

UNIVERSITY OF GHANA
SCHOOL OF PUBLIC HEALTH
COLLEGE OF HEALTH SCIENCE



**EFFECT OF SUBSTANCE ABUSE ON QUALITY OF LIFE AMONG THE YOUTH
OF EAST AYAWASO MUNICIPAL (NIMA/MAAMOBII) IN THE GREATER ACCRA
REGION OF GHANA**

BY

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LEGON IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD
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DECLARATION

I, Issah Munziru, author of this dissertation, do hereby declare that except references to work of other people who have been duly cited, the work presented in this dissertation: Effect of Substance abuse on Quality of health among the youth of Ayawaso East Municipal (Nima/Maamobi) was done by me under the supervision of my academic supervisor, Dr. Prudence Tetey.

The dissertation has neither in part nor whole been presented for any award.


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19/10/2019
.....
DATE


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18/10/2019
.....
DATE

DEDICATION

I wish to dedicate this work of mine to Almighty Allah and my family.

ACKNOWLEDGMENT

First of all, I would like to thank the Sovereign Allah for his divine protection, understanding and authority to effectively finish this study.

I am so grateful to the head of the department of BEOH School of Public Health, Professor Julius Fobil, all the tutorial and administrative staff of the School of Public Health who spent their precious time in guiding me to acquire an unquenchable knowledge like this. May the good Allah richly bless you and replenish all efforts spent on training me.

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The Chair Person
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STATEMENT TO COMPLY WITH ETHICAL PRINCIPLES

I **Issah Munziru**, principal investigator of this study, write to state that I will comply strictly with all the ethical principles, which includes beneficences and non-scale beneficences that is promoting the interest and wellbeing of others, not harm, respect for the right of others and ethical principle of justice that is fair treatment of others.

The above ethical principle will be adhered to throughout the study by ensuring that the research is based on full informed ethics review committee guidelines, the data collected will be kept confidential under locked in cabinets. Manual data collected will not bear the names of clients visited at the facilities.

I will adhere strictly to all ethical principles and guidelines throughout the research. Data collected will be used solely for the academic purpose of the research

Issah Munziru (Student)

Dr. Prudence Tetey (Academic Supervisor)

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ABSTRACT

Background: Studies on substance abuse have shown that various age groups of people abuse several drugs. Currently, youth in both developed and developing nations have experienced an increase in substance misuse. The accessibility, affordability, and consumption of abused drugs by the youth have attracted great concern among public health practitioners.

It is recognized that substance abuse among the youth has a severe effect on their quality of life. It also has a great impact on the physical, cognitive and intellectual development of those who use it. There is limited documentation on factors influencing substance abuse and how substance abuse influence quality of life among the youth in Greater Accra, Ghana.

Objective: This present work is aimed at determining the factors influencing substance abuse and the quality of life among the youth of Nima and Maamobi of Ayawaso East Municipality.

Methods: The research adopted a case-control study design that is incomparable. Using a respondent-driven sampling technique, a self-administered questionnaire was used to collect data from a total of 354 (118 cases and 236 controls) selected among Nima and Maamobi youth.

Statistical Analysis: Quality of life was evaluated on a continuous scale using composite score analysis base on the Likert scale items that were used to measure the quality of life(WHO BRIEF). To determine the relationship between substance abuse and quality of life among the youth of Nima/Maamobi, the multivariable ordinary least square regression analysis was used. For heavily skewed quality of life distribution, quantile regression analysis was used. . Bivariate analysis of factors associated with drug abuse was conducted using either the Chi-square test of independence and the Fisher's exact test where appropriate. Multivariable logistic

regression analysis was used to invest factors associated with substance abuse (socio-demographic, socio-cultural and socio-economic).

Results: The teenagers who abused drugs had a reduction in their quality of life of 37.2 percentage points relative to the comparison group (youth who do not abuse drugs). Factors associated with substance abuse included broken homes, peer pressure, poor parent-to-ward relationships, availability and low cost of abused drugs, and poor child upbringing.

Conclusion: Most participants were males and Junior High School graduates. It was observed that socio-demographic, socio-cultural and economic factors have related effects on substance abuse and the individual's quality of life. Therefore, it is recommended that rehabilitation centers should be located in the different health facilities, especially in those areas that are prone to substance abuse. This is to assist to minimize the situation. Regular seminars on quality family leadership should be held.

CHAPTER ONE

INTRODUCTION

Substance abuse has become one of the world's growing major problems of public health and socioeconomic issues. Substance abuse involves the harmful use of psychotropic substances including alcohol and illicit drugs such as cocaine, heroin, amphetamines etc. Psychotropic substances are drugs or chemical substances that change brain function and results in alterations in perception, mood, consciousness, cognition and behaviour. The users of the psychoactive substance are always keen to repeat the dose. They find it difficult to control the use of these drugs or may have withdrawal symptoms (Al-alawi & Shaikh, 2018). Many prospective risk variables boost the likelihood of abuse of drugs. These include genetic factors, environment in the family, lack of parental attachment, mental health and extraneous environment. Most of the time, people abuse drugs is to improve efficiency or reduce problems like stress, depression, peer pressure and anxiety. The use of a drug is related with decreases in a broad spectrum of areas of quality of life, including physical, social, psychological, labor, academic and economic functioning (Felipe, Bernardes, Filho, Paula, & Noronha, 2018). Misuse of substances affects not only the adult group, but also the youth. It has been observed that a greater part of substance abuse begins amid the pre-adulthood (Adewumi, Bukunmi, 2017). Survey reports from schools in some African countries showed that the use and ill-use of alcohol and drugs by adolescents begins with liquor and cigarettes. A research by Peltzer (2009) on substance use among school-going teenagers in six nations in Africa (Kenya, Namibia, Swaziland, Uganda, Zambia, Zimbabwe) showed that 6.6 % of learners surveyed abused alcohol (two or more daily in the previous month for at least 20 days or more) and 10.5 % had illicit use of drugs (three or more sessions). This is allied with a higher rate of crime,

interpersonal violence, uncontrolled sexual behaviors and negative psychological burden to the families and the nation as a whole. The study will be looking at the factors influencing substance abuse and quality of life among the youth in the country and the relationship between substance abuse and quality of life.

Problem Statement

It is estimated that about 275 million people worldwide used drugs at least once in 2016, which is 5.6% of the worldwide population aged 15-64 years. Approximately 31 million people who use drugs suffer from drug use diseases, which implies their use of drugs is harmful to the extent that they may have to be given therapy. (UNODC, 2018). In 2016, in the United States, 63,632 people died of drug overdose, the highest recorded number (UNODC, 2018).

Total global opium production was easily the highest estimate recorded by United Nations Office on Drug and Crime since it began estimating global opium production by 65% from 2016 to 2017 (10,500 tons) at the beginning of the twenty-first century. In most countries, cannabis is also the most widely used substance among the general population and young people. Illicit substance use is detrimental to individuals and society ; it spawns offenses, spreads diseases like AIDS, kills youth and future leaders (Oliha, 2014). A nationwide study on illicit drug use conducted in Ghana's second-cycle schools reported that 65% of drug abusers used medicines to have a nice time with their peers, 54% wanted to experiment with what it was like, 20% to 40% used it to alter their moods, feel good, relax, relieve tension, and overcome boredom and problems (Adu-Gyamfi & Brenya, 2015) .). Unprescribed drug use in Ghana has become one that is difficult to handle and control. Most drug users in Ghana use

drugs secretly. Consequently, the health implication accompanying drug abuse worsens for the users. The situation is not different in Nima/Maamobi, where the abuse of drugs has increased.

This has a serious impact on the health of the youth and the community as a whole, hence the need to investigate the variables that contribute to the abuse of the substance and its health quality.

1.3 Justification

Youth substance abuse is a severe issue that defines the youth's future in every nation. It is not enough to acknowledge the fact that there is an increasing trend in substance abuse both in developed and developing nations.

This research is relevant to knowing factors that influence the youth into substance abuse, the pattern of drug use and its health implications. This will add up to the already existing knowledge on substance abuse and its implication among the youth. It will also serve as an awake up call to the twin community and the nation as a whole. The information will also be used as a guide and provide a focus for various intervention and preventive programs on substance abuse among the youth.

1.4 Research Questions

What is the effect of substance abuse on the quality of life among the youth of Nima/Maamobi?

What are the (economic, demographic, cultural and environmental factors) associated with drug abuse among the youth of Nima/Maamobi?

1.5 General Objective

To determine factors associated with substance abuse and the effect of substance abuse and quality of life among the youth of Nima/ Maamobi.

1.5.1 Specific Objectives

To determine the effect of substance abuse on quality of life among the youth of Nima/Maamobi.

To determine the association between economic, demographic, cultural and environmental factors on drug abuse among the youth of Nima/Maamobi.

1.6 Conceptual Framework

Demographic variables like age, gender, occupation, religion, marital status, and education often influence choices about drug abuse. Men are more likely to participate per research in maladaptive behaviors such as drug abuse and money abuse relative to their female counterparts. Also, age is a major influencing variable when drug abuse begins. Some young people may take drugs with the intention of being seen as adults with the intention of appearing old. Educated folks are known to make self-improving choices that are less harmful to them than uneducated folks who may be confused and thus end up being comforted by drug abuse. Religion also plays a major role in socializing the individual by providing the rules needed to guide the person's behavior and social interactions.

