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THE USE OF ILLICIT DRUGS AND THEIR EFFECTS ON ACADEMIC PERFORMANCE AMONG SENIOR HIGH SCHOOL STUDENTS IN SUNYANI WEST DISTRICT

BY

PAUL AMANKWAA (B.Sc. PUBLIC HEALTH)

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DECLARATION

Student

I hereby declare that this dissertation/thesis is the result of my own original work and that no part of it has been presented for another degree in this University or elsewhere.

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I hereby declare that the preparation and presentation of this dissertation/thesis was supervised in accordance with the guidelines on supervision of dissertation/thesis laid down by the University for Development Studies.

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ABSTRACT

Background: Illicit drug use has become a major public health concern in Ghana, particularly among senior high school students in Sunyani West District. This study sought to discuss the use of illicit drug and their effects on academic performance among senior high school students in Sunyani- West District in the Brong-Ahafo Region.

Methods: The study was quantitative in nature. Cluster and simple random sampling techniques were used to select 418 respondents from selected cluster schools in the Sunyani – West District. The results were analysed using Statistical Package for Social Sciences (SPSS) version 20.0. **Results:** It was found out that the commonly illicit drugs used were alcohol (42.0%), tramadol (31.0%) and the least were cannabis (14.0%) and cocaine (3.0%). The study revealed that substance use among family members, poor parental supervision, family conflict, peer pressure, availability and accessibility of illicit drugs were the factors associated with illicit substance use among senior high school students in Sunyani- West District. Thirty-eight percent (38%) of the respondents said they have experimented with illicit drugs and were still using them.

Conclusion: Many of the respondents were knowledgeable in identifying illicit drugs. The sources of knowledge were cited as school, radio, friends, internets and literature. Absenteeism, truancy, poor self-control, high level of conflict, decrease ability to concentrate, school dropout, individual neurobiological level, poor reputation and declining of retention rate were effects associated with illicit drug use. Illicit drug use and poor academic performances were linked where it used led to decline in their academic performance.

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DEDICATION

This work is dedicated to God Almighty, my father Mr. Samuel Yaw Abebrese, my late mother Madam Esther Gyinae and to my uncles, brothers and sisters.

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ABRAVIATIONS/ACRONYMS

AHRQ: Agency for Healthcare Research and Quality.

APA: American Psychiatric Association.

ASAM: American Society of Addiction Medicine.

DNA: Drug News Africa.

EMCDDA: European Monitoring Centre for Drugs and Drug Addiction.

GNA: Ghana News Agency.

GSS: Ghana Statistical Service.

GPIDUC: Global Prevalence of Illicit Drug Use Common.

INCB: International Narcotics Control Board.

LSD: Lysergic acid Diethylamide.

NIDA: National Institute on Drug Abuse.

NACOB: Narcotic Control Board.

SAMHSA: Substance Abuse and Mental Health Services Administration.

UNIDP: United Nation International Drug Control Programme.

UNODC: United Nations Office on Drug and Crime.

WHO: World Health Organization.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Illicit drugs are those kinds of drugs that are not legal to sell, use or make and also prohibits by the international law. These illicit drugs include drugs that are not required by law such as the cannabis, opiates and certain kinds of stimulants, pharmaceutical drugs such as pain-killers and tranquillisers when it is used for purpose that are not medical and other drugs used inappropriately such as inhalants. International law does not require the use of illicit drugs. The use of illicit drugs comprise of non-medical use of many kinds of drugs that are not accepted by the international law. Amphetamine type stimulants, cannabis, cocaine, heroin and other opioids are all examples of illicit drugs. Illicit drug use and misuse has become a major public health concern globally. Illicit drugs use is gradually becoming a norm in our societies these days.

In the United Kingdom for example, there is a drug Act enacted in 1971 which is the main lawgiving body. Drugs that are considered to be risky or otherwise harmful when misused are being regulated and supply by this Drug Act of 1971.

The Act divided the drugs which are considered harmful or dangerous when misused into three categories or groups (A, B and C) in order to look at their relative problems. The Act also provided the criminal penalties for unlawful manufacturing, control and supply in connection with each category or group.

Category 'A' drugs are made up of ecstasy, cocaine, heroin, magic mushrooms, tryptamines (such as LSD), methadone, methyl amphetamine and injectable amphetamines, as well as NBOMe1 compounds. Amphetamine, cannabis and synthetic

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cannabinoids, benzo furan compounds, synthetic cathinone derivatives such as mephedrone, ketamine and analogue compounds including methoxamine and pipradrol related compounds such as desoxypipradrol (2-DPMP) and diphenylprolinol (D2PM) are all examples of drugs that belong to category B drugs. Category C drugs which is the last group comprises of anabolic steroids, benzodiazepines, GBL/GHB, khat, piperazines (such as BZP) and tranquillisers (EMCDDA, 2014; World Drug Report, 2012).

The problems that arise from illicit drug use are more in our societies today. Drugs are considered to be problematic depending on the society because the term drug in a particular society may be food in another society. The United Nation International Drug Control Programme (UNIDP, 2015) asserts that drugs are chemical substances that affect the thinking ability of a person, making the person do things that are irrational. Illicit drug usage means the excessive use of drugs that are illegal. "The word "substance or drug" as used here refers to a chemical that modifies a person's mood, perception or cognitive behaviour when it is smoked, injected, swallowed, drunk, inhaled in powdered or vapour form" according to WHO (2014). Other words related to substance or drug use are substance abuse, substance dependence, illicit drug use and abuse. Illicit drugs such as the psychoactive and the mood-altering substances are not the only forms of drugs used. The term has enormous series of meanings related to taking in drugs that affect the user mind (psychoactive) or performance enhancing drug for nontherapeutic or non-medical outcome. These whole descriptions of illicit substances show a bad judgement about the use of these substances.

In 2012, it was projected that between 162 million to 324 million people which corresponds to 5.2 per cent (between 3.5% and 7.0%) of the global population aged 15-64

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years had been using an illegal substance mostly a drug which belongs to the opioids, cannabis, amphetamine or cocaine (WHO Drug Report, 2014).

In 2012, an estimated of 183,000 (range of 95.00 to 226.00) deaths related to drug use were recorded. The figure corresponds to a death rate of 40.0 (range of 20.0 to 49.3) deaths per million among the population aged 15-64 years (WHO Drug Report, 2014). The incidence of drug issues remain stable throughout the globe according to the UNODC and 246 million people slightly over 5% of the worldwide population have used an illicit drug in 2013 (World Drug Report, 2015). Also according to the World Drug Report in 2015, it asserted that globally, almost 27 million individuals or nearly a total population of a country like Ghana remains problem of substance users, which means that a lot of people are suffering from substance use and dependence according to global drug report (World Drug Report, 2015). About half of this population size injects substances with an estimated 1.65 million of these people living with HIV through the sharing of needles (UNODC, 2015). Again 2013 World Drug Report by the United Nations Office on Drug and Crime (UNODC) revealed that over 35 million people, representing 0.8% of adult population worldwide use heroin, cocaine or both. Africa region has taken the number two (2nd) position in the use, consumption and trafficking of illicit drugs. According to statistics from the UN, people who suffer from diseases that are related to illicit drug use per every year are 37,000.

According to Donkor (2015), a speech delivered by the acting executive secretary of NACOB on the state of substance usage and abuse in the country. He noted that cases of drugs such as cocaine, alcohol, cannabis and heroin use has increased in the country. The report further noted that statistics from the Psychiatric Hospital, Pantang in Accra shows

that, the number of the youth who are within the ages of 15-20 years who are engage in drug use kept rising from the year 2003 to 2010. There were 145 cases in 2003 as compared to 767 cases in 2010 with an average percentage rise of 61% yearly. It was added that the number of girls getting involved in drugs use for economic reason such as 'pushers' and prostitution has increased. Furthermore, he indicated that there has been an increase in the geographical coverage of use of all forms of drugs in the country revealing that only nicotine, alcohol and cannabis has national coverage of use in the past. However, narcotics like cocaine, heroin and various combinations and their products that were accessible and were used among the people in the big towns like Kumasi, Accra, Takoradi, and Sekondi nowadays exist and are used in all parts of the country.

The nation is currently experiencing a terrible increase of people who use and abuse drugs and later become addicted to the drug they use (Donkor, 2015).

1.2 Statement of the problem

The magnitude at which illegal drugs were consumed have been unchanged in the last five years but an estimated of 15.5 million to 38.6 million are problem drug users, not excluding persons with drug addiction and drug-use syndromes which continue to be a specific worry. Throughout the world in 2010, an estimated number of 153 million and 300 million individuals who were between the ages of 15-64 years had used illicit drug on one occasion. The number corresponds to 3.4 to 6.6 per cent of the global number of people in this age group who had used an illicit drug according to the 2012 World Drug Report by the United Nations Office on Drugs and Crime (GNA, 2013). The report further explained that internationally, the two commonly used illegal drugs continue to be cannabis with global annual incidence ranging from 2.6 to 5.0 per cent and amphetamine-

type stimulants (ATS) not including "ecstasy" also ranging from 0.3 - 1.2 per cent but figures linking to their manufacturing remains uncommon.

The report again emphasized on the projected annual incidence of cannabis use in 2010 which ranges between 2.6 to 5.0 per cent among the grown-up people. One hundred and nineteen to two hundred and twenty-four million (119-224 million) was estimated to be users of cannabis who were between the ages of 15-64 years. The use of cannabis remains the most commonly used illegal drug in the world. The report noted in terms of prevalence, an amphetamine-type stimulant (ATS) not including "ecstasy" is the second to cannabis use. Again, it states that illegal drugs use in men surpasses greatly that of the women in general. However, the use of drugs that makes people calmer or less anxious (tranquillizers) and sedatives for non-medical purposes are great in women. Moreover, it continued by saying that, most of the untimely and avoidable losses of human lives emanating or causing from illicit drugs use are obviously the greatest form of dangers that manifest from the use of illicit drugs.

"The unstable political climate in most African countries has disrupted drug control laws already existing. Hence, public health problems related to substance use has been on the surge in Africa", (INCB, 2014). The year 2014, for example saw a considerable increase in the manufacturing and trafficking of methamphetamine (a narcotic substance) and growth in marijuana despite immense eradication efforts implemented by Governments of respective countries (INCB, 2014). "Benin reported 45% of drug users as young people, with an average age of 22 years. Similarly, in Cameroon, between 75% and 80% of hospitalizations for drug users has been for individuals between 15 and 39 years of age" (INCB, 2014).

A report by the United Nations Office on Drugs and Crime (UNODC) indicate that, Africa plays a major role in the trans-shipment zone for the marketing of cocaine to Europe, the southern, west and central regions of the continents. These continents stand to have a high case of cocaine use of about 0.7 per cent annual incidence in 2013. This gives an overview of the world supply and demand for substances and the new substances that affects the mind (psychoactive), which indicates a "little change" in the total global production, use and health effects of illicit drugs. The UNODC estimated in 2013 that, 246 million people had use illicit drugs, accounting for a rise of 3 million people from the past year. However, it stated that the use of illicit drug is unchanging and this rise is attributed to global population growth. Meanwhile, only one person from every six illicit drug users has access to treatment and there were an estimated number of 187,000 drug-related losses in the year 2013 (UNODC, 2013).

As cited in Donkor (2015), an article by Ametepey reported that there are almost 14-22 million people abusing cannabis, 16-34 thousand opiates addicts and 64-83 thousand users of cocaine among the population aged 15-64 in the West Africa Region in the year 2008. The rate of use and abuse of the drugs by the youth is higher than the world average rate especially for the cannabis use which went up by 12% for users aged 15-64. The harm that are caused by drug abuse and addiction leads to overburdened justice system, strained health care system, loss of productivity as well as environmental destruction (Donkor, 2015).

Illicit drug use has turn to be an important public health worry in Ghana, particularly among senior high school students in Sunyani West District. Again as cited in Donkor (2015) drug consumption among Ghanaian youth is on the rise. In the past, problem of

illicit drug use was highly concentrated among the youths living in the urban centres of Ghana, but in recent times the issue of illicit drug use and abuse has become a national problem which has spread to the rural settings. The consumption rate of drugs such as marijuana and cocaine has been increasing steadily whiles the trade in illegal drugs has become rife in almost every part of the country and the target audience has been the youth.

The extent and its characteristics vary from region to region. According to the World Drug Report (2015), "in 2013 Ghana recorded the seizure of 901 kg of cocaine against 290 kg reported by Nigeria and 20 kg by Côte d'Ivoire. This occurred amidst the lowest levels of coca bush cultivation since the mid-1980s: global coca cultivation fell from 60,400 hectares in 2012 to 49,800 hectares". The greatest and regularly used illicit drugs in the senior high schools by students these days are the cannabis and alcohol. Illicit drug misuse has become one of the leading causes of preventable deaths, illness and injury. Some other common illicit drugs are inhalants, heroin, cocaine etc. The illicit drug use issue in Ghana is not different from other countries in the world though there may be changes in the magnitude of usage or abuse. The existence of illicit drug use in Ghana is difficult to tell the time it actually became a problem. Currently, those in senior high schools are the group who are more involved in illicit drug use.

Illicit drug use among adolescents in school is becoming a big concern to the public. In 2014, TODAY newspaper revealed that, the story of illicit drugs use in Ghana is not different through the surveys they did and join together with figures they obtained from Narcotics Control Board (2014) shows that around fifty thousand (50,000) individuals in the country, predominantly the adolescence are hooked on to drug use. The report further

explained that among the total figure of 50,000 drug users in the country, 35,000 remained students from the first /second cycle schools and tertiary schools who are of the age 12 to 35years (NACOB, 2014).

There was estimation that around 1.25 million people in Ghana in 2012 had drug addiction problem, mostly marijuana (Drug News Africa, 2012). The illicit drugs use in our country today is now part of the major reasons why mental disease is high amongst the adolescence especially those in senior high schools as majority of them are in the psychiatric hospitals, the rest at prayer camp and on the streets.

The department of psychiatric unit in Sunyani regional hospital out- patient monthly morbidity returns (OMMR) reports for the year 2012 shows that out of a total of 2,284 patients who accessed the unit, 596 representing 26% were alcohol and drug use related cases. This shows clearly that illicit drug use is in an ascendency and therefore something must be done to deal with this harm and there is the need for each and every one to involve in the campaign against illicit drug use that is destroying the future of the youth of which those in senior high schools also form part.

Despite the fact that anecdotal evidence points to a high incidence of drug abuse among young people, there has been to-date no vigorous empirical study to ascertain the magnitude of the problem. Such data are needed for effective planning of innovative interventions and also for policies. The purpose of this study therefore is to measure the magnitude of use, explore the factors related to illicit drug use among in- school adolescents and their effects on student academic performance.

1.3 Justifications of the study

Today illicit drug use is a major problem in Sunyani- West District and Ghana as a whole. Illicit drug use is a disquieting problem among the growing population in Sunyani-West District especially those in senior high schools. Those in senior high schools in Sunyani–West District have not received much levels of research attention on their health risks behaviour. Among these risks is what the illicit drug use can do to their health. The study seeks to assess the prevalence, associating factors and effects of illicit drug use on academic performance among senior high school students. The study will help educating students especially those in senior high school on the associating factors of illicit drug use. It will assist the public health unit in the district in dealing with the youth of which the senior high school students are part on illicit drug use. The study will inform programme officers and implementers on the effects of illicit drug use on academic performance and appropriate recommendations will be made in an effort to overcome the prevalence of illicit drug use in Sunyani West District and the nation as a whole.

1.4 Research Questions

1. What is the prevalence of illicit drug use among senior high school students in the Sunyani West District?

2. What is the knowledge level of the senior high school students on the illicit drugs?

3. What are the factors associated to illicit drug use among senior high school students in the Sunyani West District?

4. What are the effects of illicit drugs use on academic performance of senior high school students in Sunyani West District?

1.5 Research Objectives

The main objective of the study is to find the use of illicit drugs and their effects on academic performance among senior high school students in Sunyani West District. The specific objectives are as follows:

1. To determine the prevalence of illicit drug use among senior high school students in the   Sunyani West District.

2. To assess the knowledge level of the senior high school students on illicit drugs in Sunyani West District.

3. To determine the factors associated with illicit drug use among senior high school students in Sunyani West District.

4. To assess the effects of illicit drugs use on academic performance of senior high school students in the Sunyani West District.

1.6 Conceptual Frame Work

This refers to set of concepts that are linked and described by broad generalization which are formulated by the researcher or an individual for a purpose. The study was guided by the assumption that illicit drug use by senior high school students has direct influence on academic performance. Illicit drug use negatively affects student's academic performance as shown in figure below.

Figure 1 indicates that illicit drug use may have impact on academic performance negatively among senior high school students. Poor academic performance is likely to happen when students involve themselves in illicit drug use. When a student uses illicit drugs, it could lead to extreme cases of absenteeism, getting low results in school, suspension, failing to do assignment, decreased the person ability to reason and dropping out of school.

<div style="writing-mode: vertical-rl">UNIVERSITY FOR DEVELOPMENT STUDIES</div>

ASSOCIATING FACTORS

- Environmental factors.
- Broken Homes
- Parental neglect
- Family history of illicit drug use
- Peer Pressure
-Social inequalities
- Access to illicit drugs
- Media influence

ILLICIT DRUG USE

EFFECTS OF ILLICIT DRUG USE ON ACCADEMIC PERFORMANCE

- Droup out of school
- Poor academic performance
- Absenteeism
- Declining retention rate
- Decrease ability to concentrate
- Mental illness
- Poor reputation
- Truancy

Source: Author's construct, 2019

Figure 1: Relationship between factors associated with illicit drug use and its effects on academic performance.

Illicit drugs use is likely to make the students have negative attitude towards learning, failing to do home works and reduced the ability to think thereby having an influence on academic performance. Illicit drug use may also interfere with student's discipline which

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leads to loss of time for studies where the person will be doing punishment or will be under suspension. Illicit drug causes a decrease in attention of the user towards studies. This is because students are not motivated to set objectives or goals, with no wish to thrive in everything. Students using illicit drugs at times go to school late and they lack the zeal hence its negative influence on their academic performance.

In fact, there are a lot of different factors that influence a person to involve in illicit drug use and all these factors have significant role to play in the development of illicit drug use issues. Below shows some of the associating factors of illicit drug use or key contributors to illicit drug use: genetics, environment, trauma, mental illness, personality, influence of peers etc.

1.6.1 Theoretical framework

It is generally accepted that a good research work must both be grounded in and based on scientific theory. Stokes (2007), puts it that, ''theories are tools to help us think and we need to find a theoretical paradigm which will be useful and help us to investigate our chosen object of analysis''. Hence, the social cognitive/learning theory is used for a sound basis for this scholarly work.

Social learning theory talks about the reasoning and emotional parts of a person's conduct. This theory explains learning in relations to the behavioral, the environmental and the personal factors (Bandura, 1997). It also describes how some behaviour patterns are acquired and maintain by individual from the environment in which he or she lives in. The theory again explain that a person cognitive which is the mind is the active force that builds or make one's reality and what the person is as human (Bandura 2001).

Bandura (1986) explains that adolescents acquire their beliefs from their role models, parents and their close friends. The theory suggest that adolescents who are exposed to friends and parents who use drugs especially illicit drugs will shape and influence them to experiment with such drugs. The theory again sugessted that, role models contribute strongly to adolescent use of alcoholic drinks and illicit drugs. Adolescents observe their role models experimenting with drugs have the tendency to directly influence and shape their outcome expectation and their beliefs about the most immediate and likely social, personal and psychological consequences.

Having parents who use alcohol or friends who are marijuana smokers in order to smooth social interactions will influence adolescent views on the effects of the substance use. For example, adolescent who observes his or her peers buying and inhaling or smoking marijuana, cigarettes and other illicit drugs provide them with the nescessary skills and knowelledge to get and use them. Again marijuana use is more common amongst the youths who have talked to friends about using illicit drugs, friends who have positive attitude towards marijuana use.

Environmental factors can influence person behaviour and this can either be social or physical environment. Social environment has to do with someone who models from friends, family member or colleagues. A person may model from people who use illicit drugs. The physical setting of the environment provides the basis for understanding behaviours among individuals. Someone may watch others and learn their behaviours and try to put that particular behaviour into practice, for example the use of illicit drugs. This situation is referred to as reasoning or mental representation of the environment that affects one's behaviour. Personal factors mean that human beings are capable of

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exercising control over their own lives. This suggests that, human beings can regulate their selves, are proactive, self-reflective, self-organizing and have control over things that have influence on their own doings to bring the results they want. This is applicable to the use of illicit drugs where a person uses his or her mental processes as a point of reference to either use it or faces the consequences and thus having self-direction. Following this perspective, I seek to find out how adolescents acquire knowledge about illicit drugs, how peer pressure influences choices made, and how other social and environmental factors play out in decision making regarding use of illicit drugs.

1.7 Limitation of the study

In every research limitations to the study are inevitable. One of the limitations of this study that cannot be ignored was time constraint.

The issue of illicit drug use is confidential and people feel shy to talk about. The chances or possibility of the respondents given wrong answers to the questions could not be ruled out.

The study was only limited to form two and form three students and therefore the study could not hold true for senior high school students in all levels of study.

The time limit for the administering of the questionnaires was short. Thus there was much pressure during the questionnaires administration because the form three students were writing their WASSEC examination and even some of them were about to leave their schools since they were done with their exams.

Lack of co-operation from some school authorities as well as the targets population also limited this study. Some of the respondents did not even complete their questionnaires while others did not return their questionnaires to the researcher.

1.8 Dissemination of results

The results of the study would be made available and accessible to especially the Sunyani-West Education Directorate and the academic community for the implementation of the recommendations and it will also serve as a source of literature for further studies. The findings are also to be presented at meetings, seminars, conferences and events as and when necessary in other that it benefits all stakeholders.

1.9 Organization of chapters

This report has been organized into six chapters. Chapter One includes background of the study, statement of the problem, research objectives and research questions, justifications of the study, conceptual frame work, theoretical frame work and dissemination of results. The second chapter is made up of introduction to illicit drugs, definition of illicit drugs, prevalence of illicit drug use, knowledge level of students on commonly illicit drugs, factors associated with illicit drug use and effects of illicit drug use on academic performance.

Chapter Three of this thesis is about the study area, study sites, study type, study method, study design, study population, sample and sample size, independents and dependent variable, sampling, tools and instruments, data collection procedure, pre-testing, validity and reliability of instrument, data entry and analysis, data cleaning, management and security.

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Chapter Four focuses on presentation and analysis of demographic characteristics, knowledge about illicit drugs and factors associated with illicit drug. The fifth chapter is about discussion of results and Chapter Six which is the last chapter look at the summary, conclusion and recommendation aspect of this study.

CHAPTER TWO

LITERATURE REVIEW

This chapter reviews all the relevant literature related to this study from several sources including journals, articles, textbooks, and internet source. It gives overviews of illicit drug use, associating factors and the effects on its use among senior high school students (S.H.S). It comprises of theoretical data as well as data from the works that has been done in relation to the topic under study. The review was carried out under the following themes: definition of illicit drugs, prevalence of illicit drugs use among S.H.S students, knowledge level of S.H.S students on common illicit drug use, associating factors of illicit drug use and the effects of illicit drug use on students' academic performance.

2.1 Introduction to illicit drugs.

Illicit drug usage has turned out to be widespread nowadays than any other time in Ghana. Adolescents are using drugs that alter their mental, emotional and social functioning. In educational organizations, illicit drug usage can reduce student's attentiveness in class, cause the user not attending classes and failing in examination leading to poor academic performance. Statistics from the Narcotic Control Board of Ghana shows that around 70% of the adolescence who are in the first and second cycle schools are face with the danger of drugs misuse in Ghana.

"The huge volumes of cases that are criminal and are examined by forensic science laboratories are represented by illicit drugs. Illicit drugs can occur naturally as in the case of marijuana or cocaine or they can be manufactured from naturally occurring substances such as in the case of heroin or they can be totally synthetic as in the case of amphetamines and most other prescription drugs. Illicit drugs are being classified base on

their major effects. We have four major types: "stimulants, depressants, narcotics, and hallucinogens" (Houck & Jay 2015).

Also according to Workplace Testing.com (2016), illicit drugs may be divided into two main groups. The first group comprises of drugs that are illegal to process, trade and use. Methamphetamine, heroin and cocaine are the only drugs in the first group. The group two contains drugs which are permitted by law to process, trade and use when it has been authorized or prescribed by a doctor, but the one for whom the drugs have been prescribed to may misuse or abuse them or are used by persons who are not under the care of any prescribing doctor and might have got illicit drugs through any means that are illegal. The group two drugs are the prescription pain medications and prescription sedatives (Workplace Testing.com 2016).

