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Research Article

Predictors of Alcohol use among Secondary School Students in Calabar South Local Government Area, Cross River State, Nigeria

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Abstract: Alcohol use continues to be an important global public health problem and adolescence is a period of developing drinking habits. The use and abuse of alcohol by adolescents is on the increase in most African countries and is closely associated with risky behaviours, STDs and mental disorders in adult life. This study aims to identify predictors that may significantly be associated with alcohol use among secondary school students in Calabar South Local Government of Cross River State. A cross-sectional analytical survey was conducted to identify predictors of alcohol use among secondary school students in the study area. A multistage sampling technique was used to select 5 out of 33 secondary schools. A sample size of 370 was calculated using Cochran formula. Data was collected from 370 respondents using semi-structured self-administered questionnaire administered using a proportionate allocation technique among the respondents. Mean age of respondents was 14.89 ± 2.19 years, with 203 (54.9%) between the ages of 11 and 15 years. One hundred and sixty-eight (45.4%) of the students drank alcohol, with the majority of consumers being SSS2 students, 60 (16.2%). The predictors of alcohol used in this study were: respondent's ages, 11-20 years ($p = 0.008$), respondent's type of school, public school ($p = 0.025$) and respondent's class, SSS2 ($p = 0.035$). Parents, schools and health authorities need to create more awareness on the hazards of alcohol drinking. Policy makers should enforce the laws regulating drinking age, with particular focus on adolescent drinking.
Keywords: Predictors, Alcohol, Secondary, School, Students, Nigeria.

INTRODUCTION

Alcohol use continues to be an important global public health problem and adolescence seems to be a period of time in the development of drinking patterns into adulthood [1]. The World Health Organization has stated a global status report that many school children experiment the use of alcohol before their 12th birthday thus calling for the attention of member countries to evolve practical strategies to stem this tide and delay the early onset of this substance use or abuse [2]. Among the African Countries, studies show varying ages of youth's experimentation with alcohol use and abuse. From study in South Africa, 12% of youth experiment with alcohol use before 13 years of age [3]. Similar age bracket was reported in a study in Botswana [4] and in a study conducted among school going adolescents aged 11-17 years in Uganda, 18% of adolescents reported that they had ever drank alcohol[5]. A study conducted by Adu-Mireku [6] to assess the prevalence and association between alcohol, cigarette, and marijuana use in Ghana among Senior Secondary School students in Accra with 894 sampled students revealed 56.9% girls and 43.1% boys, with mean age = 17.4 years. In another study, Ghana's lifetime alcohol prevalence due to socioeconomic

differences among Ghanaian adolescents aged between 12–18 years in a school-based cross-sectional survey stood at 39.3% [7].

Sub-Saharan African countries, including Nigeria, are confronted with a high prevalence of alcohol use. Evidence from the 2016 Global burden of disease study estimated that Nigeria was one of the countries with the highest prevalence of current alcohol use among adults 15 years and older in sub-Saharan Africa (SSA), 40 to 59.9% at a population level, for both males and females[8]. Some scholars have ascribed the absence of a working policy on alcohol in Nigeria to the sabotaging efforts of the alcohol manufacturing companies on the formulation of effective alcohol control policies [9, 10].

Alcohol use is considered the main risky behavior among adolescents, young adults and students in general [10-14]. The use and abuse of alcohol by adolescents is on the increase in most African countries and is closely associated with risky behaviours, sexually transmitted diseases [15-19] and mental disorders in later adult life [20]. Family relationships are widely recognized as playing a role in adolescent alcohol use

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[21]. Scientists have established that social networks influence adolescents' substance use behaviour, an influence that varies by gender. However, the role of gender in this mechanism of influence remains poorly understood and the role an adolescent's gender, alongside the gender composition of his/her network, plays in facilitating or constraining alcohol use is still unclear [22].

