Knowledge, attitudes and practices regarding alcohol use among undergraduate students at a South African university

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Background. Alcohol use among undergraduate students in academic institutions is a growing concern in South Africa (SA).
Objective. To determine the knowledge, attitudes and practices regarding alcohol use among undergraduate students at a SA university.
Methods. We conducted this cross-sectional study from August 2022 to April 2023. Undergraduate students ≥18 years were invited to complete a self-administered, anonymised, online questionnaire incorporating screening questions from the Alcohol Use Disorder Identification Tool (AUDIT). Univariable and bivariable analyses were then performed.
Results. Ultimately, we included 378 participants (65% female, median age 22 interquartile range 21 - 23 years). Overall, 78.9% (95% confidence interval (CI) 73.4 - 83.5) of participants had consumed alcohol previously, and among them, 14.4% (95% CI 10.6 - 19.3) consumed alcohol up to three times a week. Male students were more likely to engage in binge drinking than female students (18.2% v. 8.5%, $p<0.001$). Most students (68%) lacked awareness regarding the safe limit for alcohol consumption and underestimated the standard units of alcohol in a 330 mL can of beer (71.3%) or glass of wine (83.8%). Relationship stress and increased workload were the most cited triggers for consuming alcohol. Among those who underwent AUDIT screening, 11.7% (95% CI 8.3 - 16.2) had positive results for harmful or hazardous drinking, while 8.6% (95% CI 5.7 - 12.7) indicated likely alcohol dependence.
Conclusions. Our findings highlight a concerning alcohol burden among young people in academic institutions, particularly male students. A systemic evaluation of university drinking culture is recommended to support student wellness.

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Student author biography
Buhle Mbuqa, Busisiwe Radebe, Liju Danielkutty, Malisa Ferreira and Robyn Ducasse are medical interns working in the South African public health sector. They graduated with MB ChB from the University of Cape Town in March 2024. As undergraduate students, they showed a keen interest in research and became involved in research activities from their 4th year of study, culminating in completion of this research in their 6th year of study. They have been actively involved in UCT extra-curricular activities such as the African Research Society, Student Health and Welfare Centres Organisation (SHAWCO) and UCT Surgical Society. They look forward to pursuing health research alongside clinical work in future.

Alcohol use is a global public health concern.[1,2] In 2016, harmful alcohol use contributed to ~3 million deaths globally, accounting for 5.3% of all deaths. Alcohol use has a more substantial impact on global mortality than tuberculosis, HIV/AIDS, diabetes, hypertension, digestive diseases, road injuries and violence. It contributed to 132.6 billion Disability Adjusted Life Years (DALYs), constituting 5.1% of all DALYs in 2016.[1] Harmful alcohol use is directly associated with the quadruple burden of disease in South Africa (SA), including communicable and non-communicable diseases, maternal and child disease as well as trauma, imposing a substantial physical and financial cost on the health system. Excessive alcohol use poses a risk factor for numerous chronic diseases, including cardiovascular disease, liver disease, psychiatric conditions, cancers, and neurological and gastrointestinal diseases.[3] Additionally, alcohol influences infectious diseases such as HIV, sexually transmitted infections (STIs), tuberculosis (TB) and lower respiratory tract infections.[4] It is linked to an increased risk of transmission of disease due to high-risk behaviour and poor adherence to treatment.[4]

Alcohol-related traumatic injuries contribute up to 40% of visits to the emergency department.[5] Most (90%) road traffic accidents among people aged 20 - 39 years are attributable to alcohol use.[6] The impact of alcohol on healthcare resources became evident during the lockdown and alcohol restrictions implemented in SA amid the coronavirus disease 2019 (COVID-19) pandemic. There were notable reductions in admissions for assault, accidents, other injuries and sexual assaults, and a decrease in unnatural deaths from 800 - 1 000 per week to 400 per week.[6,7] Alcohol-related harm extends to maternal and child health, with SA holding the highest rate of fetal alcohol syndrome in the world.[8] Furthermore, parental alcohol use negatively affects parenting and influences a child's cognition and behaviour.[8]

In SA, one-third of the population is reported to consume alcohol in any amount, with half of them reporting binge drinking.[9] Of concern is the prevalence of alcohol use in the younger population. In 2016, 21.4% of individuals aged 15 - 19 years in Africa were current alcohol users. This figure rose to 34.1% among the 20 - 24-year age group, surpassing the overall prevalence of alcohol use in the general population.[1]

Alcohol use among university students is especially concerning. The general lack of knowledge among students about alcohol and safe alcohol practices makes them a high-risk population.[10,11] Alcohol is widely accepted by students as a social beverage, often consuming it to facilitate social interactions and conform to peer norms.[12-15] University students, in general, demonstrate higher alcohol consumption and engage in more hazardous drinking, resulting in a greater prevalence of alcohol use disorders compared to their counterparts who are not at university.[16,17]

