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ORIGINAL RESEARCH

Prevalence and Factors Associated with Alcohol Consumption Among Secondary School Students in Nekemte, Ethiopia: A Cross-Sectional Study

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Background: Alcohol consumption is a major public health concern among adolescents and young adults. Adolescence is an important period of human growth. Alcohol consumption during this age will lead to a variety of problems: health, social, economic, etc. Further, research studies have shown that alcohol consumption, both at normal and above normal levels, will lead to a wide range of health problems. The purpose of this study is to evaluate the prevalence and associated factors for alcohol consumption among secondary school students in Nekemte town, East Wollega Zone, Ethiopia, in 2022.

Methods: A school-based cross-sectional research design approach is used. The data is collected using a structured and self-administered questionnaire. Through systematic random sampling, 291 out of 15,798 students ranging from 9 through 12 grades are chosen. The students selected from each school are proportional to their total strength.

Results: The study is conducted on 291 participants with a mean age of 17.5 ± 1.5 years. Of them, 49.8% are males, and the remaining 50.2% are females. It revealed that 27.84% of participants consume alcohol: 30.3% males and 25.3% females. Age (AOR: 2.755, 95% CI: 1.307–5.809), Urban location (AOR: 1.674, 95% CI: 0.962–2.914), Smoking (AOR: 0.426, 95% CI: 0.104–1.740), Chewing Khat (AOR: 2.185, 95% CI: 0.539–8.855), Having friends who drink (AOR: 1.740, 95% CI: 0.918–3.300), and having a family member who drinks alcohol. All these categories are significantly ($p<0.05$) associated with alcohol use.

Conclusion: The effects of alcohol consumption and its risks of mental illness, chronic illness, and social problems in adulthood are not completely understood by school students. Alcoholism can be eradicated using educational, preventive, and motivating measures. Special attention should be given to young people and their coping mechanisms against alcohol use.

Keywords: alcohol use, secondary school students, prevalence, associated factors

Introduction

Alcohol is an addictive psychoactive substance that has been widely used in many cultures for centuries. However, alcohol use in adolescents is associated with negative consequences for cognitive development and brain function, including changes in verbal learning, visuospatial processing, memory, and attention, as well as impaired gray and white matter development and integrity.[1] These neurocognitive changes from adolescent alcohol use may also lead to behavioral, emotional, social, and academic problems later in life.[2]

Consuming substances like alcohol, tobacco, and khat leaves (*Catha edulis*) has become a significant public health issue worldwide, along with several socioeconomic issues. According to studies, substance use has rapidly increased and is frequently motivated by the need to meet personal and social needs, enhance relationships with peers and form new ones, increase sexual activity, boost self-confidence, lessen stress, and promote social contact.[3]

According to the World Health Organization (WHO), heavy episodic drinking is prevalent among young people aged 15–19 years, accounting for 26.5%. Mortality rates are higher in boys than in girls and among older adolescents (15–19 years) than in the younger group (10–14 years).[4] The WHO also released a global status report on alcohol and health,

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which showed that about 3 million deaths in 2016 were attributed to drinking, with 28.7% due to injuries, 21.3% due to digestive system diseases, 19% due to cardiovascular diseases, 12.9% due to infectious diseases, and 12.6% due to cancer. Additionally, 49% of disability-adjusted life years (DALYs) are caused by drinking.[5] These numbers demonstrate the negative impact that alcohol use can have on individuals, families, and communities and highlight the need for effective interventions to reduce alcohol use among adolescents.

In Africa, alcohol use has rapidly grown in the twentieth century and has become a leading cause of mortality and morbidity on the continent. In sub-Saharan Africa, alcohol use has also been common among the age group of 12–19 years in the last 12 months. In East Africa, alcohol use in a usual lifetime, the past 12 months, and the past month was 52%, 28%, and 26%, respectively.[6]

In Ethiopia, the practice of alcohol and other substance use has evolved over several years from an era of purely traditional alcoholic beverages (eg, Tela, Araki, and Tej) to the recent use of industrially produced alcoholic beverages (eg, beer). Both traditional and manufactured alcoholic drinks are used in Ethiopia, with an estimated alcohol content of 2–4% for Tela (traditional beer), 7–11% for Tej (honey wine), and up to 45% for Araki (a strong, colorless liquor distilled from grain).[7]

