



THE IMPACT OF BENZODIAZEPINE USE ON MORTALITY AMONG POLYSUBSTANCE USERS IN VANCOUVER, CANADA

BACKGROUND & METHOD

- This study looked at the impact of benzodiazepine* (BZD) use on mortality among a Canadian cohort of people who inject drugs (PWID).
- Between May 1996 and November 2013, 2802 PWID in Vancouver were followed; each participant was followed for a median of 67 months (~5.6 years).
- Study participants were interviewed on a semi-annual basis to collect information on drug use and other risk behaviours.
- Rates and causes of death were examined through linkages with the provincial vital statistics database.

QUICK FACT

AMONG PWID, BENZODIAZEPINES WERE MORE STRONGLY ASSOCIATED WITH RISK OF DEATH THAN ANY OTHER SUBSTANCE OF ABUSE.

FINDINGS

- During the study period, 527 (18.8%) of the study population died.
- Benzodiazepine use was strongly associated with increased risk of death from any cause.
- The mortality rate was 1.86 times higher among PWID who used BZD versus those who did not.
- This effect did not change after controlling for other factors that could influence mortality, such as HIV infection, hepatitis C infection, and high-risk behaviours.
- Benzodiazepine use was associated with a higher risk of mortality than all other substances of abuse, including heroin, alcohol, and cocaine.

IMPLICATIONS

- Due to increased risks of harms from BZD use, including death, improved physician education is needed to promote safer prescription strategies for this medication, particularly among polysubstance-using populations and PWID.
- There is an urgent need to increase awareness of the safety and risks associated with benzodiazepines, in order to reduce diversion and prevent serious harms associated with prescribed and illicit use of this medication.

* Benzodiazepines are a class of sedative or anti-anxiety medications; common examples include Valium (diazepam), Xanax (alprazolam), Ativan (lorazepam), and Librium (chlordiazepoxide).

Walton G, Hayashi K, Bach P, Dong H, Kerr T, Ahamad K, Milloy MJ, Montaner J, Wood E. **The impact of benzodiazepine use on mortality among polysubstance users in Vancouver, Canada.** *Public Health Reports*, 2016; 131(3): 491–499.

