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Reducing Cannabis Harms for Children and Youth in Canada: A Population Health Approach – Sarah Blades

Introduction/problem definition that demonstrates the need for a policy change:

Canadian children and youth experience harms from cannabis products ranging from injuries such as poisoning and motor vehicle incidents, to challenges with mental health and educational participation. Harms vary depending on acute or long term impacts of early and frequent exposure to cannabis.

Research methods:

Qualitative analysis of the federal Cannabis Act to determine policy opportunities for improvement. Review of publications from Canadian sources regarding substance use regulation.

Results and analysis:

The current Cannabis Act can be strengthened by incorporating recommendations from the Canadian Drug Policy Coalition https://www.drugpolicy.ca/wp-content/uploads/2013/01/CDPC2013_en.pdf including holding the legal market between prohibition and promotion.

Retail of regulated cannabis for the purposes of public health protection will: 1) not generate profit but save health and social costs 2) maintain access to cannabis for adult Canadians and 3) improve equity and reduce criminalization for people who use drugs.

Current status in the Cannabis Act permits many practices decided at the provincial level that negatively impact children and youth such as exposure in retail environments, the unregulated online market, and edible products that resemble foods popular with children.

Recommendations and implications for policy, practice or additional research:

- Separate retail structures from other regulated substances (limit co-retail with alcohol)
- Limit cannabis purchases to in person only (learn from Quebec and vaping product sales)
- Amend edible cannabis regulations to restrict items that resemble candy, chocolate bars or sweet baked goods; allowing capsules, distillates and teas which do not resemble foods popular with children.
- Strengthen plain packaging requirements, especially for cannabis beverages.
- Increase the minimum purchase age to 21, removing the legal purchaser from most social circles of children and youth.

Adolescent Attitudes Towards and Participation in Cannabis-Impaired Driving and Riding with Cannabis-Impaired Drivers - *Mahmood Reza Gohari***Background:**

Cannabis is the second most commonly used substance and contributes to ~20% of fatal drug-impaired driving crashes. Perceived risks play a significant role in the decision-making process related to cannabis-impaired driving (CID) and riding with an impaired driver (RWCID). Potential shifts in social norms related to the legalization of recreational cannabis use may lead to a reduced risk perception, thus an increased cannabis-impaired driving/riding (CIDR), particularly among adolescents.

Objective:

This study investigated the associations between adolescents' perceived risk of CID and RWCID and their reported engagement in CIDR.

Methods:

three repeated cross-sectional survey data collected in 2020-23 from 65,862 Canadian secondary school students were analyzed. Multilevel logistic regressions were used to estimate the risk perception of CID and RWCID and their association with the odds of engaging in past 30-day CIDR.

Results:

Overall, 5.8% of students perceived CID to present no-low risk, 87.1% medium-high, and 7.1% expressed uncertainty about CID risk. Significantly higher proportion of adolescents perceived CID as low-medium in 2021 compared to 2020 (OR=1.26). Younger, lower socioeconomic status, and those attending schools in rural/small urban, exhibited a higher likelihood of no-low CID risk perceptions. Significantly lower proportions of adolescents who perceived CID as moderate-high risk reported experiences of CIDR, compared to those who perceived no-low risk (5.2% vs. 14.0%, OR=4.2). Similar results were observed for RWCID.

Conclusions:

Results highlight increased likelihood of CIDR among adolescents who perceived no or low risk for CID and/or RWCID. Addressing risk perceptions through preventive efforts may enhance road safety by reducing CIDR.

Prevalence and characteristics of polysubstance use among Canadian youth - *Gabriella Luongo***Introduction/background:**

Polysubstance use in adolescence increases the risk of poor health outcomes in adulthood, including substance use disorders and mental health disorders. This study aimed to characterize polysubstance use among Canadian youth by socio-demographic, health, and behavioural characteristics.

Methods:

Data from the 2021-22 Canadian Student Tobacco, Alcohol and Drugs Survey (n=61,096) were analyzed. Polysubstance use was defined as the use of two or more of the following substances on the same or different occasion in the past 30 days: cigarettes, vapes (with nicotine or flavours), cannabis, and alcohol. We described and compared the prevalence of polysubstance use by socio-demographic, health, and behavioural characteristics. Results were weighted to represent Canadian students in grades 7-12 from nine provinces (New Brunswick declined to participate). Significant results, after a Bonferroni correction, are presented.