Factors associated with alcohol use in different countries have been well documented. Several studies have indicated that a combination of demographic factors such as age, gender, religion, parental income, living arrangements, peer pressure, the proliferation of nightclubs and day parties, the use of other substances like marijuana and tobacco, and happy hour promotions contribute to the high prevalence of alcohol use among adolescents and young adults in school.[6,8]

Adolescents are heavily influenced by their peers, and they may feel pressure to drink to fit in with their social group. Additionally, many adolescents and young adults may not fully understand the negative consequences of alcohol consumption and may engage in risky behaviors as a result. Another important factor associated with alcohol use among school students is easy access to alcohol through older friends or family members, or they may purchase alcohol themselves. Furthermore, the advertising and marketing of alcohol products targeted at youth contribute to the problem. Only a few studies have explored the prevalence of alcohol use and the variables that are linked to it, as well as the simultaneous examination of the effect of several domains of risk and associated factors on alcohol use among school students in Ethiopia. Further, there has been no previous report on the prevalence of alcohol use and associated factors among secondary school students in Nekemte. The objective of this study was to assess the prevalence of alcohol use and associated factors among secondary school students in Nekemte, Ethiopia, in 2022.

Methods
Study Area and Period
The study was conducted in secondary schools in Nekemte Town, which is located in East Wollega Zone, Ethiopia. East Wollega is bordered to the south and west by the Ilu Abba Bora Zone; to the west by the Didesa River, which separates it from West Wollega; to the north and northwest by the Benishangul Gumuz region; to the northeast by the Horo Guduru Wollega Zone; to the east by West Shewa; and to the southeast by the Gibe River, which separates it from Jimma.

The city of Nekemte is the capital of the East Wollega district, located 331 kilometers west of Addis Ababa. Its altitude is between 1960 and 2170 feet, and the total area of the commune is 5480 square kilometers. The climatic condition of the city is woina dega, with an annual ambient temperature range of 14 to 26 degrees Celsius. According to 2018 data, the city has a total population of 127,380, including 65,002 men (51.03%) and 62,378 women (48.97%). Pregnant women accounted for 4420 (3.47%), and non-pregnant women for 23,731 (18.6%). In terms of health facilities, there are 2 public hospitals, 2 public health centers, 21 mid-level clinics, 26 lower-level clinics, and 26 pharmacies in the city.[9]

There are eight public high schools in Nekemte town: Nekemte Secondary School, Darge Secondary School, Biftu Nekemte Secondary School, Dalo Secondary School, Ifa Boru Secondary School, Kumsa Moroda Secondary School, Dire Jato Secondary School, Leka Secondary School. There are a total of 14,664 students (6695 males and 7969 females) in these eight high schools. Additionally, there are three private high schools: Betel (329 students), Onesmos (259 students), and Kidane Mihret (546 students).

Sample Size Determination

The sample size for this study was determined using the following assumptions and the formula for a single proportion of the population (n = $(Z \alpha /2)^2$ p $(1–p)/d^2$): The prevalence of alcohol usage among Harar students[10] (Ethiopia) and associated factors was 22.2% at Zα/2 (significance level) of 0.05 = 1.96, d (error) = 5%, and P (alcohol consumption rate). This ratio of 22.2% was used to calculate the necessary sample size using a 95% confidence range and a 5% margin of error (265 participants). By inserting values in the formula n = $(1.96)^2$ * 0.222 $(1–0.222)/ (0.05)^2$ =265. The ultimate sample size of 291 is also considered to have a 10% non-response rate.

Sampling Technique

The total number of students in Nekemte Town secondary schools from grades 9 up to 12 is 15,798. From those students, 291 students were selected from all high schools by making proportional allocations for each school. First, we calculated the sample for each school by using the crisscross formula. Then, a list of students from grades 9–12 was taken, and every K value (the sampling interval is "K") (where K = N/n; N = 15,798, n = 291) was selected using a systematic random sampling technique for every 54 students in each grade section, starting from 1 (1, 55, 109.). On the day of data collection, the randomly selected students were informed to remain in their classes.

