Perceived Causes and Effects of Substance Abuse among Senior High School Students in Ghana

Samuel Oti-Boateng
Tutor, Department of Education and Professional Studies,
Atebubu College of Education, Ghana

Henry Yao Agbleze
Tutor, Department of Education and Professional Studies,
E.P. College of Education, Ghana

Abstract
The study sought to find out the cause and effect of substance abuse among students in Ghana and measures to reduce substance abuse. This was a quantitative study underpinning by positivist philosophical thought. It employed a survey design where data were collected using four-point Likert-type scale questionnaire. The data were analysed and the results were presented using independent sample T-test, ANOVA, mean and standard deviation. It emerged from the study that Peer Pressure and Imitation and Curiosity from friends was the major cause of substance abuse among the senior high school students in Ghana. The hypothesis show that Tamale Metropolis was significantly different from Cape Coast Metropolis and Sunyani but Cape Coast and Sunyani Metropolises do not differ significantly Therefore, it is recommended that Government agencies, non-Governmental agencies, and school authorities must have design programs directed at addressing the problem of drugs as part of its curricular or extracurricular activities. Again, the study shows that social and psychological effect for substance abuse were more frequent. However, school guidance services should be strengthened so that students could know the effect of substance abuse when they engage in it. Furthermore, the study suggested that parental monitoring, enlightenment and education were suggested as the factors that could help students curb substance abuse. Mass media like newspapers, magazine and internet should be used to educate students about the effect of engaging in substance abuse.

Keywords: Substance abuse, students, senior high schools

1. Introduction
Adolescent substance use is the largest preventable and most costly public health problem facing mankind today (Feinstein, Richter, & Foster, 2012). In reality, with respect to adolescents, the term ‘substance abuse’ is preferred to ‘substance use’ as any use among adolescents (minors), amounts to abuse since it violates the law. Moreover, there is evidence that youths start using psychoactive substances at earlier ages than in the past (Melchior, Chastang, Goldberg, & Fombonne, 2008). Tobacco, alcohol and illicit drugs, use is among the most common substances held responsible for considerable mortality and morbidity especially among adolescents and young adults (Degenhardt et al., 2008). Addiction is, therefore, a disease with its origins from adolescence. Studies in Africa have shown that substance abuse by students starts with alcohol and cigarettes (Obot, 2004; Odejide, 2006). A study by Peltzer (2009) on substance abuse among school-going adolescents in six African countries (Kenya, Namibia, Swaziland, Uganda, Zambia, Zimbabwe) indicates 6.6% of students surveyed engaged in risky alcohol use (two or more per day for at least 20 days or more in the past month) and 10.5% engaged in illicit drug use (three or more times ever). Peltzer (2009) further reported that school truancy, loneliness, sleeping problems, sadness, suicidal ideation, suicide plans, mental distress, lack of parental, peer pressure and poverty were associated with substance use (tobacco, alcohol, illicit drugs), while school attendance, parental supervision, and connectedness were protective factors for substance use.

Substance (Drug) is any substance, natural or chemical other than food that is taken to change mood, behaviour, feelings, and or the psychological state of the target youth (Ministry of Health/World Health Organization, MOH/WHO, 2003). Substance abuse occurs when a person uses drugs or consumes alcohol excessively and typically causes significant problems in a person’s life (Simmons, 2008). In previous studies conducted in some other African countries and in Ghana researchers seem to indicate that lifetime prevalence rates of alcohol, cigarette, and cannabis are significantly greater for boys compared to girls (Adu-Mireku, 2003; Adelekan, 1989). Lampetey (2005) indicates that the importance of family cohesion plays a role in youth substance abuse in Ghana and the chances of substance abuse are less when the adolescent stays with both parents rather than others. Parents of abusers often are divorced, separated, or never married. Some of the reasons given for alcohol and drug use among the youth centered on the perceived benefits, such as enabling them to
study, to do hard work, to get rid of shyness, and to forget about their problems; for curiosity, for fun, and due to peer pressure (MOH/WHO, 2003). Other reasons include the lack of parental control and rebelling against parents.

The World Drug Report 2015 explains that globally, about 27 million people, or almost the entire population of a country the size of Ghana, are problem drug users, that is, people suffering from substance use disorders or drug dependence. And half of these people inject substances with an estimated 1.65 million of them living with HIV through the sharing of needles (UNODC, 2015). Public health systems are thus overburdened with regards to the prevention, treatment and care of substance use disorders and their health consequences.