The age of first intoxication is associated with negative alcohol outcomes and alcohol expectancies, or beliefs about the effects of alcohol, may explain such associations as both positive and negative expectancies have been shown to be key predictors of drinking outcomes [23].

Alcohol consumption especially by adolescents often appears to be under social influence even though little is known about whether some people are particularly likely to exhibit similar drinking patterns to their peers [24].

A good number of young people are either of secondary school or university level of education and this group of people are unique as they have the first opportunity to belong to a larger group of peers where independence is gradually introduced. With a good number of secondary school students being teenagers, juvenile delinquencies are often thus a norm. This makes them more vulnerable to trying previously prohibited and sometimes illicit experiences [25].

In Nigeria, alcohol and tobacco are readily available in the forms of alcoholic beverages and cigarette respectively even though their use is still illegal. However, these may act as "gateway" drugs, predisposing to illicit drug use [26].

Alcohol consumption by secondary school students has been linked with poor academic performance and truancy [26], personal health problems such as mental disorders, injuries and dangerous adventures [27].

Studies had been done on substance use by adolescents in the Niger Delta Region, Nigeria [20] and in Cross River State Nigeria [25] on the effects of drug abuse and addiction on academic performance of Students [26]. However, there is paucity of local studies on predictors of alcohol use among this group of adolescents. The results from this study will therefore help in developing public health enlightenment campaigns among adolescents and youths on the need to stay off alcohol use.

The aim of this study is to identify predictors such as socio-demographic factors, family structure, student's home, parent's marital status, type of school and class of student that may significantly be associated with alcohol use among secondary school students in Calabar South Local Government of Cross River State Nigeria.

MATERIALS AND METHODS

This study was carried out in secondary schools in Calabar South Local Government Area (LGA), in Cross River State, Nigeria. Cross River State is one of the six states that make up the South-South geo-political zone of Nigeria. There is a state owned university (Cross River State University of Technology, CRUTEC), thirty-three (33) secondary schools (twenty six (26) private secondary schools and seven (7) public secondary schools) in Calabar South LGA.

This was a cross-sectional analytical study to determine Predictors of Alcohol use among Secondary School Students in Calabar South Local Government Area, Cross River State, Nigeria.

The study population was secondary school students from Junior Secondary School (JSS 1-3) and Senior Secondary School (SSS 1-3) in five schools (3 private and 2 public secondary schools) in 2017. The total population of students in this study area was 3,622.

All students who were present in school during the period of the administration of the questionnaire were included from this study. All students who refused to give consent for the study where excluded. The minimum sample size was determined using the Cochran formula. The minimum sample size was 370.

A multistage sampling method (three stages) was used to select five of the 33 secondary schools in Calabar South LGA, stratified into 26 private and seven public secondary schools. Stage one: A simple random sampling was done to select three out of 26 private secondary schools and two out of 7 public secondary schools.

Stage two: In each of the selected schools, the students were group into arms: JSS1, JSS2, JSS3, SSS1, SSS2 and SSS3. The total population of students in the five schools was obtained and a proportionate sampling carried out thus:

The five schools had a total population of 2021 as shown in the table below. The percentage of the total population to be sampled was calculated as:

$$370/2021 \times 100 = 18.31\% \text{ (see table I).}$$

Stage 3: A simple random sampling method by balloting was used to sample students from the six classes until the required sample size was achieved.

The data were collected using semi structure self-administered questionnaires. The questionnaire was distributed among the classes using a proportionate allocation system among the study participants in the

selected classes. The questionnaire for this study was pre-tested in two secondary schools in another LGA not selected for this study. This was to enhance comprehensibility, validity, reliability and sensitivity of questions, and to estimate average duration of administration of the questionnaire. Minor corrections observed were incorporated into the questionnaires for final data collection. Data was collected on respondents' socio-demographic characteristics.