Data Collection Instrument and Procedure

The study was conducted from October 17th to November 18th, 2022. Data was collected using a structured, self-administered questionnaire. The questionnaire includes socio-demographic characteristics and frequency of alcohol use by students; knowledge and perceptions of students towards alcohol; and factors that lead to drinking. The English version of the questionnaire was translated into Afan Oromo for better understanding. Data quality was ensured through two days of training for data collectors and supervisors, pre-testing of the data collection tools on 5% of the sample, and close observation of the data collection process. Alcohol use among secondary school students aged 15–23 years was collected by asking the question, "Have you used at least one of the alcoholic drinks (Tela, Teji, Araki, Shamita, Borde, beer, wine, whiskey, etc.) for nonmedical purposes in the past 12 months?" The answer type was yes or no.

Study Variables

Dependent variable: alcohol use.

Independent variables: socio-demographic characteristics (age, gender, grade level, place of residence, religion, monthly income, alcohol user parents, friends). Use other substances such as khat, tobacco, and others.

Operational Definition

In Ethiopia, there are two types of alcohol available: traditional or locally-made alcohol and foreign liquor. The common alcohol-containing traditional beverages in Ethiopia are Tela, Teji, Araki, Shamita, and Borde.

Alcohol use: Participants who answered yes to the question, "Have you used at least one of the alcoholic drinks (Tela, Teji, Araki, Shamita, Borde, beer, wine, whiskey, etc.) for nonmedical purposes in the past 12 months?" were considered alcohol users,[5] and then they followed the other questions: age, location, reason, type of alcohol, and with whom did you use alcohol for the first time? If no, follow the question on perceptions of alcohol use, smoking cigarettes, and chewing khat.

Data Quality Control Measures

- Ensuring confidentiality and respecting the rights of the respondents during data collection.
- Checking for completeness of the questionnaires after data collection.
- Obtaining ethical clearance from the Wollega University Institute of Health Sciences Ethics and Research Committee.
- Securing cooperation from the Nekemte town educational bureau and obtaining consent from the sample population before conducting data collection.
- Assuring the confidentiality of the information collected.

Data Processing and Analysis

The data were coded, entered into Epidata version 3.1, and exported to SPSS version 26.0 for analysis. Descriptive statistics were calculated to determine frequency and percentage. There was a logistic regression analysis. To prevent the possible impacts of confounders, a variable with a p-value of less than 0.25 in a bivariate analysis was included in a multivariate analysis. To determine the strength of the association with alcohol use, adjusted odds ratios (AOR) were computed at a 95% confidence level. Finally, variables with p-values <0.05 were considered statistically significant predictors of alcohol use.

Results

Socio-Demographic Characteristics

A total of 291 students participated in the survey, with a 100% response rate. Of these participants, 49.8% are males and 50.2% are females. Respondents who hail from urban areas account for 52.9%, while 47.1% are from rural backgrounds. Similarly, 59.8% of respondents are in the age group of 20–24, while the others are 15–19. The average age of the respondents is determined to be 17.5 years (SD + 1.5), with the oldest being 23 years and the youngest being 15 years. Orthodox Christians made up more than half of the participants (55.7%), followed by Protestants (39.9%), while Muslims and Wakefata (an ethnic faith practiced by the Oromo people) made up the remaining 3.1% and 1.4%, respectively. Further, 22.3%, 24.1%, 26.1%, and 27.5% of the participants were in their Ninth, Tenth, Eleventh, and Twelfth grades, respectively. Most respondents (56%) reside in rented houses, followed by 26.1% reside in their own houses, and the remaining 17.9% reside with relatives. The average monthly income of 70.8% of participants' families is less than 500 Ethiopian birrs (ETB), while that of the remaining is above 500 birrs (Table 1).

Prevalence of Alcohol Use

The present study finds that alcohol usage is common among secondary school students in Nekemte Town. It was found that 27.84% of participants had used alcohol in the past 12 months. Most of them (74.07%) started drinking when they were between the ages of 15 and 19, while 24.69% started when they were between 20 and 24, and the rest (1.23%) started when they were under 15. Further, the study finds that the participants have consumed alcohol for the first time: at home (39.51%); at bars and restaurants (22.22%); in hotels (22.2%); in parks (11.11%); and at relatives' houses (4.94%).