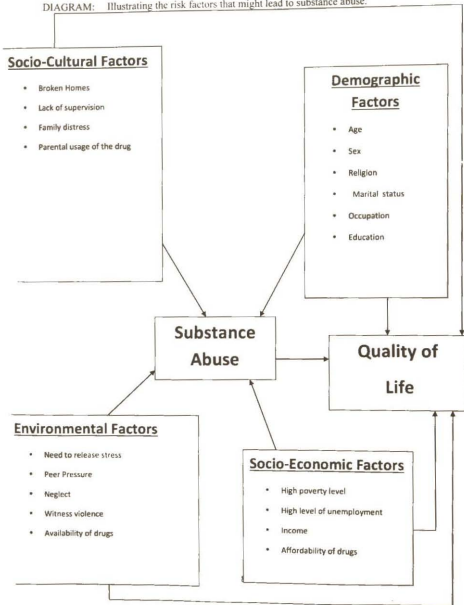
In determining one's behavior, social-cultural variables also play a major role. For example, during cultural tasks, some cultures suggest taking stimulants, depressants, and hallucinogens such as beer, liquor, wine, Sativa tobacco, and cannabis. Some religions do not frown on alcohol, members take drugs and during social gatherings may push them into reliance. Some alcohol or drugs are culturally acknowledged and during these cultural ceremonies or celebrations people are grouped into age sets and provided with the drug. In social and religious meetings, for example, cannabis, a traditional drug in Indian society, is ritualized. In certain cultural communities, using Bhang and Charas by adolescents without parental permission for this is a socially punishable conduct. Parental attitude towards alcohol or smoking plays a major role in either smoking or drinking the teenager. Smoking parents' kids are likely to be smokers twice. Adolescents are less likely to smoke when they are disapproved by parents or guardians. If both parents are smokers, female adolescents are highly expected to be smokers. Maternal smoking has a powerful correlation with female youth that turns out to be a smoker.

Being brought up in a home where smoking by parents exposes the young individual to smoke from cigarettes. Parents who smoke can also give cigarettes easy access and less likely to stop smoking to their children. Smoking is also likely to occur in children with older siblings. The social environment also plays a vital role in influencing drug abuse from the family environment to the influence of the peer group and the need to be accepted into a particular group. Therefore, substance abuse may be at its peak in societies where such factors occur. Young smokers are the most influenced by friends. Tobacco smokers have mostly begun their abuse in the company of a smoking colleague (Jiloha, 2009). Female adolescents with a best friend who is a smoker are nine times more at a chance of becoming smokers. A shared activity with important socializing functions for female youth is smoking. Peer smoking also predicts Cannabis abuse in the school-going population has been associated with poor scholastic performance, school dropout and reinforcement of conduct symptoms these adolescents create their peer group. Academic failure or poor social skills can put a child at further risk for substance abuse. Studies report that children with early behavioral problems are at risk of developing academic problems and experiencing rejection from their pre-social peers, probably leading to connections with deviant peers and in turn engage in other Maladjusted acts such as truancy, substance use, or possibly violent behavior (Bradshaw, O'Brennan, & McNeely, 2008). Advertising is an effective weapon to influence the decision of the youth to initiate smoking. Advertising bans are very effective in reducing cigarette smoking prevalence in youth. A banned on advertisements of cigarettes and other tobacco products through an Act has been made by the Indian government (Jiloha, 2009).

Economic variables like one's economic status determine one's drug abuse indulgence. Higher rates of parental education and socio-economic factors have an inverse relationship between adolescents with the use of tobacco and other psychoactive substances.

Smoking prevalence is more common in families with low socio-economic societal educational status. Children using inhalants generally have low socio-economic status, with volatile family revenue engaged in menial job. Marital issues, parental divorce, single parenting, adolescent drug abuse. Parents with poor child monitoring are likely to have their kids abuse drugs. The "Drug Abuse and Addiction" study (2017) addressed that a very significant factor is the family's contribution, home environment, particularly during adolescence. There may be an increase in parents or elderly family members who indulge in substance abuse or participate in criminal conduct.

DIAGRAM: Illustrating the risk factors that might lead to substance abuse.



CHAPTER TWO

2.0 LITERATURE REVIEW

This chapter is concerned with the review of related literature concerning the variables related with substance use among the youth, as documented by researchers, authorities, writers, and theorists. The areas reviewed include the definition of the concept of drug abuse, the prevalence of substance abuse, some of the substances abused in Ghana and its health implications, factors linked with substance abuse conceptual framework and quality of life.

Drug abuse was described as the unlawful or harmful use of psychotropic substances, including alcohol and illegal drugs (Rathore, Joshi, & Pareek, 2017).

The day's drug abuse was seen as a problem of street children, working children, and trafficked children was initially, but has now become a common practice among school-going teenagers with varying socio-economic and educational status (Rathore et al., 2017). Drug abuse can also be called use or uncontrolled use of drugs. (Muchena & Makotamo, 2017). Drug abuse / use is described as persistent use of drugs that are not required for therapeutic reasons, but to alter one's mood or influence one's state of mind (Muchena & Makotamo, 2017). The Medical Center of the University of Maryland agrees with the above definitions that substance abuse is the recurrent use of illegal medicines or the misuse of over-the-counter medicines with negative outcomes. These effects can involve having issues at job, school, and home and interpersonal relationships issues. There is an alarming decline in the age range at which people begin to consume or have their first taste of drugs. As per the aforementioned study was done by Kailash in 2016. Many kids at the age of five reported taking in drugs. (Kailash, 2016).

By generating less dopamine or by decreasing the amount of dopamine receptors in the reward circuit, the brain conforms to the overwhelming surges in dopamine as the person continually uses drugs wrongfully. This results in a reduction in the reward circuit impact of dopamine, which decreases the capacity of the user to appreciate the substance. This decrease causes the addicted person to continue to abuse drugs in an attempt to restore the dopamine function to a steady level, except that higher doses of the drug are needed to maintain the same high dopamine: an effect known as tolerance (Al-musa & Al-montashri, 2016).

2.2 Prevalence of Substance Abuse

According to recently published World Drug Report (2018), nearly 275 million people, representing 5.6 percent of the world population, between 15–64 years used drugs at least once in the year 2016 (Mental, Care, & Mhca, 2018). Among them, for drug-related illnesses, about 31 million individuals would need therapy. The 2010 Global Burden of Disease Study showed that it directly accounted for 20 million Disability-adjusted Life Years (DALYs), representing 0.8 percent of all worldwide DALY cause. The biggest contributor to the immediate burden of DALYs was opioid reliance. About 5,500 children in India take tobacco products daily and some as young as 10 years of age (Saxena, Saxena, Kishore, & Kumar, 2010). Many drug and substance brands are available. Rao (2010) discovered that nicotine was present in substances such as tobacco or 'bidis' and 'gutkha' and inhalant / volatile substances used as adhesive glue, petrol, gasoline, thinner and spirit sniffing that were common substances used. The appalling fact that, according to one of the studies, at the age of five years was the age of starting to take in or having the first taste of drugs is dwindling sharply, many children reported consuming drugs (Kailash, 2016). Africa is encountered with many problems such that, substance abuse is not focused on as it should be. Both illicit drug trafficking and

substance abuse are on a heighten in Africa. Cannabis, Opioid, Heroin, Shisha, and alcohol are among the drugs ill-used across the Sub- Sahara African continent.

Only a few works of literature estimate the prevalence of substance abuse. A study done in South Africa by (Taylor, Jinabhai, Kleinschmidt, & Dlamini, 2003) reported a 16.9% prevalence rate of ever smoked cannabis in the KwaZulu-Natal, South Africa. A study by (Eneh & Stanley, 2004) done at Port Harcourt, West Africa, revealed an overall prevalence of 26%. A World Drug Report of 2006, states that the prevalence rate of cannabis use as 1.4%, opioid use as 0.05% in Uganda. A research by (Siziya et al., 2013) found that the general incidence of ever-smoked cannabis was 37.2%, 34.5% for men and 39.4% for women. . Another study by (Oshondi, Aina, & Onajole, 2010) done in Nigeria among secondary school learners states that the prevalence of past users of cannabis to be 1.1%, current users to be 12% and lifetime users to 4.4%. the prevalence of past users of cocaine was 1.9%, current users at 1.9% and lifetime users at 3.8% and the prevalence of past users of heroin at 0.5%, 3.3% for current users and 3.8% for lifetime users. It further states that more males (5.1%) used cannabis than females (3.1%) and more females used heroin (4.4%) and cocaine (4.0%) than the males at 2.3% and 1.8% for heroin and cocaine respectively. Another study in Kenya a neighboring country to Uganda done by Tuwei, 2014, states that 19% of the respondents took marijuana of which 46% who used daily skipped more classes spent less time studying earning low grades and finally dropping out of college. Approximately 31.6% who used marijuana every week spent less time studying while 42.9% who used once a month reported with poor grades. The researcher argues that marijuana abuse directly mars academic abilities which limit academic performance.

In Wellington's (2005) school-based studies at chosen junior high schools in Ghana (Ghana Global Youth Tobacco Survey-GYTS) and backed by WHO-Ghana, it was found that out of a total of 1,917 participants, 14% had ever smoked cigarettes, 19% used a form of tobacco. It was revealed that tobacco company agents had previously provided free cigarettes to 15.1 percent of participants. Over the past year, about 55.9 percent had been educated about the dangers of smoking in the classroom. Another research conducted by Adu-Mireku (2003) showed that by the age of 16, 72.7 percent of Ghanaian high school pupils began abusing drugs.

2.3 Patterns of Drug Use among The Youth

After tobacco and alcohol, cannabis follows as the most widely used drug. Cannabis is regarded among young people to be the most widely used drug. Epidemiological research, aimed only at developed countries, indicates that marijuana's perceived simple accessibility, combined with perceptions of less side effects, makes marijuana the most prevalent substance used after tobacco and alcohol. Its use begins in late adolescence and rises in adolescence. Approximately 9 percent of all participants who experiment with cannabis develop its use disorders. While 1 in 6 of those who start using cannabis as adolescents develop illnesses in the use of cannabis between one quarter and one half of those who smoke cannabis every day. The use of other drugs is typically preceded by cannabis use. Compared to non-users, users are more likely to use other drugs even if they are controlled for other major covariates such as genetics and environmental influences (UNODC, 2018). Among other reasons, the use of cannabis during adolescence and the subsequent use of other drugs during young adulthood may lead from prevalent and shared environmental variables. Adolescent users may come into contact with other cannabis-using colleagues or drug dealers who provide other drugs, leading to enhanced exposure to a social context that promotes other drug use (UNODC, 2018). For

example. A longitudinal research among teenage twins showed that a twin who used cannabis progressed differently towards the use of other drugs, alcohol dependence and substance use disorders at rates twice or even five times greater than a twin who did not use cannabis (UNODC, 2018) in Bolivia, Colombia, Ecuador and Peru a comparative study university learners indicated that cannabis was commonly used among them. Also highest among university learners in Colombia was the reported use of other drugs. Students in the four nations also recorded the use of drugs such as cocaine, tranquilizers, LSD, and inhalants. In the survey, the proportion of those who started to use drugs at a young age varied among males and females, with drug use among male students being twice as high as among female students.

