

**PREVALENCE, DETERMINANTS AND SELF-REPORTED EFFECTS
OF DRUG ABUSE AMONG ATHLETES IN NATIONAL ATHLETICS
CHAMPIONSHIP IN NIGERIA**

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**A THESIS SUBMITTED TO THE DEPARTMENT OF HEALTH PROMOTION AND
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DECLARATION

I, AMAO, Kayode Opeyemi (01/25OA012) hereby declare that this thesis entitled: Prevalence, Determinants and Self-Reported Effects of Drug Abuse Among Athletes Participating in National Athletics Championship in Nigeria. Is a report of my research work. This thesis has not been presented or accepted in any previous application or consideration for the award of a higher degree. Also, all the sources of information and cited materials were adequately acknowledged. In, addition, the research work has been ethically approved by the University Ethical Review Committee and passed the anti-plagiarism screening of the University of Ilorin Postgraduate School.

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CERTIFICATION

This is to certify that the thesis entitled “Prevalence, Determinants and Self-Reported Effects of Drug Abuse Among Athletes Participating in National Athletics Championship in Nigeria” has been read and approved as meeting the requirements of the Department of Health Promotion and Environmental Health Education, Faculty of Education, University of Ilorin, Nigeria, for the award of Doctor of Philosophy (Ph.D.) degree in Health Education.

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DEDICATION

This these is dedicated to my late father Pa. Solomon O. Amao, my late mother Deaconess Mary Aboyeye Amao and my wife for their patience and support.

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LIST OF ABBREVIATIONS

ESC: Economic and Social Council

IAAF: International Association of Athletics Federation

ILO: International Labour Organisation

IOC: International Olympic Committee

NAFDAC: National Agency for Food Drug Administration and control

NDLEA: National Drug Law Enforcement Agency

NIDA: National Institute on Drug Abuse

UNODC: United Nations Office on Drug and Crime

WADA: World Anti-Doping Agency

WHO: World Health Organisation

ABSTRACT

Drug abuse is an excessive and persistent self-administration of drug without regard to the medically or culturally accepted pattern. The use of doping substances to enhance performance by athletes is currently a national and international social problem as it also affects their functional health. This study investigated the Prevalence, Determinants and Self-Reported Effects of Drug Abuse Among Athletes in National Athletics Championship in Nigeria. The objectives of the study were to: (i) determine the prevalence of drug abuse among athletes; (ii.) assess if financial reward for outstanding performance determines drug abuse among athletes; (iii). investigate if training facilities determines drug abuse among athletes; and (iv). examine the self-reported effects of drug abuse among athletes in National Athletics championship in Nigeria.

A descriptive research design of survey type was employed. Population of the study comprised all active (487) and retired (113) athletes that participated in National Athletes Championships, Abuja in 2018, which in total of 600 athletes. All the 600 athletes were sampled and participated in the study. The instrument used for data collection was a structured questionnaire which was validated by three experts and tested for reliability that yielded a correlation co-efficient of 0.88 using Spearman-Brown Prophecy Formula. The instrument was administered by the researcher and three research assistants. Percentage and Chi-square statistics were employed for data analysis at 0.05 level of significance.

The findings of the study were that;

- i. the prevalent drugs abused by the athletes in National Athletics Championship were; tramadol (58%), codeine (55%), and marijuana (55%);
- ii. financial reward for outstanding performance was a significant determinant for drug abuse among athletes in National Athletics Championship (cal. χ^2 value = 214.86 is > crit. χ^2 value = 16.92 df = 9);
- iii. training facilities was a significant determinant for drug abuse among athletes in National Athletics Championship (cal. χ^2 value = 427.90 is > crit. χ^2 value = 16.92 df=9);
- iv. watery eye was a significant self-reported physical health effect of drug abuse among the athletes(cal. χ^2 value = 187.92 is > crit. χ^2 value = 16.92, df = 9);
- v. restlessness/hyperactivity was a significant self-reported physiological health effect of drug abuse among the athletes (cal. χ^2 value = 214 is > crit. χ^2 value = 21.03, df = 12); and
- vi. aggression was a significant self-reported psychological health effect of drug abuse among athletes in National Athletics Championship in Nigeria(cal. χ^2 value=326.10 is > crit. χ^2 value = 21.03, df = 12) in National Athletics in Nigeria.

The study concluded that athletes that are involved in the abuse of drug experienced some health challenges, although it improved their performances during competition. The implication is that the drug had devastating effects on their health. The study recommended that athletes should be discouraged on drug abuse and be educated on its side effects. Also doping test on drug abuse be carried out before training and competition proper.

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CHAPTER ONE

INTRODUCTION

Background to the Study

Drugs are chemicals that save lives and halt diseases, but they can also cause injury and death. Since the early times, herbs, leafs and plants have been used to treat and control diseases. A drug is a substance which, when introduced to the body will alter the normal biological psychology functioning of the body especially the central nervous system (Asthon 2017). Drugs have been existing from time immemorial and means different things to different people of different ages. For instance, drug is a substance by which health problems or issues are resolved (Ghodse, 2003). A drug is a substance that prevents, or cure and reduces the symptoms of a disease or ailment thereby promoting life (James, 2018). Drug can be broadly defined as substances that change the way the brain and body function (Carl, 2017). Drug also means all psychoactive substances (substance that people take to achieve a change of mental, physical or emotional state) including tobacco, alcohol, medicinal drugs and volatile substances (inhalants) (Richard, 2018).

Drug is so important to the body that sometimes our bodies cannot do without it. This is because our bodies are chemically dependent on drugs and drugs are a source of assistance or correction of its biochemistry (Moses, 2009). Drug usage has always been part of human culture, and a man uses drugs for variety of purposes over the ages. Drug has physiological and psychological effects on the mind and body. The earliest known drugs which alter the human mind are alcohol, marijuana and opium. Many people owed their continued survival in a reasonably sound health to permanent dependence on prescribed drugs (Moses, 2009). Drugs can be dangerous, even though they are meant to improve our health. Taking them correctly and understanding the right way to administer them can reduce the risks. (Case-Lo, 2016). Drugs work in our body in a variety of ways. They can interfere with micro-organisms

that invade our body system and destroy abnormal cells that cause cancer, replace, substances (such as hormones or vitamins), or change the way that cells work in our body (Michael, 2018).

Drug abuse involves or excessive use of illegal as well as legal drugs and these often lead to problems. Substance abuse can simply be defined as a pattern of harmful use of any substance for mood altering purposes (Richard, 2018). Substances can include alcohol and other drugs (illegal or not) as well as some substances that are not drugs at all. Abuse of drugs also includes the use of illegal medicines by apparently healthy persons for both social convenience and personal pleasures, as well as the use of non-drug substances such as petrol to produce drug like effects. Drug abuse apply to the illegal, non-medical use of a limited number of substances, most of these drugs, which have properties of altering the mental state in ways that are considered by social norms and defined by statute to be inappropriate, undesirable, harmful, threatening, or at minimum, a culture-alien. According to Farlex (2012) drug abuse is the habitual use of drugs not needed for therapeutic purposes, but to alter one's mood, affect the state of consciousness, or to affect a body function unnecessarily (asinlaxativeable) Drug abuse is one of the social problems that affects everyone, anywhere, either directly or indirectly and children are no exception. Substance use and abuse is a long standing major public health issue all over the world. It has for long been an issue of debate among stakeholders in order to find a lasting solution to its menace (Oyewumi& Adigun, 2013). Substance abuse refers to the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs (WHO, 2018).

Drug abuse is one of the common problems in sports and it is a major public health problem all over the world, (United Nations Office on Drug and Crime (UNODC, 2008). In competitive sports, people have always and will always use any means to try and gain an advantage over their opponents. The intake and misuse of drugs by adolescents have become

of most knotty health related issue in Nigeria and else around the world. National Agency for Food and Drug Administration and Control NAFDAC (2000), cited by Haladu (2003), described drug abuse as excessive and continuous self-administration of drug without a recourse to medically or culturally accepted patterns. Abdulahi (2009) also posited that substance abuse as the intake of drug to the extent that it affects the health and social function of an individual. Odejide (2000) in his own opinion claimed that drug abusers who manifest symptoms of depression, anxiety, stress, behavioural change, fatigue and loss or increase in appetite should be treated by medical experts and counsellors to save them from several other chronic diseases or effects.

Drug abuse or substance abuse could also be referred as to the use of certain chemicals for the purpose of creating pleasurable effects on the brain. There are over 190 millions drug users around the world and the problems have been increasing at alarming rates, especially among young adults under the ages of 30 (Mandal, 2019). Drug abuse is a more intense and often willful misuse of drugs is too often to the point of addiction (Baladi & Umedani, 2017).

Drug abuse kills about 200,000 people worldwide each year. Heroin, cocaine and other drugs continue to kill around 200,000 people yearly, shattering families and bringing misery to thousands of other people, insecurity and the spread of HIV (United Nation 2002). Global treatment for drug abuse would cost \$250 billion per year if everyone who needed help receive proper care. According to United Nation Report no fewer than one in five people who need treatment actually receive it (United Nation, 2012). Everyday, over 500,000 bottle of codeine are consumed by young Nigeria across the country, some with the intake of marijuana in an alarming trend that has subtly eaten deeply into Nigeria (Ifijeh 2017).

Today, drug use in sports has reached an alarming rate in society and it is adversely affecting sports, the problem is more serious in professional athletics where Athletes, Coaches and Trainers misuse drugs in search of ways to enhance performance. Many Athletes fail to take their time when making the decision whether to dope to their advantage. Unfortunately, Athletes may turn to substances to cope with numerous stressors, including pressure to perform, and retirement from a life of sport (which happens much earlier than retirement from other careers). Drugs for the treatment of illnesses, therapeutic indications, recreational or social reasons, as muscular aids or to cover up the presence of other drugs during drug testing. By doing this, the safety of the Athlete's health is being neglected. Drug abuse has led to some number of deaths and suspensions of Athletes (Morse, 2013).

Drug use by athletes has maimed careers and lives in some instances. Whether an athlete uses an illicit or controlled drug, he or she takes a great risk of harming the body and may be disqualified from the competition. It is alright to be competitive, but using performance enhancing drugs is both dangerous and unethical. According to Collins English Dictionary, (2014), Athlete can be described as a person trained in exercises, games or contests requiring physical strength, soul, stamina, speed and many more. An athlete is a participant in a group of sporting activities which includes track and field, road running, cross country running and race walking (David, 2013).

Athletics is a collection of sporting events that involve competitive running, jumping, throwing, and walking (Oxford English Dictionary, 2013). Athletics is a sport comprising many events demanding skills from individuals (Abubakar, 2017). The most common types of athletics competitions are track and field marathon, cross categorized into track and field events. Track events include the running events over various distances such as sprint races which include 100m, 200m, 400m as well as the 4 x 100 and 4 x 400m relay, 100m/110m and 400m hurdles. Middle distances races such as 800m and 1,500m, long distance races are

5,000m, 10,000m, steeplechases and marathon. Field events are activities which involve jumping and throwing that are performed on the field, example of jumping events are: long jump, triple jump, high jump and javelin, shot-put, Discus and Hammer. Due to man's basic instinct of running and the apparent simplicity of sprinting many people tend to opt for sprints or short distance running. Drug abuse in the field of sports is often referred to as 'substance abuse' or 'doping' (Calatayud, Alaide, Zuritan & Benavent, 2007). Drug abuse in the athlete population may involve doping in an effort to gain a competitive advantage. Alternatively, it may involve the use of substances such as alcohol or marijuana without the intent of performance enhancement, since athletes may develop substance use disorders just as any non athlete may do.

Generally, drug used in sport can be grouped into two main categories which include: restorative and addictive drugs. Restorative drugs are used to make one feel strong and healthy again after an injury or illness, while in some cases to kill or suppress pains. They are therefore taken with the objective of restoring the athlete's normal prowess or skills. Addictive drugs on the other hand is usually use in order to stimulate an athlete's performance beyond his normal capability or capacity. This enhancing drug when taken is called doping in sports.

Athletes, sports men and sport women use of illicit substances to excel in performance is a form of cheating behaviour and this could be dangerous to their health and career. The problem of drug use is very common in competitive sports (Moran, Guerin, Kirby & Macintyre, 2008). In spite of the complexity of doping, two major problems arise which are health problems and unfair performance enhancement. Both issues are sometimes seen in conflict with the right of autonomy which implies that the athletes can use their body freely but for the sake of sports. Another major issue which needs to be addressed while dealing

with doping is the spirit of sportsmanship (Mieth & Sorsa, 1999; Kindlundh, Hagekull, Isacson & Nyberg, 2001; Ozdemir, Nur, Bagcivan, Bulut, Sumer & Tezeren, 2005).

According to Fields (2004) Athletes have been using drugs to enhance their performances since ancient times. The use of drugs by Athletes is almost as old as the Olympic Game itself. He further reported that the pressures of professional athletics conditions and the accompanying lifestyle can create a situation in which Athletes seek both relief and the enhancement of their performance by using alcohol or other drugs.

As a result of the increase in the incidence of drug abuse by Athletes world wide, the World Anti-Doping agency brought out the 2009 prohibited lists of International standard. The list contained substances and methods prohibited at all times (in and out of competition). The prohibited substances include: Anabolic Agent, Beta-2-Agonists, Cannabinoids, Diuretics and other masking agents, Glucocorticosteroids, Narcotics, Hormones and related substances, Hormone antagonists and modulator, Stimulants. Athletes frequently use ergogenic aids to improve their performances and increase their chances of winning in competition (Silver, 2010). According to Silver (2010), Ergogenic aid is defined as any means of enhancing energy utilization including energy production, control and efficiency. He further described an ergogenic aid as any means of enhancing energy production and utilization. The use of drugs to improve the performance in sports is prevalence since ancient times (WADA 2012).

The prevalence of doping is higher among sports competitors and increases with the age and level of competition (Laure & Bisinger, 2007; Ehrnborg & Rosen, 2009). Ozdemir, etal (2005) noted that there are numerous psychological factors that contribute to an athlete's propensity to engage in drug abuse substance, like performance enhancement, perfection, confidence, motivation, task, ego, emotional status and low social support. Unfortunately, much of the research on doping behaviour has so far concentrated on individual differences in

attitudes towards drug testing programme. However, it has not been well understood are the underlying psychological factors behind the use of performance enhancing substances in sports. There are empirical evidences in lots of studies stating the role of psychosocial variables in the use of doping in sports. Some studies have analyzed the performance enhancement attitude with doping belief and sports orientation, while few researchers studied the social support determinants of the performance enhancing drugs by gun user. Hence, understanding athlete attitudes and behavioural intentions towards performance enhancement is critical for anti-doping intervention strategies (Ozdemir et al, 2005).

Hornby (2010) described determinants as those things that decide whether or how something happens. In this study, determinants are those factors that bring about the abuse of substances by athletes. These factors according to empirical evidences are to enhance sports performance for mental alertness, peer pressure and acceptance, to escape from personal and family problems, to relieve stress and anxiety, social support, and for competitiveness and pressures for success (NIDA, 2005; Oak, 2012; Anderson, 2012; Reardon and Creado 2014). For the purpose of this study, the researcher categorized these factors into three as follows; physical, psychological, and social related factors. Ascertaining the determinants of substance abuse among athletes going by this discourse stands out as a very appropriate cause of action in the quest of curbing substance abuse among athletes. The necessity is underscored by the fact that knowledge of these factors will help to locate which problem to tackle in order to reduce substance abuse among athletes.

According to Olumakin (2005), Self-reported effect of drugs among athletes has been explained as a measure in which athletes are asked to report directly on their own behaviours, beliefs, attitudes, or intentions towards the use of drugs which could be measured through survey questions either by having interviewers record and the length of time which the athletes take to answer questions based on the use of drugs.

Drug test in Olympics only began in 1968 and ever since then numerous athletes have been apprehended using substance ranging amphetamines to steroids and even common alcohol. The most unfortunate aspect of drug abuse is that sports legends or celebrities around the world who are suppose to serve as role models to the upcoming athletes are caught in the act of doping to attain fake successes in sports. For instance, superstars such as Tyson Gay, Asafa Powell, Allison Randall and Sherone Simpson were among the five athletes who allegedly tested positive for banned performance-enhancing substance during the Jamaican national championships in June, 2013 (The Nation Sporting Life, 2013).

According to Donovan, Egger, Kapernick and Mendoza (2002), drug abuse is a social problem and is a great concern in our society like any other social problem. It has been attracting the attention of sociologist, political scientist, psychologist, philosophers, sports administrators, coaches, athletes and social workers. Several deaths of athletes have been related to drug abuse. Although it is not possible to mention all drugs that have been casually linked with sudden death in athletes, the most important (9) of them are; Ephedrine (Ma-Huang or herba ephedra), cocaine, Amphetamines, anabolic steroids (Oxymesterone, Methandrostenolone, Stanozoletc) Erythropoietin, Alcohol, Ergotamine derivatives and Energy drinks (Odebunm, 2010). Donovan et al (2002) observed that the influence of drug abuse among athletes has become a source of concern for so many well-meaning Nigerians. Most athletes have turned themselves into medical professionals because of an ailment they once had. They are constantly diagnosing and prescribing for themselves and others without any knowledge of its chemistry, purpose or side effects of the drugs. This is a bad precedent to which other people in the society have become accustomed to.

The cancerous influence of drug abuse is not limited to a particular part of the world or an age group. Odejide (2000) noted that drug abusers experience academic failures, false confidence, illusions, hampered performance, distortion of the senses, hallucinations, delusions and loss of brain cells. In Nigeria, smoking of tobacco causes 90% of drug cancers,

30% of all cancers and 80% of other chronic lung diseases (Shokunbi, 2000). Stimulants such as cocaine, heroin, marijuana, alcohol, cigarettes are most common drugs abused by athletes and they constitute the high-risk group in the use and abuse of drugs.

Statement of the problem

Drug abuse among athletes is a major issue that gives serious concern to both individuals and the society at large. The use of doping substances to enhance performance by athletes is currently a national and international social problem. This is because sports have become a big-time business with national and international champions making millions of money, enjoying self-esteem coupled with recognitions and various rewards such as cash gifts, houses, cars and scholarship awards. Athletes participate in sport competition in order to excel or perform well and win medals. In a situation when athletes feel they could not meet up to the expected standard, they tend to abuse drug that will aid their performance. Abuse of drugs has cross all lines of race, culture, education and socio economic status, leaving no group untouched by its devastating effects. It is an enormous public health problem, with far reaching effects in the society (Ajibade, et al 2016).

Rates of performance enhancing drug use may be higher among elite athletes, where the incentives for optimal performance are quite high. International drug testing results, collated by World Anti-Doping Agency (WADA), demonstrate an approximate prevalence of 2% positive tests per year. However, the true prevalence is thought to be closer to 10% during sport competitions. The researcher observed that there are lot of factors that determine the performance of athletes on the track and field events. Some of these determinants may be financial reward, belief that it can enhance performance and lack of facilities to train.

Also, athletes indulge in drug abuse because of rewards attached to the result of the athlete performance during national and international competitions. Some of the athletes reported effects of drug abuse include suspensions, bans, early retirement, health problems

and premature death. Other self reported are physical, physiological and psychological effects. Although the intention of these athletes who engaged in drug abuse is mainly to enhance their performances which gradually made some of them to become drug addicts.

Most behaviours of athletes who abuse drug include poor attitudes with no other identifiable cause, chronic dishonest, difficulty in paying attention, forgetfulness, sudden oversensitivity, red watery eyes, irregular heartbeat, running nose, inability to sleep, awake at unusual times and unusual laziness. The researcher also observed that prevalence of drug abuse among athletes cannot be underestimated, especially in weight lifting, athletics and soccer worldwide. The athletes who abused drug had extra ordinary performance over their opponents who genuinely use their physical efforts and hard work. The athletes who used drugs wanted to win at all cost. The female athletes were not left out in the habit of taking performance-enhancing substances like their male counterparts.

The researchers noted that, there were noticeable increase in unhealthy and anti-social behaviours of athletes who abuse drug during and after sports competition. Effects of drug abuse can be linked to the influence of the dangerous acts such as riot during inter-house sports, secondary students wielding dangerous weapons such as cutlass, broken bottles. It is observed that no researcher has carried out any research in this area, hence the need for this study on the prevalence, determinants and self-reported effects of drug abuse among athletes in National Athletics Championship.

Research Questions

The following research questions were answered in the study;

1. What is the prevalence of codeine abuse among athletes in National athletics championship in Nigeria?
2. What is the Prevalence of Marijuana abuse among athletes in National athletics championship in Nigeria?
3. What is the Prevalence of tramadol abuse among athletes in National athletics championship in Nigeria?
4. Will financial reward for outstanding performance be a determinant for drug abuse among athletes in National athletics championship in Nigeria?
5. Will beliefs in the use of performance enhancement drug be a determinant for drug abuse among athletes in National athletics championship in Nigeria?
6. Will facilities be a determinant for drug abuse among athletes in National athletics championship in Nigeria?
7. What are the physical (structural imbalance) self-reported effects of drug abuse among athletes in National athletics championship in Nigeria?
8. What are the physiological (Hormonal imbalance) self-reported effects of drug abuse among athletes in National athletics championship in Nigeria?
9. What are the psychological(temperament) self-reported effects of drug abuse among athletes in National athletics championship in Nigeria?