Globally, extensive research has been conducted on alcohol use among university students, but there is a scarcity of studies addressing alcohol use among university students in SA. The available research conducted at SA universities indicates a high prevalence of alcohol consumption among students. A recent study conducted at a university in the Western Cape revealed that 80.6% of students use alcohol, making it the most frequently used substance among them.[18] Additionally, most of those students started using alcohol only after enrolling in university.[18] Another study conducted at a SA university found that 6.75% of university students had harmful or high-risk alcohol use and likely alcohol dependence based on the Alcohol Use Disorder Identification Tool (AUDIT) scores.[13]

Given the potential harms associated with alcohol use, it is important to gain a better understanding of the extent and patterns of alcohol use among university students to identify and address the risks associated with harmful alcohol consumption. Student Wellness practitioners at a South African university highlighted the need to better understand alcohol use in their context to prevent alcohol abuse and promote healthy behaviours amongst students. We explored the knowledge, attitudes, and practices regarding alcohol use among undergraduate students at this university.

Methods

Design and participants

We conducted a descriptive, cross-sectional study. The study population included all undergraduate students (~N=16 130) at the university who were 18 years and older. All registered undergraduate students were invited to participate in the study. Students younger than 18 years and postgraduate students were excluded. No sampling of the study population was performed. For data analysis, a minimum sample size of 385 was calculated by estimating that 50% of the student population engaged in alcohol use, with an alpha error of 0.05 and absolute precision of 0.05.

Data collection

The study population was invited to participate via institutional e-mail. The study was advertised on social networks, including WhatsApp and Instagram, and a poster on the institutional online education platform.

Measurement tool

We employed a self-administered, anonymised, online questionnaire that incorporated questions exploring knowledge and attitudes regarding alcohol use. The questionnaire also integrates screening questions from the AUDIT to identify hazardous or harmful alcohol practices within the study population. The AUDIT is an internationally validated questionnaire that is widely used to screen for alcohol-related problems.[13]

Data analysis

Data were analysed on Microsoft Excel and Jamovi 2.3 (Jamovi project, Australia). Numerical data were analysed using measures of central tendency and dispersion. Categorical variables were analysed using frequency tables and two-by-two contingency tables. The χ^2 test and Fisher's exact test were used to test relevant associations.

Ethical considerations

The research protocol was approved by the Human Research Ethics Committee (ref. no. HREC 062/2022) and the Department of Student Affairs of the relevant university. Informed consent was obtained using an electronic information sheet explaining the purpose, risks and voluntary nature of the study. Participants provided consent before they proceeded to the questionnaire. The risk posed by the sensitive nature of the content in the questionnaire was addressed by the provision of an electronic information sheet with contact details of accessible support structures.

Results

Demographic data

A total of 405 undergraduate students responded to the questionnaire (response rate 2.4%). In the analysis, 378 (93.3%) completed questionnaires were included, while the remaining 27 (6.7%) were excluded as they only provided consent without responses to the questions. Of the 378 participants, 244 (65%) were female and 128 (34.0%) were male (Table 1). Most participants (78.0%) were between the ages of 21 and 29 years, with a median age of 22 years (interquartile range (IQR) 21 - 23). Participants represented various faculties, with a majority from Health Sciences (57.0%). Approximately 31% of participants resided in university housing, while 68% lived off-campus during academic terms.

Knowledge

One-third of the participants did not answer the knowledge questions on standard units of alcohol in specified quantities of beer, wine and alcoholic spirits (Fig. 1). Of the respondents, 71.3% (95% CI 65.4 - 76.5) and 83.8% (95% CI 78.8 - 87.8) underestimated how many standard units of alcohol were in a 330 mL beer and a 150 mL glass of wine, respectively. Male students were more likely to underestimate the standard units of alcohol in a 330 mL can of beer (p=0.03). Participants residing in urban areas were significantly more likely to underestimate the standard units of alcohol in beer (p=0.004) and wine (p=0.05) compared with participants from rural homes. In contrast, 41.6% of participants overestimated the standard units of alcohol in a 40 mL shot of alcoholic spirits.

Two-thirds of the participants did not answer the questions on the maximum units of alcohol that male and female individuals could consume in a week. Of those who did respond, the majority, both male (93.2%) and female (85.2%), underestimated the safe weekly limit for alcohol consumption. Among the respondents, 19.1% believed that men and women shared the same maximum limit for the number of alcohol units they could safely consume in a week, while 80.9% correctly estimated a higher maximum number of units of alcohol per week for men compared with women.