Table 1 Socio-Demographic Characteristics of Secondary School Students in Nekemte Town, 2022 (N = 291)

Variables	Category	Frequency	Percentage
Sex	Male	145	49.8
	Female	146	50.2
Age (years)	15–19	117	40.2
	20–24	174	59.8
Grade Level	Grade 9	65	22.3
	Grade 10	70	24.1
	Grade 11	76	26.1
	Grade 12	80	27.5
Residence	Urban	154	52.9
	Rural	137	47.1

(*Continued*)

Table 1 (Continued).

Variables	Category	Frequency	Percentage
Religion	Orthodox Christians	162	55.7
	Muslim	9	3.1
	Protestant Christians	116	39.9
	Wakefata	4	1.4
Present residence	Home	76	26.1
	Rented house	163	56.0
	Relative place	52	17.9
Average monthly income[#] from family or others (in birr)	Less than 500	206	70.8
	501–1000	36	12.4
	1001–1500	25	8.6
	1501–2000	14	4.8
	>2000	10	3.4

Note: [#]1 USD = 51.94 Birr in November 2022.

Participants have started drinking alcohol for a variety of reasons, including family gatherings (51.8%), religious occasions (19.75%), peer pressure (23.46%), and forgetting sorrows (4.94%). The respondents to this survey have claimed that they have started consuming alcohol in the form of a variety of drinks: 48.15% beer, 25.93% Tela, 9.88% Tej, 7.41% wine, 6.17% Araki, and 1.23% gin and whiskey. The participants said that a majority of 32.1% had their first drink with family, followed by 29.63% with their partner, 24.69% with a relative, and 13.58% alone. The respondents have reported that they are continuing to drink alcohol: the majority (50.62%) do it at home, followed by 28.4% at bars and restaurants, 16.05% at hotels, and 4.94% at friends' residences. During the previous 30 days from the date of their responses, participants have reported that they had different numbers of drinks: 53.09% had one or two drinks, 13.58% had three to nine drinks, and 6.17% had ten or more drinks (Table 2). However, 13.5% of students claimed that they missed class because of alcohol consumption.

Table 2 Prevalence of Alcohol Use Among Secondary School Students in Nekemte Town, 2022

Variables	Category	Frequency	Percentage
Alcohol use	Yes	81	27.84
	No	210	72.16
Age when alcohol is consumed for the first time (N =81)	<15	1	1.23
	15–19	60	74.07
	20–24	20	24.69
A location where alcohol is consumed for the first time	Home	32	39.51
	Friends' house	4	4.94
	Hotel	18	22.22
	Park	9	11.11
	Restaurant and bar	18	22.22

(*Continued*)

Table 2 (Continued).

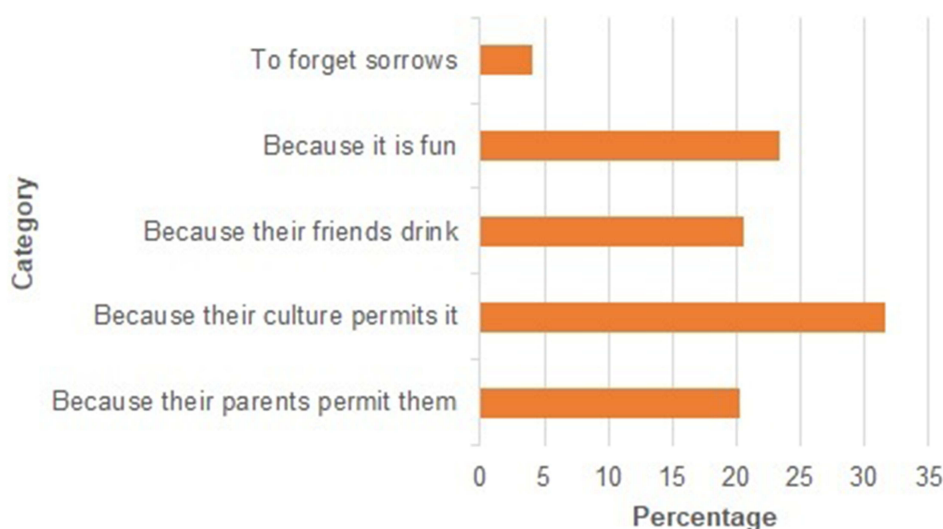| Variables	Category	Frequency	Percentage
Reasons for your first alcohol consumption	Religious occasion	16	19.75
	Family occasion	42	51.85
	Because of peer	19	23.46
	To forget sorrows	4	4.94
Type of alcohol consumed for the first time	Beer	39	48.15
	Wine	6	7.41
	Whisky	1	1.23
	Gin	1	1.23
	Tej	8	9.88
	Tela	21	25.93
	Araki	5	6.17
With whom did you first drink alcohol	Family members	26	32.10
	Boy/Girlfriend	24	29.63
	Relative	20	24.69
	Nobody	11	13.58
Frequency of alcohol consumption in the past 30 days	Never	22	27.16
	1 or 2 times	43	53.09
	3 to 9 times	11	13.58
	10 or more times	5	6.17
Having a family member who drinks (N=291)	Father	48	16.49
	Mother	13	4.47
	Father and mother	26	8.93
	Brother/sister	18	6.19
	No one	185	63.57
Having friends who drink	Yes	61	20.96
	No	230	79.04
Smoking cigarettes	Yes	30	10.31
	No	261	89.69
Chewing khat	Yes	26	8.93
	No	265	91.1

