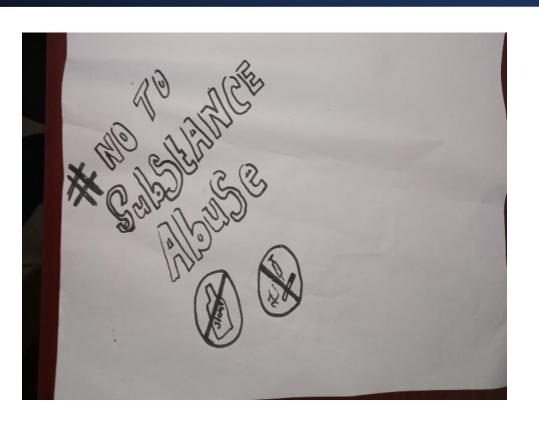
Trends in socio-demographic characteristics and substance use among high school learners in a selected district in Limpopo Province, South Africa





57th SACENDU in-person Symposia 2025

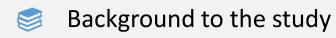
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Outline



- Introduction and rationale
- Objectives and methodology
- Trends in substance use
- Discussion
- Recommendations
- **©** Conclusion

Background to the study-Results are part of a bigger study which had two phases

- Phase 1 Needs assessment Situational analysis
 - Established baseline for anti-substance use initiative
 - Methods: Cross-sectional survey, interviews, policy analysis
- Presentation focus: Results of the cross-sectional survey
- Objective 1 of the study was:
 - To determine the prevalence of substance use among high school learners in the Capricorn District.
- Other objectives in Phase 1:
 - To identify the **determinants of substance use** among high school learners in the Capricorn District.
 - To assess **existing strategies** used to address substance use within selected high schools and if these strategies align to the ISHP.
 - To conduct a policy analysis of the Integrated School Health Policy with a lens on substance use prevention.

Introduction

1 in 4 learners globally first smoke before the age of 10 (WHO).

Percentage use is > 10% for any tobacco product by 13–15-year-old learners

Tobacco and alcohol are the most abused and experimented substances by adolescents in South Africa (majority of adolescents are found in schools)

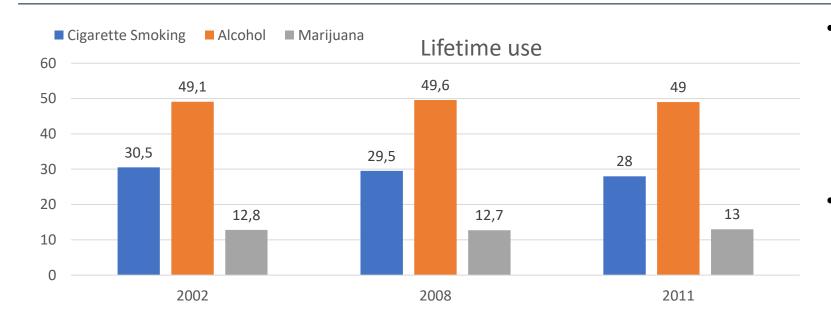
Average age of drug experimentation in South Africa is 12 years and this is rapidly decreasing

Rationale

Increased concern of variety drugs available to teenagers (marijuana (cannabis/dagga), cocaine, nyaope, glue, etc)

Substance use at an early age results in negative health and social outcomes (e.g., early onset of sexual behaviour which may lead to STIs; school dropouts, crime).

In South Africa public health initiatives targeted at addressing adolescent issues are integrated as part of current health reforms e.g., Re-engineering PHC, National Master Drug Plan and the Integrated School Health Policy (ISHP), National School Safety Framework



- A quick glance at trends in use over the years (2008 to 2011) amongst learners, shows prevalence rates have not significantly changed (1st, 2nd & 3rd Youth Risk Behaviour surveys).
- Over this time period, age of first use is still reported to be under the age of 13.

Background review on substance use in Limpopo

Key Challenges:

Crime, bullying and substance use disrupt teaching and learning.

Youth commonly use alcohol, tobacco, marijuana, inhalants, and homebrewed/commercial beer.