Research Hypotheses

The following research hypotheses were tested at 0.05 level of significance to guide the study;

- HO₁: Codeine will not significantly be a prevalent drug abused by athletes in National athletics championship in Nigeria.
- HO₂: Marijuana will not significantly be a prevalent drug abused by athletes in National athletics championship in Nigeria.
- HO₃: Tramadol will not significantly be a prevalent drug abused by athletes in National athletics championship in Nigeria.
- HO₄: Financial reward for outstanding performance will not significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria.
- HO₅: Beliefs in the use of performance enhancement drug will not significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria.
- HO₆: Lack of training facilities will not significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria.
- HO₇: Physical (structural imbalance) effects will not significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.
- HO₈: Physiological (Hormonal imbalance) effects will not significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.
- HO₉: Psychological (temperament) effects will not significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

Purpose of the Study

The purpose of the study is to examine prevalence, determinants and self reported effects related to drug abuse among Athletes in National Athletics Championship in Nigeria. Specifically, the study is to:-

- determine the prevalence of drug abuse among athletes in National Athletic championship in Nigeria
 - investigate if tramadol will be prevailing of drug abuse among athletics in National Athletics Championship in Nigeria.
 - assess if codeine will be prevailing of drug abuse among athletes in National Athletics Championship in Nigeria.
 - determine if marijuana will be prevailing of drug abuse among athletes in National Athletics Championship in Nigeria.
- assess the determinants of drug abuse by athletes in National Athletics championship in Nigeria.
 - determine if beliefs in the use of performance enhancement will be a determinant for drug abuse among athletes in National Athletics Championship in Nigeria.
 - assess if financial reward for outstanding performance will be a determinant for drug abuse among athletes in National Athletics Championship in Nigeria.
 - investigate if lack of training facilities will be a determinant for drug abuse among athletes in National Athletics Championship in Nigeria.
- examine self-reported effects of drugs abuse among athletes in National Athletics Championship in Nigeria
 - investigate if physical (structural imbalance) effects will be a self-reported effects of drug abuse among athletes in National Athletics Championship in Nigeria.
 - assess if physiological (Hormonal imbalance) effects will be a self-reported effects of drug abuse among athletes in National Athletics Championship in Nigeria.

- determine if psychological (temperament) effects will be a self-reported effects of drug abuse among athletes in National Athletics Championship in Nigeria.

Significance of the Study

The study would be a great benefits to all the coaches, sports Administration, Athletes, Physical and Health Educato, NGOs, State and Federal Governmentas well as academic researchers. The finding would serve as a resource materials to coaches and sports Administrators on the needs to educate the athletes on the danger attached to the drug abuse in relation to their health. It would also assist them on how to organize and manage sports programmes in the school. It would also exposed the athletes to the risk attach to drug abuse during and after their retirement which could brings about physical deformity. The study would also encourage the health educator to organized workshop and symposium for all the athletes on the need to stay away from drug abuse in order not to give negative effect on their health. The findings of this study would enable sport administrators to easily identify atheletes who are into drug abuse to restrain and refer to medicals and needed treatments. The findings of this study give detailed information to nongovernmental organization on how to provide needed support such as community and grassroots awareness to curb drugs abuse among the youths who are into sports and want to be professionals in future. The findings of this study when publish would enable state and the federal governments enact laws and more stringent on athletes found indulging in drug abusebe sanctioned and refer for proper medical treatment and rehabilitation to ensure sound healthy living. Finally, the findings would help academic researchers in the area of drug to carry out more studies on the effect of drug abuse in sports in the communities.

Scope and Delimitation of the Study

The study investigated the prevalence, determinants and self-reported effects of drug abuse among athletes in National Athletics Championship. The study was delimited to all

active and retired athletes in track and field events in National Athletics Championship. The study covered all the athletes from 36 states as well as the Federal Capital Territory (FCT) Abuja who competed in National Athletics Championship.

A descriptive research design of survey type was adopted for this study. A multi-stage sampling procedure which consisted of purposive and stratified sampling procedure was used to select the respondents for this study. A researcher designed questionnaire which was subjected to psychometric test was employed for this study. The validity and reliability were ascertained on the content of the research instrument. The researcher administered the questionnaire with the help of three trained research assistants. Percentages was used for demographic data while inferential statistic of chi-square was used to analyze the postulated hypotheses set for the study at 0.05 level of significance using SPSS software version 23.0.

Operational Definition of Terms

The following terms are defined as use in the study:

Abuse: the misuse of drugs or use of drug any how without prescription.

Athletes: Skillful persons that take part in sporting activities at National athletic championship .

Athletics: sport perform on the track/field by the athletes.

Determinant: factors that influence the athletes to use drug.

Drug Abuse: Indiscriminate taking of any drug other than food into the body

Drug: Any substances taking into the body other than foods to enhance performance.

Effect: The consequence of taking drug by the athletes.

Prevalence: Frequency or occurrence of drug used by athlete.

Self-reported: It is the personal account of drug used by the athlete.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

Literature review can be described as a process composed of series of activities which include; searching for works of earlier researchers relevant to a new study, locating them reading, analyzing, critiquing extracting and recording necessary information from them (Nkwocha, 2010). However, the central focal point of this study is to access the prevalence, determinants and self-reported effects of related drug abuse among athletes participating in national athletics championship in Nigeria.

This chapter deals with the review of some related literature on the study from different scholar and authority. The related literature critically reviewed in this work is derived from scholar articles such as international, national and local journals, periodicals, projects, dissertations, internet, thesis and relevant textbook. The following sub-headings were critically examined:

- Theoretical Framework
- Conceptual Framework
- Concept of Drug in Sports
- Concept of Drug Abuse Among Athletes
- Prevalence and Incidence of Drug use among Athletes
- Determinants of Drug Abuse among Athletes
- Reasons why People take Drug
- Drugs Commonly Abuse by Athletes
- Health Effects of Marijuana on Athletes
- Self-Reported Effect of Drug Abuse among Athletes
- Effect of Commonly Abused Drug on Athletes
- Blood Doping
- General effects of Drug Abuse to the body, and the people in the community
- Economic Effect of Drug Abuse
- Appraisal of the Literature Reviewed

Theoretical Framework of Drug Abuse

This study examined personality theories and cognitive theory of drug abuse propounded by Bandura in 1980. The theories of drug abuse by Bandura emphasized that some people really depend on certain drugs for their survival due to a number of factors. The major emphasis of the theories of drug abuse is that people have their individual reasons for depending on one type of drug or the other. Such reasons, according to Oluremi, (2012), are explained by the following theories. Personality theory of drug abuse, Learning theory of drug abuse, Biological theory of drug abuse and Socio-cognitive learning theory.

Personality Theories of Drug Abuse: Personality theory of drug abuse is considered appropriate for this study since the main emphasis of the theory is based on certain traits or characteristics of an individual that abuse drug. The emphasis of this theory is that there are certain qualities of characteristics in the individuals that abuse drugs. Such personality characteristics are in ability to delay satisfaction, low tolerance for frustration, poor coping ability and low self-esteem, poor impulse control and high emotional dependence on other people. People with these personality characteristics find it difficult to abstain from drug abuse.

Social Cognitive Learning Theory: Also the social cognitive learning theory which was propounded by Bandura (1986) is also considered appropriate for use for this study. This theory deals with the behaviour that determines the person's thought processes, environment and behaviour itself.

This theory which was propounded by Albert Bandura (1986) opined that behaviour is determined by the person's thought processes, the environment and behavioural instinct. This means that individuals determine their own behaviour while being influenced by the environmental factors and their own behaviour. The theory emphasizes social cognitive learning theory which tends to focus more on cognitive expectancies, vicarious learning and self regulations as explanatory mechanism of drugs and substance abuser. For instance,

individuals who believe that alcohol will make them more popular, less inhibited better lovers and more fun to be around, will be more likely to use alcohol. Bandura (1986) contends that behaviour is largely regulated by cognitive factors such as perception of an issue and the pattern within the environment-social cognitive theory that emphasizes the role of observational learning with regard to the pressure and influence of models.

Social cognitive learning theory postulates that role modeling does not only affect behaviours but also leads to the development of thoughts and emotions that shape behaviour. Athletes who get engaged in the behaviour of drugs and substance abuse are most likely learnt the behaviour from their environment.

According to Bandura (1986) the environment influences one's behaviour and at the same time behaviour influences the environment. This theory is therefore relevant to the study as it form a basis for studying the prevalence, determinants and self-reported effects of related drug abuse among athletes participating in national athletics championship in Nigeria. The social cognitive theory indicates to what extent substance abuse among athletes could be influenced by their gender, age, the social pressure as well as their interaction with their colleague. The aspect of interaction indicates that athletes choose to engage in activities that are risky making them used to substance abuse.

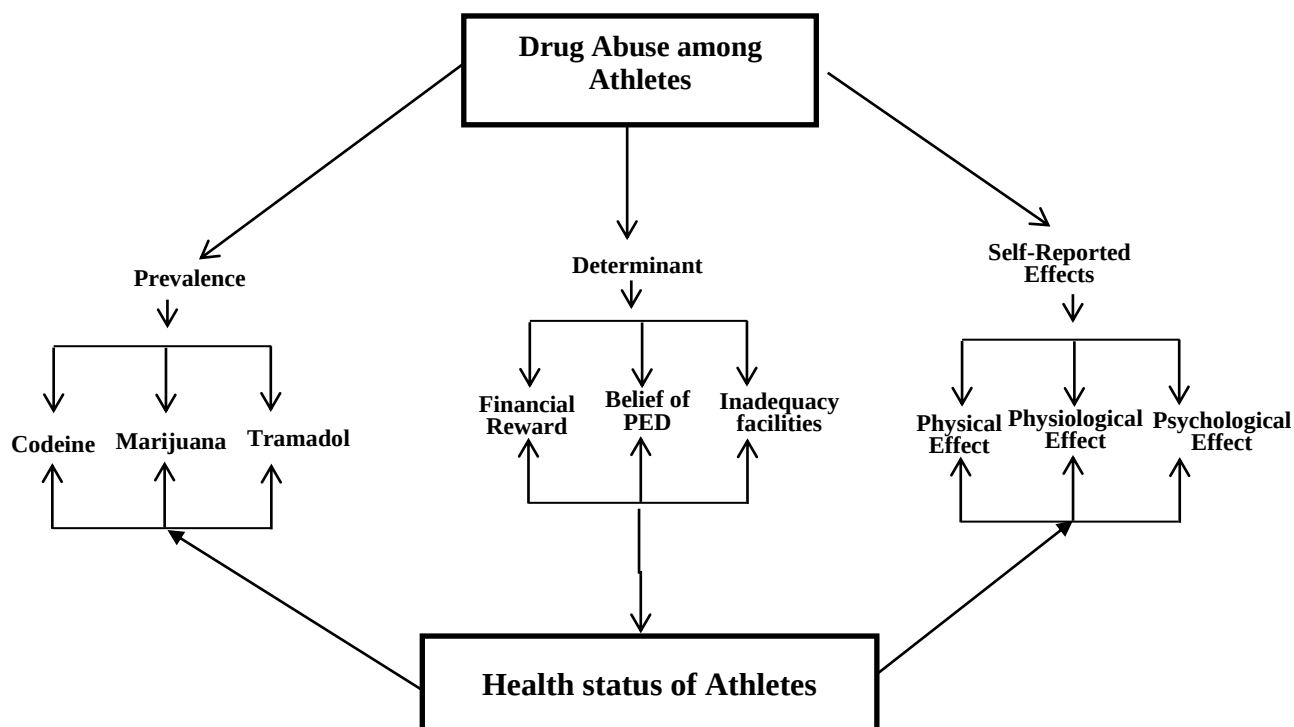
The social cognitive theory also explains that the external influences affect the behaviour through cognitive process. Human beings are capable of forming symbols which they can use to guide their future behaviour. Through this process a person is able to model observed behaviour. It is through understanding of the process involved in one's construction of reality that will enable a human behaviour to be understood, predicted and changed.

Conceptual Framework

Conceptual framework is a graphical representation of broad ideas and theories that help the researcher to properly identify the problem and articulate it with the variables under study and finding suitable literature (Jeffels, 2012). Conceptual framework also refers to how a researcher conceptualizes relationship between variables in a study and shows them graphically or use of a diagram. The conceptual framework on prevalence, determinants and self-reported effects of drug abuse among athletes participating in national athletics championship in Nigeria. Drug abuse can be prevalence among athletes because of the outstanding reward expected from their performance and drug abuse are determined by some variables such as financial reward from the performance. Belief that performance enhance drug can only assist them in their performance also inadequate facilities can be a determinant of drug abuse. There are so many effects of drug abuse in which some of them are self-reported. Some of these effects of drug abuse may include physical health problem, physiological and psychological health problems, all these may affect the health status of the athletes.

The concept below illustrates the holistic view of this study.

Fig 1: Conceptual Framework on prevalence, determinants and self-reported effects of drug abuse among athletes participating in national athletics championship in Nigeria



Sources: Researcher's developed 2018.

Concept of Drugs in Sports

Drug is any substance which by its chemical nature affects the structure and function of a living organism when taken (Moronkola&Okanlawon 2003; Ajala, 2006). Ogunsola (2011), described drug as any substance which when taken interacts with the body system modifies the psychological and biological process of the body. The term "Drug" is often used synonymously with the terms such as medications, therapies, treatment medicine, therapeutics or medicaments. Generally speaking, drugs are substances that influence the function of the human body. Drugs are molecules (also called chemical or compounds) that affect the body when they are ingested, inhaled, injected, or otherwise enter the body. To a medical doctor, drugs are either substances that are used as medication such as pain relievers, or substances used for recreation (Drugs abuse) such as alcohol. This means that nearly all

man ingests, inhales or absorbs can be recognized as drug. These definitions also includes practically all foreign materials even foods, vitamins, air pollutants, pesticides, fruits, snake venom and so on. This must have been the reason why Okafor (2002); Sanusi, Gaya and Lanzai (2006); Nwegbu (2000) perceive drug as any substance other than food which when taken into the body alters its normal functioning. In other words, drugs are chemical substances that affects the functions of living cells used in medicine to diagnose, cure, prevent the occurrence of disease and disorders and prolong the life of patients with incurable conditions (Odetola, 2008).

Drug is chemical substance, such as a narcotic or hallucinogen that affects the central nervous system, causing changes in behaviour and often addiction. (O'Neil 2012) The author maintained that drugs are usually distinguished from endogenous biochemicals by being introduced from the organisms. For example, insulin is hormone that is synthesized by the pancreas inside the body, from outside, it is called a drug. Stephson (2010) defined drug as a substance which may be medicinal, intoxicating, performance enhancing or other effect when taken or put into the human body or body of another animal. In line with this Seeke (2011) defined drug as a chemical substance used in the treatment, cure, prevention or diagnosis of disease or used to otherwise enhance physical or mental wellbeing. That is to say that any chemical substance externally added to the body, whether animal or human even plant which affect on the system is referred to as drug.

Furthermore, Escandon& Galvez (2006) asserted that drug is any substance which when introduced into the body will alter the normal biological and psychological functioning of the body especially the central nervous system. Kamanga (2009) concurred and referred to drug as any substance which absorbed into a living organism may notify one or more of its physiological functions. The term is used in reference to substance taken for a therapeutic purpose and as well as abused substances. Drug may be prescribed for a limited duration, or on a regular basis for chronic disorder. Alcohol, nicotine, and caffeine are the most widely consumed psychotropic drugs worldwide. In the same vein, when the major function of the

drug is exerted in the brain which is the centre of the nervous system, it produces psychoactive or psychotropic properties and produces such effects as sedation, hypnosis, stimulation, change in mood or behaviour. Hence such 'drugs are referred to as psychoactive or psychotropic compounds or drugs. This is because they usually change the perceptions, thoughts and observable behaviour of the individual (Moses, 2009).

Concept of Drug Abuse Among Athletes

Drug abuse occurs when an individual takes a drug without medical or professional advice or directions, habitually, which may lead to significant impairment or distress manifestations of failure to fulfill major roles and obligations at school or home (Orji, Anyira & Otonoh, 2012). According to United National Children's Fund and World Health Organisation (2006), substance abuse include the use of chemicals in excess of normal prescribed treatment dosage and frequently, even with knowledge that they may cause serious problems and eventually lead to addiction. Fayombo (2008) defined drug abuse as the use of mood modifying substances illegally, excessively and in a socially unacceptable manner. The drugs range from those that should not even be taken, without medical prescription such as cocaine, amphetamine, heroin, marijuana many more to socially acceptable beverages such as whisky, local gin, beer and other alcoholic drinks. Paul and Walton 2006 also viewed drug abuse as the act of taking drugs, without medical justification or the use of drugs to the extent that, it is physically hazardous to self or others. Thus, this definition focuses on psychoactive drugs. Thus all drugs can be abused to an extent that it becomes addiction when the drug users are unable to stop the use of drugs despite the harmful effects on the users' social, personal and economic lives.

Drug abuse refers to the misuse of any psychotropic substance resulting in changes in bodily functions, thus affecting the individual socially, cognitively or physically. Social effects may reflect in an individual's enhanced tendency to engage in conflicts with friends,

coaches, and other training partners. Cognitive effects can be seen in the individual's lack of concentration on training and memory loss (Eysenck, 2002). Sambo (2008) observed that the continuous use of substance can cause serious and sometimes irreversible damage to adolescent's physical and psychological development. Medically, drug abuse is the use of drug to an extent that it produces definite impairment of social, psychological or physiological functioning of the user. Drugs abuse can make the user feel pleasure, but they are also toxic. We often warn that long-term drug abuse is bad for our health and that even a single use of a drug can kill. Cocaine can kill in a variety of ways, most common health problems associated with it includes heart attack, overheating (hyperthermia), and brain damage. It is the use of illegal drugs, or the misuse of prescribed or over-the-counter drugs.

The use of drugs for social rather than prescribed medical reasons among athletes has reached an alarming rate. While many new drugs are hitting the streets, some older ones are resurging in popularity. Whenever man travelled, he has taken his drugs with him, and the associated drug-taken practices have spread too. More people than ever before are exposed to the drug taking-practices of other cultures. According to Akosu (2007), although attention tends to be concentrated on the illicit spread and use of heroin, cocaine, and cannabis, there is also a vast global trade in illegal, recreational drugs like tobacco and alcohol, as well as products such as tranquillisers and hypnotics which have legitimate medical uses but are also drugs abuse and dependence.

In Nigeria, industrialization and increased exposure to western lifestyle have contributed to the spread of substance use with alcohol and tobacco acting as "gateways" to the use of other substances like cocaine, heroin, amphetamine, inhalants and hallucinogens (Zhimin, Weihua & Zhi, 2001). Contributory factors include some or all of the following: unhealthy family background, high social class, peer group influence, desire to remain awake

at night, pressure to succeed in academic work, self-reported poor mental health and easy accessibility to substance (Zhimin, et al, 2001).

As the International Sports became very competitive and commercialized, manufacturers of drugs started to produce highly potent drugs often with dangerous side effects, to improve performance (Akosu, 2007). In reaction to the substantial risk posed by drug abuse on the health of users and its attendant negative impact to the society, the Nigerian Federal Government set up the National Drug Law Enforcement Agency (NDLEA) and the National Agency for Food and Drug Administration and Control (NAFDAC) to combat the trend (Nwadigwe, 2008). However, these agencies, owing largely to official corruption over the years, made no appreciable impact in checking the trade and use of illicit drugs. In the same vein, Obot (2004) agreed that Non-Governmental Organizations (NGOs) were not making the expected impact on Drug Demand Reduction (DDR) in Nigeria because of poor funding and inadequate information on drugs. Nwadigwe (2008), however, opined that with the ongoing fight against corruption by the present Nigerian Government, the agencies are beginning to perform, especially NAFDAC. Despite efforts by the World Anti-Doping Agency, International Olympics Committee and sports federations, worldwide doping by participants of various levels and in different sports has been proven to exist (Baron Martin & Abol, 2007; Pitsch and Emrich, 2012).

The word doping is often used to refer to any practice involving prohibited substances or other methods to give an athlete an unfair advantage over other competitors. The term doping is widely used by organizations that regulate sporting competitions. Athletes usually do not accept that they dope. In the 1998 Tour de France, many of the riders engaged in doping. They however refused to accept it, but when they got caught in doping test, they reacted strangely about its presence in their body and shrugged it off by saying, “I wonder how this substance got into my body” or ‘I had never taken these drugs’ (Peters, Schulz & Michna, 2002).

Doping involves excessive doses which are more likely to produce toxic side effects and considered as poisoning (Oshodin, 2004). Doping is one of the most essential sport drug mostly abused during Olympics which has a negative impact on the health of the athletes. Today, there is a broad consensus against doping in sports. The World Anti-Doping Agency (WADA) defines doping as the intake of one or more of the substances or methods listed in its annually updated "Prohibited List".

Doping in sports is widespread and shows little sign of abating. Athletes are dropping out of the Rio Olympics files. Maria Sharapova was banned for two years after testing positive for meldonium. Doping is a divisive and socially-undesirable behaviour and it is enormously secretive. In competitive sports, doping refers to the use of banned athletic performance-enhancing drugs by athletic competitors. Doping artificially stimulates the organism that is affecting the function of the whole body which leads to over stretching of energy resources and physical overload. It retards the recovery rate and consequently the development of various pre-pathological and pathological conditions. This gives rise to premature deaths of sports men and women occasioned by permanent health damages in their organisms. These negative influences call for concerted efforts in order to wage an organized war against doping and substance abuse generally. The abuse of drugs most especially doping is on the increase in the professional sports especially, wrestling, weight lifting, cycling, football, boxing and athletes.