The majority of the participants (62%) said that they spent less than 500 ETB per month on alcohol. Of this amount, 60% comes from pocket money provided by family, 20% comes from borrowing from friends, and 20% comes directly from friends as a sponsor. Furthermore, among the participants, 10.31% smoke cigarettes, and the remaining 89.69% do not. Similarly, the participants said that 8.9% of them use khat, but the remaining 91.1% do not.

Students' Perceptions of Alcohol Use and Its Repercussions

The population of this study reported that they consume alcohol for various reasons, such as enjoyment, relaxation after work, and because their culture permits. The participants have varying levels of knowledge about different amounts of alcohol and their potential impacts (Figure 1). The students also have different perceptions about the health benefits of alcohol. The majority of the students believe that alcohol has no health benefits, while others believe that it can protect against heart disease, reduce mental stress, and aid in socialization (Table 3).

Factors Associated with Alcohol Use

The results of the study suggest that several demographic characteristics are connected to the frequency of alcohol use. Bivariate logistic regression shows that the factors associated with alcohol use are sex, age, residence, smoking, having a family member who drinks, having friends who drink, and chewing khat. The analysis made using the multivariate logistic regression method reveals that Nekemte secondary school students' prevalence of alcohol usage was substantially correlated with factors like age, urban area, smoking, having a family member who drinks, having friends who drink, and chewing khat. Males are 1.220 times more likely to drink alcohol than females (AOR: 1.220, 95% CI: 0.671–2.220), but it is not significant. According to this study, the prevalence of alcohol usage is about two times greater in those between the ages of 20 and 24 than it is in their counterparts between the ages of 15 and 19 (AOR: 2.755, 95% CI: 1.307–5.809). On the other hand, in comparison with the students living in rural residences, urban resident students have odds of alcohol use prevalence that are 1.6 times higher (AOR: 1.674, 95% CI: 0.962–2.914). When compared to its reference category, the odds of having a family member who drinks alcohol are strongly associated with alcohol usage: the father (AOR: 0.377, 95% CI: 0.156–0.911), both father and mother (AOR: 0.190, 95% CI: 0.070–0.512), and a brother or sister (AOR: 0.229, 95% CI: 0.066–0.788). The family impact is still another strong factor in alcoholism among students. Further, this study finds that, compared to people in the community without such friends, the odds of having friends who drink alcohol are about 1.7 times greater (AOR: 1.740, 95% CI: 0.918–3.300). Similarly, students who smoke cigarettes have been associated with drinking alcohol more than students who do not (AOR: 0.426, 95% CI: 0.104–1.740). On the other hand, the odds of drinking alcohol are two times higher among students who chew khat compared to those who do not chew khat (AOR: 2.185, 95% CI: 0.539–8.855), but this estimation is also significantly associated with alcohol use (Table 4).

Figure 1 Nekemte secondary school students' responses to the reason for drinking alcohol.