Also, there has been a dramatic increase in substance use among people aged 12 to 17 years (Center for Behavioral Health Statistics and Quality, 2015). In 2014, nearly 21.5 million people aged 12 or older suffered a substance use disorder (SUD). This includes 17.0 million people with an alcohol use disorder, 7.1 million with an illicit drug use disorder, and 2.6 million people who suffered from both. Almost all these were greater than percentages recorded from 2002 through 2010. The use of substances during adolescence obstructs the development of the brain and thus increases the risk of serious health and mental health conditions in later life. It exposes one risky sexual behaviour and the spread of various diseases. Substance use among the youth is very much on the ascendency and it continues to be a serious public health problem (Feinstein et al., 2012).

Ghana, like many other countries, is also facing a growing substance abuse problem though there may be some disparities in the scope of the problem. Sadly, this has stretched to include the youth. In the November 18, 2017 edition of the TODAY, a popular weekly daily in Ghana, it was reported that about 50,000 people in Ghana abuse substances and 70% of these result in mental illness. It stated that “research from fifteen (15) psychiatric hospitals in Ghana has shown that about 70 per cent of inmates in those hospitals were youth from senior high schools and tertiary institution”. This gives a piece of clear evidence to the fact that the youth, the most vibrant and active part of the society, are the ones gradually being eaten away by this menace.

The study sought to find out the cause and effect of substance abuse among students in Ghana and measures to reduce substance abuse. To address the purpose of the study, the following objectives and hypotheses were formulated to guide the study. To find out the causes of substance abuse among senior high school students in Ghana.

- To examine the effects of substance abuse to senior high school students in Ghana.
- To find out measures to curb substance abuse among the senior high school students in Ghana.

The study made and tested the following hypothesis:

- \( H_0: \text{There is no significant difference between metropolises in terms of causes of substance abuse among SHS students in Ghana.} \)

The study will be relevant to Headmaster/mistresses, teachers, Doctor, Nurses, Psychiatric hospital, Government and all stakeholders, particularly in their decision-making processes. Furthermore, the study could enrich the available literature on the variables being studied. This would enable future researchers to have reference material for research similar to this study. In other words, the findings of this study may serve as related literature to future researchers investigating issues concerning student’s perception on substance abuse.

2. Literature Review

2.1. Causes of Substance Abuse among the Students

Many authors and researchers have shown that there are many contributing factors that lead to substance abuse among students. Terry-McElrath, O‘Malley and Johnston (2009), argue that substance abuse is caused by a combination of environmental, biological, and psychological factors. Students abuse substances because of: peer pressure or influence, boosting energy, coping with stress, enhancing cognition or for curiosity and imitation.

2.2. Peer Pressure in Relation to Substance Abuse

Peer pressure is the most common influencing factor of substance abuse especially among the youth (Adewuyi, 2013; Ahmed, 2012; Mohammad, 2014; Okwaraji, Ebigbo, & Akpala, 2009; Yusuf, 2010; Yusuf, 2013). A study conducted in southern Nigeria to investigate factors influencing substance abuse among undergraduate students in Osun State, where a sample of 1,200 undergraduate students was randomly selected from three tertiary institutions in the State. The results showed that peer pressure is the major factor influencing substance abuse among undergraduate students in the state (Yusuf, 2010). However, the peer group is found to have a strong influence on substance abuse than parental influence, though there is a tendency of children to learn substance abuse from their parent (Yusuf, 2013), and the majority of youth are influenced into substance abuse by their peers (Adewuyi, 2013).

2.3. Imitation and Curiosity Related to Substance Abuse

Curiosity is one of the critical factors that cause or influenced youth to indulge in substance abuse. Curiosity and imitation are more common among adolescent. They always want to copy adult members of society (Gopiram & Kishore, 2014; Racz, 2008). Children learn from watching and imitating what adults say and do. As they grow, they are likely to pick up both positive and negative habits from their parents and other adult members of the society (Ahmed, 2012). A qualitative study in India, aimed to examine the reasons for initiation, maintenance of harmful use of substances and abstinence among adolescents and young adults by comparing the users and non-users, using a sample size of 80 participants consisting of 40 users and 40 non-users, in the age group of 15-24 years, found that, majority of the youth abuse substances because of peer influence and curiosity (Gopiram & Kishore, 2014).
2.4. Cognitive Enhancement Effect of Substance Abuse

Enhancement of cognition is a major factor that influence youth to indulge in substance abuse (Franke et al., 2011; Franke et al., 2014; Franke, Lieb, & Hildt, 2012; Herman-Stahl, Krebs, Kroutil, & Heller, 2007; Holloway & Bennett, 2012; Pustovrh & Mali, 2014; Schelle et al., 2015). Substances are abuse with the intention to boost cognitive capacities, with the aim to enhance one’s performance above baseline level especially at schools (Herman-Stahl et al., 2007; Schelle et al., 2015). Substances such as caffeine, marijuana and nicotine as well as other illicit drugs are used especially among the youth in order to study so as to enhance memory, understanding and thinking (Schelle et al., 2015).