Table 1. Participant characteristics (*N*=378)

Variable	*n* (%)
Sex	
Female	244 (64.6)
Male	128 (33.9)
Did not respond	6 (1.0)
Age (years)	
≤20	67 (17.7)
21 - 29	297 (78.6)
≥30	2 (0.5)
Did not respond	12 (3.2)
Faculty	
Engineering and the Built Environment	37 (9.8)
Law	12 (3.2)
Commerce	22 (5.8)
Humanities	55 (14.6)
Health Sciences	214 (56.6)
Science	38 (10.1)
Year of Study	
1	48 (12.7)
2	57 (15.1)
3	78 (20.6)
4	74 (19.6)
5	91 (24.1)
≥6	30 (7.9)
Home†	
Urban	330 (87.3)
Rural	47 (12.0)
Residence during academic terms	
University residence	118 (31.2)
Off-campus residence	28 (7.4)
Communal private accommodation	47 (12.4)
With parents	99 (26.2)
Private accommodation (lives alone)	86 (22.8)

†Outside of academic terms.

Attitudes

Among the 276 participants who responded to attitudinal questions, 74.6% (95% CI 69.1 - 79.4) agreed that students who use alcohol are at a higher risk of health problems. Additionally, 78.0% (95% CI 72.2 - 82.1) believed that students using alcohol would face negative health outcomes later in life. Overall, 89.5% (95% CI 85.0 - 92.7) of respondents expressed concern about the negative outcomes of alcohol consumption. While 48.8% (95% CI 36.9 - 49.0) supported the idea of allowing alcohol on campus, 28.4% (95% CI 23.2 - 34.3) disagreed and 28.8% (95% CI 23.6 - 34.7) remained neutral. Sixty-five percent (95% CI 58.9 - 70.6) of respondents did not believe that alcohol marketing strategies influenced their alcohol consumption. Overall, 25.1% of residence students reported using alcohol as a coping mechanism for stress and anxiety, compared with 14.7% of students living off-campus (p=0.04). Furthermore, 25.1% of residence students believed that alcohol marketing does impact their drinking behaviour, compared with 18.6% of students living off campus (p=0.04).

Stressors triggering alcohol use

Of the 247 participants who responded to the question about stressors triggering alcohol use, 48.6% mentioned having no specific stressors that triggered alcohol consumption. Participant responses reveal relationship stress as the most frequently identified stressor (23.9%) leading to alcohol use (Fig. 2). Mental health issues reported encompass social anxiety, obsessive-compulsive disorder, attention-deficit/hyperactivity disorder and depression.

Alcohol advertising

Figure 3 illustrates the locations where participants mainly encountered alcohol advertising. These included television or movies (56.3%), special offers when buying alcoholic beverages (39.4%) and sports sponsorships (38.6%).

Practices

Overall, 78.9% (95% CI 73.4 - 83.5%) of participants had consumed alcohol, with 14.4% (95% CI 10.6 - 19.3) consuming alcohol up to three times a week (Table 2). Those living in off-campus residences, communal or private accommodation were more likely to have consumed alcohol than those living with parents or at university residence (p=0.039). Male students were more likely to engage in binge drinking, i.e., ≥6 drinks on one occasion (p<0.000) than female students.

The most consumed alcoholic beverages were wine, cocktails and gin (Table 2). Other beverages included crème and herbal liqueur, rum, soju and champagne. Eighty-six percent of participants consumed alcohol at social events and alcohol was mostly consumed on Saturdays.

Among the 257 participants responding to the AUDIT tool, 11.7% (95% CI 8.3 - 16.2) screened positive for harmful or hazardous drinking and 8.6% (95% CI 5.7 - 12.7) for likely alcohol dependence. Male students were more likely to have harmful or hazardous drinking (18.2 v. 8.5%) or alcohol dependence (12.5 v. 6.1%, p=0.01) than female students. Year of study, age and faculty were not significantly associated with more frequent or hazardous drinking. Students with harmful or hazardous drinking were less likely to acknowledge the negative health risks of alcohol (p=0.047) and the negative health outcomes when older (p=0.057) than those without harmful drinking habits. Students with harmful or hazardous drinking habits (73.3%) and likely alcohol dependence (63.6%) were more likely to want alcohol at campus events than students without harmful drinking habits (36.1%, p=0.001). Students with harmful or hazardous drinking (30%) and likely alcohol dependence (40.9%) were also more likely to acknowledge the influence of advertising on their drinking than those with no harmful drinking (17.1%) (p=0.051).

Participants reported mostly consuming alcohol at social events rather than drinking at home or a residence. Drinking in social settings influenced the drinking patterns of students across all sexes, ages, faculties and areas of student living, with 79.3% of participants having participated in drinking games and 77.1% of participants reporting drinking more while playing drinking games. Similarly, 81.3% of participants participated in pre-drinks and 69.6% of participants reported drinking more during pre-drinks.