Table 3 Perceptions of Alcohol Use Among Secondary School Students in Nekemte Town, 2022

Variables	Category	Frequency	Percentage
How much alcohol will a normal person consume to become a drinker?	Less than one drink	58	19.93
	1 drink	140	48.11
	2 drinks	70	24.05
	3 drinks	6	2.06
	4 drinks	10	3.44
	5 or more drinks	6	2.06
How much do you think people harm themselves if they drink alcohol once or twice a month?	No risk	151	51.89
	Slight risk	19	6.53
	Moderate risk	35	12.03
	Great risk	38	13.06
	I do not know	17	5.84
Which alcoholic beverage do you think is the safest?	Beer	29	9.97
	Wine	6	2.06
	Tej	70	24.05
	Tela	150	51.55
	Araki	35	12.03
What positive benefit can alcohol consumption provide?	No positive health benefits	215	73.88
	Protects the heart	2	0.69
	Removes mental stress	44	15.12
	Helps with socializing	29	9.97
Has one of your family members discussed with you the harmful effects of drinking alcohol?	Yes	32	11.00
	No	259	89.00

Discussion

This research sought to find out how common alcohol usage was among secondary school students in Nekemte Town as well as its contributing variables. In this research, alcohol usage in Nekemte town is prevalent, with a rate of 27.84%. Other research reveals the respective prevalence in other places: Aksum Town, Ethiopia, 39.7%;[11] Addis Ababa, Ethiopia, 45.7%;[12] South Africa, 39.1%;[13] the United States of America, 41.8%;[14] Kisumu, Kenya, 51.9%;[15] Brazil, 46.9%;[16] and Tanzania, 32.5%.[17] Upon comparing the aforementioned prevalence rates, Nekemte town's rate is much lower than that of other places in Ethiopia as well as other countries. The lower alcohol consumption rate observed in Nekemte town may be due to variations in socioeconomic status, cultural influences, etc. However, there are some areas where the prevalence rates are lower than that of Nekemte town. For instance, the prevalence rate in the eastern region of Ethiopia is 22.2%,[10] Kenya 15%,[18] Zimbabwe 15.6%,[19] Ethiopia 19.4%,[20] Thailand 14.8%,[21] and India 12.5%.[22]

This survey finds that most of the students in Nekemte town initially start drinking at home, and later they continue to do so in bars and restaurants, hotels, parks, and the houses of close relatives. This shows that easy access to alcohol contributes to the usage of alcohol by Nekemte Town secondary school students. These findings also reveal that there

Table 4 Bivariate and Multivariate Logistic Regression Analysis of Factors Associated with Alcohol Consumption Among Secondary School Students in Nekemte, 2022

Variables	Category	Alcohol Use		COR (95% CI)	AOR (95% CI)	P value
		Yes N (%)	No N (%)			
Sex	Male	44 (30.3)	101 (69.7)	1.283 (0.767–2.146)	1.220 (0.671–2.220)	0.215
	Female#	37 (25.3)	109 (74.7)			
Age	15–19 years#	28 (23.9)	89 (76.1)			
	20–24 years	53 (30.5)	121 (69.5)	1.392 (0.817–2.374)	2.755 (1.307–5.809)	0.008
Grade Level	9th grade#	16 (24.6)	49 (75.4)			
	10th grade	20 (28.6)	50 (71.4)	1.312 (0.626–2.750)		
	11th grade	21 (27.6)	55 (72.4)	1.071 (0.529–2.169)		
	12th grade	24 (30.0)	56 (70.0)	1.122 (0.561–2.246)		
Residence	Urban	51 (33.1)	103 (66.9)	1.766 (0.974–2.988)	1.674 (0.962–2.914)	0.048
	Rural#	30 (21.9)	107 (78.1)			
Religion	Orthodox Christians	46 (28.4)	118 (71.6)	0.793 (0.190–3.305)		
	Muslim	3 (33.3)	6 (66.7)	1.087 (0.637–1.856)		
	Protestant Christians	31 (26.7)	83 (73.3)	1.190 (0.121–11.734)		
	Wakefata#	1 (25.0)	3 (75.0)			
Average monthly income from family or others	Less than 500 birrs#	58 (28.2)	148 (71.8)			
	501–1000	11 (30.6)	25 (69.4)	0.638 (0.132–3.094)		
	1001–1500	6 (24.0)	19 (76.0)	0.568 (0.103–3.123)		
	1501–2000	4 (28.6)	10 (71.4)	0.792 (0.131–4.794)		
	>2000	2 (20.0)	8 (80.0)	0.625 (0.090–4.329)		
Having a family member who drinks	Father	15 (31.3)	33 (68.8)	1.197 (0.404–3.540)	0.377 (0.156–0.911)	0.030
	Mother	5 (38.5)	8 (61.5)	0.846 (0.255–2.805)	0.296 (0.082–1.064)	0.062
	Both parents	11 (40.7)	15 (59.3)	0.615 (0.135–2.815)	0.190 (0.070–0.512)	0.001
	Brother/sister	5 (27.8)	13 (72.2)	0.559 (0.155–2.024)	0.229 (0.066–0.788)	0.019
	No one drinks#	45 (24.3)	140 (75.7)			
Having friends who drink	Yes	23 (37.7)	38 (62.3)	1.795 (0.988–3.261)	1.740 (0.918–3.300)	0.042
	No#	58 (25.2)	172 (74.8)			
Smoking cigarettes	Yes	8 (26.7)	22 (73.3)	0.936 (0.399–2.198)	0.426 (0.104–1.740)	0.035
	No#	73 (28.0)	187 (72.0)			
Chewing khat	Yes	10 (38.5)	16 (61.5)	1.708 (0.741–3.938)	2.185 (0.539–8.855)	0.044
	No#	71 (26.8)	194 (73.2)			