Also prevalent among learners was polydrug use, with one-third of learners in Colombia reported using two or more substances at the same time in the previous year, compared to 20% in Ecuador and 7% in Peru. Among the drugs most frequently reported as being used at the same time were cannabis, cocaine, LSD and ecstasy.

2.4 The Quality Of Life (QOL)

The concept of quality of life widely surrounds how a individual rates the 'goodness' of various life elements. These assessments include one's emotional reactions to life events, disposition, sense of life fulfillment and satisfaction, and work and personal relationships satisfaction. The word 'quality of life' is often referred to as 'well-being' as well. Overall, QOL encompasses the satisfaction of the patient with life as a whole and not only the limitations of functioning related to disease. QOL assumes its full significance as a measure of diagnosis and outcome when health is considered to be a state of complete physical, mental and social well-being, not just the lack of illness, and this is known as Overall Quality of Life (OOQL). Human-related

health quality (HRQOL) is the perception of an individual as to how their physical, psychological and social functioning and well-being is influenced. QOL measures can help clinicians to select and evaluate the efficacy of a particular therapy course. Their use is consistent with increasing interest in models that involve patients as partners in their care throughout the health sector (Laudet, 2011).

The model addresses the burden of illness and services on the overall well-being of the patient. The model also provides a human-centered, strength-based continuity of care for people, families, and communities to take care of their health, wellness, and alcohol and substance disorders rehabilitation (Clark, 2008). Individuals dependent on substances and drug use seekers for therapy with illness have bad QOL compared to cohorts without drug use disorder (Donovan et. al. 2005).

2.5 The burden of Drug Abuse

Dependence is a state characterized by an emotional and mental concern for the substance's effects and persistent desire for it. This could lead to progressive neglect of research, extracurricular activities, and interpersonal relationships in a key developmental era such as childhood and adolescence, putting these youth many paces behind their age mates. Also significant is the use of financial burden substance on substance users, their families and the nation as a whole. A recent study by the National Institute of Mental Health and Neuro Sciences (NIMHANS) in rural, urban, town and slum households of 28,500 people in and around Bangalore City, Karnataka, found that the average monthly alcohol expenditure of alcohol-addicted patients exceeds the average monthly salary. NIMHANS researchers have calculated that addiction to substance abuse can contribute straight to high-risk behaviors, particularly among vulnerable populations (Abuse, Agarwal, & Georges, 2013). Activities

such as gambling, drug peddling, pickpocketing, stealing, fighting, rape, and self-harm, when intoxicated, are prevalent among youth. They are at a higher risk of suicide and depression.

In return for medicines, children and teenagers sometimes engage in or are compelled into sex. Abusers of youth substances are disposed of behavioral delinquency and anti-social practices. They risk contracting bloodborne and sexually transmitted infections such as AIDS when sharing used needles or having unprotected sex under the substance's influence. Younger ages at the start of drug use and dependency such as that of opioids are correlated with greater severity of drug use, greater life-time use of other drugs, greater feeling seeking and greater worldwide psychopathology (Abuse et al., 2013).

General symptoms of substance abuse disorder

The Fifth Edition (DSM-5) Mental Disorders Diagnostic and Statistical Manual outlines eleven symptoms of substance use disorders. These may include a constant desire to stop using the substance and/or continually attempting to decrease or regulate the use of the drug, continuing to use the substance despite understanding that a physical or psychological health problem was probably caused or aggravated by the drug, using the substance in greater quantities or for a lengthy period of time than initially designed, with symptoms of withdrawal. Other such symptoms require spending a considerable quantity of time attempting to acquire, use or retrieve the substance from its use, stopping or reducing social, work-related or recreational operations due to drug use, building up tolerance where a bigger quantity of the substance is required to have an impact, having a powerful desire to use the substance and continuing to use it even when the substance is used.

2.6 Some of the Common Drugs Abused and Their Effects

Codaine: Common effects include drowsiness and constipation. Other effects that are less common are euphoria, itching, nausea, vomiting, dry mouth, orthostatic hypotension, urinary retention, depression, and paradoxical coughing. The commonly unusual negative effects consist of anaphylaxis, seizure, and respiratory depression.

Continuing codeine use may result in physical dependence. If an person suddenly ends the medication, withdrawal symptoms may happen when physical dependence has evolved. Symptoms of withdrawal include: medication cravings, yawning, sweating, troubled sleep patterns, weakness, stomach cramps, diarrhea, muscle spasms, irritability, and pain. To reduce the symptoms of withdrawal, under the supervision of a health care professional, long-term users should systematically minimize their codeine medication.

Heroin:

Heroin is usually smoked by injection or through an aluminum foil or cigarette paper. Constipation is caused (Shazzad et al., 2013). Suppression of different immune pathways mediated by cells leads to opportunistic infections (Shazzad et al., 2013). Intravenous use with non-sterile needles and syringes or other associated medical equipment can lead to infection transmission such as HIV and hepatitis, bacterial or fungal endocarditis contracting tendency. Physical dependence may result from prolonged use of all opioids, resulting in cessation of use withdrawal symptoms. It reduces the function of the kidney, while skin-popping leads to abscesses more often. More often than not, direct injection leads to lethal overdose (Shazzad et al., 2013). A tiny proportion of smokers of heroin, and sometimes intravenous users, may

develop toxic leukoencephalopathy symptoms. These symptoms include slurred speech and walking difficulty.

Overdose of caffeine can contribute to the state of over-stimulation of the central nervous system called caffeine intoxication (DSM-IV 305.90) or locally called "caffeine jitters." The symptoms of caffeine intoxication are comparable with other drug stimulants' overdose symptoms. These may include restlessness, fidgeting, anxiety, excitement, troubled sleep pattern, facial flushing, enhanced urination, gastrointestinal disturbance, muscle twitching, wandering thought and speech flow, irritability, irregular or rapid heartbeat, and psychomotor agitation (Shazzad et al., 2013). In cases of much larger overdoses, the following may include: depression, judgment lapses, disorientation, disinhibition, delusions, hallucinations, or psychosis, and rhabdomyolysis (skeletal muscle tissue breakdown) may be caused. Extreme withdrawal symptoms— including headache, irritability, lack of concentration, drowsiness, insomnia, and pain in the stomach, upper body, and joints — can occur within 12 to 24 hours of discontinuing caffeine intake, extreme at approximately 48 hours, and usually last 2 to 9 days. Continuous use and overdose may lead to death.

Marijuana

Marijuana is acquired from the *Cannabis sativa* (hemp) plant's desiccated floral tops, leaves, stems and seeds. It is the most frequently used psychotropic substance. It changes user mood and also affects nearly every organ in the body, its intake can be in a form of smoking, inhaling through the vapor, brewing it as a beverage, using it as a balm, or ingesting it into products such as brownies or chocolate bars. Others consume resin-like form extracted from their plants, it produces an intense high feeling, the substance is called dabs locally.

The main mind-altering (psychoactive) element in marijuana is Delta-9-tetrahydrocannabinol (THC). These are chemical compounds that influence the central nervous system's cannabinoid receptors and many peripheral tissues (Baron, 2015). It creates changes in mood, depression, suicidal thinking, memory issues, and normal learning disruption. It can also give rise to dependence. When an person smokes cannabis, it reaches the brain within minutes, THC is quickly taken into the bloodstream. The body absorbs THC more slowly when consumed, suspending action for up to 2 hours and expanding the length of the effect. It also interferes with other brain parts, adversely affecting equilibrium, posture, coordination and reaction time.

Effects of Marijuana

Marijuana has certain immediate effects on drug applicants such as happiness, relaxation, drowsiness, altered awareness of time, weakened memory, reduced reflexes and impaired motor skills, increased desire for food, dry mouth, tachycardia, behavior impairments, and paranoia. Often short-term impacts, however,

Other issues subsequently arose for the above-mentioned and could be called long-term effects. They may include other breathing problems; as tobacco smoke, marijuana smoke has many of the similar irritating and pulmonary effects. Prolonged users may create persistent cough and the risk of lung infections is greater. In addition, the abuser may be at risk for cardiovascular infections: ingestion causes tachycardia for several hours, increasing the chance of arrhythmias or stroke. This can exacerbate pre-existing heart problems in long-term customers and older people placing them at higher danger of a cardiovascular case.

There are also threats of mental health effects: Prolong marijuana users have lessen individual performance on memory-related tasks and cause a decrease in motivation and interest in

everyday activities. The substance is also known to strengthen symptoms in users with schizophrenia.

The development of children could also be hampered by the intake of marijuana. The use of marijuana during pregnancy may influence the growth of the brain of the fetus and has been associated with baby behavioral issues.

In the abusers of these drugs, this could also cause psychological dependence: like most other abuse drugs, individuals who use marijuana for long periods of time may develop dependence on it. Signs of user dependence include the need to use marijuana for daily tasks and the experience of cravings and anxiety when marijuana is not available..

Alcohol

Binge drinking: binge drinking is called in the United States consuming more than five units of men and four units of women. It brings about vandalism, fighting, violent behaviors, accidents, drunk driving, problems with police, negative health, social, economic, or legal issues. It is also linked to frontal lobe processing and impaired neurocognitive working memory deficits and delayed auditory and verbal memory deficits (Shazzad et al., 2013). Binge drinking is a contributing factor to most heart attack crises beyond the stress of returning to work. For men who have 15 or more drinks per week and for women who have 12 or more drinks per week, there is an increased risk of dependence. . This is known as alcohol dependency (Shazzad *et al.*, 2013).