At the international level, top sportsmen and women such as Mariam Jones, Lance Armstrong, Ben Johnson, Vivian Chukwuemeka, Damilola Osayomi were found to have used doping substances to gain competitive advantages over their opponents (Eno-Obasi, 2013). Competing athletes who dope intentionally are grouped as "...villains, mavericks and professionals (Petroczi, 2013) "Villains" cheat deliberately, while "mavericks" display an ignorant disregard for the rules. "Professionals" however purported to be the largest group progress from food and lifestyle changes, to supplementation, and finally to prohibited substance abuse. It is posited that these arrays of athletes are not 'cheaters', but victims of

highly competitive, professionalized world of elite sport, whereby they are constrained to train and practice intensely for a very long periods for them to be successful.

Furthermore, various psychological-measures to increase performance in sports must be regarded as doping. Baron, Reardon and Baron (2013), additionally, athletes may be significantly less likely to receive treatment for underlying mental illness like depression (Reardon, 2010) opined that athletes are given adequate treatment and rehabilitation for physical injuries, however this may be less often if it is a case of mental related illness which is a sign of weakness. (Reardon, 2010) further stressed that untreated mental illness is often associated with substance abuse, perhaps in an attempt to self-medicate. Alternatively, drug being abused may cause mental health illness.

Sports psychologist and exercise scientist have therefore, examined the psychosocial factors that lead athletes' decisions to take performance enhancing drugs with adolescents, college and elite athletes. Some of the factors that had athletes' to doping behaviour in sports include societal pressures, financial stress, and improvement of appearance (Ehrnborg & Rosen, 2009; Pectroczi & Aidman, 2009). Societal pressure may influence sports men and women to use performance-enhancing drug as a result of undue stress arising from the syndrome of the 'win at all cost' attitude which our society has placed on sports performance and achievement (Blood worth & McNamee (2009). Athletes may also use performance-enhancing drugs to help their financial situation. For example, if an athlete needs to gain a scholarship to pay college fee, they may likely use performance-enhancing drugs. This may untimely be the primary motive for participation in sports.

Young athletes and other categories of athletes have different reasons for doping in sports. (Nilson Spark, Bargi & Allebeck, 2004). The most common reason given was to improve appearance to maximize their performance in sports. Green, Uryasz, Petr, & Bray (2001) also investigated the factors that influence collegiate athletes to consider taking performance-enhancing drugs. The data showed that only 1.1% of the participants admitted

using anabolic steroids. Result further showed that the primary reasons why athletes ingested performance-enhancing drugs were for performance enhancement and recovery from injuries.

Blooworth& McNamee (2009) held a series of group discussions with 40 elite athletes to determine the possible reasons athletes use performance-enhancing drugs. During the group discussions, the researchers used hypothetical situations to determine the participants' attitudes toward doping. The majority of the athletes reported that they did not believe doping was a national problem in their sport life. The participants reported that the primary reasons why they would take performance-enhancing drugs included improving one's financial situation and recovering from injuries. In contrast, the researchers found that the main reasons why athletes avoid using performance-enhancing drugs included shame of being caught and the idea that performance-enhancing drugs are not natural and take away from one's natural ability. This negative connotation is related to shame in that using performance-enhancing drugs is not a moral norm; therefore, the participants cited shame as a deterrent for using Performance-Enhancing drugs (PEDs).

Drug are used to gain superiority over opponents which under normal circumstances might not have occurred is corrupting the principle of fair play in sports competition. Sport is beginning to lose its value and appeal, the joy and enjoyment of participation is gradually fading out. Losers in sport now feel that they have not had a fair competition since some athletes perform beyond their maximum natural capabilities with the aid of drugs. Consequently, sports administrators should squarely face this unwholesome challenges so as to preserve the sanity of sports.

The history of athletics organized events at a sports festival are the Ancient Olympics Games. At the first games in 776BC in Olympia, Greece, only one event was contested; the stadium foot race and the first Olympics winner was Koroibos. In later years further running competitions have been added. Also in the Ancient Olympic Pentathlon, four of the events are parts of the track and field we have today. The long jump, the javelin throw, the discus throw and the stadium foot rate (Abubakar, 2017).

Athletics events were also present at the Panhellenic games around this period, and they become known to Rome in 200BC. In the middle Ages new track and field events were developing in parts of Northern Europe. The stone put and weight throw competitions were popular among Celtic societies which were precursors to the modern shot put and hammer throw events. Also the pole vault was popular in the Northern European Lowlands in the 18th century (Apagu, 2012). Modern competitions in athletics, took place for the first time in the 19th century. Usually they were organized by educational institutions, military organizations and sports club as competitions between rival establishments; in these competitions the hurdling were introduced for the first time. Also in the 19th century the first national associations have been established and organized the first national competitions. In 1880 the Amateur Athletic Association of England Starts organizing the annual AAA championships. While in United State in 1876, the USA outdoor Track and Field championship organized for the first time by the New York Athletic club took place (Efford, 2008). The establishment of the modern Olympic Games in Athens at 1896 by Baron Pierre de Coubertin marked a new era for track and field events plus marathon race. The Olympics also consolidated the use of metric measurements in international track and field events, both for distance races and for measuring jumps and throws. The events of track and field have been expanded in the following years (Efford, 2008).

In 1912, the International Amateur Athletic Federation (IAAF) was established and becoming the international governing body for athletics, having the amateurism as one of its founding principles for the sports. The first continental tracks and field competition was the 1919 South American championships, followed by the European Athletics championships in 1934. In the 1928 summer Olympics women competed for the first time (Abubakar, 2017).

Furthermore, major athletics competitions for disabled athletes were first introduced in the 1960's summer Paralympics. From the 1960's the athletics gained more exposure through television coverage. After over half a century of amateurism, the amateur status of the sport began to be displaced by increasing professionalism in the late 1970s, while in 1982, the IAAF abandoned amateurism and later changed its name to the International Association of Athletics Federation. The following year IAAF organized the world championships in athletics, the first ever world competition for athletics which was to later become one of the track and field events in the most prestigious competitions and even in the Olympics (Apagu, 2012).

The IAAF global championships in Athletics become a fully professional competition with the introduction of prize money in 1997. Also in 1998 the IAAF Golden League increased the professionalism of athletics. In 2010, the series was replaced by the more lucrative IAAF Diamond league which comprises meetings in Europe, Asia, North America and the Middle East which were the first ever worldwide annual series of track and field meetings (Apagu, 2012).

The Athletes federation of Nigeria is the governing body for the sport of athletics in Nigeria. It is a member of the confederation of African Athletics and the International Association of Athletics Federations. It was founded as the Central Committee of the Amateur Athletic Association of Nigeria in 1944. The AFN is headquartered at the Nigeria National Stadium in Garki, Abuja. It organizes the annual National Athletics Championships in Nigeria which is a domestic competition in Athletics. The All Nigeria National Athletics Trial championship was an annual series of track and field meets organized by the Athletics Federation of Nigeria (AFN, 2018).

Despite efforts by the World Anti-Doping Agency, International Olympics Committee and sports federations, worldwide doping by participants at various levels and in different sports has been proved to exist (Baron Martin &Abol, 2007; Pitsch and Emrich,

2012). In high performance sports, statistics on prevalence vary widely and include self-report studies citing 1.2% to 25.8% (3-9) use and from the Randomized Response Technique (RRT) citing 6.6% (10) to 35% use (Pitsch&Emrich 2012).

Prevalence and Incidences of drug use among athletes

In high performance sports, statistics on prevalence vary widely and include self-report studies citing 1.2% to 25.8% (3-9) use and from the Randomized Response Technique (RRT) citing 6.6% (10) to 35% use (Pitsch&Emrich 2012). In 2013/14, Drug –Free Sports New Zealand DFSNZ carried out 925 drug tests on professional athletes, with 4 violators, a doping prevalence of 0.004% was established as compared to 0.007% in 2012/13 and while it was 0.005% in 2011/12. (DFSNZ, 2014) However, those tests exclude gym users or athletes that were listed in the anti-doping regulations. Another paper reported 5 from every 32 New Zealand builders admitting to the use of Androgenic Anabolic Steroids (AAS) at one stage of their career (DFSNZ, 2014). An Australian-based study on doping among elite athletes reported an 8% prevalence compared with 52% in male gym users, Probert & Leberman (2019) and Goulet, Valois (2010). Also it has been established that 25% of a Canadian junior provincial athletes reported RED use in the previous year. Valois, Goulet, Buist & Cote (2010) and that up to 12% of an American high school student cohort reported AAS abuse. Thus, from these estimates, 10% of athletes diagnosed by a health professional are possibly using a RED, and 1 in every 3 athletes are at the risk unintentionally doping from supplement use.

Today, it has been universally established that some top athletes use illegal drug to enhance their performance. The wide spread of illegal drug use in sports among sportsmen and women may be better imagined by the number of athletes apprehended using illicit drug by the IOC Medical Commission (2007) authorized laboratories world over between 1985 and 2006. For instance, in 1985 detected 930 cases, in 1986, it was 627; in 1987, 854 cases were recorded. 1153 cases were recorded in 1988 while it was 1341 cases in 1989; and in 1990, 1064 cases were detected with 30 different kinds of ergogenic substances being abused

by athlete. Also, Dore (1995) reported by Adegboyega (2014) that 89,166 cases out of which 1,222 athletes tested were positive by IOC Medical Commission. The International Paralympics Committee penalized athletes between 2005 and 2006 for violating anti-doping rule for the period of two years in sporting events such as power lifting, shooting, archery and athletics (IOC Medical Commission, 2007).

This ugly situation has ruined the careers of a great number of many world champions and upcoming athletes foreign and local. Studies have shown that the most common illegal drugs use as performance enhancing agents by athletics include amphetamine, cocaine, anabolic agents, ephedrine, diuretics and caffeine Oshodin, 2004; Lake, 2005 and Synthetic Report, 2007. The use of these illegal drugs did not become a major issue in sports until after the 1988 Olympics in Mexico, when many athletes set new records). In Nigeria, the illegal use of drugs to enhance performance by professional athletes in Nigeria has been a source of embarrassment not only to government but also to sports administrators, coaches and spectators (Akosu, 2007).

Although, sports administrators are doing a lot to discourage the practice, yet the incidence appears to be on the increase. It stands to reason that this trend is the result of overriding interest by the athletes to win competitions at all cost (Michael, 2012), as a result of this urge, the athletes resorts to trying special foods, drugs and other feasible means to achieve his or her aim. Thus, doping to improve sports performance and achieve superiority over the opponents become a global problem. It is not out of place to reason that doping to enhance sports performance has been on the increase because of the rewards that await the high “performer” from governments, cultural institutions, philanthropist and other big enterprises after winning. Such gifts in the form of scholarship, huge financial rewards and other carrier prospects bring about the “winning at all cost syndrome” which promotes the use of illicit drugs in sports.

However, in Nigeria, there were recorded cases of athletes who tested positive to performance-enhancing substances as reported by (Mohammed, 2009; Yusuf, 2010; and Adegboyega, 2012) , International Olympic Committee Medical Commission (IOCMC 2008). Fatal casualties of doping in Nigeria have been on the increase. A few of them include the following (i) in 1992 , three Nigerian athletes tested positive to doping substances (ii) in 1993, a Nigerian sprinter was tested positive in all African Championship (iii) In 1995 one (Athletes-Track) was tested positive and had their medals withdrawn for using banned substances. Another Nigerian runner tested positive to Nanadrolone deaconate during Mobil Tracks and Fields in Lagos in 1995. (iv) In 1996 and 1997, two females and one male athletes tested positive to doping substances and were sanctioned for a 3- month suspension. (v) In 2009, three Nigerian athletes joined the list of Nigeria drug cheats in the 12th IAAF World Championship held in Berlin. (vi) In 2010, three Nigerian sprinters tested positive to doping substance and were sanctioned for 2 years. (vii) In 2012, three Nigerian sprinters tested positive to doping substances and were sanctioned for 2 years and one was life ban (viii) In 2013 only one female Nigerian sprinter was caught for doping and was sanctioned for one year.

Four female Nigerian sprinters were disqualified from participating in 2016 Olympics scheduled which took place in Rio de Janeiro, Brazil and they were sanctioned for 8 years. These illicit drugs intake by the athletes are now becoming main part, because many of the athletes are actually taking the drugs to make up for their energy dissipation during training and events in particular. Many athletes have suffered severely from the side effect of these drugs, which have psychological, social, physical, economic and job-related inclines, the pathetic thing is that intake of such drugs have also had to sudden death of some athletes.

Between 1987 and 90, shortly after athletes are believed to have begun using (EPO), 20 young Belgian and Dutch cyclist died one of them was Johannes Draijer, a 27 years old racer from the Netherland who finished 20th in the 1989 Tour de France. In February 1990 he

died in his sleep of a heart blockage, a few days after completing a race in Italy. An autopsy test conducted after the death did not specify the cause of death-he had been passed fit to ride by a doctor- but in a television interview afterwards, his widow said she hope his fate would serve as a warning to others athletes who take the drug. Between 1989 and 1992, seven young Sivedish orienteering enthusiasts died mysteriously and there was another cluster of cyclist deaths in 2003-2004, when eight aged under 35 died.

Determinants of Drug Abuse among athletes

Reardon and Creado (2014) explained Athletes abuse many types of drugs, and for different reasons. Hence, any discussion on the likely causes of drug abuse in sport should differentiate among the types of substances ingested. With respect to anabolic steroids, Reardon, et al (2014) reported one study of high school males that found reasons for ingesting steroids included improving athletic performance (48%), to look better (28%), to prevent sports injuries (10%), social reasons (6%), and “other reason” (8%). Based on a review of the anecdotal and scientific literature and on my own professional interaction with athletes as a sport psychology consultant in the U.S and Australia, I have concluded that the causes of drugs use lie within three categories: physical, psychological/emotional, and social (Reardon, et al, 2014).

Physical Determinants of Drug Abuse Among Athletes

Given the extensive pressure on skilled athletes to succeed and be competitive, a view held and often communicated by their coaches and corporate sponsors, it is not surprising that performers explore all possible avenues to reach-perhaps even go beyond-their performance potential. The sources of this pressure are rarely identified in combating drug use. As indicated earlier, coaches and sponsors can and often do contribute to the competitors’ dilemma by reinforcing the need to win at any cost. The expectations of parents, media, and peers group only fuel the pressure to maximize performance by artificial substance abuse (Jean, 2006).

Enhance sport performance: The most common physical cause for ingesting drugs is attempting to enhance performance. Depending on the drug being taken, the athlete may be seeking benefits such as increased strength, endurance, alertness, and aggression, or decreased reaction time, fatigue, anxiety, and muscle tremor.

Reardon and Creado (2014) attempted to identify the reason for using anabolic steroids among elite race walkers. Increasing performance, the wish to win, and financial incentive (e.g. commercial contracts and product endorsements) were the three principal motives to use banned performance-enhancing drugs. Forty-one percent of these athletes had heard of endurance walkers using such drugs. Apparently, the pressure of performing well in international events, especially the Olympic Games, exacerbates the problem.

Cope with pain and injury rehabilitation: Athletes also ingest drugs to cope psychologically with physical discomfort and to expedite recovery from injury. For example, athletes may feel that medical treatment is not sufficient to eliminate pain. They will take drugs to attenuate pain with no prescription and without the coach's knowledge (National Institute on Drug Abuse, 2015), sited in usually for the reason of not disappointing the coach or to avoid losing starting status (a tendency more typical of the male athletes).

Weigh control: Amphetamines are often used to control appetite and diuretics to reduce fluid weight. These drugs quickly reduce weight, allowing the athlete to compete in a lower, more favorable weight group (NIDA, 2015) or at a weight deemed more facilitative to success.

Psychological Determinants of Drug Abuse

By far the most common determinant for using drugs among athletes is psychological and emotional. For some athletes, mind-altering drugs provide the most convenient escape from unpleasant emotions. There are psychological causes for taking drugs believed to be ergogenic aids.

- * ***Stress and anxiety:*** Emotions such as stress, tension and anxiety may be antecedent causes of ingesting drugs, particularly hallucinogens and beta blockers. Drugs taking attenuates the stress and tension associated with the pressures to succeed over a prolonged time period, such as a full season or longer. Thus, recreational drug use may reflect a short-term approach to managing stress and anxiety or be a vehicle for escaping an unpleasant present situation (Reardon et al, 2014).
- * ***Boredom:*** For many individuals, experimentation with recreational drugs, often ingested in group (social) situations, can help overcome boredom (Jean 2006). This type of drug use appears to be more prevalent on weekends or when team related activities are unplanned, especially when traveling. Athletes also can become bored by redundancy in the team's practices or in some other aspect of their participation (Reardon et al, 2014).
- * ***Personal problems:*** Drug taking may be a response to a personal problem independent of sport involvement. The athlete's personal life can be a potential source of support or of extreme stress. Silver (2001) interviews with 16 Canadian Olympic athletes showed that elite athletes, like any other individuals, need the love, acceptance and support of their immediate families. When this support is lacking, the competitor may be less capable of coping with sport demands and more susceptible to the mental escape that certain drugs provide.
- * ***Low self-confidence:*** Many athletes use drugs to build self confidence. This use reflects the athlete's doubt about his or her own skills ("They make me feel better about my ability") or concern about staying competitive ("I'm sure 'so and so' are taking them") or "If I'm going to perform at 'X' speed, I have to take these"). As an example, competitors may use steroids to foster aggressive behavior and increase body size and strength to overcome low self-confidence, especially in contact sports.

- * ***Superman complex/experimentation:*** Some athletes feel impervious to any potential negative side effects of drug. According to Don Weiss, executive director of the National Football League: “It is not easy to convince pro football players that they are vulnerable to the negative health effects of steroids. Some of these young men are such great physical specimens with such great athletic abilities that they think they’ll be like that forever”. According to Obot, Ibanga, Ojiji and Wai (2001) athletes who exhibit the Superman complex do not feel constrained by the deleterious effects of drugs, even after obtaining valid information about possible detrimental effects to their health.
- * ***Perfectionism:*** Some individuals are never pleased with their accomplishments, even with the appropriate recognition and adulation of others. For these people, “good” is never quite good enough. **A perfectionist** is someone who has trouble discriminating between realistic and idealized standards (NIDA, 2005). He or she bypasses attainable excellence in pursuit of unattainable perfection. It would appear that the perfectionist athlete is ripe for drug abuse, a concept called negative, or neurotic, perfectionism. In a sport context, some athletes may be driven to seek consistent, perfect performance through anabolic steroids or other performance enhancing drugs. Inversely, these individuals may need to moderate the pressures of their unrealistically high goals, or to cope with their fear of performance failure. Using performance-enhancing drugs provides a means to overcome the self-doubt and anxiety associated with failing to meet excessively high standards (NIDA, 2005 M). Although perfectionism has not been studied among athletes who take drugs, it would not be surprising to find that certain drug-taking competitors for the profile of this unhealthy psychological state.
- * ***Self-esteem:*** Two related conceptual frameworks often used interchangeably, that might help explain drug use in sport are self-concept and self-esteem. *Self-concept* is the collection of ideas, or the picture, that persons hold about themselves. ***Self-esteem***

is the evaluation they place on this picture (NIDA, 2005). For example, an athlete's self-concept may be derived from the joy and satisfaction they derive from their participation and success in sport, and the extent to which these positive feelings contribute to life satisfaction. The athletes' self-evaluation as a successful sports competitor comprises their self-esteem. Because self-esteem reflects the extent to which individuals value themselves, being successful in competitive sport would be of significant importance to any skilled athlete. The perception of failure is painful, humiliating, and unacceptable. Success is the only viable outcome, even if it means cheating.

Of course, this is not health thinking. Any individual who identifies too strong with only one form of self-concept, at the omission of others, is walking on thin ice. Success is never guaranteed and the ability to cope effectively with not meeting self-expectations is very important to mental health. Nevertheless, unless athletes are able to separate sport performance outcomes from sport participation as a primary source of their self-esteem, and perhaps being less judgmental in juxtaposing their sport success with their value as a person, the attraction to performance-enhancing drugs will likely persist. Failure to find reward and gratification in other areas of life outside of sport, and dealing effectively with disappointment in sport settings, may lead to depression and other forms of self-destructive, often illegal, behaviour (Reardon, et al 2014).

- * ***Competitiveness and pressures for success.*** Meeting the expectations of others (e.g., spectators, coaches, teammates, media, corporate sponsors), especially in elite sport, creates substantial pressure to excel and to remain competitive. If anabolic steroids favourably affect sport performance then certain athletes will search for anything even using banned substances, that will give them a competitive edge over their opponents. Perhaps the pivotal point for athletes about their decision to use steroids is whether they can control the temptation to cheat and, instead, to respond to internal and

external sources of pressure with hard training, confidence high-quality coaching, proper nutrition (including vitamin supplements), and social support from friends and family (Oak, 2012).

Social Determinants of Drug Abuse

Perhaps there is no greater cause of succumbing to drug ingestion than response to social-and-societal-pressures.