Results and analysis:

In 2021-22, 15.6% of Canadian students in grades 7-12 reported polysubstance use. The most prevalent polysubstance use combination was the use of vapes, cannabis, and alcohol (reported by 28.5% of those

who reported polysubstance use). Students with the following characteristics reported a higher prevalence of polysubstance use: those in grades 10-12 (vs. grades 7-9), those who lived in Newfoundland and Labrador (vs. Ontario), those who identified as woman/girl (vs. man/boy), those who identified as Indigenous (vs. White), those who were bisexual (vs. heterosexual), those who perceived their mental health as fair/poor or did not know (vs. excellent/very good/good), those who perceived their physical health as fair/poor (vs. excellent/very good/good), and those who reported being bullied (vs. not) or bullying others (vs. not) in the past 30 days.

Conclusions and implications for policy, practice or additional research:

This analysis identified socio-demographic, health, and behavioural characteristics for polysubstance use among Canadian youth that warrant further examination. Future research should explore the correlates of polysubstance to decipher which characteristics are most predictive of polysubstance use, to inform policy and practice.

Impact of the COVID-19 pandemic on alcohol and drug use patterns among youth: findings from a cross-sectional sample from British Columbia, Canada -- *Kirsten Marchand*

Introduction/background:

Concerns about youth alcohol and drug use have risen since the COVID-19 pandemic due to the pandemic's impact on known risk/protective factors for substance use. However, the pandemic's immediate and long-term impact on youth substance use has been less clear, limiting services and policies during this crucial time.

This study determined how the COVID-19 pandemic impacted youths' need for substance use services and risk and protective factors for substance use.

Methods:

We conducted a repeated cross-sectional study of data collected among youth (n=6,022) accessing integrated youth services in British Columbia. The exposure was the COVID-19 pandemic (March 2020 – February 2022) compared with a pre-pandemic period (May 2018 – February 2020). Interrupted time series (ITS) examined changes in average monthly substance use symptoms. Stratified multivariable logistic regression investigated how the pandemic modified the effects of established risk/protective factors on substance use service need.

Results and analysis:

Fifty-percent of youth met the criteria for moderate/high substance use service need, with the odds being 2.39 times (95% confidence interval = 2.04, 2.80) greater during the pandemic compared to the pre-pandemic period. Results from the ITS indicated significant immediate effects of the pandemic on monthly substance use symptoms (p-value=0.01). Significant risk/protective factors included exposure to violence, engagement in meaningful activities, and self-rated physical and mental health. These factors remained consistent across pandemic and pre-pandemic periods.

Conclusions and implications for policy, practice or additional research:

This study demonstrated that the COVID-19 pandemic corresponded with increased youth substance use, signalling a need for increased clinical capacity in existing youth services and policies that can respond earlier to risk/protective factors for substance use.

Examining differences in substance use outcomes among gender minority and non-gender minority youth: evidence from the COMPASS Study - *Thepikaa Varatharajan***Introduction/background:**

Evidence depicting substance use disparities between gender minority youth (GMY) and non-GMY (i.e., girls and boys) is scarce. The objective of this study was to examine differences in substance use outcomes by gender identity and determine associated risk and protective factors.

Methods:

This study utilized cross-sectional data from 42,107 Canadian high school students (grades 9-12) who participated in either Year 8 (2019/2020) or Year 9 (2020/2021) of the COMPASS study. Generalized estimating equation models were used to estimate past-30-day substance use [cigarettes, e-cigarettes, binge drinking, cannabis, and non-medical prescription opioids (NMPOs)]. Predictor variables in the adjusted models included socio-demographics, other substances, mental health outcomes, school connectedness, happy home life, and bullying victimization. Two-way interaction terms were utilized to examine if the mental health outcomes moderated the relationship between gender identity and substance use.

Results and analysis:

GMY relative to non-GMY reported a higher prevalence for all substance use outcomes. In the adjusted analyses, GMY had higher odds of cigarette, cannabis, and NMPOs use, but lower odds of e-cigarette use relative to non-GMY. The odds of using a substance was greater among youth who used other substances. For all substances except binge drinking, school connectedness and happy home life exhibited a protective effect. Bullying victimization was identified as a risk factor for cigarette and e-cigarette use. Significant two-way interactions between gender identity and all mental health outcomes were identified.

Conclusions and implications for policy, practice or additional research:

Canadian GMY are at a heightened risk for certain substances compared to girls and boys. Findings from this study emphasize the importance of collecting inclusive gender identity data in youth surveillance systems. Results also support prioritizing GMY in substance use-related prevention, treatment, and harm reduction programs. Future studies should explore how gender identity influences the onset and progression of substance use among Canadian adolescents over time.