Long-Term Effects of Alcohol Use

Those with alcohol use disorder often face various challenges. They often complain about interpersonal relationships, problems relating to job or college, and legal problems. They also

complain about irritability and disturbed sleeping pattern. Alcohol abuse is also a significant cause of chronic fatigue. Signs of alcohol abuse are correlated with organs being affected by alcohol. Although these results are frequently present, it is not essential to diagnose alcohol abuse. Signs of alcohol abuse show that its drastic effects on the central nervous system include acute inertia and bad judgment; chronic anxiety, irritability. Alcohol's impact on the liver includes elevated liver function testing (AST is at least twice as large as ALT). Cirrhosis and liver failure result from long-term use. Alcohol also causes the critical thinking of a person to be impaired. In a stressful scenario, one's capacity to reason is impaired, and they seem to be very inattentive to what is happening around them. In people with alcoholism, social skills are significantly impaired due to the neurotoxic effects of alcohol on the brain, particularly the brain's prefrontal cortex area. The social skills impaired by alcohol abuse include impairments in the perception of facial feelings, issues of prosperous perception, and theory of mental deficits; the capacity to comprehend humor in alcohol abusers is also impaired. Critical disease is less likely to survive in patients who abuse alcohol. A study conducted at the Ohio State University Medical Center discovered that patients with alcoholism or withdrawal from alcohol were at a much greater danger of sepsis and were more probable to die during hospitalization (Shazzad et al., 2013). Alcohol abuse causes neuroinflammation and leads to myelin disruption and loss of white matter; adolescent brain development is at enhanced danger of brain damage and other long-lasting brain disorders. Adolescent alcohol use disorder may have a detrimental impact on hippocampal, prefrontal cortex, and temporal lobes. Children aged 16 and under who take heavily alcohol display symptoms of behavioral disorder. Its symptoms are problems in school behaviour, constant lying, learning disabilities and social disabilities.

Cocaine

Cocaine is a powerful and highly addictive substance produced from leaves of coca plants mainly grown in South America (Drug Abuse, 2016). It works by inhibiting reuptake of serotonin, norepinephrine, and dopamine, leading to greater concentrations of these three neurotransmitters in the brain with the reward effect of blocking dopamine transporters.

Cocaine (C₁₇H₂₁NO₄) is a psychoactive, stimulating drug that is powerful and extremely addictive. It's traded on the street as a good, white powder. It is possible to snort or dissolve in water and inject the powdered, hydrochloride salt form. Freebase is an ammonia-processed cocaine hydrochloride heated to remove the salt from hydrochloride. This type of 'freebase' is not water-soluble; owing to the reduced melting point, the powder can be heated and its vapors smoked. People who use this drug in any form can "binge" the substance continually within a minimum of time and at increasingly higher doses in order to maintain their "high"

Crack cocaine ("crack") is a popular type produced with baking soda that is rock-like and may contain a large percentage of impurities. The word "crack" refers to the sound of crackling heard before smoking when it is heated

CHAPTER THREE

3.0 METHODOLOGY

3.1 Introduction

This section discusses the methods and methodology of the study process. The chapter describes the target population, sample size, and sampling technique used in this study. Also addressed are the research tools, sources of information, data analysis and ethical considerations. .

3.2 Study Area

Nima and Maamobi are twin villages in the Greater Accra Region of Ghana's east municipality of Ayawaso. GIMPA bordered the Municipality on the North through the University of Ghana, Legon, sharing borders at UPS Road with the Ga East District. On the south by the Ring Road starting from Ako-Adjei inter-change down to Kwame Nkrumah Circle. On the East, by the Independence Avenue starting from Kwame Nkrumah Circle to Apenkwa overhead bridge sharing boundaries with the Osu-Clotey sub-district on the west- starting from UPS Junction through 37 Military Hospital to Ako-Adjei Inter-change. In the nation's capital, Nima and Maamobi are strategically situated. These communities share with the Seat of Government the same constituency ; the Flagstaff House in Kanda. They can boast of a general hospital, a public clinic, and a chips compound. These two communities are also less than a 30-minute drive from Kotoka International Airport, Accra's Central Business District, Ghana's Parliament, Accra's Ministries, and other landmarks of equal importance.

Nima and Maamobi are typical Zongo communities with most of the inhabitants being Muslims, from Northern Ghana and other West African countries, with Hausa as their main

Lingua Franca, they have different kinds of buildings, but the majority of them are compound houses build with red clay and plastered with cement. They are very densely populated communities with kiosks built on footpaths and some toilet rooms converted into bedrooms. Nima and Maamobi are among the communities most marginalized, poor and/or harmful to live in. It is also said to be one of the most filthy areas in the nation's capital. Nima and Maamobi are renowned for their extensive Internet Fraud adaptation, frequently known as "Sakawa."

3.3 Study Design

Since the study involved a key population (substance abusers) and the difficulty associated with locating this high-risk group of people, the study employed a case-control design.

Following the purpose of the study, 1:2 unmatched case-control designs were adopted. The study identified individuals who use the substance (cases) and individuals who are not using the substance (controls) and then determined the socio-demographic, economic, cultural and environmental factors that would likely influence the probability of substance abuse. The selection of these factors was based on subject matter knowledge, literature review and specific research questions this study sought to address.

3.4 Variables

Outcome measures

The outcome variables are substance abuse and quality of life. For specific objective one, substance abuse was the main outcome variable of interest. In assessing the effect of substance abuse on quality of life as stipulated in specific objective two, substance abuse was the primary exposure of interest whiles quality of life serves as the main outcome measure of interest.

Explanatory variables:

Socio-demographic factors, socioeconomic factors, and socio-cultural factors. Details of the specific variables studied under each domain can be found in Figure 1.

3.5 Operational Definition

Substance abuse: current use of one or many of the following psychoactive substances (alcohol, shisha, cocaine, "Ashish", heroin, codeine and tramadol, marijuana/weed)

Psychoactive substance: A substance that can change the mood, thoughts, and consciousness of an individual who used it.

Youth: a person between the ages of 15 -35 years as per the African Charter.

3.6 Study Population

The study population will be the youth residing in Nima- Maamobi and are the age of 15 to 35.

3.7 Sampling Method.

The study employed the respondent-driven sampling (RDS) technique. This starts with a set of immediate participants serving as "seeds." These participants also employed their acquaintances, friends, or families who qualify in the study to form the first "wave" within the inclusion criteria. The first wave respondents then recruited the second wave, who in turn recruited the third wave. The sample expanded in this manner, growing wave by wave till the sample size was met for the cases. The controls were selected from the same place where the cases were selected. RDS combined snowball sampling — a technique of non-probability sampling — with a mathematical model weighing the sample to make up for the reality that it was not acquired in a straightforward random manner.

3.8 Sample Size Calculation

Power Analysis

Let p_{c_2} be the proportion of those who are not abusing drugs but have experienced broken home. Let p_{c_1} be the proportion of those who abuse drugs and have broken home.

Then the sample size for each group is given by

$$n = \frac{\left\{ Z_{1-\beta} \sqrt{[p_{c_2}(1-p_{c_1}) + p_{c_1}(1-p_{c_2})]} + Z_{1-\alpha/2} \sqrt{[2\bar{p}(1-\bar{p})]} \right\}^2}{(p_{c_1} - p_{c_2})^2}$$

Where

p_{c_2} = proportion of the youth who are not from an area where the substance is commonly abused and abused substance

p_{c_1} = proportion of the youth who are from an area where the substance is commonly abused and abuse substance

OR = Odds ratio = 2.10

$$p_{c_2} = \frac{p_{c_1} \cdot OR}{1 + p_{c_1} \cdot (OR - 1)} = \frac{0.357 \times 2.1}{1 + 0.357(2.1 - 1)} = 0.538$$

$$\bar{p} = \frac{p_{c_1} + p_{c_2}}{2} = \frac{0.357 + 0.538}{2} = 0.448$$

α = Significance level = 0.05

Power = 1 - β = 0.80

$Z_{1-\beta} = Z_{0.2} = 0.85$

$$Z_{1-\alpha/2} = Z_{1-0.05/2} = 1.96$$

$$n = \frac{\left\{0.85\sqrt{[0.357(1 - 0.357) + 0.538(1 - 0.538)]} + 1.96\sqrt{[2(0.448)(1 - 0.448)]}\right\}^2}{(0.357 - 0.538)^2}$$

$$n = 117.89$$

Cases = 118

Controls = 2 × 118 = 236

Total minimum required sample size = 118 + 236 = 354

3.9 Data Collection Procedure and Tools

Data collection involves the process of collecting information or data that can answer the research problem appropriately. Different methods for collecting information are used in this type of studies. They include the use of all earlier available data such as observation, face-to-face interviews, written questionnaire administration, focus group discussion organisation, and multiple projective techniques. For the study, a questionnaire with closed-end issues was used in English. The questionnaires have two sections. Section one captured the participant's social demographics and factors influencing substance abuse. The second chapter was enacted by the Quality of Life-BREF (WHOQOL-BREF) World Health Organization. This tool was used to collect data from all consenting respondents on the objective quality of life. It is a short version of the WHO's self-report questionnaire (WHOQOL-100) designed to measure the perception of the individual's position in life in the context of the culture and value systems they live in and in relation to their goals, expectations, standards and concerns.

3.10 Data processing and analysis

The questionnaires were coded, crosschecked and entered into the STATA version 15. Data cleaning was performed and response frequencies were produced. The analytical findings were provided as frequency tables. Bivariate analysis of variables connected with drug abuse was performed at a substantial rate of 5 percent using the Chi-square independence test and all p-values below 0.05 were deemed important. Life quality was evaluated on a constant scale using the Likert scale-based composite score analysis products used to evaluate quality of life. To determine the relationship between substance abuse and quality of life, the multivariable ordinary least square regression analysis was used and the quantile regression analysis was used for the heavily skewed quality of life distribution. Multivariable logistic regression analysis was used to investigate socio-demographic, socio-cultural and socioeconomic associated with substance abuse. The responses were coded and grouped into themes and discussed. The information obtained was compared with the reviewed literature and discussions were made based on the specific objectives.