Means and simple frequency distributions were used to describe the demographic information of respondents in the study settings. Simple frequency distributions were also used to describe exposure and outcome variables like family type, student's home, parents' marital status, type of school and class of student. The data collected were organised, tabulated and analysed using the Statistical Package for the Social Sciences (SPSS) version 21. Level of statistical significance was set at 95% (p<0.05) for the analyses.

Tests of proportion (e.g. Chi square test) and bivariate were used for analysis. Statistical significance was defined as 95% confidence interval excluding the null value of 1.

A written permission was obtained from the principals of all the selected secondary schools for this study where the aims and objectives of the study were explained to them. Informed consent and cooperation was sought and obtained from the participants before he/she was included in this study. The objectives of the study were explained to them and they were assured of

confidentiality of their information. The participants were given the option to opt out of the study if they so wished and that their refusal to participate will not attract any punishment or denial of benefits to them.

RESULTS

Table II shows the socio-demographic characteristics of the respondents. The mean age of the respondents was 14.89 ± 2.19 years. There were more females 191 (51.6%) than males 179 (48.4%). The majority of the students interviewed were in the senior secondary class 291 (78.1%), while the greater majority of the respondents were students of public secondary schools 328 (88.6%) More than half of the respondents lived together with both parents 252 (68.1%), Most of the respondents' parents were married (83.6%) in a monogamous home (79.7%) and had less than 5 siblings (76.2%).

Table III shows the prevalence of alcohol use among secondary students in this study. Overall, 168 (45.4%) of respondents drink alcohol and the majority of the consumers are in the SSS2 class, 60 (16.2%) followed by SSS3 class 36 (9.7%).

Table IV shows the bivariate analysis of predictors of alcohol use among respondents in this study Overall, age of the respondents, 11-20 years ($p = 0.008$), respondents type of school, public school ($p = 0.025$) as well as class of the respondents, SSS2 ($p = 0.035$) were statistically significant and stands out as the predictors of alcohol use in this study.

Table-I: Number of students sampled in each school

SCHOOLS	TOTAL POPULATION	STUDENTS SAMPLED
Government Secondary School, Henshaw Town	920 x 0.1831	168
Government Secondary School, Idang.	875 x 0.1831	160
Blossom High School.	94 x 0.1831	17
Light Way Secondary School	70 x 0.1831	13
Paico Secondary School	62 x 0.1831	12
Total	2021	370

Table-II: Socio-demographic characteristics of study participants in the study area in 2017 (N=370)

Variable	Frequency	Percentage (%)
Age/years		
≤10	13	3.5
11-15	203	54.9
16-20	152	41.1
≥21	2	0.5
Mean age ± SD*	14.89 ± 2.19	
Sex		
Male	179	48.4
Female	191	51.6
Class of students		
Junior secondary School	79	21.3
Senior secondary school	291	78.7
Type of school		
Public	328	88.6
Private	42	11.4

Students home		
With both parents	252	68.1
With single parents	78	21.1
With Non-parents	40	10.8
Parents' marital status		
Married	309	83.6
Divorced	39	10.5
Single	22	5.9
Students' family type		
Monogamy	295	79.7
Polygamy	64	17.3
Polyandry	11	3.0
Number of students' siblings		
≤5	282	76.2
6-10	81	21.8
>10	7	2.0

Table-III: Prevalence of alcohol use among secondary students in this study in 2017

Student class	Alcohol use		Total
	Yes	**No**	
JSS 1	28 (7.6%)	22 (5.9%)	50 (13.5%)
JSS 2	4 (1.1%)	6 (1.6%)	10 (2.7%)
JSS 3	8 (2.2%)	11 (3.0%)	19 (5.2%)
SSS1	32 (8.6%)	62 (16.8%)	94 (25.4%)
SSS2	60 (16.2%)	76 (20.5%)	136 (36.7%)
SSS3	36 (9.7%)	25 (6.8%)	61 (16.5%)
Total	168 (45.4%)	202 (54.6%)	370 (100%)

Table-IV: Bivariate analysis of predictors of alcohol use among the study participants in 2017

