LACK OF ANALGESIC EFFICACY OF OPIOIDS AND GABAPENTIN ON ACUTE EXPERIMENTAL PAIN RESPONSES IN METHADONE MAINTAINED PATIENTS

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Introduction
There are limited data to inform the management of pain in opioid dependent patients. We sought to examine the effect of three analgesic approaches on experimentally induced pain, to inform the treatment of acute pain in opioid dependent people.

Methods
Nine participants were recruited from an outpatient methadone clinic. Usual methadone alone (UM), or in addition to usual methadone either 30% extra methadone (EM), oxycodone equivalent to 30% usual methadone or gabapentin (600mg) in random order, were given to participants, using a within patient double-blinded design. Acute pain response was measured by immersing the non-dominant arm in cold water at 5^0. Vital signs, pulse oximetry, pupil diameter, measures of VAS for sedation, good and bad effects, liking and cognitive tests (DSST) were assessed.

Results
No difference in mean pain tolerance was found between the medication conditions. Mean pain tolerance was 28.17seconds in UM, 32.29s in EM, 28.52s in the oxycodone arm and 26.89s in the gabapentin arm. Inter-individual variability in response to analgesic was observed. A 30% extra methadone was associated with increased self-rated sedation and intoxication. Addition of gabapentin was associated with an increase in self-rated drug liking. Oxygen saturation and respiratory rate were not affected by drug condition. No adverse events were detected.

Discussion and Conclusions
Findings indicated considerable inter-individual variability in response to different analgesic strategies, and limited benefit of acute addition of gabapentin to manage acute pain in patients receiving methadone treatment. Further studies are required to identify variables that predict adequate analgesic response.