2.5. Coping with Stress using Illicit Substances

Stress is another factor that leads or make the youth to abuse substances and drugs (Gonzales, Anglin, Beattie, Ong, & Glik, 2012; Yusuf, 2010; Al-Haqwi, 2010). According to Kulis, Marsiglia, and Nieri (2009), in a study to examine the relative effects of perceived discrimination and acculturation stress on substance use, found that, the youth had the perception that substances are used to calm down their stress, cheers them up, or relieves boredom, so they use it as a coping strategy to stress.

2.6. Effects of Substance Abuse

Substance abuse has several effects. There is a general belief that problems of substance abuse can be categorized into medical, physical, psychological, social, educational, and economic implications and can be from experimenting substance to drug dependence (Ahmed, 2012). The physical, psychological, social and economic consequences of substance abuse among youth are becoming more obvious and disturbing (Yusuf, 2010, 2013).

2.7. The Physical Effect of Substance Abuse

Substance abuse has an effect on the physical body of a youth who are involved in this behaviour. Intoxication with a substance can cause physical effects, intoxication with heroin, sedative or hypnotic drugs can cause marked sleepiness and slowed breathing. Also, cocaine intoxication can cause rapid heart rate, or tremors, while, seizures can occur due to alcohol withdrawal syndrome (Edwards, 2014).

2.8. Psychological Effects of Substance Abuse

Psychological effects of substance abuse tend to vary and depend on the type of substances involved (Edwards, 2014). The general effects of abuse or addiction of any drug can be devastating. Psychologically, intoxication with substances or withdrawal from a substance can cause euphoria as with alcohol or inhalant intoxication, paranoia which occur due to marijuana or steroid intoxication, while cocaine or amphetamine withdrawal will lead to severe depression or suicidal thoughts (Edwards, 2014).

2.9. Social Effects of Substance Abuse

Yusuf (2013) investigated the effects of peer modelling techniques in reducing substance abuse among undergraduate students found that substance abuse may reduce undergraduate chances of graduating from school or of landing and holding a steady job, it may also be causing student unrest in the campus which will disturb academic calendar and this may also lead to poor academic performance.

2.10. Measures in Controlling Substance Abuse

Various kinds of literature were reviewed to find out possible measures that can be taken to control substance abuse among the youth. It was found that educating and enlighten the youth on the issues of substances abuse can help reduce the menace of substance abuse. Other measures that were reviewed include; provision of employment, parental monitoring, law enforcement and religious measures

2.11. Enlightenment and Education

Education has a significant influence on substance abuse (Ahmed, 2012; Ndeti, Khasakhalu, Mutiso, Ong'echao-owuor, & Kokonyo, 2010). The student who are aware or educated on the dangers or effect of substance abuse are more likely not to indulge in substance abuse than students who are not aware of the dangers involved (Ahmad 2012; Aliyu, 2014; Ndeti et al., 2010 Kulis et al., 2009). The weaker student is using substance abuse as a means of compensation to their academic weakness and as a diversional therapy (Ndeti et al., 2010). Moreover, parental education has an influence on substance abuse among the youth (Jibril et al., 2008).

2.12. Job Provision (Student Empowerment)

About 1 in 6 unemployed workers in New York (US) are addicted to alcohol or drug, the ratio is almost twice the rate for full-time workers (Kurtz, 2013; White, 2014). A survey by Kurtz (2013), shows that 17% of unemployed workers had substance abuse disorder, where only 9% of full-time workers had the similar disorder. The numbers in the survey are self-reported, and therefore, could not be generalized or could even be higher in real situations. The high rate of unemployment among the youth in Nigeria has contributed to the high rate of poverty, insecurity and indulgence to substance abuse in the country (Ajuf, 2013).
2.13. Religious Measures

Religion can be understood as a shared set of beliefs and practices that have been developed in community with people who have similar understandings of the transcendent, which is designed to mediate an individual’s relationship with God or the transcendent (Hodge, Marsiglia, & Nieri, 2011). As such religion can be a protection against some of the social behaviour such as youth involvement in substance abuse. Youth who actively involved in religious activities are less likely to indulge in substance abuse (Hodge et al., 2011).