Note: #Reference category.
Abbreviations: COR, crude odds ratio; AOR, adjusted odds ratio.

have been a variety of reasons for the students to use alcohol during family occasions, followed by social pressures, religious events, and the desire to forget sorrows.

According to the results of a bivariate and multivariate analysis on alcohol consumption among secondary school students in Nekemte town, male students between the ages of 20 and 24 are more likely to consume alcohol than female students. The outcome of the present study is consistent with earlier studies that appear in the literature.[23,24] Studies on the usage of substances frequently find that males use substances more regularly and are more likely to develop dependence than females.

Also, the results show that youth in the age group 20–24 consume more alcohol than youngsters. Generally, 20 years of age marks the transition from youth to adulthood, and it's also the time for young adults to experiment and attempt new things, including drinking. Additionally, this age group is also under a lot of societal pressure, stress, and pressure to succeed, which is making them embrace alcohol and leading them to alcohol consumption.[25] Alcoholism among youth is due to easy accessibility, greater social acceptability, and less parental supervision.

In this study, the results show that students who stay with alcoholic parents and friends are more likely to consume alcohol. The current findings agree with those conducted in South Africa,[23,26] demonstrating that parents' drinking habits have a significant impact on their children's drinking behavior. Additionally, peer pressure is a factor in adolescents' desire to experiment with alcohol use.[26] A family that practices alcohol consumption may produce offspring who are more likely to consume alcohol in the future. But a family that disapproves would probably produce offspring who abhor alcohol.[27]

This finding can be supported by the fact that engaging in activities with friends while drinking alcohol results in good feelings and enhances satisfaction with peer connections. Children and teenagers who use tobacco or alcohol regularly will have higher levels of satisfaction with peer connections.[28] According to other studies, wealthier or more educated parents are more likely to praise the flavors or advantages of alcoholic beverages in front of their children.[29] Further research shows that students who spend more time with alcoholic family and friends are affected the most by their drinking behavior.[30–32] Additionally, research on high school students in Ethiopia found a link between alcohol usage and a family history of alcohol consumption.[33] However, it is suggested that parents stop or reduce drinking alcohol in front of their children during family gatherings and religious occasions.

This study found that rural area students consume locally made alcohol called Tela at higher frequencies, but urban area students consume industrially made beer abundantly. This observation is supported by the studies conducted in Nigeria, which show that alcohol usage is higher in urban locations and also in low socioeconomic rural areas.[34,35] It has been shown that people in higher socioeconomic classes prefer industrially made beer, while those in lower socio-economic classes tend to drink traditional beverages, which are riskier.[36]

There is a strong correlation between the incidence of alcohol usage, cigarette smoking, and khat use. The results of this study are in line with comparable investigations made in Zimbabwe and Zambia, where drinking alcohol has been linked to gender, friendship with smokers, and khat usage.[37,38] Many other research studies demonstrate that alcohol usage in the adolescent period leads to many risks, such as mental illness, chronic illnesses, and social issues in old age.[39] Alcohol also has hazardous side effects that put consumers at risk for chronic illnesses,[5,40,41] especially as they get old.[42]

