KNOWLEDGE, RISK-PERCEPTION AND PRACTICE RELATING TO MARIJUANA USE AMONG OUT-OF-SCHOOL ADOLESCENTS IN IKPOBA OKHA LOCAL GOVERNMENT AREA OF EDO STATE

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CERTIFICATION

I certify that this study was carried out by Esosa Peter IGBINOSUN in the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Nigeria.

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DEDICATION

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MINES

ABSTRACT

The world estimate of Marijuana use as an illicit substance is about 119 to 224 million users. In a study conducted among adolescents, it was reported that adolescents between the ages of 13 to 18years are the prominent users of illicit drugs like Marijuana. Marijuana use is a problem in Nigeria and other parts of the world resulting in personality disorders in adolescents. There is presently a great dearth in the literature relating to Marijuana use among out-of-school adolescents. This study investigated the knowledge, risk-perception and practice relating to Marijuana among out-of-school adolescents in Ikpoba Okha Local Government Area (LGA) of Edo State.

This study was a descriptive cross-sectional study which made use of an intervieweradministered questionnaire. It was limited in scope to the knowledge, risk-perception and practice relating to Marijuana use among out-of-school adolescents in Ikpoba Okha LGA, Edo State. A four-stage sampling technique was used in selecting 310 respondents from the study local government area. Information collected was on socio-demographic characteristics, knowledge, risk-perception and practice. Knowledge was scored on a 6-point scale; scores of <4 and \geq 4-6 were classified as poor and good knowledge respectively. Risk-perception was scored on a 12-point scale; scores of <6 and >6-12 were rated as positive and negative perception respectively. Practice was also scored on an 8-point scale; score of <3, and \geq 3 were classified as bad practice and good practice respectively. The data were analysed using the IBM SPSS version 25 using descriptive and inferential statistics at p=0.05.

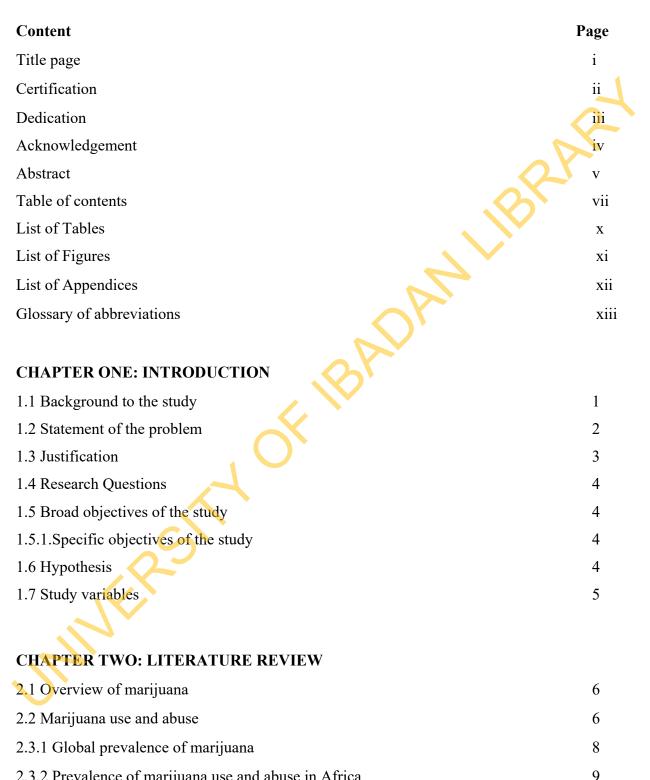
The mean age of respondents was 15.6 ± 2.9 years, half of the respondents (50.3%) were female, (49.7%) were male. Christianity (94.8%) was the major religion. Artisan (73.9%) was the major occupation of the respondents, Majority of the respondents (97.4%) reported to have heard of marijuana; the three highest reported sources were from friends/peers (55.5%), television (49.7%) and area (45.8%). Mean knowledge score obtained was 1.96 ± 0.2 ; resulting in good knowledge (95.7%) of marijuana use scoring >5 - 6 point on a 6-point knowledge scale while (4.3%) had poor knowledge of marijuana use scoring <5 points. Majority (84.8%) of the respondents had positive perception while few (15.2%) of them had negative perception on

marijuana use; few (4.0%) of the respondents had used marijuana and 19 year was reported to be the highest age of initiation to marijuana use.

This study showed that knowledge was good; majority had positive perception but bad practice. Efforts must therefore be intensified towards sensitization of the adolescent groups to improve the knowledge, risk-perception and practices relating to marijuana use among out-of-school. Also, friends or peers were seen to have substantial influence in practice hence, parents are encouraged to monitor their children friends or peers.

ration are of the second **Keyword:** knowledge, risk-perception, practice, marijuana use, out of school adolescent.

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GLOSSARY OF ABBREVIATIONS

NDLEA	-	National Drug Law Enforcement Agency
NAFDAC	-	National Agency for Food and Drug Administration and Control
UNODC	-	United Nations Office on Drugs and Crime
LGA	-	Local Government Area
STI	-	Sexually Transmitted Infection
WHO	-	World Health Organization
in.		

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CHAPTER ONE

INTRODUCTION

1.1 Background to the study

The world estimate of Marijuana use as an illicit substance is about 119 to 224 million users (UN Office on Drugs and Crime, 2012). Drug abuse is a prominent issue in the world of public health as it transcends to global issues leading to both health, security and resource challenges, and Nigeria is not an exception to the insecurity posed by marijuana use (UNODC, 2005). In a study conducted by Yesuf, (2010) and Adekeye (2015), adolescents between the ages of 13 to 18 were the prominent users of illicit drugs like Marijuana.

The World Health Organization defined drug abuse as "*a state of periodic or chronic intoxication, detrimental to the individuals and the society, produced by the repeated consumption of a drug (natural or synthetic)*" (WHO, 2006). Drug abuse is also seen as the constant and indiscriminate self-use of drugs outside the culturally and medically acceptable norms (NAFDAC, 2015).

There has been a rising increase in the level of psychiatric health problems among adolescents in Nigeria due to the use of Marijuana which result in poor development of their brain, thus leading to the inability to withstand the influence of Marijuana (Lisdahl, Nagel, and Tapert, 2010; Schweinsburg, Brown, and Tapert, 2008) A study by Meier et al., (2012) also showed an observable drop in the level of Intelligent quotient (IQ) of Marijuana users of 1,000 participants who were between the ages of 13 to 38years. Adolescents were observed to exhibit deviant behaviours under the influence of Marijuana which ranges from unprotected sexual intercourse, risky driving to violence among their peers (Gruber and Pope, 2002). These problems observed among the adolescent Marijuana users were the associated risk of early Marijuana onset (Brook, Brook, Zhang, Cohen, and Whiteman, 2002; Lynskey et al., 2003). The use of illicit drugs by these set of individuals is posed with the problem of being introduced to the illicit drug at such a young age that they do not know which drug to take, when and how to take it (Adekeye, 2012).

Nigeria as a state today is constantly being reinforced to encourage drug use by the youths and adolescents and as the country transits from a drug consuming to a drug-producing state, the young are indiscriminately exposed to factors that enhance drug use. Marijuana is produced in large quantities in all parts of the country among other illicit substances. These substances have been able to establish their root in places like the school, street, motor and motorcycle parks, market and even homes where it is easily accessed by adolescents. "A convicted drug addict, who served his two-year jail term at the Central Prison in Benin City before relocating to Abuja after his release, reported that Abuja is a potential haven for illicit drugs after Lagos and Port Harcourt", (Staff, 2012). Nigeria is presently Africa highest users of Marijuana (United Nations Office on Drugs and Crimes, 2011), and according to NDLEA (2009), schools in Nigeria bear the greatest burden of drug abuse, with an estimated 20% of secondary school students in Lagos State haven used Marijuana in their lifetime.

Sambo (2008) quoted Falco (1988) that Marijuana use can lead to incurable damage in the psychological, mental and physical development of adolescents. The problem of drug abuse is difficult as well as expensive to manage, in developing countries like Nigeria and other Africa countries where there are no good health systems and access to Health care is expensive. This makes the problem of substance use more compounded, and even so more difficult to manage among the adolescent leading to compromised immunity, mental illnesses, cancer, cardiovascular disorder and acute respiratory or lung diseases. (Morandi, Silva, Golay, and Bonsack, 2017).

1.2 Statement of the problem

Marijuana use is as a big problem in Nigeria as it is in other parts of the world, and its use has affected human activities and productive years. (National Drug Law Enforcement Agency, 2009),

The number of Marijuana users in Akwa Ibom State has reached an alarming state with 33% female and 48% male users. Also, data from Nigeria Drug Law Enforcement Agency revealed that 201 males and 36 females have been arrested across the State on the ground of Marijuana use (NDLEA, 2015). Adolescent users of marijuana are faced with numerous problems such as personality disorder, stubbornness, and rigidity, lack of socialization, lack of respect for older people and serious medical conditions (Anthony 2012).

In a study carried out among College of Education Students in Benin City by Fayombo (2000), Obianwu (2005), Omage and Oshiloya, (2006), revealed that majority of the students in the area use stimulants like Marijuana. The NDLEA (2015) clarified the unarguable fact that Marijuana is a menace in secondary schools, colleges, University and

the Nigeria society, and that this is on the account of peer pressure and desire to please and feel significant among friends. Adolescents and youths between the ages of 12 to 25 years use Marijuana in Akwa Ibom State, supporting the claim that more young people in Nigeria are becoming drug dependent and children from well to do homes are observed to use drugs like Marijuana and cocaine (NDLEA, 2015). Staff (2012) said that Marijuana and other illicit substances like Codeine and Methamphetamine which have great intoxicating ability are found among school children. Alabi (2012), estimated that 1.5 million adolescents in Nigeria schools smoke Marijuana, and 2.5 million adolescents smoke Marijuana across various communities.

However, the menace constituted by Marijuana use is a general societal problem as it affects all. Drugs like Marijuana affect not just the individual, family, but also the society, Nation and its economy (Akanbi and Ajiboye, 2014).

1.3 Justification

The adolescents are the future of a nation, so effort must be made to keep them mentally and psychologically sound (Lakhanpal, Agnihotri, 2007; United Nations Office of Drugs and Crime, 2007; Abudu, 2008; Radda, 2009) Sadly, adolescents who are the future of the Nation have taken to drug, with majority between the ages of 12 to 17 years (Villatoro et al., 2012). In Benin City metropolis, adolescent between the ages of 10 to 19 can easily be found smoking marijuana while they are supposed to be in school or learning handwork as apprentices. This act of moral decay has brought about low academic performance among the adolescents that tries to go school and lack of concentration and will to subject him/her to authority by those learning a trade, thus leading to increased crime, unwanted pregnancy, mental illness and examination malpractice.

There is presently a dearth of information in the literature relating to Marijuana use among out-of-school adolescent as numerous studies has been conducted among in-school-adolescents as baseline information about the extent of the problem as a first step to help curb the menace. This study investigated knowledge, risk-perception and practice among the out-of-school adolescents.

This study will be very useful in designing Health Promotion and Education intervention for the prevention of drug use among adolescents and also to enlighten the adolescent group on the pending danger of Marijuana use.

The result of the findings will show the level of knowledge, risk perception and level of practice of marijuana among out of school adolescent which will assist parents in

educating their wards on the danger of Marijuana use. The findings from the study will also help in other similar studies or implementation of health promotion programmes about marijuana use among out-of-school adolescents.

1.4 Research questions

- What is the level of knowledge of Marijuana among out-of-school adolescents in Ikpoba Okha Local Government Area?
- 2. What is the practice of Marijuana among out-of-school adolescents in Ikpoba Okha Local Government Area?
- 3. What is the level of risk-perception relating to Marijuana use among out-of-school adolescents in Ikpoba Okha Local Government Area?

1.5 Objectives of the study:

The broad objective of this study is to investigate the knowledge, risk-perception and practice relating to Marijuana among out-of-school adolescents in Ikpoba Okha Local Government Area of Edo State.

1.5.1 Specific objectives:

The specific objectives are to:

- Determine the knowledge of Marijuana among out-of-school adolescents in Ikpoba Okha LGA of Edo State.
- 2. Assess the practice of Marijuana among out-of-school adolescents in Ikpoba Okha LGA of Edo State.
- 3. Determine the level of risk-perception relating to Marijuana use among out-ofschool adolescents in Ikpoba Okha LGA of Edo State.

1.6 Hypotheses

The following null hypotheses were stated.