Variable	Alcohol Use		Chi (x^2)	p-value
	Yes %	No % (n = 370)		
Sex				
Male	90(24.3)	89 (24.1)	3.323	0.76
Female	78(21.1)	113 (30.5)		
Age				
≤10	10 (2.7)	3 (0.8)	11.864	0.008[*]
11-15	78(21.1)	125 (33.8)		
16 -20	79 (21.4)	73 (19.7)		
≥21	1 (0.3)	1 (0.3)		
Family type				
Monogamy	131 (35.4)	164 (44.3)	0.664	0.178
Polygamy	32 (8.6)	32 (8.6)		
Polyandry	5 (1.4)	6 (1.6)		
Student leaving with				
Both parents	111 (30.0)	141 (38.1)	4.754	0.313
Mother alone	18 (4.9)	17 (4.6)		
Father alone	24 (6.5)	19 (5.1)		
Guardian/friend	25 (6.8)	25 (6.8)		
Parent's marital status				
Married	133 (35.9)	176 (47.6)	4.978	0.083
Divorced	24 (6.5)	15 (4.1)		
Single	11 (3.0)	11 (3.0)		
Type of School				
Public	157 (42.4)	171 (46.2)	11.139	0.025[*]
Private	17 (4.6)	25 (6.8)		
Class of student				
JSS1	28 (7.6)	22 (5.9)	12.011	0.035[*]
JSS2	4 (1.1)	6 (1.6)		
JSS3	8 (2.2)	11 (3.0)		
SSS1	32 (8.6)	62 (16.8)		
SSS2	60 (16.2)	76 (20.5)		
SSS3	36 (9.7)	25 (6.8)		

*Statistically significant

DISCUSSION

The World Health Organization's Regional Report in 2010 on alcohol showed that the proportion of adolescents 15 to 19 years currently drinking alcohol was 34.1% globally; 69.5%, 52.7%, 37.3% and 29.3% in Europe, America, Western Pacific Region and Africa respectively [28]. With 41% of the study participants being in the 16-20 year age group, which is close to the 15-19 age group in the WHO report, the prevalence of alcohol use of 45% in this study exceeds the 29% reported by WHO for the African region. In Nigeria, 18 years and above is the legal drinking age [29]. The prevalence of alcohol use by adolescents in this study was higher than similar studies in Lagos State (9.2%) [30], Enugu State (31.6%) [31], but lower than that reported in Rivers State (65%) [32]. The prevalence of alcohol use in this study is lower than that reported in similar studies outside Nigeria [33-37]. These differences may be due to lack of implementations of laws regulating drinking age in Nigeria as results from previous studies reported [30, 31].

This study showed statistically significant association between age and consumption of alcohol, with the older age groups more involved in drinking alcohol than the younger age group. This finding contrasts the observations reported by similar studies [38, 39]. This contrast could be due adventurous behaviours and other lifestyles seen more in older age groups, which are associated with younger age groups in this study area.

Although our study did not show any significant difference between rates of drinking among males and females, other studies [34, 38] reported higher rates of drinking among males compared to females. This shows the current change in lifestyle seen in modern behaviour among adolescents. In the past years, drinking of alcohol was regarded as a masculine behaviour, and alcohol consumption in an all-male group affirms the privilege of being a man [40].

In this study, the school type showed a very strong association with alcohol consumption with the majority of students who consume alcohol seen in public secondary schools than in private secondary schools. This could be due to the poor supervision of students by few, poorly motivated teachers in over populated public secondary schools, compared to the more expensive well-staffed and motivated teachers in high proliferating private secondary schools with well-coordinated population of students in the study area. This comparison was not made in other similar studies.

This study also showed that, student's family type, parent's marital status and students living with their parents, did not show any significant relationship with alcohol consumption. However, the study showed that the majority of the students come from monogamous homes, live with both parents who are married, which is still a common attribute among Nigerians.

