

## RESEARCH ARTICLE

## ASSESSING AWARENESS OF ALCOHOL-RELATED LIVER DISEASE RISKS AMONG STUDENTS AT ACHIEVERS UNIVERSITY OWO, NIGERIA

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## ABSTRACT

Alcohol consumption can lead to a spectrum of liver diseases known as alcohol-related liver disease (ALD). Understanding the risks associated with alcohol intake is crucial for promoting liver health, particularly among young adults. This study aims to assess the awareness level of the risks associated with alcohol consumption and its connection to liver disease development among students at Achievers University Owo. A descriptive study design was employed, involving 389 students selected using a multistage sampling technique. Data were collected through a semi-structured questionnaire and analyzed using SPSS version 23. Descriptive statistics, including frequency and proportions, were calculated to interpret the data. The findings revealed that only 26.7% of students were aware of the dangers associated with alcohol consumption, particularly its role in causing liver diseases such as Alcoholic Fatty Liver Disease (AFLD). Factors influencing alcohol intake included peer pressure (32.1%) and participation in social events (20.8%). The study highlights a significant gap in awareness among students regarding the health risks of alcohol consumption, suggesting that educational interventions are necessary. Proposed measures to reduce alcohol consumption included mandatory education, addressing misconceptions, and prohibiting alcohol sales on campus. A substantial number of students at Achievers University are aware of the potential health risks associated with alcohol consumption, including liver disease development. It is recommended that health workers and medical personnel promote healthier beverage choices and encourage abstinence from alcohol among students, youth, and adolescents. This study contributes to the existing literature by highlighting the specific awareness levels of liver disease risks associated with alcohol consumption among university students, providing a basis for targeted health education initiatives.

## KEYWORDS

Alcohol consumption, Alcohol-related liver disease, Awareness, Peer pressure, Undergraduate students

## 1. INTRODUCTION

Alcohol is a psychoactive substance that has been consumed extensively across various cultures for centuries, often leading to dependency. Its harmful use has significant social and economic consequences and contributes heavily to the global burden of disease (Shield et al., 2020). According to the World Health Organisation, alcohol use is a causal factor in over 200 diseases, injuries, and other medical conditions (WHO, 2022). Alcohol consumption is associated with numerous health issues, including mental and behavioural disorders, alcohol dependence, and serious non-communicable diseases like liver cirrhosis (WHO, 2022). Alcohol use disorder (AUD) is prevalent globally, and the cost of excessive alcohol use has increased (Ramkissoon and Shah, 2022). Alcohol-Related Liver Disease (ALD) is a severe consequence of prolonged heavy alcohol consumption and can progress from liver steatosis to fibrosis and cirrhosis, often involving alcohol-associated hepatitis (Ramkissoon and Shah, 2022). Among the forms of ALD, cirrhosis is the most severe, with potentially fatal outcomes, placing a heavy social and economic burden on families, healthcare systems, and communities (Ramkissoon and Shah, 2022; American Liver Foundation, 2020; European Association for the Study of the Liver, 2018; National Institute on Alcohol Abuse and Alcoholism [NIAAA], 2021).

The Health Belief Model (HBM), developed in the 1950s by Hochbaum,

Rosenstock, and others, is a psychological framework used to explain health-related behaviors. The model suggests that an individual's health behaviours are influenced by their perceptions of four key factors: the severity of a potential illness, their susceptibility to that illness, the benefits of taking preventive action, and the barriers to doing so (Sulat et al., 2018). According to the HBM, individuals' health behaviours are shaped by their perception of a health risk and the importance they place on reducing that risk. For instance, someone is more likely to quit alcohol if they perceive that doing so may prevent severe health outcomes like liver disease (Femi et al., 2019). The HBM has been effective in predicting health behaviours, especially in preventive health measures, making it suitable for evaluating the risks associated with alcohol use and the development of liver disease. The model comprises six essential constructs related to human behaviour: perceived susceptibility, perceived severity, perceived benefits, perceived barriers, cues to action, and self-efficacy, all of which contribute to individuals' decisions to engage in health-promoting actions.