There is no significant difference between:

- Respondents' knowledge of Marijuana and risk-perception among out-of-school adolescents
- 2. Respondents' knowledge of Marijuana and practice among out-of-school adolescents
- 3. Respondents' risk-perception and practice of Marijuana use among out-of-school adolescents.

4. Socio-demographic characteristic (age, occupation, religion, ethnic background, guardian level of education and occupation of respondents') and practice of marijuana use among out-of-school adolescents.

1.8 Study Variables

The independent variables include basic socio-demographic characteristics of the respondents such as age, occupation, religion, ethnic background, guardian level of education and guardian occupation.

, are knowle locerents. The main dependent variables of interest in this study are knowledge, risk-perception and

CHAPTER TWO

LITERATURE REVIEW

2.0 Conceptual clarification

2.1 Overview of Marijuana

Marijuana is a composition of dry leaves, stems flower and seeds of a cannabis sativa which is a hemp plant. It is the world most commonly consumed illicit drug (National Institute on Drug Abuse, 2014, Substance Abuse and Mental Health Services Administration, 2013). There are over 489 chemical substances that have been discovered in Marijuana and 70 of these substances have unique characters that are peculiar to cannabis sativa. (Maldonado, Berrendero, Ozaita, Robledo, 2011), it is a very complex substance due to the large components that it contains and ways they react with one another to produce a high level of toxics (American Chemical Society, 2007).

Marijuana contains such substances as Tetrahydrocannabinol (THC), cannabinoid carboxylic acid. Cannabinoid carboxylic acid burn to release Tetrahydrocannabinol which can stimulate cannabinoid receptors in the brain leading to a psychoactive effect (Maldonado, Berrendero, Ozaita, Robledo, 2011). Marijuana is a known haven for Bacteria and Fungi among other biological pesticides, it is also known to contain a very high amount of Ammonia, Cyanide, Nitric oxide and Aromatic amines which when inhaled into the body can pose a very serious Health challenges (American Chemical Society, 2007)

There was a tremendous increase in the level of Marijuana use by high school students in the United States from 3.3% to 22.7% from the year 2008 to 2013 the use of Marijuana was also observed among junior school adolescents (National Institute on Drug Abuse, 2103)

2.2 Marijuana use and abuse

Hughes, Lipari, and Williams, (2015) showed from a National Survey of Drug Use and Health (NSDUH, 2014) that Marijuana use among adolescent is a public Health challenge as 7.22% of adolescents aged 12 to 17 use Marijuana from 2013 to 2014. This also correlates with the 1.8 million using Marijuana among the adolescents' (Hughes et al., 2015). The use and abuse of Marijuana cuts across all age groups. In a similar study conducted by (NSDUH, 2014), 2.95% to 9.08% was recorded among age group of 50 to 64 years, also, 0.15% to 2.04% among 65 years plus was observed (Salas-Wright et al., 2017). Concerning the use and abuse of Marijuana by adolescents, looking at it wide range of Health implications for its users who are basically and predominantly the adolescents, it has called for a great concern and hence a phenomenon of attention by scholars (Center for Behavioral Health Statistics and Quality, 2015).

The use and abuse of Marijuana has been significantly linked to such behavioural mishap like bullying, indecent behaviours and misuse of other substances by adolescents (Wheaton, Robinson, and Morris, 2012; Topper et al., 2011), research has proven that adolescents who are victims of bully engage in drug use like Marijuana (Carlyle and Steinman, 2007; Radliff et al., 2012; Tharp-Taylor, Haviland, and D'Amico, 2009).it is also shown that bullied adolescents are more likely to use Marijuana than their nor bullied counterparts (Carlyle and Steinman, 2007; Tharp-Taylor et al., 2009) studies suggests that the use of Marijuana is heightened among adolescents by bully practice (D'Amico et al., 2005; Johnston, O'Malley, Bachman, and Schulenberg, 2010;Luukkonen, Riala, Hakko, and Rasanen, 2010; Morris, Zhang, and Bondy, 2006; Mooreet al., 2014; Wang, Iannotti, and Luk, 2012). Depression, anxiety and lack of concentration in school work and intellectual activities leading to high school dropout and lack of zeal to learn skills or trade have been observed among adolescents who use Marijuana (Degen- hardt et al., 2013; Hayat bakhsh et al., 2007(Hayatbakhsh et al., 2007, (Caldeira, Arria, O'Grady, Vincent, and Wish, 2008)

Male adolescents have been observed to have a high rate of use of Marijuana than their female counterparts (SAMHSA, 2014) hence there is a significant difference in the use of Marijuana in respect of male to female adolescent (Carliner et al., 2017).

Today the problem posed on the world by drug is growing fast and its devastating effect is impactful in the lives of millions, the adolescent population is heavily affected. The world has been fully penetrated by Marijuana and other illicit drug use and no one Nation is left out of this menace of drug use and abuse, (Mondester, 2016).

2.3 Prevalence of Marijuana

2.3.1 Global Prevalence of Marijuana

Man has been known to use drug since can be remembered, the drugs used usually come in different forms like naturally occurring plants such as coca, cannabis and opium (Muskand De Klerk, 2003). Drugs like Marijuana and opium have been used by religious leaders in time past to treat diseases. During the colonial era of America, alcohol was used as elixir, from AD 1200 to AD 1550; South America used cocaine for medicinal purpose (Wolmer, 1990).

There was a shift in the order of use of drugs during the 1920s when Mexican laborers who migrated to United States during the Vietnam War brought with them Marijuana and other drugs known today as illicit drugs (Mondester, 2016). Ever since, there has been a clear evidence of Global increase of drug abuse (World Drug Report, 2004). In a publication by WHO (2004), there are about 1.1 million drug abusers which is about a third of the World population who are 15years of age that uses basically Tobacco in cigarette, about 800 million of these abusers are from Developing Countries, and 700 million are male. The report also stated that to further prove that smoking was fast becoming a problem in the Developing World; there are over 4 million cases of drugs in the Developed Nations of the world with an increase of 2 million to 4.1 million of consumption of Cocaine in Europe from 1998 to 2008 (UNODC, 2010).

There is also a report of 20% increase of production of Amphetamine, Marijuana has maintained the position of the World most produced and consumed drug with 130-190 million abusers annually (INCB, 2003: UNODC, 2010). In places like the United States of America and Colorado, there is high rate of recreational Marijuana use by adolescents (Johnson et al., 2015) Colorado Department of Public Health and Environment [CDPHE], 2014) reported 19.7% Colorado secondary school adolescents using Marijuana.

The high prevalence of Marijuana use among US adolescent was ascribed to the legalization of Medical Marijuana use and it is observed to be more prevalent in Cities that have legalized Medical Marijuana use (Hasin and colleagues, 2015).

2.3.2 Prevalence of Marijuana use and abuse in Africa

African has remained the hallmark of drug abuse over the years (INCB, 2001). Drug became an issue in Africa in the early 1990s when 300kg of heroin from Thailand was impounded in Nigeria in 1993 (NYATUORO, 2012). In 1999, 22% of the Marijuana reported by Interpol to have been impounded in the world came from Africa and Nigeria was the leading west Africa country with 17 tonnes followed by Ghana with 4.3 tonnes, Senegal with 7 tonnes and Ivory coast with 1.6 tonnes and in East Africa, hundreds of hectares of land were opium and Marijuana was cultivated were destroyed in Kenya (INCB, 2001).

Although Marijuana is illegal, there is a high consumption of it in Africa (UNDCP, 2002). Over 25 million people making up 5.8% of adult uses Marijuana in Africa. 61% of psychologically ill people in Africa are youth and adolescents who are users of Marijuana (NYATUORO, 2012). This has over the years worsen as reported in an International Narcotics Convention in Vienna in March 2001 where Africa leaders asked the UN to help fight against drug abuse in the continent (INCB, 2001). In South Africa, the drugs commonly used are Cocaine, Marijuana (known as dagga in South Africa) and Methaqualone (WHO, 2011).

The most affected by this menace of drug abuse are the adolescents between the ages of 10 to 19years who basically suffer from drug abuse syndrome (WHO, 2011).

A study conducted in Botswana by Garechaba, et al (2017) showed a prevalence of 17.4% students admitted to have abused drug, 75.0% were senior secondary school students and between the ages of 14 years as at when they started using drug. 50% of the students admitted to have been introduced by their friends, 19.4% by their family members and 13.9% by their school mates. The proportion of male to female using drugs according to the result of the study showed that it was almost equal, with 52.8% and 47.2% of boys to girls respectively.

2.3.3 Prevalence of Marijuana use in Nigeria

Nigeria has remarkable record of Marijuana use. Northwest leading with 37.47% of victims of drug abuse, southwest following with 17.32%, Southeast with 13.5%, North central 11.71% and Northeast with 8.54% of drug abuse victims, it was also reported that Marijuana, Amphetamine, Heroin and Cocaine are 10.8%, 10.6%, 1.6% and 1.4% respectively consumed in Nigeria (Akannam, 2008). NUODC (2007). United Nations

Office on Drugs and Crimes (2011) also stated that Nigeria is the highest consumer of Marijuana in Africa with men at 94.2% and women at 5.8%. Out-of-school adolescents and in-school adolescents are also known to abuse substances such as volatile chemicals.

Marijuana use is high among out-of-school adolescents in Nigeria as they see drug use as a means to gain recognition among their peers, appear tough and hard hearted (Dorcas, 2012). It is strongly believed that the use of Marijuana among secondary school students in Ibadan has reach epidemic level, as its use and abuse can impede academic processes and learning, thus truncating the individuals live (Fayombo and Aremu, 2000). In a study carried out in Kaduna state, it is shown that 74.5% of male and 25.5% female secondary school students reported use of harmful substances (Esther, 2016).

2.4 Factors responsible for Marijuana use among out-of-school adolescents

2.4.1 Experimental curiosity

Due to inadequate knowledge or information about drugs, adolescent tend to experiment to get a feel and are motivated to continue after the first use due to the extreme pleasure and hype they get from it. Adolescents are motivated to continue the Marijuana use prior to first use as a result of the satisfaction they derive from it use. Adolescents use drugs most times when trying to find out how effective a drug can be and when the desired feeling is experience leads to further use (Oshodi, Aina, and Onajole, 2010).

2.4.2 Peer group influence

As adolescent grow, there exist a gap between them and their parent and this gap like any adolescent from any part of the world is bridged by peers which has a great deal of influence in their life and activities such as introduction to drug so as to gain acceptance (Igwe, et al., 2009). The period of teen can be a period of great influence into use of harmful substances by friends when there is a strong relationship (Sherman, 2007). Denise, (2006), concluded in his study that peer pressure has great influence in drug use like synergistic, Marijuana, cocaine and inhalant which reduces their health thereby impacting their behavior and academic performance and plan for the future which lead to dropping out of school, increase in crime rate, lawlessness and rape among adolescents.

2.4.3 Lack of parental supervision

A lot of parents are too busy to have time for their children and some do not even create interactive atmospheres for their children, those who do puts them under constant pressure demanding better academic performance from them leading to the initiation of drug and hence drug abuse among adolescents (Abudu, 2008).

2.4.4 Personal problem due to socio-economic conditions

Adolescents who develop personality problem due to socio-economic conditions are more likely to abuse drugs like Marijuana. Many of our young people take to drug just to take their mind of the constant rise in unemployment, poverty, broken homes, inconsistency in the economic state and unending community conflict of the nation which results in children taking to the street to try to make a living or begging as the case may be (Haladu, 2003).

2.4.5 The need for energy to work for long hours

Many parents have been forced to send their children into the street to search for means to assist the family due to increased poverty rate. Many of the children have taken to hawking, bus conductor, head loading of goods, scavengers and some serve in food canteens, in other to serve for longer hours so as to make good earnings, they take Marijuana for energy (Haladu, 2003; Desalu, et al., 2010; Ajibulu, 2011; Henry, Smith, and Caldwell, 2006).

2.4.6 Availability of the drugs

The drop-in price of drugs has made it supply to increase thereby making it's easily assessable by adolescents (Haladu, 2003). Drugs like pain killers are regularly advertised on media exposing adolescents to drugs, the glamour that is displayed on advertisement makes young people want to have a feel of the drug (Oluremi, 2012).

2.4.7 The need to prevent the occurrence of withdrawal symptoms

To avoid the painful symptoms that precedes withdrawal from the Marijuana (withdrawal symptoms) such as feeling of pain, profuse sweating and shaking, the user tends to continue the use of drug, due to inability of drug users to tolerate the withdrawal symptoms (Ige, 2000)

2.4.8 Social pathologies

Unemployment and parental deprivation, broken homes and non-functional relationship and drug abusing family induces the adolescent into use of harmful substance (Abudu, 2008).

