First Nations Health Authority
Health through wellness

Study: Impact of Prescribed Safer Supply on Population Health

This study is the first to investigate the impact of receiving prescribed safer supply (PSS) on: i) death (by any cause) and ii) acute care visits[1] using data of everyone in BC with a substance use disorder.

We wanted to know the impact of receiving PSS on death and acute care visits for people with opioid use disorder (OUD) and stimulant use disorder (StUD).

Background

Illicit fentanyl is the primary contributor of overdose deaths in the toxic and unregulated 'street' drug supply. In 2020, in the beginning of the pandemic, the rate of toxic drug deaths nearly doubled from 2019, to an average of five per day.

In 2020, First Nations people died from toxic drugs at 5.3x the rate of other residents in BC. This accounted for 14.7% of all deaths, despite First Nations people representing just 3.3% of the BC population. This is attributable to the ongoing impacts of colonization and intergenerational trauma.

In March 2020, the BC Government approved a form of prescribed safer supply (PSS) outlined in the Risk Mitigation Guidance. Under this guidance, a doctor or a nurse practitioner could prescribe pharmaceutical alternatives to the street supply.

PSS is one harm reduction approach that aims to reduce reliance on the street drug supply by providing safe alternative. It is not a treatment for substance use disorders – it is meant to keep people alive.

1 Acute care visits = emergency room visits and hospital stays
2 OUD = Opioid Use Disorder; a chronic health condition characterized by dependence on opioid drugs, such as heroin and fentanyl
3 StUD = stimulant use disorder; a chronic health condition of dependence on stimulant drugs like meth, cocaine, crack

First Nations Health Authority
Health through wellness

Study: Impact of Prescribed Safer Supply on Population Health

Methods & Analysis in action

Between March 27, 2020 and August 31, 2021, 5,356 people with OUD[2] received opioid-PSS. Among those who received opioid-PSS, one-third were female (36.4 %) and 9.9% lived in a rural community.

We used health records and databases to identify all BC residents with OUD and all opioid-PSS dispensations.

We looked at death rates by any cause and from overdose, and acute care visits for all people with OUD in BC.

To answer the research question, we compared risk of death, overdose, and acute care visits among people with OUD who received PSS to people with OUD but who did not receive PSS.

We also looked at the impact of PSS on the same outcomes among people with StUD[3], but those results are not reported here.

What we found

Receiving opioid PSS for 1 or more days lowered death rates from any cause by 61% and from overdose by 55% in the week following prescription.

Receiving opioid-PSS for 4+ days lowered death rates from any cause by 91% and from overdose by 89%. The more days PSS was used, the less likely deaths were to occur.

We did not find a significant impact of opioid-PSS on acute care visits.

Key Finding: The more days prescribed safer supply was used, the less likely deaths were to occur.

First Nations Health Authority
Health through wellness

Study: Impact of Prescribed Safer Supply on Population Health

What these findings mean

People who have access to PSS may rely less on the toxic street supply, which in turn reduces the risk of death.

Fewer than 1 in 10 people with OUD in BC were able to access opioid-PSS. There is an opportunity to expand access and availability to reduce reliance on the street supply in BC.

PSS and harm reduction interventions are an opportunity to meet people where they are at, and support them on their own healing journey.

Addressing the toxic drug supply crisis requires many programs and services including prevention, education, treatment, healing, and other harm reduction interventions.

Slaunwhite A, Min JE, Palis H, Urbanoski K, Pauly B, Barker B, Crabtree A, Bach P, Krebs E, Dale L, Meilleur L. Effect of Risk Mitigation Guidance opioid and stimulant dispensations on mortality and acute care visits during dual public health emergencies: retrospective cohort study. bmj. 2024 Jan 11;384. doi: https://doi.org/10.1136/bmj-2023-076336

For more information about safer supply including experiences of safer supply clients, see our Safer Supply FAQ.

BC Centre for Disease Control
Provincial Health Services Authority
Centre for Advancing Health Outcomes
First Nations Health Authority
Health through wellness
University of Victoria
Canadian Institute for Substance Use Research
BRITISH COLUMBIA CENTRE ON SUBSTANCE USE
Networking researchers, educators & care providers
SFU
SIMON FRASER UNIVERSITY
THE UNIVERSITY OF BRITISH COLUMBIA
School of Population and Public Health
Faculty of Medicine