According to International Encyclopedia of the Social & Behavioral Sciences (2001),illegal drugs that are commonly used include central nervous system stimulants (such as crack cocaine, cocaine and amphetamines), central nervous system inhibitors (opiates, heroin and sedative-hypnotics such as benzodiazepines or barbiturates), or hallucinogens such as marijuana or hashish, LSD and phencyclidine.

Dasgupta (2017) reports that, illegal drugs use has become a major public health concern worldwide, this is because there is an estimated 230 million people worldwide (approximately 5% of world populations) had use an illegal drug at least once in their life time. The number of people who habitually use illicit drugs worldwide is approximately 27 million (0.6% of the global number of people). Approximately 15.9 million people of the world total population usually inject illicit drugs and among this number, an estimated

3 million people of that number may become HIV positive. According to the World Health Organization's report, approximately half of the total world population drinks alcohol.

"Reliable evaluative reports of the significance of school-based educational programs in Western industrialized countries exist. They indicate that the best results are to be achieved when locally administered interactive educational programs are used to improve life skills, increase participation in prosocial non-school activities or augment resistance skills to social influences. While there are community or family interventions that look promising, more evaluation research is still needed before conclusions about their value can be drawn" (Science Direct.com, 2016).

A report by the Department of State US has said, Ghana still remains the transit point for illicit drugs, especially the South American cocaine and Southwest Asian heroin bound for European and North American markets. A Report by the International Narcotics Control Strategy reviewed that Marijuana is the major illegal drug consumed and traded in and out of this country with an increasing amount especially to Spain (Odonkor, 2016).

Again, the report cited an incident that happened on the 22nd August, 2016, where the Customs Division of the Ghana Revenue Authority seized cannabis of more than two metric tons at Kpedze, which is close to Ho in the Volta Region of Ghana. Even though, the country do not have any current data and statistics about cannabis growing in the country however, some local law enforcement officers in the country also have confidence that cannabis growing rose in the year 2016 the report stated (Odonkor, 2016).

2.2 Definition

It is necessary to understand and differentiate between addiction and dependency as a lot of individuals try to use these words synonymously (DSM-5, 2013). American society of addiction medicine (ASAM, 2011) defines addiction as "a primary, chronic disease of brain reward, motivation, memory and related circuitry." NIDA (2011) defines addiction as "a chronic, often relapsing brain disease that causes compulsive drug seeking and use despite harmful consequences to the addicted individual and those around him or her". Whenever a substance is used for a condition which it is not recommended by manufacturer, it is considered as drug misuse.

According to the American Psychiatric Association (2013), which issued the DSM- 5, "the major change with substance abuse and alcohol abuse and dependence disorders has been the removal of the distinction between "abuse," "addiction," and "dependence." In addition, the current version of the DSM does not include the term "addiction." The DSM-5 now combines the categories of substance abuse and substance dependence into a single disorder measured on a continuum from mild to severe" (APA, 2013).

Illegal substances are drugs which can stimulate like cocaine and amphetamines or inhibit the central nervous system of the user or can cause mood-altering effects like marijuana or LSD to the effect that their usage has been banned worldwide (International Encyclopedia of the Social & Behavioral Sciences, 2001).

The United Nation International Drug Control Programme (UNIDCP, 2013) asserted that drugs are chemicals that have effects on the capacity of how someone thinks, thereby making the person to do things that are irrational. In other words what they do after

taking the drug is not based on logical reasons or clear thinking (UNIDCP, 2013). The word drug" or "substance as used in this context refers to any chemical that changes one's perception, mood or cognitive behaviour when the substance is injected, smoked, swallowed, drunk, inhaled in powdered or vapour form (WHO, 2014).

There are different methods adopted by substance users to take in the drugs. Some of these methods include smoking, inhaling, injecting, ingesting and others. The method of how a drug enters the user's body impacts greatly on how the substance affects the person. For instance, through injection the substance moves directly to the bloodstream whiles ingestion of drug requires the substance to pass through the digestive system and this leads to the impact of drug on the body. Smoking is the most frequently method used and the most dangerous delivery drug system used by many substance users. Drugs commonly smoked are marijuana and tobacco. The dose of these smoked drugs material cannot be quantified. Smoking causes the interaction of many components and degradation products along with the associated tars in the product (Mensah, 2016)

Illicit drug use involves the use of non-medical varieties of substances which are banned and also against the global laws. These substances include cocaine, heroin, amphetamine-type stimulants, cannabis, and other opioids. Illicit drug use and misuse has become a major global worry over the years.

2.3 Prevalence of illicit drug use among senior high school students.

Prevalence is a measure of how many drug users are there in a particular country or community and by what means are they spread among the people. This measure is useful

in measuring whether existing responses match the scale of the problem and whether they are directed at the relevant sections of the population.

Incidence on the other hand is a measure of the rate at which people use drugs for the first time. It is useful for targeting prevention activities and monitoring recruitment of new users, as required by the EU drugs strategy and action plan. Information on circumstances associated with incidence and changes in it are particularly relevant to prevention work.

A study by Molinaro et al. (2011) reveals that illicit drug use is present and possibly becoming greater widespread among Italian high school learners of which cannabis use still remains five times widespread than any other illicit drugs. It also revealed that boys are more likely to be using illicit drugs than girls.

Adolescent girls abuse drugs and alcohol just as much if not more than boys. Girls involve in cigarette smoking more than boys and they have caught up with boys in abuse of illicit drugs and alcohol. They tend to use drugs for reasons like the desire to lose weight (Corey, 2006). Again Cotto et al. (2010) revealed that girls have surpasses boys when it comes to the use of alcohol and nonmedical use of psychotherapeutics substances such as stimulants, tranquilizers and sedatives. Substance intakes also show gradual changes by time, probably moderated by political, cultural and economic factors like changing in the laws and unpredictability of market prices. Upon all the attentions from lawmakers and social communication attempts by numerous governments in the last 10 years, the prevalence of drug use was remarkably constant particularly for the most frequently use drugs such as cannabis and cocaine, with a reduction in heroin

overbalanced by a clear rise in hallucinogenic and stimulant substance use (Molinaro et al., 2011).

According to Egerton (2015), illicit drugs use has increased in the recent years. A report by the researcher shows the main world trend of illicit drug use is the growing accessibility of different forms of substances. Another report released by United Nations Drugs Control Programme (2004) says 4.8% of the people in the world use drugs, however most difficult situation is that those who are mostly hooked are the youth. Drug use in China has gone up whiles the age of those who are new users is going down. A study conducted in Czech Republic stated that adolescence between 15-18 years of age were new drug users which constitute 37%. Drug use in particular the use of heroin remains a serious challenge in Egypt. About 6% of students who gained admission into secondary schools and were sampled for the survey in Egypt admitted that they have experiment with drugs before. A report in Pakistan indicated the number of people who begun the use of heroin at the age of 15-20 years had doubled. It has been noted that the role Africa's play in the world drug supply chain is rising. Africa has been noted to be the 2nd major continents for cannabis manufacturing, trading and usage resulting in 26% of world seizures of this drug in 2001 (UNODC, 2004).

There is a report that revealed that, the drug use in Kenya has tend to be widespread than any other times (NACADA, 2010). Those who are involved in the drug use are students in the senior high schools, tertiary colleges and universities. Again, the same report shows the usage of these drugs has move at a fastest rate and has spread to all portion of the nation. Drug use can be trace back to pre-colonial times where alcohol and other drugs were used and consumed as part of traditions of the communities. The communities

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had ethics and values that strictly guided the use of drugs. The consumption of alcohol, tobacco and other drugs was an honor generally given to the elders, usually the male elders. Traditions and taboos were upheld to discourage the misuse of drugs. Drug use has been at the lowest level in 2012/13 since the introduction of the UK survey. The numbers of school children who are 11 - 15 years of age and had use illicit drugs during the past year in UK survey was 11% in 2013 as compared to 12% in the year 2012. A Survey in Northern Ireland also reported a similar proportion of pupils who had ever use drugs being 10.5% were nearly five points different from the previous survey. In 2009, approximately 200 million adults globally had used illicit drugs such as cannabis, amphetamines, cocaine, opioids and heroin (GPIDUC, 2012).

The U.S. Department of Health and Human Services (2010) asserted that, the use of illicit drugs among the youth is found to be lower than tobacco and alcohol use. Adolescence and young adults that are at the age of 12 to 25years are more possible to be users of illegal drugs than the grown up found to be 26years and older. Studies have reported that the extent to which adolescent dislike marijuana use and perceive harm related to its consumption has gone down recently. "Changes in these beliefs and attitudes can be associated with driving changes in use" (Johnston et al., 2012). Marijuana is one of the illicit drugs that are most widely used among the youth and many of the youth has reported that it is the most highly accessible among all the illicit drugs. In 2009, an estimated of 125-203 million people worldwide consumed cannabis (New Zealand Police Illicit Drug Strategy, 2010). This estimation corresponds to the global incidence rate of 2.8% - 4.5% yearly. In relations to the incidence of illicit drugs, cannabis takes the lead, next is amphetamine-type stimulants (including methamphetamine, amphetamine and

ecstasy), followed by opioids (such as opium, heroin and prescription opioids) and the last is cocaine yearly. There were decrease trends in the use of heroin and cocaine in the main regions of consumption, due to onset of the use of synthetic drug.

According to 2016 NDSHS, 8.5 million (43%) of the individuals aged 14 years and above in Australia have used at least illicit drug at a particular point in time. This includes cannabis, ecstasy, meth/amphetamine, cocaine, hallucinogens, inhalants, heroin, ketamine, gammahydroxybutyrate (popularly called GHB), synthetic cannabinoids, new and emerging psychoactive substances and the misuse of pharmaceuticals such as painkillers/analgesics and opioids, tranquillisers/sleeping pills, steroids and methadone or buprenorphine (Australian Institute of Health and Welfare, 2018).

In the past month, almost 3.1 million (16%) individuals had consumed an illegal drug. It comprises of the use of drugs for purposes not meant to be medical. Whiles the number of people consuming illegal drugs in Australia was greater in 2007, there has not been any clear trend since the year 2001. The proportion of individuals consuming illicit drugs has moved from around 2.6 million during 2001 to 3.1 million during 2016 (AIHW, 2018).

Cocaine use is the second frequently illegal drug with a percentage of 2.5 of the people aged 14 years and above reporting it's used in Australia in the year 2016. There was rise in the number of persons who were consuming cocaine from 1% in the year 2004. In 2001 the number of cocaine users increases to its maximum level in Australia. The percentage of individuals consuming cocaine at a particular point in time increases from 8.1% in the year 2013 to 9.0% in the year 2016 and this shows a double increase since the year 2001 (AIHW, 2018). Most peoples who consume cocaine do so infrequently, with

almost 2 in every 3 users using it only once or twice a year. Among those aged 14 - 29 years in 2016, the normal age of first-time users is 21years and this has remained constant over the past period. The normal age of first users of other illegal drugs is older as in cannabis (17 years) and ecstasy (19 years). Throughout the age categories, the normal age of current users is around 2 years during the period of 2004 to 2016 (AIHW, 2018).

U.S. Department of Health and Human Services (2010) stated that painkillers were part of the frequently used illicit drugs by adolescent after tobacco, marijuana and alcohol. Opioids and stimulants are the most famous prescription illicit drugs. "Opioids, which include pain relievers such as OxyContin and Vicodin are central nervous system depressants that are often used to treat anxiety and sleep disorders.

Report shows that most people used drugs for the first time when they were teenagers. In 2013, the new users of illicit drugs were more than 2.8 million. It was about seven thousand, eight hundred new illicit drug consumers per day. More than half of the number representing 54.1% was below the age of 18 years (Agency for Healthcare Research and Quality 2010). AHRQ (2010), further revealed that over half of new users of illicit drugs start with marijuana, next to it are prescription pain relievers, followed by inhalants which is the most common amongst younger teenagers.

Many at times, the use of school survey is to show a particular drug use and its associated influences between the school pupils. A survey concluded that around 25 % of school children between the ages of 15 –16 years had tried illicit drugs. At this age, drugs are more likely to have influence on the school children. A survey that covers wide age groups will perhaps show a small level of drugs experienced around the age of 11 or 12

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years, this can increase to above 40% by the time they get to 18years. This group lifetime incidence can be helpful since the age gradient shows the rate at which drug experience rises at their teenage years

Australian researchers Degenhardt and Hall (2012) revealed in their study that, countries with high income and drug producing regions of poor nations have the highest burden of disease, which represents a health toll equal to alcohol abuse but less than that of disease caused by tobacco use. Although the global prevalence is high, the study indicated that illicit drug use remains hugely underestimated due to the inherent difficulty in data gathering particularly with respect to use of hallucinogenic agents and inhalants or the nonmedical use of anabolic steroids or benzodiazepines such as diazepam (i.e. Valium, Roche) (Degenhardt & Hall, 2012). There is the need for better data concerning the prevalence or existence of many illegal drug used and the harm that their uses cause globally. The need for this is very crucial especially in high-income nations with high rates of illegal drug use, also in low and middle-income nations that are closer to illegal drug manufacturing places (Degenhardt & Hall 2012).

The intake of alcohol which is being seen as a sign of maturity is now attractive to the youth. Almost all students internationally reported they have experimented with alcohol before the completion of high school with over third reporting on the dangerous associated with it use. Because of this, alcohol use amongst the youth has increased significantly.

The consequences such as social, health, behavioural and psychological emanating from alcohol consumption among the youth cannot be over looked. It is becoming a trend for almost all the substances. The earlier people start drinking, the more likely they become

dependent later in life and people who started using alcohol in their teenage years are more likely to experience alcohol-related injuries (Moure-Rodríguez et al., 2014).

A survey was conducted to find out the use of psychoactive substances among senior high and students in middle school in Morocco, cannabis consumption recorded the highest prevalence of 8.1% among the various illicit drugs studied as cited in (Mensah, 2016). In Ghana, a large proportion of mental illness among the youth usually emanate from marijuana use (Mensah, 2016).

2.4 Knowledge level of students on the common illicit drugs.

In a study testing the knowledge level of students, Blumenson & Nilsen (2009) noted in their study that there is a clear lack of knowledge for a majority of the drugs studied. Cannabis was correctly classified as a Schedule I drug by only 47.5% of respondents in their survey, as Ketamine was classified as Schedule III drug. With the more recent media attention on cannabis and its legalized status and medically-accepted usage in some states, knowing how to classify the drug on a federal level may have proven difficult for some students, accounting for more than half of the surveyed population choosing the wrong category. Furthermore, considering these stances of the state on accepted cannabis use, it may seem bizarre for participants to think of placing cannabis "in a graver category than cocaine and on at par with heroin". Such a finding on split student responses could very well illustrate confusion over differing state and federal laws, as well as a variety of differing medical marijuana legislation that is continually evolving. As some state laws allow for medical use of cannabis, these laws could be creating a new idea that cannabis is a less dangerous drug and more socially-accepted than federal laws would have the population believe (Mikos, 2009).

Next in the survey, participants were assessed on their knowledge of federal minimum and maximum sentencing guidelines with regard to possession of the drugs listed in that study. Incorrect responses were far more common than correct responses. The drug with the highest incorrect response rate in both categories of minimum and maximum sentencing was Inhalants. Because Inhalants were the only legal drug listed in the survey, it was likely that participants were unaware of its federal-legalized status and therefore chose an answer related to punishment. From those findings, it could be presumed that federal sentencing standards are not well-known, at least in the case of the student population observed in that study. Such results may point to a lack of education regarding federal drug sentencing guidelines either due to institutions' failure to teach on the subject or lack of informing oneself on federal law.

In another study by the ministry of health in New Zealand, respondents were asked to recognize any illicit drugs that they know. The most frequently identified illicit drugs include cannabis and methamphetamine (Ministry of health New Zealand, 2009). The study indicated there was high level of knowledge of Benzylpiperazine and also among those with experience in illicit drugs use; knowledge of opiates was also high. Participant's views on the potential harm of the different illicit drugs were different. Among the drugs cannabis was considered to be a 'soft' and 'natural' drug which is commonly consumed through all the social classes. Using cannabis in combination with alcohol, cannabis usage is commonly taken to be acceptable behaviour. A lot of the respondents considered using cannabis was a typical part of the people growing up in New Zealand of which they have little knowledge of the effects and most of them will come from the experience with limited or no harm (Ministry of health New Zealand,

2009). Cannabis was considered to be readily available by the respondents from wide sources including friends, siblings and parents. Participants indicated that cannabis use has the possibility to relieve the user from pain, stress management and relaxation or as a sleeping aid. They considered the damage cannabis use caused to be associated with the individual user and their immediate family. A lot of them linked this greater harm to alcohol such as drink-driving. However, is not to mention that participants know that cannabis does not have any bad effects and many of them indicated that cannabis has similar health dangers as tobacco and that those likely to get mental disease should be prevented from taking it.

Contrary, the respondents measured methamphetamine to be a ''hard'' and ''dangerous'' drug related to serious damages such as personality changes, addiction, poor health, mental illness, violence, gangs and criminal activity. However, those respondents with knowledge on illicit drugs considered methamphetamine to be the ''drug of choice'' for various drug users. They also considered the dangers associated with it use as just a portion of the appeal. A lot of the respondents were also concerned about how the drugs were produced using potential dangerous elements and questioned about the kind of drug that could be developed to substitute it. Participants indicated a number of other illicit drugs including heroin, cocaine, LSD, ecstasy and solvents but their level of recall and experience was significantly less than those drugs which was in the main groupings. Participants again indicated social trends and some thought boys that take parts in races uses Benzylpiperazine, young people use solvents, those with more income always consume cocaine, gangs are at times associated to methamphetamine use, and cannabis usage is more frequent between Maori.

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2.5 Factors associated with illicit drug use among senior high school students

Most people often wonder about what makes people more susceptible to be abusing illicit drugs or alcohol than others drugs. The progress of certain situations, conditions and predisposing factors push some people towards illicit drug use and misuse while others try to work through the same challenges in ways that help them to avoid the use of illicit drugs or alcohol.

There is a very fine line between substance abuse and dependence on drugs or alcohol. Substance abuse can be certainly most problematic because it can lead a person to suffer serious consequences as a result of using the drugs. The difference between substance abuse and dependency is that the person continues to use the drug despite having persistent social or interpersonal problems caused by the drug.

2.5.1 Biological factors (The genetic basis for drug use)

The fact that a person is faced with environmental factors that promote illicit drug use does not mean that he or she is doomed to use illicit drugs. Some of the individuals who decide to use drugs dabble in it only once and put an end to it when their first experience is bad. However, in the presence of favourable factors people beginning to experiment with drug can cause the user to quickly get out of control.

As cited by Mensah (2016), the biological factors of a person can push him or her into the initiation of substance use. The brain of the adolescents (specially the prefrontal cortex and the reward pathways) is still in the process of developing. At this stage they show increase in proclivity behaviour towards taking risk which includes the risk of smoking, drinking or using other drugs.

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The use of drugs has a genetic component according to W.H.O, (1994). It has been noted that, those with genetic predisposing factors to drug use like those with direct family members who have a history of drug use are at an increased risk of experimenting with drugs (World Drug Report, 2011). The implication is that the differences that exist among individuals at the neurobiological level affect the person's vulnerability to illicit drug use. As such not everyone will be dependent on drug. The common evidence for the genetic influence of drug use especially illicit drug comes from twin studies. Research that uses family and adoption-based designs has also shown an outcome to that effect. There are biological mechanisms which causes human's variety of feelings in the brain inclusive of pleasurable sensations. Studies have showed that human's brain has a natural "pleasure pathway" which influences the brain reward. It is through this activation of pleasure pathway that a person experiences an enjoyable sense of feelings (Tam & Foo, 2012). Thus, the use of illegal drugs causes this pleasure pathway and as a result makes this pleasurable experience. Even the actual place of the pleasure pathway in our brain is yet to be discovered in our human system, it is true that everybody has this pathway and this contributes to the fact that every individual has the feeling to be hooked and dependent on drugs (Tam & Foo, 2012). Nevertheless the likelihood of someone getting involved in a particular illicit drug use is not the same for everybody.

Because of biological factors, the mechanism of activation in the pleasure pathway is the same; the intensity of activation is not the same for every individual, contributing to different individual's predisposition to drug use and abuse. Again, because of the genetic components, some people are able to gain the positive experience of drug use but not the bad experience in it, therefore this makes the total drug use experience an enjoyable one.

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It is human nature to seek for pleasant experience, therefore these individuals' seeks out for the overall pleasurable substance use experience.

The American Psychological Association (2016) stated that almost half of a person's tendency towards drug addiction can be responsible to genetic factors. The role these gene play can be complex and they can play out different role in different people but these gene have been associated with a rise in euphoric response to drugs, decline ability to respond negatively to drugs, fast response to drugs when the drugs may cause slow reactions in others and quick leap to repetitive behaviors of all sorts, i.e. an "addictive personality" (APA, 2016).

One of the above genetic factors could make the drugs little more attractive to the users and these factors could also make an addiction slightly more difficult to overcome. For individuals faced with different issues, drug use could be well influential by basic biology. Genes might not influence someone to experiment with drugs but when the person begin to do so, the person consumption of drugs can speedily get out of hand because of underlying genetic factors (Futures Palm Beach, 2017). There is no single gene responsible for someone use of illicit drugs but the genes are an influential factors that can influence a person to use drugs. This is because genes affect how we respond and experience with drugs

2.5.2 Drug addiction runs in the family

A family history of drug or alcohol addiction places an individual or a loved one at a higher risk of becoming addiction (Mayo clinic). Genetic predisposing factors do not imply that an individual with family background of drug use will definitely become addicted to drugs or alcohol. There is no single gene that has been found responsible for

influencing the passing of this characteristics or trait. However, scientists are aware of the interaction that goes on between multiple genes which raises the danger of addiction.

Other risk factors compound the presence of family history (Genetic Science Learning Center, university of Utah). The environment within the home and the family interactions all contribute towards drug dependency passed on from one generation to another generation. The main association is that persons that are grown in an environment with drug abusers are more likely to develop mentally in a way that encourages addiction. Addiction is a complex illness and the family factors leading to this affect each and every one differently.

In addition to the genetic risks, family members are faced with social, environmental and behavioral factors that will impact the tendency towards drug use and addiction. If you become sick after trying drugs or drinking alcohol, the experience may be enough to cause you to steer clear of further experimentation. Watching a loved one's life deteriorating from drugs or alcohol abuse can also be enough to turn off a potential addict. Also another person in the family may not have these reactions at all and in the absence of unpleasant experiences with illicit drugs or alcohol, the person will face a greater risk of developing his or her own addiction. As a teen, young adult or parent, it is important to take measures to avoid potential risk. Preservation of health and well-being can help a person to develop lifestyle habits that allow the person to break away from the family history and develop a life that is healthy both mentally and physically.

2.5.3 Psychological factors (Personality type)

Evidence indicates that certain personality traits are predisposing to drug use. "Personality traits of impulsiveness, sensation seeking and negative emotionality have been associated with an increased risk of using drugs" (Ibid, 2013). "Sensation seeking has been defined as a need to seek intense sensations, along with the willingness to take risks for the sake of having such experiences. Among those with sensation seeking as a personality trait, under-responsiveness to natural rewards and the need for greater stimulation has been suggested as motivation for drug taking". Individuals with high levels of impulsivity have a tendency to act quickly without forethought and planning (Ibid, 2013).

Evidence by Samo et al. (2013) reveals that not giving forethought and inhibitory control over behavioural impulses may play a role in influencing continuous use of drug. "Longitudinal studies have found that impulsivity in childhood predicts experimentation with drugs in later adolescence, early adulthood and scores on measures of negative emotionality have also been associated with future drug use" (Samo et al., 2013). Again Samo et al. (2013), asserts that continuous usage of substances has been linked to individual behavioral, cognitive or affective variations to personality. "The social withdrawal, irritability and negative emotionality often observed among drug-dependent groups may be better attributed to drug induced anxiety and depressive syndromes" (Samo et al., 2013). Further studies have proposed diverse description for the association that exist among personality type and drug use. The personality characteristics have been recorded to have a large number of components that are heritable (Ibid, 2013).

Sometimes, the way people respond, think and react to situations can cause one to use illicit drug. For instance, some people may do things impulsively; they act on their stimulus rather than reasoning through a lot of choices available and make choices based on future consequences, effects and the benefits. Impulsivity of this nature can make people experiment with illicit drugs whiles people who are always more careful will never decide to do so.