A group researcher investigated knowledge and practices regarding alcohol consumption among university students (Messina et al., 2021). Their study, "Knowledge and Practice towards Alcohol Consumption in a Sample of University Students," found that 53.3% of the participants scored high on the Alcohol Use Disorders Identification Test-Consumption (AUDIT-C), and 13.1% reported binge drinking at least once a month. The

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findings indicated that college students are not fully aware of the consequences of alcohol abuse. Given that young students are future members of adult society and potential leaders, more attention should be given to their substance-use behaviors. The study recommended employing educational, preventive, and motivational strategies to address young people's substance-abusing coping mechanisms. Similarly, some researchers assessed knowledge about the dangers of alcohol consumption in their cross-sectional study among Makerere University undergraduate students (Andrew et al., 2017). Data was collected through focus groups and self-administered questionnaires. Of the 435 students surveyed, 242 (55.6%) reported using alcohol, 49 (11.3%) had quit drinking, and 144 (33.1%) had never consumed alcohol. Despite their awareness of the risks of alcohol use, including liver disease, the prevalence of alcohol consumption remained high.

In a cross-sectional survey conducted by Saini and Suthar involving 180 undergraduate students at Shekhawati PG College, Rajasthan, India, 25.55% of participants reported regular alcohol use, with males comprising 63.04% of the drinkers (Saini and Suthar, 2022). Most students (69.56%) began drinking during social events or celebrations, and 47.8% started between the ages of 18 and 19. In a study by titled "Alcohol Consumption among Tertiary Students in the Hohoe Municipality, Ghana," it was found that 39.5% of students had consumed alcohol at some point, and 49.1% continued to do so (Aboagye et al., 2021). Factors such as academic adjustment difficulties [AOR = 3.6, 95% CI = 2.01, 6.46] and peer influence [AOR = 3.7, 95% CI = 2.31, 5.82] were linked to alcohol consumption. The study emphasised the importance of focussing more on alcohol-related education in higher education and providing counselling support for at-risk students.

Some researcher conducted a focus group study titled "College Students' Perspectives on an Alcohol Prevention Programme and Student Drinking," which revealed that alcohol use is perceived as a commonplace aspect of college life (Calnan and Davoren, 2022). Many students expressed scepticism regarding the effectiveness of alcohol prevention programs. The study underscored the need for relevant strategies that address students' perceptions of alcohol consumption. Alcohol abuse remains a major issue globally. According to the WHO, alcohol abuse is responsible for approximately 3 million deaths annually, accounting for 5.3% of all deaths worldwide (WHO, 2022). Alcohol use also accounts for 5.1% of the global burden of disease and injury, measured in disability-adjusted life years (DALYs). Alcohol abuse not only poses significant health risks, but also has a profound social and economic impact on individuals and society. WHO has established a link between alcohol abuse and various non-communicable diseases, such as liver disease, injuries, and mental and behavioural disorders (WHO, 2022). Furthermore, the University of Michigan Health reported that men of African and Hispanic descent have a higher risk of alcohol-related cirrhosis compared to Caucasian men, with heavy alcohol consumption being a major contributing factor (NIAAA, 2021). Social pressure, the pursuit of euphoria, and other factors make young people particularly susceptible to alcohol use.

Rates of alcohol consumption among college students and young adults remain high, partly due to significant life changes, such as moving away from home for the first time, living with peers, and experiencing reduced adult supervision. These circumstances increase the risk of alcohol use and misuse. Despite some awareness of the health risks associated with alcohol intake, including liver disease, more comprehensive studies are needed to address the gaps in understanding these risks among undergraduates. Raising awareness about the risks of alcohol consumption on liver health is essential, especially among students of Achievers University, Owo. This can help mitigate the burden of alcohol-related liver disease (ALD) and improve public health outcomes. Addressing gaps in awareness and promoting ways to reduce alcohol consumption can prevent the progression of alcohol misuse into liver disease. A WHO report in 2022 highlighted that alcohol contributes to over 200 diseases and injuries, including liver disease, and noted that 13.5% of deaths among people aged 20-39 years are attributable to alcohol. This age group includes university students, making them particularly vulnerable to the health risks associated with heavy alcohol consumption.

