Does naloxone provision lead to increased substance use? A systematic review to assess if there is evidence of a 'moral hazard' associated with naloxone supply

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Background: Take home naloxone (THN) programs have been rapidly upscaled in response to increasing opioid-related mortality. One often cited concern is that naloxone provision could be associated with increased opioid use, due to the availability of naloxone to reverse opioid overdose.

Aim: We conducted a systematic review to determine whether THN provision is associated with changes in substance use by participants enrolled in THN programs.

Methods: We conducted a systematic review of the literature to assess changes in heroin or other substance use by people who use opioids following THN provision.

Results: Seven studies with 2578 participants were included. Of the seven studies, there were two quasi-experimental studies and five cohort studies. Based on the Joanna Briggs Institute quality assessment, four studies were of moderate quality and three studies were of high quality. Of the five studies that reported on the primary outcome of heroin use, no study found evidence of increased heroin use across the study population. Five studies reported on other substance use (benzodiazepines, alcohol, cocaine, amphetamine, cannabis, prescription opioids), none of which found evidence of an increase in other substance use associated with THN provision. Four studies reported on changes in overdose frequency following THN provision: three studies reporting no change, and one study of people prescribed opioids finding a reduction in opioid-related emergency department attendances for participants who received naloxone.

Conclusion: We found no evidence that THN provision was associated with increased opioid use or overdose. Concerns that THN supply may lead to increased substance use were not supported by data from reviewed studies.