opioid use disorder.

Key Words

- Opiate Agonist Therapy
- Opioids/Opiates
- Pharmacologic Interventions

Learning Objective # 1

Describe the predictive value of opioid craving on treatment retention during buprenorphine/naloxone or methadone opioid agonist therapy.

Learning Objective # 2

Describe the predictive value of opioid craving on switching to a different opioid agonist during buprenorphine/naloxone or methadone opioid agonist therapy.

Reference # 1

Jutras-Aswad et al., 2022. Flexible Buprenorphine/Naloxone Model of Care for Reducing Opioid Use in Individuals With Prescription-Type Opioid Use Disorder: An Open-Label, Pragmatic, Noninferiority Randomized Controlled Trial. *Am J Psychiatry* appiajp21090964. <https://doi.org/10.1176/appi.ajp.21090964>

Reference # 2

McAnulty et al, 2022. Buprenorphine/naloxone and methadone effectiveness for reducing craving in individuals with prescription opioid use disorder: Exploratory results from an open-label, pragmatic randomized controlled trial. *Drug Alcohol Depend* 239, 109604. <https://doi.org/10.1016/j.drugalcdep.2022.109604>

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