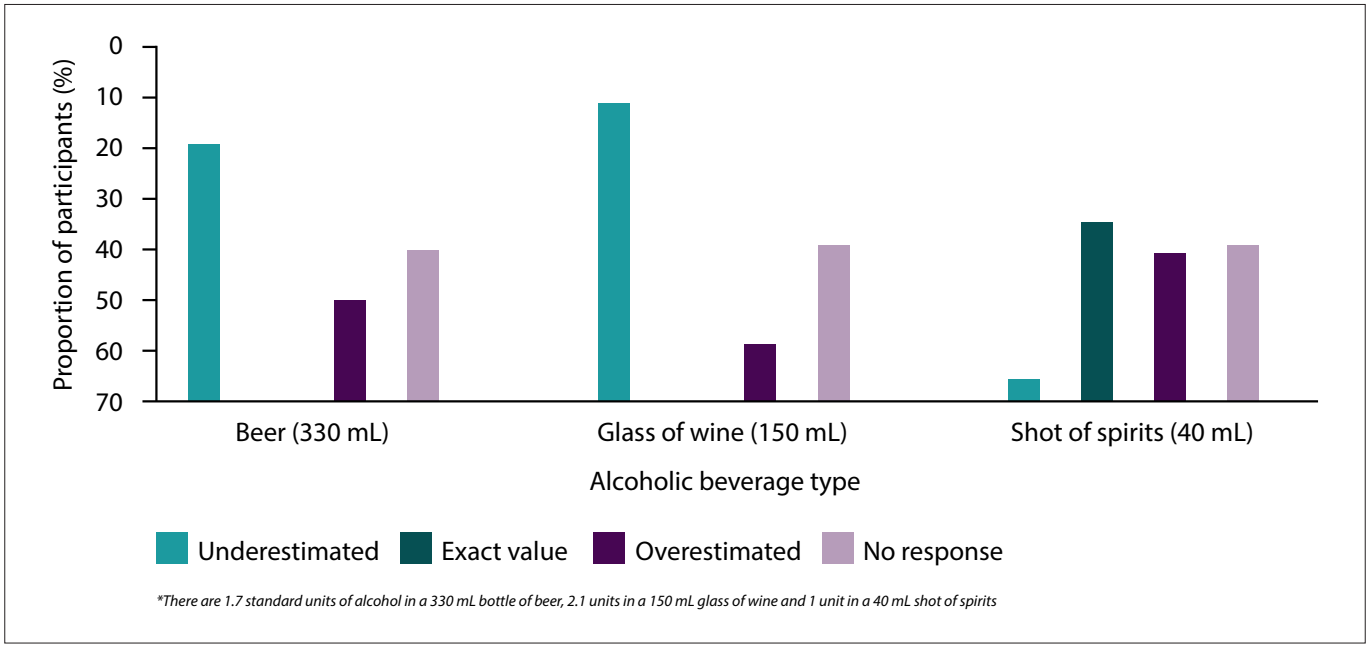

Fig. 1. Knowledge of students regarding alcohol units found in commonly consumed alcoholic beverages (N=378).*