Another example is that people who are introvert tends to have fewer positive feelings or attracted to rewards in life are more likely to use and abuse drugs. In contrast, an active people (extrovert) who have more positive feelings are less likely to be using drugs. Among the reasons for this may be those with more positive feelings and extroverted people are more sensitive to all types of rewards whether from social situations or other rewards "compete" with the positive feelings that can cause them to use drugs. Notwithstanding the above, those having low positive emotions/extroversions also have few interests in other rewards and they are more simply drawn by the effects of the drug. Another personality trait that has been linked to substance use is negative emotionality or the tendency to experience negative feelings, such as anxiety, depressed and respond poorly to stressors (Racheal, 2015).

A study by Futures (2017) reported an association among drug use and personality factors such as poor self-control and "difficult temperament". Individuals who possess the above personality factors will have fewer friends and not being able to link with others, then substances may seem like an optional way to appease their discomfort. It is sensible to mention that behavioral characteristics like this could lead to drug use and misuse (Futures, 2017).

The National Hospital Organization's Chief of Psychiatry Mitsuru Kimora asserted that an individual personality places them at a high risk of substance dependency. The combination of being a high risk seeker and possess lack of worry over possible damage that can make someone you love more susceptible to substance misuse leading to addiction. If you have a member in your family who tends to engage in other dangerous behaviors, no matter how inoffensive they may appear to be, it is good to take measures to avoid the development of the person towards experimenting with drugs or alcohol.

2.5.4 Social factors

The conditions or situations of a family in which a child passes through during childhood are associated with the use of illicit drugs (Leri et al., 2007, Ibid 2013). Apart from the genetic make- up or characteristics that are common within a family, there are ranges of family factors and conditions which have influence on illicit drug use. As explained earlier, social learning theory suggests that one of the ways by which behaviour is learnt is by copying and modelling of others. The family attitudes play a role towards illicit drug use in this regard. As well as this, a typical family relationship may also influence drug use. Evidence from studies indicates that the following family factors listed below leads to individual differences on illicit drug use: single-parent, or step families, substance use among family members, poor parent-child relationships, family conflict and poor parental supervision (NSA, 2012; UNODC/UNAIDS, 2013; Siphokazi, 2013).

We need to consider that there are other environmental factors that may influence a person to use drugs most especially illicit drugs and it is difficult to differentiate or disentangle these factors from the influence of family conditions. This is because the

families share the same environments. These confounding variables may include social inequalities and the role of peer pressure.

According to Futures Palm Beach rehabilitation center (2017), the home in which a person is born into, nurture and grow up may have great deal of impact over the person's use of drug and misuse. A study in the Archives of General Psychiatry supports this theory well with the help of a study on alcohol and drug use between genetic twins who have been natured and rose differently by different homes. The one who grew up in a home where he or she faced with difficulties like divorce, mental illness and also where substance and alcohol use were normal is more likely to become drug user and abuser when the person grew up (Futures Palm Beach, 2017). It is very possible for those that live in homes like this to cause intense stress on them and that using drugs seems to be the best approach to their solution however, it is possible that a person who grow up in this type of home is likely to normalize drug use and abuse. When the child grows up and sees siblings, parents and other family members using and abusing illicit drugs that child also learns to use and abuse it. Additionally, living in a place or in a particular environment where the use of illicit drug is very common may also contribute to ones use, abuse and addiction of drugs. People may witness their neighbours buying illicit drugs on the street and they may walk by needles, vials and other drug objects on a regular basis. Calls from drug dealers might ring out and the person might be approached by dealers on a regular basis. This behaviour can normalize drug use (illicit drugs) and make the individual feel as if the use and abuse are both common and without any harm. Furthermore, living in a crime prone zone can be very worrying and some of the people living in such vicinity may turn to depend on illicit drugs so that they can drive away

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their worries and fears. To some people, using drugs help them to get relief, fit into a particular group or society and the excitement from it can be hard to resist (Futures Palm Beach, 2017).

2.5.5 Peer influence

Whether peer influence has positive or negative impacts on a person's life relies on the quality of peer group. Drug users always want to seek admiral for something done from their age group and so they often try to persuade others to join in their behaviour as a means of seeking acceptance. Peer pressure is a major factor contributing to drug use such as illicit drugs among students. In this case, students are convinced into the use of substances by virtue of being enticed and introduced to it by their peers. For example in schools especially, students tend to be lured by friends who are into the drug use business. People who are determine not to destroy their bodies become isolated and are given provocative names such as "john or anti-so". To end all these mockery, some easily give in to the advice given by their peers who use illicit drugs. At times students are persuaded that they will be feeling high and would gain a sense of fitting into the group. As a result, they become interested to the extent of tasting such substances. This finally leads them into experimenting with illicit drugs (Njeri & Ngesu, 2014).

According to the University of Maryland Medical Center, peer pressure or influence has a definite impact on whether a person will abuse drug or not. Adolescents or teenagers are more influence by their peers.

Imaging a friend or loved ones who are addicted to or use drugs occasionally makes it likely for someone to use them. Peer influence is an important factor in the initiation of substance use especially among adolescents. Whiles some studies have revealed the fact

that a person who is more likely to use drugs is likely to choose drug user as friend, others show that the simple desire to keep up appearances with friends does contribute to start of drug use as well as avoiding the users from putting an end to illicit drug use (Beginnings Treatment Centers.com).

Peers can influences whether an individual disengages him or herself from drug use or engages in it use, (Centers for Disease Control and Prevention (CDCP, 2013; Ibid/NSDUH, 2013). It is always said adolescents experiment with drugs if their colleagues are doing so. The use of illicit drug gives the younger person the chance to be accepted in and walk with the peers and also associate themselves with the crowd and it may give them something to do when the day grows old (Future, 2017). Peers may directly or indirectly influence persons, such as offering illicit drugs or through social modelling and perceived norms respectively. Health Canada (2012) research has asserted that, adolescents who are used to have more time spending with their peers are at a high chance of increasing their risk of drug usage A study has indicated that when young people spends more than four evenings in every week going out with their friends, they are at higher risk of drug usage than youth who spend few nights out (Health Canada, 2012).

2.5.6 Social inequalities

Social inequalities refer to people who are in different socioeconomic status facing different quality of life. These differences include preventable differences in health, well-being and length of life. The usage of cannabis has found to be higher among people who live in low deprived areas than those living in urbans and cities indicating that the two groups are of different social inequalities (UNODC, 2013). This is because cannabis

users more frequently comes from less-deprived backgrounds (UNODC, 2013). Adolescents and young adults who are from poorer backgrounds have little discretionary cash to buy drugs. This suggests that there is an effect of having a lot of money on drug use at both the individual and neighborhood level (Ibid, 2013). Social deprivation turns to appear to influence the harmful use of illicit drugs.

2.5.7 Stigmatized groups

According to Drug Control in China report, groups that are stigmatized are found to be prone to more frequent, early and more problematic drug user (DCC, 2013). These authors suggest that between certain stigmatized groups, socioeconomic disparities seem to play a significant role in their stigmatization. Problems associated with drug use are usually behavioural, like poor diet and lack of exercise, associated with negative health outcomes (DCC, 2013). People who are considered susceptible include, but are not limited to young people within care institutions, sex workers, homeless populations and victims of traumatic experiences.

2.5.8 Access to drugs

Price appears to influence the use of drugs especially illicit drugs. It is believed that the addictive nature of drugs by drug users was not sensitive to any change that occur in price, but studies has indicated that drug users are reactive to changes in price (WHO, 1994; 2015, Chang et al., 2013). This estimated responsiveness to price elasticity of demand differs by drug and user type. Almost in all cases, the number of drug users, the amount they buy and the quantities of drugs used or consume goes down when the prices goes up. WHO (1994), Chang et al.(2013) have revealed that, due to the prohibition nature of drug use, the data on the price of such drugs often reported are of low quality.

When the price of a particular illicit drug is high, users tends to buy less because they can no longer afford the increase in price of that kind of drug but they buy more when the price is low. This means that price has an influence on one's ability to use or not to use illicit drug.

2.5.9 Trauma

The world is not always the best safer place where we can stay and from period to period we are at high risk of exposing to troubles which includes physical altercations, sexual abuse (rape), verbal abuse, neglect (either by parents or family members), accidents (loss of the brain), natural disasters (earth quake, flooding) and terrorism.

Experiencing any of the above can leave a permanent mark in the mind of the victims. Those who are exposed to issues of this nature may be attracted to appease their sorrow by relaying on illicit drugs. The association between these types of trauma from infancy to adult substance abuse is very clear and disturbing. The National Child Traumatic Stress Network has reported that one in every four children living in America has at least once experienced an event like this before getting to the age of 16 (Futures palm beach, 2017). An appropriate rehabilitation can aid people to process these issues so that the victims may not be interested on relaying on drugs especially illicit drugs however, victims who may not get this form of rehabilitation will be at risk of getting addictions down the line.

2.5.10 Mental Illness

Futures Palm Beach rehabilitation center (2017) shows that, the connection that exists among mental illness and drug abuse is strong. The National Alliance on Mental Illness

stating that more than half of all drug users and addicts are also having issues relating to mental illness. For some people, illicit drug use and abuse arises when they are trying to deal with the suffering and pains that are caused by mental illness, the illicit drug use causes series of event that can allows a mental illness to start and grow. There are others who have genetic tendencies which might make the user susceptible to both addiction and mental illness, even though specialists have warned that a lot of research needs to be conducted on this after which a firm conclusion can be made. All these are clear indication that mental illness appears to go hand in hand with illicit drug use and when the link is created it is hard to break without assistance.

The presence of psychological problems places someone you love at greater risk of chemical dependency according to the National Institute on Drug Abuse (NIDA). Mental health issues that have not being diagnosed can lead to self-medication with alcohol or drugs leading to an eventual dual diagnosis. Comorbidity is the term used by professionals to describe the existence of two disorders at a time, such as depression and alcoholism. One condition can lead to other one but it is also common for each disorder to add to the complications of the other disorder as well.

Many other environmental, familial and social factors can increase the scales toward addiction when a loved one suffers from mental illness. Lacks of care from family members or pressure within your family can multiple the feelings of depression or anxiety. Poor role models and bad peer pressure also increase your susceptibility. The absence of good healthcare can add to the danger of illicit drug use and dependence of a loved one to pacts with the frustrations and fear of knowing something is wrong but without knowing exactly what it is.

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There are many factors that can lead a person with underlying psychological problems or previously diagnosed mental illness to use illicit drugs. Overwhelming stress or trauma in the life of a family member can lead to the use of alcohol or drugs for escape and relief. Some people with mental illness see it that illicit drug use and abuse helps them to relieve their selves from unpleasant symptoms and side effects caused by the illness, this is a form of self-medication. Your personality or that of someone you love also plays a role in whether or not drugs or alcohol begin to look like a viable solution for relief from mental health issues.

2.5.11 Physical availability of illicit drugs

(The physical availability of drugs refers to the proximity and accessibility of a drug).

Simple reason will indicate that illicit drugs cannot be used when the drugs are not physically available in one's environments. The drug availability and accessibility is one of the factors that contribute to the increasing use of illicit drugs among senior high school students. The easy availability of these drugs has been one of the reasons why illicit substances use among the youth is high.

The extensive availability of all kinds of drugs such as alcohol, marijuana, tobacco and controlled prescription drugs in the environment all contribute to the starting and continuous use of addictive substances among young people (Mensah, 2016). Reasonably, the possibilities of people trying out with drug when it becomes accessible are easy and as a result addiction to drugs begins to increase. Therefore, availability of drugs is a problem that needs an instant consideration so that arrangements could be taken to reduce or remove the likely negative outcome.

Among the factors reported to influence illicit drug use is the accessibility of the drugs physically. "Research from the USA has suggested that the physical availability of drugs is often concentrated in neighborhoods with high levels of economic disadvantage, greater population density and high concentrations of minority residents" (Ibid/ NSDUH 2013). Levels of use were reported to be the same among those seen in the affluent areas (Ibid, 2013).

According to Tam & Foo (2012) students of today do not only misuse drugs outside their school compound alone but also in class where teaching and learning also goes on. This means that, nowadays young people particularly students do not have to wait until they close from school before they use and abuse drugs. Students do drug activities in school where everyone is supposed to attend class. Furthermore, the report stated that students these days sell drugs in school. As the students go to school every day as scheduled, a student who sells illicit drugs do not have any challenge in trading and marketing drugs to classmates or schoolmates. Hence, this has led to the rise of many drug dealers in the school compounds and availability of illicit drugs among the student's population becomes widen.

2.5.12 Psychological attractiveness and societal acceptance (Popular media)

Our famous mass media which include television, radio, film, internet and video games increases people's exposure to the lifestyles of celebrities and this form people's aspect or dimension of the societal environment. Evidence available shows that the famous mass media may influence our behaviour towards our health. Studies has indicated that the mass media presents pro-alcohol and smoking images that can influences the quantity of these drugs a person can take (Ibid/ NSDUH, 2013; EMCDDA, 2012). The advertising

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and marketing of drugs such as marijuana, cocaine, tobacco, alcohol and other forms of drugs by the popular media all contribute to the use of substances among adolescents as cited by Mensah (2016) in her thesis.

Communication and interaction among human beings has become easier due to the use of modern technology, especially the internet. It has been giving a lot of diverse assistances to human beings. However, the popular mass media has some disadvantages. In this case, particularly the internet has made it less difficult on the transaction of drugs. The sale of illicit drugs on the internet has increased the experience and then the availability of these drugs to users and those who are not users may be interested to later use and abuse drugs which become easy. The internet has become a famous tool for advertising and buying of substance which includes the herbal dietary supplements (Tam & Foo, 2012). Illicit drugs such as marijuana and ecstasy has been found to be the highest among the herbal supplements sold on the internet.

With a click on the internet, those who are using drugs for the first time and those who have used it for long time are able to have the drugs being distributed to their door step. The situation is seriously supported by persons who are involves as the one selling and the one buying have to sustain their obscurity (Tam & Foo, 2012). Furthermore, through internet the chronic drug users get to keep in contact with drug sellers to ensure continuous supply of drugs at any time.

Again through the borderless World Wide Web, most people especially the youth get to know and study more about drugs easily specifically the illicit substances. Some drug users and abusers may share their own experience in their website or webpage such as their positive experiences on particular drugs, guidelines on where to obtain a particular

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drug, the diverse methods of consuming certain drug so that different effects can be obtained, descriptions about the happiness or "high" side of it as an effect of the drug usage, information on the duration of the effects and likely side effects after using the substance.

Whiles studies into the effect of the mass media on drug usage has receive low attention by various researchers, a similar result seems to be existing (Ibid/ NSDUH, 2013). There is evidence indicating that the famous mass media has a defensive effect on drug use is lacking (Ibid/ NSDUH, 2013; EMCDDA 2012; BMA REPORT 2013).

2.5.13 Ignorance

For years now, there has being wrong information regarding the harm of illicit drug use has been numerous. People usually start using the drugs as experimentation with the idea that the drugs are not harmful. When drug is able to give the person with result that the person seeks to achieve, then the person does not take into consideration the health consequences that will come out of the drug after used. By the time the user realizes the full dangers of the drug, it will be late for the user to stop consuming it. For the user to refrain from such habit the user can experience loneliness, isolation and despair, lack of schooling and life in general becomes hard for the user to adapt to. A lot of difficulties are connected to making new lifestyle can leads a person to try drugs (Caday, 2017).

2.5.14 Polydrug use

It is the tradition of using many drugs (poly drug) at a time which is intended to augment the effect of some particular drugs (Ololade & Mndzebele, 2017). World Drug Report (2011) explains polydrug use as a way of using two or more drugs at the same period or successively. Its commonly happens among those who take it on occasions and those who

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often use the drugs (EMCDDA, 2012; Ibid, 2013). The polydrug use has three separate forms of use: The first form is about taking diverse drugs collectively to take a greater result (EMCDDA, 2012; Ibid, 2013). This kind of pattern is commonly seen among those who are users of cannabis and cocaine, who used to combine the drug and alcohol, other combination is the use of benzodiazepines together with heroin (Ibid 2013; Backmund et al., 2005), combination of alcohol or other opioids (methadone, oxycodone, etc.) and also combination of other stimulants use together with cocaine. The second form is the use of a drug in which the adverse effect of the first substance is reduced by the second drug for example as in heroin and cocaine use ("speedball"), or other opioids use together with cocaine, while in the last case there is also a different result.

The third form is seen whenever a drug is slowly replacing or being substituted by different one because of the changes that has happens in price or its accessibility since the drug is a popular one. Some of the examples are heroin replaced by oxycodone, desomorphine or other opioids or ecstasy being replaced by mephedrone or some other new psychoactive substance. Research has reported the degree of polydrug use. A research was done among fourteen (14) countries in the year 2006. In this study it was reported that 60 % of individuals who uses cocaine are polydrug users, also 42 % of them were alcohol users, 28% were cannabis users and 16 % of them uses heroin (EMCDDA, 2009). A research conducted in the South-Eastern United States shows that, 48.7 % of those on admission getting treatment were those who were polydrug users, with alcohol, cocaine and cannabis which remains the commonly polydrug being used (Kedia et al., 2007). The main dangers and effects of polydrug users, for both people who take it occasionally and drug users who are at high risk remains in serious health challenges

because of increase in poisonous and overdose that can lead to death. It is significant to recognize and understand the forms of polydrug use because its use overturns the established outline and description of the user of a particular single drug.

2.5.15 Financial capability

Apart from the easy accessibility to drugs in school compounds by students, another item that adds to the student's use of illicit drugs these days among the students is financial capability. Among the students population, many of them comes from families with good standing in terms of money, therefore giving large sum of pocket money which may not be necessary for a senior high school student can rises their comfort of gaining illicit drugs (Tam & Foo, 2012). Tam and co-worker indicated that, given huge amount of money to students remove the likelihood barrier in getting illicit drugs. A huge sum of money given to students is one of the key contributors to the increase in availability and the use of illegal substances among students nowadays.

A particular worry in recent times has been on the rise on the use of "club drug" located in various night clubs as well as dance parties. To the two researches, the main club drugs are ecstasy and methamphetamine that contain hallucinogenic elements (Tam & Foo, 2012).

It is important to take note that, the youth use drug as strategy to come down stress, which can have effects on the development of competent managing skills. For instance, Tam and co-worker (2012) in their research revealed that pressure from taking examinations, peer pressure, family influences, curiosity, all contribute to the way of using drugs. The researchers again indicated that parents, peers, and social support also play a vital part in preventing students from illicit drug use and misuse. For example,

parents who are more involved in giving limits such as where their children can go after school are more likely to have children who will not use drugs.

2.6 Effects of illicit drugs use on academic performance of senior high school students.

Drug use such as illicit drugs has become a big problem to student learning behaviour which is important component in educational practice. A study by Njeri and Ngesu revealed that 10% of the students believed that drug use and abuse leads to withdrawal disorder as the students do not communicate with them whiles 8% also thought that drug users are always violent. Their result implies that drug use by students contribute to poorly performance as the aims of education to students are over turn by behaviours such as violence and withdrawal. This makes it difficult for such students to concentrate on their academic goals or studies (Njeri & Ngesu, 2014).

Problems that emanates from illicit drugs use can have significant effect on people, relatives, communities and the society at large. The amount spend on treatment, education, service provision, enforcement and care can be quantify in terms of money however, the individual and emotional costs on the users lives as well as those around him or her cannot be quantify.

Many users of illicit drug always think that the only negative thing associated with illicit drugs use is that they are prohibited by law and attract jail terms. The truth of the matter is that, there is negative effect on academic performance as well as health challenges related to every illicit substance and some of them can be very fatal.

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The usage of illicit drugs has the ability to affect the user's body and mind by depressing the brain and the spinal cord. Drugs stimulate the nervous system of an individual making the person behave in an abnormal and in an extra ordinary manner, leading the individual to lose his or her sense of being. Illicit drug use changes the brain chemistry and influences the students' ability to make decisions and concentrate on their academic work. Furthermore, Kikuvi (2009) has indicated that illicit drugs have effect on student's attention span that greatly lowered when boredom sets in as quicker than those who do not use and abuse illicit drugs. The student will be losing interest in school activities such as extra curriculum activities like sporting. Most of the illicit substances have effect on the mind (psychoactive), affect the student's decision making process, creative thinking and the growth of the needed life and social skills are prevented from growing. Illicit drugs also distract the individual alertness of their unique ability and interest, affecting their career growth. It results in mental impairment capacity of the students and destabilizes their body function and emotion for academic performance. Illicit drug use has made students less serious about their academics as they normally stay away from classes and lessons. Illicit drug use gradually weakens the strength and power of the students to learn their books and involve in other academic activities which can lead to poor academic performance. Students who abuse and use illicit drugs experience a wide range of problems including difficulties in academics, problems related to health and poor - peer relationships. Students declining in grades, absenting themselves from class and other events increases the likelihood of these students to drop out from school are all challenges encountered with illicit substance use and misuse.

Again illicit drugs use affect the brain, resulting in major weakening of the functions carried out by the user's brain (Abot, 2005). Cognitive and behavioural problems experienced by drug users may influence their academic performance and also present obstacles to learning for their classmate (United Nations, 2005). According to NACADA (2012) survey, it was found out that 6% of the school children have ever had sex while on drugs. Assessment of this situation indicates that, during the first sexual intercourse 30% of them engage in sex unwillingly. Furthermore, almost 20 percent said they received a motivation which lured them to have sex, also 8 percent reported they took drugs before their first sexual meeting.

Having sex earlier in life impact negatively on the children self-esteem, making them more expose to harm such as early pregnancy, getting STIs and AIDS, performing poorly in academics and eventually being a school dropout.

One of the most common effects of illicit drug use is keeping up with academic responsibilities. According to National Institute on Alcohol and Alcoholism (2005), in the United State of America, about 25% of students have difficulties in academic performance due to illicit drug usage. Some of the academic difficulties emanating from drug usage are performing poorly in test, missing class, falling behind in academic performance and earning low grades. Even at times students who have not experimented with drugs especially illicit drugs may suffer academically because of their peers using the drugs. The minor effect of usage of illicit drugs includes taking care of friends who have experimented with illicit drugs and also being victims of assault which can affect work of students who do not use drugs. These consequences have a dramatic end results. This shows that significant number of students who are school dropout always do so

because the drugs they use interferes with their academics. Illicit drug use undermines the academic mission of secondary schools, colleges and universities. Illicit drug use and its effect on students' performance can lead to a decline in the overall academic performance of a school as a result schools may face declining retention rates and poor reputation.

According to Fogoros (2017), drugs are substances and are different due to their chemical properties which have effect on the body of the users in different ways. The truth is some of the substances can even modify an individual's brain and body in a way that last longer after the person has put an end to taking the drugs which changes can even be permanent.

"In the past years, fentanyl, a powerful synthetic opioid has re-emerged as a drug threat in Pennsylvania and in Philadelphia. It is reported that fentanyl-related overdose deaths were 24 and 100 for the years 2013 and 2014 respectively" (Wong et al., 2008).

Fogoros (2017) maintained the reason why illicit drugs are not backed by international law. This is because studies have shown that illicit drugs are harmful in the short term and dangerous to one's wellbeing in the long run. Whenever an individual uses illegal drugs the user is pushing his or her health, life and the capacity to live very well and thus ones educational welfare at risk too

2.6.1 The brain-altering effects of chemical dependency

The brain is a complicated organ in the body. The brain controls our body's basic roles which help us to understand, react to all what we experience and shaped our behaviour. Simply put, our brain is everything we think and feel and who we are as a person (NIDA, 2018).

Drugs use interferes with the way the neuron send, receive and process signals through neurotransmitters. Some of the illicit drugs including heroin and marijuana cause neurons due to their biological structures which imitate the natural neurotransmitters in our body. This gives way to the substances to be attached to it and cause the neurons. Although these substances imitate the users brain's own chemicals however, the drugs do not cause neurons to start in the same way as the natural neurotransmitter do and they leads to sending abnormal information via the network. Additionally, chemicals like amphetamine or the cocaine can also activate the neurons to allow unusual large amounts of natural neurotransmitters or can avoid the usual brain chemicals reprocessing by interfering with the transporters. This interrupts with the usual interaction that goes on among the neurons (National Institute on Drug Abuse, 2018).