In 2022, a case involving an undergraduate diagnosed with ALD due to excessive alcohol intake, along with family issues, resulted in death, underscoring the severity of the problem. Achievers University, Owo, is a tertiary institution with students in the high-risk age range for alcohol consumption, influenced by factors such as exploration, peer pressure, poor academic performance, and family challenges. Addressing this concern requires assessing students' awareness of alcohol-related health risks, promoting health education, and working towards reducing and preventing alcohol-related liver disease. This study aims to assess the level

of awareness of the risks of alcohol intake in relation to liver disease among students of Achievers University. The broad objective is to determine students' awareness levels and identify areas where more education is needed to mitigate the risks of alcohol misuse.

The findings of this research will also benefit nursing education by providing insights that can be incorporated into nursing curricula. Including more comprehensive content on alcohol consumption and liver health will help nursing students develop critical thinking skills and adopt a holistic approach to patient care. Additionally, the results may inform policy-making, such as mandating regular screening for liver disease among high-risk populations, including university students, which would promote early detection and better management of liver health issues. Further, the study aims to encourage the integration of research findings into clinical guidelines and patient care protocols. Efforts to raise awareness and educate young people on the consequences of alcohol misuse must prioritize preventive measures, motivational interventions, and targeted support programs. These measures could involve campaigns that emphasize the dangers of alcohol misuse and highlight the potential benefits of avoiding alcohol consumption, especially for young adults who are in a critical stage of life. Additionally, equipping counseling services with the necessary tools to assess and assist students at risk of alcohol misuse can be instrumental in preventing severe health consequences, including liver disease.

## 2. METHODOLOGY

### 2.1 Method

A descriptive cross-sectional research design was used to assess the level of awareness regarding liver disease risks among students at Achievers University Owo (AUO), Ondo State, Nigeria. This design was chosen for its effectiveness in capturing a snapshot of current awareness levels, helping identify knowledge gaps, misconceptions, and areas for intervention. It also facilitates the collection of quantitative data to provide insights and inform the development of targeted educational programs and health promotion strategies suited to the students' needs.

The study was conducted at AUO, a private university located in Idasen-Ute, Owo, Ondo State, Nigeria, established in 2007. AUO offers various academic programs, including undergraduate and postgraduate degrees, and serves as a hub of learning for students from different states in Nigeria.

The target population included male and female students across different colleges within AUO, such as:

- College of Basic Health Sciences (COBHS)
- Faculty of Nursing Sciences (FONS)
- Faculty of Medical Laboratory Sciences (FOMLS)
- College of Natural and Applied Sciences (CONAS)
- College of Social and Management Sciences (COSMAS)
- College of Law (COL)

Since its inception, the student population has grown significantly, from about 300 students to thousands today, reflecting the university's commitment to providing quality education and expanding its academic offerings. The sample size was determined using Taro Yamane sampling formula:

$$n = \frac{N}{(1+N(e^2))} \quad (1)$$

n = sample size,

N = Total population of students in Achievers university, Owo, Ondo state,

e = margin error

A multistage sampling technique was employed to select respondents for the study, ensuring representation from all colleges and faculties at Achievers University Owo, Ondo State. Initially, faculties were selected, followed by the random selection of seven departments using alphabetical order. The first and fifth departments chosen from each college included Nursing Science, Human Anatomy, Medical Laboratory Science, Microbiology, Political Science, Accounting, and Law. Within these selected departments, a convenience sampling method was utilized to

recruit respondents, allowing for easy access to participants without requiring extensive resources or effort.

## 2.2 Inclusion and Exclusion Criteria

The study included undergraduate students enrolled at Achievers University Owo, Ondo State, ensuring a focus on individuals within the selected academic departments. Specifically, participants were required to be undergraduates from the designated faculties that were part of the sampling process. In contrast, postgraduate students from Achievers University were excluded from this study, as the focus was primarily on undergraduate perspectives. Additionally, undergraduate students from Achievers University who were not part of the selected departments were also excluded. This targeted approach aimed to ensure that the findings accurately represented the awareness levels of alcohol-related liver disease among the intended student population.

## 2.3 Instrument for Data Collection

The data collection instrument used in this study was a self-structured questionnaire consisting of close-ended questions. The questionnaire comprised 33 items divided into four sections. The first section included six questions focused on the sociodemographic information of respondents, while the second section featured ten questions designed to assess the level of awareness regarding the risks associated with alcohol consumption. The third section contained twelve questions addressing the factors contributing to alcohol intake, and the fourth section included five questions on strategies to reduce alcohol consumption.

