

# Alcoholic Beverage Use Among Somali Youth Living in Eastleigh, an Urban Suburb in Nairobi, Kenya

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**Abstract:** Background: Harmful use of alcohol causes a large disease, social and economic burden to societies. Alcohol use is the third largest disease risk factor for deaths among youths between 15-29 years that contribute to 4% of the global burden of disease. Eastleigh also is known as “Little Mogadishu” is a suburb in Nairobi that is mostly inhabited by both Somali Community from Kenya and majorly from migrations from Somalia. It hosts about 30,000 Somali refugees and characterized by extremes of wealth and poverty. Objective: The aim of this study is to identify the prevalence of alcohol use and the patterns of use among Somali Youth living in Eastleigh suburb in Nairobi. Method: This is an exploratory cross-sectional study among youth aged between 18-25 years of age that used a face-to-face interview. Results: Findings indicated a high prevalence among those who are male, of younger age, with married parents, born in Eastleigh, with lower educational level, the singles, the unemployed and those with high family income. Alcohol use is comorbid with other licit psychoactive substances that include tobacco products, miraa and shisha. Conclusion: These participants have relatively high alcohol use that is comorbid with other licit psychoactive substances. Recommendations include further studies to be done in this community using standardized instruments to cover a larger area and interventions to target younger youth of below 15 years of age and policy on treatment of young people with mental disorders to include substance abuse as well.

**Keywords:** Psychoactive Substance, Alcoholic Beverages, Licit Substances, Somali Community

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## 1. Introduction and Background

### 1.1. Introduction

Alcoholic beverages are psychoactive substances that may lead to dependence properties and has been used widely among many cultures, globally from times immemorial. Harmful use of alcohol causes a large disease, social and economic burden to societies. [1] Alcohol use is one of the worlds leading risk factor for morbidity, disability and mortality. Alcohol use is the third largest disease risk factor for deaths among youths between 15-29 years that contribute to 4% of the global burden of disease, [2]. The World Health Organization, [3] has estimated 9% death attributable to alcohol use. Death due to alcohol has been reported to be related to dependence, liver cirrhosis, and pneumonia, [4],

cancers, injuries, infectious diseases that include but not limited to tuberculosis, and HIV/AIDS, [1].

Alcohol consumption cause not only health risks but social and economic costs that include alcohol costs, hospital and health system costs, criminal justice system costs, loss of productivity due to absenteeism and unemployment, loss of working hours due to premature death, [2]. In addition, alcohol use may also lead to intangible costs to both the individual user and family that include suffering, pain, and poor quality of life.

At adolescent age, the human brain is at the neuro-development change that is influenced by the environment, sex hormones and genetics, [5]. Studies have also indicated that the adolescent brain, specifically the hippocampus is vulnerable to the effects of alcohol, [6].

### **1.2. Somali Community Living in Eastleigh**

Eastleigh also known, as “Little Mogadishu” is a suburb in Nairobi that is mostly inhabited by both Somali Community from Kenya and majorly from migrations from Somalia. It hosts about 30,000 Somali refugees and characterized by extremes of wealth and poverty, [7]. Due to migration, Somali children and youth in this suburb have faced lots of trauma, chronic violence gang activities, [8] due to movement, separation, loss, broken relations with family and friends. This has led to traumatic memories of violence, death and separation.

The large Somali Community in Eastleigh attracts new refugees arrivals from Somalia and other refugee camps in Kenya. They come to Eastleigh in the hope of getting a better education and job opportunities, [9-10]. Others come from the diaspora, specifically the developed world to get married and to be inducted into the Somali culture or as a stopover on their way to Somalia or Northern Kenya.

Eastleigh is made up of large shopping malls with cheap imported commodities that include clothing, and electronics among others produced from China and Dubai sold through informal networks to most parts of East Africa. This area attracts capital from Somalis from the diaspora. In addition, this area has majority Muslim religion embedded in the Somali Culture, where hope is connected to good behaviour and being a good person. However, much Somali community face daily crackdowns, interrogations and discriminatory profiling due to al-Shabaab recruitments believed to be done in Eastleigh, [11].