3.11 Pilot study:

The questionnaire was tested with twenty-five youth from the Newtown and Pig farm to test the validity of the questionnaire to collect the data needed without presenting any difficulties to the respondents. Pilot study participants were not part of the primary study. No major changes were made to the questionnaire after the pilot test.

3.12 Ethical consideration

Ethical clearance was sought from the Ghana Health Services Ethical Review Board. Permissions were obtained from the MMDCE, chiefs and opinion leaders of the communities. As the use of substances is usually considered private and confidential, anonymity was assured by coding the questionnaires. The participant names were not asked. This was to ensure that the resulting data was not linked to any individual participant. The participants were briefed on the characteristics and purpose of the study and of their right to withdraw at any point should they wish to do so. Informed consent in writing was sought from the participants in the study, this included the purpose of the study, possible risk and discomfort, possible benefits, privacy, confidentiality, and voluntary participation. Participants who gave consent but later decided to withdraw were allowed to do so without hindrance or offense.

CHAPTER FOUR

4.0 RESULTS

The section introduces the outcomes of this thesis ' four primary particular goals. The section consists of five parts. Section one presents the results of the study participants ' frequency distribution and the distribution of covariates by case (substance abusers) and controls (non-substance abusers). Section two of this section provides outcomes on substance abuse-related sociodemographic variables. Sections three and four current outcomes respectively on financial and cultural variables related to substance abuse. Finally, section five of this chapter provides outcomes on the impact of substance abuse on quality of life among individuals residing in the Greater Accra region of Ghana , specifically Mamobi and Nima.

4.1 Background characteristics of study participants

The research involved 354 participants with 118 (33.3%) cases and 236(66.7%) controls. Males were 80.5% (285/354) of the total participants with about one-third of them within the ages of 20 to 25 years. About 48.3% (171/354) of the respondents were Secondary school leavers. However, the majority (58.5% , 69/118) of the cases were Primary school leavers while the majority of the controls were secondary school graduates (58.5%, 138/354). Muslims were the dominating religious group among the participants with more than half of them residing in urban communities. Overall, the proportion of employed respondents was 39.8% (141/354) but most (35.6%, 84/236) of the controls were students while more than half (55.1%, 65/116) of the cases were employed. Generally, the majority of the respondents were single(not married and not cohabiting) but for cases, the majority (47.5%, 56/118) of them were cohabiting while

51.7% (122/236) of the controls were single. Although more than half of the respondents were generally living with their parents/guardians, the proportion of controls living with their parents/guardians was about more than twice that of the cases (73.7% vs 24.6%). The parental relationship was mostly positive among the respondents (61.9%, 219/354), the proportion of controls with a positive parental relationship when growing up was about three times that of the cases (78.0% vs 29.7%, $p < 0.001$). The proportion of respondents who had their parents still married when growing up among the control group was about twice as much as that of those in the case group (80.5% vs 33.9%, $p < 0.001$). Overall, a little above half (51.7%, 183/354) of the participants frequently experienced some tension/fight in their homes while growing up. The proportion of participants with family tension/fight while growing up was twice as much among the cases compared to the control group (76.3% vs 39.4%, $p < 0.001$).

Table 4. 1: Distribution of background characteristics by case status of study participants

	Case Status		
	Control=236 N(%)	Case=118 N(%)	Total=354 N(%)
Sex			
Male	190(80.51)	95(80.51)	285(80.51)
Female	46(19.49)	23(19.49)	69(19.49)
Age			
Mean ± SD			
< 20	58(24.58)	29(24.58)	87(24.58)
20-25	83(35.17)	42(35.59)	125(35.31)
26-30	53(22.46)	26(22.03)	79(22.32)
31+	42(17.8)	21(17.8)	63(17.8)
Educational level			
None	33(13.98)	14(11.86)	47(13.28)
Primary	50(21.19)	69(58.47)	119(33.62)
Secondary	138(58.47)	33(27.97)	171(48.31)
Tertiary	15(6.36)	2(1.69)	17(4.8)
Religion			
Christian	83(35.17)	44(37.29)	127(35.88)
Islam	141(59.75)	69(58.47)	210(59.32)

Other/None	12(5.08)	5(4.24)	17(4.8)
Residence Classification			
Urban	130(55.08)	73(61.86)	203(57.34)
Rural	106(44.92)	45(38.14)	151(42.66)
Occupation			
Student	84(35.59)	5(4.24)	89(25.14)
Unemployed	76(32.2)	48(40.68)	124(35.03)
Employed	76(32.2)	65(55.08)	141(39.83)
Marital Status			
Never	122(51.69)	32(27.12)	154(43.5)
Currently	25(10.59)	9(7.63)	34(9.6)
Cohabiting	81(34.32)	56(47.46)	137(38.7)
Formerly	8(3.39)	21(17.8)	29(8.19)
Place of Residence			
Nima	112(47.46)	63(53.39)	175(49.44)
Maamobi	124(52.54)	55(46.61)	179(50.56)
Living with Parent/ Guardian			
No	62(26.27)	89(75.42)	151(42.66)
Yes	174(73.73)	29(24.58)	203(57.34)
Positive Parental relationship			
Yes	184 (77.97)	35 (29.66)	219 (61.86)
No	52 (22.03)	83 (70.34)	135 (37.03)
Parents together			
No	46(19.49)	78(66.1)	124(35.03)
Yes	190(80.51)	40(33.9)	230(64.97)
Parent/guardian mostly lived with			
Both Parents	169(71.61)	32(27.12)	201(56.78)
Single	49(20.76)	38(32.2)	87(24.58)
Relatives/Friends	18(7.63)	48(40.68)	66(18.64)
Rate of Parental Supervision			
Liberal/Unconcern	19(8.05)	52(44.07)	71(20.06)
Moderate	170(72.03)	25(21.19)	195(55.08)
Strict	45(19.07)	16(13.56)	61(17.23)
Very Strict	2(0.85)	25(21.19)	27(7.63)
Immediate family doing drugs			
No	228(96.61)	78(66.1)	306(86.44)
Yes	8(3.39)	40(33.9)	48(13.56)
Tension/fight in the family			
No	143(60.59)	28(23.73)	171(48.31)
Yes	93(39.41)	90(76.27)	183(51.69)
Accessibility of drugs in the area			
No	72(30.51)	10(8.47)	82(23.16)
Yes	164(69.49)	108(91.53)	272(76.84)
Affordability of drugs in the area			
Very	22(9.32)	46(38.98)	68(19.21)
Affordable	115(48.73)	61(51.69)	176(49.72)
Moderate	47(19.92)	7(5.93)	54(15.25)
Costly	52(22.03)	4(3.39)	56(15.82)

Close friend doing drugs			
No	210(88.98)	10(8.47)	220(62.15)
Yes	26(11.02)	108(91.53)	134(37.85)

%: column percentage, N: Frequency

4.2 Background Characteristics of Study Participants And Substance Abuse

Table 4.2 illustrates the detailed distribution of the background characteristics of the study participants and how the different covariates vary among the cases and the control.

The bivariate (unadjusted) analysis based on the Chi-square test of association showed that educational level, occupation, and marital status were the sociodemographic factors associated with substance abuse ($p < 0.05$). The socio-cultural factors associated with substance abuse include living with parents or guardian, relationship with parents or guardian, broken homes, type of guardian the youth lived with when growing up, and the quality of supervision provided by the guardian, whether any family member was into drug abuse, family dispute or tensions and having a close friend who is into drugs ($p < 0.05$). The socio-economic factors related to substance abuse include affordability of drug and accessibility of drug in the area of residence ($p < 0.05$).

Table 4. 2: Distribution of background characteristics by case status of study participants

	Case Status			chi-square	P-value
	Control=236 N(%)	Case=118 N(%)	Total=354 N(%)		
Sex				0.00	1.000
Male	190(80.51)	95(80.51)	285(80.51)		
Female	46(19.49)	23(19.49)	69(19.49)		
Age				0.01	1.000
Mean ± SD					
· 20	58(24.58)	29(24.58)	87(24.58)		
20-25	83(35.17)	42(35.59)	125(35.31)		
26-30	53(22.46)	26(22.03)	79(22.32)		
31+	42(17.8)	21(17.8)	63(17.8)		
Educational level				51.52	<0.001
None	33(13.98)	14(11.86)	47(13.28)		
Primary	50(21.19)	69(58.47)	119(33.62)		
Secondary	138(58.47)	33(27.97)	171(48.31)		
Tertiary	15(6.36)	2(1.69)	17(4.8)		
Religion				0.2375	0.888
Christian	83(35.17)	44(37.29)	127(35.88)		
Islam	141(59.75)	69(58.47)	210(59.32)		
Other/None	12(5.08)	5(4.24)	17(4.8)		
Residence Classification				1.48	0.224
Urban	130(55.08)	73(61.86)	203(57.34)		
Rural	106(44.92)	45(38.14)	151(42.66)		