According to the study by Garechaba, et al (2017), out of 36 students that were asked on factors influencing drug abuse, 36.1% said relieving stress as the main rationale behind drug use, 27.8% said fun and pleasure, while pressure and experimentation was 25.0%. Additionally, the qualitative data also revealed that students abuse drug to boost their self-esteem.

2.4.9 Public policy

There has been a tremendous rise in the use of Marijuana by adolescent in the past few years (Johnston, O'Malley, Bachman, and Schulenberg, 2012). It has been reported that Marijuana can be easily assessed by adolescents (Johnston et al., 2012) as a result, adolescent no longer see Marijuana use as been risky (Johnston et al., 2012) which has led to an increase in the level of accidents among adolescents (Asbridge, Hayden, and Cartwright, 2012), an increase in the Health problem related to Marijuana use (Hall, 2009). These can be traced to the policies been passed by government on the access to Marijuana due to laws permitting it use medically (Procon.org, 2011). This has been argued that such policies can pose a negative effect on Marijuana use by adolescent and subsequently recreational Marijuana (New York Times, 2011).

2.5 Effects of Marijuana use among out-of-school adolescents

When drugs are taken either by injecting, sniffing or chewing, they go into the blood and find their way to the brain where they affect the body functioning system (NACADA, 2006). Drug abuse by adolescents could result to lack of willingness to learn in school resulting in massive dropout rate among adolescent (Blandford, 1998).

Munyoki, (2008) mentioned that strike and interruption of learning activities has resulted in secondary school due to violence, school properties destructions and killing of people. For example;

• A group of students after taking drug in Kiangoma secondary school in Nyeri Kenya set a new student on fire just to test the authority of the new principal (Central Province Educational Board Report, May 2001).

- At St. Kizito mixed school, group of boys entered the female hostel and raped 72female students, leading to the death of 19 students in the process (Wangai Report, Nation July 17, 2000) there were also
- 68 students burned to death by group of drugged students at Kyanguli secondary school (Report of the Task Force on Student Unrest in Secondary Schools, 2001).

Akers (1991), Ballas (2006), Akus (2010) and NDLEA, 2015), viewed the effect of Marijuana among adolescents to have strong destructive harm on the nervous system, increased heartbeat, a dilating effect on the blood vessels, aggression, hopelessness, selfishness, impotence, chest and lung pain and frequent illness due to weakened immunity.

2.6 Knowledge of Marijuana among out of school adolescent

Adolescents have good knowledge of Marijuana use and its consequent effect on the Health and psychological state of the user and Marijuana use was acknowledge to result in killing rape and other social vices (Abdulahi, 2011).

In a study conducted in Europe by Rug, et.al (2000), there is a good knowledge of illicit drugs like Marijuana, in the report 97% of respondents have at a time heard of Marijuana which is the most highly abused drug in Europe according to (European Monitoring Center for Drug and Drug Addiction, 1997). There is also a high knowledge of ecstasy which is rated 94.3%, cocaine 96.4% and heroin 96.4%. In addition, the study also reported that 30% of the respondent said they know people who use drugs and 25% said they know persons who have drug addiction problem. The report also includes younger respondents below the age of 18 and 29 years of age having greater knowledge of drug abuse.

According to Oshodi et, al (2010), most adolescents 73.0%, do not have good knowledge of drug abuse and its associated complications as 10.5% of the respondents have the believe that it is only people with bad Health that can have complication with substance use and abuse.

Takalani G.et al (2016) in a study carried out in South Africa, reported 68% male and 66% female adolescents to have knowledge of drug abuse while 23% male and 26% female do not have knowledge of drug abuse and 9% and 7% male and female respectively were not certain of their awareness on drug abuse. In addition, a total of 62% and 60% male and

female respectively knew those students who were willing to use drug and 23% and 26% male and female respectively did not know any students who were willing to use drug. In a similar study conducted on knowledge of substance abuse among secondary school students in Jordan by Linda et al (2015), it is discovered that 70.5% of the respondents had knowledge of substance abuse as they have heard of substance abuse and about half of the respondents also have knowledge of the various substances that can be abused like Marijuana and Cocaine, while 32.2% did not have knowledge of the pending danger of using drugs like cigarette. It was recorded that about 28% of the respondents knew of organizations that help people with drug abuse problem and 17.8% were well knowledgeable of treatment center for people with drug abuse problem.

Still relating to knowledge, it was also reported that most of the respondents agreed that drug abuse could be a problem to the abuser in that it can lead to or result in dropping out of school and also lose of job, the students also are aware that drug abuse is not accepted by the society and the abusers could become serious problem or nuisances to the society and Nation at large.

According to the study carried out by Cajetan, et al (2017), the source of information on drug abuse by adolescents in Imo state, are the print media, television, radio, friends and peers. It was discovered in the study that boys are more open to source of knowledge on drug abuse than their female counterpart especially through the print media, television, radio and peers, but the girls were discovered to be more knowledgeable on drug abuse information coming from medical expert.

In a study conducted in Botswana, by Garechaba et al (2017), it was confirmed that majority of adolescents have good knowledge of Marijuana use and abuse. The percentage sources of information are 75.8% television, 51.7% print media, and 10.1% peers.

2.7 Risk perception of Marijuana among out-of-school adolescents

Risk perception was defined by Kirch, (2008) as the way individuals perceive a phenomenon to be harmful to them.

The level of perceived risk of Marijuana use to causing harm to adolescent protects them from Marijuana use (Janz and Becker, 1984; Keyes et al., 2016; Piontek et al., 2013; Schmidt et al., 2016), this has damaging effect to the Health of users (Volkow et al., 2014), causing addictive potential (Chen et al., 2009),

In the United States of America, Monitoring The Future study (MTF) and National Survey on Drug Use and Health (NSDUH) are saddled with the responsibility of carrying out yearly study on the risk perception and use of Marijuana by adolescents (Ohnston et al., 2016, Center for Behavioral Health Statistics and Quality, 2015; Lipari et al., 2015).

There has been a significant increase in the perception from 2009 through 2013 that the use of Marijuana do not have risk associated to Health of users among adolescents by 23% leading to an increase in the use of Marijuana by 52% (Merrill et a, 2013) ,Marijuana use risk perception among adolescents increase with age and level at school, and decrease with the level of educational status of parents, living with father , mother, stepmother, stepfather.(Merrill et al., 2013), in a similar study conducted between 2002 and 2014 in the United State by National Survey on Drug Use and Health (NSDUH, 2014) showed that the risk perception on Marijuana use of greater proportion of participants have over the years decreased from 50.4% in 2002 to 33.3% in 2014 (Compton et al., 2016). In another study by NSDUH (2014), between 2002 to 2012, it was shown that the reduction in the risk perception of adolescents were due to easy access of Marijuana (Pacek et al., 2015).

In a study on risk perception relating to Marijuana use among adolescents by Audrey Hang Hai (2017), it was discovered that female had a higher risk perception than the male adolescents hence producing a higher Marijuana use among male than among female adolescents, it was also discovered that religiosity had a great influence on the risk perception of adolescent and was discovered to be greater among female than male(Audrey Hang Hai, 2017). The legalization of Marijuana by some countries is perceived to be the cause behind the reduction in the risk perception of Marijuana use (Schuermeyer et al., 2014; Okaneku et al. 2015; Wen et al., 2015; Compton et al., 2016; Fairman, 2016;Martins et al., 2016;Hasin et al., 2017)

2.8 Practice of Marijuana among out-of-school adolescents

National Institute of Drug Agency NIDA (2015) in describing the practice of Marijuana by adolescent stated that Marijuana is used either in the form smoking or as food that is added to food as supplement by adolescents. In the year 2002, the Drug Abuse Warning Network (DANW) reported that in Nigeria there were over 15 % adolescents between the age of 12 to 17 admitted to psychiatric homes for drug related psychological illnesses (Adam, 2012). Most adolescent admit to use Marijuana to avoid the pressures and problems around them (Omage, 2005)

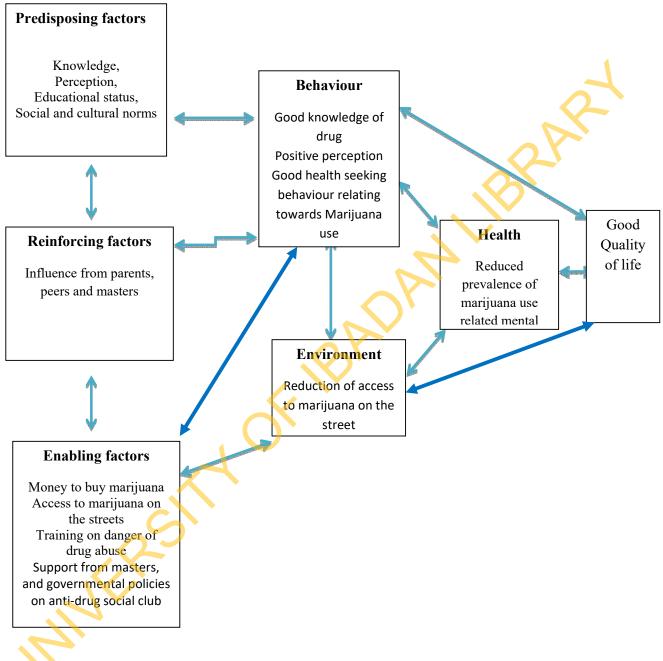
2.9 Conceptual framework and its application to the study

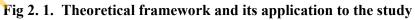
Precede model and risk perception relating to Marijuana use

This model will make use of the Predisposing, Reinforcing and Enabling Causes in Education Diagnosis and Evaluation (PRECEDE) model developed by Lawrence Green and Marshall Kreuter (1970) for Health Education and Health Promotion programmes to identify knowledge, risk perception and practice relating to Marijuana use among out-of-school adolescent in Ikpoba Okha Local Government Area.

The predisposing factors, reinforcing factors and enabling factors are significantly related to Health promoting behaviours which are associated with mental well-being and quality of life can either influence behaiour positively or negatively.

The application of the model will help in understanding health promoting behaviours and demonstrates its relationships with adolescent's well-being and quality of life. The predisposing factors provide a reason for behaviour. Some of the factors include knowledge, attitude, perceptions cultural and religious beliefs, norms and readiness to change. Enabling factors assists or encourages persons to act on their predispositions which include available resources such as time, money, skills, supportive policies, assistance and service. Reinforcing factors are factors or influences that promote continuity or encourage repetition of behaviours. The factors could be social influences such as friends, family peers etc. feedback mechanism social support, praise, reassurance and symptoms relief.





2.10 Application of Proceed model to knowledge, risk-perception and practice relating to marijuana use in Ikpoba Okha LGA, Edo State.

Predisposing factors: predisposing factors such as socio-demographic factors like sex, age, family type, and marital status of parents, level of education, knowledge and risk-perception would determine how an adolescent will handle issues relating to marijuana use. Knowledge and perception can help reduce the practice of marijuana use by making available to the adolescent the required information about the harmful effect of marijuana thereby reducing its practice. (Questions 1, 2, 6, 7, 8, 18, 19, 20, 26, 28 and 29. Appendix 1)

Enabling factors: the enabling factors include money to buy marijuana, access to marijuana on the streets, the presence of marijuana users around adolescents like friends who smoke, parents who smoke and neighbors who smoke marijuana. Adequate support from maskers and governmental policies on anti-drug will help keep adolescents from marijuana use. (Questions 38, 49, 50, 42 and 43. Appendix1)

Reinforcing factors: reinforcing factors include influence and support from parents, peers and masters that provide social identity, reduction or elimination of hideout where adolescents can smoke also influence the use of marijuana among out-of-school adolescents. (Questions 48, 50 and 48, Appendix 1).

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CHAPTER THREE

METHODOLOGY

3.1 Study Design

This study was descriptive cross-sectional in nature which made use of quantitative method of research. Quantitative method is a methodology for conducting research through the use of questionnaire to elicit information or data from the participants in a quantifiable manner.

Interviewer Administered questionnaire form of research was adopted because marijuana use is normally considered confidential, hence if one is asked to self-disclose his use of marijuana status, the likelihood of findings being significant is very much reduced, compare to when asked by a well-trained research personnel.