A high proportion of students who drank alcohol in this study were among those who were in the senior secondary class (SSS1 to SSS3). This could be due to that fact that these are the senior students in the school and this drinking habit is more pronounced from SSS1 and is carrying throughout SSS2 and their final year in secondary school in SSS3. Peer pressure and inquisitiveness to experiment on the adult's alcohol drinking habits as well as students' quest to be "high, alert and bold", as well as to remain "awake for longer periods when reading" are some of the driving forces for these students to consume alcohol as reported in similar studies [41-44].

CONCLUSION

Our findings in this study shows that age, type of school and class of students are the predictors of alcohol consumption among secondary school students in the study area. This also indicates that there is high level of alcohol drinking among the sampled secondary school students. There is a serious call for aggressive awareness campaigns against the hazards of alcohol consumption by students with more focus on peer/social groups in schools as well as in social and religious gatherings.

REFERENCES

1. Balázs, M. Á., Piko, B. F., & Fitzpatrick, K. M. (2017). Youth problem drinking: the role of parental and familial relationships. *Substance use & misuse*, *52*(12), 1538-1545.
2. World Health Organization. (2004). Global status report on alcohol [document online]. c2004. Available from: http://www.who.int/substance abuse/publications/global_status_report_2004_over view.pdf (Accessed last on 30th July, 2017).
3. Reddy, S.P., James, S., Sewpaul, R. (2010). Umthente Uhlaba Usamila – The South African Youth Risk Behaviour Survey 2008. Cape Town: South African Medical Research Council. (Accessed last on 30th July, 2017).
4. Majelantle, R.G., Bainame, K., Masupu, K., Nkawaka, P. (2011). Youth Risk Behaviour Surveillance Survey Report 2010. Botswana Ministry of Education and Skills Development.
5. Rudatsikira, E., Muula, A.S., Siziya, S., Twa-Twa, J. (2007). Suicidal ideation and associated factors among school-going adolescents in rural Uganda. BMC Psychiat, 7
6. Adu-Mireku, S. (2003). The prevalence of alcohol, cigarette, and marijuana use among Ghanaian senior secondary students in an urban setting. *Journal of Ethnicity in Substance Abuse, 1*:2(1): 53–65.
7. Doku, D., Koivusilta, L., Rimpelä, A. (2012). Socioeconomic differences in alcohol and drug use

among Ghanaian adolescents. *Addictive Behaviours*, *1*:37(3): 357–60

8. GBD. (2016). Alcohol Collaborators. Alcohol use and burden for 195 countries and territories, 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet. 2018;392:1015–35

9. Dumbili, E.W. (2014). The Politics of Alcohol Policy in Nigeria: A Critical Analysis of How and Why Brewers Use Strategic Ambiguity to Supplant Policy Initiatives. *49*(4):473–487.

10. Dumbili, E.W., Williams, C. (2016). Anywhere, everywhere: alcohol industry promotion strategies in Nigeria and their influence on young people. *Afr J Drug Alcohol Stud*, *15*(2):135–52.

11. Lasebikan, V.O., Ayinde, O., Odunleye, M., Adeyefa, B., Adepoju, S., Fakunle, S. (2018). Prevalence of alcohol consumption and alcohol use disorders among outdoor drinkers in public open places in Nigeria. BMC Public Health 18, 400. https://doi.org/10.1186/s12889-018-5344-6. (Accessed last on 30th April, 2018).

12. Adeoye, B.K., Adeoye, A., Ngozi, E.O., Ani, I.F. (2014). Alcohol use among undergraduate students in a selected Private University in Nigeria: prevalence and associated factors. *Int J Health Sci*, *2*(3):71–80.

13. Davoren, M.P., Demant, J., Shiely, F., Ivan, J. Perry, I.J. (2016). Alcohol consumption among university students in Ireland and the United Kingdom from 2002 to 2014: a systematic review. BMC Public Health, 16:1–13. (Accessed last on 30th July, 2017).

