



Knowledge, attitude, and practices of secondary school student leaders towards alcohol and other drug use, Uganda, July 2024

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Summary

Background: Alcohol and Other Drug (AOD) use contributes to a total health burden of 14% among adolescents, potentially impacting their cognitive development, academic performance, and mental health. We assessed the knowledge, attitudes, and described practices (KAP) of students toward the use of AODs to inform prevention and control strategies.

Methods: We conducted a cross-sectional study among secondary school student leaders attending the annual prefects conference in Kampala in July 2024. We obtained students' registration lists and systematically selected participants at an interval of three. We collected data using self-administered questionnaires. Bloom's cut-off of $\geq 60\%$ and $< 60\%$ was used to determine adequate knowledge and positive attitudes towards AOD use, while practices towards AOD use were descriptively defined.

Results: A total of 569 student leaders were surveyed, 400 (70%) were male, 423 (74%) were 18 years or older, and 329 (58%) were in an advanced class level. Their mean age was 18 years (SD: 1.9) with a median age of 19 years (IQR: 17–20) years. Nearly one-third of students, 27% (155), had ever used AODs, while 18% (103) reported current use. Among participants who had ever used AODs, alcohol was the most commonly used substance, 99 (64%). Most current AOD users, 62 (60%), consumed AODs at home and primarily with friends 70 (68%). Overall, most participants demonstrated adequate knowledge about AOD use 518 (91%). Attitudes toward AOD use were mixed, with 467 (82%) viewing addicts as victims, 381 (67%) disliking students who used AODs, while 159 (28%) supported punitive measures. Among current users ($n=103$), most reported using AODs with friends 70 (68%) and at home 62 (60%) while citing peer pressure 54 (52%) and curiosity 35 (34%) as key reasons for initiating use. Overall, the majority of the participants 529 (93%) demonstrated positive attitudes towards AOD use.

Conclusion: Our findings demonstrate that while students had good knowledge about AOD use, their practices remained risky, often influenced by peer pressure and home environments, suggesting that knowledge alone is not sufficient to prevent AOD use. Schools could build on this knowledge by addressing students' attitudes and practices to promote safe, supportive environments that discourage AOD use.



Background

According to the Global Status Report on Alcohol and Health 2018, approximately 5.6% of adolescents aged 15-19 years globally reported engaging in heavy episodic drinking (defined as consuming 60 or more grams of pure alcohol on at least one occasion within 30 days) (1). Additionally, the United Nations Office on Drugs and Crime World Drug Report 2022 noted that about 30 million adolescents globally used drugs in the previous year(2). Globally, the prevalence of alcohol and drug (AOD) use among adolescents has been linked to various adverse outcomes, including impaired cognitive development, poor academic performance, and increased risk of mental health disorders such as depression, anxiety, and conduct disorders (3). In Uganda, secondary school students face unique challenges related to AOD use, influenced by cultural, social, and economic factors. Addressing these challenges requires an understanding of students' knowledge, attitudes, and practices towards AOD use.

Research has shown that students' awareness of the risks of AOD use and their attitudes toward it significantly influence their behavior(4,5). On June 27, 2024, the Uganda Mental Health Division of the Ministry of Health raised an alert about increasing numbers of students using AODs in secondary schools. We assessed students' knowledge, attitudes, and practices towards AOD use, Uganda, July 2024.

Methods

Study design and setting

We conducted a cross-sectional study among secondary school student leaders who attended the 3rd Uganda annual national prefects conference held at Hotel Africana in Kampala, Uganda, in July 2024. The 3rd edition of the National Prefects Conference was held in Kampala, focusing on the theme "Drug Abuse and Its Effect on Mental Health". The conference attracted over 1,600 student leaders who resided in 22 districts of Uganda.

Sample size and sampling

Sample size estimation was based on a conservative 50% prevalence rate, using the Kish Leslie formula with a 95% confidence level ($Z=1.96$) and a margin of error of 5%. To account for non-response, the sample size was increased by 10% (6), resulting in a final sample size of 423 participants. However, our study considered a total sample size of 569 participants, given the students' availability and willingness to participate in the study. We utilized a systematic sampling technique to identify respondents to participate in the study. We used registration lists of all students who attended the prefects' conference, and this provided a sampling frame. We calculated the K^{th} interval of selecting students as 3.