## **2. Methodology and Study Design**

### **2.1. Methods**

This study explored the alcohol beverage use among Somali Youth living in an urban suburb in Nairobi. This was done through a face-to-face interview administered questionnaire survey among the youth of ages between 18 and 25 years of age in section 1 of Eastleigh. This study is based on self-reported alcoholic beverage use that included data on demographic characteristics.

#### **2.1.1. Settings and Population**

Section 1 was purposely sampled from the four sections because it was learned that in this area there was more use of various psychoactive substances. It was established that Eastleigh suburb is majorly inhabited by immigrants of Somali Community except for a few others from Ethiopia, Eritrea, and a few locals from Kenya. Somali Community immigrants in Eastleigh come from Southern Somalia and the diaspora. Those from the diaspora come for both stop over to Somalia, and Northern Kenya, or to find spouses on arranged

marriages. Others come to invest in a business in the area. Most young Somali people from the West, also come to spend time with their relatives for culture rehabilitation that includes learning the Koran.

All consenting youth from sampled households in section 1, with were interviewed, using a researcher-developed questionnaire. The sample size was determined using a standardized formula developed by Kish Leslie, 1965 [12] because it mainly considers the confidence interval, margins of error (e) and a sample proportion of desired characteristics. 245 participants were sampled and interviewed, but only 213 completed the interview fully.

#### **2.1.2. Ethical Considerations**

The Kenya Methodist University Ethics Committee, which sets forth research ethics concerning individuals' personal data at the University, approved the protocol. In addition, the National Commission for Science, Technology & Innovation (NACOSTI), a state corporation that approves research and gives license to collect data, approved and gave the license. The ethics committee approval and NACOSTI license were presented to the provincial administration (area chiefs) to request for consent to collect data. They were explained the purpose, plan and implication of the study and requested to assist in planning data collection in the sampled households. The youth were also told the purpose, plan and implication of the study and that participation was voluntary without any pay, no intrusive procedures and they could withdraw at any time without any penalty. They were also told that data collected would be treated confidentially and reports would only be reported in groups but not individually.

#### **2.1.3. Study Procedures and Instrumentation**

The participants were interviewed using the researcher-developed questionnaire that had three parts, A, B, & C. Part A asked for demographic characteristics that included age, gender, family, educational level, marital status, religion, occupation, living conditions and family income. Section B asked the participants frequency of alcoholic beverage use, desire to use, in the last months 12 months and the use of other licit psychoactive substance. Section C asked them patterns of alcoholic beverages in the last 12 months.

### **2.2. Data Management and Analysis**

Collected data were analyzed using SPSS version 23.

## **3. Results**

### **3.1. Introduction**

Alcoholic beverage use among this participants were reported to be 32.1%

### 3.2. Alcoholic Use per Socio-Demographic Characteristics

**Table 1.** Indicating Alcoholic Beverage use per Socio-Demographic Characteristics.

		a.) Alcoholic beverages (beer, wine, spirits, etc.)			
		Yes		No	
		n	N %	n	N %
Gender	Male	52	41.9%	72	58.1%
	Female	23	26.1%	65	73.9%
	Other	0	0.0%	1	100.0%
Age in years	18-19	20	38.5%	32	61.5%
	20-21	13	34.2%	25	65.8%
	22-23	16	31.4%	35	68.6%
	24-25	26	36.1%	46	63.9%
Parents marital Status	No	31	44.3%	39	55.7%
	Yes	44	30.8%	99	69.2%
Born in Eastleigh	No	31	33.7%	61	66.3%
	Yes	44	36.4%	77	63.6%
Highest level of education attained	Primary and Below	29	55.8%	23	44.2%
	Secondary Education	16	20.0%	64	80.0%
	Middle College Education	7	46.7%	8	53.3%
	Certificate	9	34.6%	17	65.4%
	Diploma	10	30.3%	23	69.7%
	Undergraduate Education	4	57.1%	3	42.9%
	Post Graduate	0	0.0%	0	0.0%
Marital status	Married	15	27.3%	40	72.7%
	Single	55	39.3%	85	60.7%
	Divorced	4	30.8%	9	69.2%
	Separated	0	0.0%	4	100.0%
	Widowed	0	0.0%	0	0.0%
	Other	1	100.0%	0	0.0%