3.2 Description of the Study Area

The study was carried out among out-of-school adolescent in Ikpoba Okha LGA, Edo State, Nigeria. Ikpoba Okha LGA is one of the 3 LGAs that make up the Benin City Metropolis. The LGA is bounded in the North by Uhunwonde LGA; in the South by Delta State; in the East by Orhionmwon LGA; in the West by Oredo and Egor LGAs. It has a landmass of 862km² temperature of 28oc and an estimated population of 371,106 people estimated from 2006 population census. There are 10 ward and 5 primary health centres in the local government.

Ikpoba Okha LGA is predominantly an urban settlement that comprises areas like Sokpoba road, Ikpoba Hill, Ologbo and Sapele road to mention a few. The local government also has within her scope Santana market, Eki-osa market, Ikopba hill market and Oka market. Ikpoba Okha LGA is a heterogeneous settlement with predominantly the Binis, Igbos, Deltanas, Hausas, Yorubas and others. There are several conditions or factors which favour the use of Marijuana in the LGA such as the selling joints close to residence; artisans dominated areas and presence of bushes where adolescents can hide to smoke.

3.3 Study population

The study populations were Male and Female adolescents within the ages of 10 to 19 years in Ikpoba Okha LGA who were out-of-school and learning a trade

3.4 Sample size determination

The sample size was calculated using the formula provided by Fisher's et al, (1998) which

is

$$N=\underline{z^2pq}{d^2}$$

Where:

n = the required sample size

z=1.96 (95%) standard normal deviation at the required confidence interval

p=prevalence of drug abuse in the targeted population

d2 = margin of error set at 0.05(precision set at 5%)

p= 22.1% (Momoh and Ogunu, 2000).

$$N = \frac{2^2 pq}{d^2}$$

$$N = (1.962 \times 0.221 \times 0.826)$$

$$(0.05)^2 = 280.5 = 281$$

10% of the calculated sample size was added to make up for possible cases of improper completion of the questionnaires and or cases of attrition.

<u>10</u> x 281

100 = 28.1

N is readjusted to be equal to $281 + 28.1 = 309.1 \approx 310$

The n was adjusted to 310 to increase the power of the study

The sample size was increased to 330 to address the issue of a questionnaire that may not be properly filled and to increase the generalizability of the findings.

3.5 Sampling technique

A multi-stage sampling technique was employed for this study

- Stage 1: Five (5) wards were selected from the Ten (10) wards in Ikpoba Okha Local Government Area using simple random sampling.
- Stage 2: Two (2) Settlements were then selected from each of the 5 wards using simple random sampling.
- Stage 3: Shops in the settlements were enumerated and an approximately 800 shops were said to be registered (information from association), systematic random sampling was then used to select the stores by systematically selecting every second stores in the settlement which summed up to 600 stores.

Stage 4: Convenient sampling was used to select participants from each.

3.6.1 Inclusion criteria

Out of school adolescents who met the study criteria of out-of-school adolescent learning trade and willing to participate in the study were recruited

3.6.2 Exclusion criteria

- An adolescent who is not learning work in the study area or just visiting
- Adolescents who are not willing to give consent

3.7 The instrument for data collection

The instrument used for data collection was an interviewer-administered questionnaire, administered at different wards in Ikpoba Okha Local Government Area, Benin City of Edo State, Nigeria.

Four sections were used as follow:

Section: A Socio-demographic characteristic of the study participants.

Section B: knowledge of Marijuana use among out-of-school adolescent

Section C: Risk perception relating to Marijuana use among out-of-school adolescents

Section D: Practice of Marijuana use among out-of-school adolescents

3.8 Data collection procedure

For the study, serially numbered interviewer-administered questionnaire was used. The data was collected by the researcher with the help of four (4) research assistants who were adequately trained on how to collect data relating to knowledge, risk-perception and practice of marijuana use among out-of-school adolescents and a practical section was done to aid their understanding of the research instrument. The research assistants moved from shop to shop in the community to select the eligible participants. After the completion of the questionnaire, the researcher checked each questionnaire for completeness and errors before leaving the field.

3.9 Recruitment and training of research assistants

Four experienced research assistants were recruited and trained on the ways and method of the data collection. The training was carried out in two days using the developed training manual. During the training, a participatory approach was adopted and everyone was involved. Demonstration and return demonstration (role play) was also involved.

3.10 Validity of instrument

Validity refers to the accuracy of an instrument that is, how well it measures what it is supposed to measure. The researcher ensured the validity of the instrument by reviewing the relevant literature. The instrument was subjected to scrutiny by experts to validate the instrument and the supervisor was consulted to give a valid template of how the instrument should be. The corrections and suggestions made were effected before the actual administration of the questionnaire to the study participant.

3.11 Reliability of instrument

In establishing the reliability of the instrument, the researcher did a Pre-test of the instrument. The Pre-test is a process whereby the researcher administers the constructed questionnaire to 10% of the total study population in another representative population but the filled questionnaire for the pre-test was not be used in the final analysis of the work. The pre-test of the instrument was carried out among similar group in Egor Local Government Area, a similar population group; questions found to be unclear or unnecessary were modified or deleted accordingly. Appropriate corrections were captured subsequently to establish validity and reliability. A Cronbach Alpha measurement to determine the reliability co-efficient. The reliability obtained for this study was 0.893 indicating strong internal consistency of the instrument. The research assistants were also involved in the pre-test exercise as this provided them with practical experiences relating to the study.

3.12 Data analysis and management

All completed questionnaires were checked for completeness and consistencies of variables. A coding guide was then developed and approved by my supervisor to facilitate the entry of the responses into the statistical package (Appendix IV). The questionnaire used was manually sorted out before the information supplied was entered into the computer and then Statistical Product for Service Solution (SPSS) version 25 was used for the analysis of the data collected. A 6-point knowledge, 12-point perception and 4-point practice scale was developed. Respondents with knowledge scores of 1-4 and 5-6 were classified as poor and good knowledge respectively. Perception scores of ≤ 6 and > 6 were rated as poor and good perception respectively. Scores of <3 and ≥ 3 were categorized as bad and good practice respectively. Analysis was carried out using descriptive (frequency counts, percentages, means and standard deviations) and inferential statistics at 95% confidence interval. The relationship between variables and categories were analysed using chi-square at P<0.05 level of confidence. Outcomes of the data analysis were

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presented in tables and graphs. The data collected were adequately managed by keeping the questionnaire in safe place and the SPSS data was kept confidentially on a password computer.

3.13 Limitations of the study

The sensitivity of the research topic limited the responses gotten from the respondents who thought the researchers were men of the police force; this was however overcome by reassuring them of the confidentiality of the information given and excluding any form of identification from the questionnaire.

3.14 Ethical considerations

Ethical approval was sought and obtained from the Edo State Ministry of Health research ethics committee before going to the field for data collection; also, informed consent was obtained from the respondents (Appendix IV). To ensure confidentiality of research participants, identifiers such as names and other information that can reveal the identity of research participants were not included in the research instruments. The nature of the study, benefits and objectives were explained to the respondents and they were assured that the information given would be treated with the utmost confidentiality. Respondents were also intimated about the opportunity to withdraw their consent freely at any point during the study. Confidentiality of each participant was maximally maintained during and after the collection of their information. Information gathered from the respondents was stored in the computer for analysis by the researcher while copies of the filled instruments were kept for maximum safety.

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CHAPTER FOUR

RESULT

4.1 Respondents' Socio-Demographic Characteristics

In this section, results of respondents' socio-demographic characteristics are presented in table 4.1. Respondents' ages ranged from 10 to 19 years, many (21.9%) of the respondents are 19 years, which included (50.3%) female and (49.7%) male. Christianity (94.8%) is the major religion of the respondents. Many of the respondents (73.9%) are Artisans and about three third are Edo (68.4%) which is due largely to the study location. Many (85.5%) of the respondents were able to complete their junior secondary school while (14.5%) were only able to complete their primary education additionally, many of the respondents' parents (78.4%) were married and living together, and similar percent (73.2%) were from monogamous homes. many of the respondents' father and mother had secondary education (60.6%) and (66.5%) respectively where (59.0%) of their mothers are traders, (32.6%) of their fathers work in private organization.

Table 4.1a: Respondents'	~ ^	· · · · ·
Characteristics	Frequency	Percentage (%)
Age (in years) *		
10	21	6.8
11	11	3.5
12	27	8.7
13	25	8.1
14	27	8.7
15	24	7.7
16	29	9.4
17	29	9.4
18	49	15.8
19	68	21.9
.,		
Gender		
Male	154	49.7
Female	154	50.3
emale	130	50.5
Religion		
Christianity	294	94.8
slam	7	2.3
Fraditional	9	2.9
Degnandants? Occupation		
Respondents' Occupation	60	19.4
Learning a trade **		
Artisan	229	73.9
Not working	21	6.8
Ethnicity		
Yoruba	15	4.8
gbo	25	8.1
Hausa	3	1.0
Edo	212	68.4
Delta	47	15.2
Others ****	8	2.6
Highest level of education	completed	
Primary	45	14.5
Junior secondary	265	85.5

Table 4 1a: Respondents' Socio-demographic characteristics

*Mean age = 15.64 + 2.910

**Learning a trade = learning how to sell drugs

***Others =Igala, Idoma, Akwa Ibom

Characteristics	Frequency	Percentage (%)
Parents marital status		
Married	243	78.4
livorced/separated	38	12.3
ingle parent	1	0.3
vidow/widower	28	9.0
Type of Family		
Ionogamy	227	73.2
blygamy	83	26.8
evel of education of Father/Guardian		
lo formal education	12	3.9
rimary	27	8.7
econdary	188	60.6
ertiary	83	26.8
evel of education of Mother/Guardian		
o formal education	12	3.9
rimary	26	8.4
econdary	206	66.5
rtiary	66	21.3
ccupation of Mother/Guardian		
rader	183	59.0
ivil servant	18	5.8
orks in a private ganization	32	10.3
etired	1	0.3
rtisan C	39	12.6
nemployed	16	5.2
hers*	21	6.8
ccupation of Father/Guardian		
rader	41	13.2
vil servant	46	14.8
orks in a private ganization	101	32.6
etired	5	1.6
rtisan	52	16.8
Jnemployed	7	2.3
thers*		

Table 4.1b: Respondents' Socio-demographic characteristics (N=310)

*Others = Soldiers, Drivers, farmers.

4.2. Respondents' knowledge about marijuana use

MINE

Majority (97.4%) of the respondents have heard of marijuana with friends/peers (55.5%), television (49.7%) and area (45.8%) as the most popular sources, only 32.3% however hear about marijuana always while (65.2%) occasionally hear about it and Cigarette (73.9%) is the most commonly used drug beside marijuana (Table 4.2a).

Majority of the respondents (93.9%) answered correctly that marijuana is a substance that can alter the brain function of adolescents, while (92.6%) believe it is illegal to use marijuana in Nigeria, (92.6%) knows that marijuana use can lead to damaging of the kidney. Majority of the respondents (89.4%) says that adolescents who are already using marijuana cannot stay without taking it while (94.5%) believe that brain damage can result from marijuana use.

Mean knowledge score obtained by the respondents was 1.96 ± 0.203 . The respondents' category of knowledge scores was as follow: 95.7% had good knowledge of marijuana use scoring 5-6 point when placed on a 6-point knowledge scale. While (4.3%) of respondents had poor knowledge scoring <5 points, on the same scale.

The association between respondents' level of knowledge and socio-demographic characteristics are presented in the table 4.2.

Fisher's Exact analysis revealed that there is no significant association between acquired knowledge and socio-demographics of respondents ($p \le 0.05$). Majority of the respondents whose family type was monogamy (215) had good knowledge of marijuana use compared to others. Similarly, type of family had a significant association with level of knowledge of respondents ($p \le 0.05$) (Table 4.2).

Table 4.2a: Respondents' Awareness about Marijuana use		(N=310)	
Variables	Frequency	Percentage (%)	
Ever heard of Marijuana			
Yes	302	97.4	
No	8	2.6	
Source of information on marijuana use (N=302)		4	
Television	154	49.7	
Radio	118	38.1	
Friends/peers	172	55.5	
Church	42	13.5	
Mosque	3	1.0	
Family members	47 📢	15.2	
Social media	42	13.5	
Area	142	45.8	
Others	4	1.3	
Frequency of hearing about marijuana (302)			
Occasionally	202	65.2	
Always	100	32.3	
Never heard	8	2.6	
Other drugs commonly used besides marijuana (3	02) *		
Cigarette	229	73.9	
Tramadol	147	47.4	
Alcohol	174	56.1	
Tobacco	64	20.6	
Rohypnol	44	14.2	
Codeine	86	27.7	
Cocaine	97	31.3	
Shisha	8	2.6	
Others	9	2.9	

•• 1 2 L

*multiple responses

 Table 4.2b: Respondents' knowledge about marijuana use

(N=302)

Variables	Frequency	Percentage (%
Marijuana is a substance that can alter the brain	291	93.9
function of adolescents		1
		7
Marijuana use is an illegal act in Nigeria	287	92.6
Marijuana use can damage one's kidney	287	92.6
Adolescents who use marijuana cannot stay without	277	89.4
taking it		
Brain damage can result from Marijuana use 🥢	293	94.5
Brain danlage can result from Warfjaana use	275	74.5
OF		
A .		