14. Dumbili, E.W. (2013). Patterns and determinants of alcohol use among Nigerian university students: an overview of recent developments. *Afr J Drug Alcohol Stud*, *12*(1):29–52.

15. Arata, C.M., Stafford, J., Tims, M.S. (2003).High school drinking and its consequences. *J Youth Adolesc,* 38:567-580.

16. Miller, J.W., Naimi, T.S., Brewer, R.D., Jones, S.E. (2007). Binge drinking and associated health risk behaviors among high school students. *Pediatrics*, *119*(1):76-85. doi: 10.1542/peds.2006-1517. PMID: 17200273. (Accessed last on 30th July, 2017).

17. Simbayi, L. C., Mwaba, K., & Kalichman, S. C. (2006). Perceptions of the combination of HIV/AIDS and alcohol as a risk factor among STI clinic attenders in South Africa: Implications for HIV prevention. *Social Behavior and Personality: an international journal*, *34*(5), 535-544.

18. Abdool Karim, Q., Meyer-Weitz, A., & Harrison, A. (2009). Interventions with youth in high-prevalence areas. In K. Mayer & H. F. Pizer, (Eds.), HIV preventions: A Comprehensive Approach. London: Academic Press.

19. Agrawal, A., Grant, J. D., Waldron, M., Duncan, A. E., Scherrer, J. F., Lynskey, M. T., ... & Heath, A. C. (2006). Risk for initiation of substance use as a function of age of onset of cigarette, alcohol and cannabis use: findings in a Midwestern female twin cohort. *Preventive medicine*, *43*(2), 125-128.

20. Abasiubong, F., Idung, A. U., Udoh, S. B., & Ekanem, U. S. (2012). Parental influence on substance use among young people in the Niger Delta region, Nigeria. *African Journal of Drug and Alcohol Studies*, *11*(1).

21. Pizarro, K. W., Bustamante, I. V., & Surkan, P. J. (2017). Family factors and adolescent problem drinking in a high-risk urban Peruvian neighborhood. *Substance Use & Misuse*, *52*(2), 194-202.

22. Jacobs, W., Goodson, P., Barry, A. E., McLeroy, K. R., McKyer, E. L. J., & Valente, T. W. (2017). Adolescent social networks and alcohol use: variability by gender and type. *Substance use & misuse*, *52*(4), 477-487.

23. Stamates, A. L., Lau-Barraco, C., & Linden-Carmichael, A. N. (2016). Alcohol expectancies mediate the relationship between age of first intoxication and drinking outcomes in college binge drinkers. *Substance use & misuse*, *51*(5), 598-607.

24. Robinson, E., Jones, A., Christiansen, P., & Field, M. (2015). Drinking like everyone else: Trait self-control moderates the association between peer and personal heavy episodic drinking. *Substance Use & Misuse*, *50*(5), 590-597.

25. Ekpang, P. U., & Abuo, C. B. (2015). Relationship between Drug Abuse and Psychosocial Behaviours among Adolescents' in Senior Secondary Schools in Cross River State, Nigeria-Counseling Interventions. *European Journal of Business and Management*, *7*(36), 151-159.

26. Philip, A. A., Edna, B., & Samson, A. J. (2016). The effects of drug abuse and addiction on academic performance of students in federal polytechnic idah, Kogi State Nigeria. *Int. J. Democratic Dev. Stud*, *2*, 13-22.

27. Madu, S. N., & Matla, M. Q. P. (2003). Illicit drug use, cigarette smoking and alcohol drinking behaviour among a sample of high school adolescents in the Pietersburg area of the Northern Province, South Africa. *Journal of Adolescence*, *26*(1), 121-136.

28. World Health Organization. (2014). Management of Substance Abuse Unit. Global status report on alcohol and health, 2014. *World Health Organization*.

29. Drinkingmap.com. Drinking age in Nigeria. Available at http://www.drinkingmap.com/drinkingage-in-nigeria.html (Accessed last on 10th October, 2018).