Prevalence Trends (2008–2016, +2019 study):

Male learners abuse drugs more than females.

Gradual increase in substance abuse over the years.

Contributing Factors:

Individual Level: Males have more financial access; Higher risk for males and urban youth; Parental and peer substance use influences behavior.

Community Level: Liquor stores near students' homes; Subjective adult norms on substance abuse; Perceived crime, violence, and negative neighborhood opinions; Community affirmations of adolescent behavior.

Need:

More current studies needed to track trends.

Establish a stronger data baseline for evidence-based interventions.

Methods: Quantitative













Cross sectional survey was
conducted in 4
public high
schools in 2020

Study
population – all
Grade 8 to 12
high school
learners (N= 13
244) enrolled
2019-2020 in
15 Public high
schools

4 schools
selected (2
urban and 2
peri-urban) —
stratified into 2
strata and
simple random
sampling to
select 2 schools
in each strata

One class each from Grade 8 to 12 was selected for participation from the identified schools—simple random sampling

768 learners participated in the survey

A selfadministered questionnaire among the learners

Data Analysis



SPSS v 25 was used to analyse quantitative data (Creswell, 2013).



P-value of 0.05 showed a result to be statistically significant

Instrument and Procedure

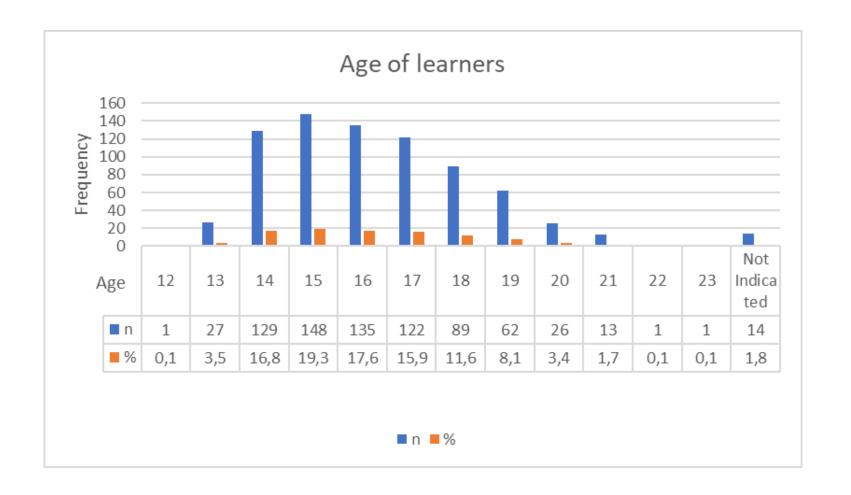
- Questionnaire was a modified instrument adapted from the United Nations Office of Drugs and Crime (UNODC) Global Assessment Programme on Drug Abuse Toolkit questionnaire on Conducting School Surveys on Drug Abuse.
- Questionnaire was adapted to the local context using SA based terms and removing terms not relevant to the context.
- A pilot study was conducted in a different school circuit. The questionnaire and process of data collection adjusted accordingly.

Results: Demographic Characteristics

768 high school learners participated in the survey

Learners	%	n
Female learners	54.2	416
Male learners	45.8	352
Peri urban (school 2 and 3)	37.2	286
Urban (school 1 and 4)	62.8	482

Age of learners - Mean average age was 16 years



Parents' level of education

Highest level school completed	Father	Mother
Completed primary schooling or less	1.3	1.4
Some secondary school	5.2	7.7
Completed secondary school	11.8	15.2
Some college or university	6.9	9.9
Completed college or university	45.6	50.1
Don't know or does not apply	26.8	14.3
Not indicated	2.3	1.3