- * ***Peer pressure and acceptance:*** Pressure from peers, or the need to gain group acceptance, is a likely cause of drug taking among some sport participants (Oak, 2012). From the perspective of psychological maturation and development, the need for social acceptance and pressure to conform make adolescents particularly susceptible to peer group influence.

Oak (2012) describes the peer group as “a critical agent of socialization as dependence on the family is reduced and the young person seeks to belong and fit into new relations with peers”. In their eagerness to attain social acceptance adolescents become aware of the types of approval-earning behaviours-the need to please other people-that will facilitate popularity. Oak 2012 concludes that these developmental characteristics, “coupled with a setting or contest where (drugs) are readily available, clearly implies that adolescence is a time of increased susceptibility to risk from drug use”. Anderson (2012) concluded, in his study of Canadian adolescents, that the lure of steroids is too strong for many teens due to extreme demands on conformity, particularly among males. Attitudes of strong rejecting drug use should be developed early in life, before drug taking occurs.

- * ***Models:*** Modeling occurs when we learn by demonstration or change our behavior to imitate behaviours we have observed. Modeling has a particular influential effect during adolescence. Accordingly, the development of appropriate (e.g., training and effort) and inappropriate (e.g., cheating, drug taking) behavior of young athletes is often derived from the modeling of older, ones that are more experienced. The

modeling effect is reinforced by media reports that publicize incidences of drug abuse by professional athletes (Tate, 2006). It is highly likely that reports of drug use by established sports stars influence the use of performance-enhancing drugs among interscholastic and intercollegiate athletes, many of whom aspire to compete at higher (i.e., Olympic or professional) levels. Perceptions are common that elite athletes ingest drugs, and “if it doesn’t hurt so and so, it won’t hurt me”, a reflection of the “Superman Complex”. Thus, for many athletes drug use is sanctioned through observing their elite models (Jean 2006).

- * **Social support:** Athletes may ingest a banned substance to gain social support. For example, the increase in muscle size and strength from steroid use may result in acceptance and approval among peers and coaches. Social support is a primary need of athletes, particularly from team-mates. Anderson, (2012) operationally define **social support** in a sport context as involving a network of personal ties to meet a recipient’s needs for venting feelings, providing companionship and reassurance, reducing uncertainty during stressful times, aiding mental and physical recovery from stress and fatigue, and improving communication skills. Their findings indicate that coaches in particular are not providing listening support, emotional support, or shared social support. Statements from athletes such as “No one ever tells me I’m doing a good job” or “There’s no one to turn to when I need to talk to somebody” indicate the lack of social support. Perhaps more than any other rationale for drug use among athletes, the absence of social support can create drug dependency in athletes either for enhancing performance (i.e., to gain needed recognition from others) or as a vehicle to cope with stress or relieve boredom (i.e., reasons to use recreational drugs).

Reasons why people take drug

The reasons people use drugs vary greatly for every individual more often than not, a person is trying to fix an issue within his life and he sees drugs as the solution to his problems. A young person may be trying to fit in with his colleagues and views using drugs

as a means of feeling a part of. In other ways many individuals use drug as a way to self-medicate. From chronic pain to mental health disorders, many people use drugs to alleviate symptoms of an ailment.

Experimentation

The period of people is characterized by one very important psychological phenomenon, which is experimentation. Some people derive pleasure in trying out new experiences such as drugs, sex which occasionally leads to serious consequences. Obot, Ibanga, Ojiji and Wai (2001) confirmed that, most of the people that are struggling with the challenges of drug use, actually went into drug use as a result of experimentation.

Curiosity:

The appetite for experimentation and for some new proof of one's conjecture about a drugs effect or the hope for revelation of new meanings of life often leads to drug abuse (Ayenigbara, 2004). Some students use drugs out of curiosity, on an experimental basis.

Emotional and Psychological Stress:

Some believe that drug abuse offers a way to escape from school or work related stress, financial difficulty or feeling shy or low self-esteem. Poor economic background, loss of loved ones i.e. parents usually result to stressful situations. Many also experiment to feel the taste and get rid of frustration due to unpleasant uncomfortable family environment and poor parent-child relationship at home. Meanwhile, the momentary relief from stress caused by the drugs can lead the student to become dependent on such drugs and finally addictive.

Availability and Affordability of Drugs

The relatively high prevalence of drug use among people can be attributed to the fact, that these substances are socially tolerated, available, accessible and affordable to greater percentage of the adolescent population. The adolescents have easy and ready access to substance like alcohol, cigarettes and cannabis on a regular basis. In the southern region of Nigeria, these substances are sold in bars, shops and hotels without any obvious restriction. Most people use drugs simply because, they can get them without stress. As averred by Knot

(2000), people frequently use drugs like tobacco, alcohol, marijuana, valium, codeine because, they can be obtained from friends, patient medicine stores, open markets and mobile drug vendors with little or no difficulty.

Peer Group Influence:

In a study by Odejide (2006), peer group influence was one of the factors found to be important in hard drugs usage by people as they often had their first contact with hard drugs through friends and associates. The pressure of peer groups like friends, school mates and social groups have led many youths into drug addiction. These youths of the same age brackets take to drugs to assist them to commit crimes they would have been timid to commit. Young people have formed the habit of moving about in gangs both within and outside communities. Even more sinister is the influence of cults in the schools and most of the times they defy both school and parental authority and the most visible medium of doing this is through the use of hard drugs which gives the needed bravery. Friends can significantly influence the adolescent into drug use. A child may take up drugs so that he or she may be drawn closer to a group so where this is the norm. As affirmed by Okatachi (2003), majority of substance users were influenced significantly by their friends who are already users without giving adequate consideration to the risk associated with drug use.

Socio-Cultural Determinants

Some people use drugs because of their socio-cultural acceptance. Most of the substances widely used in wedding and funeral ceremonies in some parts of the country have a greater degree of psychoactive effects. Isaac and Joseph (2012), observed that, substance like kola nut, alcohol, raw tobacco and cigarette that are used for social purposes and enjoy wide acceptance in social events like naming ceremony, rituals, burials and marriage engagements. The active ingredients in them can alter the way the user feels, thinks and behaves when taken in excess and could possibly lead to addiction.

Disability:

In the view of Odejide (2006), having a physical disability is a risk factor for people in developing drug problems. Because of this fact, some people in communities who are deaf, amputees, dumb and other handicaps may be more vulnerable to developing drug problems than their peers who are not impaired.

Escape Route for Stress

People also use drug in order to be able to face the various challenges within their environment. Most people possibly indulge in drugs for the purpose of finding escape route from reality of day to day problems. As opined by Shrier, Harris, Kurland and Knight (2003) individual, especially people turn to psychoactive substances in seeking escape from pain, boredom, fatigue, anxiety, poverty and frustration including behavioural or emotional problems.

Timidity:

Today many people find it difficult to bring or develop themselves up to meeting with or talking to a mammoth crowd, instead, they indulge in the use of drugs in order to boost their confidence and disperse the fear so as to enhance their performance. In a study by Sanusi, Gaya and Lanzai (2006) youths admitted to taking drugs to give them the courage to abuse their teachers or to treat those in authority with disrespect.

Availability:

The wide spread availability of thousands of drugs create an atmosphere in which both legal and illegal drugs are likely to be abused. Not until recently, when the use of drugs like diazepam was put under regulation and restrictions, it had been easy to walk into drug store and buy them. This had led many people to abuse such drugs. But for alcohol and cigarette, it is easy to buy them and people are abusing them by the seconds (Ajala, 2006).

Ignorance:

Although as we have seen some people abuse drugs for various reasons as supra-enumerated ignorance is still the major factor behind all these factors (Odelola, 2008). Many persons are not knowledgeable about the inherent danger in the drugs they abuse.

Advertisement:

Influence of publicity and commercial promotion has greatly contributed to the abuse of many drugs (Ajala, 2006). Exaggeration of the efficacy of such drugs during advertisements have led many people to substance abuse. Pervasive advertising of drugs as solution to all problems, and perhaps own fondness for instant cures for our symptoms and difficulties all create an atmosphere in which both legal and illegal drugs are likely to be abused.

Drugs Commonly Abuse by Athletes

Traditional Alcoholic Beverages and Drugs: as compiled by the WHO (2000), some of the traditional alcoholic beverages abused include. **Emu (palm wine)** which is produced from sugary palm saps. The most commonly tapped palm trees are oil palm and raffia palm which has an alcoholic contents of around 5%. This is peculiar to easterners and southerners while Burukutu is synonymous with south-westerners. It is a whitish liquid collected in vessels fixed to the base of the palm tree from where some leaves have been removed. Fresh wine from these sources is very sweet and contains little alcohol. But when left to ferment, the alcohol contents increases (about 3%) than bottled palm wine (about 4%). Generally, palm wine, which has an alcohol content of between 3-6% is also widely consumed in the Ibadan area of Nigeria. While the main alcoholic beverages produced and consumed by the Tiv people of central region of Nigeria are called tashisandityo, also known as palm wine (WHO, 2003).

Burukutu: This is a popular alcoholic drink of a vinegar-like flavour prepared from sorghum grains and fermented guinea corn and consumed in the northern guinea savannah belt of

Nigeria. It is also typically consumed in the Ibadan area and has alcoholic content of between 3-6%. Burukutu is the most popular alcoholic drink in the rural areas of northern Nigeria and among the poor of the urban neighbourhoods because it is cheaper than the commercially-brewed beer. It is often consumed as food because it is thick and heavy. The brewers of Burukutu are mostly women (Okoye, 2001).

Ogogoro: Otherwise called apetesi, jedi, opaeyin, kinkana and baba apaari) It is a jin-like drink brewed or distilled from palm wine or oil. In Nigeria, distillation takes place in small sheds dotted across the coastal areas and in the villages in the southern Nigeria. The end product is a clear vapour with alcoholic content often more than 40% (Samet, 2007).

Otibaba or Otika': always produced in the rural town of Igbo-ora, guinea corn is malted and fermented to produce them, with 'baba' and 'ka' which are local names for them. There is also 'agadangidi', a fermented drink made from mashed ripe plantain, fresh chilli water and fresh chilli peppers.

Pito: Is the local beverage of the Binis in the mid-western region of Nigeria. It is presently being consumed throughout Nigeria due to its low price. Brewed from cereal grains (maize, sorghum or a combination of the two), pito is a dark brown liquid which varies in taste from sweet to bitter. It contents include sugars, lactic acid and amino acid with alcoholic content of 3%.

Indian hemp: (popularly called 'igbo', 'eja') found in south-western Nigeria, grown in local farms, dried and then smoked in papers. It is very cheap and readily available to buyers (Park, 2015).

Types of Abused Substances

According to WHO (2013), there are many stages of substance abuse numerous drugs, some of these are readily accepted by the society.

Legal Substances: These are authorized by law for sale over-the-counter or by medical practitioner's prescription. These include: alcoholic beverages, nicotine, caffeine and

inhalants which include nail polish, inhalers, gasoline and glue). Recommended drugs such as: tranquilizers, amphetamines, benzodiazepines, barbiturates, steroids, and analgesics can be deliberately or not deliberately over medication or otherwise used improperly. In many instances, new drugs prescribed in good faith by medical practitioner turn out to be a problem later. For instance, diazepam (valium) was widely recommended in the 1960s and 70s before its potential for serious addiction was discovered. In 1990s, sales of fluoxetine (prozac) help to generate a \$3 billion antidepressant market in the United States, leading many people to criticise what they saw as creation of a drug culture that discouraged people from learning other methods to handle their problems. In the same vein, readily available but largely uncontrolled herbal drugs have grown in popularity; many of these are psychoactive or affects the mind to some degree, thereby raising the questions of their quality and safety. Prescribed drugs are controlled by food and administration as well as the drug enforcement administration (Well, 2000).

Illegal Substances: Recommended drugs are considered illicit when diverted from proper use. Some people shop until they find a medical practitioner who willingly recommends drug for them. Also supplies are also sometimes stolen from laboratories, hospitals or clinics. Morphine, a strictly control opiate, and synthetic opiates, such as fentanyl, are most often misused by people in the medical profession, who has unfettered access to these drugs, other illicit drugs include cocaine, marijuana and hashishi, heroin, hallucinogenic drugs such as LSD, PCP (phencycline or “angle dust”), “designer drugs” such as MDMA (Ecstasy), and “party drugs” such as GHB (gamma hydroxybutyrate) (WHO, 2013).

Types of Drugs That Athletes Use

Athletes may use a variety of drugs, such as performance-enhancing drugs, stimulants, and opioids, to improve their performance, manage pain or injury, and deal with the stress of athletics. Below are the some of the most commonly used types of enhancing drugs.

Performance-Enhancing Drugs

- *Anabolic steroids.* Are synthetic drugs that mimic or enhance the effects of testosterone. The human body naturally produces anabolic steroids in the form of testosterone, which aids muscle-building, (Mayo Clinic 2015). In medicine settings, they can be used to treat muscles loss and delay of the onset of puberty. Athletes may use high doses of anabolic steroids to increase muscle size, work out harder, and recover more quickly from workouts.
- *Androstenedione (Andro).* Andro is a prescribed drug that can be used illegally by athletes hoping to train harder and recover more quickly from injuries. However, studies shows that andro does not improve muscle strength or increase testosterone levels (Mayo Clinic 2015).
- *Human growth hormone (HGH).* Naturally, occurs within the body. However, synthetic versions have become very popular within the world of sports. When it occurs naturally, it helps teens grow their bones during puberty and strengthen the skeletal structures overall. Athletes may use HGH to increase muscle mass and improve performance. The injectable drug is only available as a prescription but is regularly bought and sold illegally (Mayo Clinic 2015). In medical settings, it can be used to help those who are not producing enough during puberty or who are fighting certain diseases, such as HIV. However, it is used in sports for another reason.
- *Diuretics.* Athletes may use diuretics to lose weight or to pass a drug test. Diuretics Reardon & Creado (2014); and (Mayo Clinic 2015) work by altering the body's fluid and electrolyte levels (Mayo Clinic 2015). They are popular among sports that support strict weight control, such as boxing and wrestling.
- *Erythropoietin.* Is a hormones produced by the kidneys in response to not having enough oxygen in the cells of the body. This drug increases the production of red blood cells (erythrocytes) and hemoglobin, which can increase oxygen delivery to the

muscles (Mayo Clinic 2015). Athletes may take erythropoietin to increase endurance and aerobic power (Reardon and Creado, 2014). In medical settings, it is used to treat anemia.

Painkillers and Prescription Drugs

Prescription of opioids such as OxyContin and Vicodin, are narcotic analgesics intended for use in the managing of acute pain. In large enough doses, abusers may experience a high that includes euphoria and relaxation in addition to pain relief (NIDA, 2014). However, some athletes may begin by taking opioid painkillers with a prescription, others use them non-medically in excess of their prescribed instructions, or without a prescription at all. Even those taking them according to prescribed doses may experience some degree of tolerance and dependence. However, those abusing them are much more likely to develop serious physiological dependence and later addiction.

Stimulants

- Amphetamines and methamphetamine, athletes might use amphetamines, including illicit drug methamphetamine to enhance alertness and performance. Amphetamines reduce appetite. Because of this latter effect, some athletes, such as boxers or wrestlers might use amphetamines to shed weight.
- Adderall. Adderall is a prescribed stimulant used to treat attention-deficit, hyperactivity disorder. Studies suggest that it may improve focus, alertness and reaction time (Reardon & Creado, 2014). Like other stimulants, athletes may abuse Adderall to enhance performance, shed weight and control fatigue.

Other Drugs

- *Alcohol*. A great number of athletes drink alcohol. Reardon & Creado (2014) may be astonishingly, some athletes drink alcohol before a game or competition in order to reduce anxiety and thereby enhance performance. There is little proof that this works, though consistent alcohol use is more likely to lead to other issues that actually

hamper performance. In addition, some sports teams may encourage binge drinking as a form of initiation for new members.

- *Cocaine*. Just like other stimulants, athletes might abuse cocaine to improve their endurance and performance, decrease fatigue, shed weight and increase focus. Cocaine makes users to experience a temporary euphoria, followed by a crash. Abusers might "binge" on the drug repeatedly to prolong the high (NIDA, 2014).
- *Marijuana*. Athletes might use marijuana for euphoria and relaxation. Some athletes may resort to marijuana to treat pain (NIDA, 2015).

Marijuana

Cannabis, popularly known as marijuana in Nigeria was the most widely used substance in Nigeria; followed by tramadol, codeine or morphine. Tramadol, Marijuana and Codeine are some of the substances that have taken the attention of youths in Nigeria. According to National Bureau of Statistics (NBS) in its report, drug use in Nigeria, 2018 survey. Here is the extent of drug use in Nigeria Marijuana 10,640,000, pharmaceutical opioids (Tramadol, Codeine, Morphine) – 4,608,000.

- Marijuana refers to the dried leaves, flowers, stems and seed from the cannabis sativa or cannabis induced plant that is usually smoked by the user. There are many slang terms for marijuana, including pot, grass, fish, weed and Mary Jane. Within minutes of inhalation of marijuana smoke, blood levels are achieved with peak physiologic and subjective effects occurring in 20 to 30 minutes and subjective effects lasting two to four hours. The immediate sensations increased heart coordination and balance, and a “dreamy”, unreal state of mind-peak within the first (3) minute (NIDA, 2012). Aside from the discomfort that goes with sore throats and chest colds, it has been found that smoking one joint give as much exposure to cancer – producing chemicals

as smoking form to five cigarettes (Odebunmi, 2010). Marijuana is the most commonly used illicit drug in the United State (SAMHSA 2015).

- Marijuana is stronger and more hazardous today. It's a green/brown mixture of dried shredded leaves, stems, seeds and flowers from the hemp plant. Most users roll loose marijuana into a cigarette called a "joint". It can also be smoked on a water pipe "being" mixed in food and or brewed as tea. There are many slang terms of marijuana: Weed, Aunt Mary, Boom, Chronic, dope ganja, fish, gangster, Grass, Hash, Herb, Kif, Mary Jane, Pot Reefer, and Sinsemila.
- Marijuana is illegal, buying, selling or having small amount can lead to an arrest.
- Marijuana affects performance by causing changes in personality, inducing hallucination, delusions and symptoms of psychosis.
- Impairing short-term memory and perception
- Increasing blood flow to the limbs
- Decreasing maximal work capacity
- Tinny movement and coordination are affected by THC.

There are over 400 chemicals in marijuana and hashish (Oakley 2004). The chemical that causes intoxication or the "high" in users is called THC (short for tetrahydrocannabinol). THC creates the mild-altering effects that classifies marijuana as a "drug".

Marijuana can be smoked as a cigarette (joint), but may also be smoked in a dry pipe or a water pipe known as a "bong". It can also be mixed with food and eaten or brewed as tea.

Health Effects of Marijuana on Athletes

Marijuana use may have a wide range of effects, both physical and mental.

Physical Effects of Marijuana on Athletes

- **Breathing problems** – Marijuana smoke irritates the lungs, and people who smoke marijuana frequently can have the same breathing problems as those who smoke tobacco. These problems include daily cough and phlegm, more frequent lung illness, and a higher risk of lung infections. Researchers so far haven't found a higher risk for lung cancer in people who smoke marijuana (The National Academics of Sciences Engineering and Medicine, Health and Medicine Division Board on Population Health and Public Practice, 2017).
- **Increased heart rate** – Marijuana raises heart rate for up to 3 hours after smoking. This effect may increase the chance of heart attack. Older people and those with heart problems may be at higher risk.
- **Problems with child development during and after pregnancy.** One study found that about 20% of pregnant women 24-years-old and younger screened positive for marijuana.

However, this study also found that women were about twice as likely to screen positive for marijuana use via a drug test than they state in self-reported measures (Young –Wolff, Tucker & Alexeeff, 2017). This suggests that self-reported rates of marijuana use in pregnant females is not an accurate measure of marijuana use and may be underreporting their use.

Additionally, in one study of dispensaries, nonmedical personnel at marijuana dispensaries were recommending marijuana to pregnant women for nausea, but medical experts warn against it. This concerns medical experts because marijuana use during pregnancy is linked to lower birth weight (The National Academics of Sciences Engineering and Medicine, Health and Medicine Division Board on Population Health and Public Practice, 2017) and increased risk of both brain and behavioral problems in babies. If a pregnant woman uses marijuana, the drug may affect certain developing parts of the fetus's brain. Children exposed to marijuana in the womb have an increased risk of problems with attention, (Goldschmidt, Day & Richardson, 2000) memory, and problem-solving compared to unexposed children (Richard, Ryan, Willford, Day & Goldschmidt, 2002). Some research

also suggests that moderate amounts of THC are excreted into the breast milk of nursing mothers. With regular use, THC can reach amounts in breast milk that could affect the baby's developing brain.

- **Intense Nausea and Vomiting.** Regular, long-term marijuana use can lead to some people to develop Cannabinoid Hyperemesis Syndrome. This causes users to experience regular cycles of severe nausea, vomiting, and dehydration, sometimes requiring emergency medical attention (Galli, Sawaya&Friedenberg, 2011).
- The mental consequences of marijuana use are equally severe. Marijuana smokers have poorer memories and mental aptitude than do non-users (Additional Marijuana facts, 2015). Recent studies on young adults that smoke marijuana found abnormalities in the brain related to emotion, motivation and decision-making (National Cannabis Prevention and Information Centre, 2011).

