

CHANGES IN ILLICIT OPIOID USE PREDICT CHANGES IN ANHEDONIA IN OPIOID-DEPENDENT INDIVIDUALS – A LONGITUDINAL ANALYSIS

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Introduction and Aims:

Recent research suggests that anhedonia (impaired capacity to experience pleasure) is common among individuals with substance use disorders. However, it is unclear to what extent anhedonia is dynamically influenced by recent substance use. We examined whether monthly fluctuations in anhedonia were associated with recent illicit opioid use, after controlling for other variables likely to influence anhedonia.

Design and Methods:

Participants were 121 opioid-dependent individuals who, at recruitment, were either prescribed opioid replacement pharmacotherapy (methadone n=55; buprenorphine n=35) or had recently withdrawn from all opioids and were attempting abstinence (n=31). Anhedonia, substance use, and depression were assessed monthly for 6 months, and again at a final 12-month follow-up. Random intercept linear models, with restricted maximum likelihood estimation, were used to examine the longitudinal association between change in anhedonia and change in illicit opioid use, adjusted for age, sex, depression, history of PTSD, and pharmacotherapy.

Results:

There was a general tendency for anhedonia to decline over time. There was also a significant temporal association between changes in anhedonia and changes in opioid use such that participants' anhedonia tended to increase following a month with above-average illicit opioid use (i.e. above the individual's average use over the observation period).

Discussions and Conclusions:

We found that anhedonia increases after increased levels of recent illicit opioid use, when controlling for a range of other factors likely to influence anhedonia. This supports models proposing that anhedonia may be influenced by the pharmacological effects of recent opioid use.

Disclosure of Interest Statement:

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