2.14. Parental Monitoring

Parental monitoring refers to a parent’s knowledge of his or her child’s activities, associations, and whereabouts to ensure that the child’s behaviour is not harmful to his or her development and safety (Bertrand et al., 2013). Inadequate and poor parental monitoring has been associated with both elevated levels of substance consumption and poorer prognoses regarding treatment outcomes. A marked decline in parental monitoring also has an influence on adolescents’ increased alcohol use (Luyckx et al., 2011)

3. Methodology

Based on the purpose of the study the researcher chose the positivist paradigm which is situated within the normative school of thought and is linked to the objectivist epistemological perspective as the philosophical foundation for the study. They believe that social reality exists and it is independent to the observer. The positivist operates on the assumption that human behaviour is essentially rule-governed (Cohen, Manion, & Morrison, 2007). This scientific approach helps the process of collecting data and testing it using some analysis, for example, the relationship of one set of facts that is similar to produce generalisable conclusions.

The design used for the study surveyed. Bowling (2014, p.214) describes survey as “the study of an existing condition, prevailing viewpoints, attitudes, ongoing processes and developing trends in order to obtain information that can be analysed and interpreted to come up with a report of the present status of subject or phenomenon under study.” Survey deem as the most appropriate research design because the researcher wants to collect data to make a generalisation to a larger population.

The targeted population of the study was made up of SHSs and students in Ghana. The estimated number of public SHSs 616 and private SHSs 264 sum up to 880; students, eight hundred and fifty-one thousand three hundred and twelve (851,312) (Ministry of Education (MoE) SHSs National Profile, 2017). But the accessible population consist of public senior high schools and students found in the Tema, Sunyani and Coast Cape Metropolises. Census sampling was used to select all SHSs in the metropolises. Purposive sampling technique was used to select form 2 and form 3 students. Gay and Diehl, (1992) way for determining sample size was adopted for the selection of form 2 and form 3 students from each SHSs in the metropolises. The researcher sample 10% of form 2 and form 3 students from the accessible population of public SHSs in the three metropolises. The total sample was 1679 students. The researcher selected nine hundred and seventeen (917) form 2 students, seven hundred and sixty-two (762) form 3 students.

A Four Point Likert-type scale was the instrument used for data collection in this study. The instrument was pilot tested in Kumasi Metropolis with the overall internal consistency yielded an alpha level of 0.78 which shows that the instrument was reliable. According to Sekaran and Bougie (2010), if the Cronbach’s alpha is less than 0.7, then the indication is that the instrument being used has low reliability and that not all the items met reasonable standards of internal consistency and reliability. With the aid of SPSS vision, ANOVA, Mean and Standard Deviation were used for the data analysis.

4. Results and Discussion

This section presents the results and discussion of the study. On a four Point Likert-type scale, the respondents were asked to indicate their levels of agreement or disagreement with the statement concerning the particular question. A mean score of 2.50 and above indicate positive responses while a mean of 2.49 and below indicate respondents’ negative responses. The test value was computed by adding all the scores on the Likert scale. That is Strongly Agree was scored as 4, Agree as 3, Disagree as 2 and strongly Disagree as 1. The test value was obtained by adding all the scores together (4+3+2+1=10) and was divided by the four-point Likert scale (10/4=2.5). The results are presented as follows.

| S/n | Statement                                          | N   | Mean | St.D  |
|-----|---------------------------------------------------|-----|------|-------|
| 1   | Peer Pressure                                      | 1679| 3.85 | 0.32  |
| 2   | Imitation and Curiosity                            | 1679| 3.62 | 0.41  |
| 3   | Cognitive Enhancement                              | 1679| 2.94 | 0.47  |
| 4   | Coping with Stress Using Illicit Substances        | 1679| 2.65 | 0.51  |
| 5   | Boosting Energy                                    | 1679| 3.41 | 0.46  |
| 6   | Lack of Parental Attachment in Childhood           | 1679| 3.41 | 0.43  |

Table 1: Causes of Substance Abuse among the Students
Source: Field Data, (2018)

From Table 1, all responses to the items produced mean score were greater than the test value of 2.5. For example, respondents suggested that Peer Pressure was the highest factor that causes substance abuse in senior high schools in Ghana recorded (M=3.85, SD=0.32). Therefore, it is very possible that the peer group had a strong influence on substance...
abuse than parents (Yusuf, 2013). Based on the finding of this study, it was concluded that the majority of the youth were abusing substances due to pressure from their peers. However, peers had a strong influence on the youth’s indulgence in substance abuse. The peers used certain reasons or words to convince their friends to abuse substances. One of the reasons given was that the substances were used as energy boosters (Terry-McElrath et al., 2009).