80.5 % of learners lived with their mothers

Persons living in the same household as learner

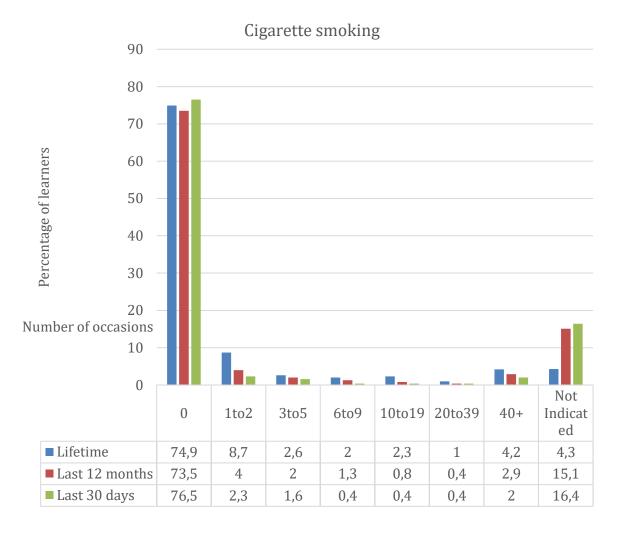
Which of the following people live in the same household with you?		No
Alone	2.1	97.9
Father	46	54
Stepfather	6.3	93.7
Mother	80.5	19.5
Stepmother	0.9	99.1
Brother/s and/or sister/s	64.3	35.7
Grandparent/s	13.3	86.7
Other relative/s	11.7	88.3
Non-relative/s	0.5	99.5

Trends in substance use and abuse among learners



Overall prevalence of cigarette smoking

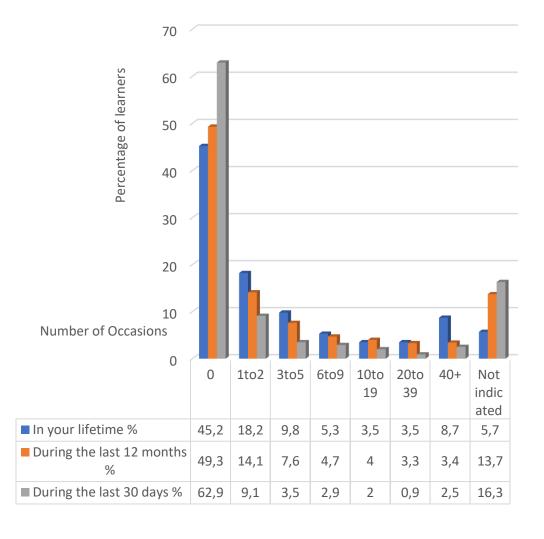
- Lifetime prevalence of cigarette smoking was **20.8%** (n=160)
- During the last 12 months was 11.4% (n=87)
- In the last 30 days was **7.1%** (n=54)



■ Lifetime ■ Last 12 months ■ Last 30 days

Overall alcohol use

- Lifetime prevalence: 49% (n=377)
- During the last 12 months: 37.1% (n=284)
- In the last 30 days: 20.9% (n=160)



■ In your lifetime % ■ During the last 12 months % ■ During the last 30 days %

Association between socio-demographic characteristics and lifetime cigarette smoking and alcohol use

Cigarette smoking

- Lifetime cigarette smoking associated with gender (P=0.000) with more male learners (14.2%, n=104) smoking than females (7.6%, n=56).
- Cigarette smoking is higher in schools in the urban (14.6%, n=108) than in peri-urban (7%, n=52) areas (P=0.000).
- Cigarette smoking was more in grade 12 (6.4%, n=47) and grade 10 (5.3%, n=39)

Alcohol use

- Lifetime alcohol use associated with grade (0.001) and gender (0.000)
- Most alcohol use in grade 10 (12.8%, n=93) and least in grade 8 (8%, n=58).
- Differences in use among male and female learners varied with the number of occasions with overall high use in females (27.7%, n=201).
- There was no significant difference in alcohol use with schools