Reasons why athletes use marijuana

- Reducing Pain – CBD is known to reduce inflammation which is a major source of pain especially in sport related injuries. It's no surprise that athletes turn to marijuana as a primary source for pain management.

- Getting rid of pre-game anxiety

The adrenaline that pumps through an athlete's body is enough to make anyone nervous and the last thing an athlete needs is to make a mistake due to nerves. This is why athletes are turning to various forms of cannabis to combat these pre-game jitters.

- Boosting runner's high Runner's often experience something called a "runner's high" which is when a flood of endorphins enters the blood stream. It makes a running seem a lot easier and a lot less painful.
- Increasing Endurance: Many long distance runners are now turning to cannabis to increase their endurance. Because cannabis can help boost a runner's high, making the run easier and less painful, it usually means that someone can actually run a longer time.

- Enhancing Focus: Cannabis' psychoactive effects encourage the focus on a single goal, and since athletes are focused on performing and winning, many are turning to cannabis to help them get into the zone. Cannabis also help with eliminating ambitions which can promote the kind of fearlessness necessary for being aggressive in certain sports. It can help athletes take bigger risk by giving them the confidence to succeed.

- **Tramadol**

Tramadol is an opiod pain medication mainly used to treat moderate of severe pain, such as backache or postoperative pain. Tramadol is another drug that is alarmingly being abused. Tramadol is said to be a narcotic analgesic because it works in the body to change how the body feels and responds to pain. Analgesics are pain-relieving drugs e.g. paracetamol and aspirin, while narcotics are drugs that work by affecting (dulling) user's sense of pain called brain receptor e.g. codeine and morphine. No narcotic pain medication (e.g. tramadol should be sold over-the-counter by Pharmacist but it's unfortunate that tramadol can readily and easily be purchased without a prescription in most pharmacies in Nigeria.

It has no effects on the respiratory system however, overdose causes arrhythmias cramps, coma and even death. In Nigeria, it is controlled as the 50 and 100mg dosage strengths but very high dosage forms of 200 and 225mg have interred the market. There is also a significant increase in smuggling of Tramadol capsules. Tramadol use disorder is associated with physical withdrawal symptoms and compulsive behaviour.

Tramadol is a fully synthetic drug, which means that it is man-made and does not occur in nature. This is contrast to morphine and codeine – which are natural opiates derived

from the opium poppy. It also differs from drugs like hydrocodone, and oxycodone which is also semi-synthetic and made on a laboratory, still retain some natural qualities.

Tramadol is widely prescribed around the world for pain relief. However, it was not until 1995 that the drug became available in the US. Now, the medication is quite popular in America.

Tramadol is generally well tolerated, and side effects are usually temporary.

Commonly reported side effects include:

- Nausea, constipation, dizziness, euphoria, weakness, drowsiness and vomiting

Less commonly reported side effects include:

- Itching, sweating, dry mouth, diarrhea, rash, visual disturbances & vertigo

Codeine is part of a group of drugs known as opioids. Opioids interact with opioid receptors in the brain and elicit a range of responses within the body, feelings of pain relief to relaxation, pleasure and contentment (Upfal, 2006). It is frequently combined with Tylenol or aspirin for more effective pain relief. Every day, over 500,000 bottles of codeine are consumed by young Nigerians across the country. Some with the intake of tramadol, marijuana and other Opioids, an alarming trend that has eaten deeply into Nigerian with children of all classes having a field day abusing these drugs. A survey has stated that Marijuana, codeine and tramadol are the most abused substances in Nigeria. The survey also revealed that the abuse is prevalent among youths aged between 15 – 20 years. According to the poll of opinions of Nigerians on drugs or substances that are most abused in Nigerians revealed that Marijuana (342), Codeine (cough syrup) (209). Codeine is used to provide relief from a number of conditions, including; Mild to moderate pain, Dry irritative cough, Severe pain (when combined with aspirin or paracetamol), Diarrhea, Cold and flu (when combined with antihistamines and decongestants (Upfal, 2006). Some athletes misuse codeine by intentionally taking more than the recommended dose to get high, or as an act of self-harm. Codeine is usually swallowed and comes in different forms, including: Tablets, Capsules, Suppositories, Liquids, Soluble powders and tablets (Upfal, 2006).

Effects of Codeine

There is no safe level of drug use. Use of any drugs always carries some risk – even medications can produce unwanted side effects. It's important to be careful when taking any type of drug.

Codeine affects athletes differently, based on: the person's size, weight and health, whether the person is used to taking it, whether other drugs are taken around the same time, the amount taken.

Side Effects of Codeine

The most common side effects of codeine to athletes are: Tiredness, Blurred vision, Dizziness, Dry mouth, Confusion, Difficult concentrating, Euphoria, Restlessness Sweating, Decreased heart rate, Difficulty urinating, Limbs feeling heavy or muscles feeling stiff, Stomach-ache Nausea, Vomiting, Constipation, (Odebunmi, 2010).

Overdose of codeine by athletes can lead to: Agitation, Mental numbness, Inability to pass urine, Severe constipation and obstructed bowel, Cold clammy skin with a bluish tinge, Regular use of codeine may eventually cause: Reduced sex drive, irregular periods, constipation, Tension and muscle twitches, dependence on codeine, Needing to use more to get the same effect, Financial, work and social problems (Upfal, 2006, Brands Sproude & Marshman, 2008)

Self-Reported Effect of Drug Abuse among Athletes

Physical Health Effect of Drugs among Athletes

Aderibigbe (2017) asserted that when an athlete uses drugs, many changes occur in his body, both physically and psychologically. Some of these changes occur immediately, while others only happen over time. Every side effect of drug use has the potential to be severe, but the physical effects can be especially dangerous. An athlete should therefore try to avoid combining drug use with any type of physical activity. Some athletes take straight

testosterone to boost their performance. The anabolic steroids used by athletes are often synthetic modifications of testosterone.

Olaoye (2016) also explained that these drugs are synthetic substances similar to male sex hormones, and that some athletes use them to build muscle and increase their athletic ability. These drugs, which are illegal to use in the United States, can cause severe health problems. Aderibigbe (2017) further explained that there are several common physical effects of drug use among athletes includes, change in appetite, confusion, dilated pupils, distortions in perception, dizziness, dry mouth, flushing of skin, impaired coordination and balance, increased energy and alertness, increased heart rate, blood pressure and body temperature, nausea. One type of performance-enhancing drug that is particularly abused by athletes is anabolic steroids. Aderibigbe (2017) affirmed that common stimulants include caffeine and amphetamines. Cold solutions often contain the stimulants ephedrine or pseudoephedrine hydrochloride. Energy drinks, which are popular among many sports men and women, often contain high doses of caffeine and other stimulants. The street drugs cocaine and methamphetamine also are stimulants.

Psychological Effect of Drugs among Athletes

Doping not only causes a situation of unequal participation during sporting events but also disrupts its moral and ethical basis, and this affects the athletes psychologically. The punishment given to Ben Johnson of Canada is a good example of this. Ben Johnson had advantage over other athletes (Vipene & Amasiatu, 2015). If he had achieved the feat unnoticed or without being caught but he was caught and therefore banned for two years. This affected him psychologically apart from the fact that his image was chanted globally (Vipene & Amasiatu, 2015).

Performance usually drops with constant abuse of most drugs. This makes the athlete get to his peak very easily (Vipene & Amasiatu, 2015). With this premature achievement, he

declines sharply too. This may cause easy frustration for the said athlete too. Therefore the athlete will become very hostile with his team mates and the coach who are free from the use of drug. Consequently, indiscipline of all sort like breaking of bounds become stock in trade because he will be breaking bounds. Sneaking out of camps looking for where to secure drugs which he depends on (Vipene & Amasiatu, 2015).

As the monetary needs also increase, begging, borrowing or stealing become a way of life for him or her this psychologically affects the athlete in performance. Anugweje (2009) opines that he thinks of how to get drugs than he think of training. As such he cannot perform to optimum; because he is not sure of where to get money to buy the next dose of drugs. If this occurs during a major competition, the athlete is bound to make mistakes because he has lost concentration (Anugweje, 2009). Also depression is another psychological emotions usually exhibited by individual athletes that use drugs to enhance his performance (Anugweje, 2009).

At this point in time, weather in training or competition proper, what makes meaning to them is how to be high. This indifference to their personal images and anti-social behavior do manifest significantly in them psychologically. They therefore resort to self defense mechanisms to safe image. Anumonye and Ajayi (2009) outlined the following as the immediate psychological (emotional) effects of marijuana or Indian hemp which is a commonly abused drug among youths including the athletes.

1. Hampered performance in many ways including clumsiness in movement
2. Observing things, which others do not observe, which often called hallucination. This can affect any of the five sense.
3. False confidence about one clarity of thinking.
4. Distortion of the senses, such as disturbance in timing of effects
5. Misinterpretation of things perceived which often referred to as illusions

6. Delusion or abnormal thoughts, usually feelings of persecution or of grandiosity (that is of unwarranted greatness). These psychological factors apart from affecting performance in sports adversely have its attendant dangers to the family in particular and to the society in general.

Physiological Effect of Drugs among Athletes

The psychological distress associated with substance abuse and drug abuse can range from mild to serious. At any level of severity, this distress can have a profoundly negative impact on the life of an addicted athletes.

According to Lust for Life (2015), psychological effect of anabolic steroids includes explosive aggressive or short temper which is also known as '*Roid Rage*' significant mood swings, manic behaviors, and delusions hallucinations. Withdrawal from anabolic steroids suddenly can results in withdrawals symptoms including depression and apathy, anxiety and joint pains. Because the use of performance enhancing substance is underground and illegal, the long term effects could be described as a hidden iceberg while listening to the consequences, it is very easy to gloss over them (Lust for Life, 2015).

Finally, it is worthy of note to emphasise that athletes don't take these drugs to level the playing field, they do it to get advantage over others. A vicious cycle of increasing dosage to get a bigger advantage takes place. At risk groups, young impressionable adolescent, those on the verge of prestigious teams in prestigious schools, girls and boys, and men and women concerned with body image. The net is widening for athletes doping to enhance performance (Lust for Life, 2015).

Effects of Drug Abuse on Athletes

Drug abuse among athletes may lead to negative effects such as:

- Suspensions and eventual bans. Many professional athletic bodies have strict regulations against using performance-enhancing recreational drugs. Athletes who break these rules may face serious sanctions, such suspensions or bans. In some cases,

prior titles, medals, or prizes may be withdrawn. Professional athletes such as Lance Armstrong, Steve Howe, and Brett Favre have suffered these consequences.

- Job loss and premature retirement. Drug abuse can diminish an athlete's ability to focus and otherwise negatively affect an athlete's performance. Certain drugs will give rise to a number of negative consequences and might be associated with performance-hindering withdrawal symptoms. Some athletes may be forced into a premature retirement because of the negative effects of their drug abuse over time.
- Health problems.

Physical Health

Injuries due to accidents (such as car accidents), physical disabilities and diseases and the effects of possible overdoses are among the health-related consequences of adolescents' alcohol and drug abuse. According to Wechler & Serbring. (2004), alcohol and drug abuse also motivate students to practice unsafe sexual intercourses with different sexual partners. This can lead them to contact HIV/AIDS and other sexually transmitted diseases. Transmission of HIV/AIDS primarily occurs during unsafe sexual contact or through sharing of unsterilized drug-injection equipment (Aklog, Tiruneh & Tsegay, 2013).

Many athletes who used alcohol and drug engage in behavior that places them at risk of contacting HIV/AIDS or other sexually transmitted diseases. This may include the actual use of psychoactive substances (particularly those that are injected) or behaviour resulting from poor judgment and impulse control while experiencing the effects of mood-altering substances (Brook, Cohen & Brook, 2008).

Mental Health: As it was stated by Deressa & Azazh (2011), mental health problem such as depression, developmental lags, apathy, withdrawal and other psychosocial dysfunctions frequently are linked to alcohol and substance abuse among adolescents. Substance-abusing youth are at higher risk than nonusers for mental health problems, including depression; conduct problems, personality disorders and suicidal thoughts (Kebede 2002).

Taking anabolic steroids can result in kidney and liver damage, heart problems and hypertension. Mental effects can include anger, depression and violence. Men may also experience impotency, infertility, and development of certain female sexual characteristics (e.g., enlargement of breast tissue), while women might experience menstruation changes and development of masculine features. (Mayo & ESPN 2015).

Androstenedione is a steroid produced in the adrenal glands and the gonads, which is converted in the body to testosterone. It is used by athletes to increase muscle strength and mass and to shorten muscle recovery time. Andro use can lead to side effects such as reduction in sperm production, shrinking of the testicles, and increased breast size in men. Premature baldness, liver and kidney diseases, and aggressive behaviour. In women, it can lead to the development of certain masculine qualities, such as deeper voice like male. Partial hair loss for both men and women, abusing drug may increase the risk of heart attack and stroke (Mayo Clinic 2014).

Notable users of Andro are Roy Jones, Jr (boxer): Andro was available in over-the-counter supplements when he tested positive in 2000. Mark McGwire (baseball player): Admitted using it in 1998, at a time when it was legal not banned by Major League Baseball.

- Human Growth Hormone (HGH, Somatotropin) is a hormone produced by the pituitary gland that promotes body growth. Whereas anabolic steroids primarily affect muscles. HGH strengthens bones and tendons as well. HGH use is associated with joint pain, fluid retention, muscle weakness, diabetes, high blood pressure, vision problems. It can also lead to carpal tunnel syndrome, high cholesterol, enlarged heart and increased risk for colon and prostate cancer (Mayo Clinic, 2015).
- Notable users: Jason Giambi (baseball player): In late 2003, admitted to a federal grand jury that he took HGH and steroids from 2001 to 2003.
- Bill Romanowski (football player): In 2005, admitted on the TV show of 60 minutes that he took HGH and steroids from 2001 to 2003. He has retired since 2003.

- Excessive diuretic use can cause muscle-cramps, dizziness, dehydration, rash, gout, potassium deficiency, poor balance and coordination, low blood pressure, and even death (Mayo Clinic, 2015)
- The risk of using erythropoietin includes heart attack, stroke, and pulmonary embolism (Mayo Clinic, 2015). Erythropoietin is a hormone that enhances athlete's performance by increasing stamina as it boosts the red blood cell count in the body. However, it can become dangerous when too much of it exists in the body.
- Marijuana can negatively affect short term memory, learning and coordination that can lead to liver and neurological damage to the body (NIDA & British Broadcasting corporation 2014)
- Alcohol use may impair problem-solving ability, memory, learning, and coordination and can lead to liver and neurological damage to the body (NIDA & British Broadcasting corporation, 2014).
- Addiction: The abuse of certain drugs, such as stimulants and opioids can lead to addiction (NIDA & British Broadcasting Corporation 2014). Addiction is a brain disease that involves irresistible drug use despite negative consequences (NIDA 2014). Athletes who are addicted to drugs or alcohol might have trouble quitting without professional treatment.
- Cocaine can cause damage to the heart and respiratory, nervous, and digestive system (NIDA 2014).
- Opioids such as heroin and prescribed analgesics have a high risk of overdose. When these drugs are injected, the user's risk of contracting infectious diseases is on the increase significantly.

Death, Amphetamine use might lead to inevitable hemorrhagic stroke or heart attack (ESPN).

Improper use of opioids like heroin or prescription of drugs also carries a high risk of fatal

overdose. Basketball player Len Bias and Professional hockey player Derek Boogard both died of deadly drug overdoses.

Effect of Commonly Abused Drug on Athletes

Today, drug use in sport has reached enormous proportions in society and is adversely affecting sports. Nowhere is the problem more serious than in professional athletics where Athletes, Coaches and Trainers misuse drugs in search of ways to improve performance. Many Athletes fail to take their time when making the decision whether to use drugs to their advantage. Unfortunately, Athletes may use drugs for the treatment of illnesses, therapeutic indications, recreational or social reasons, as muscular aids or to mask the presence of other drugs during drug testing. By doing this, the safety of the Athlete's health is being neglected. Drug use has led to an increased number of deaths and supervisions of Athletes (Yuen, 2000).

Akosu (2007) Nwadike, (2008) reported that despite all the efforts, the incidence of drug abuse remains high among celebrities and athletes in particular, whose quest for recognition, prestige, fame, pressure to succeed and sometimes fears of failure by athletes coach or trainer and even his National Federation. It was also reported that drug use among Athletes has gone dramatically up in recent years. Athletes also are becoming more venturesome about mixing different types of drugs. One reason is that new drugs keep coming on the market, and some turn out to be of help in giving Athletes a competitive edge. Sports officials feel they have no choice but to try to combat drug use in sports with every legitimate weapon at their command. They are motivated in part by concern for Athletes' wellbeing. He explained also that most performance enhancing agents have side effects that can pose an immediate or long-range threat to health, but the officials are driven by self-interest too. Nearly all drugs used in organized sports have potentially serious side effects. Some Athletes decline to use them for some reasons, but other Athletes take drugs with little or no hesitation.

Stimulants: stimulants are psychoactive drugs that induce temporary improvement in either mental or physical function of both. They increase heart rate, induce wakefulness, reduce

fatigue, elevate mood, and produce euphoria. These powerful drugs grew in popularity in the 1980s and while their abuse has declined come-what, they remain popular in the late 1990s. Athletes take stimulants to produce alertness, increased wakefulness, and suppress appetite. Some drugs in this group however have legitimate medical use and are used in treatment of obesity, narcolepsy (excessive sleep), and attention deficit disorder (hyper-activity in children). They are also habit forming and should be administered strictly under the supervision of qualified medical personnel. Abusers take them into the body through sniffing, orally, smoking and injection. These drugs include amphetamines, cocaine and cathinonesampakines, ephedrine, mephedrine, prophythexodrine, preadoephedrine, (Julien, 2001). Oakley and Charles (2004) reported that during the 1800s and early 1900s, three types of stimulants were known to be in use by Athletes. Strychnine, which became popular as a rat poison, can at low dose act as a central nervous stimulant. However, if the dose is too high, seizure activity will be produced in the brain. The resulting convulsions lead to paralyze of respiration which eventually lead to death; at least a number of boxers were reported to have abused strychnine tablets and this might have made them more aggressive and kept them from being fatigued quickly, however it was a dangerous way to do it.

Stimulants constitute a variety of drugs to increase alertness and reduce fatigue. It was reported that in the history of Olympics, many stimulants, like amphetamines, caffeine, and cocoa leaves have been used. When doping center was first introduced, stimulants like the amphetamines were the most problem drugs in sports. Unlike anabolic steroids, which are used in training, stimulants are consumed on the day of competition. As effective methods of detecting these drugs have been developed, their use been drastically reduced. The stimulants that are detected most frequently are drugs that can be used inadvertently, like ephedrine used in the treatment of asthma (Venkateswarlu, 2000).

Amphetamines

Amphetamines is a potent central nervous system (CNS) stimulant that is used in the treatment of attention deficit hyperactivity disorder (ADHD), narcolepsy, and obesity (Stahl, 2017). The term is frequently used to informally refer to any combination of the enantiomers, or to either of them alone. Historically, it has been used to treat that nasal congestion and depression. Amphetamine is also used as an athletic performance enhancer and cognitive enhancer, and recreationally as an aphrodisiac and euphoriant. It is a prescription drug in many countries, and unauthorized possession and distribution of amphetamine are often tightly controlled due to the significant health risks associated with recreation use. (Malenka, Nestler, Hyman & Holtzman 2015). The first amphetamine was synthesised in Germany by Edelano in 1887 and was followed by methyl amphetamine which was synthesised in 1919 by Ogata in Japan (Obot in 2005), amphetamine was introduced as a nasal decongestant in the form of Benzedrine inhaler. However, because of its widespread abuse, the legal use of Benzedrine as a nasal decongestant was discontinued in 1971. By this time, amphetamines were being misused for all kinds of disorders including depressions and fatigue.

Field (2004) reported that amphetamines have an appetite suppression effect attractive to a variety of Athletes for whom making and keeping a required weight is essential (example, hockeys, gymnasts, wrestlers, and boxers). He further reported that approximately 75 percent of trained swimmers, weight lifters and runners showed improvements in performance after administration of amphetamines. A review in 2001, using criteria based on knee extension strength and running to exhaustion, showed that performance usually improved by only a small percentage. However, in highly competitive sports, even one percent improvement can mean the difference between victory and defeat.

Amphetamines have both major and adverse influence on human body, such as:

Major effects: Typical therapeutic doses of amphetamines stimulate the central nervous system, increased blood pressure, widen the pupils, increase respiration rate, depress the appetite, relieve sleepiness, and decrease fatigue and boredom. Other effects include increased awareness and alertness, slight euphoria, elevation of mood and self confidence (although the ability to perform complex task is usually diminished), increased talkativeness and excitement, reduced nausea and gastrointestinal upset, and dry mouth.

Adverse effects: In some individuals, even a moderate dose of amphetamines can have adverse effects, such as agitation, inability to concentrate, anxiety, confusion, blurred vision, tremors, and heart palpitations. Higher doses of amphetamines can produce quite severe adverse reactions, which include the following: Tremors, palpitations, Dilated pupils (Mydriasis), Sweating and flushing, abdominal cramps, nausea, Hypertension (Later hypotension), circulatory collapse, Anxiety, agitation, and panic, Aggression and violent behavior often associated with paranoia, Rapid breathing, respiratory collapse, Hallucination (Visual and auditory), delirium, Extremely high fevers, Convulsions and seizures.

