

1 in 3 opioid-related deaths occurred among people with active opioid prescriptions in 2016

ODPRN

ONTARIO DRUG POLICY
RESEARCH NETWORK

Background

Why is this important?

- There has been growing concern over the increased prescribing of opioids as opioid-related deaths across North America have climbed over the last 20 years. More recently, the use of non-prescribed (i.e. diverted or illegal) opioids is thought to have become a major contributor to opioid-related deaths.
- Many strategies aimed at safe and effective opioid prescribing have been implemented. Evidence regarding the contribution of prescribed and non-prescribed opioids to opioid-related deaths is needed to inform future policy development.

What were we investigating?

- This study describes the contribution of prescribed and non-prescribed opioids to all opioid-related deaths in Ontario.

Key Points

- Prescribed, diverted and illicit opioids all play an important role in opioid-related deaths.
- 1 in 3 people dying of an opioid-related cause had an active opioid prescription at time of death in 2016.
- Almost 40% of deaths involving an active opioid prescription had additional opioids present at death.
- Since 2013, the role of non-prescribed fentanyl in opioid-related deaths increased substantially among all individuals.

Study Details

How was the study conducted?

- We conducted a population-based cohort study of all individuals who died of an opioid-related cause in Ontario between January 1, 2013 and December 31, 2016.
- Post-mortem toxicology results from coronial investigations were used to characterize drugs present at time of death to determine whether prescribed and/or non-prescribed opioids contributed to the death.
- We defined an active opioid prescription as those with a duration overlapping the date of death, and recent opioid prescriptions as those dispensed in the 30 and 180 days preceding death. The Narcotics Monitoring System (NMS) database was used to identify all prescriptions for opioids and benzodiazepines dispensed from community pharmacies.



What did we find?

- Of the 2,833 opioid-related deaths identified, an active opioid prescription on the date of death was relatively common, but declined slightly throughout the study period (38.2% in 2013 vs. 32.5% in 2016; $p=0.03$).
- Older individuals and women were more likely to have an active opioid prescription at time of death. In 2016, 46.4% of those aged 45 to 64 had an active opioid prescription compared with only 11.6% among those aged 24 or younger. Similarly, 45.6% of women had an active opioid prescription at time of death compared to 26.4% of men.
- Among people with active opioid prescriptions at time of death, 37.8% also had evidence of at least one non-prescribed opioid on post-mortem toxicology.
- Since 2013, the prevalence of active benzodiazepine prescriptions at time of an opioid-related death decreased. In 2016, 16.1% of people dying from an opioid-related cause had active prescriptions for both opioids and benzodiazepines.
- Among those without an active opioid prescription at time of death, fentanyl was detected in 20.0% of deaths in 2013, increasing to 47.5% by 2016. Prescription opioids such as oxycodone, hydromorphone, methadone and morphine are each present in just under 20% of these deaths, despite the individual having no active prescription for one of these drugs.

Recommendations

Policymakers

- Future programs and policies designed to address the ongoing opioid crisis should consider the multi-factorial contributions of prescribed, diverted and illicit opioids.
- Particular attention should be paid to the rapidly growing role of illicit fentanyl in opioid-related deaths.

Clinicians

- It is important to be aware of the contribution of prescription opioids (prescribed or diverted) to opioid-related deaths.
- However, clinicians should avoid rapidly tapering opioid doses in their patients, as this can lead to a transition in obtaining opioids from illicit sources, which is inherently less safe.

For more information

Gomes, T et al. Contributions of prescribed and non-prescribed opioids to opioid-related deaths: A population-based cohort study in Ontario, Canada. The BMJ, 2018.

St. Michael's
Inspired Care.
Inspiring Science.



 @ODPRN_Research

 @ODPRNResearch

www.odprn.ca