Again the National Institute on Drug Abuse (NIDA) reported that illicit drugs affect the brain stem, the limbic system and the cerebral cortex as well. The stem of the brain is responsible for controlling life sustaining functions which includes heart rate, breathing, and sleeping, the limbic system also keeps the brain's reward circuitry and helps to control emotions and to feel happy whiles the cerebral cortex is the "thinking center" of the brain that manages problem solving, planning and decision making as well as helping people to process information provided by their senses. The more people use illicit substances, the more these drugs influences negatively on the user brain chemicals and circuitry.

The Genetics Science Learning Center (GSLC) at the University of Utah stated that, consuming illicit drugs leads to immediate changes to ones brain's synapses in the

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nervous system. In that process the drugs intend to deceive the brain cells releasing large amounts of dopamine, leading to intense happiness and excitement, pleasurable feelings which often is a great experience for the first time user. The brain is an organ that adapt to any action as quickly as possible, trying to compensate for the presence of so many dopamine receptors. As a person's brain center is pleasured and rewired by continuous drug or alcohol use, casual use of the drugs develop into a necessary character almost as if it is a natural reflex in response to the body and brain's desire for pleasurable feelings (GSLC, 2010).

Fogoros (2017), further reported on some of the effects of illicit drugs as "most abused drugs directly or indirectly target the brain's reward system by flooding the circuit with dopamine''. "Dopamine is a neurotransmitter present in regions of the brain that regulate movement, emotion, cognition, motivation, and feelings of pleasure. When drugs enter the brain, they can actually change how the brain performs its jobs. These changes are what lead to compulsive drug use, the hallmark of addiction".

Although illicit substances use may be voluntarily, these drugs have the ability to change the brain chemistry which has a damaging effects with the person's ability to take choices and can lead to compulsive craving, seeking and use. This becomes a drug dependency.

"All illicit drugs use such as nicotine, cocaine, marijuana, and others affect the brain's "reward" circuit, which is part of the limbic system. Drugs hijack this "reward" system causing unusual large amounts of dopamine to flood the system" Fogoros (2017). This flood of dopamine is what causes the "high" or euphoria associated with illicit drug use.

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2.6.2 Lack of healthy coping mechanisms and life skills

A propensity towards drug or alcohol abuse generally occurs when one faces multiple risk factors. The presence of some risk factors can lead someone to have a lack of healthy coping mechanisms or the life skills necessary to avoid experimentation with drugs or alcohol leading to addiction. Not having the skills to work through adversity in a healthy way makes one vulnerable to resorting to unhealthy coping mechanisms instead (Fogoros, 2017; GSLC, 2010).

There are risk periods for drug use which often occurs during the major transitions in children's lives. As the teen faces various challenges like social, emotional and educational in their growing years, they are simultaneously exposed to these substances and social activities that involve drug use and they are more prone to the use of substances to assist them to cope with the challenges they faced (Schlauch et al., 2013). When an individual lacks healthy coping mechanisms or life skills there is an increased risk of being influenced by the behaviours of others. A teenager who has not learned how to deal with stress in a healthy manner and has no support system in the house may be more willing to believed it when a peer suggests that using drugs or drinking alcohol can make the situation better. Moreover, if illicit substances or alcohol have been used as an acceptable family coping mechanisms, then teens within the family will faced a higher risk of relaying on drug abuse (GSLC, 2010; Fogoros, 2017).

Lack of healthy coping mechanisms, no matter what the cause place you at risk whenever an overwhelming amount of pressure occurs. Rather than realizing that there is a way to work through and overcome the problem the person affected may believe there

is only temporary escape. In an effort to overcome difficulties you and your family member will look to others for possible solutions. If the examples and role models available are not positive, it can further solidify unhealthy coping behaviours such as drug or alcohol abuse (World Drug Report, 2014; Fogoros, 2017).

2.6.3 Health and social impact of illicit drugs

This entails problems related to substance use as reflected in the demand for treatment. The level of consumption of substances can cause disorders and addiction problems that may call for the need of treatment. Examining different drugs that leads to the demand for treatment can give information about the type of drugs that has the highest adverse health effect. Treatment for users of cannabis is very noticeable and clear in Africa through the Americas and in the Oceania. Globally, people see cannabis as the least damaging illegal drug between the years 2003 and 2012. The total number of admissions for treatment of cannabis rose in Western and Central Europe from 19 per cent to 25 per cent, Eastern and South-Eastern Europe from 8 per cent to 15 per cent, Latin America and the Caribbean from 24 percent to 40 per cent and Oceania from 30 per cent to 46 per cent. Opioids dominated in the Eastern and South-Eastern Europe and Asia with high demands for treatment. In America especially, the Latin and the Caribbean the demand for treatment is associated to the use of cocaine which is a major contributing factor.

The use of amphetamine stimulants (ATS) brings large number of treatment demands in Asia and Oceania (Drug use and health consequences, 2014). World Drug Report (2014) has estimated that approximately one in six drug user's access treatment in the hospitals every year throughout the world. However, there has being no standard definition for problems drug users. The meaning of problematic drug users may differ from nation to

nation and this includes individuals that use it. There is great difference that exist among drug users in different countries with estimation of 1 out of 18 problematic drug users getting treatments in Africa solely due to cannabis use as compared to 1 out of 5 problematic drug user's getting treatment in Western and Central Europe, 1 out of 4 obtaining treatment in Oceania and 1 in every 3 user's getting treatment in North America.

2.6.4 Drug-related deaths

Drug related deaths are the most extreme forms of damage that is caused from illicit drug use. The United Nations Office on Drugs and Crime (UNODC) estimated in 2012 that, 183,000 deaths were related to drugs (from 95,000 to 226,000) leading to death rate of 40.0 (ranges from 20.8 - 49.3) deaths per one million persons aged 15-64 years (WHO, 2004). Again UNODC estimated that about 99,000 to 253,000 deaths in 2010 were recorded as a result of illegal drug use or it was between 22.0 to 55.9 deaths per million populations aged 15-64 (World Drug Report, 2012).

Recent estimation by World Drug Report (2013) shows a decrease in the number of deaths related to drug used. This decrease of the number of deaths were dominantly due to the updated results estimated from some countries like Islamic Republic of Iran, Kazakhstan and Uzbekistan which affect the global number of deaths related to drugs. However, this estimation cannot be used to interpret the situation that there is fall in the number of global deaths related to drug use. Drug overdose is one of the main contributors to the global number of drug-related deaths. Opioids such as heroin and the non-medical use of prescription opioids are the main types of drugs connected to those deaths. Risk factors for overdose includes the availability and purity of opioids; reduced

tolerance due to a recent period of abstinence such as due to treatment, incarceration or self-imposed abstinence; lack of treatment for opioid dependence and polydrug use especially involving benzodiazepines and the use of alcohol (UNODC/WHO, 2013). Deaths from opioid overdose are preventable not only by reducing opioid dependency or restricting supply but also by reversing the effects of opioids after an overdose has occurred.

Alcoholic beverages and illegal drugs use have a significant impact on the health of Australians. Both drugs accounted for 4.5% of all mortality cases in Australia in 2011 (6,660 deaths or about 1 in every 20 deaths in Australia) and this is according to the Australian Institute of Health and Welfare (2018).

The way the drug gets into the body of the user has an effect on how the chemical affects the individual. For example, injecting sends the chemical directly to the blood stream, giving more rapid impacts whiles ingesting needs the chemical to go directly to the digestive system which can delay its effect (Fogoros, 2017). In knowing this, Fogoros (2017) reveals that more than 527,000 room visit as emergency cases in each year are challenges from drug related issues from illicit substance users. Also, illicit drug offenders account for more than one-third of the growth in the state prison population and more than 80 percent of the increase in the number of federal prison inmates since 1985. More than 75 percent of domestic violence victims reports that their assailant had been drinking or using illicit drugs at the time of the incident.

2.6.5 Injuries

A lot of illness and disabilities comes from drug abuse than from any other preventable health condition. These days one in every four deaths is attributed to illicit drug use. People who live with substance dependence have a greater risk of all negative outcomes including unintended injuries, accidents, risk of domestic violence, medical problems, and death. Forty-five percent (45%) of persons with an untreated substance use syndrome will commit suicide according to Psychology Today.com. Both inhaled and intravenously injected drugs have the ability to cause substantial injury to the lungs the patterns of injury and it seriousness depends mostly on the individual agents, the concentrations and the means of administering the drug (Zander & Rassaei, 2018).

Australian Institute of Health and Welfare (AIHW) indicated Australia's deadly and non-deadly disease problem were responsible for 6.7% of disease coming from alcohol and illegal medicines. There is a comparison of 9% which is from tobacco smoking and 2.6% which is from physical inactivity. This burden is high in men than in women of which illegal drugs and alcohol accounted for 9.1% of all disease burdens in men as equated to 3.8% of all disease burdens in women (AIHW, 2018).

2.6.6 Health Problems

The effects of illegal drugs use and dependence can have a huge influence affecting a great number of organs in the human system. Drug use most especially illicit drugs can make the immune system becomes weak, increasing the immune system to be susceptible to infections and causes cardiovascular conditions ranges from abnormal heart rate to heart attacks. When you inject drugs it can leads to collapse veins, infections of the blood

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vessels and heart valves, cause nausea, vomiting, abdominal pain, cause the liver to work harder, possibly causing significant damage or liver failure, cause seizures, stroke and widespread brain damage that can have effects on all aspects of the user daily life by causing problems with memory, attention and decision-making, including sustained mental confusion and permanent brain damage (Mensah, 2016).

Illicit drug can cause global body changes such as breast development in men, dramatic fluctuations in appetite and increases body temperature, which may impact a variety of health conditions. Most of the health risks identified which are associated with substance use are related to smoke. Examples of these risks are cancer of the lungs, mouth, nose, throat, esophagus, cervix and others (Mensah, 2016). The use of illicit drugs includes the abuse of prescribed medicines which can affect the health and well-being of the users. Diseases that can be emanated from illicit drug use are stroke, cancer, hepatitis, lung disease and HIV. Some of these dangers normally happen when substances are use in large quantities or after long usage. Notwithstanding, other side effects can happens after only one or a few junctures of use (Center for Behavioral Health Statistics and Quality, 2015).

2.6.7 Behavioral Problems

Illicit drug users may experience behavioral problems such as paranoia (The user of illicit drugs become suspicious and afraid of other people), aggressiveness (The user has a quality of anger and determination that makes them ready to attack other people), hallucinations (This is an experience of seeing something that is not really there because the person has taken illicit drugs), addiction (It is the condition of taking in illicit drugs and being unable to put an end to it), impaired judgment (This is a situation where the

individual is unable to make sensible guesses about a particular situation or decision), impulsiveness (The illicit drug users do things suddenly without thinking about them carefully) and loss of self-control (Illicit drug users are not able to control their feelings or do things that their feelings want them to do).

2.6.8 Birth Defects

In the United States, approximately 4% of women who are pregnant use illegal substances like the marijuana, cocaine, ecstasy and other amphetamines and heroin. These substances can give a lot of dangers to the pregnant women and the unborn child. A lot of these substances can cause an unborn child to be born too soon or to have withdrawal symptoms, birth defects or learning and behavioural challenges (Gateway alcohol and treatment center, 2017). Additionally, illicit drugs may be prepared with impurities that may be harmful to the pregnancy.

Lastly, pregnant women who found of taking illegal substances may involve in other unhealthy behaviours which increases their pregnancy at high risk like having extreme poor nutrition or developing sexually transmitted infections.

2.6.9 Effects of marijuana

The preparation of marijuana is from shredded leaves, stem or flower bud of the cannabis plants. The methods of use can be through smoking, eating, vaporization and brewing however, majority of the users used it by smoking. The intoxicating substance or chemical in it is tetrahydrocannabinol or THC. A research by Potency Monitoring Project indicates that the normal THC content of marijuana has increase from a percentage less

than 1 in 1972 to a rise of 3 - 4 % in the year 1990s. There was a rise in the THC content to almost 13% in the year 2010.

According to National Institute on Drug Abuse, marijuana uses affect the user's attention, how the user recalls issues and the capacity to study. The impact always exists in days or weeks before its effects can wear off. It means that, those who smoke marijuana everyday are not working at their best. According to National Institute on Drug Abuse (NIDA), marijuana is the most commonly illicit drug used amongst the youths and the grown-ups. The delta-9-tetrahydrocannabinol (TCH), thus the most psychoactive chemical in marijuana always interact and binds with the cannabinoid receptors in the brain leading to the production of a mellowing and calming outcome. The brain areas which receive great level of concentrations of the cannabinoid receptors would be impacted deeply. When people start using marijuana at the teenage age it would have an important influence on the brain development, which includes decreasing the activities of the brain, giving few neural fibers to particular regions and lesser than normal hippocampus that controls learning and recall purposes.

One of the parts of the brain called hippocampus is responsible for managing short term memory which means that marijuana users can have difficulty in remembering current issues. Other parts of the mind that are being affected include cerebellum and the basal ganglia that direct coordination and involuntary muscle activities respectively. The use of marijuana decreased the user's motor skills and mood alterations. The sensory perception reduced the user's memory, having problem in reasoning ability and challenges in solving issues are all examples of the side effects.

Students who smoke marijuana tend to decline in class by getting low grades and sometimes drop out of school. A research by Northwestern Medicine in 2014 indicated that, teenagers who are uses marijuana have problems relating to the structures in the brain which appears to be shrinking showing a likelihood signs of reduction in neurons. These irregularities can remain for more than one year after the teenager has stopped experimenting with marijuana. This shows the substance has long-term impacts which seem the same as brains of schizophrenics. Long-term marijuana user at times faced with problem in reasoning clearly, establishing their views, taking multitasking and recalling of events. Sustained marijuana use can also slow reaction times in some individuals.

Again, a study published by the University of Montreal in the journal Development and Psychopathology in 2016, also reported similar results after taking research on almost 300 students. Student who began using marijuana at the age of 14 did worse on some reasoning tests whiles those who do not smoke did better. The research indicated that pot smokers are having high rate of school dropout (Lauren, 2017).

The use of marijuana impairs the user ability to form new memories and to shift focus. Delta-9-tetrahydrocannabinol (THC) changes how information is process due to the damage of the memory as a result of the use of marijuana. Youths who are frequently users of marijuana always need to compromise with the processing ability during learning of new ideas. There is problem in retaining new memories, making a lot of mistakes when taking tests and having difficulty in listening attentively (Jacobus et al., 2009).

Also study on marijuana use shows that heavy marijuana use in one's adolescent's stage and continued into adulthood can reduce the person's IQ level. Again marijuana use leads to euphoria, distorted sensory perception, increased heart rate and appetite, impaired

learning, memory; panic attacks; psychosis, frequent respiratory infections; possible mental health decline (IJDDS, 2016).

Those who support legalization of marijuana and pot smokers in a whole had confidence that consuming marijuana does not have any effects or damage on the user Smoking of wee can have harmful outcome on the heart, the brain and the lungs as well according to research.

Fogoros (2017) reported that although there has not been any confirmation on marijuana smoking and the associated risk of getting cancer. The smoke of marijuana contains three times the volume of tar as in tobacco smoke and 50% more carcinogens. In Ghana, a large proportion of mental illness among the youth originates from marijuana usage.

2.6.10 Effects of Methamphetamine

Methamphetamine is very addictive. There is huge volume of dopamine which remains in the brain synapses for a longer period of time after it has being used. This dopamine keeps the cells active, which allows the users of the drug to have a strong experience of euphoria (FNP, 2018). This type of illicit substances can be snort, smoke, inject or ingest orally. Whether the user smoke or inject methamphetamine it causes an instant intense feeling called "rush" or bliss which only lasts for a few minutes before wearing off.

Methamphetamine has effects on the brain and the central nervous system. Individuals who use this kind of illicit drugs at times suffer from hallucinations, anxiety and confusion as well. Methamphetamine destroys the user's dopamine systems that are found in the brain leading to challenges with the memory as well as learning, movement and emotional regulations issues. The health effects of users of methamphetamine are the

most obvious and noticeable among any of the frequently used illicit substances. This is due to the fact that it has a dramatic consequence on the outward appearance of long users.

"Availability of methamphetamine remains high as evidenced by its accounting for the largest percentage of drugs identified from law enforcement seizures and its declining wholesale price.   The trend for methamphetamine was up across all five of the indicators mentioned [seizures, treatment admissions, poison control reports, non-fatal ED cases, and toxicology cases] (Mary-Lynn, 2016). After a relatively short period of use, methamphetamine will begin to show on the faces of some users and begin to rot their teeth, known as "meth mouth."

 Meth is a stimulant that has an effect on the user's central nervous system. Meth is a high addictive drug. It is less expensive than the rest of the illicit drugs found on the street, that is why so many people get involved so easily (Fogoros, 2017).

2.6.11 Effects of cocaine

Cocaine is a strong and high addictive drug. Cocaine belongs to the schedule II drugs and it can be found in different forms which include powder, paste or solidify and rock-like form. Among the effects of cocaine in the brain is the rise of dopamine release. This dopamine is a neurotransmitter which plays a responsibility in the brain by registering feeling that are positive and also to reward behaviours that caused those feelings to start. When the user takes in little amounts of cocaine, the person will feel intense happiness and excitement, active, chatty, mentally alert and oversensitive to sight. Bleeding happens in the brain with balloon like bulges occurs within the walls of cerebral blood

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vessels. This has also been linked to sustained cocaine use (Randox testing services, Effects of cocaine on human body). Cocaine is a very powerful central nervous stimulant that has effects and causes large amount of dopamine in the brain. Dopamine is a neurotransmitter associated to desire and movement that is connected with the brain's reward system. Cocaine addict changes the brain's sense of reward and punishment. Accumulation of dopamine causes constant stimulation of the brain's sense of reward till the effects of the substance go off. Those who are regular users of cocaine are likely to suffer from paranoia and this can negatively influence the roles of the central nervous system leading to unexpected cardiac arrest.

Effects of cocaine may not be notice as immediately as that of methamphetamine use but they can be very damaging or harmful to the body. Although the overdose of cocaine is not common, using it for a long period of time can leads to an increase in the vulnerability of the user getting heart attack and stroke. The use of cocaine causes the central nervous system to affects the way the brain process dopamine Additional health related situations of the use of cocaine may arise depending on how the drug is used either by snorting, ingesting or injecting it (Fogoros, 2017).

2.6.12 Effects of ecstasy

Ecstasy is also called designer drug. Ecstasy or MDMA affects the brain by increasing the activities of the three neurotransmitters (the chemical messengers of brain cells) namely: serotonin, dopamine and norepinephrine. Ecstasy (MDMA) makes the brain to become significantly depleted of the neurotransmitter contributing to the negative psychological effects of the users (NIDA, 2017). Ecstasy (MDMA) affects with the way

the brain processes information and stores memories and with long term use, these cognitive issues can become more pronounced. The negative health effects associated with ecstasy usage are same to those experiences from amphetamines and cocaine use.

Serotonin is a nerve pathway that is predominantly affected by ecstasy. Serotonin is a neurotransmitter that synthesizes, stores and release by specific neurons. It involves series of regulation processes within the brain such as mood, emotions, aggression, sleep, appetite, anxiety, memory and perceptions. It has been revealed by a study conducted in Liverpool University that those who uses ecstasy often shows significant decrease in how the serotonin is being transport within their brain. This has an effect on regulating proper emotional responses to situations (University of Liverpool, 2016).

Ecstasy or MDMA can cause a lot of mental and physical challenges which are from sleeping interruption to serious anxiety, from vomiting to unclear vision and from increase in heart rate to high blood pressure. The major harm associated to the use of ecstasy is that it is always mixed with other substances which can bring unexpected effects (Fogoros 2017).

2.6.13 Effects of heroin

Heroin, like all opiates works as a central nervous system depressant. The human brain contains several opiate receptors as morphine which is natural occurring chemical. Both heroin and morphine are chemically the same to endorphins which is the body's natural painkillers. When heroin get to the user's brain, the drug is changed to morphine and binds quickly to the opioid receptors. Heroin users and addicts report of feelings of sudden pleasurable experience of feelings. The degree of the sensation is a sign of how

considerable the heroin substance has been consumed and how quickly the substance gets to user's brain which ties to the opioid receptors. Frequent use of heroin alters the physiology of the brain that causes long-term disproportions in the neuronal and hormonal systems that are difficult to overturn. Researches have indicated that the decline of the brain's white matter is as a result of heroin usage, which might influence the user's ability to make decisions, ability to regulate behaviour and responses to stressful situations (National Institute on Drug Abuse 2014).

Health effects that are connected to the use of heroin and related drugs are not due to the usage of the substance itself but rather relate to how or the way by which the heroin is used by the user. Those who uses injectable heroin always face many harmful health outcomes that are associated to infections that may occur because the users use injections that are not sterilized methods. Whether user inject, snort or smoke the heroin, it will start to have impact to the body central nervous system almost immediately after the drug has being used.

Heroin substance belongs to opioids group with some of the users being reported of longing after only one use. Huge amount of heroin is required for users to stave off withdrawal symptoms and this could be unpleasant. It is easy to take overdose of heroin and this is always cut with other poisonous drugs (Fogoros 2017).

2.6.14 Effects of Lysergic acid diethylamides

Lysergic acid diethylamides (LSDs) are very potent illegal drugs which make the user see things that only exist in their mind. Sometimes the drug is ingested in liquid form or is taken in pill or capsule form. Once the drug is taken in, it is absorbed through mucous

membranes in the mouth and then move through the digestive system which begins to affect the brain.

As cited by Passie et al. (2008), LSD decreases performance on tests of attention and concentration, 100 µg of LSD impairs recognition and recall of various stimuli. LSD would significantly impaired performance on arithmetic to users who consume 100 µg. Memory would also be affected by LSD as well as impairment of visual memory. The thinking processes are more resistant but can be affected when higher doses of LSD are given.

Changes can occur in the brain and this could lead to cognitive and memory problems as well as difficulty in verbal communication. These changes in the brain could make maintaining a job, continuing education or committing to social responsibilities more difficult for the users, (American Addiction Centers, 2018).

Fogoros (2017) recounted that, there are really very little studies that has being conducted on the long term health effects related to the usage of LSD. A lot of the physical outcomes developed from the use of LSD are severe to a certain degree which is much more sudden and noticeable with psychological effects. The major problem associated with LSDs use is that their effects are not predictable. Those found of using LSD can experienced suddenly an acute and unfavorable reaction also known as a "bad trip" at any time.

CHAPTER THREE

METHODOLOGY

This chapter presents the various methods that were used to gather and analysed the data to answer the research questions asked. It describes the profile of the study area, research design, study population and sampling. It also presents the data collection tool, quality assurance of the data collected, how data was analysed and ethical consideration.

3.1 Study Area

3.1.1 Geographical location

The study was conducted in the Sunyani West District of the Brong Ahafo Region of Ghana.

The Sunyani West District is one of the twenty-two districts of the region. It was established in November 2007 through legislative instrument number (LI) 1881, 2007, and inaugurated on 29th February, 2008. The administrative capital is Odumase.

The district lies between latitude 7^0 19N and 7^0 35N and longitudes 2^0 08W and 2^0 31 W. It shares boundaries with Wenchi Municipality to the North, Tain District to the North, Berekum Municipality to the North East and Sunyani Municipality to the South. Sunyani West District has a total land area of 1,059.33 square kilometers and the district occupies 4.2 percent of the total land area of the region (GSS, 2014).

The Climatic zone of Sunyani West District falls within the Wet Semi-Equatorial region and therefore has two rainy seasons in a year. The major rains begin in April and end in July and minor rainy season starts from September to October. Average annual rainfall is about 1700mm. The dry season often lasts for five (5) months and occurs between

November and March each year. The abundance of rainfall offers the district comparative advantage in agricultural production and forestry.

3.1.2 Demographic characteristics

The population of the district has been growing steadily since the year 1970 with the population of the district as a percentage of the regional population also increasing from 3.8% in 1970 to 4.9% in 2010. The 2010 population and housing census put the population of the District at 85,272 with a growth rate of 3.8%.

The distribution of the population in the district is generally skewed. The four largest localities (Nsoatre, Chiraa, Odumase and Fiapre) hold about 69.76% of the District's population with 30.24% distributed among the other settlements. The district has a household population of 84,630 with a total number of 10,715 households. The average household size in the district is 4.3 persons.

3.1.3 Education in Sunyani West District

There are a total of one hundred and forty-two (142) basic schools out of which ninety-seven (97) are public schools and the remaining being private. Also, there are six (6) senior high schools and one (1) technical/vocational school; of which four (4) of them are public schools and the remaining two (2) being private schools. The district has two (2) tertiary institutions: the Catholic University College and the University of Energy and Natural Resources.