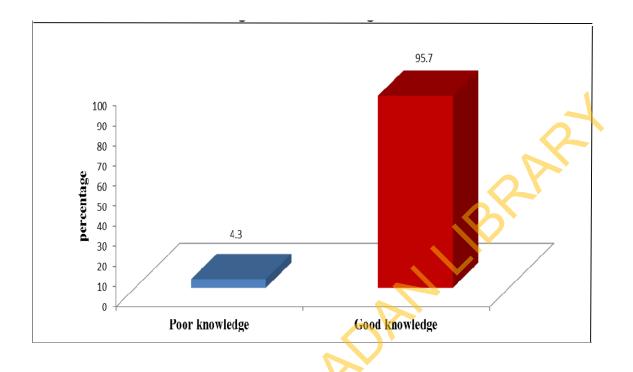


Figure 4.1: Respondents' knowledge on Marijuana use

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demographic characterist	Poor	Good	X ²	$\frac{N=31}{Df}$	/
Socio-demographic characteristic	Poor Knowledge (%)	Good knowledge (%)	X²	DI	p-value
Age (years)					
<15	4(1.3)	127(42.1)	0.879	1	0.404
15-19	9(3.0)	162(53.6)			1
Gender					-
Male	7(2.3)	141(6.7)	0.127	1	0.470
Female	6(2.0)	148(49.0)	\$		
Religion				K ~	
Christianity	13(4.3)	275(91.1)	0.139	2	1.000
Islam	0(0.0)	6(2.0)			
Traditional	0(0.0)	8(2.6)			
Occupation					
Leaning a trade	1(0.3)	59(19.5)	2.495	2	0.249
Artisan	10(3.3)	211(69.9)			
Doing nothing	2(0.7)	19(6.3)			
Ethnicity					
Yoruba	0(0.0)	15(5.0)	2.440	4	0.574
Igbo	2(0.7)	22(7.3)			
Hausa	0(0.0)	3(1.0)			
Edo	10(3.3)	198(65.6)			
Others	1(0.3)	51(16.9)			
Educational level					
Primary	3(1.0)	40(13.2)	0.869	1	0.407
Junior secondary completed	10(3.3)	249(82.5)			
Parent marital status Married	10(3.3)	227(75.2)	7.625	3	0.72
Divorced/separated	1(0.3)	35(11.6)	1.025	5	0.72
Single parent	1(0.3)	0(0.0)			
Widow/widower	1(0.3)	27(8.9)			
Type of family					
Monogamy	6(2.0)	215(71.2)	5.055	1	0.048*
Polygamy	7(2.3)	74 (24.5)	2.000		0.010
Father/guardian educational level					
No formal education	0(0.0)	12(4.0)	0.845	3	0.893
Primary	0(0.0)	26(8.6)	-		
Secondary	9(3.0)	174(57.6)			
Tertiary	4(1.3)	77(25.5)			
*significant	、 /	、 /			

Table 4.2c: Association between respondents' level of knowledge and sociodemographic characteristics

*significant

characteristics			(N=310)		
Socio-demographic characteristic	Poor knowledge (%)	Good knowledge (%)	X ²	Df	p-value
Mother/guardian educational level					
No formal education	1(0.3)	11(3.6)	1.866	3	0.5 <mark>2</mark> 9
Primary	0(0.0)	26(8.6)			
Secondary	10(3.3)	192(63.6)		- <	2
Tertiary	2(0.7)	60(19.9)		5	
Mother/guardian occupation					
Trader	5(1.7)	171(56.6)	8.999	6	0.129
Civil servant	0(0.0)	18(6.0)			
Works in a private organization	4(1.3)	28(9.3)			
Retired	0(0.0)	1(0.3)			
Artisan	2(0.7)	37(12.3)			
Unemployed	0(0.0)	16(5.3)			
Others	2(0.7)	18(6.0)			
Father/guardian occupation					
Trader	1(0.3)	39(12.9)	6.320	6	0.318
Civil servant	0(0.0)	43(14.2)	0.520	U	0.010
Works in a private organization	4(1.3)	96(31.8)			
Retired	0(0.0)	5(1.7)			
Artisan	2(0.7)	48(15.9)			
Unemployed	0(0.0)	7(2.3)			
Others	6(2.0)	51(16.9)			

Table 4.2d: Association between respondents' level of knowledge and socio-demographic characteristics (N=310)

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4.3 Respondents' risk-perception on Marijuana use

Table 4.3 presents respondents perception on marijuana use. Respondents mean perception score was 1.85 ± 0.360 , proportion of respondents' level of perception on marijuana use was as follow: (15.2%) had negative perception (0- \leq 6), while (84.8%) had positive perception (>6-12) on marijuana use. Few (76.1%) of the respondents agreed that marijuana use can lead to users injuring their body while majority (91.3%) also agreed that the use of marijuana has health consequences on adolescent users. Also, (75.8%) of respondents agreed that adolescents who use marijuana are more likely to commit suicide.

Two hundred and seventy seven (89.4%) agreed that driving after taking marijuana is wrong while almost all the respondents disagreed that fighting after taking marijuana is good and (89.0%) respondents disagreed that taking marijuana is good for adolescent, where majority (90.3%) agreed that marijuana can cause behavioural change in adolescent who uses marijuana and (40.3%) of the respondents agreed that an adolescent that has never used marijuana cannot stay without taking it while more than half (52.9%) of the respondents disagreed that adolescent who have never taken marijuana cannot stay without taking it. (See table 4.3 for more details on other perceptions on marijuana use reported by respondents).

Table 4.3a: Respondents' perception on marijuana use Statements		(N=302)		
Statements	Agree	Disagree N (%)	Undecideo N (%)	
	N (%)			
Marijuana can lead to users injuring their body	236 (76.1)	43 (13.9)	23 (7.4)	
The use of Marijuana has health consequences	283 (91.3)	8 (2.6)	11 (3.5)	
Marijuana users among adolescents are more likely to commit suicide	235 (75.8)	42 (13.5)	25 (8.1)	
It is wrong to drive after taking Marijuana	277 (89.4)	19 (6.1)	6 (1.9)	
It is good to fight after taking Marijuana	14 (4.5)	283 (91.3)	5 (1.6)	
it is good to take Marijuana	19 (6.1)	276 (89.0)	7 (2.3)	
Taking Marijuana can cause behavioural change among adolescents	280 (90.3)	17 (5.5)	5 (1.6)	
Adolescents cannot stay without taking Marijuana	125 (40.3)	164 (52.9)	13 (4.2)	
Adolescents who indulges in Marijuana use are usually strong	141 (45.5)	128 (41.3)	33 (10.6)	
An increase in the price of Marijuana help to reduce smoking among adolescents	60 (19.4)	234 (75.5)	8 (2.6)	
Marijuana use among adolescent makes them feel good	141 (45.5)	138 (44.5)	23 (7.4)	
Marijuana makes adolescents to act bold	252 (81.3)	37 (11.9)	13 (4.2)	
Do you see yourself to be susceptible	23 (7.4)	279 (90.0)		

Table 4.3b Respondents perception scoPerception on marijuana use	Frequency	Percentage (%
Negative	46	15.2
Positive	256	84.8
Total	302	100.0
*Mean perception score: 1.850.360		
*Scale: 12 point		0
*Negative perception score (0 - <u><</u> 6)		
*Positive perception score (>6 - 12)		25
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4.4 Respondents' practice relating to marijuana use

Many of the respondents (54.6%) know people in their neighborhood who indulge in marijuana use, while (4.0%) of respondents have used marijuana and (58.3%) of respondents said they smoke marijuana occasionally while (41.7%) reported to have used marijuana just once where (58.3%) respondents used marijuana just to experiment while (25.0%) and (16.7%) respondents used it due to peer pressure and emotional reasons respectively (see table 4.4 for more details).

Table 4.4 also shows that smoking (75.0%) is the most popular form in which marijuana is used by respondents. Few (21.6%) of the respondents have friends who smoke marijuana while (21.2%) respondents have family members who smoke marijuana and (100%) of the respondents have made effort to quit smoking marijuana but (66.7%) have actually quit smoking marijuana as they reported that they do not currently smoke marijuana. (See table 4.4 for more details on other practice relating to marijuana use reported by respondents).

Mean practice score obtained by the respondents was 1.4±0.5. The respondents' category of practice scores was: 33.3% had good practice relating to marijuana use scoring ≥3 point on an 8-point practice scale. While of respondents' 66.7% had bad practice scoring <3 points, on the same scale.

Table 4.4a: Respondents' practices relating to mar	(N=302)	
Variables	Frequency	Percent (%)
Jo you know people who smoke marijuana?		
n your neighborhood?		
Yes	165	54.6
No	137	45.4
Do you have friends who smoke marijuana?		
les	65	21.6
Jo	236	78.4
Do you have family members who smoke?		\mathbf{V}
narijuana?		
⁷ es	64	21.2
lo	238	78.8
Ever smoked marijuana? *		
/es	12	4.0
lo	290	96.0
at what age did you start to smoke marijuana *		
15	8	66.7
-15	4	33.3
re you currently smoking marijuana *		
Zes Ces	4	33.3
No Vie	8	66.7
Iow do you get marijuana *		
Peddlers	1	25.0
Peers	3	75.0

*N=12

 Table 4.4b: Respondents' practices relating to marijuana use
 (N=12) 39

Variables	Frequency	Percent (%)
Why did you start smoking marijuana		
Peer pressure	3.0	25.0
Experiment	7.0	58.3
emotional reason	2.0	16.7
How often do you smoke		<
Occasionally	7.0	58.3
Just once	5.0	41.7
Why did you start smoking marijuana		\mathbf{v}
Peer pressure	3.0	25.0
Experiment	7.0	58.3
emotional reason	2.0	16.7
Where do you usually smoke		
At home	4.0	33.3
At work place	2.0	16.7
At friend's house	4.0	33.3
At social events	1.0	8.3
Others	1.0	8.3
When do you usually feel the urge to smoke marijuana?		
When with friends who smoke	5.0	41.7
When alone	6.0	50.0
When worried	1	8.3
Ever attempted to quit smoking marijuana		
Yes	12	100.0

Table 4.4c: Respondents' practices relatingVariables	(N=12) Percentage (%	
Where do you buy marijuana		
Neighborhood	4.0	33.3
work place	2.0	16.7
social gathering	5.0	1.7
Others	1.0	8.3
In what form do you use marijuana?		
Smoking	9.0	75.0
Mixed with food	2.0	16.7
Soaking in water/hot drinking	1.0	8.3
- PSIN		
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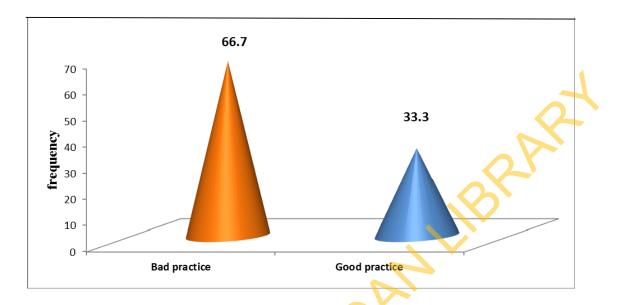


Figure 4.4: Respondent's practice of marijuana use

- *Mean: 1.42±0.492
- *Scale: 8 point
- *Good practice: \geq 3
- *Bad practice: < 3

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4.5 TEST OF HYPOTHESES

Hypotheses 1: There is no significant association between respondents' knowledge of marijuana and risk-perception among out-of-school adolescents in Ikpoba Okha Local Government Area, Edo State, Nigeria.

Table 4.5 presents the result of the cross tabulations between respondents' knowledge and risk-perception on marijuana use.