Based on socio-demographic characteristics alcohol was used as follows: males a higher use of 41.9%, compared to females who were at 26.1%. In the age in years, highest being those between 18-19 at 38.5%, followed by those of between 24-25 years at 36.1% and lastly those of between 20-21 and between 22-23 at 34.2% and 31.4% respectively. Participants who had unmarried parents reported a higher alcohol use of 44.3% compared to those who had married parents who reported use to be 30.8%. In addition, those born in Eastleigh reported a higher alcohol use of 36.4% compared to those born outside Eastleigh, who reported a use of 33.7%. Based on educational level, higher alcohol use was among those of primary and below level that indicated 55.8%, the undergraduate, 57.1%, middle college education at 46.7% and a lower use among those with certificate education, 34.6%, diploma level at 30.3%, and secondary education

20.0%. The single had higher alcohol use of 39.3% compared to the married and divorced who reported a 27.3% and 30.8% respectively.

### 3.3. Prevalence of Alcoholic Products Use Based on Socio-Economic Characteristics

The unemployed and employed had the highest alcohol use at 41.8% and 35.0% compared with the students, business individuals and self-employed which reported use to be 29.4%, 27.3% and 25.0%. Participants from very high family income, not sure income and very low income reported higher alcohol use of 100%, 100% and 81.8% compared to low, moderate and high income which indicated the use of 53.6%, 27.8% and 12.5%.

**Table 2.** Alcoholic beverages per Socio-Economic Characteristics.

Socio-Economic Characteristics		Yes		No	
		n	N %	n	N %
Occupation	Self employed	5	25.0%	15	75.0%
	Business	3	27.3%	8	72.7%
	Employed	14	35.0%	26	65.0%
	Unemployed	38	41.8%	53	58.2%
	Student	15	29.4%	36	70.6%
Family income	Very High	2	100.0%	0	0.0%
	High	2	12.5%	14	87.5%
	Moderate	42	27.8%	109	72.2%
	Low	15	53.6%	13	46.4%
	Very Low	9	81.8%	2	18.2%
	Not Sure	5	100.0%	0	0.0%

### 3.4. Comorbidity of Alcoholic Beverages with Licit Psychoactive Substance Use

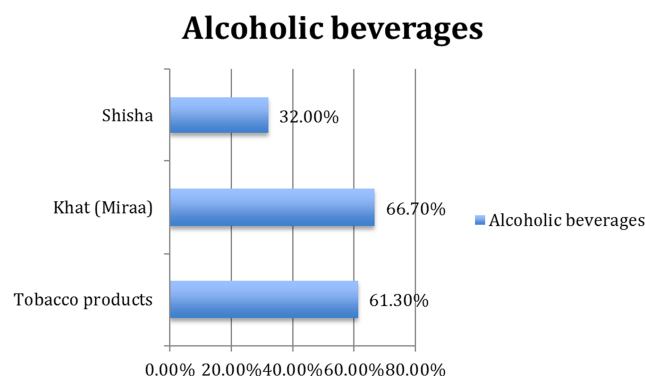


Figure 1. Alcoholic Beverage use with other licit psychoactive substance use.

Among the respondents who take alcoholic beverages, 61.3% of them also use tobacco products, 66.7% of them use khat and 32% also use Shisha.

## 4. Discussion

### 4.1. Prevalence of Alcoholic Beverage Use

This study reported a 32.1% alcoholic beverage use among these participants. This is lower than what was found among other studies in Africa. A meta-analysis of alcohol use among young people in East Africa, which recorded a prevalence of 52.0%, [13] while that among undergraduates in Nigeria reported a high of 60.8%, [14], and that among college and non-college youth in the United States recorded a high of 73.1% use, [15]. This was expected to being a Muslim culture and being Somali, who have been found to normally use less alcoholic beverages than the non-Muslim Somali, [16].