$K^{\text{th}} \text{ interval} = \frac{\text{Total learners that attended the conference (1707)}}{\text{Number of learners needed (569)}} = 3$



The first learner was randomly selected by choosing a random number between 1 and 3. The following participants were selected after every 3rd learner on the registration list until the required sample size of 569 was attained.

Data collection and study Variables

Using a structured self-administered questionnaire loaded in the Kobo collect toolbox, we collected data regarding the variables of participants such as age, sex, religion, their knowledge, attitudes, and practices.

Data analysis

We generated descriptive statistics to compute the frequencies and percentages of different variables, including sociodemographic variables. Knowledge, attitudes, and practices (KAP) of participants were assessed. Positive responses were scored with 1, while negative responses were scored with a 0 value. All scores were added to generate total scores. Bloom's cut-off points were used to measure the knowledge, practices, and perception levels. Scores that were <60% we considered to be poor while those that were ≥60% were considered to be good (7).

Ethical consideration

The Ministry of Health Uganda provided administrative clearance to conduct this investigation. In addition, we received a non-research determination clearance from the US Centers for Disease Prevention and Control (US CDC). This activity was reviewed by the CDC and was conducted consistent with applicable federal law and CDC policy. § §See e.g., 45 C.F.R. part 46, 21 C.F.R. part 56; 42 U.S.C. §241(d); 5 U.S.C. §552a; 44 U.S.C. §3501 et seq. We sought informed consent from participants who were ≥18 years and assent from those who were <18 years.

Results

Socio-demographic characteristics of study participants

We enrolled 569 students, with a mean age of 18 years (SD:1.9) and a median age of 19 years (IQR: 17–20) years. Most of the students were male 400 (70%), 423 (74%) were 18 years or older, and most were in an advanced class level, 329 (58%). Most participants attended private schools, 285 (50%). Among the study participants, 155 (27%) reported having ever used AODs, while 103 (18%) reported current use.

Knowledge about Alcohol and Other drug use among secondary school learners

Our study found out an overall high level of knowledge on AOD use among study participants, 518 (91%). Most participants, 558 (98%) were aware of the legal age for purchasing alcohol in Uganda and could identify an example of an illegal drug. Additionally, the majority 552 (97%) recognized the potential dangers of mixing alcohol. However, 119 (21%) were knowledgeable about the short-term effects of marijuana use while 336 (59%) were aware of the risks involved in inhalant abuse (Figure 1).