Secondly, the results show that Imitation and Curiosity from friends yielded (M=3.62, SD=0.41). In this study, the youth abused substances because they had heard that substances such as marijuana and cigarette can be fun, or make a person feel and act differently. As such, they were curious to find out what people felt when they smoked (Oshikoyi & Ali, 2006). The study also found that the youth abused substance because they saw their parent or other family members abusing substances. This is consistent with the findings of Myers (2013), who reported that the youth tend to imitate what they see their parents or other family members do.

Again, two statements recorded the same mean and standard deviation. The response on Boosting Energy, recorded (M=3.41, SD=0.46) and Lack of Parental Attachment in Childhood was (M=3.41, SD=0.43). The responses on the item “Cognitive Enhancement” produced a (M=2.94; SD=0.47), respondents commented that coping with stress using illicit substances recorded (M=2.65; SD=0.51). This finding supports previous studies (Franke et al., 2011; Franke, Lieb, & Hildt, 2012; Holloway & Bennett, 2012; Pustovrh & Mali, 2014; Schelle et al., 2015) who found that substances were abused with the intension to boost cognition.

4.1. Research Hypothesis 1

This section sought to find out the causes of substance abuse among SHSs in the metropolises. A One-way Analysis of Variance (ANOVA) was conducted to achieve the stated hypothesis.

| Source: Field Data (2018) |
|---------------------------|

Table 2: Summary of One-Way Analysis of Variance

| Source: Field Data (2018) |
|---------------------------|

Table 2 shows that the overall F-ratio for the one-way ANOVA is significant. It noted that the F-ratio (58.39) is significant (p = .001) at the .05 alpha level. This implies that there was a significant difference somewhere among the mean scores of the Metropolises in Ghana (Tamale, Sunyani and Cape Coast). Based on this evidence, the researcher accepts the alternate hypothesis that states: “There is a significant difference between metropolises (Tamale, Sunyani and Cape Coast) in terms of causes of substance abuse among SHSs students in Ghana”. However, the sig value of .001 did not tell the differences between the cause levels among the metropolises. The statistical significance of the differences between each pair of metropolises is provided in multiple comparisons as indicated in Table 3.

| Source: Field Data (2018) |
|---------------------------|

Table 3: Multiple Comparisons (The Post-Hoc Tests)

| Source: Field Data (2018) |
|---------------------------|

Table 3 shows the results of a one-way between-groups analysis of variance conducted to check the regions, as measured by the benefit of guidance services. Respondents were divided into three groups according to regions (Group 1 Tamale; Group 2 Sunyani; Group 3 Cape Coast). There was a statistically significant difference at the p< .05 level in benefit of guidance services scores for the three regions: F (2, 1676) = 58.39, p = .001. Post-hoc comparisons using the Tukey HSD test indicated that the mean score for Tamale Metropolis (M=28.72, SD=5.66) was significantly different from Cape Coast Metropolis (M=31.99, SD=4.35) and Sunyani (M=31.69, SD =4.90) but Cape Coast and Sunyani Metropolises do not differ significantly. Despite reaching statistical significance, the actual difference of the effect size in mean scores between the groups was not shown. The effect size was calculated using Eta squared formula:
The study revealed that senior high school students were abusing substance by peer pressure and imitation out of curiosity. The common substance that was abuse by students were Marijuana (Wee), alcohol, tramadol and cigarette. Therefore, it is recommended that Government agencies, non-Governmental agencies, and school authorities must have design programs directed at addressing the problem of drugs as part of its curricular or extracurricular activities. Such programs must address all facets of adolescents and drugs, as well as teaching them empowerment approaches that serve to keep them away from drugs.

Again, the study concluded that social and psychological challenges were the most frequent effect of where students engage in substance abuse. Community leaders and school authorities should enforce the cultural values and norms that can protect the students form involving themselves in behaviours that could affect their future career. School
guidance services should be strengthened so that students could know the effect of substance abuse when they engage in it. The study revealed that parental monitoring, guidance and counselling and enlightenment and education were suggested as the factors that could help students curb substance abuse. Mass media like newspapers, magazine and internet should be used to educate community on the effect of engaging in substance abuse. Also, authorities organizing educational programmes on substance abuse prevention such as in schools, mosque and churches as a means of educating and enlightening the community about the dangers or effects of abusing substances could help in preventing students indulgence in substance abuse.