Occupation				42.72	<0.001
Student	84(35.59)	5(4.24)	89(25.14)		
Unemployed	76(32.2)	48(40.68)	124(35.03)		
Employed	76(32.2)	65(55.08)	141(39.83)	35.08	<0.001
Marital Status					
Never	122(51.69)	32(27.12)	154(43.5)		
Currently	25(10.59)	9(7.63)	34(9.6)		
Cobabiting	81(34.32)	56(47.46)	137(38.7)		
Formerly	8(3.39)	21(17.8)	29(8.19)	1.11	0.293
Place of Residence					
Nima	112(47.46)	63(53.39)	175(49.44)		
Maamobi	124(52.54)	55(46.61)	179(50.56)	77.70	<0.001
Living with Parent/ Guardian					
No	62(26.27)	89(75.42)	151(42.66)		
Yes	174(73.73)	29(24.58)	203(57.34)	77.8	<0.001
Positive Parental relationship					
Yes	184 (77.97)	35 (79.66)	219 (61.86)		
No	52 (22.03)	83 (70.34)	135 (70.34)	75.09	<0.001
Parents together					
No	46(19.49)	78(66.1)	124(35.03)		
Yes	190(80.51)	40(33.9)	230(64.97)	77.71	<0.001
Parent/guardian mostly lived with					
Both Parents	169(71.61)	32(27.12)	201(56.78)		
Single	49(20.76)	38(32.2)	87(24.58)		
Relatives/Friends	18(7.63)	48(40.68)	66(18.64)	131.86	<0.001
Rate of Parental Supervision					
Liberal/Unconcern	19(8.05)	52(44.07)	71(20.06)		
Moderate	170(72.03)	25(21.19)	195(55.08)		
Strict	45(19.07)	16(13.56)	61(17.23)		
Very Strict	2(0.85)	25(21.19)	27(7.63)	62.47	<0.001
Immediate family doing drugs					
No	228(96.61)	78(66.1)	306(86.44)		
Yes	8(3.39)	40(33.9)	48(13.56)	42.81	<0.001
Tension/fight in the family					
No	143(60.59)	28(23.73)	171(48.31)		
Yes	93(39.41)	90(76.27)	183(51.69)	21.46	<0.001
Accessibility of drugs in the area					
No	72(30.51)	10(8.47)	82(23.16)		
Yes	164(69.49)	108(91.53)	272(76.84)	63.54	<0.001
Affordability of drugs in the area					
Very	22(9.32)	46(38.98)	68(19.21)		
Affordable	115(48.73)	61(51.69)	176(49.72)		
Moderate	47(19.92)	7(5.93)	54(15.25)		
Costly	52(22.03)	4(3.39)	56(15.82)	216.75	<0.001
Close friend doing drugs					
No	210(88.98)	10(8.47)	220(62.15)		
Yes	26(11.02)	108(91.53)	134(37.85)		

%: column percentage, N: Frequency

Type of drug	Frequency distribution of substance abuse		
	Not at all n(%)	Less often n(%)	Often n(%)
Alcohol	90 (76.3)	18 (15.3)	10 (8.4)
Shisha	75(63.6)	4(3.4)	39(33.0)
Tramadol	104(88.1)	1(0.9)	13(11.0)
Ashish	83(70.3)	1(0.9)	34(28.8)
Heroin	1(100)	0(0.00)	0(0.00)
Cocaine	114(96.6)	1(0.9)	3 (2.5)
Codein + Tramadol	63(53.4)	3(2.5)	52 (44.1)
Marijuana/Weed	52(44.1)	6(5.0)	59 (50.0)

Table 4. 3: Frequency Distribution of drugs abused by the youth
Not at all cases

Detailed frequency distribution of substance abuse can be found in Table 4.2. It was observed that, among the youth who abused the different types of drugs, the highest proportion was recorded by those who use marijuana (50%), followed by Shisha (33%) and then Ashish (28.8%). Drugs that were least abused among the youth from the observation were cocaine (2.5%) while heroine is rarely used by the youth.

4.3 Multivariate analysis of sociodemographic factors associated with substance abuse

Table 4.3 summarizes the sociodemographic factors affecting substance abuse. The results from the multivariate logistic regression analysis showed that the odds of abusing drug among the youth whose highest educational qualification is Junior High School is approximately 12 times the odds of abusing drug if the youth had no formal education after controlling for other socio-demographic factors (aOR = 11.8, 95% CI: 3.73-34.76; p<0.01). Similarly, the odds of abusing drugs among the employed youth is approximately 13 times as high as the odds of

abusing drugs among students (aOR=12.5, 95% CI: 3.8-40.7; p<0.01). Among the youth who were separated, the odds of abusing drug is 12 times the odds of abusing drug among those who have never married (aOR=12.0, 95% CI: 3.0-46.7; p<0.01).

Table 4. 2: Sociodemographic factors influencing substance abuse: Multivariable logistic regression analysis

Characteristics	aOR	[95% CI]	P-values
Sex			
Male	ref		
Female	0.87	0.38-1.95	0.728
Age in years			
Less than 20	ref		
20-25	0.99	0.41-2.38	0.975
26-30	0.82	0.29-2.31	0.714
31 years or more	0.77	0.24-2.45	0.661
Education Level			
None	ref		
Primary	1.6	0.55-4.65	0.391
Junior High School	11.39	3.73-34.76	p<0.001
Secondary	0.64	0.25-1.64	0.353
Tertiary	0.17	0.03-1.05	0.056
Residence when growing up			
Urban	ref		
Rural	0.55	0.29-1.04	0.066
Occupation			
Student	ref		
Unemployed	3.44	1.02-11.59	0.047
Employed	12.52	3.84-40.78	p<0.001
Current Marital status			
Never married	ref		
Currently married	1.11	0.34-3.65	0.859
Cohabiting	2.72	1.25-5.91	0.012
Separated	11.76	3.00-46.73	p<0.001
Divorced	0.68	0.06-8.20	0.763
Where do you live currently			
Nima	ref		
Maamobi	1.12	0.60-2.08	0.716

ref; Reference aOR; adjusted odds ratio

Separated couples are those who are cohabiting and gone apart

Divorce refers to married couples who have formally gone apart their separate ways from the marriage

4.4 Economic factors associated with drug abuse.

Table 4.4 summarizes the economic factors affecting substance abuse. The results from the multivariable logistic regression did not indicate a statistically significant relationship between the accessibility of drug and substance abuse after adjusting for sociodemographic factors ($p > 0.05$). However, there was no significant relationship between affordability and substance abuse ($p\text{-value} < 0.05$).

Table 4.3: Multivariable logistic regression analysis of socio-economic factors associated with substance abuse

Characteristics	aOR	95% CI	p-value
Affordability of drug in the residence			
Affordable	ref		0.015
Moderate	0.26	0.06 -1.08	0.963
Costly	0.01	0.001 -0.17	0.523
Accessibility of drugs in your area of residence			
Very easy	Ref		
Moderate	0.62	0.30-1.28	0.199
Difficult	0.69	0.22-2.16	0.526
Very difficult	0.93	0.07-11.74	0.954
Sex			
Male	Ref		
Female	1.24	0.52-2.99	0.627
Age in years			
Less than 20	ref		
20-25	1.24	0.48-3.21	0.66
26-30	1.38	0.46-4.17	0.57
31+	1.05	0.3.65-3.65	0.934
Education Level			
None	Ref		
Primary	1.99	0.63-6.29	0.24
Secondary	0.77	0.28-2.06	0.597
Tertiary	0.14	0.21-0.94	0.043
Junior high secondary	11	3.39-35.73	$P < 0.001$
Mostly reside when growing up			
Urban	ref		
Rural	0.65	0.32-1.32	0.23
Occupation			
Student	ref		
Unemployed	4.11	1.12-15.06	0.033
Employed	12.52	3.45-45.16	$p < 0.001$

Current marital status

	Ref		
Never married	0.85	0.23-3.16	0.808
Currently married	2.06	0.90-4.72	0.085
Cohabiting	5.49	1.27-23.64	0.022
Separated	1.21	0.09-15.67	0.884

Ref: Reference aOR: Adjusted odds ratio

4.5 : WHOQOL BREF responses from study participants

Table 4 5 summarizes the WHOQOL responses from the study participants. The results from the table shows that 28.81% of the participants were very dissatisfied with their quality of life and none was satisfied with his/ her quality of life. 43.22% were dissatisfied while 6.87% said they were satisfied with their quality of life. 21.19% remained neutral.

26.27% of respondents were very dissatisfied with their health situations while 1.69% were very satisfied with their health situations.. 53.39% of the participants were dissatisfied with their health situations while 14.41 remained neutral..

18.64% of respondents were very dissatisfied with the level concentration they have during activities while 9.32% of them were satisfied with the level of concentration they have during activities. No respondent was very satisfied with the level of concentration he/she has during activity.

Table... 4.5 : WHOQOL BREF responses from study participants

Variables	Very dissatisfied	Dissatisfied	Neutral	Satisfied	Very satisfied
Quality of life	34 (28.81)	51 (43.22)	25 (21.19)	8 (6.78)	0 (0.00)
Health satisfaction	31 (26.27)	63 (53.39)	17 (14.41)	5 (4.24)	2 (1.69)
Physica pains prevent you from doing what you want to do	1 (0.85)	31 (26.27)	30 (25.42)	51 (43.22)	5 (4.24)
How much do you need any medical treatment to function in your daily life	4 (3.42)	36 (30.77)	43 (36.75)	28 (23.93)	6 (5.13)
How much do you enjoy life	16 (13.56)	48 (40.68)	47 (39.83)	7 (5.93)	0 (0.00)
To what extent do you feel your life to be meaningful	20 (16.95)	50 (42.37)	43 (36.44)	5 (4.24)	0 (0.00)
How well are you able to concentrate	22 (18.64)	58 (49.15)	26 (22.03)	11 (9.32)	0 (0.00)
How safe do you feel in your daily life	22 (18.64)	45 (38.14)	40 (33.9)	10 (8.47)	0 (0.00)
How healthy is your physical environment	29 (24.58)	74 (62.71)	12 (10.17)	3 (2.54)	0 (0.00)
Do you have enough energy for everyday life	16 (13.56)	59 (50)	30 (25.42)	13 (11.02)	0 (0.00)
Are you able to accept your bodily appearance	25 (21.37)	44 (37.61)	38 (32.48)	10 (8.55)	0 (0.00)