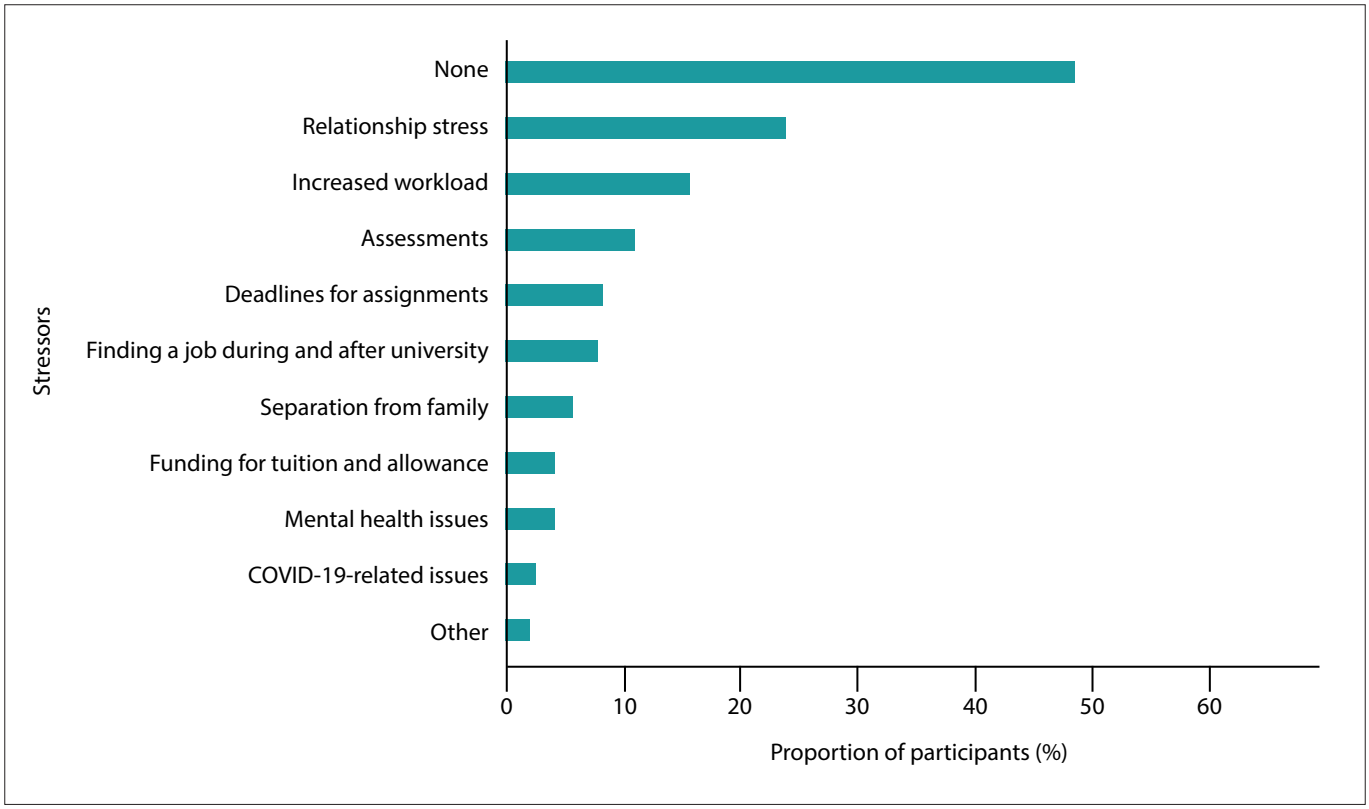

Fig. 2. Stressors triggering alcohol use among undergraduate students (N=247).

Discussion

While most students recognise the negative health outcomes of alcohol use, our study revealed that many undergraduate students still consume alcohol. Approximately one-tenth of students engaged in harmful or hazardous drinking behaviour, particularly prevalent among male students.

A notable proportion of participants in our study did not answer questions regarding standard units of alcohol in beverages and the maximum amount of alcohol that may be safely consumed. This may reflect limited knowledge of the impact of different quantities of alcohol. While most students who attempted these questions underestimated the number