The study shows that senior high schools’ students in the Tamale metropolis were more prevalent to substance abuse than Sunyani and Cape Coast Metropolises. Therefore, it is recommended that school authorities in Tamale metropolis should enforce school rule and parents in this metropolis should support and monitor their children behaviour.

6. References
i. Abdu-Raheem, B. O. (2013). Sociological Factors to Drug Abuse and The Effects on Secondary School Students” Academic Performance in Ekiti And Ondo States, Nigeria. Contemporary Issues in Education Research, 6(2), 233–240.
ii. Adamson, T., Onifade, P., & Ogunwale, A. (2010). Trends in socio-demographic and drug abuse variables in patients with alcohol and drug use disorders in a Nigerian treatment facility. West African Journal of Medicine, 29(1), 12–18.

iii. Adewuyi, T. (2013). Age and Peer Influence on Substance Abuse among Undergraduates. Ife Psicologia. Retrieved from http://www.readperiodicals.com
iv. Adu-Mireku, S. (2003). Prevalence of alcohol, cigarette, and marijuana use among Ghanaian secondary students in urban setting. Journal of Ethnicity in Substance Abuse, 2(1), 53–65
v. Affinnih, Y. H. (2012). A Preliminary Study of Drug Abuse and Its Mental Health and Health Consequences among Addicts in Greater Accra, Ghana. Journal of Psychoactive Drugs, 31(4), 395–403. http://doi.org/10.1080/02791072.1999.10471769
vi. Ahmadi, J., Tabatabaee, F., & Gozin, Z. (2006). Physical Trauma and Substance Abuse. Journal of Addictive Diseases, 25(1), 51–63. http://doi.org/10.1300/J069v25n01_08
vii. Ahmed, A. M. (2012). Substance Abuse Among Undergraduate Student of Usmanu Danfodiyo University, Sokoto. Sokoto Journal of the Social Sciences, 2(1), 136–147.
viii. Ajufo, B. (2013). Challenges of Youth Unemployment in Nigeria: Effective Career Guidance as a Panacea. African Research Review, 7(1), 307–321.
ix. Al-Haqwi, A. I. (2010). Perception among medical students in Riyadh, Saudi Arabia, regarding alcohol and substance abuse in the community: a cross-sectional survey. Substance Abuse Treatment, Prevention, and Policy, 5(2).
x. Bertrand, K., Richer, I., Brunelle, N., Beaudoin, I., Lemieux, A., & Ménard, J.-M. (2013). Substance Abuse Treatment for Adolescents: How are Family Factors Related to Substance Use Change? Journal of Psychoactive Drugs, 45(1), 28–38.
x. Bowling, A. (2014). Research methods in health: Investigating health and health services. McGraw-Hill Education.
xii. Branstetter, S. A., & Furman, W. (2013). Buffering Effect of Parental Monitoring Knowledge and Parent-Adolescent Relationships on Consequences of Adolescent Substance Use. Journal of Child and Family Studies, 22(2), 192–198.
xiii. Cheung, C.-K., & Yeung, J. W.-K. (2007). Self-reflected causes of substance abuse among Hong Kong young addicts. Vulnerable Children and Youth Studies, 2(1), 17–31.
xiv. Cohen, L., Manion, L., & Morrison, K. (2007). Research methods in education. London: Routledge.
xv. Dankani, I. (2012). Abuse of cough syrups: A new trend in drug abuse in Northwestern Nigerian states of Kano, Sokoto, Katsina, Zamfara and Kebbi. International Journal of Physical and Social Sciences, 2(8), 199–213.
xvi. Davis, S. J., & Spellman, S. (2011). Reasons for drug abstention: A study of drug use and resilience. Journal of Psychoactive Drugs, 43(1), 14–19.
xvii. Degenhardt, L., Chiu, W.-T., Sampson, N., Kessler, R. C., Anthony, J. C., Angermeyer, M., ... Wells, J. E. (2008). Toward a Global View of Alcohol, Tobacco, Cannabis, and Cocaine Use: Findings from the WHO World Mental Health Surveys. PLoS Medicine, 5(7), e141. http://doi.org/10.1371/journal.pmed.0050141
xviii. Dray, A., Perez, P., Moore, D., Dietze, P., Bammer, G., Jenkinson, R., Maher, L. (2012). Are drug detection dogs and mass-media campaigns likely to be effective policy responses to psychostimulant use and related harm? Results from an agent-based simulation model. International Journal of Drug Policy, 23(2), 148–153.
xix. Edwards, R. D. (2014). Drug Abuse Symptoms, Causes, Treatment - What are the physical and psychological effects of drug abuse and addiction? Retrieved May 12, 2018, from http://www.medicinenet.com/drug_abuse/article.htm
xx. Ekpenyong, S. N. (2012). Drug Abuse in Nigerian Schools: A Study of Selected Secondary Institutions in Bayelsa State, South-South, Nigeria. International Journal of Scientific Research in Education, 5(3), 260–268.
xxi. Faggiano, F., Vigna-Taglianti, F., Burkhart, G., Bohrn, K., Cuoro, L., Gregori, D., Galanti, M. R. (2010). The effectiveness of a school-based substance abuse prevention program: 18-Month follow-up of the EU-Dap cluster randomized controlled trial. Drug and Alcohol Dependence, 108(1–2), 56–64.
xxii. Feinstein, E. C., Richter, L., & Foster, S. E. (2012). Addressing the critical health problem of adolescent substance use through health care, research, and public policy. Journal of Adolescent Health, 50(5), 431–436.