Fischer Exact analysis revealed that there was no significant association between ind in there is in marijuana use in mari knowledge of marijuana use and risk-perception of respondents to marijuana use with a pvalue < 0.05. Thus, we accept the null hypothesis that there is no significant association in

school adolescents					(N=302)
Variables	Knowledge s category	score	Df	X2	P-value
Risk-perception	Poor (%)	Good (%)			
Negative	4(1.3)	42(13.9)	1	2.540	0.119
Positive	9(3.0)	247(81.8)			
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Table 4.5: Respondents' knowledge of marijuana to risk-perception among out of school adolescents (N=302)

4.6 Hypothesis 2: There is no significant association between respondents' knowledge of Marijuana and practice relating to marijuana use among out-of-school adolescents in Ikpoba Okha Local Government Area, Edo State, Nigeria.

Table 4.6 presents the result of the cross tabulation between respondents' knowledge and practice relating to marijuana use.

Fischer exact analysis revealed that there is no significant association between knowledge and ie < .dens' kno. practice of respondents relating to marijuana use with a p-value < 0.05. Thus, the null hypothesis that there is no significant association in respondents' knowledge and practice

use among out of sc	hool adolescents			()	N=12)
Variables	Knowledg	e category	Df	X2	P-valu
practice category	Poor (%)	Good (%)			
Bad	2(16.7)	6(50.0)	1	0.000	1.000
Good	1(8.3)	3(25.0)			
Good	1(8.3)	3(25.0)			
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 Table 4.6: Respondents' knowledge of marijuana to practice relating to marijuana

 use among out of school adolescents
 (N=12)

4.7 Hypothesis 3: There is no significant association between respondents' riskperception and practice relating to marijuana use among out-of-school adolescents in Ikpoba Okha Local Government Area, Edo State, Nigeria.

Table 4.7 presents the result of the cross tabulation between respondents' risk-perception and practice relating to marijuana use.

Fischer exact analysis revealed that there was no significant association between riskperception and practice of respondents relating to marijuana use with a p-value of < 0.05. significant in the second seco Therefore; we accept the null hypothesis that there is no significant association between

perceptio Negative (%) 3(25.0) 2(16.7)	n category Positive (%) 5(41.7) 2(16.7)	Df	X2	P-valu
(%) 3(25.0)	(%) 5(41.7)	1	0.171	1,000
3(25.0)	5(41.7)	1	0.171	1.000
		1	0.171	1.000
2(16.7)	2(16.7)		389	
F BA	OAN		36-	
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Table 4.7: Association between perceptions of marijuana to practice relating to
marijuana use among out of school adolescents(N=12)

4.8 Hypothesis 4: There is no significant association between age, sex, family type, ethnicity and occupation of respondent and practice relating to marijuana use among out-of-school adolescents in Ikpoba Okha Local Government Area, Edo State, Nigeria.

Table 4.8 presents the result of the cross tabulation between respondents' sociodemographic characteristics and practice relating to marijuana use.

Fischer exact analysis revealed that there was no significant association between sociodemographic characteristics and practice relating to marijuana use with p-value of < 0.05. Therefore; we accept the null hypothesis that there is no significant association between the socio-demographic characteristics and practice relating to marijuana use.

of Bh

	marijuana use among out of school adolescents (
	Variables	Practice s	Practice score category			p-value
		Bad (%)	Good (%)			
	Age					
	<15	2(16.7)	0(0.0)	1	1.200	0.515
	<u>≥</u> 15-19	6(50.0)	4(33.3)			
	Condon					~
	Gender Male	7(58.3)	2(16.7)	1	2.000	0.491
	Female	1(8.3)	2(16.7)	-		
		-	·			
	Level of education completed Primary	1(8.3)	1(8.3)	1	0.300	1.000
	Junior secondary	7(58.3)	3(25.0)	1	0.500	1.000
		, (00.0)		$\mathbf{\vee}$		
	Type of family		1(0.0)		0.000	1 000
	Monogamy _Polygamy	2(16.7) 6(41.7)	1(8.3) 3(25.0)	1	0.000	1.000
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J						

Table 4.8: Respondents' Socio-demographic of marijuana use to practice	relating to
marijuana use among out of school adolescents	(N=12)

CHAPTER FIVE

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1. Discussion

Socio-Demographic Characteristics and Related Information of Respondents

Individual's demographic characteristics greatly determine their use of substances, there is therefore need to look at these socio-demographic characteristics of the respondents in this study (Ernestina Adjei Mensah, 2016). The study revealed that the majority of the respondents are female which is in contrast to the respondents sampled in the study of Osahon and Oseh (2018), Enakpoya (2009), Omage and Omage (2009) and Adeyemo et al. (2016).; Edo was the major ethnic group of the respondents due to the study location. Level of education of the respondent shows that (85.5%) of the respondents completed junior secondary education, while those that had primary education as their highest level of education were (14.5%), and the proportion of the respondents who are Christians is higher than Islam and Traditional religion, was found to be similar to the study conducted in Benin City by Omage and Omage (2009), Essien, Inyang and James et al., (2016), Ernestina Adjei Mensah, (2016), where majority (94.8%) of the respondents were Christians. The result from the study also revealed that male are more users of marijuana than female which corroborate with the study of (Ernestina Adjei Mensah, 2016), that female have less tendency to use marijuana than their male counterpart and also the study of (Mcfetridge, Liss, Potenza, & Ph, 2011; UN Women, 2014, UNODC, 2015).

Respondents' knowledge about marijuana use

Majority of the respondents had heard of marijuana and from different sources, a large number of them heard from friends or peers. This implies that friends or peers are a great influence in the life of adolescents. From the study, it was discovered that fewer proportions (22.3%) of the respondents know where marijuana is sold in their areas which increases the vulnerability of a considerate number of adolescents to marijuana use. As seen in a study by Osahon and Oseh, (2018), most adolescents and youths when asked why they indulge in drug abuse said out of peer pressure.

This study found out that knowledge was not significantly associated with perception while there was significant association between knowledge and practice. Which was similar to the study carried out by (Ernestina Adjei Mensah, 2016), where there was a significant relationship between knowledge and practice which make knowledge a protective factor to marijuana use.

Respondents reported other commonly used and abused illicit substances in the community, these include cigarette, alcohol, Tramadol and Shisha. This was supported by the study of Bassi and Idoko et al (2017).

Respondents' perception

The study revealed that majority of the respondents had positive perception while few of them had negative perception about marijuana use. These findings point out that adolescent in the study area are aware of the pending danger in the use of marijuana. This finding was found to be in contrast to a study conducted by Ekpenyong, S. N. (2012) among in-school adolescents in Bayelsa state where it was established by the study that majority of the respondents had negative perception while a few had positive perception.

On behavioural change due to taking of marijuana among adolescents, majority agreed, while others did not agree to changes in behavour due to marijuana use among adolescents. This result agreed with the findings of (Essien, Inyang and James et al., 2016) which had majority of the respondent agreeing that taking marijuana can produce some behavioural changes while others did not agree.

Respondents' practice relating to marijuana use

Respondents who reported that they know people who indulges in marijuana use in their neighborhood accounted for more than half of the sample population while adolescents who themselves have ever smoked or used marijuana were considerably few. Respondents who have ever smoked marijuana highest age were 19 years which was similar to the findings of a study conducted by Essien, Inyang and James et al (2016), where it was revealed that adolescents between the age of 16 and 17 years were likely to use marijuana in the study area. Respondents who agreed to have ever smoked marijuana were 12 (4.0%) while other respondents reported not ever smoked marijuana and among those who have used marijuana, majority of them said they used it in the form of smoking while a few others said mixed with food and soaking in water or hot drinking. This is in corroboration with the findings of (Essien, Inyang and James et al., 2016) in a similar study carried out in Akwa Ibom State where it was discovered that more than half of the respondents agreed to have used marijuana and less than half disagreed and out of those who agreed to have used marijuana, some percent used it by mixing it with hot drinks, while others used it by mixing it with food.

This study showed that male adolescents between the ages of 14 to 19 years are the most vulnerable group to marijuana use as they tend to be exposed to the use of marijuana in their environment. This report is supported by the study carried out by Bassi and Idoko et al., (2017) where their study revealed that, the average age of introduction to marijuana use was 14 years, and the most vulnerable groups were males especially those between 10-19 years.

A small percent of the respondents said the reason they use marijuana is due to peer pressure while a similar percent clamed due to emotional reasons which was in corroboration with the result from a similar study conducted in Benin by Omage and Omage (2009), Osahon and Oseh, (2018) and (SAMHSA, 2014, Adu-Mireku 2003). This help to reiterate the need of family preventive program, guidance and counseling which help adolescent in choosing who they associate with. Less than one-third of the respondents have family members who smoke marijuana, which according to a similar study by Bassi and Idoko et al. (2017) have a great influence on the practice of marijuana use by respondents.

according to the findings, analysis revealed that there was no significant association between gender of respondents and practice relating to marijuana us which is similar to the findings of (Osahon and Oseh.2018) in a study carried out among students at the university of Benin but these findings where in contrast to the findings of Akanbi, et al. (2014) and Oliha, (2014) who in separate studies in the College of Education, Kwara state and The University of Benin, Edo state respectively presented significant differences in male and female abusers of marijuana.

Implications of findings for health promotion and education

The result of this study highlights reasons for planning, implementation and evaluation of health education on marijuana use in the community setting and Nigeria at large. Targeted population for health education should also include the parents, masters to apprentice, media group and the state or LGA drug law enforcement board. Appropriate methods to enable the health education include public enlightenment using the mass media, group dialogue, peer educators, counseling and community-based seminars. Through health education, the targeted population will be able to understand the danger of marijuana use, acquire adequate knowledge about marijuana use and the associated harm. The use of advocacy is another appropriate strategy to curb marijuana use. Advocacy will help to facilitate policy formation relating to regulation on the use of marijuana in public places. Parents and staff in places where out-of-school adolescents are learning work can also benefit from seminars and training programmes where the relevance of their roles both at home and at place of learning work is important in curbing marijuana use among out-ofschool adolescent.

The use of behavioural communication change (BCC) materials such as billboards, posters or banners within the community can help enlighten the adolescents about marijuana use. Media houses can also make jingles and adverts to educate the public about the concept of marijuana use.

5.2 Conclusion

The study investigated the knowledge, risk perception and practice relating to marijuana use among out-of-school adolescents. Conclusions can be made that the study population have good knowledge, bad practice and positive risk-perception relating to marijuana use among adolescents. Efforts must therefore be intensified towards sensitization of the adolescent groups to further improve the knowledge, risk-perception and practices relating to marijuana use among out-of-school. Also, friends or peers were seen to have substantial influence in practice hence, parents are encouraged to monitor their children friends or peers.

5.3 Recommendations

- Giving of Health education and organization of sensitization programs on the effect of marijuana use for out-of-school adolescents and families via community stakeholders, health and religious worship centers should be put in place to help combat the menace of marijuana use among adolescents.
- 2. Since parents play a significant role in regulating marijuana use among adolescents, parents should be equipped by governmental and nor governmental organizations with adequate knowledge on marijuana use and parent-child relationship/interaction should be reinforced as a prevention programs.

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AFRICAN DIGITAL HEALTH REPOSITORY PROJECT

APPENDICES

APPENDIX I

Informed Consent Form

Greetings to you. My name is Igbinosun Esosa. I am a post graduate student of the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan. I am conducting a research on knowledge, risk-perception and practice relating to marijuana use among out-of-school adolescent in Ikpoba Okha Local Government Area of Edo State.

Title of research

Knowledge, risk-perception and practice relating to marijuana use among out-of-school adolescent in Ikpoba Okha Local Government Area of Edo State.

Name and affiliations of the researcher

This research is being carried out by Igbinosun Esosa Peter of the Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan, Oyo state, Nigeria.

Purpose of the research

The purpose of the research is to investigate the knowledge, perception and lifestyles influencing obesity among in-school adolescents in selected rural and urban local government areas in Ibadan, Oyo state.

Procedure for the research

I will be recruiting 310 respondents into the study and i therefore invite you to take part in the research project. If you accept, you will be asked to take part in the filling of the questionnaire which will be given to you. No one, other than the researcher or research assistant would be present. The information that will be given will be considered confidential and only Igbinosun Esosa and his research assistants would have access to such information.

Expected duration of the research and respondent involvement

The duration of the data collection for this research, of which you are invited to take part is 2 weeks and each respondent will spend 10-15 minutes in filling the questionnaire and taking measurements.

Risk

There is no physical risk associated with this study as you will be tagged anonymous. i.e. Information such as your name and address would not be taken by the researcher his assistants.

Cost to the participant

Your participation in this study will not cost you anything.

Beneficence

The result of this research is not of direct beneficence to the respondents. However, the results of the research will help policy makers within Nigeria to develop effective interventions that will ensure a decrease in the prevalence of marijuana use in Ikpoba Okha LGA of Edo state and Nigeria as a whole.