Although death reports from amphetamine use are rare, some individuals who are usually sensitive to these drugs have died as a result of burst blood vessels in the brain, heart failure, or high fever. Amphetamine psychosis, a mental disturbance similar to paranoid schizophrenia, is sometimes associated with high dose of amphetamine used, but many of its symptoms have been observed with moderate dose levels.

Injecting amphetamines causes other complications: unsterile and shared needles cause problems with tetanus, Aids, abscesses, and hepatitis (Field, 2004).

Venkateswarlu (2000) reported that available recent research evidence suggests that amphetamines can enhance, concentration and fine motor coordination. He explained that field experience tends to show that the use of amphetamines is inherently dangerous as deaths in international competitions have often been attributed to excessive use of amphetamines. He emphasized that, as amphetamines increase heart and blood pressure, they impose much greater stress on the cardiovascular system of the users and thus can trigger cardiac

arrhythmias. Instead of delaying the onset of fatigue they may most likely delay the sensation of fatigue, enabling the Athletes to perform dangerously beyond normal limits to the extent of experiencing circulatory failure.

Caffeine, nicotine and alcohol are stimulants that are socially accepted drugs of dependence. Caffeine produces a mild central stimulation, similar to that of a low dose of amphetamines. It also causes increased heart rate, cardiac output, metabolic rate, and urine production. However, at high doses, it causes tremor, nervousness, anxiety and insomnia. When an individual stop taking this drug, he may experience withdrawal reaction, irritability and headache (Venkateswarlu, 2000).

Caffeine is present in many social beverages, like coffee, teas and cola drinks. Because of its euphoriant properties, it is often used to improve motor performance. However, relatively high doses (400mg) are required to produce very slight effect in reducing fatigue, and even produce hand tremor (Weise & Laties, 2005).

Weise and Laties (2005) also stated that cocaine is the primary psychoactive substance found in the leaves of the cocoa plant. It is a powerful stimulant which is banned in most countries. Historically, it was used by the Incas of South American to reduce fatigue and exhaustion. They further reported that cocaine use has both physiological and psychology effects on human body such as:

Physiological Effects: Cocaine affects both the peripheral nervous system (PNS) and the central nervous system (CNS). Although cocaine's acute effects are highly stimulatory, they are very brief. The chronic physiological effects can result in serious medical complications and death.

Acute Effects: Cocaine's effects on the sympathetic nervous system include an increase in respiration and heart rate and a loss of appetite. Heartbeats may be irregular and extremely rapid. As blood vessels constrict, blood pressure and body temperature rise. The rise in blood pressure may cause hemorrhaging or congestive heart failure. Other symptoms include seating and a pale appearance. Cocaine's effects on the voluntary branch of the Peripheral

Nervous System (PNS) include increased motor activity but no increase in physical strength or improvement in coordination. Its effects on the Central Nervous System (CNS) include euphoria, increased alertness and mental awareness, and a corresponding reduction in fatigue. At exceedingly high doses, convulsions and seizures may occur.

Chronic Effects: Cocaine abusers experience a number of undesirable side effects associated with chronic abuse which includes dizziness, irregular heartbeat, sleeping disturbances, nasal burns and sores, chest pains and coughing. Although cocaine is touted as having aphrodisiac properties, chronic abuse can actually lead to impotence and loss of sex drive.

Psychological Effects: Cocaine produces acute and chronic psychological effects that are similar to those produced by amphetamines. Reported feelings range from euphoria and exhilaration immediately after administration to anhedonia (inability to experience pleasure) and depression as the drug is eliminated. Chronic cocaine abuse can produce psychological disturbances, such as irritable and violent behaviour, depression, confusion, impaired thinking, anxiety, paranoia, memory loss, cocaine psychosis, hallucinations, and suicidal tendencies.

Narcotic and other Analgesics

These are psychoactive compound with sleep inducing properties. Also, drug that has both sleep-inducing and pain-relieving effects; Analgesia means to relieve pain, such as opiate drugs. Narcotic and other analgesics according to Venkateswarlu (2000) are drugs to relieve pain. Narcotic analgesics, like morphine are powerful but have adverse effects and should therefore be used carefully. In sports, they are used on the day of competition and therefore are readily detectable. Non-narcotic drugs, like aspirin, are very mild drugs. In sports, narcotic analgesics are banned.

However, there is no restriction on the use of non-narcotic analgesics. (NIDA, 2008) & (Broadley, 2000), also reported that narcotics or narcotic analgesics are drug that relieve pain and produce sedation. The word narcotic comes from the Greek work 'narke', meaning numbness or stupor. The term opiod, or opiod analgesics, is also used to describe this group

of drugs including natural narcotics, which are derivatives of opium, quasi-synthetic narcotics, made by chemically altering natural opiates and synthetic narcotics, opiate like drugs manufactured by drug companies. Narcotics are true analgesics, that is, they relieve pain without producing sleep. Some of the narcotic analgesics are counted among the most powerful and useful medications available. However, they are also among the most deadly of abused substances. Those who become dependent on these substance risk death from overdose and from infection with potential fatal diseases, such as hepatitis and AIDS. Narcotics drugs include heroine, trainado, Fentanyl, Opiods, Morphine and their derivatives, Narcotics works by binding to receptors in the brain and blocking the feeling of pain. Narcotics are drugs from the Opiate family, upon use; narcotics have an immediate effect on the body. Narcotics are highly addictive because they change the chemistry of the brain, they decrease the perception of pain and after the body's reaction to pain (Broadley, 2000). Other examples of narcotics include Opium, codeine, hydromorphone, naloxone, Oxymorphone, methadone, pentazocine and cocaine. Narcotics can be taken orally by athletes, inhaled, smoked or injected. (Oshodin, 2004).

Broadley (2000) further stated that narcotics have both physiological and psychological effects on human body, such as:

Physiological effects: Narcotics produce their most pronounced effects on the Central Nervous System (CNS), however, they also influence the Peripheral Nervous System (PSN), particularly the smooth muscles of the intestinal tract and the eyes. Both acute and chronic physiological effects of narcotic occur as:

Acute effects: Narcotic produce analgesia, euphoria, drowsiness, and depression of mental faculties. They do not depress motor activity or cause the slurring of speech to the degree that alcohol and barbiturates do, but they do depress respiration. Opiates appear to reduce the sensitivity of the brainstem to levels of carbon dioxide that may be building up in the body. As high doses breathing becomes irregular and slow. The primary cause of death in cases of narcotic overdoses is respiratory arrest. In the regard, narcotics are the leading cause of

deaths from unintentional drug poisonings. Other undesirable effects of narcotics include constipation, stimulation of the “vomiting center” in the medulla, and suppression of Rapid Eye Movement (REM) sleep is associated with formation, narcotic are detrimental to this physiological process. The specific depression of the cough centre of the brain also occurs, and this is regarded as a therapeutically desirable effect of opiates. Codeine is the narcotic that is most effective as an antitussive (cough suppressant).

Chronic effects: The following are the major effects of narcotics: pain relief (analgesia), euphoria (sense of well being), cough suppressant (antitussive), respiratory depression, sedation or drowsiness, constriction of pupils (Pinpoint pupils), nausea and vomiting, itching and decrease in gastrointestinal activity (constipation) (Fields, 2004).

Psychological effects: The psychological effects of narcotic vary with individuals, their moods, and social or environment settings. As with the physiological effects both acute and chronic psychological effects of narcotics occur.

Acute effects: Acute effects of narcotic used can be observed outwardly as a behavioural pattern of lethargy, lack of concern and inability to concentrate. Inwardly, users report peacefulness, feelings of wellbeing, and even euphoria. Others, especially intravenous users, described the rush in sexually pleasurable terms, followed by the sensations. These highs last for a short time, however, they are followed by a period of increasing anxiety. Because tolerance develops, those who continue to abuse the drug are invariably disappointed in their attempts to repeat the same high level of pleasure achieved in earlier usages.

Chronic effects: The existence of psychological dependence as evidenced by craving, is well established for narcotic use. The user’s mood and the social or environmental settings in which the drug is taken are important in the establishment of psychological dependence in intravenous drug users.

Kyalo & Mbugua (2011) highlighted some of the effects of narcotics when the users want to withdraw as appetite suppression, nausea and vomiting, dilated pupils gooseflesh, or

increased phylomotor activity, restlessness, intestinal spasms, abdominal pain, muscle spasms, kicking movements, occasional diarrhea, increased heart rate and blood pressure, chills alternating with flushing and sweating, irritability, insomnia, violent yawning, severe sneezing and runny nose, crying and tearing, nasal inflammation, depressive mood and tremor.

However, chronic use of opiates, especially heroin, results in a variety of obstetrical compromises. Because withdrawal in an addicted mother may lead to spontaneous miscarriage, the consensus of the medical community to date is to stabilize the heroin addicted mother on methadone during the pregnancy. However, these babies may display withdrawal symptoms and have significant neonatal difficulties, with lifelong negative effects on psychomotor development (Fields, 2004). Mild analgesic drugs, including aspirin, are non-steroidal anti-inflammatory drugs, because they act mainly to reduce inflammation. These drugs are believed to inhibit enzymes causing the production of very active derivatives, called prostaglandins, from fatty acids of the damaged region of cell membrane. These oxidized fatty acids are potent stimulators of factors involved in tissue repair. They are also active on blood vessels, nerves and in the central nervous system, producing vasodilatation, pain and fever. Inhibition of their production relieves pain and reduces swelling and fever in tissue damage and infection. They also exert protective effects in the stomach by neutralizing the effect of the acid gastric secretions on the stomach wall (Venkateswarlu, 2000).

Anabolic Steroid: These are performance enhancing drugs that include two types of compounds; anabolic-androgenic steroids (here after referred to simple as steroids), which are synthetic compounds that mimic the action of the male hormone testosterone, and human growth hormone (HGH), a protein produced by the human pituitary gland. Anabolic steroid are available commercially. They are popularly with sprinters, weight lifters, and body builders. They are similar in structure to the male sex hormone (testosterone) and therefore

they enhance male reproductive and secondary sex characteristics, allow athletes to train harder and longer. In addition, they increase muscle mass and strength. The main systems affected are the secondary sex characteristics, the heart, and the liver. These compounds can be considered as performance enhancing because they accelerate the rate at which the body builds protein; thus they increase muscle size and strength and promote muscle-injury repair among athletes who use them. Both types of anabolic drugs are legally available only with a physicians or veterinarian's prescription. Most of the illicit anabolic steroids available in the United States are smuggled into the country. Some of the most commonly encountered are boldenone (Equipose), ethylestrenol (maxibolin), fluosymesterone (Haloestin), methandriol, methandrostenolone (Dianabol), methyl-testosterone, nandrolone (durabolin, Deca-Durabolin), oxandrolone, and trenbolone (Finajet) (Timothy, (2006).

In males, the usage leads to Sterility, Reduced testicles, High blood pressure, increased sexual appetite but decrease performance, breast enlargement, In females, usage of steroids can lead to deepening of the voice and excessive hair growth on the face and body. Examples of Anabolic steroids are Donabal, Anavar, Androl, Winstrol and Oreton. (Ijeoma, (2007), Fricker, 2007; Frazer, 2009).

Steroid: Steroids are muscle-builders that are often used and abused by athletes. When they are taken over a long period of time, they can lead to significant medical issues including heart problems and liver failure Timothy (2006). Examples include cholesterol, cortisol, and aldosterone. Some of these steroids, such as hydrocortisone, have important medical uses either in replacement therapy for adrenocortical deficiency or for their potent anti-inflammatory effects in disorders of many organ systems. (Tolliver, 2004) Two important steroids are the female hormone estrogen, produced in the ovaries, and the male hormone testosterone, produced in the tests. These two hormones have only small chemical differences but large differences in their effects on growth and development. Steroid also can be produced synthetically. Synthetic steroids that produce testosterone like effects are called

androgenic steroids because they cause the expression of male secondary sex characteristics, including a deepening of the voice, growth of facial and body hair, and increased aggressiveness.(Lowe, 2004) They are also called anabolic steroid because they stimulate protein synthesis, resulting in increase in muscle size and strength (Timothy, (2006).

Physiological Effects:

The physiological effects of using anabolic androgenic steroids are to increase weight and muscle mass, increased water retention, and decreased body fat. Researchers recently demonstrated in a carefully controlled study that “supraphysiologic doses of testosterone, especially when combined with strength training, increase fat free mass and muscle size and strength in normal men. In some sports, such as body building, where muscle size is performance, steroids do improve performance. With proper nutrition and training, strength is also increased. Endurance is thought to be improved because steroids promote red blood cell proliferation, thereby increasing the blood’s oxygen-carrying capacity. Steroids do reduce recovery time after injury or exhaustion, enabling Athletes who abuse steroids to train longer and harder than they would otherwise. However, these Athletes risk injury and permanent disability from such overtraining. In addition, Athletes may lose flexibility or become “muscular bound”.

Abuse of anabolic-androgenic steroids results in several physiological side effects in both sexes, including the male pattern baldness, acne, and edema on the feet and legs. When adolescents take steroids, these agents can prematurely stop the lengthening of bones, resulting in stunted growth. Steroids abuse by males can result in sore or swollen breast tissue, testicular shrinkage, hair loss, and impotence. For females, unwanted effects include deepening of the voice, menstrual irregularities, reduction in breast size, and enlargement of external genitals. Chronic steroids abuse produces a variety of irreversible health problems, including long bone fusion in children, changes in physical appearance, damage to organs and organic systems, including liver tumors, and prostate cancer in males. All oral and some injectable steroids reduce high density cholesterol, while increasing low density cholesterol,

increasing the risk for atherosclerosis (clogging of blood vessels) and myocardial infarction (heart attack). Chronic use of steroids also causes hypertension (chronic high blood pressure), thereby increasing the risk for cerebrovascular accidents (stroke) Timothy (2006) Jenkins (2010).

Psychological Effects: In addition to the physiological effects, steroids abuse causes significant psychological changes in both men and women. Initially, users report feelings of well-being, euphoria, inflated feelings of self-esteem, increase in energy and sex drive, and improvement in appetite. These feelings may be accompanied by increased aggression and decreased tolerance to pain. Users often have difficulty controlling their emotions, especially anger, and many experience sudden mood swings, aggressive behavior, and combativeness.

When abusers discontinue their steroid abuse, they report dysphoria, depression, fatigue, decreased sex drive, insomnia, lack of energy, and dissatisfaction with body appearance. Some experience severe depression and thoughts of suicide. Steroid also increase the likelihood that the user will develop social problems as a result of personality or change in attitude. These problems could include disrupted and damaged interpersonal relationships, misuse and abuse of other prescription and illicit drugs, aggressive and anti-social behaviours resulting in trouble with the law (fines and imprisonment), and disqualification or disbarment from athletic competition.

The problem with steroids is that they do not act exclusively on one muscle or tissue group. Therefore, they stimulate all muscles and tissues, making the individual the risk for other adverse effects. The body's homeostasis is disrupted with the use of steroids, causing a variety of physical problems, "Heart disease will probably be the most widely noted side effect with anabolic steroids abuse. Blood pressure elevates significantly when an individual takes anabolic steroids due to the retained fluid and increased blood volume. High Density Lipoproteins (HDL-C) that aid the body in removing cholesterol and are important to cardiac longevity, are drastically reduced with the use of androgens" Timothy (2006), Jenkins (2010).

For adolescents, the drug can cause stunted growth and the premature closing of growth plates. Other problems resulting from steroid abuse by men include the following: Liver and kidney damage, breast development, acne, baldness, cysts, shrinking of the testicles and sterility, reduces sex drive headaches, nausea and dizziness.

For women the drug can cause the following: infertility, clitoral enlargement, breast atrophy, menstrual irregularities and male pattern baldness and voice change.

More and more evidence is accruing that the most significant effect of anabolic androgenic steroids use may be psychiatric. Psychological reactions such as extreme aggressive, mood swings, depression and delusions are reported in some individuals Timothy (2006).

Beta Blockers

Beta blockers are a class of drugs used in the professional medical world to manage heart conditions and high blood pressure. Beta blockers or beta adrenoceptor as blocking agents. Beta blockers or beta adrenoceptor can also be refers to as blocking agents.

Beta Blockers drugs were introduced into medical therapy to reduce cardiac work, so that ischemic cardiac pain, called angina, is relieved, and to prevent arrhythmias and to lower blood pressure. They were also found to reduce muscle tremor, which prompted their non-medical use to enhance performance. As a consequence of their antitremor effects, they are used as anti-anxiety agents. In the field of sports, their use as performance enhancers is limited to precision sports. Beta Blocker also written β - blocker are a class of medications that are principally used to manage irregular heart rhythms, and to be shield the hearth from a second heart attack (Myocardial infraction) after a first heart attack (secondary prevention). They are also generally used to treat high blood pressure (hypertension), although they are no longer the first option for initial treatment of most patient (Stahl, 2017). Beta blockers promote lower heart beats and reduce tremors, beta blockers have been use in professional sports where high accuracy is needed including garchery, shooting, golf, bawls and snooker (Tim Glover, 2015). Beta blockers are forbidden by the International Olympic Committee

World Anti- doping Agency (Scott, 2008). (Tim Glover, 2015). Olympics, 50-metre pistol silver medalist and 10-metre air pistol bronze medalist Kim Jong Su tested positive for propranolol and was stripped of his prize or reward (Scott, 2008). For the same causes, beta blockers have also been used by surgeons. Abuse of beta blockers can cause heart failure, depression and sleeping disorders, decrease libido, impotence in males and bronchospasm and reduced maximal oxygen uptake, ventilatory capacity, heart rate, cardiac output and blood pressure (Wilmore and Costil, 2009).

Androstenedione

Androstenedione (andro) is another form of steroids synthesized by the ovaries, testes and adrenal glands. In men, andro results into diminished sperm production, breast enlargement, acne and shrinking of testicles. In women, it may induce masculinization and acne. However, some studies say that it does not work the same and may not increase muscle strength at all (Ghodse 2003). Andro is available as permitted by law only in prescription form and is a controlled substance. Manufacturers and body building magazines promote its capability to give athletes to train and get better in good time. However, its use as a performance-enhancing substance is illicit in the United States.

Diuretics

Diuretics: is any substance that promotes the production of urine. Diuretics are substance that increases the excretion of salt and water in the urine Botre& Pavan (2009). According to Venkateswarlu (2000) diuretics are substances that increase the excretion of salt and water in the urine. The primary medical uses of diuretics include treatment of high blood pressure and excess fluid retention. Athletes use these drugs for the following three main reasons:

- a. To reduce weight, either to qualify for the low weight category or they believe that loss of weight increases performance.
- b. To overcome fluid retention caused by androgenic steroids, and

- c. To change the excretion rate of urine to modify urinary concentration of banned drugs to escape from being caught.

He went further to explain that diuretics act by modifying the transport of ions, like potassium, sodium, bicarbonate, and chloride, through the membranes of the kidney cell wells. More ions remain unabsorbed by inhibiting the re-absorption of ions from the filtrate derived from the blood. As urine must be ironically balanced, extra anions like bicarbonate or chloride take extra sodium, the main cation in the blood and thus filtrate into the urine. The increased removal of salt results in increased removal of water to keep urine as dilute as can be. The major problems of these diuretics is that by increasing the amount of sodium reaching the later stages of nephron, the exchange with potassium within the cells of the kidney is increased. This leads to a gradual loss of potassium from the body, which affects muscle function, especially the function of the heart. These drugs can cause muscle weakness, cramps and fatigue due to dehydration, which result in decrease of strength, endurance and body weight. Use of high doses of these drugs results in reduced blood volume, increased blood viscosity and clotting or chronic electrolyte disturbances. Some of the most popular used diuretics are frusemide, acetazolamide and probenecid. Probenecid is not strictly a diuretic. But is in the international Olympic committee (IOC) banned list of drugs because of its effects on urinary drug output Botre& Pavan (2009).

Creatine: is a naturally occurring compound produced by our body that helps our muscles release energy. Scientific research indicates that creatine may have athletic benefit by producing small gains in short term bursts of power. Creatine is the most popular supplement among the performance enhancing drugs in sports. It is sold over the counter (without a prescription) and is reputed to help improve performance in sports that involve short bursts of power, such as weight lifting, wrestling, and sprinting. Even though reliable research has not yet established a connection between creatine and serious health problems, there is some evidence that heavy use may cause kidney, liver, and heart problems.

Many athletes take nutrimental supplements instead of or in addition for performance enhancing drugs. Supplements are available over the counter as powders or pills. The most popular supplement among athletes is probably creatine monohydrate. Creatine appears to help muscles make more adenosine triphosphate (ATP), which stores and transports energy in cells, and is used for quick bursts of activity, such as weight lifting or sprinting. There's no evidence, however, that creatine enhance performance in aerobic or endurance sports.

Our liver produces about 0.07 ounces (2 grams) of creatine each day. We also get creatine from the meat in our diet. Creatine is stored in our muscles, and levels are relatively easily maintained. Because our kidneys remove excess creatine, the value of supplements to someone who already has adequate muscle creatine content is questionable.