xxiii. Field, P., & Morse, J. (1985). Nursing Research. The application of qualitative approach (1st ed.). Rockville, M.D.: Aspen publication.

xxiv. Floyd, L. J., & Latimer, W. (2009). Adolescent Sexual Behaviors at Varying Levels of Substance Use Frequency. Journal of Child & Adolescent Substance Abuse, 19(1), 66–77.

xxv. Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. Australian & New Zealand Journal of Psychiatry. Australian & New Zealand Journal of Psychiatry, 6(6), 717–732.

xxvi. Franke, A. G., Bagusat, C., McFarlane, C., Tassone-Steiger, T., Kneist, W., & Lieb, K. (2014). The Use of Caffeinated Substances by Surgeons for Cognitive Enhancement. Annals of Surgery.

xxvii. Franke, A. G., Lieb, K., & Hildt, E. (2012). What users think about the differences between caffeine and illicit/ prescription stimulants for cognitive enhancement. PloS One, 7(6).

xxviii. Gaidhane, A. M., Syed Zahiruddin, Q., Waghmare, L., Shanbhag, S., Zodpey, S., & Joharapurkar, S. R. (2008a). Substance abuse among street children in Mumbai. Vulnerable Children and Youth Studies, 3(1), 42–51.

xxix. Gaidhane, A. M., Syed Zahiruddin, Q., Waghmare, L., Shanbhag, S., Zodpey, S., & Joharapurkar, S. R. (2008b). Substance abuse among street children in Mumbai. Vulnerable Children and Youth Studies, 3(1), 42–51.

xxx. Gangi, J., & Darling, C. A. (2012). Adolescent Substance Use- Frequency Following Self-Help Group Attendance and Outpatient Substance Abuse Treatment. Journal of Child & Adolescent Substance Abuse, 21(4), 293–309.

xxxi. Gascon, D. J., & Spiller, H. A. (2009). Relationship of Unemployment Rate and Rate of Opiate Exposure in Kentucky. Journal of Psychoactive Drugs, 41(1), 99–102.

xxxii. Gay, L. R., & Diehl, P. L. (1992). Research methods for business and management. New York: Macmillan.

xxxiii. Gopiram, P., & Kishore, M. T. (2014). Psychosocial Attributes of Substance Abuse Among Adolescents and Young Adults: A Comparative Study of Users and Non-users. Indian Journal of Psychological Medicine, 36(1), 58–61.

xxxiv. Gryczynski, J., & Ward, B. (2011). Social norms and relationship between cigarette use and religiosity among adolescents in the United State. Health Education & Behaviour, 38(1), 39–48.

xxxv. Hamisu, M., & Badamas, L. (2014). The effectiveness of school-based substance abuse prevention program on secondary school students’ attitudes towards benylin with codeine in Katsina, Nigeria. International Journal of Physical and Social Sciences, 4(2), 211–220.

xxxvi. Hardy, K. V., & Qureshi, M. E. (2012). Devaluation, Loss, and Rage: A Postscript to Urban African American Youth with Substance Abuse. Alcoholism Treatment Quarterly, 30(3), 326–342.

xxxvii. Herman-Stahl, M., Krebs, C., Kroutit, L., & Heller, D. (2007). Risk and protective factors for methamphetamine use and nonmedical use of prescription stimulants among young adults aged 18 to 25. Addiction and Behaviour, 32, 1003–1015.

xxxviii. Hodge, D. R., Marsiglia, F. F., & Nieri, T. (2011). Religion and Substance Use among Youths of Mexican Heritage: A Social Capital Perspective. Social Work Research, 35(3), 137–146.