These findings demand the necessity of interventions to reduce alcohol consumption among secondary school students in Nekemte Town. Particular focus is to be placed on the characteristics mentioned in this study, such as age, peer pressure, and family members. In the management of alcoholism, the primary care physician's role is very important in identifying and treating alcoholic patients early. They play a vital role in interventions that help motivate patients to abstain and seek treatment. For people who drink more alcohol and do not like to stop, the beneficial recommendation is to reduce their intake.[43]

Other review studies suggest that school-based prevention programs are the most effective for non-drinking adolescents. According to this analysis,[44] secondary school students in Africa who have not yet started drinking may benefit from school-based alcohol prevention programs that include many components and are built around participatory approaches.

Recent studies show that therapeutic approaches using sodium oxybate in the treatment of Alcohol Withdrawal Syndrome (AWS) and the maintenance of alcohol abstinence in alcoholics are effective. Some randomized data suggest

that Gamma-hydroxybutyrate GHB is better than Naltrexone and Disulfiram regarding abstinence maintenance and prevention of cravings in 3 to 12 months. It is recommended that GHB be used only under strict medical supervision since concerns about the abuse or misuse of the drug and its addiction potential have arisen.[45]

Another one called behavioral couples' therapy (BCT) is to be given to the family members and friends of a drinking student. This therapy cares for the alcoholic patient together with the spouse or cohabiting partner to build support for abstinence and improve relationship functioning. BCT assumes that spouses can reward abstinence and that alcoholic patients in happier, more cohesive relationships with better communication have a lower risk of relapse.[46]

Overall, these findings suggest that individuals who are young adults, reside in urban areas, and have family members and friends who drink alcohol, smoke, or chew khat are more likely to use alcohol. However, it is important to note that the study is observational, and hence, causality cannot be inferred from the results. Due to the self-administered nature of the data collection procedure, self-reported data may contain reporting inaccuracies because some students might not have paid close attention to their responses or may have misunderstood the purpose of the study. The study's cross-sectional design makes it challenging to identify cause-and-effect connections. Further research is needed to understand the underlying mechanisms that contribute to these associations.

Recommendations

The results of this study indicate that alcohol use prevalence is high among Nekemte town secondary school students.

To reduce the prevalence of alcohol, the following recommendations are proposed:

- The Nekemte town educational bureau should work with the Nekemte town health office to create awareness in all high schools about the negative effects of alcohol use on students' economic, health, social, and academic performance.
- High school directors should create small groups or clubs that focus on raising awareness about the negative effects of alcohol use on students and the community as a whole.
- The Food, Medicine, and Health Care Administration and Control Authority (FMHACA) should place restrictions on media that promote alcohol drinking and restrict alcohol import agents.
- The Wollega University Institute of Health Sciences, scholars, and researchers should conduct further research on alcohol use prevalence at the community level as well as the specific alcohol composition of local drinks.

It is important to note that these recommendations are based on the findings of this study, and further research is needed to understand the underlying causes of the prevalence of alcohol usage in Nekemte town.

Conclusions

According to the findings of this study, alcohol usage is common among secondary school students in Nekemte, Ethiopia. The study found that male students are more likely to consume alcohol than female students. Age, urban location, having a family member who drinks, having friends who drink, smoking, and chewing khat are also found to be significantly associated with alcohol consumption rates. The effects of alcohol consumption and its risks for mental illness, chronic illness, and social issues in adulthood are not completely understood by school students. These findings give significant information on the prevalence and risk factors of alcohol drinking among secondary school students in Nekemte, which can be utilized to design and implement effective interventions to minimize alcohol consumption among this population. Interventions must be designed to address the specific risk variables identified in this study and to raise awareness among parents, teachers, and students about the detrimental repercussions of alcohol intake. Special attention should be given to young people and their coping mechanisms against alcohol use.

Abbreviations

WHO, World Health Organization; DALYs, Disability-Adjusted Life Years; NCD, Non-communicable diseases; AOR, Adjusted odds ratio; COR, Crude odds ratio; ETB, Ethiopian Birr; SPSS, Statistical Package for Social Sciences; FMHACA, Food, Medicine, and Health Care Administration and Control Authority.

Ethical Approval and Consent to Participate

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