Prevalence of Non-Medical Use of Prescription Drugs in Canada

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Introduction

The non-medical use (NMU) of prescription drugs has been identified as a significant public health concern, with a particular focus on the misuse of opioids, stimulants, and sedatives. Despite this increased attention, data on the prevalence of NMU in Canada is limited and is often impacted by how NMU is defined. The aim of this study was to use data from the Survey of Non-Medical Use of Prescription Drugs (NMURx) to describe, among Canadian adults aged 15 and above, the lifetime and last 90 day prevalence of NMU of prescription drugs, as well as the proportion of those that have non-medially used these drugs in the last 90 days among those that have non-medically used these drugs in their lifetime.

Methods

The NMURx program is a large-scale, repeated, cross-sectional survey of adults (15+) in Canada.

- NMURx studies NMU of medications among the general population and characterizes associated behaviors.
- The NMURx survey also has launched or is prepared to launch in the United States, United Kingdom, France, Germany, Italy, and Spain.
- NMU is defined as medication use without a doctor's prescription, or for any reason other than what was recommended by a doctor/dentist/pharmacist/the packet insert (e.g. "for enjoyment/to get high", "to self-treat pain").
- Post-stratification weights were applied to reflect the distribution of adults in Canada, based on age, gender, and geographic region.

This analysis used data collected in Canada in third quarter 2016 to estimate the prevalence and 95% confidence intervals (CI) of lifetime NMU and last 90 day NMU of opioids, benzodiazepines, stimulants, and GABA analogues, among adults in Canada.

- Respondents could report NMU at the drug product level or, in the case that the specific product is unknown, at the active pharmaceutical ingredient or drug class level.
- Opioids in this analysis include fentanyl, buprenorphine, morphine, methadone, oxycodone, oxymorphone, tramadol, tapentadol, codeine (prescription and over-the-counter codeine are included in this analysis), hydrocodone, and hydromorphone.
- Stimulants in this analysis include amphetamine, dextroamphetamine, and methylphenidate.
- Benzodiazepines in this analysis include alprazolam, clobazam, clonazepam, diazepam, flurazepam, lorazepam, oxazepam, and temazepam.
- GABA analogues in this analysis include pregabalin, gabapentin, and baclofen.

Table 1: Respondent Demographics

Characteristic	% (95% CI) Weighted N = 30,454,776
Gender	
Male	49.3 (48.2, 50.4)
Female	50.7 (49.6, 51.8)
Age in Years	
Median (IQR)	46.0 (30.3,60.8)
Range	15.0, 93.0

Figure 1: Non-Medical Use Prevalence

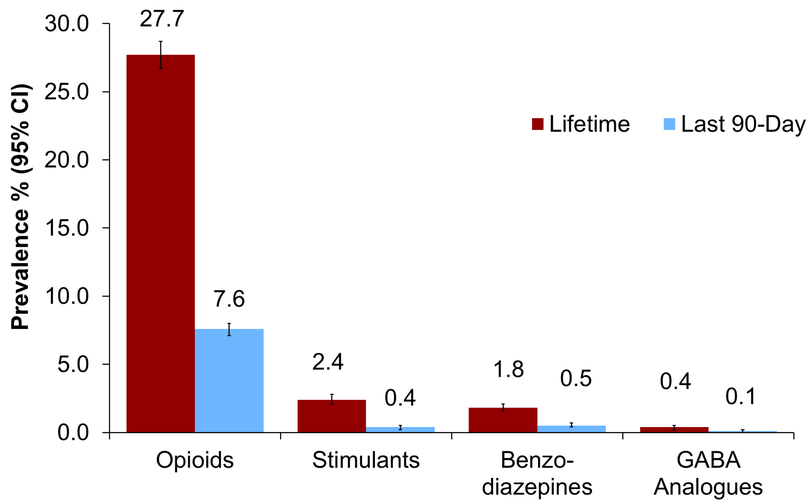
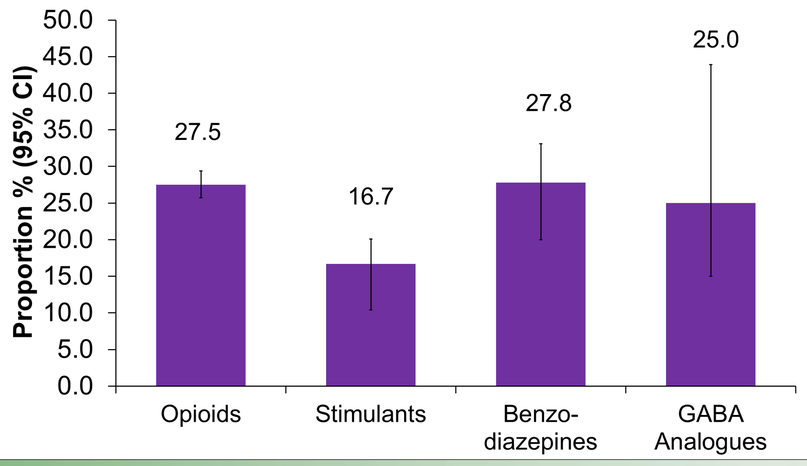


Figure 2: Last 90 Day NMU among those Reporting Lifetime NMU



Results

- Prevalence of lifetime NMU (Figure 1) was highest for opioids (27.7%; 95% CI 26.7%-28.7%), followed by stimulants (2.4; 2.1-2.8), benzodiazepines (1.8; 1.6-2.1), and GABA analogues (0.4; 0.2-0.5).
- Prevalence of NMU in the last 90 days (Figure 1) was highest for opioids (7.6; 7.1-8.2), followed by benzodiazepines (0.5; 0.4-0.6), stimulants (0.4; 0.2-0.5), and GABA analogues (0.1; 0.0-0.2).
- Among respondents reporting lifetime NMU per drug class, NMU in the last 90 days (Figure 2) was highest for benzodiazepines (27.8: 20.0-33.1), followed by opioids (27.5: 25.7-29.4), GABA analogues (25.0: 15.0-43.9), and stimulants (16.7: 10.4-20.1).

Conclusions

- While lifetime NMU of opioids, benzodiazepines, stimulants, and GABA analogues was reported by the general Canadian adult population, NMU was highest for prescription opioids.
- More than a quarter of those who reported lifetime NMU of opioids, benzodiazepines, and GABA analogues reported NMU within each drug class in the last 90 days.
- While the overall prevalence of NMU in the last 90 days among Canadian adults was much higher for opioids than for the other drug classes, the proportions of NMU among those that report lifetime NMU are similar across drug classes.

Discussion

The rate of lifetime NMU for opioids is more than ten times higher and the rate of NMU in the last 90 days is more than fifteen times higher for opioids than that for stimulants, benzodiazepines, and GABA analogues. The current extent of opioid NMU in Canada and the substantially higher rates of opioid NMU compared to other prescription medications highlights the need for the further development and implementation of evidence-informed solutions.

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