The demographic data section collected personal details such as sex, age, religion, and educational status. Awareness of the risks posed by alcohol intake on liver health was evaluated using a Likert scale, ranging from 4 to 1, with scores assigned as follows: "Strongly Agree" received a score of 4, "Agree" a score of 3, "Disagree" a score of 2, and "Strongly Disagree" a score of 1. Similarly, the factors associated with alcohol intake and the proposed methods for reducing consumption were also assessed using the same Likert scale. This consistent scoring system allowed for a comprehensive analysis of respondents' awareness, attitudes, and beliefs regarding alcohol use and its potential health risks.

## 2.4 Validity and Reliability of Instrument

To ensure the face and content validity of the questionnaire, consultations were held with the supervisor and references were made to previous studies on similar topics. This approach helped confirm the correctness and appropriateness of the questionnaire in alignment with the study's objectives. These measures aimed to ensure that the instrument for data collection was both valid and reliable. A test-retest reliability assessment was conducted through a pilot study involving a 10% sample size. A total of 36 questionnaires were administered to 36 undergraduate students at Achievers University Owo (AUO). These participants were not included in the final sample to identify any ambiguities in the questions prior to the full administration of the questionnaire.

## 2.5 Method of Data Collection and Analysis

For this study, participants were approached and informed about the research's objectives. Informed consent was obtained following the established approval protocol. Participants were asked to sign the consent section of the self-administered questionnaire as a symbol of their agreement. Questionnaire distribution took place over two weeks, during which a total of 389 questionnaires were disseminated with the assistance of two trained nursing students alongside the researcher. All questionnaires were reviewed for consistency and completeness. Data were entered and analyzed using the Statistical Package for Social Sciences (SPSS) version 23. Variables such as age and education level were collected and categorized during the analysis. Descriptive statistics, including frequency and proportions, were calculated. Additionally, multivariable logistic regression analysis was employed to identify factors associated with alcohol intake. Adjusted Odds Ratios (AOR) with a 95% confidence interval were used to indicate the strength and direction of associations, with a P-value of less than 0.05 considered statistically significant.

## 2.6 Ethical Consideration

A formal letter of permission to collect data, duly stamped and signed, was obtained from the Faculty of Nursing Sciences at Achievers University, Owo, Ondo State (AUO). This letter was then presented to the Achievers University Research and Ethics Committee to secure approval for

administering questionnaires to the undergraduate students. Additionally, approval was granted by the Owo Local Government Secretariat Research Committee. The questionnaires provided to the respondents were designed to be clear and free of ambiguity. Emphasis was placed on ensuring the confidentiality of the information provided by participants. They were informed that no incentives were offered for participation and that they had the right to withdraw from the study at any time.

## 3. RESULTS

The data obtained with the use of a well semi-structured questionnaire was analyzed with the use of Statistical Package Service Software (SPSS) and the result obtained was presented in frequency table and chi-square was used to test for relationship between some variables. The findings are organized into tables that detail the socio-demographic characteristics of the participants, their awareness of alcohol-related risks, factors associated with alcohol intake, and suggested strategies for reducing alcohol consumption among students.

Table 1: Socio-demographic Characteristics of the Students		
Variable	Frequency (F)	Percentage (%)
Gender		
Male	157	40.4
Female	232	59.6
Total	389	100.0
Age Range		
20 years or below	102	26.2
21-24 years	170	43.7
25-29 years	95	24.4
30 years or above	22	5.7
Total	389	100.0
Student's Level		
100L	112	28.8
200L	163	41.9
300L	66	17.0
400L	24	6.2
500L	24	6.2
Total	389	100.0
Student's Department		
Nursing Science	122	31.4
Medical Laboratory Science	82	21.1
Microbiology	87	22.4
Political Science	21	5.4
Law	24	6.2
Accounting	28	7.2
Human Anatomy	25	6.4
Total	389	100.0
Marital Status		
Single	363	93.3
Married	26	6.7
Total	389	100.0
Religion		
Christianity	208	53.5
Muslim	181	46.5
Total	389	100.0

The demographic data in Table 1 indicate that the sample comprised more females (59.6%) than males (40.4%). The age distribution shows that a significant proportion of the participants (43.7%) were aged 21-24 years, with the mean age calculated at 20.76 years ( $\pm 0.45$ ). Most respondents were first-year (100L) or second-year (200L) students, representing 28.8% and 41.9%, respectively. The majority were from the Nursing Science department (31.4%) and identified as single (93.3%). Religiously, a larger proportion identified as Christians (53.5%).