The males reported a higher alcohol beverages use of 41.9% compared to a lower female use of 26.1%. This is similar to other studies globally. NACADA, 2012 [17] in a rapid assessment report for ages 15-65 years, reported a higher percentage of alcohol ever use among males (41.9%) compared to females, ((17.4%) in Kenya. The same report also reports that those between ages 10-14 years males had a higher (3.7%) use of any alcoholic beverages compared to females, (2.3). Jiang et al, [18] reported a higher prevalence use of alcohol among young male, aged between 15-24 years of age compared to females in Asian Countries. Macinko et al, [19] reported a higher alcohol use among males aged 25-35 years compared to females in a health survey study in Brazil. In addition, Evans et al [20] confirmed that males have a higher alcohol use among youth in the USA. However, in another study, Vreneider & Vaz, [21], found alcohol consumption to be higher among females, (40.6%), compared to males (38%), although heavy alcohol users were males.

#### 4.1.2. Age in Years

Alcohol use based on age was found to decrease with age

among these participants from 18-23 years but with an increase to 36.1% at a higher age bracket of 24-25 years. This is partly similar to other studies globally. Younger age has been associated with binge alcohol use among immigrants in Finland from Russian, Kurdish and Somali origin, [16]. In addition age and language proficiency is largely associated with alcohol and other psychoactive substance use among young adult immigrants. [16].

#### 4.1.3. Parents Marital Status

Those whose parents were not married reported a high (44.3%) alcohol use compared to those with married parents who reported a lower (38.8%) alcohol use. Studies have reported that marital status of parents may or may not be an actor in youth and child alcohol intake; however, this depends on neglect, child abuse and use of substances by the parents, [22]. Lerner & Ohannessian [23] In their book, risks and problem behaviours in adolescence reported that adolescents from single-parent homes were more likely to intake psychoactive substances. However, studies have also indicated that it is not just living with parents, but the idea of parental monitoring on the adolescent that may help reduce alcohol use, [24]. Those adolescents living with the extended family were found to more likely to use in lesser alcohol, among the Latino and Somali communities living in the developed world, [25].

#### 4.1.4. Educational Level

Alcohol use decreased from 55.8% for primary and lower to 0% among postgraduates, although undergraduates have a high alcohol use of 57.1%. The high among undergraduates may be related to campus life based on findings reported by Dawson et al [26] among college students. However, Maciko et al, [19] found out that those with higher education were more likely to use more alcohol than the less educated in Brazil. In addition, according to Taftdahl et al [27] patients with substance use disorders are more likely to have less education.

#### 4.1.5. Marital Status of Participants

As expected, the single participants reported a higher (39.3%) alcohol use compared to a lesser (27.3%) s use by the married. This is similar to findings of Jenkins et al [28] who found out that alcohol use was higher among single participants compared to the married in a household survey in Western Kenya.

#### 4.1.6 Born in Eastleigh or Out of Eastleigh

Participants born in Eastleigh reported a higher alcohol use of 36.4% compared to those who migrated to Eastleigh, (33.7%). These researchers have attributed this to the neighbourhoods of the suburb, which allows for easy access and availability of alcohol, and the likelihood of traumatic events this youth have gone through due to frequent crackdowns, interrogations and discriminatory profiling, [11]. Those who migrated may have had less access to alcohol and may not have already faced what those who were

born in Eastleigh are already facing.

#### **4.2. Prevalence of Alcoholic Products Use Based on Socio-Economic Characteristics**

##### **4.2.1. Occupation**

This study found a higher alcohol use among the unemployed and employed at 41.8% and 35.0% respectively. Other studies have reported mixed findings. In a study of alcohol use in Kenya, Jenkins et al [28] they found that the self-employed had more alcohol intake than other occupations. However, other studies have not found any connection between employment or job availability with alcohol use, [29]

##### **4.2.2. Family Income**

Participants who reported a very high family income and not knowing family income and those with low family income reported a higher alcohol use of 100%, 100% and 53.6% respectively. Other studies have reported mixed results. Unemployment of parents has been reported to increase the likelihood for adolescent alcohol use, [30], while increased income among young people has been found to likely increase the use of alcohol, [19].