Confidentiality

Privacy of respondents would be ensured by using serial numbers rather than the name of the respondent, ensuring the respondents anonymity in the research. Research assistants would be trained on the importance of confidentiality and how to maintain it. Whatever information was inputted by the respondents will be kept secret by the researcher and the data will not be disclosed to a third party.

Non-maleficence

I will ensure that this research is risk free and that no harm will come up to respondents.

Voluntariness

Participation of the respondents is strictly voluntary. Respondents can choose to participate or withdraw from the research during the duration.

Ethical consideration

Approval for this study would be obtained from the Edo state Ethics Review Committee, located at the Ministry of Health. Should you have any question about your participation in this research, you can contact the principal researcher:

Igbinosun Esosa Peter

Address

Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan.

Telephone: 08169401984

Email: esosco@yahoo.com

Or the supervisor of the research:

Dr. Yetunde John-Akinola

Address: Department of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan.

Email: zfisayo@yahoo.com

Statement of person obtaining informed consent:

I have fully explained this research to and have given sufficient information on the risk, benefit and confidentiality to make an informed consent

DATE:

SIGNATURE:

NAME:

Statement of person given informed consent:

Now that the study has been well explained of me, i fully understand the consent of the study process and I hereby agree to be part of the study.

DATE: SIGNATURE:

NAME:

APPENDIX II

QUESTIONNAIRE

Knowledge, risk-perception and practice relating to marijuana use among out-ofschool adolescent in Ikpoba Okha Local Government Area of Edo State.

Dear Respondent,

My name is IGBINOSUN Esosa Peter, a Master of Public Health Student in the Department of Health Promotion and Education, University of Ibadan. The purpose of this study is to investigate the *knowledge, risk-perception and practice relating to marijuana use among out of school adolescents in Ikpoba Okha Local Government Area of Edo State.* Your participation in this study is voluntary. It is desired that honest and sincere answers should be given. The findings from this study will help in the design and formulation of health promotion and education intervention programmes for controlling the abuse of marijuana among out-of-school adolescent populations. All information gathered during the course of this study will be treated with high level of confidentiality, please note that your names are not needed in the study so you do not have to write your name on this questionnaire. Your willingness to answer the questions in this questionnaire implies that you have consented to participate in this study.

Thanks for your cooperation.

SECTION A: Socio-Demographic Characteristics of Respondents

In this section, Kindly respond to the following questions appropriately provided as applicable.

- 1. Age as at last birthday in years:
- 2. Gender 1. Male[] 2.Female []
- **3. Religion: 1.** Christianity [] 2. Islam [] 3. Traditional []4. Others (specify)
- 4. What work are you doing now: 1. Learning a trade [] 2. An artisan[] 3.Doing nothing [] 4. Others (specify)
- 5. Ethnicity: 1. Yoruba [] 2. Igbo [] 3. Hausa [] 4. Edo [] 5. Others specify
- 6. Highest level of Education: 1. Primary school [] 2. Junior Secondary school [] 3.
 Senior secondary school [] 4. Others (specify)

- 7. Parent marital status: 1. Married [] 2. Divorced/separated [] 3. Single parent []
 4. Widow/widower []
- 8. Type of Family: 1. Monogamy [] 2. Polygamy []
- 9. Highest Level of Education of Father/Guardian: 1. No Formal Education []
 2.Primary [] 3.Secondary [] 4.Tertiary [] 5.Others (specify) ______
- 10. Highest Level of Education of Mother/Guardian: 1. No Formal Education []
 2.Primary [] 3.Secondary [] 4.Tertiary [] 5.Others (specify)
- 12. Occupation of Father/ Guardian: 1. Trader[] 2. Civil-Servant [] 3.Worksin a Private Organization [] 4.Retired [] 5.Artisan [] 6.Unemployed [] 7.Other, (specify)_

SECTION B: AWARENESS AND KNOWLEDGE OF MARIJUANA AMONG OUT-OF-SCHOOL ADOLESCENTS.

Kindly respond to the following questions appropriately

- 13. Have you ever heard of marijuana? 1. Yes [] 2. No []
- 14. If "Yes" what are your sources of information about marijuana use?
 1. Television []
 2. Radio []
 3. Friends/peers []
 4. Church []
 5. Mosque []
 6. Family members []
 7. Social media []
 8. Others (specify)
- 15. How often do you hear about marijuana use? 1.Occasionally [] 2.Always []
 - 3. Never heard []
- 16. Do you know where marijuana is sold? 1. Yes [] 2. No[]
- 17. Beside marijuana which other substance do adolescents use around here?

Awareness/knowledge questions

S/N	Statement	True	False
18	Marijuana is a substance that can alter the brain function of adolescents		
19	Marijuana use is an illegal act in Nigeria		
20	Marijuana use can damage ones kidney		1
21	Adolescents who use marijuana cannot stay without taking it	K	
22	Brain damage can result from marijuana use		

SECTION C: RISK-PERCEPTIONOF MARIJUANA USE AMONG OUT-OF-SCHOOL ADOLESCENTS

Kindly respond to the following questions appropriately

S/N	Statements	Agree	Undecided	Disagree
23	Marijuana can lead to users injuring their body			
24	The use of marijuana has health consequences			
25	Marijuana user among adolescent are more likely to commit suicide			
26	It is wrong to drive after taken marijuana			
27	It is good to fight after taken marijuana			
28	It is good to take marijuana			
29	Taking marijuana can cause behavioural change among adolescents			
30	Adolescents cannot stay without taking marijuana			
31	Adolescents who indulges in marijuana use are usually strong			
32	An increase in the price of marijuana help to reduce smoking among adolescents			
33	Marijuana use among adolescent makes them feel good			
34	Marijuana makes Adolescents to act bold			

35. Do you see yourself to be susceptible to smoking marijuana? 1. Yes [] 2. No []

36. If "Yes" why? 1. Moving with friends that smokes marijuana [] 2. Living in an area where marijuana is sold [] 3. It is a normal thing for adolescents of my age [] 4. My family allows it [] 5. Staying around where people are smoking []

6. Others (specify)

37. What are you doing to guide against becoming a smoker? 1. Stop moving with friends that smokes marijuana [] 2. Not staying around area where it is sold [] 3. Keep away from people that are smoking [] 4. Others (specify)

SECTION D: PRACTICE OF MARIJUANA AMONG OUT-OF-SCHOOL ADOLESCENTS

Kindly respond to the following questions appropriately.

38. Do you know anybody in your neighborhood who indulges in marijuana use?

1. Yes [] 2. No []

39. Have you ever smoked marijuana? 1. Yes [/] 2. No []

40. If "Yes", at what age did you first start to smoke marijuana?

41. Are you currently smoking marijuana? 1. Yes [] 2. No []

42. If "Yes", how do you get marijuana? 1.Peddlers [] 2. Peers [] 3. Family members []

43. Where do you buy marijuana? 1. Neighborhood [] 2. Work place [] 3.Social gathering [] 4.Other (specify)_____

44. How often do you smoke? 1. Occasionally [] 2. Always [] 3. Everyday []

45. Why did you start smoking marijuana?1. Peer pressure [] 2. Experiment []

3.Lack of parental supervision [] 4.Availability of drug [] 5.Emotional reason [] 6.For energy to work [] 7.Loneness []

46. In what form do you use marijuana 1. Smoking [] 2. Sniffing [] 3. Eating []

4. Chewing [] 5. Mix with drink [] 6. Mix with food []

7. Soaking in water/hot drinking []

47. When do you usually feel the urge to smoke marijuana?

When with a bottle of alcoholic drink [] 2. When with my friends who smoke []
 When alone [] 4. When worried []5. During social gatherings and ceremonies []

48. Where do you usually smoke? 1.At home [] 2. At work place []
3.At friends' house [] 5.At social events [] 6.In public spaces (e.g. parks, shopping centers, street corners) [] 7. Others (specify)

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49. Do you have friends who smoke marijuana? 1. Yes [] 2. No []

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50. Do you have family members who smoke marijuana? 1. Yes [] 2. No []

51. Have you ever attempted to quit smoking marijuana? 1. Yes [] 2. No [

APPENDIX III

QUESTIONNAIRE

KNOWLEDGE, RISK-PERCEPTION AND PRACTICE RELATING TO IGBO USE AMONG OUT-OF-SCHOOL YOUNG PEOPLE IN IKPOBA OKHA LOCAL GOVERNMENT AREA OF EDO SATE

SECTION A: Socio-Demographic Characteristics of Respondents In this section, please tick ($\sqrt{}$) any of the responses that apply to you in the options provided or complete the spaces provided as applicable.

- 1. Na watin be your age the last time wen you do birthday: ______ years
- 2. Gender 1. Boy [] 2. Girl []
- 3. Religion: 1. Christianity [] 2. Islam [] 3. Traditional
- 4. Which kind work you de do: 1. Learning a trade [] 2. An artisan[] 3.Doing nothing [] 4. Others (specify)
- 5. Where you from: 1. Yoruba [] 2. Igbo [] 3. Hausa [] 4. Edo [] 5. Others specify
- 6. Na where you go school reach: Primary school [] 2. Junior Secondary school [] 3. Senior secondary school [] 4. Others (specify)

7. Na how your parents de Live: 1. Married [] 2. Divorced/separated [] 3. Single parent []

8. Which kind family you come from: 1. Monogamy [] 2. Polygyny []

9. Where you Papa go school reach: 1. No Formal Education [] 2. Primary []

3. Secondary [] 4. Tertiary [] 5. Others (specify)

10. Where you Mama go school reach: 1. No Formal Education [] 2. Primary []

3. Secondary [] 4. Tertiary [] 5. Others (specify)

11. Which kind work your Mama de do: 1. Trader [] 2. Civil-Servant [] 3. Works in a Private Organization [] 4. Retired [] 5. Artisan [] 6. Teacher [] 7. Unemployed [] 8. Others, (specify)_______

 Which kind work your Papa de do: 1. Trader [] 2. Civil-Servant [] 3.Works in a Private Organization [] 4. Retired [] 5. Artisan [] 6. Teacher [] 7.unemployed [] 8. Other, (specify)

SECTION B: AWARENESS OF IGBO USE AMONG OUT-OF-SCHOOL YOUNG PEOPLE.

Abeg jejely answer de questions to the following questions appropriately

13. You don hear of igbo before? 1. Yes [] 2. No []

14. If you don hear, Na how you take get gist wen igbo use level?
1. Television [] 2.
Radio [] 3.Friends/peers [] 4.Church [] 5.Mosque [] 6.Family members []
7.Social media [] 8. Others (specify)

15. Like how many times you de hear talk wen concern igbo use? 1. Occasionally [] 2.Always [] 3. Never heard []

16. You sabi where dem sale igbo? 1. Yes [] 2. No []

 17. Outside igbo watin people de bas for area 1. Cigarette [] 2. Tramadol [] 3.Alcohol [

] 4.Tobacco [] 5.Rohypnol [] 5.Codeine [] 6.Cocaine [] 7. Others

 (specify)______

SECTION C: KNOWLEDGE OF IGBO USE AND ABUSE AMONG OUT-OF-SCHOOL YOUNG PEOPLE

Kindly respond to the following questions appropriately

S/N	Statement	Na true	Na lie
18	Igbo na watin fit change the way brain de reason		
19	To bas igbo na illegal		
20	Igbo use fit jabaru kidney		
21	Young people wen de use Igbo fit easily wan take their own life		
22	Brain fit knock because of igbo use		

SECTION C: RISK-PERCEPTION OF IGBO USE AMONG OUT-OF-SCHOOL YOUNG PEOPLE

S/N	Statements	Agree	Undecided	Disagree
23	Igbo fit make person wen de bas am injure himsef			4
24	To de bas igbo de risky to Health			-
25	Young person wen de bas igbo fit kill himsef			
26	E no good to drive wen person don high with igbo		2	
27	E make sense to fight wen person don high with Igbo			
28	E make sense to test Igbo			
29	To de take Igbo fit make person de behave one kin			
30	Young people no fit stay say them no take igbo			
31	Young people wen de take igbo get power well well			
32	If them increase the price of igbo e go help reduce			
	people wen de bas			
33	Igbo de make young people de feel highry			
34	Igbo de give young people mind			

Kindly respond to the following questions appropriately.