Drug use

Drugs first tried

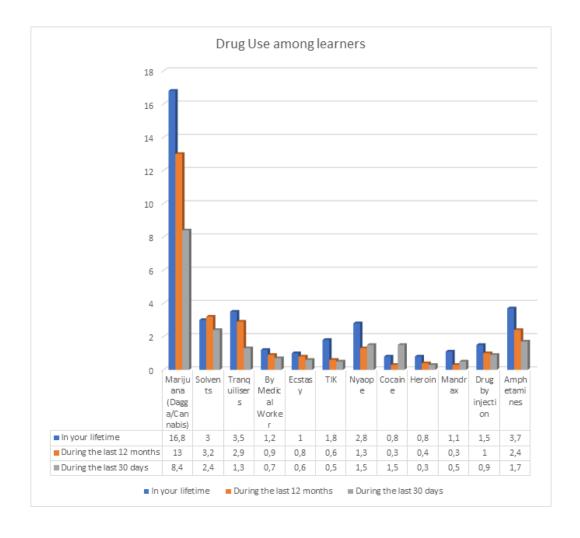
- 12.1% of the learners said yes to trying marijuana first
- Of these 19.3% were male learners and 13.9% female learners.
- The results for the other drugs varied but also indicated more males had tried out substances than females

Drug first tried

	n	%	
Never tried any of the substances listed		562	73.2
Tranquillisers or sedatives (without a doctor/ medical			
worker telling you to do so)		8	1
Marijuana (Dagga, Cannabis)		93	12.1
TIK (Methamphetamine)		2	0.3
Nyaope (Whoonga)		3	0.4
Solvents or inhalants (Glue, jeyes fluid etc.)		3	0.4
Ecstasy (or Amphetamines)		2	0.3
Cocaine (or other forms of crack)		2	0.3
Mandrax		1	0.1
I don't know what it was		13	5.3
Missing		51	6.6
Total		768	100

Lifetime use of drugs, during 12 months and last 30 days

- Overall lifetime use of marijuana was 16.8%, 3.7% amphetamines, 3.5% tranquilisers, 3% solvents, 2.8% nyaope, 1.8% TIK and 1.2% told by medical workers.
- In the last 12 months, 13% of the learners had used marijuana, 2.9% Tranquilisers, 3.2% solvents. 2.4% amphetamines, 1.3% Nyaope.
- In the last 30 days -Overall, 8.4% of the learners used marijuana, 2.4% solvents, 1.7% amphetamines and 1.5% nyaope



Sociodemographic characteristics of learners and types of drug use (% and P-Value)

- Lifetime use of drugs varied across schools, grade and gender with the number of occasions.
- There was a significant association between *school* and the use of ecstasy (0.01), nyaope/whoonga (0.025) and mandrax (0.03) with higher use in urban (20.7%) compared to periurban (16.9%) schools.
- There was an association between *grade* and the use of marijuana (0.000) with overall high use from Grade 10 to 12 and *gender* on the use of marijuana (0.000) and nyaope (0.018) with more males (25.1%) than females (14.1%)

Age of first use of substances: 13 years or less (early onset)

- The age for first use of alcohol (beer, wine) and cigarette smoking was quite low at 13 years or less with a significant percentage even below 15 years of age.
- "An age of initiation of 13 years or younger was taken as an indicator of early onset".
- At the age of 13 years or younger: 18.5% (n=142) of the learners had drank beer; 18.8% (n=144) drank wine; and 11.1% (n=85) had smoked first cigarettes

Access to substances and awareness of the substances

- Results showed that a wide variety of substances are easily available to learners.
- 357 learners (46.5%) responded that they found it easy to obtain a cigarette
- Table shows percentage of learners who found it easy to obtain the listed drugs
- Percentage of learners who had heard of the listed drugs-72.1% Marijuana, 69.8% nyaope, 67.6% cocaine, 47.8% solvents, 39.8% heroin, 33.9% TIK......

Substances	Percentage
Cigarettes	46.5
A small bottle of spirits (ca 35 cl)	26.5
Marijuana/ Dagga (cannabis, pot, grass)	22.8
Nyaope/Whoonga	14.8
Amphetamines (pills, bennies, speed)	8.4
Tranquillisers or sedatives	7.8
Cocaine/Crack	7.2
Mandrax	4.9
Ecstasy	5
Heroin (smack, horse)	6.9
Solvents or inhalants (glue etc.)	15.3

Perceived risk of using substances

•Perceived High Risk:

- •46% see **smoking 1+ packs/day** as high risk.
- •40% see **drinking 4-5 drinks daily** as high risk.
- •24% see **occasional smoking** as high risk.