3.1.4 Health care services

Currently, the district has one (1) polyclinic which serves as a referral point for the rest of the facilities. There are four (4) health centers, thirty-five (35) CHPS operational zones,

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five (5) private health centers, three (3) maternity homes and one (1) private hospital which also serve as another referral center in the district.

3.1.5 Economic characteristics

About 70.4 percent of the populations aged 15 years and older are economically active whiles 29.6 percent are not economically active. For those who are economically not active, a large percentage of them are students representing 55.6% (GSS, 2014). The main economic activity among the people of Sunyani West District is farming. Crops cultivated include yam, maize, cassava, plantain, cocoyam, and vegetables. However, some proportion of the population engages in other business such as trading. There are market days which occur once in a week in the four main towns in the district. This occurs on different days within the week allowing the movement of traders and buyers from other parts of the district and beyond to transact business throughout the district.

3.2 Study sites

The study covered four schools which were located in the four main towns within the district. Sacred Heart Senior High school was one of the schools from which data were collected. The school is a mixed sex school with a population of one thousand and forty-two (1,042). The school is a mission school established by the Roman Catholic church of Ghana headed by a Reverend Sister and is located in Nsoatre.

The next school is Chiraa senior high school which is a mixed sex school. The school had a population of one thousand, one hundred and thirteen (1,130) students of which the majority were boys. The school is a non- missionary school established by the chief and the people of Chiraa. The school can be located in Chiraa.

The third school is Notre-dame girl's senior high school. It is a missionary school established by Roman Catholic Church and is headed by a Reverend Sister. The school is a single sex school with a population of one thousand and forty-four (1,044) and it is located in Fiapre.

The last school from which data was collected was Odumaseman senior high school. The school is located in Odumase the administrative capital of the Sunyani West District. The school was established by the chief and the people of Odumase. It is a mixed sex school with a total population of one thousand, five hundred and seventy-one (1,571) students.

3.3 Study Type

An observational study was used in this study, as it was the most appropriate design given the ethical concerns that characterized the study. As such the independent variable was not under the control of the researcher procedures. The researcher only observed variables of interest without assigning treatment or intervention to the participants.

3.4 Study Method

Quantitative method was employed to assess the use of illicit drugs and their effects on academic performance among senior high school students. This method provided objective measurement and analysis of variables, which were measured and signed numerical values.

3.5 Study Design

The study was designed as a cross-sectional study. As such a cross-section of students from the selected senior high schools was surveyed between April and May, 2018. This was to describe and quantify the distribution of study variables.

3.6 Study Population

The study population was senior high school students. The inclusion criteria were that a student should be currently in senior high school and in year two or three at the time of the research. This criterion was to enable a comparison of participants' previous performance to their current performance using their basic education certificate examination results and their promotion examination. Those who were currently in first year were excluded from the study because their promotion exams were not available to assess their performance at the Senior High School level.

3.7 Sample and Sample size

Sample size of 418 respondents was obtained using the Yamane formula (i.e. $N/1+Ne^2$). To this end, a 5% margin of error was assumed, with estimations set to be within 95% confidence interval. The formula is shown as:

$$N/1+N*e^{2:} \quad \text{where,}$$

N= population size of the study group.

One (1) is a constant number,

e = margin of error, which was taken as 5% (0.05).

$$\frac{2807}{1+2807*0.05*0.05}$$

$$\frac{2807}{2808*0.0025}$$

$$\frac{2807}{7.02} = 399$$

To take care of contingencies, a 5% margin was allowed on the calculated sample (5/100 multiply by 399 = 19). This brought the actual sample size to 418.

3.8 Definition and measurement of study variables

3.8.1 Independent variables

These are variables that are not under the control of the researcher. In other words, the researcher does not have the ability to manipulate the variables. The independent variables for the study include the knowledge about illicit drugs. Knowledge was measured by asking questions specifically on illicit substances and scored them into good, average and poor to know their overall knowledge. Moreover, the specific knowledge was measured. To measure this variable, specific questions were asked on illicit drug and the right responses were taken to certify respondent's knowledge. Academic performance was another independent variable that was measured in this study. This was done by asking respondents who were still using illicit drug at the time of the study to identify whether they were performing worse or better.

3.8.2 Dependent variables

They are variables that can be manipulated or controlled by the researcher. They are also dependent on the independent variables. The main outcome of measure of the study was prevalence of illicit drug use which was the dependent variable. The prevalence was measured by determine the percentage of students who have answered yes to the use of illicit drugs at the time of the research.

3.9 Sampling

A cluster sampling method was used. At the first stage the schools were clustered into five groups. Then a simple random sampling method was used to select four schools from the five cluster schools. The names of the schools which were written on pieces of papers were folded. The guidance and counselling coordinator from the district education office was asked to pick four schools out of the five cluster schools. Those schools that were picked finally became my targeted schools of which data were collected from them. In the selected schools, simple random was used in selecting the 418 respondents to answer the questionnaires. In this case, each student was given an equal chance of being selected to be part of the sample as this was needed to avoid bias.

3.10 Tools and Instrument

Structured questionnaires were used to collect primary data from participants. It was made up of both closed-ended and open-ended questions. Closed-ended questions provide options for participants to choose from but the open-ended questions allow participants to give their diverse views or opinions on a particular issue. The questionnaires were made up of five sections. The first section talked about the demographic characteristics of the respondents. The second section was on prevalence of illicit drug use, the third section was on the knowledge level of students on the commonly illicit drugs they use, fourth section of the questionnaires was about factors that are associated with illicit drug use among the students and the last section was the effects of illicit drugs use on student's academic performance.

3.11 Data collection procedure or technique

The data for the study was collected using the questionnaires formulated by the researcher. The words "yes" and "no" were written separately on pieces of paper and placed in a bowl. Upon entering the class on the day of the data collection, the researcher asked each student to pick one of the papers from the bowl. Those who picked "yes" were invited to be part of the study. The questionnaires were given to the respondents who had been randomly selected and with the help of the researcher the questionnaires were administered. The researcher assisted those who were finding it difficult to understand some of the questions and gave further explanations to those questions.

3.12 Pre-testing

The questionnaires were pre-tested to ensure that the questions were clear and also free from any ambiguity and also to capture other information that may be required. For the pre-testing, ten (10) students from Presby-Dutch Senior High School in Nsoatre, which was not part of the study, were invited to fill the draft questionnaires. This school is also located in the same district, thus shares some similarities with the environment of those Senior High Schools that has been selected. The comments made by the students were considered and into the final questionnaires. The various questions were read by the researcher about four times in other to check and correct mistakes in the questionnaires before they were administered.

3.13 Validity and reliability of the instrument

To know the validity of my research instrument, some copies of the instrument were made and distributed to some friends who are in the same department to answer and identify any corrections that needed to be incorporated in the instrument. Also copies of

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the instrument were given to a couple of senior high school teachers within the district to answer and their response was used to fine tune the instrument.

3.14 Data entry, cleaning and analysis

Data was cleaned, coded and entered into the computer software, Statistical Package for Social Sciences (SPSS) version 20.0. (IBM, Illinois, USA). Percentages, tables and charts were then used to analyze the quantitative data that the researcher has collected. The researcher used this to investigate the numerical data that were collected from the respondents. To determine the associations between some factors associated with illicit drug use, cross tabulations and Pearson's chi square test were used. Thus at a significant level of 5%, all p-values less than 0.05 were considered significant.

3.15 Data Cleaning, management and security

It was duplicated and stored on a pen drive and email. Password was created by the researcher to ensure proper security and protection on the computer. Concerning the data cleaning, there was reading in the entire questionnaires that were conducted.

3.16 Ethical consideration

Authorisation to conduct the study was obtained from the Sunyani West Education Directorate. To this end an introductory letter was obtained from the University for Development Studies and presented to the Sunyani –West Education Directorate. The District Director of education upon receipt of the letter also wrote a letter granting the researcher permission to gather research data from the selected senior high schools within the district. The permission letter from the district education office was presented to the authorities of the selected schools who permitted the researcher to administer the

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questionnaires. Informed consent of study participants was sought prior to administering of the questionnaires. The participants were all informed that they have the right to withdraw from the study at any point in time, to refuse to give information and the right to ask for clarification regarding the study. Respondents were assured of confidentiality of their identity and information they provided.

CHAPTER FOUR

PRESENTATION OF RESULTS

As it has been stated earlier, this thesis is a report of the work carried out to assess the use of illicit drugs and their effects on academic performance among senior high school students in Sunyani West District. This chapter of the thesis presents the analysis of the data obtained in accordance with the set objectives in a bid to answer the questions set for the study.

4.1 Demographic characteristics

i. **Age**

The age distribution of respondents is presented in Figure 1. The mean age (standard deviation) of the respondents was 17.6 (1.15) years. The ages of the respondents however ranged between 13-25 years. From Figure 1, it is seen that the distribution age of respondents indicate that, 17-18 years old were the majority representing the highest percentage of the valid respondents. There were only two respondents aged 13 years and 25 years respectively representing 0.3% each. This is illustrated in the figure below.

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Age distribution of respondents
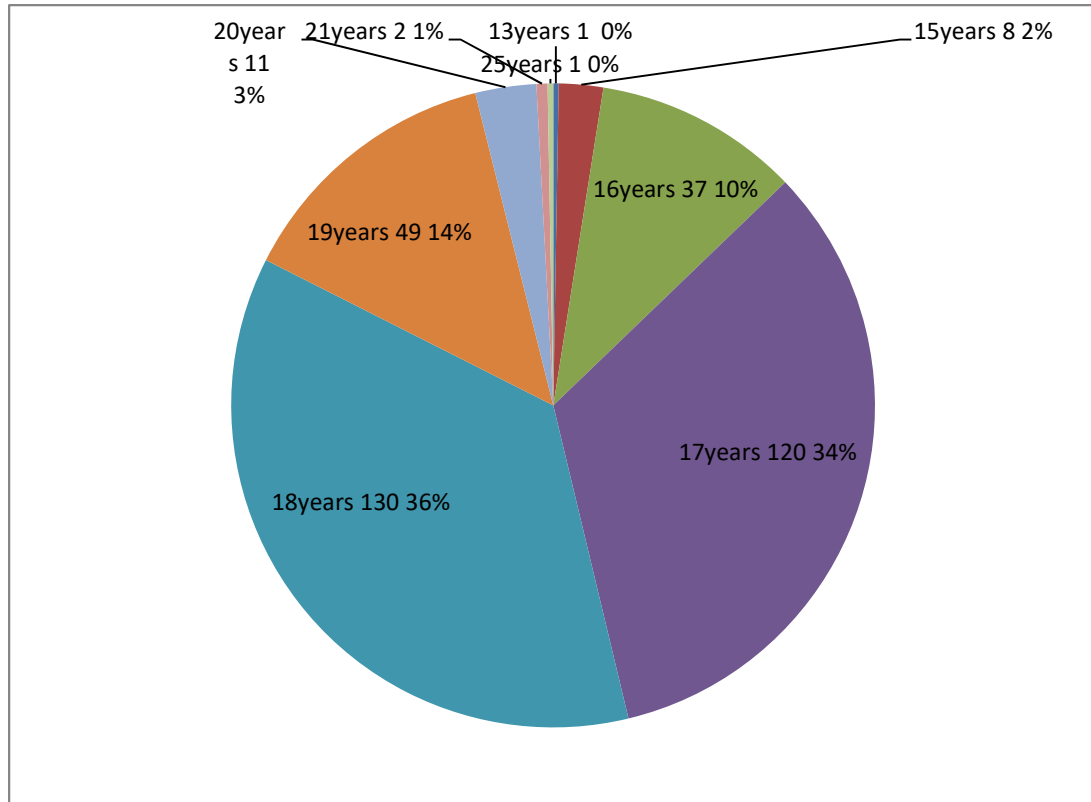
Figure 2: Distribution of respondent's age (N = 359)

Table 1 presents respondents characteristics such as sex, religious denomination, kind of school respondents attended, mode of schooling and also the residence of respondents. There were 228 representing 63.5% of the 359 respondents been females whiles the remaining percentage and number were males. More than half of the sampled respondents, 296 which represent 82.5% were Christians, 62 representing 17.2% been Muslims and the remaining were traditionalist. The total number of respondents who attend mixed school was 299 with a percentage of 83.3% whiles the remaining number and percentage represents those who attend single sex school. Two hundred and five of

the respondents who attended boarding schools represent 57.1% of the total participants. With regards to respondent's residence, 212 of the sampled respondents, forming 59.1% lives in a rural setting.

Table 1: Demographic characteristics of respondents (N = 359)

Demographic characteristics	Number of respondents	Percentages
Gender		
Male	131	36.5
Female	228	63.5
Religion		
Christianity	297	82.5
Islamic	62	17.2
Traditional	1	0.3
Kind of school		
Single sex school	60	16.7
Mixed school	299	83.3
Mode of school		
Day	154	42.9
Boarding	205	57.1
Residence of Respondents		
Rural	212	59.1
Urban	147	40.9

4.2 Prevalence of illicit drug usage

i. Prevalence of illicit drug use

The prevalence of illicit drug use by respondents was determined by asking them to indicate whether they ever used any of the illicit drugs presented in Table 2. To this end a list of illicit drugs were listed including cannabis, amphetamine, cocaine, heroin, opioids, inhalants, alcohol and tramadol for respondents to indicate whether they have used at least one or not.

From Table 2, it is seen that majority (67%) of the respondents have ever used at least one illicit drug before whiles 33% of the respondents said they have never experimented with illicit drugs before. It is seen from the table that, less than half of the respondents, that is 154 representing 42.0% have ever taken alcohol and 110 of the sampled population which represents 31.0% have ever used tramadol.

There were 50 of the respondents which represent 14.0% who have ever taken cannabis (wee) before whiles the remaining have never taken it before. A very few of the total respondents accounting for only 10 participants representing 3.0% have ever used cocaine. Thirty-five out of 359 respondents representing 10.0% have ever taken inhalants such as petrol or gasoline. With regards to respondent's current use of illicit drugs, 137 which represent 38.2% were still using at least one of the illicit drugs and this gives the prevalence of illicit drug use among the respondents.

Table 2: Showing prevalence of illicit drug use among respondents

Variables	Number (N)	Percentages
Used at least one illicit drug	240	66.9
Types of illicit drug used		
Alcohol	154	42.0
Tramadol	110	31.0
Cannabis	50	14.0
Inhalants	35	10.0
Cocaine	10	3.0
Respondent's current use of illicit drugs		
Still using illicit drugs	137	38.2

'N' represent the number of respondents who have ever used illicit drugs

ii. How Respondents administer illicit drugs

The route through which substances are introduced to the body has implications on abuse, addiction and the health of the user. Figure 3 illustrates how respondents administered illicit drugs. A total of 161 of the sampled respondents representing 44.8% administered illicit drugs by drinking, 120 of them administered it by injecting(others), 56 of them administered by smoking and 22 by inhaling.
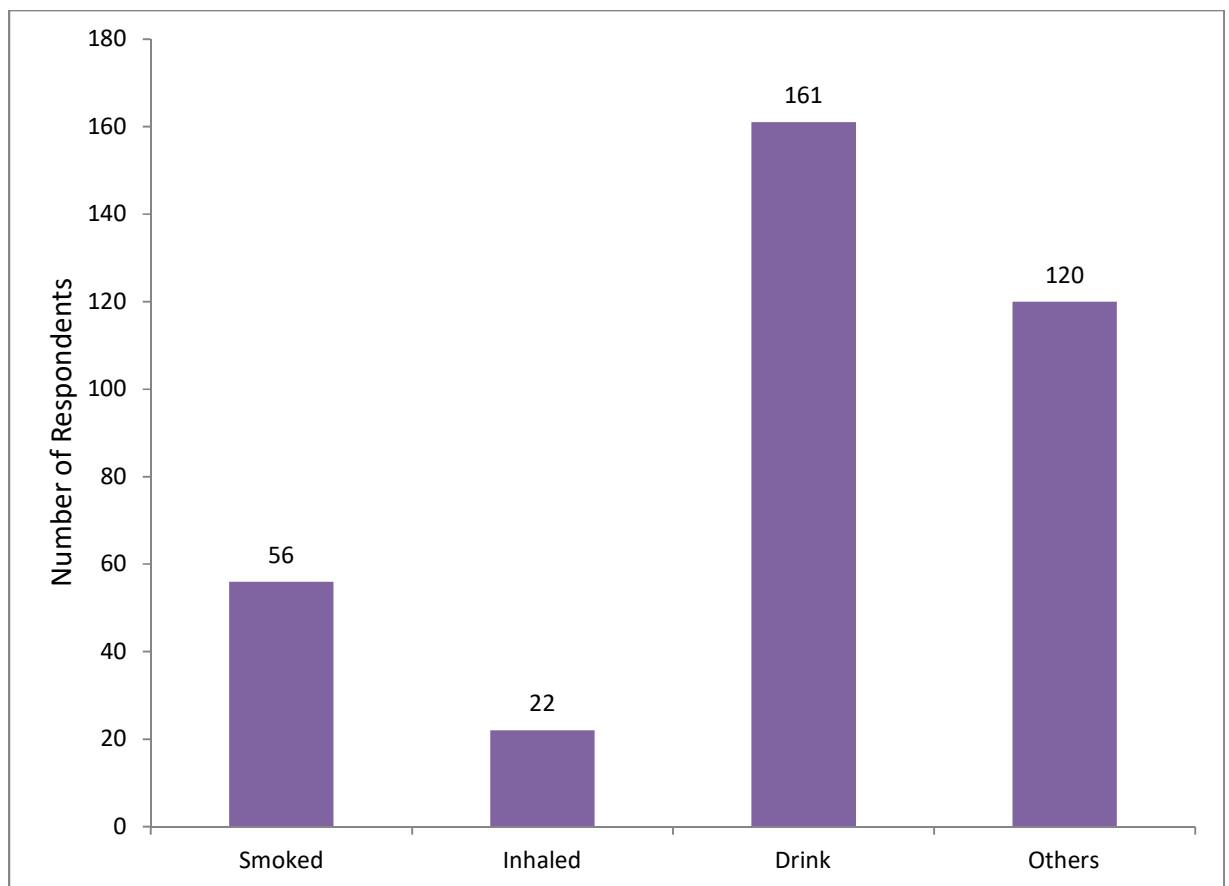
Figure 3: Distribution of participants routes of administration of illicit drugs (N=359)

From Table 3, it is seen that majority of the respondents (both male and female) administered illicit substances by way of drinking followed by those who also administered it through injecting.

Again, Table 3 shows the age group of the participants and how they administered the drugs. Those who administered illicit drugs by drinking in both groups were the majority (44.8%) followed by injecting. There was no association between age and how respondents administered illicit substances however; there was an association between gender and how respondents administered illicit drugs (p-value = 0.03).

Table 3: Showing association between gender, age and how respondents administer illicit substances

Variables	Smoke(N/%)	Inhaled(N/%)	Drink(N/%)	Inject(N/%)	P value
Gender					
Male	25(19.1%)	4(3.1%)	66 (50.4%)	36(27.5%)	
Female	31(13.6%)	18(7.9%)	95(41.7%)	84(36.8%)	**0.03**
Age					
< legal age	29(14.9%)	8(4.1%)	95(48.7%)	63(32.3%)	
Legal	27(16.5%)	14(8.5%)	66(40.2%)	57(34.8%)	**0.20**

N is number of respondents who administer illicit substances by the various routes

iii. **How often respondents take illicit drugs**

The frequency of intake of illicit drugs by respondents was evaluated and presented in Figure 4. Out of 359 respondents, 137 still take illicit drugs. Out of which 57 of the respondents representing 41.6% take it whenever it is available and only 8 respondents take it monthly.
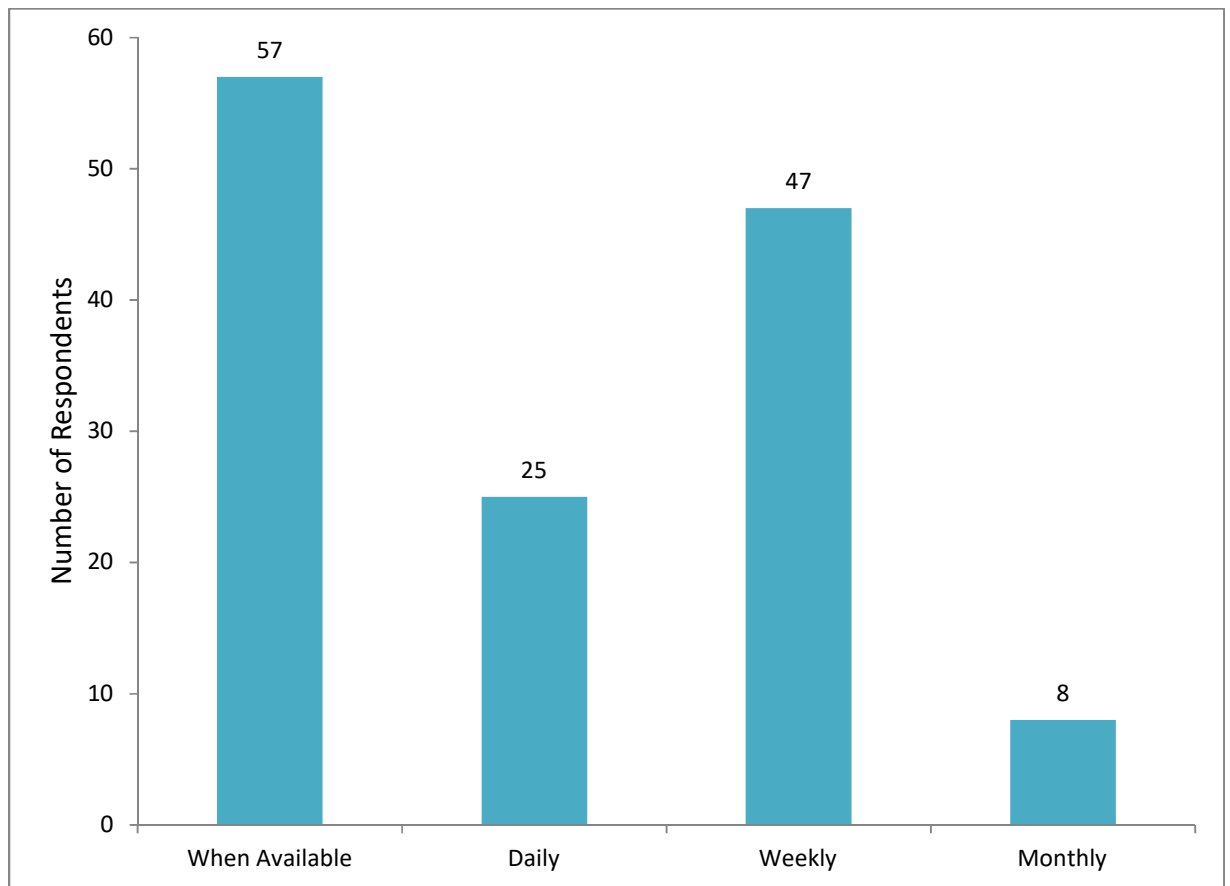
Figure 4: How frequent respondents take illicit drugs

From Table 4, 2.2% of the total number of those who were still taking illicit drugs do it monthly while's majority (62.3%) did it on occasional basis (others). Majority (60%) of the students who were below 18 years also took the drugs on occasional basis.