Some risks in taken creatine as supplements considered as food and not drugs by the FDA. This means supplements manufacturers are not required to conform to the same standards as drug manufacturers do. In some cases, supplements have been found to be contaminated with other substances, which may inadvertently lead to appositive test for performance-enhancing drugs.

Possible negative consequences of a creatine that can reduce athletic performance include:

- Muscle cramps
- Diarrhea
- Stomach pain
- Onausea
- Weight gain

Weight increase is desired which athletes who wants to shoot up their sizes. But with prolonged creatine abuse, weight increase is more likely the result of water retention than an increase in muscle mass. Water is drawn into our muscle tissue, away from other parts of our body. This put athletes at the risk of dehydration.

High-dose creatine use may potentially damage athletes: Kidneys, Liver.

Erythropoietin (EPO):

Erythropoietin (EPO) is a hormone secreted or produced by the kidneys. It performs a role in controlling the amount of red blood cells in the blood stream. Erythropoietin is a hormone that enhance an athlete's performance by increasing stamina as it boosts the red blood cells count in the body. A synthetic version of EPO was developed in the 1980s, and it quickly became popular as a performance enhancing drug, particularly among athletes involved in endurance sports such as cycling. When used excessively, EPO can increase the number of red blood cells to such a degree, that the blood becomes too thick to flow properly, potentially leading to heart attacks and strokes. According to the 2007 World Almanac and Book of facts, in the late 1980s, shortly after the appearance of synthetic EPO, thirty top endurance athletes, mainly cyclists, in Belgium, the Netherlands, Denmark, and Sweden died; the likely cause of their deaths was EPO.

Hallucinogens: These drugs have potential in distorting perception of time, colour, touch, sound space and reality. This category of drugs can be called Psychedelic (Cherry, 2009). Drugs in this group are known as Psychedelic drugs. Drugs that are classed as Psychedelics include, Marijuana, Ketamine, Lysergic acid diethylamide (LSD), Mescaline, PCP (Phencyclidine) (Richard, 2004). These drugs affect the way of in which the brain processes and interpret neurological or nerve impulse thereby altering the mood and thinking of the individual. Psychedelic drugs cause changes in the senses leading to distortion and false perception. The individual might see, hear, smell or feel things that are not real. Moreover, some psychedelic drugs can be used in the treatment of glaucoma, chemotherapy induced vomiting and AIDS – related weight loss. This group of substances distort the perception of objective reality in the user, the sense of direction, distance and time. This distortion in perception often manifest as illusions, delusions and hallucination. They also produce

anxiety, agitation and violent behaviours. The users often hallucinate and they tend to see, smell, taste, hear or feel things that do not exist. They sometimes speak of “seeing sound and hearing sounds”. When the hallucination has to do with seeing it is referred to as visual hallucination and it has to do with hearing it is referred to as auditory hallucination. Examples of hallucinogens include LSD (lysergic acid diethyl amide), PCP (phencyclidine) mescaline, and peyote. These drugs were initially used for medical purposes but later used for non-medical purposes. These drugs can produce unpredictable, erratic, and violent behavior in users that sometimes lead to serious injuries and death (Ijeoma, 2007; Nichols, 2004).

Physical effects associated with athletes using hallucinogens:

- i. Increased heart rate and blood pressure
- ii. Sleeplessness and tremors
- iii. Lack of muscular coordination
- iv. Sparse, mangled, and incoherent speech
- v. Decreased awareness of touch and pain that can result in self-inflicted injuries.
- vi. Convulsions
- vii. Coma: heart and lung failure

Psychological effect associated with athletes using hallucinogen:

- viii. A sense of distance and estrangement
- ix. Depression, anxiety and paranoia
- x. Violent behaviour – confusion, suspicion and loss of control
- xi. Flash backs – behaviour similar to schizophrenic psychosis
- xii. Catatonic syndrome whereby the user become mute, lethargic, disoriented, and makes meaningless repetitive movements.

Human Growth Hormone (HGH)

Human growth hormone (HGH) , also known as gonadotropin, is a hormone that has an anabolic effect. Human growth hormone is not a steroid but a large protein secreted by the brain's pituitary gland and is one of the major hormones influencing growth and development. Harvey Curshing discovered the hormone in 1912 and isolated it from human and monkey cadaver brain in 1956. (Sonksen and Endocrinal, 2001). Two years later it was used to treat dwarfism in children by injection. It does this by stimulating the production of growth factors known as somatomedins. The specific of growth hormones is greater than that of steroid. Thus, only human growth hormone has no known medical uses in adult, but abuse of the drug has already begun especially by Athletes. The normal route of administration hGH is injection, posing an additional health risk of infection from non-sterile counterfeit drugs and the risk of HIV and hepatitis transmission caused by shared needles Meinhardt, Nelson, Hansen et al, (2010).

Olympic, professionals and weekend athletes abuse hGH because of not unsubstantiated reports that it is as effective as anabolic steroids with fewer side effects. They often abuse hGH as a steroid substitute to prevent loss of muscle after discounting the use of steroids. Ben-Johnson admitted to using hGH along with steroids during investigations after his disqualification in Seoul. Athletes who use human growth hormone (hGH) do so with the belief that it is free from side effects and is safer and even more effective than steroids. These ideas are not accurate.

According to some controlled scientific, studies, hGH does not increase muscle strength. Nevertheless, the abuse of hGH in sports is escalating, with large caches of needles and vials of hGH being confiscated at sporting events worldwide. Six months prior to the 2000 Olympic Games, a pharmacy in Sydney was broken into and 1,575 multiple dose vials of hGH were taken while nothing else was touched. Also, on their way to Australia, the Chinese swimming team were detained, as needles, syringes, and vials of hGH were found by customs officials in their baggage.

Using hGH may lead to life-threatening health conditions, especially since some estimated report that athletes who use hGH to enhance performance are taking 10 times therapeutics dosage. Some reported side effects of hGH are serious and include acromegally (a thickening of bones, especially apparent in the face, hand and feet); organomegally (enlargement of internal organs); hypertension, cardiovascular disease, cardiomyopathy, glucose intolerance, colonic polyps, diabetes, heart and thyroid disease, menstrual disorders, decreased sexual desire and a shortened life span (Holt & Sonksen, 2008).

Since hGH is a naturally-produced hormones and rhGH is similar in structure, testing for doping with rhGH has been a technical challenge only recently solved by WADA certified laboratories. Routine blood tests for hGH available at clinical laboratories will not differentiate hGH from rhGH and are of no value in determining if an adolescent or weekend athlete is doing.

Venkateswarlu (2000) in support of Pinger's report explained that one of the major effects of growth hormone is implied in its name, it is required for the normal growth of children. Its deficiency causes dwarfism in them. It causes retention of nitrogen from protein foods and a proportional accumulation of other tissue constituents. It reduces the metabolism of sugars but increases the metabolism of fat. Its release is pulsetile and increased by exercises, fasting, deep sleep, stress and amino acid intake. It causes the release of polypeptides, called somatomedines from the liver, which may produce its actual effects. Somatomedins are stored by binding them to plasma proteins, which may be responsible for the prolonged effects of growth hormone, though the plasma proteins, which may be responsible for the prolong effects of growth hormone, though the plasma half-life of growth hormone itself is only twenty (20) minutes.

He went further to state that hyper-secretion of this hormone in adults and its excessive use by Athletes lead to acromegally, characterized by distorted bone and organ growth, enlargement of fingers, toes and facial features, thickening of the skin, hair growth, heart and thyroid disease, high blood pressure, glucose intolerance leading to diabetes,

impotence and shortened life span. Growth hormone produces large but weaker muscles. It appears that growth hormone increases fat free body mass, decrease bone density. In addition, it appears to increase total body water, whole body protein synthesis rate and whole-body protein balance.

These are birth control pills that contain synthesis versions of natural estrogens and progesterone. They function as contraceptives by preventing ovulation. Although experts feel that it is rarely advisable to manipulate a female Athlete's menstrual cycle to improve her performance, it might be appropriate for the elite female Athletes who perform better in follicular (early cycle) phase than at other times to use oral contraceptives to regulate menstrual cycle for important competitions. This should be done by administering low dose oral contraceptives continuously and not cyclically for several months before competition, continuing until ten days prior to the competition. However, the use of oral contraceptives involves several medical risks, some of which include nausea, weight gain, fatigue, blood clots, hypertension, stroke and liver tumor (Venkateswarlu, 2000).

Blood Doping

Jelkmann & Luyndby (2011) is the practice of boosting the number of red blood cell in the blood stream in order to enhance athletic performance. In many instances, blood doping shoot up the amount of hemoglobin in the blood stream. Hemoglobin is an oxygen-carrying protein in the blood. So increasing hemoglobin allows higher amounts of oxygen to reach and fuel an athlete's muscles. This can enhance stamina and performance, particularly in long-distance events, such as cycling and running and swimming. However, it has a number of risks, some of which include infection, reaction when the blood of another person is transfused, allergies and high blood pressure. Unfortunately, there is no full proof method to determine whether a high red blood cell count is a result of blood doping. Another problem is that at least 900ml of blood is required to produce a measurable increase in performance. However, this enhanced performance may only last for few days (Venkateswarlu, 2000).

Spriet (2010) explained that it requires a minimum of 5 to 6 week interval between withdrawal and reinfusion of blood. Blood should be stored by freezing. If it is refrigerated, forty percent (40%) of red blood cells are destroyed and if frozen, only fifteen (15%) are destroyed. The unfortunate thing about blood doping is that no one can predict how much increase of red blood cells will occur when it is used. If there is excessive increase, blood viscosity will increase to dangerous levels, which could lead to clotting or heart failure.

Other practices include urine substitution and soda loading. Urine substitution or transplanting involves the replacement of urine in the bladder of an Athlete with urine from someone not using drug. This practice is now banned. On the other hand, the practice of soda quantity of substitutes; like bicarbonate of soda, by Athletes to prevent deleterious acid increase in the muscle (Venkateswarlu, 2000). There has been adequate evidence to believe that there are substances used by Athletes to mask the drugs they consume. These are called masking agents or blocking agents. They believe that it interferes with the ability of the laboratory to detect banned substances. For example, Athletes often use the drug probenidol, to block the detection of anabolic steroids. They use this drug because of its ability to impair the excretion of banned substances (Joyner, 2003).

Types of Blood Doping

The three commonly used kinds of blood doping are blood transfusion, Injections of erythropoietin (EPO) and Injections of synthetic oxygen carriers.

Blood transfusion: in conventional medical practice, patients might go through blood transfusion to replace blood lost owing to injury or surgery. Transfusions also are given to patients who suffer from low red blood cell counts caused by anemia, kidney failure, and other conditions or treatments.

Illegal blood transfusion are used by athletes to enhance performance. There are two kinds:

Autologous transfusion: this implies a transfusion of the athlete's own blood, which is drawn and then kept for future use.

Homologous transfusion: in this kind of transfusion, athletes make use of the blood of someone else with the same blood group.

EPO injection: EPO is a hormone produced by the kidney. It controls the body's production of red blood cells. In medical production, EPO can be used to treat patients with anemia and related to dironic or endstage kidney disease. Athletes using EPO do so to embolden their bodies to produce higher than usual quantity of red blood cells to improve performance.

Synthetic oxygen carriers: these are chemicals that have the ability to transport oxygen. Two examples are: HBOCs (hemoglobin-based oxygen carriers) and PFCs (perfluorocabons)

Synthetic oxygen transporters has a lawful medical use as emergency therapy. It is used when a patient used blood transfusion but: Human blood is not available, There is a highly and potential blood infection, There is not enough time to search for correct or appropriate blood group.

Athletes use synthetic oxygen transporters to achieve the same performance-enhancing effects of other kinds of blood doping: increased oxygen in the blood that helps fuel muscles.

Tests for Blood Doping

There are test to detect kinds of blood doping, but not all. He is a summary of different types of blood doping.

- i. **Autologous transfusion:** at present, no examination exists to clearly detect antologous transfusions. Instead, indirect methods are weak one indirect method involves comparing an athlete's blood sample at testing time to blood specimen collected previous time. Important differences between the two show possible blood doping. Known, as the athlete passport, this method is supported by the World Anti-Doping Agency (WADA).
- ii. **Homologous transfusion:** blood doping through homologous can be discovered by testing. The tests were used at the 2004 Summer Olympic Games in Athens, Greece.

- iii. **EPO injection:** blood and urine test can discover the presence of synthetic EPO. But EPO remains in the body for a very brief time, while its consequences last much longer. This means that the window for testing can be quite brief. Additional testing procedures aimed at detecting new types of EPO are presently being researched.

Synthetic oxygen carriers: a test is available that could find out the presence of synthetic oxygen carriers. It was first used in the year 2004.

Risks of Blood Doping

By increasing the number of red blood cells, blood doping causes the blood to clot. This clotting forces the heart to work harder than normal to circulate blood throughout the body. As a result, blood doping raises the risk of blood clot, heart attack and stroke.

An estimated 20m European Cyclists are said to have died as a result of blood doping over the past 25 years .Blood doping through transfusion carries additional risks. Tainted blood could spread infectious diseases such as HIV, Hepatitis B and Hepatitis C.

Overtime, repeated blood transfusion can cause a dangerous buildup of iron in the body. Improperly stored blood and improperly administered transfusions can cause acute lung injury and bacterial infection. Blood transfusions also have potential side effects of Allergic reaction, Fever and Rashes or hives. The risks of EPO injections include: Hyperkalemia (potentially dangerous elevation of plasma potassium levels in the body), High blood pressure and Mild flu-like symptoms. Athletes who use synthetic oxygen carriers have an increased risk of: Heart disease, Stroke, Heart attack and Blood clot

Restricted Drugs:

There are certain drugs and substances that are banned by the International Olympic Committee (IOC), and there are some drugs that are subject to restriction. Alcohol, marijuana, local anesthetics and corticosteroids are not prohibited by the International Olympic Committee

(IOC) but may be subject to test at the request of International Federation (Venkateswarlu, 2000).

Alcohol:

Alcohol is a very strong Central Nervous System (CBN) depressant which is widely used in sports. Brooks and Brooks (2001) observed that alcohol is a drug that can be found everywhere. It can be classified both as a nutrient as it provides energy (7kcal/g) and as antinutrients as it can interfere with the metabolism of other nutrients. Because of its depressant effect on the Central Nervous System (CNS), it is also classified as a drug (Venkateswarlu, 2000).

According to Marchie and Nnamdi, (2003); and Adeniyi & Ayangbemi, 2004) alcohol when consumed in large quantities, such down brain functioning, respiration and circulation to the point that death is inevitable. In small doses, alcohol appears to produce stimulating effects, and some users may act more jubilant, less rigid and more talkative than normal. These behavioural changes are caused by alcohol faster than it can be oxidized by the liver, the blood alcohol concentration (BAC) rises, and the depressant effects become more apparent and dangerous. A fairly predictable sequence of physiological and behavioral effects takes place when a person drinks alcohol at a rate faster than one drink every hour (NAFDAC, 2003).

Alcohol comes in different forms and it is both a stimulant and depressant. Alcohol is the main psychoactive ingredient in beer, whisky, spirit, wine, liquor, and locally brewed alcoholic beverages such as palm wine, pito, burukutu, and ogogoro. Alcohol is readily available and socially tolerated. It is the most widely and commonly abused substance among youths and adults alike. (Centre for Disease Control and Prevention (CDC), 2008).

Available studies support the view that most psychomotor functions related to athletic performance are impaired and not improved by alcohol consumption does not enhance strength, power, speed, muscular endurance or cardiovascular endurance (Mahdavita, Korcha

& Benagal, 2010). The depressant effects of alcohol on the Central Nervous System (CNS) decrease pain sensation, enabling an injured Athlete to continue to perform with a great risk of increasing the severity of the injury. It also suppresses the release of antidiuretic hormone (ADH) that causes more excretion of water in the urine, resulting in decrease blood pressure and dehydration. This can have serious consequences to performance in hot environment (Madhavita et al. (2010).

Effects of Alcohol (Damian, 2000) (Lawal, 2004)

Alcohol has several negative and dangerous effects on the athletes. These include: liver disease called liver cirrhosis, alcohol addiction and behavioral problems e.g., wife and child abuse, rape, fighting, alcohol abuse, alcohol intoxication, alcohol withdrawal problems, alcohol induced mental problem, Mood swings and mood changes, alcohol induced sexual dysfunction, spread of HIV/AIDS disease through unprotected sex and alcohol induced premature death.

Although alcohol is used routinely as beverage for enjoyment, alcohol can also have negative physical and mood-altering effects when abused. These physical or mental alterations in driver or plant operator may constitute serious personal and occupational safety risks (Ijeoma, 2007).

However, influencing these conditions appears to have a two-part response: an initial sensation of excitement followed by depressive psychomotor effects. It is on this note that WHO (2008) revealed that alcohol:

- a. Decreases accuracy, balance and reaction time
- b. Slows visual tracking and information processing
- c. Decreases strength, power and muscle endurance
- d. Dehydrates the body.

These adverse effects negates all the purported benefits thereby placing an Athletes on alcohol produces the ‘feeling’ of improved psychomotor skill, when in fact they are impaired while under the influence of even a very small amount of the drug (Wilmore & Costil, 2009). Kleiner (2006) asserted that there are some evidence that alcohol may be able to reduce anxiety and muscle tremor, but the associated decrease in coordination, balance and information processing would negate any real benefit to sports performance gained from the advantage in those areas. It should be noted that the depressive effects of alcohol does not dull the sensation of pain, but pain indicates injury. The Athlete on alcohol runs a greater risk of increasing the severity of an injury because without pain, they may be unaware of the extent of the damage. In addition, alcohol dehydrates the body by blocking the release of anti diuretic hormone, causing the kidneys to excrete excess body fluid in the form of urine.

Signs and Symptoms of Drug Abuse

The use and abuse of drugs are serious issues that should not be ignored or minimized and we should not sit back and hope they just go away if left untreated, use and abuse can develop into drug dependence. As a result, it is important to recognize the signs and symptoms of drug abuse early. According to Adolescents Health Information Project AHIP (2001), the following are signs and symptoms of drug abuse:

Physical and health warning signs of drug abuse includes: seizures without a history of epilepsy, eyes that are bloodshot or pupils that are smaller or larger than normal, frequent nose bleeding could be related to snorted drugs changes in appetite or sleep patterns. Sudden weight loss or cocaine weight gain. Degeneration in personal grooming or physical appearance, body, usual smells on breath, clothing, injuries or accidents and person who won’t or can’t tell you how they got hurt shakes, tremors, incoherent or slurred speech, impaired or unstable coordination.

Behavioural signs of drug abuse includes:

Frequently getting into trouble (arguments, fights, accidents, illegal activities), sudden change in relationships, favorite hangouts, friends, hobbies, activities, drop in training attendance and performance at school or work; loss of interest in extracurricular activities, hobbies, sports exercise; decreases motivation, complaints from co-workers, supervisors and instructors silent, withdraw, engaging in furtive or suspicious behaviours, uncommon or unexplained desire for money or financial problems like stealing or borrowing; missing valuables or money (Johnson, 2000).

Psychological warning signs of drug abuse

- Unexplained change in personality or attitude
- Lack of motivation; inability to focus, appearing lethargic or “Spaced out”
- Appearing fearful, withdrawn, anxious, or paranoid, with no obvious reason.
- Sudden mood changes, irritability, angry outburst or laughing at nothing

Warning signs of commonly Abused Drugs

- Marijuana Glassy, red eyes, loud talking, inappropriate laughter followed by loss of interest, sleepiness; motivation, weight gain or loss
- Hallucinogens (LSD, PCP): Dilated pupils; bizarre and irrational behaviour including extreme aggression, hallucinations; mood swings, detachment from people; absorption with self or other objects, slurred speech and confusion.
- Stimulants (Including amphetamines Cocaine, Crystal meth); Dilated pupils hyperactivity; euphoria; irritability; anorexia, excessive talking followed by depression or excessive sleeping at odd times, may go for a long period of time without food, or sleeping; weight loss; dry mouth and nose.
- Inhalants (glues, aerosols, vapors) Watery eyes, memory and thought, impaired vision, secretions from the nose and mouth or rashes around the nose and mouth,

headaches and nausea, appearance of intoxication; drowsiness; poor muscle control, changes in appetite, anxiety, irritability, lots of cans/aerosols in the trash (WHO, 2010).

- Heroin: Contracted pupils, non response of pupils to light, needle marks, sleeping at unusual times, vomiting, sweating, sniffing, coughing, twitching and loss of appetite.
- Depressants (including barbiturates and tranquilizers), appearing drunk as if from alcohol but without the associated odour of alcohol, difficulty concentrating, clumsiness, poor judgment, slurred speech, sleepiness and contracted pupils.

General effects of Drug Abuse to the body, and the people in the community

Psychological Influence of Drug Abuse: One of the primary effects of drug abuse can be found within the definition of drug abuse itself: an increasing, intense desire to use the drug above all else. Drug craving can shift a person's entire mental focus to obtaining the drug.

According to NIDA (2015), doping not only generate a situation of inadequate participation during competitive sports but also disrupts its ethical and moral basis, which affects the athletes psychologically. The punishment meted out to Ben Johnson of Canada is a good example. He had an edge over other participants if he was not caught, this could have been enough to intimidate others athletes out of the competition. On the other hand, he was caught and banned for two years which affected him psychologically and tarnished his image globally. Performance usually deteriorates with constant use of most drugs. This makes the athlete get to his peak very easily and this may cause frustration on the part of athletes. Consequently, the athlete will become very hateful to both coach and sometimes teammate who are not involved in drugs abuse. Indiscipline of all kinds result, such as breaking of bounds, hiding out of camps without permission seeking for where to get drug he depends on.