xxxix. Holloway, K., & Bennett, T. (2012). Prescription drug misuse among university staff and students: A survey of motives, nature and extent. Drugs: Education, Prevention and Policy, 19(2), 137–144.

xl. Jag, H. K., Glenn, T., Elinore, M., & Ellen, T. (2008). Medical Consequences of Drug Abuse and Co-Occurring Infections: Research at the National Institute on Drug Abuse. Substance Abuse, 29(3), 5–16.

xli. Janichek, J. L., & Reiman, A. (2012). Clinical service desires of medical cannabis patients. Harm Reduction Journal, 9(12), 1–6.

xlii. Jibril, A, Olayinka, O., Omeiza, B., & Babantunde, A. (2008). Psychoactive substance use among children in informal religious schools (Almajiris) in northern Nigeria. Mental Health, Religion & Culture, 12(6), 527–542.

xliii. Karine Bertrand, I. R. (2013). Substance abuse treatment for adolescents: how are family factors related to substance use change? Journal of Psychoactive Drugs, 45(1), 28–38.

xliv. Kizhakumpurath, P. T. (2012). A qualitative study of the risk and protective factors of substance abuse among the young adults of Nagaland, India. ETD Collection for Fordham University, 1–224.

xlv. Kulis, S., Marsiglia, F. F., & Nieri, T. (2009). Perceived Ethnic Discrimination versus Acculturation Stress: Influences on Substance Use among Latino Youth in the Southwest. Journal of Health and Social Behavior, 50(4), 443–459.

xlvi. Lampert, J. J. (2005). Socio-Demographic Characteristics of Substance Abuses admitted to a private specialist clinic. Ghana Medical Journal, 39, 1–7.

xlvii. Melchor, M., Chastang, J. F., Goldberg, P., & Fombonne, E. (2008). High prevalence rates of tobacco, alcohol and drug use in adolescents and young adults in France: results from the GAZEL Youth study. Addict. Behav., 33, 122–133.

xlviii. Ministry of Health/World Health Organization (2003). A national survey on prevalence and social consequences by substance (drug) use among second cycle and out of school youth in Ghana Research Report. Retrieved from http://www.who.int/countries/gha/publications/substance_abuse_report.pdf

xlx. Ministry of Education (2017). Senior High Schools National Profile. http://www.ghan.gov.gh/index.php/mediacentre/news/3079-minister-for-education-presents-learning-materials-to-basic-schools-for-the-2016-2017-academic-year Retrieval 09/06/2017
Myers, L. (2013). Substance Use Among Rural African American Adolescents: Identifying Risk and Protective Factors. Child Adolescence Social Work Journal, 30, 79–93.

Obot, J. S. (2004). Responding to substance use problems in Nigeria: The role of civil society organizations. Substance Use and Misuse, 39(8), 1287–1299.

Odejide, O. A. (2006). Status of drug use, abuse in Africa: A review. International Journal of Mental Health Addiciton, 4, 87–102.

Sekaran, U., & Bougie, R. (2010). Research methods for business: A skill building approach. Hoboken, NJ: Wiley and Sons.

Tarter, R. E., Schultz, K., Kirisci, L., & Dunn, M. (2008). Does Living with a Substance Abusing Father Increase Substance Abuse Risk in Male Offspring? Impact on Individual, Family, School, and Peer Vulnerability Factors. Journal of Child & Adolescent Substance Abuse, 10(3), 59–70.

Terry-McElrath, Y. M., O'Malley, P. M., & Johnston, L. D. (2009). Reasons for Drug Use among American Youth by Consumption Level, Gender, and Race/Ethnicity: 1976–2005. Journal of Drug Issues, 39(3), 677–714.

Usman, I. N. A., & Usman, A. K. (2012). Drug Abuse, Youth Violence and Social Order: A Study of Petroleum Hawkers in Minna, Niger State, Nigeria. Bangladesh E-Journal of Sociology, 9(2), 95–100.

WHO. (2015). Management of Substance Use, 1463(March).

WHO. (2014). WHO Substance abuse. Retrieved October 29, 2014, from http://www.who.int/topics/substance_abuse/en/

Yusuf, F. (2010). Factors Influencing Substance Abuse among Undergraduate Students in Osun State, Nigeria. African Research Review, 4(4).

Yusuf, F. A. (2013). Effects of Peer Modelling Technique in Reducing Substance Abuse among Undergraduates in Osun State, Nigeria. IFE PsychologIAL, 21(1), 194–205.