Table 4: Showing association between gender, age and how often respondents take illicit drugs

Variable	Available(N/%)	Daily(N/%)	Weekly(N/%)	Monthly(N/%)	Oca(N%)	P-V
Gender						
Male	34(26.0%)	20(15.3%)	7(5.3%)	2(1.5%)	68(51.9%)	
Female	35(15.4%)	23(10.1%)	8(3.5%)	6(2.6%)	156(68.4%)	
						0.02
Age						
< legal age	35(17.9%)	26(13.3%)	12(6.2%)	5(2.6%)	117(60.0%)	
Legal age	34(20.7%)	17(10.4%)	3(1.8%)	3(1.8%)	107(65.2)	
						0.23

N is number of respondents on how often they use illicit substance

Oca - Occasional

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iv. How Respondents afford illicit drugs

From Figure 5, 123 of the respondents were able to afford illicit drugs from friends and others respectively with each of them representing 34.3%. Seventy-five (20.9%) of the respondents afforded the substance from monies given to them for up keep (pocket money), 20 of them did menial jobs to earn money so as to afford illicit drugs.
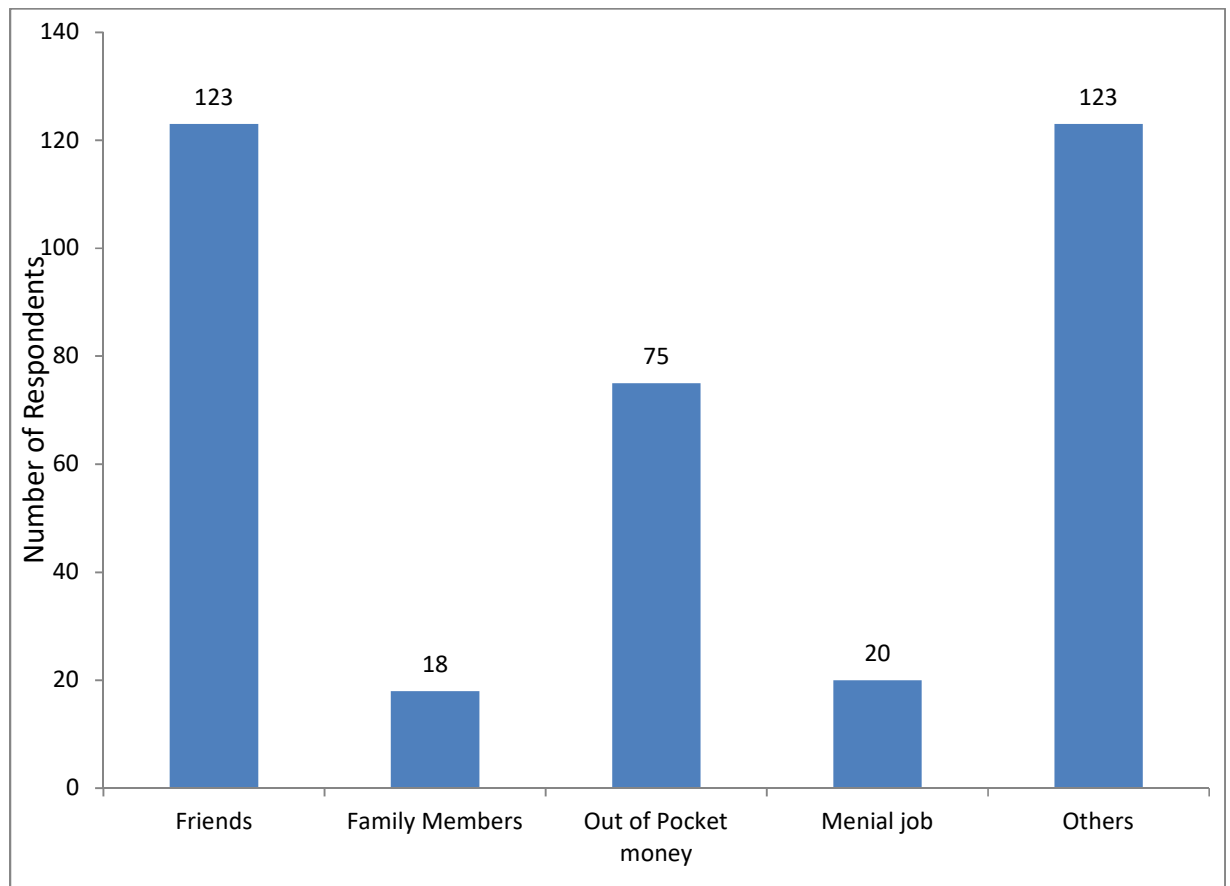
Figure 5: Sources of respondent's ability to afford illicit drugs

Table 5 shows how the students afford illicit drugs. Most (35.9%) of the males afforded the drugs through their friends whiles most (38.2%) of the females afforded it by gifts. Gender was associated with how respondents afforded illicit drugs (p-value = 0.05). Small number (3.6%) of the students who were below 18 years obtained illicit drugs from friends whiles a high percentage (36.0) of the students got the drugs through gifts (others).

Table 5: Showing association between gender, age and how often respondents take illicit drugs.

Variable	Friends(N/%)	Family(N/%)	Pocket(N/%)	Menial(N/%)	Gifts(N%)	P-V
Gender						
Male	47(35.9%)	4(3.1%)	33(25.2%)	11(8.4%)	36(27.5%)	
Female	76(33.3%)	14(6.1%)	42(18.4%)	9(3.9%)	87(38.2%)	
						0.05
Age						
< legal	72(36.9%)	7(3.6%)	39(20.0%)	13(6.7%)	64(32.8%)	
Legal age	51(31.1%)	11(6.7%)	36(22.0%)	7(36.0%)	59(36.0%)	
						0.41

N is number of respondents on how often they take illicit substance

v. How easy respondents get illicit drug

Figure 6 illustrates how easy for respondents to obtain illicit drugs. Seventy-seven of the respondents (21.4%) said it is not easy to obtain illicit drugs, 72 of them representing 20.1% said it is very easy whiles 49(13.6%) said it is easy to get illicit drugs. One hundred and eighteen (118) indicated that the question is not applicable to them accounting for 32.9% of the total number of participants.
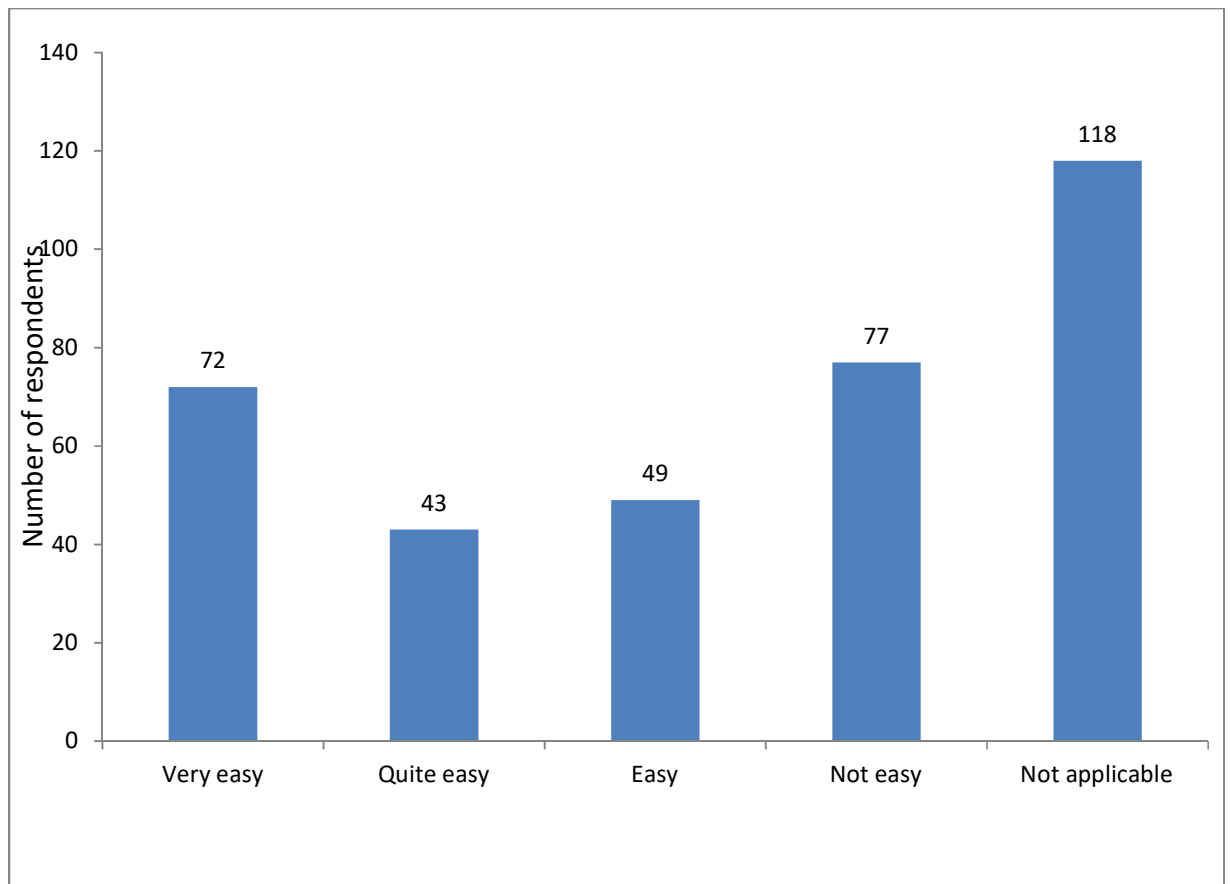
Figure 6: How easy respondents get illicit drugs

The cross tabulation (Table 6) shows how easy the students got illicit substances. Majority of the males indicated that it was very easy to get the drugs as compare to the females. With regards to age, majority (21.4%) of those who were 18 years and above confirmed that it was not easy to get illicit drugs. Only few (13.8%) of those less than 18 years said it was easy to get illicit drugs.

Table 6: Showing association between gender, age and how easy respondents get illicit drugs

Variable	V.easy(N/%)	Q.easy(N/%)	Easy(N/%)	Not e.(N/%)	N/A(N%)	P-V
Gender						
Male	37(28.2%)	14(10.7%)	17(13.0%)	30(22.9%)	33(25.2%)	
Female	35(15.4%)	29(12.7%)	32(14.0%)	47(20.6%)	85(37.3%)	
						0.02
Age						
< legal age	35(19.9%)	27(13.8%)	27(13.8%)	31(18.9%)	58(35.4%)	
Legal age	37(22.6%)	16(9.8%)	22(13.4%)	77(21.4%)	118(32.9%)	
						0.45

N is number of respondents who administered illicit substance

vi. Whom respondents lived with at home

Figure 7 shows that, 60.2% (216) of the respondents lived with both parents, 21.4% (77) of them lived with only their mother, 9.5% (35) with their guardian whiles 8.6 (31) lived with only their father.
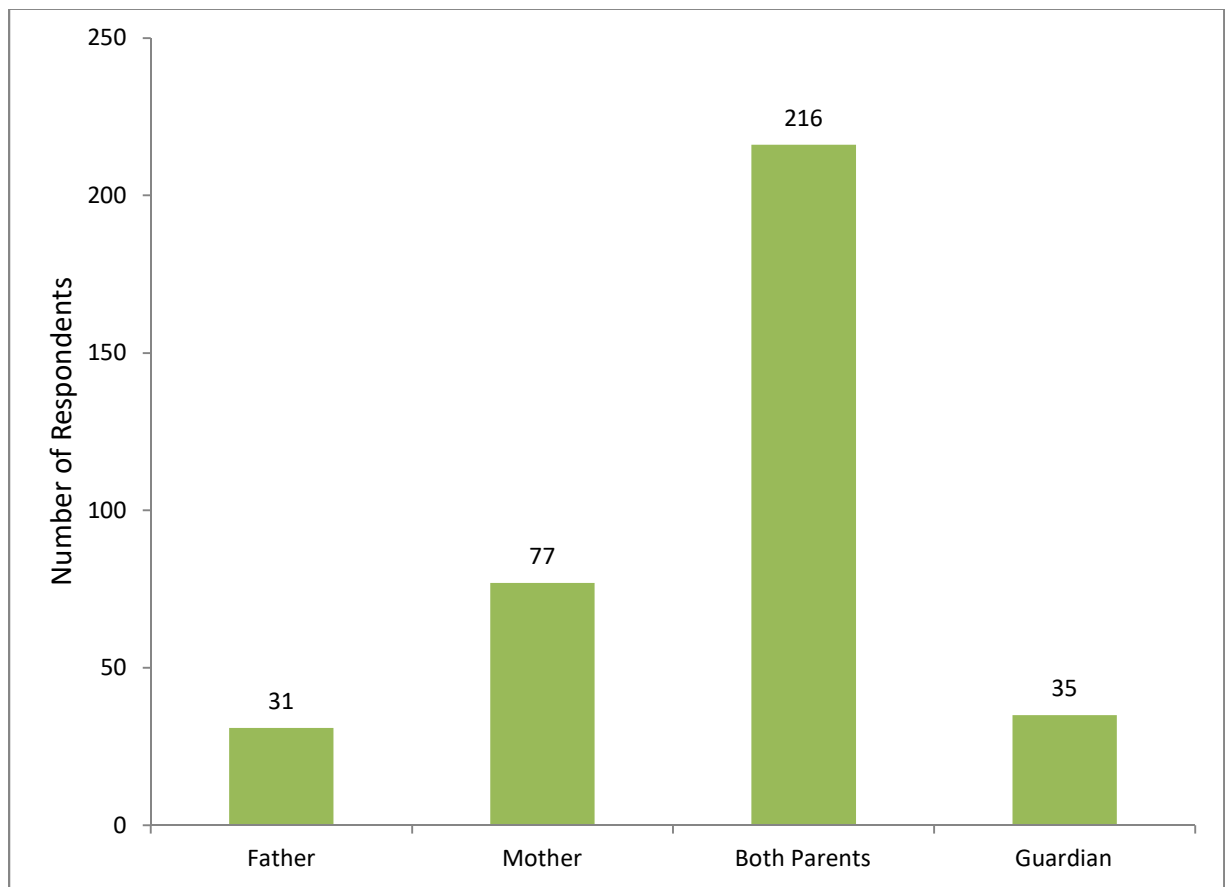
Figure 7: Whom Respondents live with at home

vii. Marital Status of Respondents Parents or Guardians

From the Figure 8, it is seen that 222 representing 61.8% of the sampled respondents said their parents were married, 87 (24.2%) of the people said their parent or guardian were still single, whiles 7.0% of their parent or guardian had divorced or separated from their partner respectively.
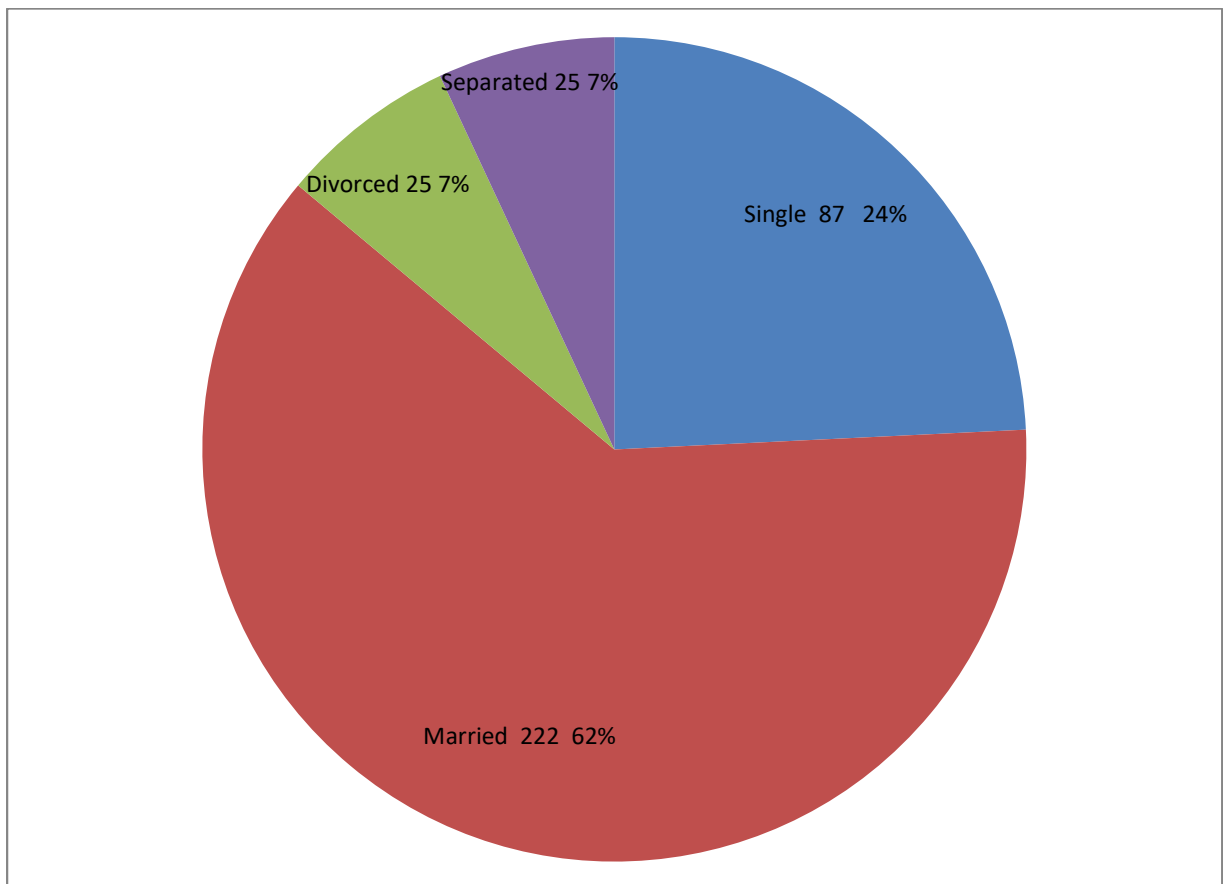
Figure 8: Marital status of respondent's parents/guardian

viii. Most influential media source of illicit drug use according to respondents

Figure 9 relates to the number of respondents who said media influences illicit drug use. Two hundred and thirty–eight of the respondents said media influences illicit drug use,

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100 out of 238 said television is the most influential media whiles 35 said literature is the most influential.
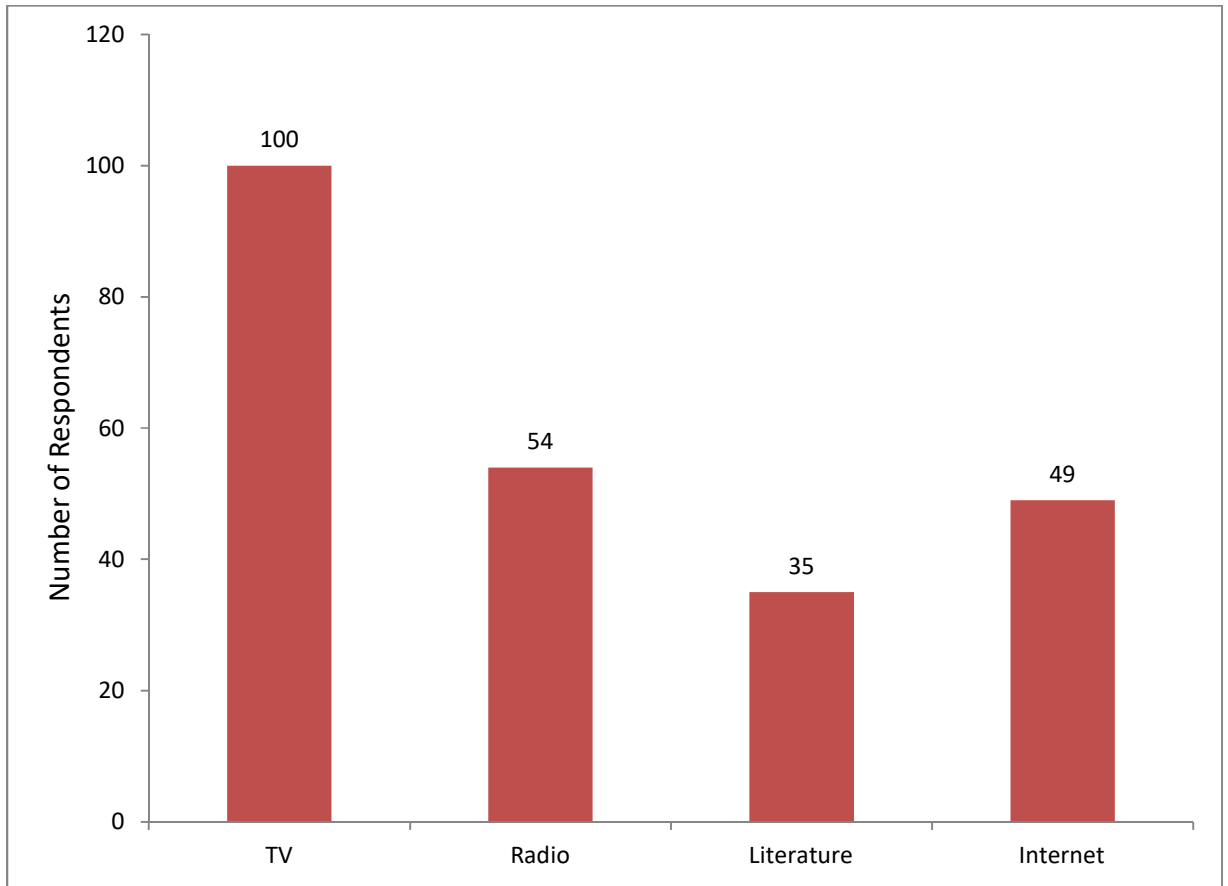
Figure 9: Most Influential media by respondents

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iii. Period in which respondents have been using illicit drugs

How long respondents had been engaged in illicit drug use was also analyzed (Figure 10). One hundred and three out of the total sampled respondents of 359 had taken illicit drugs for eight to fourteen months, 55 of them had taken it for 22-28months, 52 had taken illicit substances between 1-7 months, whiles 1 of them has consumed illicit drugs for 29-35months.
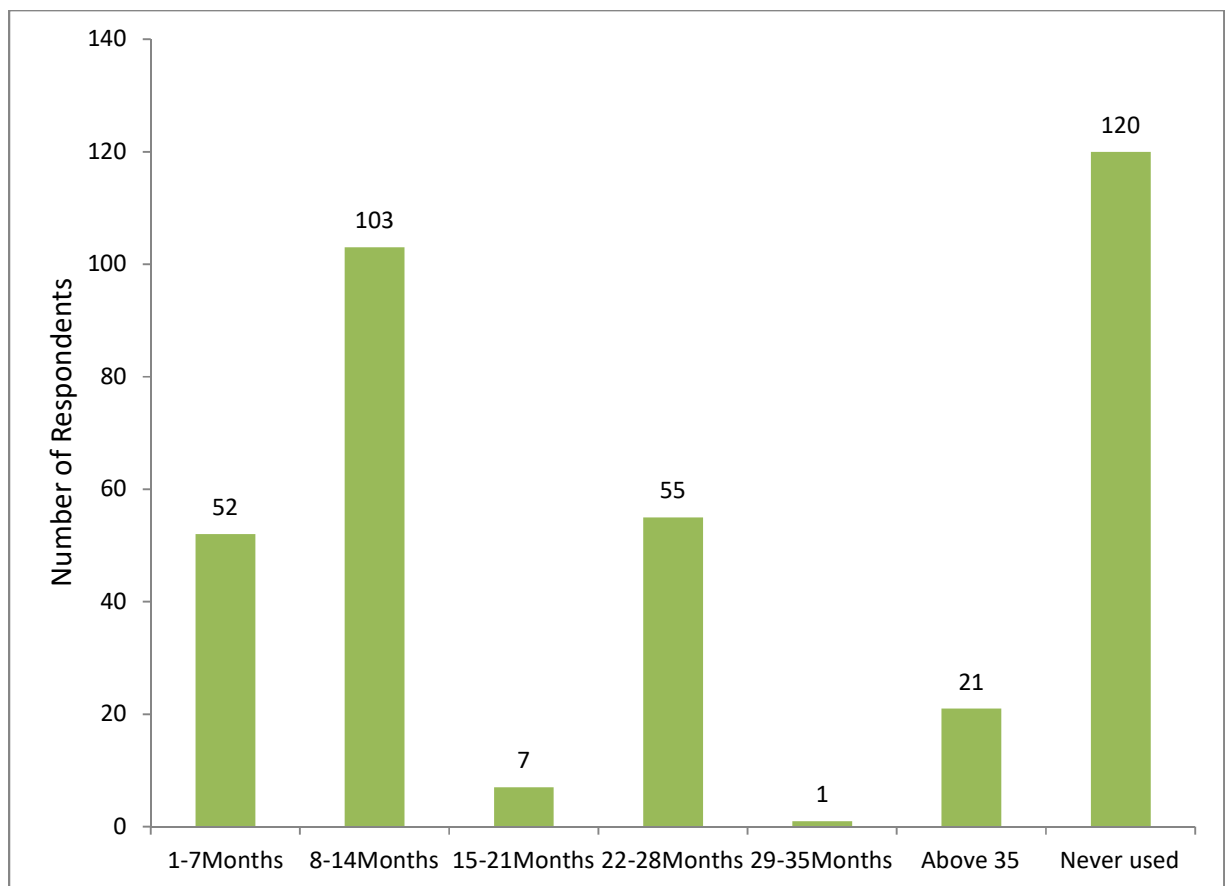
Figure 10: Period in which respondents have been using illicit drugs