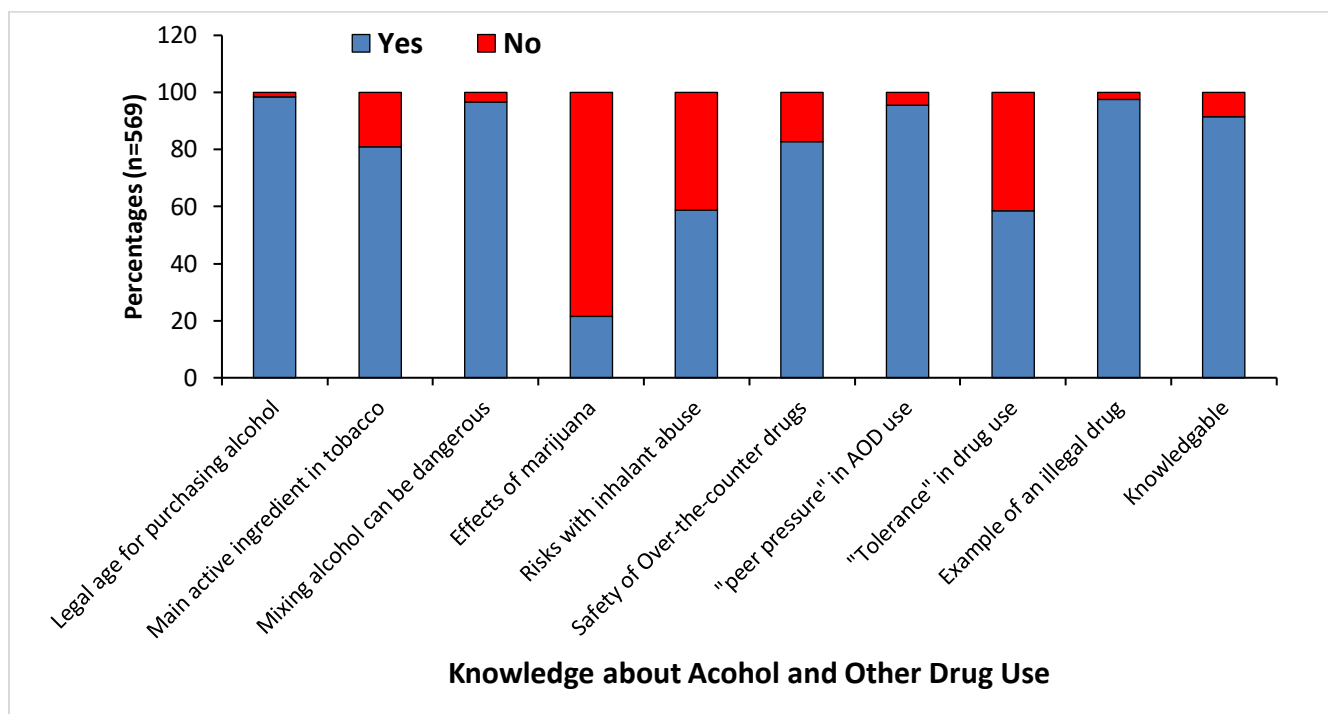


Figure 1: Knowledge of students on the use Alcohol and Other Drugs, Uganda, July 2024

Attitudes towards Alcohol and Other Drug Use

Our study indicated an overall positive attitude of students towards the use of AODs 529 (93%). Less than half of the participants, 262 (46%) strongly believed that alcohol was as dangerous to health as cigarettes. There was strong support for making drug treatment accessible to all addicts, with 296 (52%) strongly agreeing with this stance. Nearly half, 273 (48%) believed that spending on drug prevention was worthwhile. The majority, 467 (82%) viewed drug addicts more as victims than criminals. However, 381 (67%) admitted they would dislike a student who uses substances like alcohol, and 216 (38%) would dislike one who uses illegal drugs. There was less consensus on punitive measures, with 159 (28%) agreeing that severe punishments for drug misuse might solve the problem. A small minority 34 (6%) viewed it as normal for students to try drugs at least once (Table 1).



Table 1: Attitudes of students towards the use of Alcohol and ther Drugs, Uganda, July 2024

Attitudes	Agree n (%)	Disagree n (%)
Alcohol is just as dangerous to one's health as the use of cigarettes	253 (46)	294 (54)
Almost all drug addicts are dangerous to society	182 (33)	365 (67)
Drug addicts should be given a fair chance to get treatment	282 (52)	265 (48)
Drug and substance abuse cause more problems in schools	258 (47)	289 (53)
Drugs are not really a problem to us here in Ugandan Schools	96 (18)	451 (82)
Drugs education in schools should start at the primary level	277 (51)	270 (49)
I see drug addicts more as criminals than victims	101 (18)	446 (82)
I would hate a student who takes substances like alcohol	366 (67)	181 (33)
I would hate a student who uses illegal drugs like Kuber or shisha	209 (38)	338 (62)
I would not like to live near a person who is a drug addict	206 (38)	341 (62)
It is bad for a student to try drugs even once	259 (47)	288 (53)
Most people are concerned about the drug problem in Uganda	158 (29)	389 (71)
Occasional use of alcohol by students is not really dangerous	16 (3)	531 (97)
Occasional use of drugs by adults is not really dangerous	49 (9)	498 (91)
Occasional use of tobacco by students is not dangerous	37 (7)	510 (93)
Our society is too tolerant towards drug users	221 (40)	326 (60)
People who end up with a drug problem have only themselves to blame	167 (31)	380 (69)
The availability of illegal drugs poses a great threat to student	337 (62)	210 (38)
The use of drugs like Kuber is against the laws of Uganda	298 (54)	249 (46)
Very severe punishments for drug misusers may be answers to the problem of substance misuse	152 (28)	395 (72)
Money spent on the prevention of drug use is money well spent	260 (48)	287 (52)
More students today try out substances like Walagi, Cigarettes et	254 (46)	293 (54)
Most illegal drugs like Kuber, Marijuana, Shisha etc are harmful to o	289 (53)	258 (47)
Most used substances like Beer, Walagi, Tobacco etc are harmful to one's health	374 (68)	173 (32)
It is normal for students to try drugs at least once	35 (6)	512 (94)
Treatment should be available to all drug addicts	283 (52)	264 (48)