#### **4.3. Comorbidity of Alcoholic Beverage Use with Illicit Psychoactive Substance Use**

Participants who use alcohol were found to also use other licit psychoactive substances that include miraa (khat) at 66.7%, tobacco products at 61.3% and shisha at 32.00%. This finding is similar to other studies globally. Alcohol has been reported to be concurrently used with other psychoactive substances, [31]. In a study among East African youth, Frances et al [32] reported that youths who used alcohol significantly used tobacco products as well. This has been confirmed by other studies, [33-35].

## **5. Conclusion**

These participants have relatively high alcohol use that is comorbid with other licit psychoactive substances. The licit substances include tobacco smoking, shisha, and khat. The males, the younger youth, the singles and those with lower educational level need interventions to reduce the use of alcohol and other psychoactive drug use. Psychoeducational programs should target the parents of the youth too to help them in understanding the consequences of alcohol use at a young age.

## **6. Recommendations**

This study recommends a larger study that will use standardized instruments to capture all other used psychoactive substances likely used in Kenya and elsewhere among youth as young as 15 years of age and above 25 years to about 35 years of age. This is due to the increase in emerging substances that are not captured in this study. It also recommends interventions especially the use of psychoeducation among the parents and the youth even as young as 15 years and below to curb the use of

alcohol. The policies for treatment of mental health disorders among refugees should incorporate substance use disorders, [36] because mental health disorders are more likely to lead to alcohol use among adolescence. [37].

## **References**

- [1] World Health Organization, (2014). Global Status Report on Alcohol and Health, 2014. WHO, Geneva.
- [2] Rehm, J., Mathers, C., Poopova, S., Thavomcharoensap, M., Teerawattananon, Y. & Patra, J. (2009). Global burden of disease and injury and economic cost attributable to alcohol use and alcohol-use disorders. *Lancet*; 373(9682): 2223-2233. [https://doi.org/10.1016/S0140-6736\(09\)60746-7](https://doi.org/10.1016/S0140-6736(09)60746-7).
- [3] World Health Organization. (2011). Global Status report on Alcohol and Health, Geneva, WHO.
- [4] Zarridze, D., Brennan, P., Boreham, J., Boroda, A., Karpov, R., Lazarev, A. et al. (2009). Alcohol and cause-specific mortality in Russia: a retrospective case-control study of 48 557 adult deaths. *The Lancet*; 373(9682): 2201-2214. [https://doi.org/10.1016/S0140-6736\(09\)61034-5](https://doi.org/10.1016/S0140-6736(09)61034-5).
- [5] Arain, M., Haque, M., Johal, L., Mathur, P., Nel, P., Rais, A. (2013). Maturation of the adolescent brain. *Neuropsychiatric Disease and Treatment*; 9: 449-461. doi: 10.2147/NDT.S39776.
- [6] Welch, (2013). *Perceptual Modification Adapting to Altered Sensory Environments*. Academic Press Inc. A subsidiary of Harcourt Bruce Jovanovich Publishers.
- [7] Betts, A and P Collier. (2016), *Refuge: transforming a broken refugee system*, Penguin Books.
- [8] Im, H., Ferguson, A. B., & Warsame, A. H. (2017). Mental health risks and stressors faced by urban refugees: Perceived impacts of war and community adversities among Somali refugees in Nairobi. *International Journal of Social Psychiatry*; 63(8): 683-693. <https://doi.org/10.1177/0020764017728966>.
- [9] Cambell, E. H. (2006). Urban Refugees in Nairobi: Problems of Protection, Mechanisms of Survival, and Possibilities for Integration. *Journal of Refugee Studies*; 19(3): 396-413. <https://doi.org/10.1093/jrs/fel011>.
- [10] Pavanello, S., Elhawary, S., & Pantuliano, S. (2010). Hidden and exposed: Urban refugees in Nairobi, Kenya. HPG working paper. London: Overseas Development Institute.
- [11] Finns, M., Momani, B., Opatowskim M., Opondo M. (2016). Youth Evaluations of CUE/PUE Programing in Kenya Context, *Journal for Deradicalization*, 17.
- [12] Kish, L. (1965). *Survey Sampling* Wiley, New York.
- [13] Francis, J. M., Grosskurth, H., Chagalucha, J., Kapiga, S. H., & Weiss, H. (2014). Systematic review and meta-analysis: prevalence of alcohol use among young people in eastern Africa. *Tropical Medicine and International Health*; 19(4): 476-488. <https://doi.org/10.1111/tmi.12267>.
- [14] Chekwujekwu, C. D. (2017). Psychoactive Substance Use Among Nigerian Students; Patterns and Sociodemographic Correlates. *American Journal of Psychiatry and Neuroscience*, 2017; 5(2): 22-25. doi: 10.11648/j.ajpn.20170502.13.