•Perceived No Risk:

- •22% see occasional smoking as no risk.
- •19% see **1-2 drinks daily** as no risk.
- •16% see trying marijuana as no risk.

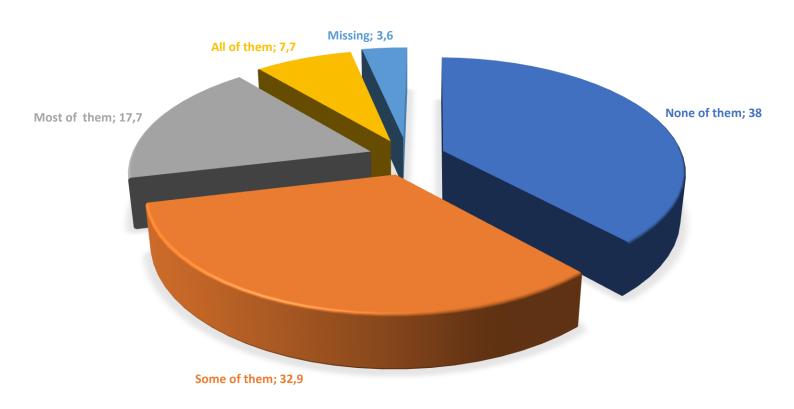
Disapproval of substance use

When asked if they disapprove of people doing the listed risky behavioural activities.

- Cigarette Use: 30% of learners did not disapprove of smoking 10+ cigarettes daily; 33% strongly disapproved
- Binge Drinking: 30% did not disapprove of having 5+ drinks in a row each weekend; 26% strongly disapproved
- Marijuana Use: 27% did not disapprove of trying marijuana; 30% strongly disapproved

Friends who have tried drugs/substances such as marijuana/dagga or cocaine

FRIENDS WHO HAVE TRIED SUBSTANCES



Social problems associated with substance use

Alcohol-Related Behavioral Problems (≥5%)

- 15% involved in arguments/quarrels
- 10% engaged in **physical fights**
- 13% lost valuables
- 10% damaged clothes
- 7% engaged in **unprotected sex**

	Never	Yes. Because of my Alcohol use	Yes, Because of my drug use	Other than alcohol use or drug use	Not indicated	Total
Quarrel or argument	59%	15%	2%	14%	10%	100
Scuffle or fight	73%	10%	1%	12%	5%	100
Accident or injury	74%	8%	1%	13%	4%	100
Loss of money or other valuable items	67%	13%	2%	13%	4%	100
Damage to objects or clothing	72%	10%	3%	11%	5%	100
Problems in your relationship with your parents	74%	8%	3%	11%	4%	100
Problems in your relationship with your friends	71%	9%	2%	14%	4%	100
Problems in your relationship with your teachers	79%	5%	2%	10%	4%	100
Performed poorly at school or work	76%	5%	3%	11%	5%	100
Victimized by robbery or theft	83%	5%	1%	7%	4%	100
Trouble with police	86%	4%	1%	4%	5%	100
Hospitalised or admitted to an emergency room	83%	4%	1%	7%	5%	100
Engaged in sex you regretted the next day	84%	7%	1%	4%	4%	100
Engaged in unprotected sex	84%	7%	1%	4%	4%	100

Discussion: Substance use, age of onset & access

- Substance Use is Rife: High lifetime use among high school learners Cigarettes (20.8%), Alcohol (49%), Marijuana (16.8%)– mirroring trends observed in past studies in the province and Sub-Saharan Africa
- Predictors of Use: Varies by age, gender, grade, and school (Socio-demographic characteristics)
- **Declining Age of Onset**: Use starting at 13 years or younger, despite legal purchase age of 18.
- **Underage Access**: Advertisements in neighborhoods may influence use; Illegal market thrives, making proposed increase to 21 years ineffective
- Higher percentage of cigarette smoking and drug abuse in urban compared to peri-urban schools- diverse group of learners from different areas attending urban schools
 - Exposed to access during commuting long distances and in private boarding houses
- Multiple factors for increased use and availability of marijuana:
 - SA ranked high in cannabis cultivation and production;
 - Marijuana use legalised for adults to cultivate and smoke in homes
 - Parental substance use influences learners