**Table 2: Awareness of Alcohol Risks Associated with Liver Disease Among Students**

Variables	SA F (%)	A F (%)	D F (%)	SD F (%)
Excessive alcohol consumption is a cause of liver diseases	143(36.8)	227(58.4)	8(2.1)	11(2.8)
Familiar with the term "alcohol-related liver diseases (ALD)"	77(19.8)	104(26.7)	135(34.7)	73(18.8)
Understanding the early symptoms and signs of liver diseases caused by alcohol intake	19(4.9)	37(9.5)	310(79.7)	23(5.9)
Belief that university students are at high risk of developing liver diseases due to alcohol intake	44(11.3)	39(10.0)	78(20.1)	228(58.6)
Regular alcohol consumption, even in moderation can contribute to the development of liver diseases	81(20.8)	55(14.1)	110(28.3)	143(36.8)
Recommended limits for alcohol consumption to reduce the risk of liver diseases	55(14.1)	91(23.4)	199(51.2)	44(11.3)
Belief that education and awareness campaigns are important to prevent ALD among students	221(56.8)	162(41.2)	3(0.8)	3(0.8)
Access to reliable sources of information about the health risk of alcohol consumption	52(13.4)	77(19.8)	171(44.0)	89(22.9)
Feel confident in my ability to make informed decisions regarding alcohol intake and liver health	109(28.0)	177(45.5)	56(14.4)	47(12.1)
Open to attending workshop or seminars about the risks of alcohol intake on liver health	125(32.1)	148(38.0)	41(10.5)	75(19.3)

The results presented in Table 2 reveal a concerning level of awareness among students regarding alcohol-related risks. While 58.4% of the respondents agreed that excessive alcohol consumption is a cause of liver diseases, only 19.8% were familiar with the term "alcohol-related liver diseases." Furthermore, a significant 79.7% of participants disagreed with having a clear understanding of the early symptoms and signs of liver

diseases linked to alcohol consumption. Alarming, 58.6% believed that university students were at low risk for liver diseases due to alcohol intake, reflecting a potential misconception. Nevertheless, a notable majority (56.8%) recognized the importance of education and awareness campaigns in preventing ALD.

**Table 3: Factors Associated with Alcohol Intake and Liver Disease Among Students**

Variables	SA F (%)	A F (%)	D F (%)	SD F (%)
Consumption of alcohol due to peer pressure	105(27.0)	148(38.0)	91(23.4)	45(11.6)
Alcohol intake influenced by friends	52(13.4)	77(19.8)	171(44.0)	89(22.9)
Drinking alcohol at social events	63(16.2)	66(17.0)	260(66.8)	----
Alcohol consumption as a means to cope with stress	268(68.9)	121(31.1)	----	----
Drinking helps to relax and unwind	268(68.9)	121(31.1)	----	----
Drinking alcohol out of curiosity	296(76.1)	72(18.5)	21(5.4)	----
Alcohol consumption is part of my cultural background	63(16.2)	66(17.0)	260(66.8)	----
Drinking is encouraged in my social circle	36(9.3)	124(31.9)	229(58.9)	----
Influenced by alcohol advertisements	177(45.5)	18(4.6)	179(46.0)	15(3.9)
Media portrays alcohol consumption positively	33(8.5)	44(11.3)	246(63.2)	66(17.0)

The findings in Table 3 highlight several factors influencing alcohol intake among students. A majority of students (68.9%) reported using alcohol as a coping mechanism for stress, while 76.1% admitted to consuming alcohol out of curiosity. Peer pressure emerged as a significant factor, with 27.0% of participants strongly agreeing that it influenced their alcohol

consumption. Additionally, 45.5% of respondents felt influenced by alcohol advertisements, while a substantial 63.2% acknowledged that media portrayals of alcohol consumption are often positive. These insights underscore the multifaceted nature of alcohol consumption among university students.