- [15] Dawson, D. A., Grant, B. F., Stinson, F. S., & Chou, P. (2015). Another look at heavy episodic drinking and alcohol use disorders among college and non-college youth. *Journal of Studies in Alcohol*; 65(4): 477-488. <https://doi.org/10.15288/jsa.2004.65.477>.
- [16] Salama, E., Niemela, S., Suvisaari, J., Laatkainen, T., Koponen, P. & Castaneda, A. E. (2018). The prevalence of substance use among Russian, Somali and Kurdish migrants in Finland: a population-based study. *BMC Public Health*; 18: 651. <https://doi.org/10.1186/s12889-018-5564-9>.
- [17] National Authority for the Campaign against Alcohol and Drug Use (NACADA). (2012). Rapid Situational Assessment of the Status of Drug and Substance Abuse in Kenya, 2012, The Government of Kenya NACADA.
- [18] Jiang, H., Xiang, X., Hao, W., Room, R., Zhang, X., & Wang, X. (2018). Measuring and preventing alcohol use and related harm among young people in Asian countries: a thematic review. *Global Health Research and Policy*; 3: 14. <https://doi.org/10.1186/s41256-018-0070-2>.
- [19] Macinko, J., Mullachery, P., Silver, D., Jimenez, G., & Neto, O. L. M. (2015). Patterns of Alcohol Consumption and Related Behaviors in Brazil: Evidence from the 2013 National Health Survey (PNS 2013). *PLOS ONE*. <https://doi.org/10.1371/journal.pone.0134153>.
- [20] Evans, E. A., Upchurch, D. M., Simpson, T., Hamilton, A. B., Hoggatt, K. J. (2018). Differences by Veteran/civilian status and gender in associations between childhood adversity and alcohol and drug use disorders. *Social Psychiatry and Psychiatric Epidemiology*; 53(4): 421-435.
- [21] Verenkar, Y. J. & Vaz, F. S. (2018). Prevalence and pattern of alcohol consumption using alcohol use disorder identification test among students at a medical college in Goa, India. *International Journal of Community Medicine and Public Health*; 5(6): DOI: <http://dx.doi.org/10.18203/2394-6040.ijcmph20182626>.
- [22] Kelleher, K., Chaffin, M., Hollenberg, J. & Fischer, E. (2011). Alcohol and drug disorders among physically abusive and neglectful parents in a community-based sample. *American Journal of Public Health*. DOI: 10.2105/AJPH.84.10.1586.
- [23] Lerner, R. M., & Ohannessian, C. M. (1999). *Risks and Problem Behaviours in Adolescence*, (6th Edition). Tufts University, Routledge, New York and London.
- [24] Comulada, W. S., Swendeman, D., & Wu, N. (2016). Cell phone-based ecological momentary assessment of substance use context for Latino youth in outpatient treatment: Who, what, when and where. *Drug and Alcohol Dependence*; 167: 207-213. DOI: <https://doi.org/10.1016/j.drugalcdep.2016.08.623>.
- [25] Areba, E. M., Eisenberg, M. E., & McMorris, B. J. (2017). Relationships between family structure, adolescent health status and substance use: Does ethnicity matter? *Journal of Community Psychology*; 46(91): 44-57. <https://doi.org/10.1002/jcop.21915>.