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4.3 Knowledge level of respondents on illicit drugs

i. Respondents overall knowledge on illicit drugs

The overall knowledge of respondents on illicit drugs was measured and categorized into good, average and poor knowledge. To do this, questions were asked specifically on illicit drugs. Again lists of illicit and licit drugs were listed and respondents were asked to identify the illicit ones. From Figure 11, more than half of the participants, 202(56.3%) have good knowledge on illicit drugs, 132 of the respondents representing 36.7% have average knowledge on illicit drugs whiles the rest have poor knowledge.
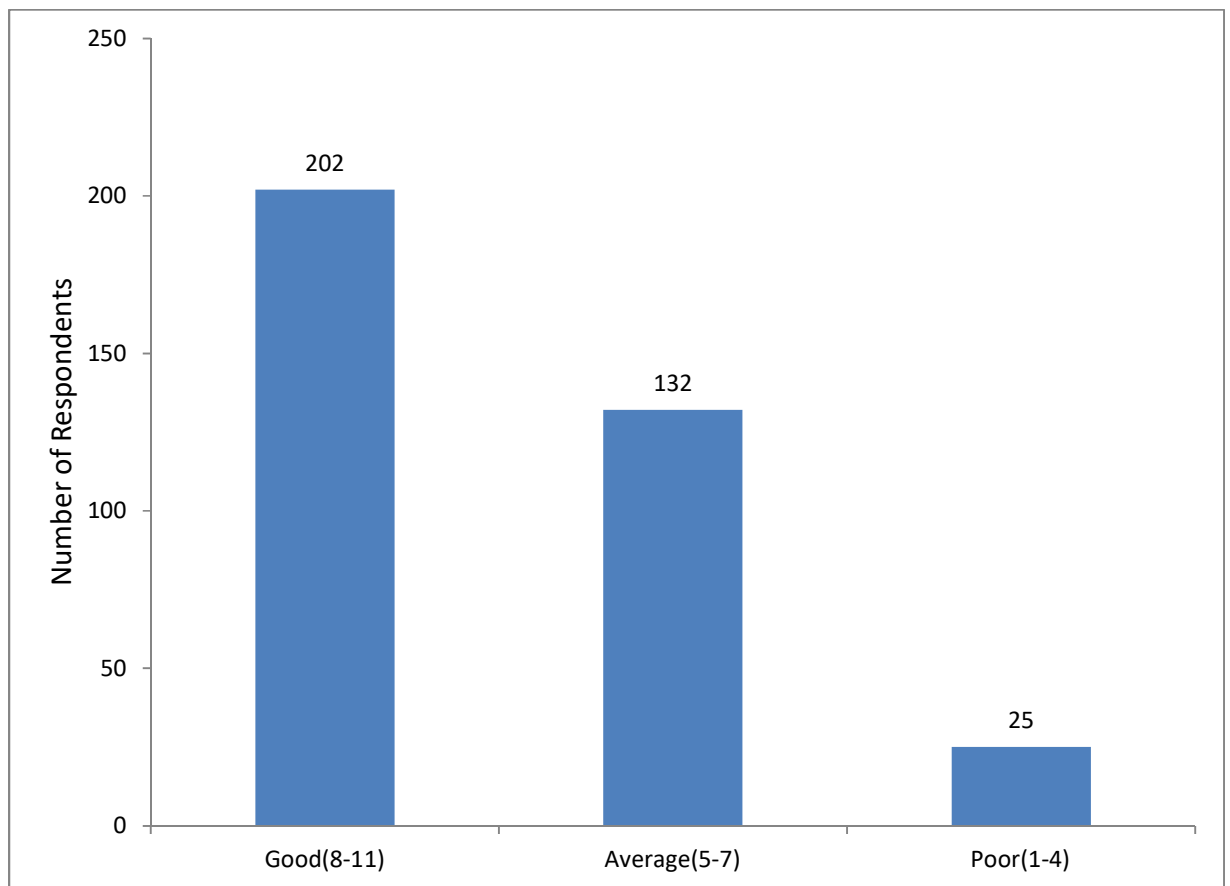
Figure 11: Distribution of overall knowledge of respondents

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From Table 7 there was no association between gender and overall knowledge on illicit drugs. Again the p-value for the association between age and overall knowledge was 0.16 indicating that they are not associated to each other.

Table 7: Showing association between gender, age and overall knowledge on illicit substances

Variables	Good (N/%)	Average (N/%)	Poor (N/%)	P-value
Gender				
Male	74(56.5%)	48(36.6%)	9(6.9%)	
Female	128(56.1%)	84(36.8%)	16(7.0%)	
				0.99
Age				
< legal age	113(57.9%)	73(37.4%)	9(4.6%)	
Legal age	89(54.3%)	59 (36.0%)	16((.8%)	
				0.16

N is number of respondents overall knowledge on illicit drugs

ii. Specific knowledge of respondents on illicit drugs

Table 8 shows the specific knowledge of the respondents on illicit drugs. To measure these variables, specific question on illicit drugs were asked to respondents and their right responses were taken to certify their knowledge.

On what a drug was, a right definition was required of participants. It was found out that, 202 respondents out of the 359 valid sampled populations were able to give correct definition of a drug representing 56.3%. Over half (199) of the respondents had a fair knowledge in defining illicit drugs representing 55.4%.

Over 90% (337) of the respondents knew that illicit drugs are not prescribed by doctors and are illegal. Furthermore, it was observed that, 333(92.8%) out of 359 of the respondents knew that handling and use of illicit drugs are punishable by law.

Additionally, 79.1% (284) of the respondents knew the right punishment associated with handling and usage of illicit drugs. There were 219 of the respondents representing 61.0% who do not think illicit drug use had any effects on academic performance.

Table 8: Shows specific knowledge of respondents on illicit drug (N=359)

Variables	Number (N)	Percentages
Definition of drug		
Correct	202	56.3
Wrong	157	43.7
Definition of illicit drug		
Correct	199	55.4
Wrong	160	44.6
Illicit drugs are not prescribed		
Right	337	93.9
Wrong	22	6.1
Consequences of handling		
Punishable	333	92.8
Not punishable	26	7.2
Punishment for handling		
Correct punishment	284	79.1
Wrong punishment	75	20.9
Effect on academic performance		
Have effect	140	39.0
Have no effect	219	61.0

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iv. Sources of awareness of illicit substances

From Figure 12, almost162 (45.1%) of the respondents got to know about illicit substances for the first time through Television, followed by friends who introduced respondents to the substance accounting for 63 (20.4%). For 56 (15.6%) of respondents had the first knowledge through internet. Only 3 (8%) got the first encounter with illicit substances through shops.
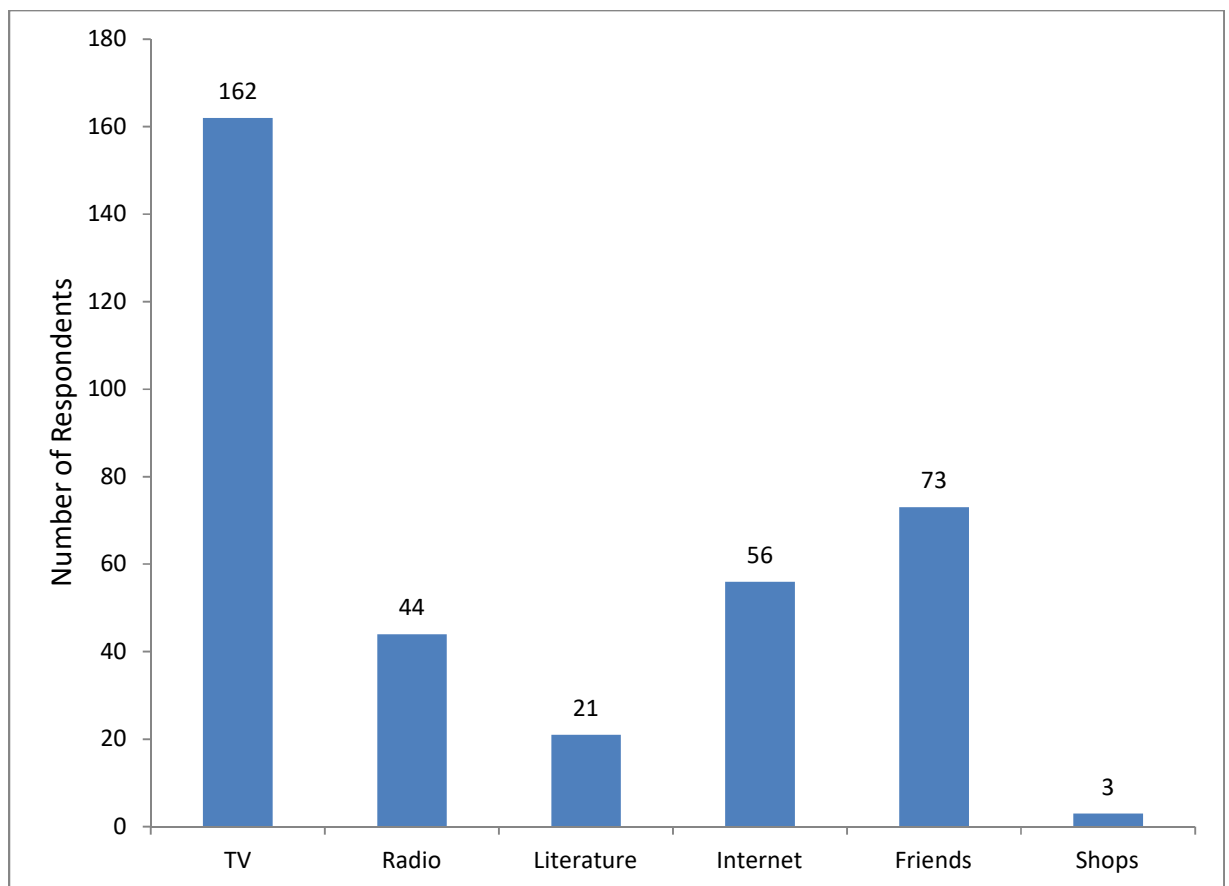
Figure 12: How respondents got to know about illicit drug (N=359)

4.4 Factors associated with illicit drug use

From Table 9, it is found that 63 (46%) of the total number of 137 of the respondents who were still using illicit drugs were males. There was higher proportion of females (54%) than males (46%) who used illicit drugs. Comparing this proportion through the chi-square analysis returned a p-value of 0.002, indicating an association between gender and illicit drugs use which means that the association was statistically significant.

From Table 9, 16 (11.7%) of the respondents who were using illicit drugs attend single sex school; 121representing 88.3% who use illicit substances also attend mixed school. With a p value of 0.03, there was association between type of school respondents attended and illicit drugs use.

It is seen that there is no association between illicit drug use and mode of schooling. Out of a total of 137 who were still illicit drug users from the total of 359 sampled, 69 of them were day students and represented 50.4% whereas 68 representing 49.6% were boarders. The p-value shows that there is no association between illicit drug use and whether a user is in boarding school or not (p- value = 0.16).

The analysis also considered the association between illicit drug use and respondents locality. The cross tabulation (Table 9) shows that, 97 representing 70.8% of the total 137 who use illicit drugs were from rural community whiles 40 representing 29.2% were from urban areas. The p-value was less than 0.05 (i.e. 0.001), indicating statistical significant association between illicit drug use and respondents locality, where more of those from rural localities used drugs as compared to those from urban centers.

From the 137 respondents who were current users of illicit drugs, 77 representing 56.2% live with both parents, 37 representing 27% lived with their mothers alone, 13 of them

accounting for 9.5% whiles 10 of the respondents accounting for 7.3% also lives with their father and guardian respectively. The p-value shows that there was no association between illicit drug use and respondents parenting status. The p-value was 0.096 showing that there was no significant influence of parenting on illicit drug use of respondents.

Regarding family use as a risk factor of illicit drug use, 137 respondents agreed that they have ever used an illicit drug before (Table 9). Out of this total number, 71 representing 51.8% said a member of their family has used an illicit drug and this has influence them whiles 66 accounting for 48.2% said they use illicit drugs but none of their family members have ever use illicit drugs. From the table, the p-value was < 0.001 which means that there was an association between family history of illicit drug use and respondent's current use of illicit drugs.

Table 9: Showing association between factors and illicit drug usage (N=137)

Variables	Number of respondents	Percentage	P-value
Gender			
Male	63	46.0	
Female	74	54.0	**0.002**
School attend			
Single sex school	16	11.7	
Mixed school	121	88.3	**0.03**
Mode of study			
Day	69	50.4	
Boarding	68	9.6	**0.16**
Respondent's locality			
Rural	97	70.8	
Urban	40	29.2	**< 0 .001**
Parenting			
Father	13	9.5	
Mother	37	27.0	
Both parents	77	56.2	
Guardian	10	7.3	**0.096**
Family history			
Member has use illicit drug	71	51.8	
No member has use illicit drug	66	48.2	**< 0.001**

'N' represents the number of respondents who were still using illicit drugs

Table 10 illustrate whether the knowledge of respondents on illicit drugs would influence their use of the drugs. It is clearly seen that the use of these drugs do not depend on the knowledge respondents had on the illicit drugs. Respondent's use of illicit drugs in the study does not rely on the fact that they have some level of knowledge on these drugs. About 56.3% of the population had good knowledge on illicit drugs whiles few of them representing 6.9% also had poor knowledge about illicit substances. The p-value was greater than 0.05 (p- value = 0.64), indicating that there was no significant association between respondents knowledge and illicit drug use.

Table 10: Association between knowledge and illicit drug use (N=359)

Variables	Number of respondents	Percentage	P-value
Knowledge			
Good	202	56	
Average	132	37	
Poor	25	7	**0.64**

'N' represent number of respondents knowledge on illicit substances

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4.5 Effects of illicit drug use on respondent's academic performance

i. The effects of illicit substances on the academic performance of respondents.

From Table 11, it is seen that, 137 out of the total sampled respondents of 359 indicated that they had noticed effects of illicit drug use on their academic performance. From that number, 121(88.3%) who had use at least one of the illicit drug before had seen an effect of illicit drug use on their academic performance. It has been indicated that the above number of respondents were experiencing worse performance as a results of illicit drug usage whiles the rest were performing better even though they were using illicit substances.

On the same Table 11, 137 respondents had indicated that majority of them were performing worse than before due to illicit drugs use. Of this number, 50 respondents representing 36.2% started using illicit drugs when they were in S.H.S 1, 34 of the respondents accounting for 24.6% started in S.H.S 2, 28 of them also representing 20.3% started in J.H.S and 10 respondents accounting for 7.2% does not know the level at which they started experimenting with drugs. There was association between level respondents started using illicit drug and their current performance as indicated in the Table 11. The p-value for the association is < 0.001. This shows an association between respondent's performance and the level they started illicit drug use.

Table 11: Showing association between illicit drugs use and respondent's academic performance

Variables	Number	Percentages	P-value
Effect on performance			
Worse	121	88.3	
Better	16	11.7	
			<0 .001
Level respondents started using illicit drugs			
J.H.S	28	20.3	
S.H.S 1	50	36.2	
S.H.S 2	34	24.6	
S.H.S 3	15	10.9	
Do not know	10	8.0	
			< 0.001

N is number of respondents currently using illicit drugs

ii. Grade respondents got in junior high school

From the Figure 13, 73 of the respondents had excellent (aggregate 6-10), 90 of them got very good (aggregate 11-15), 142 also had good (aggregate 16-20) and there were 13 of the respondents who had the least aggregate (above aggregate 25).
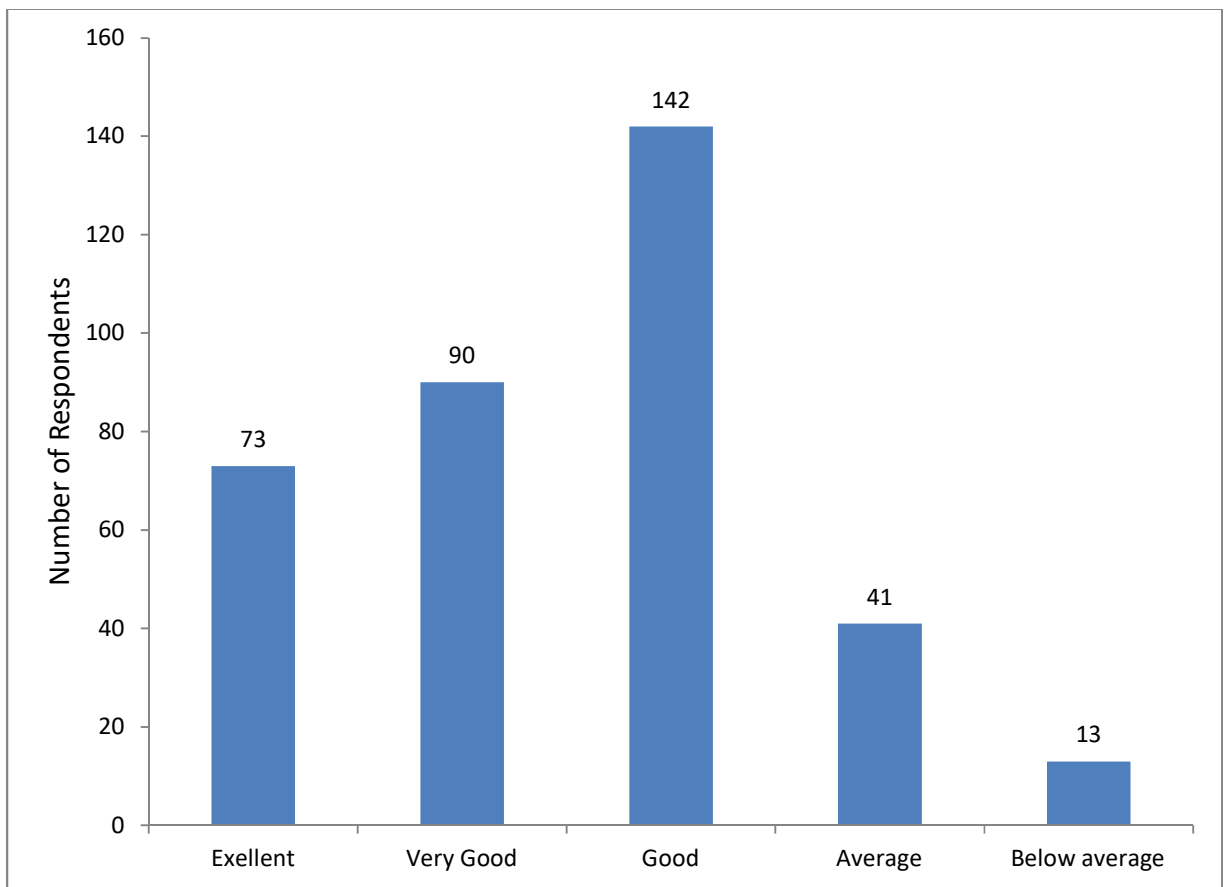

Figure 13: Distribution of aggregate obtained by respondents in junior high school

iv. How respondents ranked the effects of illicit drugs use on their academic performance

Table 12 shows how the respondents ranked the various effects of illicit drugs use on their academic performance. The various effects were ranked based on less severe, severe and very severe.

From Table 12, 162 respondents ranked declining retention rates as less severe, 135 ranked it as severe effect on their academic performance whiles 62 of them representing 17.3% ranked it as very severe effect on respondent's academic performance.

From the Table 12, 149 representing 41.5% believed that poor reputation as an effect of illicit drugs use is severe, 116 accounting for 32.3% also ranked the effect as very severe on their academic performance whiles 94 of the respondents ranked it as less severe.

Two hundred and three (56.5%) respondents of the 359 ranked school drop-out as a very severe effect as a results of illicit drug use that affected academic performance, 94 (26.2%) also ranked the same effect as severe whiles the remaining number ranked it as less severe on their academic performance.

Furthermore, 189 (52.6%) ranked mental illness as very severe effect of illicit drugs use whiles 103 accounting for 28.7% ranked the same effect as severe and 67 of the respondents ranked it as less severe effects on their academic performance.

Regarding genetic component (Individual Neurobiological level) as accounting for the effect of using illicit substances, 140 representing 39.0% of the sampled respondents ranked genetic component as being responsible of severe effect on academic performance

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as a result of using illicit drugs, 139 (38.7%) also have ranked it as being linked to less severe whiles 80 of them accounting for 22.3% as the least number ranked it as leading to very severe effect on academic performance. From Table 7, 154 (42.9%) of the sampled respondents rank poor academic performance as very severe effect as a result of illicit substance use, 151 which represents 42.1% ranked it as severe effect of illicit drug use whiles the remaining number ranked it as less severe on their academic performance.

There were 154 (42.9%) out of 359 who ranked that using illicit drugs decreases one's ability to concentrate on academic work as very severe effect leading to poor academic performance, 126 of the respondents ranked the same effect as severe and 79 ranked it as less severe effect to poor academic performance.

It is seen that, 139 of the respondents ranked high level of conflict as very severe effect t; 136 which represents 37.9% have ranked the same effect as severe as a result of illicit drugs use whiles the remaining ranked it as less severe effect on poor academic performance.

It is seen that 151 (42.3%) of the total respondents of 359 ranked poor self-control as very severe effect leading to poor academic performance of respondents, 141 representing 39.3% also have ranked the same effect as severe and the remaining number ranked the effect as less severe on academic performance.

Table 12 shows truancy as an effect of illicit drugs use leading to poor academic performance. One hundred and eighty-eighty representing (52.3%) respondents ranked the effect of truancy as very severe, 107 which represents 29.8% ranked the same effect

as severe whiles 64 of the respondents which was the least ranked it as less severe effect to poor academic performance.

One hundred and ninety representing 52.9% respondents ranked absenteeism as a very severe effect due to illicit substance use resulting to poor academic performance, 103 (28.7%) ranked the absenteeism as severe effect of illicit drugs use leading to students poor academic performance whiles the remaining number ranked it as less severe effect to poor academic performance.

Table 12: Showing how respondents ranked effects of illicit substances on academic performance

Variables	Less severe N (%)	Severe N (%)	Very severe N (%)
Declining retention	162(45.1)	135(37.6)	62(17.3)
Poor reputation	94(26.2)	149(41.5)	116(32.3)
Drop out of school	62(17.3)	94(26.2)	203(56.5)
Mental illness	67(18.7)	103(28.7)	189(52.6)
Genetic component	139(38.7)	140(39.0)	80(22.3)
Poor academic performance	54(15.0)	151(42.1)	154(42.9)
Decrease ability to concentrate	79(22.0)	126(35.1)	154(42.9)
High level of conflict	84(23.4)	137(37.9)	139(38.7)
Poor self-control	66(18.4)	141(39.3)	151(42.3)
Truancy	64(17.9)	107(29.8)	188(52.3)
Absenteeism	66(18.4)	103(28.7)	190(52.9)

'N' represents the number of respondents who ranks the various effects of illicit drugs

CHAPTER FIVE

DISCUSSION OF RESULTS

As it has been stated earlier, this thesis is a report of the work undertaken to assess the nature of illicit substance use and its effects on academic performance among senior high school students in the Sunyani West district of the Brong Ahafo Region of Ghana. Data were collected between April and May, 2018. This chapter of the thesis discusses the key findings of the study in relation to previously published evidence.

5.1 Demographic characteristics of respondents

Age is important in every aspect of life and it is used in making decisions about one's life. The study revealed that the age of the respondents ranged from 13 to 25 years with a mean age of 17.6.

The religion embraces many aspects of man's relation with the supernatural. Beliefs and practices associated with supernatural in Ghana operate at many levels in different forms. The study revealed that, overwhelming number of the respondents are Christians. This confirms with the statistics from Ghana Statistical Service that, Christianity is the predominant religion in the Sunyani West District (GSS, 2010).

More than two thirds of the students attended mixed school. A significant number of these people were boarding students. Moreover, it was revealed that, more than half of the respondents were living in the rural or deprived areas accounting for their access to illicit drugs and this agreed with report that cannabis use is found to be greater among people in low deprived areas (UNODC, 2013).

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5.2 Prevalence of illicit drug use

The study revealed that 66.9% of the respondents had ever used at least one illicit drug. This was determined by asking respondents to indicate illicit drugs they had taken before and list of drugs including cocaine, alcohol, tramadol, cannabis, inhalants and amphetamine-type stimulants. The above assertion agrees with the finding of Egerton (2015) that, illicit drug use has increased in recent years. This author suggests that, the main world trend of illicit drug use is as a result of the growing accessibility of different forms of illicit substances. Two hundred and forty respondents had ever used illicit drugs before of which 137 representing 38.2% were still using at least one illicit drug. It means that the use of these illicit substances had gained grounds among the senior high school students in Sunyani West District. This is in line with the observation that illicit drug use is a major public health concern. There are reports that about 5% of the world population had ever used an illicit drug at least once in their life time (Dasgupta, 2017).

