RISK OF DRUG-RELATED DEATH ASSOCIATED WITH CO-PRESCRIBING OF GABAPENTINOIDS AND Z-DRUGS AMONG PEOPLE RECEIVING OPIOID-AGONIST TREATMENT IN SCOTLAND.

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Background: The protective effect of opioid-agonist treatment (OAT) in preventing drug-related deaths (DRD) among people with opioid dependence is widely reported. DRD rates in Scotland are amongst the highest globally and have increased among people on and off OAT. Evidence is mixed on whether co-prescribing of sedative medications such as gabapentinoids and Z-drugs among people with opioid dependence is associated with risk of DRD.

Methods: We conducted a retrospective cohort study using linked administrative and healthcare data. Our cohort included people prescribed OAT (methadone or buprenorphine) for opioid dependence between 2011 and 2020. Individuals were followed up during OAT and up to 24 months off treatment. OAT records were linked to mortality, sociodemographic, comorbidity and prescribing data. We identified episodes of prescription of gabapentinoids and Z-drugs and used multivariable quasi-Poisson regression models to assess whether there was an association between co-prescription of these medications (during OAT and up to 24 months after treatment) and concurrent prescription (during OAT) with risk of DRD.

Results: Among 46,602 individuals with 304,783 person-years of follow up, we found that co-prescription of both gabapentinoids and z-drugs was common. Co-prescription of gabapentinoids was associated with an elevated risk of DRD (adjusted hazard ratio (aHR) = 2.18, 95% CI = 1.92, 2.46). Co-prescribing of Z-drugs also showed evidence of an association with increased risk of DRD (aHR 1.39, 95% CI = 1.15, 1.66). Concurrent prescribing (during OAT) was similarly associated with an increased DRD risk (gabapentinoids: aHR=2.09, 95% CI=1.81, 2.41; Z-drugs: aHR=1.26, 95% CI=1.01, 1.55).

Conclusion: Co-prescribing of gabapentinoids and Z-drugs is common among OAT patients. However, this large study strengthens evidence that co-prescribing is associated with an increased risk of DRD. Alternatives to prescribing sedative medications to OAT patients and/or greater caution and monitoring if prescribed are needed.

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