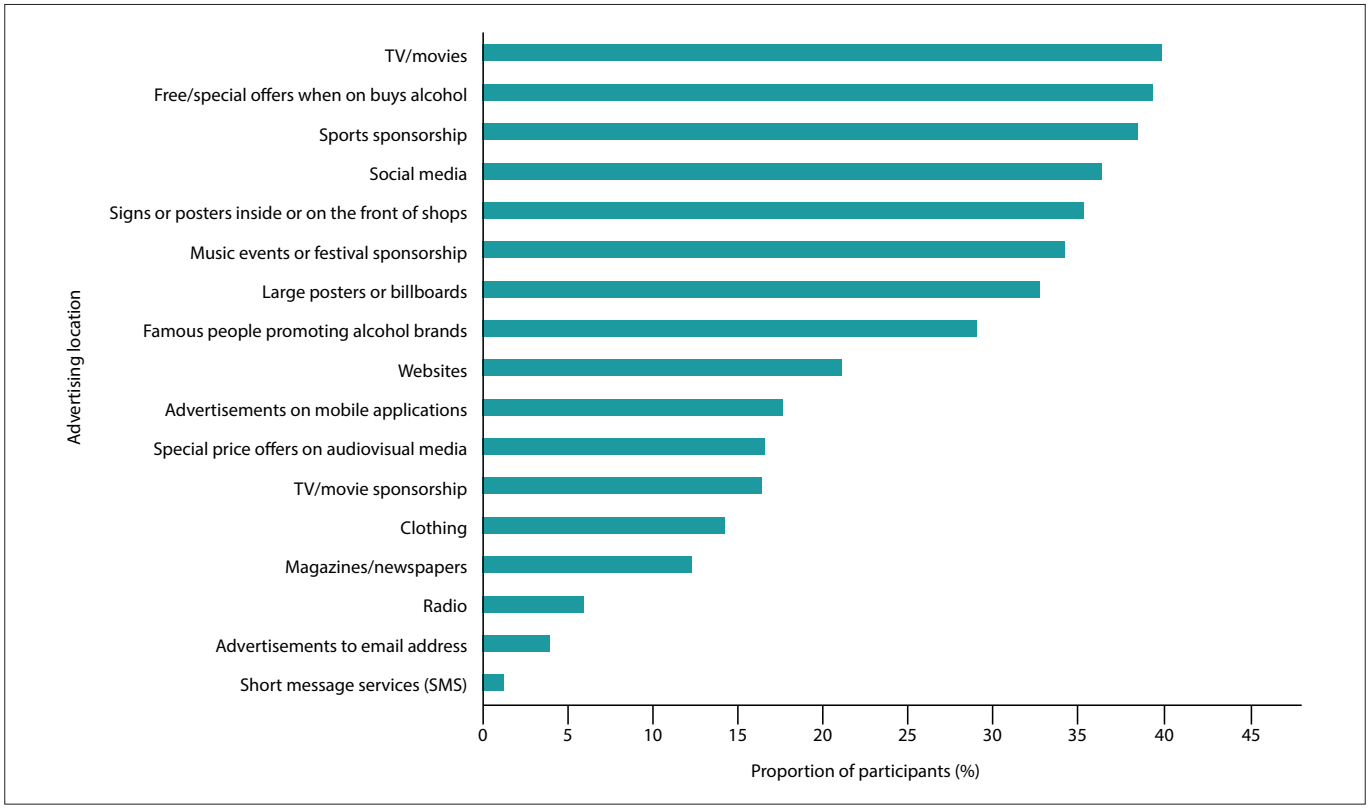

Fig. 3. Locations where alcohol advertising was encountered by participants 6 months prior to completing the questionnaire (N=252).

Table 2. Undergraduate student attitudes regarding alcohol use

Statement	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
'Students who use alcohol are at a higher risk of having health problems'. (*N*=276)	22.1%	52.5%	14.9%	9.4%	1.1%
'Students who use alcohol are at a higher risk of developing negative health outcomes when they are older'. (*N*=276)	28.6%	48.9%	14.5%	7.6%	0.4%
'I believe that there are more positive than negative outcomes to drinking'. (*N*=256)	2.0%	6.6%	18.0%	48.0%	25.4%
'I find the negative outcomes of drinking concerning'. (*N*=256)	41.8%	47.7%	8.2%	2.3%	0.0%
'I drink alcohol in order to cope with and/or manage the stresses and anxieties in my life'. (*N*=257)	3.9%	14.0%	9.3%	25.3%	47.5%
'I don't think there is a reason to be concerned about the amount I drink at this stage of my life'. (*N*=256)	38.7%	25.4%	12.5%	14.8%	8.6%
'Alcohol should be allowed on campus at events'. (*N*=257)	8.6%	34.2%	28.8%	19.1%	9.3%
'Drinking should be allowed at university residences'. (*N*=257)	8.9%	37.4%	24.5%	19.1%	10.1%
'Alcohol marketing strategies have an influence on my alcohol consumption'. (*N*=257)	3.9%	16.7%	14.4%	28.0%	37.0%

of standardised units of alcohol in beer and wine, they were less likely to underestimate units of alcohol in a shot of spirits. This may suggest that students misconceive beer and wine to be less intoxicating, and therefore less harmful. However, we note that students' understanding of standardised units of alcohol may be limited considering it is not formally taught in most educational settings. Interestingly, most students assumed that men can safely drink more alcohol than women, even when exact values were not correctly estimated. This finding is reflected in students' drinking behaviour as male students tended to drink more than female students.

Most students agreed that alcohol use may be associated with negative outcomes both as a student and later in life. It is concerning that despite students' recognition of the harmful effects of alcohol, its misuse is still common behaviour. However, the negative effects of alcohol were less