Among the drugs commonly taken by respondents are alcohol, followed by tramadol, cannabis and inhalants which most of the respondents agreed that they were easily accessible. This finding agrees with Tam & Foo (2012) when they revealed that students nowadays do not only misuse drugs outside their school compound alone but also in class where teaching and learning goes on. This shows that, young people of today particularly students do not have to wait till they close from school before they use and abuse drugs. As a result of the above, illicit substances have become easily accessible. Respondents were not faced with any difficulty in obtaining the illicit drugs. In other words the drugs which were commonly used by the students were within their reach. These drugs used illicitly form part of the illicit drugs list published by the U.S. Department of Health and

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Human Services (2010). It was however found that no respondent had ever taken heroin or amphetamine-type stimulants.

The widespread use of alcohol and tramadol agrees with the U.S. Department of Health and Human Services (2010) that, the use of illicit drugs among the youth is lower than licit ones such as tobacco and alcohol. Our findings with respect to cannabis use is however different from the report by Molinaro et al. (2011), in which cannabis use was five times more widespread than any of the other illicit drugs among high school students. This differences may be explained by a variety of factors including cultural and law enforcement strategies with respective to drug use between Italy where the Molinaro et al. study was conducted. Another study reported by Johnston et al. (2012) demonstrated marijuana to be one of the illicit drugs that are most widely abused among the youth.

The use of illicit drugs by respondents was found to be associated with availability, making students to use them on daily, weekly or on monthly basis. Fifty-seven (41.6%) of the students who were among current users of illicit drugs indicated they use illicit substances when available and only 8 respondents use the drugs on monthly basis. The proportion of individuals who uses illicit drugs were established through the Chi-square analysis showing association between gender and how often respondents uses illicit drugs with a p- value = 0.02. The Chi-square analysis also showed that there was no association between age and how frequent illicit drugs were used among respondents (P- value = 0.23). The extensive availability of all kinds of drugs such as alcohol, marijuana, tobacco and other drugs in the environment all contribute to the starting and continuous use of addictive substances among young people. This agreed with a report by Egerton (2015),

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which indicated that illicit drug use has increased throughout recent years due to availability of many kinds of drugs.

The following routes were indicated by respondents through which they administered illicit substances. It was revealed that 161respondents administered the drugs by drinking, 120 by injecting, 56 by smoking and 22 by inhalation. In support of this a report by W.H.O (2014), stated that illicit substances are injected, smoked, swallowed, drunk or inhaled in powdered or vapour form. The routes of injecting and smoking deliver drugs quickly to the brain than the routes of snorting or swallowing which deliver the drugs more slowly to the brain. Again Mensah (2013) also supported the above finding by stating that there are different methods adopted by substance users to take in the drugs. Some of these methods include smoking, inhaling, injecting, ingesting and others. The method of how a drug enters the user's body impacts greatly on how the substance affects the person. Comparing the proportion of respondents who administered illicit drugs by the various routes, it was revealed that majority of the students administered it by drinking and injecting. There was a significant association between gender and how illicit drugs were administered (p- value, 0.03). However, age and how respondents administered illicit drugs by the various routes were not associated.

It was also found from the study that, 123 representing 34.3% been the highest got experimented with illicit drugs from friends, 20.9% of them afforded the illicit substances from monies given to them for up keep (pocket money) and only18 respondents obtained illicit drugs from family members. The proportion of female students that obtained illicit substance from friends was higher than that of males. Also, a high percentage (8.4%) of the males obtained illicit drugs by doing menial job as against 3.9% of the females. The

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cross tabulation showed significant association between gender and how students afford the drugs (p- value = 0.05). With regards to age there was no association between these variables (p- value = 0.41). A study by the ministry of health in New Zealand (2009) showed that illicit drugs especially cannabis was considered to be readily available to the respondents from wide sources including friends, siblings and parents.

The Chi- square analysis on gender and how easy the students got illicit drugs indicated an association. The reason for this is not known as there have not been any reports in the literature. However it is possible that the curtesy that has always been given to the female gender is being extended within the circles of substances abuse.

The study revealed that majority of the respondents lived with both parents and that they have good relationships with their parents. Parents with good relationship with their wards are able to exercise control over them by advising them on the kind of friends they move around with. More than 60% of the respondent's parents were married, 24.2% of the respondent's parents were still single and 7% of the respondent's parents had divorce or separated. A study by UNODC/UNAIDS (2013) showed that family factors contribute to individual differences on illicit drug use, with factors including single-parent or step families, poor parent-child relationships, family conflict and poor parental supervision.

More than half of the respondents representing 238 (66.3%) believed that the media influences students' use of illicit drug, the most influential ones been television, radio, the internet and literature. A study by Tam & Foo (2012) support this finding by stating that, the sale of illicit drugs on the internet has increased the exposure and accessibility of these drugs to the users. The internet has become a popular tool for marketing and

purchasing of illicit substances. The media has a potential influence on someone to indulge in illicit drug use. The media may entice someone to use illicit substances through the adverts on television, radio or on the internet. This was supported with a study by (Ibid/ NSDUH, 2013, EMCDDA, 2012) which reported that popular media presents pro-alcohol and smoking imagery that can influence the amount of illicit substances a person can take.

The study revealed that illicit drug users have been involved in the practice for a period of at least one month to twenty-eight months. However, majority of the respondents had been in the practice for 8-14 months. In support of this Ibid (2013) and Samo et al. (2013), stated that the continuous usage of drugs affects individual behavioral and cognitive capabilities. In fact there are students who only try it once or twice and never go back to it. There are those who use it not regularly and some of them also use it quite often. This may lead to drug dependence also known as drug disorder which develops as a result of repeated drug administration and eventually to drug addiction when students become out of control use of the drug despite the negative consequences.

5.3 Knowledge about illicit drugs.

The study shows that respondents had some level of knowledge about what drugs and illicit drugs are, more than half of the respondents (56.3%) were good in identifying and answering questions on illicit drugs. This clearly shows an acceptable level of knowledge among the students, disagreeing with previous publication that most youth lack knowledge about illicit drugs (Blumenson & Nilsen, 2009). These authors measured the knowledge level of their respondents by asking them to classify illicit drugs into schedule I and schedule III drugs. In other words, their approach of ascertaining knowledge level

of their respondents was different from how the knowledge level of respondents was measured in our study. The difference in these two studies may be due to factors such as the media, friends or family members who in one way or the other has influence respondents knowledge on illicit substances. This knowledge may be gained through adverts from radio or television, reading from the internet or a friend giving insight about illicit substances to another friend. To find out the association that exist between gender and the overall knowledge on illicit drugs, the Chi-square analysis was used to ascertain that but the p-value (0.99) for the analysis proved that the variables were not associated. Again, the same analysis was used to find out the proportion of the group who were good, average and poor on illicit drugs. It was found that, age and respondents knowledge on illicit drugs was not associated giving a p-value of 0.16.

It was discovered from the study that, majority of the respondents knew the correct definition of illicit substance and almost 94% of the respondents agreed that illicit drugs are not prescribed by doctors. The population also knew that handling and use of illicit drugs are punishable by law. Accordingly, it is evident that majority of the study population knew the exact punishment the law allows as almost 80% of the respondents knew about punishments given to handlers and users of illicit drug. This was however not the case in the USA for instance, where it has been reported that federal sentencing standard are not well known at least among students population observed (Mikos, 2009), but this is not the case among the students population observed in the Sunyani West District.

The study also revealed that, almost 45% became aware of illicit drugs through television, 15.6% of them got to know of it through internet whiles only 12.3% got to

know of illicit drugs through radio. These had contributed to respondent's knowledge level about illicit drugs.

In support of the above finding, EMCDDA (2012), BMA REPORT (2013) revealed that there is little evidence indicating that the media has a protective impact on drug. The advertising and marketing of drugs such as marijuana, cocaine, tobacco, alcohol and other forms of drugs by the popular media all contribute to the use of substances among adolescents (Mensah, 2016).

The study revealed that, more than 30% of the participants indicated that illicit substances had effects on their academic performance. In support of this, the United Nations (2005) asserted that, cognitive and behavioural problems experienced by drug users may influence their academic performance and also present obstacles to learning for their classmates.

5.4 Factors associated with illicit drug use

The study showed a strong association between gender and use of illicit drugs. It was discovered from the results that, more females used illicit drugs than males. The proportion of the females to males was compared through the chi-square analysis which gave a p-value of 0.002. This is in line with Odonkor (2015) that, the number of girls getting involved in drugs use for economic gains such as pushers and prostitution has increased. Also our study agrees with Corey (2006) that, adolescent girls abuse drugs and alcohol just as much if not more than boys and girls involve in cigarette smoking more than boys, and that they have caught up with boys in abuse of illicit drugs and alcohol. They tend to use drugs for reasons like the desire to lose weight. To add to the above

assertion, Cotto et al. (2010) also agrees with this, saying girls have exceeded boys when it comes to the use of alcohol and nonmedical use of psychotherapeutics such as stimulants, tranquilizers and sedatives. Notwithstanding the above finding, the reason for this is not clear to us but might be a deviation from the norm in the study area. However, the finding from this study does not agree with the assertion that boys are more likely to be using illicit drugs than girls as established by Molinaro et al. (2011).

Locality of student is associated with illicit drug use where majority (73%) of students who were using drugs was from the rural setting with a p-value of < 0.001. The finding agreed with UNODC report which says that cannabis use is found to be greater among people living in low deprived areas than those living in urban and cities (UNODC, 2013). Again the above finding conforms to the assertion made by Odonkor (2015) that the problem of illicit drug use was highly found among the youth living in the urban centres of Ghana but in recent times the issue of illicit drug use and abuse has become a national problem which has spread to the rural settings. It is believed that those living in rural communities have easy access to drugs either by free or paying little amount, some may even involve in the cultivation of these drugs. Also some of them may not even buy alcohol simply because there is a distiller around their place.

Again, the study revealed that there is no association between substance use and respondents parenting. This is not withstanding the fact that majority of the respondents who were living with both parents were involved in drug use.

There is a link between family history of illicit drugs use and respondent use of illicit substances (< 0.001). More than 50% of the respondents indicated a member of their

family had use illicit drug, which they thought had influence them too. People acquired some behaviour through learning, imitation and modelling from their family members (Bandura, 1986). The way the family interacts all contributes towards chemical dependency passed on from one generation to another. Family history of illicit drug use places a person at risk of engaging in illicit drugs. A study by Mayo clinic supported this finding, where the authors report suggested that, a family history of alcohol or drug addiction places an individual or a loved one at a higher risk of developing addiction.

Moreover, the finding agree with World Drug Report (2011), in which it is noted that people with direct family history of drug use were at increased risk of experimenting with drugs. In our current study over 70% of the respondents were of the opinion that substance use among family members highly influences one's decision to use illicit drugs. This was in accordance with a study by the National survey on Alcohol (2012) and Futures (2017). These studies reported that respondent's use of illicit drugs was greatly influenced by family history of illicit drugs use. It should also be noted that there is evidence to the fact that the environment within the home will all contribute towards chemical dependency passed on from one generation to another (Genetic Science Learning Center).

The knowledge level of respondents on illicit drug is not associated to the use of the drugs. Quite number of these participates had good and average knowledge on illicit substances and only few of them were having poor knowledge on these drugs. This was obtained by finding the association between knowledge level and usage of illicit drugs through the Chi- square analysis which gave a p-value of 0.64 indicating that having knowledge on illicit drugs do not predisposes an individual to experiment with illicit

substances. Again this does not conforms to the previous publication that the youth of which S.H.S. students forms part lack clear knowledge on illicit substances (Blumenson & Nilsen, 2009).

5.5 Illicit drugs use and academic performance

The study showed that illicit drugs use and poor academic performance are linked as the result had indicated a significant higher proportion of 121 out of 137 respondents who were still using illicit drugs had indicated that they had notice effects of illicit drug use on their academic performance (p- value < 0.001). This observation supports Kikuvi (2009), which indicated that drugs affect students' attention span which greatly lowered and boredom sets in as much faster than those who do not use and abuse illicit drugs. Again, Abot (2005) has earlier demonstrated that illicit drugs use affects the brain, resulting in major decline in the functions carry out by the user's brain. It has also been independently noted that drug users may experience cognitive and behavioural problems which may influence their academic performance and also present obstacles to learning (United Nations, 2005). According to National Institute on Alcohol and Alcoholism (2005), in the United State of America about 25% of students have difficulties in academic activities due to drug usage.

The current study being reported that majority of the respondents started using illicit substances when they were in the first year of secondary school, where they would be around 15 years of age. Some even started using illicit drugs when they were in J.H.S. There is significant association between the level respondents started using illicit drugs and their academic performance (p-value < 0.001).

From the study, an overwhelming number of the respondents affirmed that absenteeism, truancy, poor self- control, high level of conflict, decrease ability to concentrate, poor academic performance, mental illness and school dropout were very severe effects of illicit substance use on academic performance. However, small number of the respondents was of the view that the above factors were severe and less severe effects to illicit substance use on academic performance respectively. Few of them indicated that genetic component, poor reputation and declining retention were severe and less severe effects of illicit drugs use respectively. This finding agrees with the assertion by the National Institute on Alcohol and Alcoholism (2005), that students have wide range of difficulties in academic work due to drug usage including challenges in educational welfare of students (Fogoros, 2017).

When respondents' were asked about their perceptions on the influence of factors on illicit drug use, as many as 84.1% said that poor parent-child relationship is a strong factor that exposes one to the use of illicit drugs. This has been forcefully promoted by a study conducted by UNODC in 2013, that family's attitudes towards illicit drug use may play a role in this regard (UNODC, 2013).

About 86.9% of the respondents thought that peer influence can cause one to use illicit drugs. This is supported by a research conducted by Health Canada (2012) which asserted that, adolescents who are used to spending a lot of time with their peers were at a high risk of drug use. A similar view has been held by the Centers for Disease Control and Prevention(CDCP), that peers can influences whether an individual disengages him or herself from drug use or engages in it use (CDCP, 2013).

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CHAPTER SIX

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This study was designed to assess the use of illicit drugs and their effects on academic performance among senior high school students in the Sunyani West District. This chapter covers the summary, conclusions and recommendations drawn from the findings of the research.

6.1 Summary of findings

The ages of the respondents ranged between 13 and 25 years. In addition, respondents who were between 17-18 years old were the majority representing the highest percentage whiles 13 years old was the least age.

The study shows that proportion of females who use illicit drugs was more than males through the Chi-square analysis. More than half of the sampled respondents were Christians with only 17.25% being Muslims. With regards to respondent's residence, those who lived in the rural settings were higher and were found of using illicit drugs than those in the urban areas.

Drugs commonly taken by respondents were alcohol with the highest percentage (42.0%), followed by tramadol (31.0%), cannabis (14.0%), and inhalants (10.0%), which most of the respondents agreed that they were easily accessible. About 240 (67%) respondents had ever taken illicit drugs before, however 137 (38.2%) respondents were still taking at least one of the illicit drugs at the time of the study.

It was found out that the route through which respondents introduced illicit substances into their bodies were drinking, injecting, smoking and inhaling, however those who used

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the drugs through drinking formed the majority. Some of the participants only took illicit substances whenever it is available, only few of them took it on daily, weekly and monthly basis.

Respondents were able to afford the drugs through friends, doing menial jobs, family members and out of their pocket money. Many of the participants lived with both parents' whiles few of them lived with either their mother or father or guardian. Furthermore, high percentage of participants indicated that their parents were still married but few of them parents had divorced.

Majority of them indicated television, radio and internet had the high potential of influencing someone to experiment with illicit drugs. Additionally, respondents believed that poor parent-child relationship is a strong factor that exposes one to the use of illicit drugs.

The study discovered that a greater number of the respondents were able to identify illicit drugs from licit ones, had good knowledge about the illicit drugs and others had average knowledge about the drugs. There was high number of respondents who were able to answer specific questions concerning illicit substances including the punishment for use and handling of the drugs.

The study revealed that students who had used at least an illicit drug had seen an effect on his or her academic performance. Some of the respondents started using illicit drugs as early as when they were in J.H.S. Majority of them started in S.H.S.1 & 2, however only few of them started in S.H.S 3. It was noticed from the study that none of the respondents who used illicit drugs had been in the practice for less than one month.

The study shows that absenteeism, truancy, poor self-control, high level of conflict, decrease ability to concentrate, poor academic performance, mental illness and drop out of school were very severe effects of illicit drug used. Moreover, poor reputation, genetic components (Individual Neurobiological level) and declining retention rate were identify by the respondents as severe and less severe effects of illicit drug use.

6.2 Conclusion

- The most popular illicit drugs used by the senior high school students in Sunyani West District were alcohol, tramadol, cannabis, inhalants, and cocaine.

- Alcohol and tramadol were the most frequently abused drugs with cannabis, inhalants such as petrol and cocaine been the least used once by these students.

- Some of the students use illicit drugs daily, when available, monthly or occasionally due to the easy accessibility of illicit drugs. Respondents take illicit drugs in the form of drinks, injection, smoking and inhalation.

- Many of the respondents were knowledgeable in identifying illicit drugs. The sources of knowledge were cited as school, the media, friends, internet and literature. Hence, education being it formal or informal can be a great source of knowledge.

- The students consider poor parent-child relationship, peers, single parenting, family, poor parental supervision and the media as major factors that influence students use of illicit drugs.

- Illicit drugs use and poor academic performance were linked, where it used led to decline in their academic performances.

- Absenteeism, truancy, poor self-control, high level of conflict, decrease ability to concentrate, school dropout, individual neurobiological level, poor reputation and declining of retention rate were effects associated with illicit drugs use.

6.3 Recommendations

Illicit drug use and abuse over the years has become a global phenomenon affecting almost every country and the fight against illicit drug use and abuse has become the priority of most countries. In light of this fight the following recommendations made may be of relevance in the design of relevant programmes for the reduction and prevention of illicit drugs use and abuse by the youth most especially those in senior high schools.

1. Sunyani- West District authorities should take a look at the laws on illicit drugs such as alcohol, tramadol, cannabis, inhalant, cocaine which were commonly used by the senior high school students and collaborate with the chiefs, elders and the police in the district to develop regulations on the use of these drugs and enforce them.

2. Narcotic Control Board should sponsor media (television, internet and radio) to intensify the anti-drug campaigns in order to have illicit drug free society since they were the most influential source of knowledge on illicit drugs to the students with special focus on the youth of which those in senior high schools also forms part. This ensures that education gets to all people, especially parents and children at all places such as in schools, churches and communities.

3. Parents and guardians should sincerely re-orient their children on the adverse effects of illicit drug use. Parents should be counseled on how to establish good and effective relationship with their children. This will help parents to communicate effectively with

their children, thereby being able to know and address their problems. Parents should also make it a point where possible to know people their children associate with and give them the needed guidance in protecting themselves from bad people in the community.

4. Health educators in the district should intensify their education on the negative effects of illicit drugs use on the academic performance of students as well as on their family, society and the nation in general.

5. Drug enforcement units such as Narcotic control board (NACOB) and Ghana Police Service in the Bono Region precisely Sunyani-Wests District should intensify their efforts at reducing the preparation and distribution of various forms of illicit drugs that are commonly used by the senior high school students because the study shows that most of the illicit drugs were easily available and accessible in the district.

6. National drug law must also intensify their anti-drug campaigns in order to have illicit drug free society with special focus on the youth.

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APPENDICE

APPENDIX I: QUESTIONNAIRE

<u>**INSTRUCTIONS:**</u> Do not write your name, tick or write one response in each question where applicable. Only students in the Senior High School year two and three are eligible for this study. The purpose of this study is to assess and document **'the use of illicit drugs and their effects on academic performance among senior high school students in the study area'**. The research is purely an academic exercise and your opinions and responses will be treated with utmost confidentiality. Please answer the following questions:

<u>**Section A**</u>

Demographic characteristics of respondents

1. Age of respondent ………………..

2. Gender   a. Male   b. Female

3. Religious Denomination   a. Christianity   b. Islam   c. Traditional Religion

d. Others specify please…………………………….

4. What kind of school do you attend?   a. single sex school   b. Mixed school

5. What mode of student are you?   a. Day   b. Boarder   c. Hostel

6. Where do you reside? ....

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Section B

Prevalence of illicit drug used

7. How did you first find out about drugs?   Family [ ]   School [ ]   Friends [ ]   Media [ ]

8. Which of the following illicit drugs have you ever used or ever taken?

   ➢ Amphetamine- type stimulants, Tramol, Tramadyl Yes / No

   ➢ Cannabis (wee) Yes / No

   ➢ Cocaine Yes / No

   ➢ Heroin Yes / No

   ➢ Other opioids Yes / No

   ➢ Inhalants e.g. Chemicals in Gasoline, Petroleum, Glue Yes / No

   ➢ Alcohol Yes / No

   ➢ Tramadol Yes / No

9. How did you administer it? A. smoked   B. inhaled   C. drinks   D. not applicable

10. Do you or the colleague still take the drug? Yes / No

If yes, how often do you take it? A. when available   B. daily   C. weekly D. monthly

11. How are you able to afford the drugs? a. from friends b. family member c. out of pocket money d. menial jobs

12. How easy to obtain the illicit drugs? a. very easy   b. quite easy c. easy d. not easy e. not applicable

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Section C

Knowledge level of students on commonly used illicit drugs.

13. Define a drug in your pinion…………………………………………………

14. What is an illicit drug? ....

15. Identify the illicit drugs among the following

DRUGS	Tick
Cannabis (wee)	
Inhalants e.g. Chemicals in Gasoline, Petroleum, Glue	
Cocaine	
Amphetamines e.g. Tramol, Tramadyl, Tradyl	
Prescribed drugs e.g. Paracetamol	
Heroin	
Caffeine	
Cigarette	
Tobacco	
Sedative e.g. Brukutu, Pito, alcohol	
Chloroquine	
Tramadol	

16. How did you get to know of the illicit drugs? TV [ ] Radio [ ] Literature [ ] Internet [ ] Friends [ ] Shops [ ]

17. Do you know that illicit drugs are not prescribed by doctors and are illegal? Yes / No

18. The handling and use of illicit drugs are punishable by law? Yes / No

19. Give any punishment   associated with illicit drugs handling and use……………

20. Have you noticed any effects of the illicit drugs on your academic performance? Yes / No

Section D

Factors associated with illicit drug used.

21. Whom do you live with at home?   a. Father b. Mother   c. Both Parents d. Guardian

22. Marital Status of parents/guardian? Single [ ] Married [ ] Divorced [ ] Separated [ ]

 23. Has any member of your family ever used an illicit drug? Yes / No

  24. How strong is your relationship with your parents/ guardian? Very strong [ ] Weak [ ]   Very weak [ ]

25. Do you think that the media influences students to take illicit drugs? Yes [ ] No [ ]

> ➢ If yes, which out of the following do you think is more influential? TV [ ] Radio [ ] Literature [ ] Internet [ ]

26. Do you think that peer influences affect your opinion on illicit drugs? Yes [ ]   No [ ]

27. Rank on a Likert scale of 1-3 which of the following variable factors present exposure of students to illicit drug use

FACTORS	Not Severe	Severe	Very Severe
	1	2	3
Single-parent			
Step families			
Substance use among family members			
Poor parent-child relationships			
Family conflict			
Poor parental supervision.			
Peer pressure			

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Section E

Effects of illicit drugs used on academic performance of students.

28. What grade did you get in J.H.S? …………………

29. At what level did you start using illicit drugs? a. JHS   b. SHS 1   c. SHS 2   d. SHS 3

e. Not applicable

30. In a rough estimation how long have you been taking illicit drugs?

31. How is your performance now as compared to J.H.S.?   a. Better   b. Worse

32. Rank on a Likert scale of 1-3, how these outlined effects of illicit drugs use as

heightened below affects students' academic performance.

	Less Severe	Severe	Very Severe
EFFECTS	**1**	**2**	**3**
Declining retention rates			
Poor reputation.			
Drop out of school			
Mental illness			
Genetic component (an individual			

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neurobiological level)			
Poor academic performance			
Decrease ability to concentrate			
High level of conflict			
Poor self-control			
Truancy			
Absenteeism			