Overall positive attitudes: 93%



Practices of students who had ever used Alcohol and Other Drugs

Type of substance used

Among students who had reported ever using AODs (155), alcohol was the most ever used substance, 99 (64%) followed by marijuana 25 (16%) while the least used substance was tobacco 9 (6%) (Figure 2).

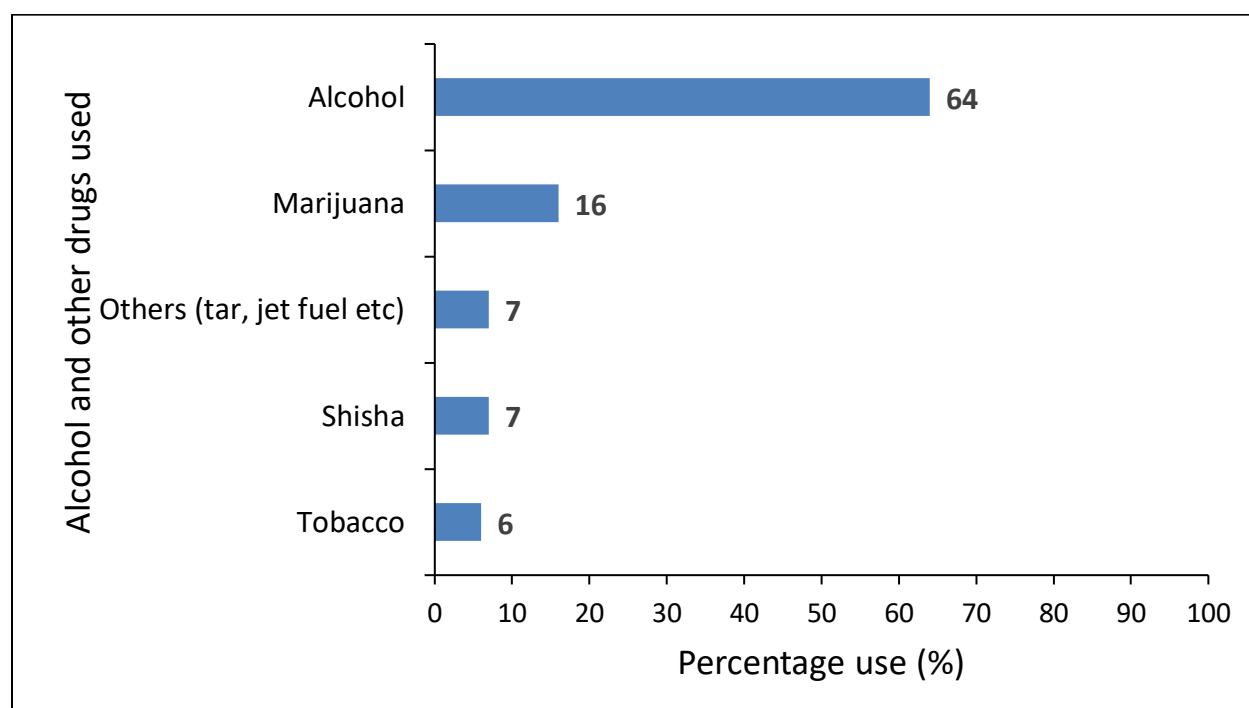


Figure 2: Alcohol and Other Drugs used by participants, Uganda, July 2024

Description of Current Alcohol and Other Drug users

Among the current AOD users (n=103), most, 50 (49%) reported using AODs for 1 or 2 days while 15 (15%) used AODs every day of the month. Most users, 69 (67%) consumed AODs once per day. Most students, 70 (68%) used AODs with friends, and AOD use most occurred at home, 62 (60%). The primary reason for initiating AOD use was peer pressure, 54 (52%) followed by curiosity, 35 (34%) with media influence being minimal 4 (4%) (Table 2).