Table 3: Practices regarding alcohol use

Variable	Total		Male	Female	
	n (%)	95% CI	*n* (%)†	*n* (%)†	*p*-value
Frequency of alcohol consumption (*N*=256)					
Never	54 (21.1)	16.5 - 26.5	18 (20.5)	35 (21.5)	0.014*
Monthly or less	75 (29.3)	24.0 - 35.2	17 (19.3)	56 (34.4)	
2 - 4 times a month	87 (34.0)	28.4 - 40.0	31 (35.2)	55 (33.7)	
2 - 3 times a week	37 (14.5)	10.6 - 19.3	20 (22.7)	16 (9.8)	
≥4 times a week	3 (1.2)	0.4 - 3.6	2 (2.3)	1 (0.6)	
Number of drinks on a typical day of drinking (*N*=198)					
1 or 2	83 (41.9)	35.2 - 49.0	24 (34.8)	57 (45.6)	<0.001***
3 or 4	65 (32.8)	26.6 - 39.7	14 (20.3)	50 (40.0)	
5 or 6	39 (19.7)	14.7 - 25.9	21 (30.4)	17 (13.6)	
7 - 9	10 (5.1)	2.7 - 9.2	9 (13.0)	1 (0.8)	
≥10	1 (0.5)	0.01 - 3.5	1 (1.5)	0 (0.0)	
Consumption of at least six drinks on one occasion (*N*=158)					
Never	58 (29.3)	23.3 - 36.0	8 (11.6)	48 (38.4)	<0.000***
Less than monthly	95 (48.0)	41.1 - 55.0	34 (49.3)	60 (48.0)	
Monthly	32 (16.2)	11.6 - 22.0	17 (24.6)	15 (12.0)	
Weekly	13 (6.6)	3.8 - 11.0	10 (14.5)	2 (1.6)	
Alcoholic beverage types consumed (*N*=198)‡					
Wine	156 (78.8)	72.5 - 84.0	50 (72.5)	103 (82.4)	0.105
Cocktails	135 (68.2)	61.3 - 74.3	33 (47.8)	101 (80.8)	<0.000***
Gin	103 (52.0)	45.0 - 58.9	30 (43.5)	71 (59.9)	0.081
Vodka	93 (47.0)	40.1 - 54.0	31 (44.9)	61 (48.8)	0.596
Cider	90 (45.5)	38.6 - 52.5	25(36.2)	63 (50.4)	0.055
Beer	83 (41.4)	34.7 - 48.4	48 (69.6)	33 (26.4)	<0.000***
Whiskey	44 (22.2)	16.9 - 28.9	20 (30.0)	22 (17.6)	0.066
Brandy	37 (18.7)	13.8 - 24.8	20 (29.0)	16 (12.8)	0.006**
Other	10 (5.1)	2.7 - 9.2	5 (7.3)	5 (4.0)	0.189
Location of drinking (*N*=198)‡					
At home, alone	31 (15.7)	11.2 - 21.4	12 (17.4)	19 (15.2)	0.690
At home, with friends	114 (57.6)	50.5 - 64.3	44 (63.8)	68 (54.4)	0.206
At home, with family	79 (39.9)	33.3 - 46.9	28 (40.6)	48 (38.4)	0.766
At university residence, alone	18 (9.1)	5.8 - 14.0	9 (13.0)	9 (7.2)	0.179
At university residence, with friends	31 (15.7)	11.2 - 21.4	18 (26.1)	13 (10.4)	0.004**
At social events	172 (86.9)	81.3 - 90.9	61 (88.4)	107 (85.6)	0.583
At other people's places	108 (54.6)	47.5 - 61.4	41 (59.4)	66 (52.8)	0.375
Other	11 (5.6)	3.1 - 9.8	1 (1.5)	10 (8.0)	0.358
Days of alcohol consumption (*N*=196)‡					
Monday	3 (1.5)	0.5 - 4.7	1 (1.5)	2 (1.6)	0.714
Tuesday	2 (1.0)	0.3 - 4.0	1 (1.5)	1 (0.8)	0.584
Wednesday	6 (3.1)	1.4 - 6.7	4 (5.9)	2 (1.6)	0.118
Thursday	40 (20.4)	15.3 - 26.7	18 (26.5)	21 (16.9)	0.116
Friday	174 (88.8)	83.5 - 92.5	65 (95.6)	107 (86.3)	0.044
Saturday	177 (90.3)	85.3 - 93.7	65 (95.6)	108 (87.1)	0.059
Sunday	48 (24.5)	18.9 - 31.0	23 (33.8)	25 (20.2)	0.037*
Participation in drinking games (*N*=198)					
Yes	157 (79.3)	73.0 - 84.4	59 (85.5)	94 (75.2)	0.092
Participation in 'pre drinking' (*N*=198)					
Yes	161 (81.3)	75.2 - 86.2	61 (88.4)	97 (77.6)	0.064

*p<0.05.
**p<0.01.
***p<0.001.
† Column percentages shown.
‡ Not mutually exclusive - multiple options could be chosen for these questions.

acknowledged by those engaging in harmful or hazardous drinking and these students were more likely to want alcohol on campus. This demonstrates the need for improved awareness of the harmful effects of alcohol before initiating alcohol use.

Of the stressors identified as contributors to alcohol use in this study, the most common was relationship stress, followed by an increased workload and academic stress. While an increased workload and academic stress are often mentioned in similar research,[12] we found it interesting that students viewed relationship stress as the most significant contributing factor to alcohol use in our context. While there was no opportunity for participants to specify the type of relationship they referred to, this finding creates an opportunity to further explore relationship stress among undergraduate students. The challenges of newfound independence, a new social environment and responsibility may contribute to stress in romantic and other relationships.[17] Increased alcohol consumption itself may also lead to relationship stress among university students and this reciprocal relationship requires further research.