**Table 4: Ways to Reduce Alcohol Intake Among Students**

Variables	SA F (%)	A F (%)	D F (%)	SD F (%)
Mandatory education and sensitization	92(23.7)	102(26.2)	151(38.8)	44(11.3)
Address poor perception of alcohol consumption	227(58.4)	130(33.4)	11(2.8)	21(5.4)
Provide access to counseling services	246(63.2)	100(25.7)	23(5.9)	20(5.1)
Strict enforcement of drinking laws on campus	140(36.0)	149(38.3)	56(14.4)	44(11.3)
Promote healthier lifestyle choices	284(73.0)	85(21.8)	20(5.1)	----
Organize awareness campaigns against alcohol consumption	199(51.1)	159(40.8)	8(2.1)	23(5.9)
Engage peer education programs	109(28.0)	143(36.7)	54(13.9)	83(21.3)

Table 4 summarizes strategies suggested by participants to reduce alcohol intake among students. A significant number of respondents (73.0%) advocated promoting healthier lifestyle choices, while 63.2% supported providing access to counseling services. The importance of addressing misconceptions surrounding alcohol consumption was highlighted, with 58.4% agreeing on the need to improve awareness. Mandatory education

and awareness campaigns were also emphasized, indicating a strong desire for structured interventions to combat alcohol-related issues on campus.

The results of this study reveal a concerning lack of awareness regarding the risks associated with alcohol consumption among undergraduate students. Although many recognized the dangers of excessive drinking,

misconceptions persist, particularly regarding the susceptibility of their demographic to liver diseases. The findings highlight the need for targeted educational initiatives and interventions to promote healthier choices and combat alcohol-related risks in university settings.

#### 4. DISCUSSION

The findings of this study reveal critical insights into the demographics and knowledge regarding alcohol consumption among undergraduate students. Notably, the sample consisted of 232 (59.6%) female students and 157 (40.4%) male students, a distribution that contrasts with the findings of who reported that 54.3% of their participants were male and 45.7% were female (Andrew et al., 2017). The notable difference in gender representation can be attributed to the fact that the Nursing, Medical Laboratory Science (MLS), and Microbiology departments, which had the highest number of participants, typically enroll more female students than male students. This suggests that certain academic programs may have gender imbalances that influence the overall demographics of the sample population.

The age distribution of participants also yielded significant results. Findings indicated that 265 (69.9%) of the students were aged 24 years or younger, while 30.1% were 25 years and above, yielding a median age of 20.76 years  $\pm$  0.45. This median age is similar to that reported which was 21 years and consistent across genders (Andrew et al., 2017). The predominance of younger students in this study, particularly those in the 100 and 200 levels, aligns with Andrew et al.'s findings that similarly featured a higher representation of students from the first to third years of study compared to the fourth and fifth years. This trend may reflect the busy schedules of final-year students, who are often preoccupied with internships, practicals, and preparations for graduation, thereby resulting in a lower participation rate.

Further examination of the academic distribution revealed that 122 (31.4%) of respondents were Nursing students, 82 (21.1%) were MLS students, and the majority, 363 (93.3%), were single. The fact that the respondents were predominantly single can be linked to their age, with many being in their early twenties, a period often characterized by educational pursuits rather than settling down. Moreover, the religious demographics indicated that 208 (53.5%) of the students identified as Christians, while 181 (46.5%) were Muslims. This balance reflects the diverse cultural context of the student population. The study also delved into the participants' awareness of alcohol-related health risks.

An overwhelming majority, 370 (95.1%), agreed that excessive alcohol consumption can lead to liver diseases, while only 19 (4.9%) disagreed with this statement. This high level of awareness is encouraging and may stem from increased exposure to health education and awareness campaigns on the risks associated with alcohol consumption. However, the results also highlighted a concerning gap in knowledge regarding specific conditions; only 181 (46.5%) of students claimed familiarity with the term 'alcohol-related liver diseases' (ALD), while 208 (53.5%) were unfamiliar. This finding contrast sharply with the results from which indicated that more students possessed knowledge about the dangers of alcohol consumption, including liver disease and mortality (Andrew et al., 2017).