Table 2: Practices of current Alcohol and Other Drug users among students in Uganda, July 2024

Variable	n=103 (%)	p-Value
Number of days AOD were used		
1–2	50 (49)	<0.0001
3–5	10 (10)	
6–9	10 (10)	
10–19	9 (8)	
20–29	9 (8)	
All 30	15 (15)	
Frequency of use in a day		<0.0001
1	69 (67)	
2	21 (20)	
3	12 (13)	
Whom they use the AOD		<0.0001
With friends	70 (68)	
With family	17 (17)	
Alone	16 (15)	
Where AOD are used		0.45
Home	62 (60)	
School	24 (23)	
Other places e.g. bars, outings	17 (17)	
Circumstances for introduction to AOD		0.0052
Peer pressure	54 (52)	
Curiosity	35 (34)	
Family environment	10 (10)	
Media	4 (4)	

Discussion

This study revealed that most student leaders had a high level of knowledge about alcohol and other drugs (AODs), particularly concerning legal regulations and health risks. Similarly, participants depicted overall positive attitudes towards AOD use, with strong support for treatment access and prevention. Alcohol was the most commonly used substance among those who reported ever using AODs, followed by marijuana and tobacco being the list used. Students reported using AODs mostly with friends and in the home environment.

Our study highlights a high level of knowledge among secondary school student leaders regarding various aspects of AOD use. This finding is consistent with previous studies



which indicated that adolescent awareness of AOD-related risk was high, likely attributable to expanded access to information (8,9). Leveraging this foundation through involving student leaders as peer educators could enhance health education efforts while reinforcing positive norms within the student community.

Our study revealed a nuanced view of secondary school students' attitudes towards AOD use. Their attitudes were marked by a mix of concern, support for treatment, and stigma. The split opinion on societal tolerance towards AOD users underscores a complex social attitude toward AOD use. This view is consistent with the concept of social stigma and the idea that AOD addiction is often perceived through a lens of victimhood rather than criminality (10). The lack of consensus on punitive measures is supported by evidence suggesting that punitive approaches alone are insufficient for effective drug policy and that a combination of prevention, treatment, and harm reduction strategies is more effective (11,12). Our findings suggest a preference for alternative approaches to addressing AOD use among students that emphasize prevention, access to youth-friendly treatment services, and harm reduction.

Our study indicates that most students had ever used AODs, with alcohol emerging as the most commonly used substance. This aligns with existing research showing that alcohol is often the first substance adolescents experiment with and the most used substance (13–16). Prevention programs should emphasize the risks associated with alcohol use and promote healthy behaviors from an early age.

Our study further highlights a strong social component of AOD use, with most of the users consuming AODs with friends and primarily at home. This underscores the role of social contexts in AOD use behaviors. Additionally, research consistently shows that peer pressure significantly impacts the initiation and continued use of AODs among adolescents, which is congruent with our findings (17–20). Peer-led prevention programs could be effective in reducing AOD use by leveraging peer influence in a positive direction (25). Additionally, addressing the social contexts where AOD use occurs, such as home environments and social settings with friends, could be key in developing effective prevention strategies.

Study limitations

The self-reported approach of responses is prone to recall bias and social desirability bias both of which could either have overestimated or underestimated the outcome. Our study population was composed of student leaders who may not be representative of the general student population.

Conclusion

Our study highlights a high level of knowledge and mixed attitudes among secondary school student leaders towards AOD use. Despite this awareness, AOD use, particularly use of alcohol, remains prevalent, often influenced by peer dynamics and in



social settings such as the home. Our findings underscore the need for school-based interventions that harness students' knowledge and peer influence while addressing social environments that facilitate AOD use.

Conflict of interest

The authors declare no conflict of interest.

Author contribution

CM, BBM, KK, EM, EO, JN, DK, and HLS conceived and designed the study. CM, JN, HK, EM, EO, and PK contributed to data collection, cleaning, analysis, and implementation of the study. CM analyzed the data and took the lead in developing the original manuscript. CM, BBM, KK, HLS, BK, RM, and ARA are all responsible for the final content in the bulletin. All authors contributed to the final draft of the bulletin. All authors read and approved the final bulletin.

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