Notably, while almost two-thirds of participants reported exposure to alcohol marketing, a vast majority of participants did not believe that alcohol marketing influenced their alcohol consumption. Among those with harmful or hazardous drinking however, there was a greater acknowledgement of the influence of advertising. This may suggest that the influence of advertising on consumption may be unnoticed at first but can have an influence on students' drinking behaviour. Students encountered alcohol advertising mainly on television or in movies, followed by special offers when they bought alcoholic beverages and sports sponsorships. These modes of marketing are also among the most frequently encountered advertisements in other SA studies,[22] suggesting that future interventions and policy change aimed at these methods may be a promising starting point. An area needing further research is the difference in alcohol advertisements aimed at male and female individuals and how this may contribute to alcohol practices between the sexes.

Our study revealed a high proportion of university students consume alcohol, and a notable proportion of these students engage in binge drinking. This result closely aligns with that of another recent study conducted in the Western Cape.[18] The high prevalence of alcohol consumption at universities in SA is reflected across several universities, particularly among male students.[18]

Social interactions with peers are a big part of the university experience and have a universal impact on the drinking behaviour of students across all sexes, ages, faculties and areas of student living. Students reported higher alcohol consumption at social events compared with home or university residence settings. This may be attributed to fewer restrictions and supervision at public venues. Alcohol was also consumed primarily on Fridays and Saturdays, days typically used as a time for relaxation and socialisation. The overlap between students' time off and their pattern of alcohol consumption supports the idea that alcohol use in universities is primarily motivated by stress relief and the social pressures to fit in with peers.[23] There is however also an element of individuality within these situations, with some individuals being more capable of withstanding social pressure than others.[18-20]

A university environment often presents more opportunities to engage in heavy drinking than outside of university.[18-20] This likely contributes to the prevalence of hazardous drinking among university students. One example of this is the large number of undergraduate students who participate in drinking games and 'pre-drinking', not only in SA but also internationally.[24] These practices not only promote faster consumption of alcohol but also larger amounts, further contributing to students' risk of developing potentially harmful consequences of alcohol consumption.

Our study found that male students are more likely to engage in binge drinking than female students, with statistically significant differences in their choice of beverage. Interviews conducted with male students at the University of KwaZulu-Natal (UKZN) revealed that male students viewed alcohol use as a means of demonstrating courage and control, which are both important norms of hegemonic masculinity.[25] Female students may not feel the need to adhere to the same norms to be perceived as socially acceptable, which may contribute to the general differences in their drinking behaviour.

The perceived benefits of alcohol use and alcohol intoxication play a significant role in students' drinking behaviour. Students consider alcohol consumption as an icebreaker for uninhibited socialisation and social conformation,[18-20] which raises questions about why students feel they need to rely on alcohol to interact effectively with their peers.

University policies regarding alcohol use need to be reviewed considering that alcohol use is so prevalent in the student population. For instance, banning alcohol at university events or a limit on the number of drinks a student may access at events should be considered. Event organisers could also provide information regarding alcohol units and the effects of harmful alcohol use to address the lack of knowledge in this respect. A study conducted in the UK found that a brief, informative online intervention administered to students before starting university reduced their alcohol consumption and their interest towards binge drinking during their first 6 months at university.[21] Similar interventions could be beneficial for SA students. Improved access to substance abuse clinics, along with promoting existing counselling and therapy for student wellness through student engagement and advertising, may effectively address the stressors experienced by students.

Limitations

Our study is limited by a small sample size and a low response rate among undergraduate students. The voluntary nature of participation may have introduced selection bias. A large proportion of respondents represented the Faculty of Health Sciences. This may be due to a stronger advertisement effort within this faculty. Health sciences students may also have a broader understanding of the effects of alcohol on health given their training. Data were collected using a self-administered questionnaire, which may be influenced by recall and social desirability bias. The questionnaire included Likert-type questions, which could introduce central tendency bias. Lastly, a high item non-response bias was introduced due to participants having the choice to not respond to all questions.

Although this study did not query a person's age of first drink, a previous study showed that most people first used alcohol after entering university.[18] Evaluating whether this trend exists in our context would have been useful to better understand whether the university environment contributes to the initiation of alcohol use.

Conclusion

Our study illustrates that alcohol use is a common practice among undergraduate students. Despite students' recognition of the harmful

effects of alcohol, its misuse is still common. Students consume more alcohol at social events than at home or university residences, possibly due to social interactions, fewer restrictions and supervision. These and other factors related to hazardous alcohol use, such as sex and residence, may guide stakeholders to implement tailored interventions and appropriate policy change. Our research highlights the need for a systemic evaluation and regular surveillance of the drinking culture in SA universities to effectively promote healthy behaviours and prevent alcohol-related harms.

Declaration. Only participants who provided informed consent were included in the study.

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