Moreover, this study's results resonate with a study which revealed that only 50% of university students correctly answered questions related to alcohol consumption risks (Messina et al., 2021). The discrepancy in knowledge levels may be attributed to the larger proportion of social and management students in this study, who may not have been exposed to comprehensive educational resources regarding the health risks of alcohol. The findings suggest that while there is a broad awareness of the risks associated with excessive alcohol intake, a significant portion of students lacks specific knowledge about ALD and its implications.

The results indicate that, despite a high level of general awareness regarding alcohol consumption and its potential risks, a gap remains in understanding specific diseases linked to excessive drinking. This lack of detailed knowledge underscores the importance of implementing targeted educational initiatives within the university setting (Herrero-Montes et al., 2022). To effectively address these knowledge gaps, universities could consider integrating alcohol education into the curriculum across various disciplines, ensuring that all students, regardless of their field of study, are informed about the health implications of alcohol consumption (Dow et al., 2020). Awareness campaigns focusing on the dangers of alcohol, specifically tailored to different student demographics, could also play a pivotal role in enhancing understanding. Engaging peer educators in these campaigns may further amplify their effectiveness, as students often

resonate more with information shared by their peers (Lavilla-Gracia et al., 2022).

Organizing workshops and seminars with healthcare professionals can provide students with direct access to accurate information regarding alcohol consumption and its consequences, thereby dispelling myths and misconceptions surrounding the issue (Sinclair et al., 2019). Given that a significant portion of students remains unaware of specific alcohol-related health risks, such educational initiatives are essential for fostering a more informed student body that is equipped to make healthier lifestyle choices. This study's findings illuminate the demographic characteristics and knowledge levels regarding alcohol consumption among undergraduate students (Messina et al., 2021). While awareness of the association between excessive drinking and liver disease is high, there remains a critical need for comprehensive education on specific alcohol-related health risks. Addressing these gaps through targeted educational initiatives and peer-led campaigns can empower students to make informed decisions about their alcohol consumption and promote overall health and well-being within the university community.

#### 5. CONCLUSION

A significant number of students in this study exhibited awareness of alcohol consumption, its risk factors, and associated diseases such as alcohol-related liver diseases (ALD). Specifically, 370 students (95.1%) acknowledged that excessive alcohol consumption can lead to liver diseases, indicating a high level of awareness about the general risks of alcohol use. However, despite this general awareness, there remains a notable gap in knowledge regarding specific health implications, as only 181 students (46.5%) reported familiarity with the term 'alcohol-related liver diseases' (ALD). This discrepancy highlights the critical need for targeted educational interventions to ensure that students not only recognize the risks associated with alcohol consumption but also understand the specific health conditions that can arise from it. The findings suggest that effective strategies to reduce alcohol consumption among students must encompass several dimensions.

First, addressing misconceptions surrounding alcohol use is essential. Educational initiatives should focus on dispelling myths that may lead students to underestimate the risks of excessive drinking. Workshops, seminars, and peer education programs can serve as platforms for disseminating accurate information regarding the health consequences of alcohol consumption. Moreover, enhancing sensitization efforts is crucial for fostering a more informed student body. The study revealed that a majority of students, specifically 265 (69.9%), were 24 years old or younger, suggesting that this demographic could be particularly responsive to targeted educational campaigns. Universities should consider implementing campaigns that engage students in discussions about alcohol consumption and its risks, utilizing social media and other communication channels that resonate with their interests.

The implementation of policies that restrict alcohol sales on campus is vital. Limiting the availability of alcohol in university-sponsored events and ensuring compliance with legal age restrictions can help create an environment that discourages excessive drinking. It is recommended to conduct longitudinal research to assess changes in alcohol consumption patterns and knowledge among students over time. Qualitative studies exploring students' attitudes and beliefs about alcohol can provide deeper insights into the factors influencing their drinking behaviors. Investigating the effectiveness of different educational interventions on students' knowledge and consumption habits could also inform future strategies aimed at reducing alcohol-related harms. Ultimately, a multi-faceted approach involving education, policy, and community engagement is essential for promoting healthier behaviors and improving the overall well-being of students on campus.

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#### CONFLICT OF INTEREST

The authors declare no conflict of interest.

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