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#### Trends and factors associated with illicit drug use in South Africa: findings from multiple national populationbased household surveys

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## Acknowledgment and declaration

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- The authors declare no conflict-of-interest.

## Background

- Illicit drug use has substantial ongoing impact on health and wellbeing globally and in sub-Saharan Africa<sup>1</sup>.
- There is little data on trends, predictors and outcomes of illicit drug use in South Africa.
- Yet, such data are important for understanding the potential health impact, and for developing strategies to mitigate the consequences of illicit drug use.

#### Aims

- We set out to:
  - 1. Describe population-level trends in recent illicit drug use.
  - 2. Assess predictors of recent drug use.
  - **3.** Evaluate whether recent illicit drug use is associated with behavioral and health outcomes in South Africa.

## Methods

- We analysed data among respondents aged 15 years or older from 5 different national households surveys conducted over 2002-2017 in South Africa<sup>1</sup>.
  - Surveys conducted in 2002, 2005, 2008, 2012, and 2017.
  - Surveys are representative of the entire country.
- Recent drug use was defined as last three-months use of illicit drugs i.e., any use of cannabis, cocaine, stimulants, and/or opioids.

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1. Human Science Research Council (HSRC). South African national HIV prevalence, incidence, behaviour and communication surveys. [cited 2021 Dec 25]; Available from: http://www.hsrc.ac.za/en/research-outputs.

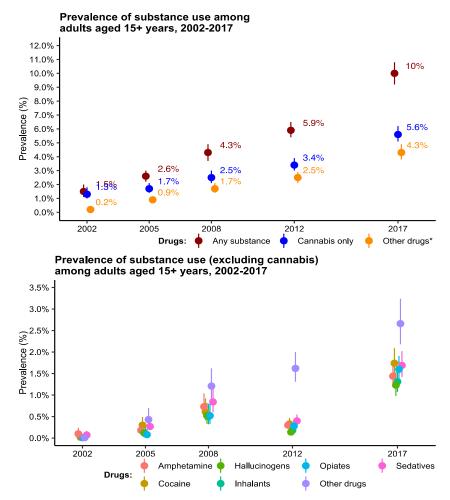
## Methods

- Multivariable logistic regression was used to:
  - Assess predictors of recent drug use *defined as any past 3months illicit drug use, excluding alcohol/tobacco.*
  - Evaluate whether recent drug use predicted behavioral and health outcomes — adjusted for age, sex, race, geographic area, province, education level, employment status, alcohol use and survey year.

#### Results

- There were 89,113 respondents aged 15+ years from the 5 pooled surveys.
- Drug use increased from 1.5% in 2002 to 10.0% in 2017 (top panel).
  - More than 10-fold increase in the use of opioids and stimulants from 2002-2017, with about 1.7% and 1.4% reported using opiates and stimulants respectively in 2017 (bottom panel).
- The increasing trend in illicit drug use was significant across various sociodemographic characteristics such as age, sex, race, etc.

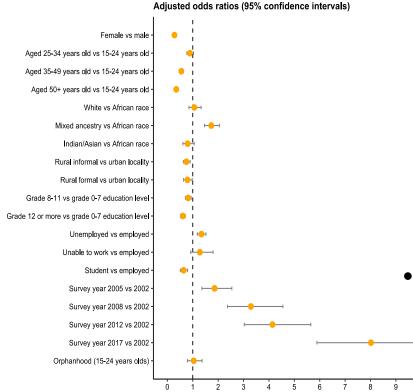
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\*Others: Includes cocaine, amphetamine, inhalants, sedatives, hallucinogens, opiates, other drugs; and cannabis with any other drugs

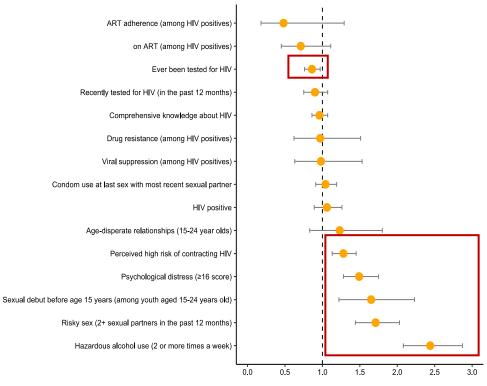
#### Results

# Factors associated with any recent illicit drug use



- Recent illicit drug use was:
  - Negatively associated with being female, older chronological age, living in rural area, and higher education attainment.
  - Positively associated with being of mixed-ancestry race, and unemployment.
- Prevalence of illicit drug use was very high in some groups
  21-33% (depending on race) among young male in urban areas.

#### Adjusted odds ratios (95% confidence intervals)



#### Results

HIV outcomes among people who use drugs (PWUD) compared to non-PWUD

- Compared to non-PWUD, people who used drugs (PWUD) were:
  - More likely to have multiple sexual partners, high alcohol intake, earlier sexual debut, experienced psychosocial distress, and perceived high-risk of contracting HIV.
  - Less likely to have ever been tested for HIV.

#### Conclusions

- Recent illicit drug use has increased substantially in South Africa in the last 15 years; and is associated with numerous risk behaviors.
  - —The prevalence of recent drug use in South Africa (10%, 2017) is now double the global average (5.4% in past year, 2018), higher than in Kenya (6% current use, 2016), but possibly lower than Nigeria (14% in the past year, 2018).
- Further research and understanding is required to mitigate the potential impact of illicit drug use in South Africa e.g.,
  - How illicit drug use may relate and progress to injecting drug use and the consequences for the HIV epidemic.
  - Interventions required to reduce high level of drug use and meet multiple problems faced by people who use drugs
    - Reducing unemployment, problematic alcohol-use, and high-risk sex targeted by age and sex.

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