Have you enough money to meet your needs	18 (15.25)	67 (56.78)	27 (22.88)	6 (5.08)	0 (0.00)
How available to you is the information that you need in your day-to-day life	28 (23.73)	47 (39.83)	36 (30.51)	7 (5.93)	0 (0.00)
To what extent do you have the opportunity for leisure activities	13 (11.02)	47 (39.83)	35 (29.66)	23 (19.49)	0 (0.00)
How well are you able to get around	30 (25.42)	55 (46.61)	27 (22.88)	6 (5.08)	0 (0.00)
How satisfied are you with your sleep	43 (36.44)	55 (46.61)	7 (5.93)	10 (8.47)	0 (0.00)
How satisfied are you with your ability to perform your daily living activities	12 (10.17)	61 (51.69)	39 (33.05)	6 (5.08)	0 (0.00)
How satisfied are you with your capacity for work	12 (10.17)	43 (36.44)	53 (44.92)	9 (7.63)	1 (0.85)
How satisfied are you with yourself	201 (16.95)	60 (50.85)	29 (24.58)	7 (5.93)	2 (1.69)
How satisfied are you with your personal relationships	21 (17.8)	47 (39.83)	26 (22.03)	0 (0.00)	9 (7.63)
How satisfied are you with your sex life	15 (12.71)	47 (39.83)	33 (27.97)	19 (16.1)	3 (2.54)
How satisfied are you with the support you get from your friends	15 (12.71)	69 (58.47)	25 (21.19)	9 (7.63)	0 (0.00)
How satisfied are you with the conditions of your living place	24 (20.34)	66 (55.93)	24 (20.34)	4 (3.39)	0 (0.00)
How satisfied are you with your access to health services	10 (8.47)	38 (32.2)	52 (44.07)	16 (13.56)	2 (1.69)
How satisfied are you with your transport	13 (11.02)	31 (26.27)	54 (45.76)	19 (16.1)	2 (1.69)
How often do you have negative feelings such as blue mood, despair, anxiety, depression	24 (20.51)	34 (29.06)	37 (31.62)	19 (16.24)	3 (2.56)

4.6 The effect of substance abuse on quality of life

The Ordinary Least Square Regression Analysis showed that the quality of life reduced by 37.2 percentage points among the youth who abused drugs compared to those who did not after controlling for socio-demographic factors ($\beta = -37.2$, 95%CI: $-39.4 - -35.1$; $p < 0.001$, Table 5). The estimated coefficient of determination was estimated to be 85.5% indicating that approximately 86% of the variation or changes in quality of life could be explained by substance abuse and selected sociodemographic factors.

Table 4.6: The effect of substance abuse on quality of life: Ordinary Least Square Regression Analysis

Characteristics	Ordinary Least Square Regression Analysis		Sensitivity Analysis: a quantile regression	
	β [95%CI]	p-value	β [95%CI]	p-value
Substance abuse				
Control-No	Ref		Ref	
Case-Yes	-37.2 [-39.4 -35.1]	p<0.001	-37.9 [-39.0 -36.7]	p< 0.001
Sex				
Male	Ref		Ref	
Female	-2.2[-4.4 -.05]	0.045	-1.5[-2.70- -0.37]	0.01
Age in years				
Less than 20	Ref		Ref	
20-25	0.4[-1.89-2.76]	0.36	-1.3[-2.52- -.042]	0.043
26-30	1.0[-1.73-3.82]	0.74	-0.5[-1.99- .97]	0.496
31 years or more	-1.2[-4.41-0.05]	0.479	-1.7[3.42- 0.09]	0.062
Education Level				
None	Ref		Ref	
Primary	3.7[0.53 -6.83]	0.022	0.1[-1.54- 1.81]	0.881
Junior High School	2.8[0.05 -5.49]	0.046	-.13[-1.57- 1.32]	0.862
Secondary	3.9[-.65 -8.42]	0.093	0.7[-1.64-3.19]	0.531
Tertiary	2.5[-7.8 -5.68]	0.136	-2.1[-3.84 - -.39]	0.016
A residence when growing up				
Urban	Ref		Ref	
Rural	-1.0[-2.77 -0.70]	0.241	-1.4[-2.33- -.48]	0.003
Occupation				
Student	Ref		Ref	
Unemployed	-0.8[-1.35 -1.68]	0.514	0.9[-.44- 2.24]	0.189
Employed	1.1[-1.41-3.68]	0.384	1.0[-.33- 2.38]	0.136
Current Marital status				
Never married	Ref		Ref	
Currently married	-0.1[-3.59-3.45]	0.969	0.3[-1.62- 2.13]	0.788
Cohabiting	-2.2[-4.31 -0.14]		-1.4[-2.52- -.30]	0.013
Separated	-2.4[0.21- 1.37]	0.21	0.1[-1.96- 2.09]	0.95
Divorced	7.1[.069- 14.44]	0.052	1.0[-2.84- 4.89]	0.602
Where do you live currently				
Nima	Ref		Ref	
Masmobi	0.6[-1.08- 2.33]	0.469	0.3[-.65- 1.16]	0.579
Coefficient of determination	85.5%		75.5%	

CHAPTER SIX

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 introduction

This chapter addresses the study outcomes overview, consequences, study constraints, conclusion, and suggestions based on the study findings.

6.2 conclusion

With regard to substance use, gender difference was observed with a clear dominance of substance use among males who were mostly students with a high level of education in junior education. Furthermore, relationship with parents or guardians, broken homes, type of guardian the youth lived with when growing up, and the quality of supervision provided by the guardian, immediate family member use of drugs, tension/fight in family while growing up, affordability of drug and having close friends who do drug were identified to be significant predictors of drug abuse among the youth.

The results from the study show that the participants in the case group (substance abusers) have a 37.2 percentage point reduction in their Quality of life compared to the control group (non-substance abusers).

CHAPTER FIVE

DISCUSSIONS

The goal of this research was to investigate the factors associated with substance abuse and the impact of substance abuse on quality of life among Nima / Maamobi youth in Ghana's Greater Accra Region. Among the individuals participating in the study, the proportion of men was 80.5%, almost quadrupled the sum of their female counterparts (19.5%). This was because most women may not have been willing to reveal their substance abuse status because society is frowning on women who are mis-using substances. This distribution of gender is not far-reaching as it is consistent with previous studies by Dimitrova et al. (2017). Men are three times as likely to abuse drugs as females, and this pattern has been consistent over the previous century (UNODC, 2015a). Men are culturally adventurous and willing to take any danger to demonstrate how manly they are. In addition, society is not frowning at men who use the substance just like they do for women.

Day after day, for various reasons, the problem of substance abuse is becoming serious. The number of people who resort to substance abuse at an early age is increasing globally (Kapse, Thakre, Thakre, & Kapse, 2017). In this current study, the substance abusers were between the ages of 15 to 35 years with the mean age of 24 years. This is not in line with the study conducted in Central India by Kapse et al. (2017) where the majority of the participants were in the age group of 25 to 44 years (middle adulthood) with a mean age of 31.52 (\pm S.D \pm 8.17) years.

From the research results, 50% of the youth who abused the drug used cannabis, 28.8% used Ashish, and 33% used Shisha 44.1% used codeine with tramadol, and 8.4% used alcohol in relation to cannabis. Nima and Maamobi are predominantly a muslim community, so the low alcohol consumption could have been accounted for. Marijuana is the greatest drug abused by the youth according to this research. This finding is consistent with the study by Brown, Asare Perekó, & Eliason (2013), who also pointed out that marijuana is the major drug abused among Ghana's youth. This is because marijuana is less expensive and very common among drug users as compared to other drugs. This is inconsistent with a study done in the Oyo state in Nigeria, which indicated that the commonest substances used by the subjects were alcohol (41.0%), marijuana (36.2%) and tobacco (10.4%) in order of frequency (Mbbs et al., 2016).

5.1 Factors influencing substance abuse

This study shows that educational level, occupation, and marital status are the sociodemographic factors associated with substance abuse. The socio-cultural factors associated with substance abuse include living with parents or guardian, relationship with parents or guardian, broken homes, type of guardian the youth lived with when growing up, and the quality of supervision provided by the guardian, whether any family member was into drug abuse, family dispute or tensions and having a close friend who is into drugs. This confirms the work of Zubaran et al. (2009) who conducted a survey and concluded on the same findings. The socio-economic factors related to substance abuse include affordability of drug and accessibility of drug in the area of residence. The easier an individual gets drugs, the greater the likelihood that he will use the drugs. High-density neighbourhoods with greater drug accessibility see a greater rate of youth drug abuse. This is in line with Mbbs et al's study (2016). Meanwhile, this finding of research differs from the finding of Janicijevic et. Al (2017)

who found that children from wealthier families with a higher socio-economic status could be at increased risk of psychoactive substance abuse, which could be explained by the frequent absence of more difficult career parents. Also, parents with higher socioeconomic status in comparison with those in the lower socioeconomic status families can have positions that are tolerant of the substance abuse (Janicijevic, Kocic, Radevic, & Jovanovic, 2017)

The finding also showed that peer pressure among the youth is a powerful determinant of drug abuse. That confirms the study of Yunusa et al. Al (2017) who discovered that youth perceive substance abuse as an benefit for peers to feel high, accept and trust, somnolence, ability to work hard and long hours, brevity, ability to focus or concentrate, ability to think and memorize quickly. Our results contradict that of Ibrahim & Kumar (2014), who discovered that relaxing or sleeping after difficult day's work, working hard, relieving stress, and enjoyment are the main reasons individuals abuse marijuana. It has been shown that teenagers who make good use of their time, have close relationships with their successful relatives, and are committed in college, demonstrate less dangerous behaviour (Öztaş et al., 2018). From the multivariate analysis, adolescents residing in the nuclear family had less probability of drunkenness and use of marijuana as a consequence of the family structure as there is some amount of parental control in the household over the youth. A study by Doku, Korvusilta, & Rimpelä (2012), the structure of the family has independent effects on drunkenness and other uses of drugs but not on marijuana. .

Parents and families have the biggest and permanent effect on children's learning and growth. If a baby is raised safely and securely, he can produce acceptable habits and follow a good and

healthy lifestyle. If not, a baby may be tempted or dragged by some other bad methods that indulge in drug abuse.