- [26] Dawson, D. A., Grant, B. F., Stinson, F. S., & Chou, P. (2015). Another look at heavy episodic drinking and alcohol use disorders among college and non-college youth. *Journal of Studies on Alcohol*, 65(4), 477-488 (2004). <https://doi.org/10.15288/jsa.2004.65.477>.
- [27] Toftdahl, N. G., Nordentoft, M. & Hjøthøj, C. (2016). Prevalence of substance use disorders in psychiatric patients: a nationwide Danish population-based study. *Social Psychiatry and Psychiatric Epidemiology*; 51(1): 129-140.
- [28] Jenkins, R., Othieno, C., Onger, L., Kiima, D., Sifuna, P., Kiangora, J. et al., (2015). Alcohol consumption and hazardous drinking in western Kenya—a household survey in a health and demographic surveillance site. *BMC Psychiatry*; 15: 230. <https://doi.org/10.1186/s12888-015-0603-x>.
- [29] Johnson, M. K. (2004). Further Evidence on Adolescent Employment and Substance Use: Differences by Race and Ethnicity. *Journal of Health and Social Behavior* <https://doi.org/10.1177/002214650404500205>.
- [30] Torrikkha, A., Kaltiala-Heino, R., Luukkhaala, T. & Rimpda, A. (2017). Trends in Alcohol Use among Adolescents from 2000 to 2011: The Role of Socioeconomic Status and Depression. *Alcohol & Alcoholism*; 52(1); 95-103. <https://doi.org/10.1093/alcac/agw048>.
- [31] Sinha, N. (2017). Impact of Family or Social Factors on Substance Abusers among Youth. *The International Journal of Indian Psychology*; 4(3): DIP:18.01.248/20170403.
- [32] Francis, J. M., Grosskurth, H., Chagalucha, J., Kapiga, S. H., & Weiss, H. (2014). Systematic review and meta-analysis: prevalence of alcohol use among young people in eastern Africa. *Tropical Medicine and International Health*; 19(4): 476-488. <https://doi.org/10.1111/tmi.12267>.
- [33] Marshall, E.J., (2014). Adolescent Alcohol Use: Risks and Consequences. *Alcohol and Alcoholism*; 49(2): 160-164. <https://doi.org/10.1093/alcac/agt180>.
- [34] Kelly, A. B., Evans-Whipp, T. J., Smith, R., Chan, G. G. K., Toumbourou, J. W., Patton, G. C., Hempill, S. A., Hall, W. D., & Catalano, R. F. (2014). A longitudinal study of the association of adolescent polydrug use, alcohol use and high school non-completion. *Addiction*; 110(4): 627-635. <https://doi.org/10.1111/add.12829>.
- [35] Weinberger, A. H. Gbedemah, M., and Renee D. Goodwin, R. D. (2015). Cigarette smoking quit rates among adults with and without alcohol use disorders and heavy alcohol use, 2002–2015: A representative sample of the United States population, *Drug and Alcohol Dependence*; 180, (204). <https://doi.org/10.1111/acer.12840>.
- [36] Horyniak, D., Melo, J. S., Farrell, R. S., Ojeda, V. D., & Strathdee, S. A. (2016). Epidemiology of Substance Use among Forced Migrants: A Global Systematic Review. *PLOS/ONE*; <https://doi.org/10.1371/journal.pone.0159134>.
- [37] Conway, K. P., Senden, J., Husky, M. M., & Merikangas, R. (2016). Association of Lifetime Mental Disorders and Subsequent Alcohol and Illicit Drug Use: Results From the National Comorbidity Survey–Adolescent Supplement. *Journal of American Academy of Child and Adolescent Psychiatry*; 55(4): 280-288. <https://doi.org/10.1016/j.jaac.2016.01.006>.