35. You think sway you fit bas onto say boys de bas for area 1. Yes [] 2. No []

36. If "Yes", na why 1. I de move with friends wen de bas igbo [] 2. I de stay area wen people for de sell igbo [] 3. Na normal thing for person of my age [] 4. My family allows am [] 5. I de stay near people wen de bas [] 6. Others (specify)

37. watin you de do to make sure say you no stay to bas? 1. Stop to de follow friends wen de bas igbo [] 2. Nor de stay where them de sell am [] 3. Nor de with people wen de bas [] 4. Others (specify)

SECTION D: PRACTICE OF IGBO AMONG OUT-OF-SCHOOL YOUNG PEOPLE

Kindly respond to the following questions appropriately

38. You get person for near you house wen de bas igbol. Yes [] 2. No []

39. You don bass igbo before? 1. Yes [] 2. No []

40. If "Yes", na for which age you take start to bas igbo _

41. You de bas now. Yes [] 2. No []

42. If "Yes" na how you de get igbo 1. Peddlers [] 2. Peers [] 3. Family members []

43. na where you de buy igbo1. Neighborhood [] 2. Work place [] 3. Social gathering [] 4. Other (specify)

44. Na how regular you de bas 1. Occasionally [] 2. Always [] 3. Everyday []

44. Like how many times you de smoke? 1. Occasionally [] 2.Always [] 3. Never heard []

45. Why you start to de smoke igbo? 1. Peer pressure [] 2. Experiment [] 3. Lack of parental supervision [] 4. Availability of drug [] 5. Emotional reason [] 6. For energy to work [] 7. Loneness []

46. Na which form you de use igbo? 1. Smoking [] 2. Sniffing [] 3. Eating [] 4. Chewing [] 5. Mix with drink [] 6. Mix with food [] 7. Soaking in water/hot drinking []

47. na when e de do you to bas igbo 1. When I de down some bottle of bear [] 2. When I de with my guys wen de bas [] 3. When I de alone [] 4. When I de worry[]5. Wen I de for party []

48. na for where you for de bas igbo 1. For house [] 2. For work place [] 3.for my guy house [] 5.for party [] 6.for outside (e.g. parks, shopping centers, street corners) [] 7. Others(specify) ______

49. You get guys wen de bas igbo? 1. Yes [] 2. No []

50. You get family member wen de bas igbo? 1. Yes [] 2. No []

51. You don try to stop to de bas igbo before? 1. Yes [] 2. No []

Thank you.

APPENDIX IV

CODING GUIDE

QST	VAR NAME	VARIABLE	VARIABLE	COD
Ν		(QUESTIONNAIRE/STATEMEN TS)	LABEL	E
SECT	ION A: SOCIOI	DEMOGRAPHY	· · · · · · · · · · · · · · · · · · ·	
01	AGE	Age at last birthday in years	10-11	1
			12-13	2
			14-15	3
			16-17	4
			18-19	5
02	Gender	Gender	Male	1
			Female	2
03	REL	Religion	Christianity	1
		Islam	2	
		, O`	Traditional	3
			Others	4
04	WRK	What work are you doing	Learning a trade	1
	2		Artisan	2
			Doing nothing	3
			Others	4
05	ETH	Ethnicity	Yoruba	1
			Igbo	2
			Hausa	3
			Edo	4
			Others	5

06	HLEDU	Highest level of Education	Primary	1
			Junior secondary	2
			Senor secondary	3
			Others	4
07	PARENTS	Parents marital status	Married	1
			Divorced/separated	2
			Single parent	3
			Widow/widower	4
08	FAM	Type of family	Monogamy	1
			Polygamy	2
09	FHLEDU	Highest level of education of Father/Guardian	No formal education	1
			Primary	2
		S S	Secondary	3
			Tertiary	4
		OX I	Others	5
10	MHLEDU	Highest level of education of Mother/Guardian	No formal education	1
			Primary	2
	2		Secondary	3
			Tertiary	4
			Others	5
11	MOCCU	Occupation of Mother/Guardian	Trader	1
			Civil servant	2
			Works in a private organization	3
			Retired	4
			Artisan	5

			Unemployed	6
			Others	7
12	FOCCU	Occupation of Father/Guardian	Trader	1
			Civil servant	2
			Works in a private	3
			organization	0
			Retired	4
	Unemployed	Artisan	5	
				6
			Others	7
SECT	ION B: KNOW	LEDEG	\mathbf{e}	
13 HRD M	HRD MRI	Have you ever heard of Marijuana	Yes	1
			No	2
14	source			-
14	source		Television	1
14	source	If "Yes", what is your source of information about Marijuana use?	Television Radio	1 2
14	source			
14	source		Radio	2
14	source		Radio Friends/Peers	2 3
14	source		Radio Friends/Peers Church	2 3 4
14	source		Radio Friends/Peers Church Mosque	2 3 4 5
14	source		RadioFriends/PeersChurchMosqueFamily members	2 3 4 5 6
14	often	information about Marijuana use? How often do you hear about	RadioFriends/PeersChurchMosqueFamily membersSocial media	2 3 4 5 6 7
	RS	information about Marijuana use?	RadioFriends/PeersChurchMosqueFamily membersSocial mediaOthers	2 3 4 5 6 7 8
	RS	information about Marijuana use? How often do you hear about	RadioFriends/PeersChurchMosqueFamily membersSocial mediaOthersOccasionally	2 3 4 5 6 7 8 1
	RS	information about Marijuana use? How often do you hear about	RadioFriends/PeersChurchMosqueFamily membersSocial mediaOthersOccasionallyAlways	2 3 4 5 6 7 8 1 2

OTHERSUB	Beside Marijuana which other	Cigarette	1
	around here?	Tramadol	2
		Alcohol	3
		Tobacco	4
		Rohypnol	5
		Codeine	6
		Cocaine	7
		Others	8
BRAIN	Marijuana is a substance that can	True	1
		False	2
ILLEGAL		True	1
		False	2
DAMAGE	Marijuana use can damage ones	True	1
	kidney	False	2
STAY	Adolescents who use Marijuana	True	1
	cannot stay without taking it	False	2
BRDAMAG	Brain damage can result from	True	1
E	Marijuana use	False	2
ION C: RISK-PI	ERCEPTION		
INJURE	Marijuana can lead to users injuring	Agree	1
	then body	Disagree	2
		Undecided	3
HEALTH	The use of Marijuana has health	Agree	1
	consequences	Disagree	2
		Undecided	3
1		1	1
	ILLEGAL DAMAGE STAY BRDAMAG E ION C: RISK-PI INJURE	BRAINMarijuana is a substance that can alter the brain function of adolescentsILLEGALMarijuana use is an illegal act in NigeriaDAMAGEMarijuana use can damage ones kidneySTAYAdolescents who use Marijuana cannot stay without taking itBRDAMAGBrain damage can result from Marijuana useIUN C: RISK-PERCEPTIONINJUREMarijuana can lead to users injuring their body	around here?TramadolAlcoholAlcoholTobaccoRohypnolCodeineCocaineOthersOthersBRAINMarijuana is a substance that can alter the brain function of adolescentsTrueILLEGALMarijuana use is an illegal act in NigeriaTrueDAMAGEMarijuana use can damage ones kidneyTrueSTAYAdolescents who use Marijuana cannot stay without taking itTrueBRDAMAGBrain damage can result from Marijuana useTrueINJUREMarijuana can lead to users injuring their bodyAgreeINJUREMarijuana can lead to users injuring their bodyAgreeINALTHThe use of Marijuana has health consequencesAgreeDisagreeDisagree

25	SUICIDE	Marijuana users among adolescent are more likely to commit suicide	Agree	1
		are more likely to commit suicide	Disagree	2
			Undecided	3
26	DRIVE	It is wrong to drive after taken	Agree	1
		Marijuana	Disagree	2
			Undecided	3
27	FIGHT	It is good to fight after taken	Agree	1
		Marijuana	Disagree	2
			Undecided	3
28	MARI	It is good to take Marijuana	Agree	1
			Disagree	2
			Undecided	3
29	BEHAVO	Taking Marijuana can cause	Agree	1
		behavioural change among adolescents	Disagree	2
			Undecided	3
30	TAKIN	Adolescents cannot stay without	Agree	1
		taking Marijuana	Disagree	2
			Undecided	3
31	STRONG	Adolescents who indulges in	Agree	1
		marijuana use are usually strong	Disagree	2
			Undecided	3
32	PRICE	An increase in the price of	Agree	1
		Marijuana help to reduce smoking among Adolescents	Disagree	2
			Undecided	3
33	FEEL	Marijuana use among adolescent	Agree	1
		makes them feel good	Disagree	2
			Undecided	3

34	BOLD	Marijuana makes adolescents to act bold	Agree	1
			Disagree	2
			Undecided	3
35	SUSCEP	Do you see yourself to be	Yes	1
		susceptible to smoking Marijuana?	No	2
36	YES	If "Yes" why?	Moving with	0
			friends that smokes	
			Marijuana	
			Living in area	2
			where Marijuana is	
			sold	
			It is a normal thing	3
			for adolescents of	
			my age	
			My family allow it	4
			Staying around	5
			where people are	5
			smoking	
			Others	6
37	GUIDE	What are you doing to guide	Stop moving with	1
		against becoming a smoker?	friends that smokes	
			marijuana	
			Not staying around	2
			area where it is sold	
			Keep away from	3
			people that are	
\mathbf{V}			smoking	
			Others	4
SECTI	ON D: PRAC	ΓΙϹΕ	1	I
38	INDUL	Do you know anybody in your	Yes	1
		neighborhood who indulges in marijuana use?	No	2

39	EVESMK	Have you ever smoked marijuana	Yes	1
			No	2
40	AGESRT	If "Yes", at what age did you start	10-11	1
		to smoke marijuana?	12-13	2
			14-15	3
			16-17	4
			18-19	5
41	CURSMK	Are you currently smoking marijuana?	Yes	1
			No	2
42	GET	If "Yes", how do you get marijuana?	Peddlers	1
			Peers	2
			Family members	3
43	BUY	Where do you buy marijuana?	Neighborhood	1
			Work place	2
			Social gathering	3
			Others	4
44	OFTESMK	How often do you smoke?	Occasionally	1
			Always	2
	2		Everyday	3
45	STRTSMK	Why did you start smoking	Peer pressure	1
		marijuana	Experiment	2
2			Lack of parental supervision	3
			Availability of drug	4
			Emotional reason	5
			For energy at work	6
			Loneness	7

46	FORM	In what form do you use	Smoking	1
		marijuana?	Sniffing	2
			Eating	3
			Chewing	4
			Mixed with drink	5
			Soaking in water/hot drinking	6
47	FUSMK	When do you usually feel the urge to smoke marijuana?	When with a bottle of alcoholic drink	1
			When with my friends who smoke	2
			When alone	3
			When worried	4
		BAL	During social gathering/ceremoni	5
48	WDUSMK	Where do you usually smoke?	es At home	1
40	WDUSINK	where do you usually shoke?		
			At work place	2
			At friend's house	3
			At social events	4
			In public spaces	5
			Others	6
49	FRNDS	Do you have friends who smoke	Yes	1
$\overline{7}$		marijuana?	No	2
50	FAMSMK	Do you have family members who	Yes	1
		smoke marijuana?	No	2
51	QUIT	Have you ever attempted to quit	Yes	1
		smoking marijuana?	No	2

EDO STATE

MINISTRY OF HEALTH

Ring Road,

P.M.B. 1113 Benin City. Edo State Nigeria

Our Ref: HM.1208/757 Your Ref:

IGBINOSUN ESOSA PETER Dept of Health Promotion and Education, Faculty of Public Health, College of Medicine, University of Ibadan. Tel..... Fax.... E-Mail..... 16th August, 2019

RE: KNOWLEDGE, RISK-PERCEPTION AND PRACTICE RELATING TO MARIJUANA USE AMONG OUT-OF-SCHOOL ADOLESCENTS IN IKPOBA OKHA LOCAL GOVERNMENT AREA OF EDO STATE.

I am directed to acknowledge the receipt of your request on the above stated matter. Consequently upon the review of your proposal and recommendations by the state ethical clearance committee, you are hereby given approval by the Honorable Commissioner to conduct the research on "KNOWLEDGE, RISK-PERCEPTION AND PRACTICE RELATING TO MARLUANA USE AMONG OUT-OF-SCHOOL ADOLESCENTS IN IKPOBA OKHA LOCAL GOVERNMENT AREA OF EDO STATE".

You are to ensure confidentiality of the respondents and make available to the library of the Ministry of Health, a copy of your research findings.

Accept the assurances of the highest esteem of the Honourable Commissioner.

Dr. Mrs. H.I. Eboreime (Director Medical Services) For: Honourable Commissioner.