5.2 The effect of substance abuse on quality of life

QoL evaluation is now recognized as an integral part of research into healthcare and healthcare. It is necessary to include QoL interventions more regularly in the assessment of medicines. QoL focuses on QoL "perceived" by participants and reflects disease impacts on QoL. The result of this current study therefore reveals that the case group participants have a 37.2 percentage point decrease in their quality of life compared to the control group (non-substance abusers). This means that the case group respondents perceived bad quality of life in all domains relative to the control group respondents. This confirms Mbbs and colleagues' study (Mbbs et al., 2016) showing lower overall quality of life (and lower overall health satisfaction in subjects using the single substance). Self-reported information obtained from QoL questionnaires enables us to understand the total burden of treatment experienced by drug-dependents. There is evidence that QOL is generally poor among active substance abusers and treatment seekers, and that improvement in QOL is associated with reducing substance abuse, including abstinence and involvement in professional treatment. To date, only physical and psychological health results have been systematically examined with respect to the QoL evaluation, and little is known about other significant functioning domains. Evidence-based intervention to improve QoL has been associated with regular exercise among other chronic disease groups (Muller, 2018). Numerous exercise interventions have already been developed among the substance use population that should be offered as adjunct treatments more often, and these along with nutrition counseling can form the basis for comprehensive lifestyle interventions.

CHAPTER SIX

CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter addresses the study outcomes overview, consequences, study conclusion, and suggestions based on the study findings.

Conclusion

Regarding to substance use, gender difference was observed with a clear dominance use among males who were mostly students with a high level of education. Furthermore, relationship with parents or guardians, broken homes,

6.4 RECOMMENDATIONS

Based on the results of the study, the following recommendations were made:

1. In order to tackle factors that contribute to substance abuse, comprehensive media education should focus on youth between the ages of 15 and 35. Ghana's government, health ministry, community leaders, non-governmental organizations, etc. should be spearheading this.
2. To improve the quality of life of drug-abusing youth, the government should provide youth with community-based mental health nurses with readily available and highly accessible mental health care services. In order to help boost their quality of life, efforts should be made to treat and rehabilitate victims.
3. Parents should often communicate with the youth to gain insight into what affects them and share the adverse effects of antisocial behaviors including drug abuse with them. Parents and caregivers should help their kids develop strong personalities, resistant skills, building techniques of self-esteem to avoid bad peer victimization.
4. To reduce the indiscriminate use of drugs in society, a community-based drug abuse awareness campaign should be performed. Stigma and discrimination should also be the focus of education.
5. Regular campaigns to increase public consciousness should continue to be funded by the government. From primary to senior high school there should be a mainstream drug abuse curriculum.
6. The government should consider creating more possibilities for the substance abuser to return to college after effective therapy. Family fund reinforcing programs of assistance particularly for those residing in extreme poverty. The Ministry of Health needs to train

and employ more mental health professionals in district and municipal hospitals to help recover addicts and others who report drug-related issues.

6.5 Limitations

The study was carried out in a twin community which is a predominantly Muslim community hence findings might be different from what pertains in other communities. Therefore the findings cannot be generalized to youth in other communities. However, it can be extrapolated to other youths of similar setting and socio-demographic characteristics. Because the sampling technique employed is respondent-driven sampling, the study is likely to be prone to selection bias.

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APPENDICES

Appendix I Questionnaire Number

Instructions: kindly complete the following questionnaire using the instructions provided for each set of questions. Tick appropriately.

Confidentiality: The responses you provide will be strictly confidential. No reference will be made to any individual(s) in the report of the study.

Part A: Respondent's background information

What is your sex?	Male (1) Female(2)	[1] [2]
What is your age?	
What is your date of birth?	
What is your education level (state the highest level?)	None (1) Primary Secondary Tertiary	[1] [2] [3] [4]
What is your religious affiliation	Christianity [1] Islam [2] Traditionalist [3] No religion [4] Other [5]	[1] [2] [3] [4] [5]
Where did you mostly reside when growing up?	Urban Rural	[1] [2]
What is your occupation?	Student Unemployed [2] Employed [3]	[1] [2] [3]
What is your current marital status?	Never married [1] Currently married [2] Widowed/widower [3] Cohabiting [4] Separated [5] Divorced [6]	[1] [2] [3] [4] [5] [6]

Where do you currently live?	Nima [1] Maamobi [2]	[1] [2]
Do you live with your parents or guardian?	No [0] Yes [1]	[0] [1]
How do you rate your relationship with your parents/guardian?	Very positive (1) Positive (2) Negative (3) Neutral (4)	[1] [2] [3] [4]
Were your parents together when growing up?	No Yes	[0] [1]
Which of your guardians did you mostly live with when growing up?	Both Parents Mother only Father only Grand parents Family relatives Friends Other	[1] [2] [3] [4] [5] [6] [7]
How will you rate the supervision of your guardians?	Liberal/Unconcern Moderate Strict Very Strict	[1] [2] [3] [4]
Were any of your immediate family members into drugs when growing up?	No Yes	[0] [1]
If yes, specify		
How often did was there tension/fight/comotion in your family?	Never Rarely Sometimes Always	[1] [2] [3] [4]
How is the accessibility of drugs in your area of residence?	Very easy Easy Moderate Difficult Very Difficult	[1] [2] [3] [4] [5]
How affordable are drugs in your area of residence?	Very affordable affordable Moderate Costly Very Costly	[1] [2] [3] [4] [5]
Did you have any close friend who was into drug when growing	No	[0]

For Cases Only

15. What type of drugs are you into and how often you use them? Kindly tick where appropriate, whereby 4 - Very Often, 3-Often, 2- Less Often, 1- Not At All

Drug	Very Often (4)	Often (3)	Less Often (2)	Not At All (1)
Alcohol				
SHISHA				
TRAMADOL				
ASHISH				
Heroin				
Cocaine				
CODEIN + TRAMADOL				
Marijuana/ Wee				

WHOQOL-BREF

The following questions ask how you feel about your quality of life, health, or other areas of your life. I will read out each question to you, along with the response options. **Please choose the answer that appears most appropriate.** If you are unsure about which response to give to a question, the first response you think of is often the best one.

Please keep in mind your standards, hopes, pleasures, and concerns. We ask that you think about your life in the **last four weeks**.

	Very poor	Poor	Neither poor nor good	Good	Very good
1.	1	2	3	4	5
	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
2.	1	2	3	4	5

The following questions ask about **how much** you have experienced certain things in the last four weeks.

	Not at all	A little	A moderate amount	Very much	An extreme amount
3.	5	4	3	2	1
4.	5	4	3	2	1
5.	1	2	3	4	5
6.	1	2	3	4	5
	Not at all	A little	A moderate amount	Very much	Extremely
7.	1	2	3	4	5
8.	1	2	3	4	5

	daily life?					
9	How healthy is your physical environment?	1	2	3	4	5

The following questions ask about how completely you experience or were able to do certain things in the last four weeks.

	Not at all	A little	Moderately	Mostly	Completely	
10.	Do you have enough energy for everyday life?	1	2	3	4	5
11.	Are you able to accept your bodily appearance?	1	2	3	4	5
12.	Have you enough money to meet your needs?	1	2	3	4	5
13.	How available to you is the information that you need in your day-to-day life?	1	2	3	4	5
14.	To what extent do you have the opportunity for leisure activities?	1	2	3	4	5

	Very poor	Poor	Neither poor nor good	Good	Very good	
15.	How well are you able to get around?	1	2	3	4	5

The following questions ask you to say how good or satisfied you have felt about various aspects of your life over the last two weeks.

	Very dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied	
16.	How satisfied are you with your sleep?	1	2	3	4	5
17.	How satisfied are you with your ability to perform your daily living activities?	1	2	3	4	5
18.	How satisfied are you with your capacity for work?	1	2	3	4	5

19.	How satisfied are you with yourself?	1	2	3	4	5
20.	How satisfied are you with your personal relationships?	1	2	3	4	5
21.	How satisfied are you with your sex life?	1	2	3	4	5
22.	How satisfied are you with the support you get from your friends?	1	2	3	4	5
23.	How satisfied are you with the conditions of your living place?	1	2	3	4	5
24.	How satisfied are you with your access to health services?	1	2	3	4	5
25.	How satisfied are you with your transport?	1	2	3	4	5

The following question refers to how often you have felt or experienced certain things in the last two weeks.

	Never	Seldom	Quite often	Very often	Always	
26.	How often do you have negative feelings such as blue mood, despair, anxiety, depression?	5	4	3	2	1

Do you have any comments about the assessment?

GHANA HEALTH SERVICE ETHICS REVIEW COMMITTEE

*In case of reply the
number and date of this
Letter should be quoted*



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21st June, 2019

My Ref. GHS/RDD/ERC/Admin/App
Your Ref. No. 19/256

Issah Munziru
University of Ghana
School of Public Health
Legon

The Ghana Health Service Ethics Review Committee has reviewed and given approval for the implementation of your Study Protocol.

GHS-ERC Number	GHS-ERC 029/04/19
Project Title	Effects of substance abuse on quality of life among the youth of Ayawaso-sub metro (Nima/Maamobi) in the Greater Accra Region, Ghana
Approval Date	21 st June, 2019
Expiry Date	20 th June, 2020
GHS-ERC Decision	Approved

This approval requires the following from the Principal Investigator

- Submission of yearly progress report of the study to the Ethics Review Committee (ERC)
- Renewal of ethical approval if the study lasts for more than 12 months,
- Reporting of all serious adverse events related to this study to the ERC within three days verbally and seven days in writing.
- Submission of a final report after completion of the study
- Informing ERC if study cannot be implemented or is discontinued and reasons why
- Informing the ERC and your sponsor (where applicable) before any publication of the research findings.
- Please note that any modification of the study without ERC approval of the amendment is invalid.

The ERC may observe or cause to be observed procedures and records of the study during and after implementation.

Kindly quote the protocol identification number in all future correspondence in relation to this approved protocol

SIGNED.....
Dr. Cynthia Bannerman
(GHS-ERC CHAIRPERSON)

Cc The Director, Research & Development Division, Ghana Health Service, Accra