Discussion: Gender disparities

- Findings reveal gender disparities in substance use
 - Overall high alcohol use in females (27.7%) compared to male counterparts (24.5%)
 - **Contextual factors** such as poverty and Gender Based Violence prevalent in communities may contribute to elevated substance use rates among females
 - Male learners have higher levels of experimentation and use of drugs particularly marijuana and nyaope (whoonga)- aligns with existing research
 - **Social Influences**: Males more likely to be exposed to peer influence & risky environments (e.g., street corners, shops)
 - Emerging trends: Some studies show little difference in use between genders, highlighting the need for tailored, gender-specific initiatives

Recommendations

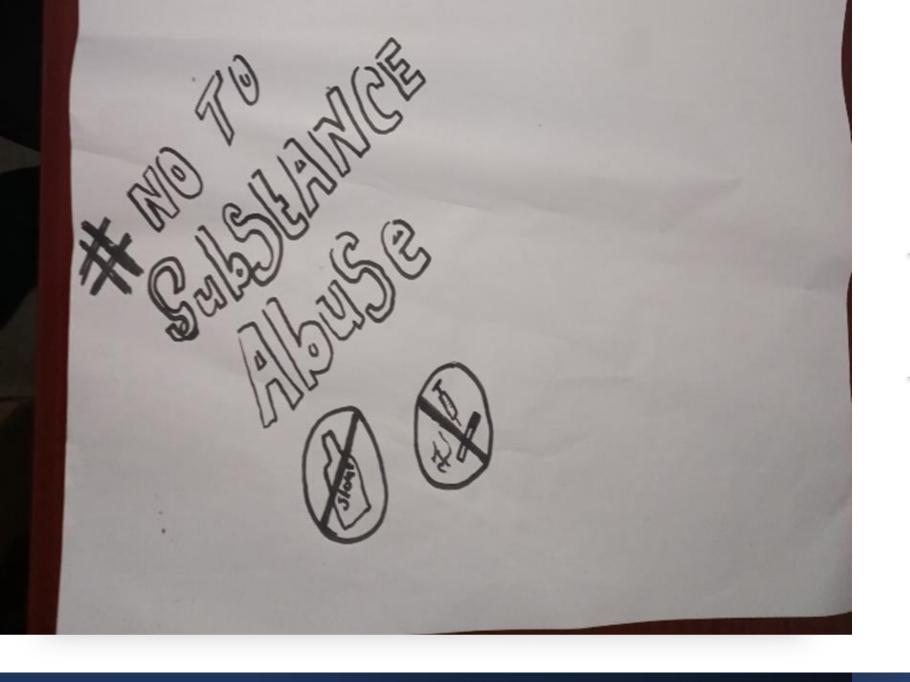
Policy & Prevention Strategies

Need for Stronger Policies & Enforcement

- Strengthen National Drug Master Plan for stricter regulation
- Ensure **policy coherence** across health, education, justice & trade
- Limpopo bill liquor regulations
- A comprehensive strategy to address substance use at multiple levels All schools should be Health Promoting Schools
- Improved allocation of financial and human resources to strengthen policies in order to curb staggered implementation (e.g. ISHP, School safety programme)

Education & Community Interventions

- Expand substance use prevention in school curriculum beyond Life Orientation and also in lower grades
- Improve learner transport safety & school environments
- Strengthen School Safety Programme & parental involvement
- Upskill and actively involve stakeholders in substance use prevention efforts especially educators at the frontline
- Reorient health services with an interprofessional team and a permanent school social worker for a holistic approach
- Implement tailored health promotion programs considering socio-demographic factors like age and gender



Conclusion

Substance use is an increasing epidemic causing havoc in learners' lives.

An intersectoral approach is needed to tackle the multiple levels of influence leading to substance use.

The findings of this study contribute to the body of updated evidence on the prevalence of substance use in Limpopo Province among high school learners.

Acknowledgements



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