30. Oshodi, O. Y., Aina, O. F., & Onajole, A. T. (2010). Substance use among secondary school students in an urban setting in Nigeria: prevalence and associated factors. *African journal of psychiatry*, *13*(1).

31. Igwe, W. C., & Ojinnaka, N. C. (2010). Mental health of adolescents who abuse psychoactive

substances in Enugu, Nigeria-A cross-sectional study. *Italian journal of pediatrics*, *36*(1), 53.

32. Eneh, A. U., & Stanley, P. C. (2004). Pattern of substance use among secondary school students in Rivers State. *Nigerian Journal of Medicine: Journal of the National Association of Resident Doctors of Nigeria*, *13*(1), 36-39.

33. Malta, D. C., Mascarenhas, M. D. M., Porto, D. L., Duarte, E. A., Sardinha, L. M., Barreto, S. M., & Morais Neto, O. L. D. (2011). Prevalence of alcohol and drug consumption among adolescents: data analysis of the National Survey of School Health. *Revista Brasileira de Epidemiologia*, *14*, 136-146.

34. Global School-Based Student Health Survey (GSHS). (2008). Ghana senior high school country report. Available at http://www.who.int/chp/gshs/2008_Ghana_Countr y_Report.pdf (Accessed last on 10th October, 2018).

35. Baheiraei, A., Hamzehgardeshi, Z., Mohammadi, M. R., Nedjat, S., & Mohammadi, E. (2013). Alcohol and drug use prevalence and factors associated with the experience of alcohol use in Iranian adolescents. *Iranian Red Crescent Medical Journal*, *15*(3), 212.

36. Reda, A. A., Moges, A., Wondmagegn, B. Y., & Biadgilign, S. (2012). Alcohol drinking patterns among high school students in Ethiopia: a cross-sectional study. *BMC public health*, *12*(1), 213.

37. Mohanan, P., Swain, S., Sanah, N., Sharma, V., & Ghosh, D. (2014). A study on the prevalence of alcohol consumption, tobacco use and sexual behaviour among adolescents in urban areas of the Udupi District, Karnataka, India. *Sultan Qaboos University Medical Journal*, *14*(1), e104.

38. Waweru, M., Kamau, A., Matogo, J. (2011). Speaking out! A situational analysis of alcohol consumption among high school students. A baseline survey report. Nairobi. SCAD. Available at http://www.scad.or.ke/documents/SCAD - speakingout.pdf (Accessed last on 5th November,, 2018).

39. Windle, M. (2018). Alcohol use among adolescents and young adults. National Institute on Alcohol Abuse and Alcoholism. Available at http://www.pubs.niaaa.nih.gov/publications/arh27-1/79-86.htm (Accessed last on 5th November, 2018).

40. World Health Organization. (2005). Alcohol, gender and drinking problems. Perspectives from low and middle income countries. Geneva, WHO 2005.

41. Merline, A., Jager, J., Schulenberg, J.E. (2008). Adolescent risk factors for adult alcohol use and abuse: stability and change of predictive value across early and middle adulthood. *Addiction*, 103(Suppl 1):84-99.

42. Mundt, M.P. (2011). The impact of peer social networks on adolescent alcohol use initiation. *Academic Pediatrics*, *11*(5):414-421. (Accessed last on 5th November, 2018).

43. Newcomb, M.D. (1997). Psychosocial predictors and consequences of drug use: a developmental perspective within a prospective study. *J Addict Dis*, *16*(1):51-89. (Accessed last on 5th November, 2018).

44. Almeida-Filho, N., Lessa, I., Magalhes, L., Araújo, M.J., Aquino, E., Kawachi, I. (2004). Drinking patterns by gender, ethnicity, and social class in Bahia, Brazil. *Rev Saude Publica, 38*(1):45-54. (Accessed last on 5th November, 2018).

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