As the monetary demands increases, begging, borrowing or stealing becomes a way of life, this psychologically affects the athlete performance. His thought now is how to obtain

drug rather than thinking of how to train. Therefore he will not be able to perform his peak, because he is not sure of how and where to get more to procure the next round of drugs. If this happens during a major competition, the athlete is bound to make mistakes because he hardly concentrates.

Depression is another psychological emotion usually displayed by athletes that use drugs. At this point in time, if they are competing or training he will not be interested because no activity makes meaning to them at this time. Indifference to the athlete's personal image and anti-social behaviour may be obvious which may affect him psychologically. Most of the times they resort to self-defense mechanism to save image (Perkerson, 2002).

WHO (2003) observed that psychological drug abuse implications commonly include changes in mood. A person may be anxious, thinking about when they can get use drug, or depressed due to drug side implication.

Other psychological drug abuse side implications includes aggressiveness or irritability, selfishness, hopelessness, lack of pleasure from previously enjoyed activities, pressuring others into consuming drugs. Side effects of drug abuse then include preoccupation with where to get the drug, how to get money for the drug, and where and when the drug can be used.

Physical influence of Drug Abuse: Physical influence of drug abuse varies by drug but are typically seen in all systems of the body. Some of the primary physical implications of drug addiction take place in the brain. Drug addiction changes the way the brain functions and impacts how the body perceives pleasure. The influence of drug addiction are that because the drug repeatedly floods the brain with the chemicals dopamine and serotonin during drug use, the brain adapts and comes to expect, and depend on, these drug-induced highs.

Physical influence of drug abuse are also seen in babies of drug abusers as well as in mortality statistics. One influence of drug addiction is: children born to drug-using mothers

can be cognitively affected throughout life. Regarding mortality, one in four deaths are due to the implication of drug addiction. Other physical effects of drug abuse include contraction of HIV, hepatitis and other illnesses, heart rate irregularities heart attack, respiratory problems such as lung cancer, emphysema and breathing problems, abdominal pain, vomiting, constipation, diarrhea, kidney and liver damage, seizures, stroke, brain damage, changes in appetite, body temperature and sleeping patterns (NIDA, 2012).

Influence of Drug Abuse on Job Related Issues: The issues of substance in the work place has always been met with a dismissive attitude and swept under the carpet. However, when all incident at work are assessed collectively it becomes important for the company to see it as a great concern. According to studies conducted by the International Labour Organization (2015) on the abuse of alcohol and drugs in the work place, the following were observed:

- a. Absenteeism of employees with alcohol and drug problems was three times higher than those for other employees,
- b. Employees with chemical dependence problems claimed sick benefits three times more than other employees, and also made compensation claims five times more than other employees,
- c. 20% to 25% of injuries in the workplace involved employees under the influence of alcohol.
- d. Drugs and alcohol supplied at work amount to 15% to 30% of all accidents at work.

It is not only heavy drinking that might result in accidents at work, but even low quantities of alcohol consumption have resulted in accidents. A study conducted in the 1990's has shown that even though alcohol is consumed in small quantities, the effects vary amongst airline pilots performing routine tasks in a simulator under three alcohol conditions. The outcome was that, before the pilots could drink any alcohol, 10% of them could not perform all tasks correctly. After a blood alcohol concentration of 0.10/100ml, 89% could not perform

all that operations correctly and after all the alcohol left their system, 68% could not perform all the operations.

(ILO 2015) submitted that substance abuse should not be seen as only affecting heavy users as incident can result from the consumption of low quantities of alcohol as well. Thus, it becomes important for employers to implement preventive measures and management programmes rather than just concentrating on the identification and rehabilitation of heavy users.

The workplace can play an important role in preventing and providing remedies for substance abusers. The ILO has a code of conduct on the management of alcohol and drug- related issues in the workplace. This can serve as a guideline for employers wishing to implement appropriate measures to prevent, reduce and control alcohol and drug- related problems in the work place.

Economic Effect of Drug Abuse

Drug abuse imposes economic cost not only to the individual user alone but to the family and other relations as well as the state. For the individual, not only will the person's monies be 'channelled to drug procurement, but also, -they cannot engage in viable occupation to earn a living. The cost on the family is equally great because the concern they have for the love one can cost them to spend all the money they have that would have been used for something else for medical care and substance abuse rehabilitation program. This can leave the other members of the family destitute. In addition, it is said that time is money. This means that time spent trying to helping the person is the time that would. have been 'engaged in economic reproductive activities. In addition, since resources are scarce it requires that wise decisions should be made in its allocation. Drug abuse can have impact on the society as a whole in terms of diversion of billions of naira by the state in law enforcement and other efforts aimed at drug interdiction, criminal prosecution, and incarceration.

The obvious implication is that, the opportunity cost is the money spent in policing the drug menace and for medical care is the money that would have been used to provide education, public infrastructure and better healthcare for the citizens. Due to incidents of drug abuse, most state governor's wives (first ladies as they are called) have developed and launch foundations projects for the treatment of drug abuse victims in Nigeria. Though drug treatment centres are not well developed and no experienced professionals, it has become a veritable channel where public funds are dubiously diverted for the treatment of drug abuse victims.

Social Influence of Drug Abuse: Kobiowu (2006) observed that rapid social, economic and technological change may bring about certain circumstances, weaken the sense of family and reduce the sense of belonging to others groups and places. Stability of relationships, environment and expectant is a powerful force in helping people to manage their lives, especially the children and young adults. In some societies, the classical problem of balancing discipline and control of children with untiring support to encourage their exploration understanding of the word and self-realization may be complicated by substance abuse problem as well as a wide range of other condition.

Families can have a powerful influence in shaping the attitude, values, and behaviour of the children compared with peers waiters of influence in drug taking.

Table 1: List of Nigeria Athletes who Abused Drugs

Name	Event	Date of violation	Banned substance Anti-doping rule vio	Sanction
Clement Chukwu	Sprinting	1992	-	
ChiomaAjunwa	Sprinting Long Jump	1992	-	
Charity Opara	Sprinting	1992	-	4 years
Chidi Imoh	Sprinting	1994	-	
Daniel Effiong	Sprinting	1995	Methy/testosterone & Ephedrine	
Davidson Ezinwa	Sprinting	1996	Ephedrine	
		1999	HCG	
Osmond Ezinwa	Sprinting	1996	Ephedrine	
Mary Onyali- Omagbemi	Sprinting	1996	Ephedrine	3 months
Innocent Asonze	Sprinting	1999	-	
Gloria Amuche Nwosu	Sprinting	2005	Testoterone	
Funke Adeoye	Harmmer Throw	2007	Ephedrine	
Christy Ekpukhon	Sprinting	2008	Metenolone	
Olutoyin Augustus	Hurdles	2009	Abnormal testosterone	
Vivian Chukwuemeka	Shot put & Discuss	2009 2012	Oxymetholone Stanozolol	
Gloria Kemasuode	Sprinting	2009	Metenolone ephedrine	
AmakaOgoegbunam	Sprinting	2009	Methenolone	3 years
OmolaraOmosho	Sprinting	2009	Metenolone	2 years
Samuel Okon	Hurdling	2010	Methy/hexanamme	
Bola Gee Lawal	Sprinting	2010	Methandienone	2 years
FolashadeAbugan	Sprinting	2010	Testoteroneprohormo	
OludamolaOsayomi	Sprinting	2010	Methy/hexaneamine	
LawrettaOzoh	Sprinting	2012	Stanozolol	2 years
Cecilia Francis	Sprinting	2013	Metenolone	1 year
Samson Idiata	Long Jump	2015	Clenbuterol	
TosinAdeleye	Sprinting	2012 & 2015	Methenolone	

Source: Pal Marius Tingue (2016)

Appraisal of the Literature Reviewed

Social learning theory seem to be related theory to this study, as it seems to offer more explanation for effects of drug abuse on the health of the athletes. The importance of discovering drug abuse among athletes cannot be over emphasized. Drug abuse put the athletes into a condition in which they lack the sense of proper self-judgment, as found in this

study. Also the social cognitive learning theory which was pronounced by Bandura (1986) is also considered appropriate for this study. This theory deals with the behaviour that determines the person's thought processes, environment and behaviour itself.

Also personality theory of drug abuse is considered appropriate for this study since the main emphasis of the theory is based on certain traits or characteristics of an individual that abused drug. The emphasis of this theory is that there are certain qualities of characteristics in the individuals that abused drugs. Such personality characteristics are inability to delay satisfaction, low tolerance for frustration, poor coping ability and low self-esteem, poor impulse control and high emotional dependence on other people. People with these personality characteristics find it difficult to abstain from drug abuse.

Drug is any substance which by its chemical nature affects the structure and function of a living organism when taken (Moronkola & Okanlawon 2003; Ajala, 2006). Godley (2006) in Ogunsola (2011), described drug as any substance which when takes interacts with the body system, and it modifies the psychological and biological process of the body. The term "Drug" is often used synonymously with the terms such as medications, therapies, treatment medicine, therapeutics or medicaments. Drug abuse occurs when an individual takes a drug without medical or professional advice or directions, habitually, which may lead to significant impairment or distress manifestations of failure to fulfill major roles and obligations at school or home (Orji, Anyin & Otonoh, 2012).

Young athletes and other categories of athletes have different reasons for doping in sports. Most common reasons given were to improve appearance and to maximize their performance in sports. Green, Uryasz, Petr, and Bray (2001) also investigated the factors that influence collegiate athletes to consider taking performance-enhancing drugs. The data showed that only 1.1% of the participants admitted using anabolic steroids. Result further

showed that the primary reasons why athletes ingested performance-enhancing drugs were for performance enhancement and recovery from injuries.

Blooworth and McNamee (2009) held a series of group discussion with elite athletes to determine the possible reasons why athletes use performance-enhancing drugs. During the group discussion, the researchers used hypothetical situations to determine the participants' attitudes toward doping. The majority of the athletes reported that the primary reasons why they would take performance-enhancing drugs included improving one's financial situation and recovering from injuries. In contrast, the researchers found that the main reasons why athletes avoid using performance-enhancing drugs is not a moral norm; therefore, the participants cited shame as a deterrent for using Performance-Enhancing Drug (PEDs). The uses of drug is to gain superiority over opponents which under normal circumstances might not have occurred, this is corrupting the principle of fair play in sports competition. Sport is beginning to lose its valued joy and enjoyment. The participation is gradually fading out. Losers in sport now feel that they have not had a fair competition, since some athletes perform beyond their maximum natural capabilities with the aid of drugs. Consequently, sport administrators should squarely face this unwholesome challenges so as to preserve the sanity of sports.

Reardon and Creado (2014), explained Athletes abuse many types of drugs, and for different reasons. Hence, any discussion on the likely causes of drug abuse in sports should differentiate among the types of substances ingested. With respect to anabolic steroids, Readon, et al (2014) reported in the study of high school males and found reasons for ingesting steroids that improve athlete performance. Based on a review of the anecdotal and scientific literature and no researcher professional interaction with athletes as a sport man. The researcher have concluded that the causes of drugs use lie within three categories: physical, psychological/emotional, and social.

Today, drug use in sports has reached enormous proportions in society and is adversely affecting sports. The problem is more pronounced among professional athletics where Athletes, Coaches and Trainers misuse drugs in search of ways to improve performance. Many Athletes fails to take their time when making the decision whether to use drugs to their advantage. Unfortunately, Athletes may use drugs for the treatment of illnesses, therapeutic indications, recreational or social reasons, as muscular aids or to mask the presence of other. By doing this, the safety of the Athlete's health is being neglected. Drug use abuse has led to an increased number of deaths and supervisions of Athletes (Yuen, 2000).

The literature review revealed that drug abuse is very prevalence among Athletes based on various authors reviewed, and drug abuse are determined by various factors. Most of the Athlete reported the side effects of drug abuse which are common among Athletes.

CHAPTER THREE

RESEARCH METHODOLOGY

Introduction

Research methods are all those process and techniques used for the conduct of research. Research methods or techniques thus, refer to the procedure that the researcher used in carrying out investigation on problems. (Kothari & Garg, 2014). Singh (2007) described research methodology as the systematic procedures by which researchers commence research work from the primary identification of the research problems to their ultimate conclusions.

Abiola and Adeyeye (2006) also described research methodology as the sequential description of the research procedures. This chapter deals with the methods and procedure that were used to carry out the research study. The study investigated the prevalence, determinants and self-reported effects of drug abuse among athletes participating in national athletics championship in Nigeria. This chapter described the procedure and strategies that were employed in the conduct of this study. The sub-headings used include, research design, population of the study, research instrument, reliability of the instrument, sample and sampling technique, validity of the instrument, procedure for data collection and method of data analysis.

Research Design

The research design adopted for this study was descriptive research design of the survey type. This method allowed the researcher to obtain the necessary information of a selected sample of the target population. Abari (2007) observed that the descriptive method involved the exploration of an observed phenomenon or a description in precise form of the characteristics of an individual group, people or a phenomenon in education. It also enabled the researcher to interpret the perception of the entire population.

Population of the study

Akinade and Owolabi (2009), defined population as the total set of observations from which a sample is drawn. According to Adeniyi, Oyekanmi and Tijani (2011) population represents all conceivable elements, subjects or observations relating to a particular area of interest to the researcher. Population means the entirety of individuals or items that encompass the focus of the research and about which conclusion is often drawn (Taylor, Sinha & Ghoshal, 2014).

The population for the study comprised of all active (487) and (113) retired athletes in Nigeria. The population for the study were 600 athletes within the study area, in the 36 states including FCT Abuja in Nigeria (Athletics Federation of Nigeria (AFN) Secretariat & organizer of All Nigeria National Championship (2018).

Sample and sampling techniques used for the study

Sample is a subset of population that is used to represent the entire group, while sampling technique is a proportional representative group from the entire population. It is a method by which a portion is drawn from the population in such a way that every member of the population has equal probability of being selected (Jekayinfa, 2005). A sample is manageable section of a population but elements of which have common characteristics, also, it refers to any portion of a population selected for the study and on whom the information needed for the study is obtained (Awoniyi Aderanti&Tayo, 2011; Akinade& Owolabi, 2009; Adedokun, 2003). Sampling is a systematic process used to select a required portion of a target population (Daramola 2006). Bhattacharjee (2012) described multi-stage sampling technique as a probability sampling technique that is conducted using the combination of single-stage techniques like a two-stage combination of stratified and systematic sampling.

A multi-stage sampling procedure of purposive and stratified sampling procedure was used to sample respondents for this study.

Stage 1: purposive sampling procedure was used to select all the 36 states including FCT Abuja. The researcher purposively selected all the 36 states including the FCT Abuja because the athletes are not many as these enabled the researcher to reach out to all the athletes in Nigeria.

Stage 2: The athletes were stratified into two (2) groups (strata) which consisted of active national athletes and retired athletes in the championship. All the entire Athletes were sampled for the study which comprised of all active (487) and retired (113) athletes who also participated in the championship as administrative officers. A total population of 600 athletes that participated in the championship were sampled for the study.

Table 2: The breakdown of sample selected for the study

S/N	State	Total Population of active athletes	Total population of retired athletes	Sample
1	ABIA	12	5	17
2	ADAMAWA	12	4	16
3	AKWA-IBOM	16	3	19
4	ANAMBRA	13	4	17
5	BAUCHI	7	2	9
6	BAYELSA	10	2	12
7	BENUE	17	3	20
8	BORNO	8	2	10
9	CROSS-RIVER	23	4	27
10	DELTA	43	7	50
11	EBONYI	4	1	5
12	EDO	25	3	28
13	EKITI	11	2	13
14	ENUGU	9	3	12
15	GOMBE	10	2	12
16	IMO	6	2	8
17	JIGAWA	4	1	5
18	KEBBI	2	1	3
19	KADUNA	24	8	32
20	KANO	13	4	17
21	KATSINA	6	2	8
22	KOGI	13	2	15
23	KWARA	27	3	30
24	LAGOS	40	7	47
25	NIGER	6	2	8
26	NASARAWA	4	2	6
27	OSUN	5	3	8
28	OGUN	13	4	17
29	OYO	7	2	9
30	ONDO	20	5	25
31	PLATEAU	6	2	8
32	RIVERS	25	4	29
33	SOKOTO	8	2	10
34	TARABA	6	2	8
35	YOBE	9	2	9
36	ZAMFARA	6	2	8
37	FCT	19	4	23
	TOTAL	487	113	600

Source: Athletics Federation of Nigeria (AFN) Secretariat & organizer of All Nigeria National Championship (2018).

Research Instrument

According to Bhattacharjee (2012), a questionnaire is a research instrument or tool comprising a set of items intended to get responses from research participants or respondents in a much-standardized way. The research instrument that was used in the collection of data is a researchers designed questionnaire tagged Prevalence, Determinants and Self-reported Effects of Drug Abuse Among Athletes (PDSEDAAPNACQ)". The instrument were administered with the help of three (3) trained research assistants. In order to avoid interviewer's bias, the trained research assistants were retired athletes who know the respondents very well.

The questionnaire was in two sections. Section A focus on the demographic data of the respondents such as-gender age range, while section B deal with items on prevalence, determinants and self-reported effect of drug abuse A Likert rating scale format type of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) and modified Likert Scale of Always (A) occasionally (O) and Never (N) was adopted for the study with close ended questionnaire that was used for the study.

The respondents were required to indicate their level of agreement or disagreement to all the items in the questionnaire, on a four-point Likert rating scale format type prevalence, determinants and self-reported effects of drug abuse among athletes participating in national athletics championship in Nigeria. The respondents responded by ticking the alternative to each item on the questionnaire.

Validity of the Instrument

In order to ascertain the validity of the instrument of this study, as regards the accuracy, simplicity, completeness, exactness, appropriateness of language expression, precision, and correctness of words, face and content validity were adopted for this study. Face validity is the extent to which the instrument which is the source of information look

genuine, accurate simple, appropriate language of expression, precision, correctness of the worlds and good grammars. While content validity is the extent to which the subject matter and the objectives to be tested are covered by the items of the test or questionnaire. A researcher who has just designed a questionnaire to test for data collection should ensure that the items of the test or questionnaire can be used to answer the research questions hypotheses. No irrelevant item should be included in the questionnaire or test (Nkwocha, 2010).

Three copies of the instrument were presented to three experts from the Department of Health Promotion and Environmental Health Education, Faculty of Education, University of Ilorin for observations, comments and suggestions, experts comments were considered cautiously and carefully to improve the quality of the instruments. The instrument was further scrutinized by the researcher's supervisor. The contribution of the researcher's supervisor and the suggestions of the three experts were incorporated into the final draft of the questionnaire that was used for this study.

Reliability of the Instrument

The final draft of the research instrument was subjected to pilot study of test re-test method outside the study area in Ogbomoso, Oyo State but similar to the study area to determine the reliability level of the instrument. Twenty copies of questionnaires were administered to the twenty respondents at the interval of two weeks. The instrument was administered the first week and re-administered to the same respondent after two weeks interval. The result obtained in the first test was used to correlated with the second result after two weeks. Pearson's Product Moment Correlation (PPMC) statistics was used. A correlation coefficient of 0.88 was obtained. This is high enough and this shows that the instrument was reliable for the study.

Procedure for Data Collection

In order to gain recognition and acquire respect in the federal ministry of sports and Athletic federation of Nigerian (AFN) to conduct this study and consequently have free access and cordial relationship with the athletes, the researcher was given an introductory letter from the Head of Department, Health Promotion and Environmental Health Education, University of Ilorin, Ilorin Nigeria. The introductory letter was taken to the Ministry of Sports and Athletes Federation of Nigerian (AFN) Secretariat, the organizers of All the Nigeria National Athletics Championship for permission to conduct the study. Lastly, consent of each participant was sought by asking individual to fill respondent's informed consent form and confidentiality pledge to maximize their co-operation and indulgence.

The researcher also considered the ethical issues involved, by getting the ethical approval from the University of Ilorin Ethical Review Committee, as regards the quality control of the data collected, a field work manual was prepared for the research team members who were research assistants. The manual contains the following; clear description of the purpose and procedure of the study, guidelines on sampling procedures, explanation of the instrument items, rating technique, discussion of terminologies, instructional sheets on how to ask certain questions and how to record the answers and ethical issues guiding the study among others. The researcher organized a day intensive training session for the research assistants which lasted for three hours on how to interpret and administer the questionnaire while each of the items were explained to the respondents with the use of English Language and Pidgin English in order to get respondents responses. The training package covered all the topics discussed in the field work manual. At the end of the training session, refreshments were served and modest allowances given to the research assistants as transport fare. The questionnaire was given to the athletes to filled during their annual National Athletics Competition tagged All Nigeria National Athletics Championship held at National Stadium Abuja between August 13 to 18th August 2018. The athlete were given the

questionnaire to filled in their various camps hostels and stadium where the championship was taken place with the help of three trained research assistants.

Completed copies of the questionnaire were retrieved immediately from the respondents by the researcher and research assistants. In a situation where this is not feasible, a follow-up mechanism was employed by the researcher and research assistants. After the collection of the copies of questionnaire, they were checked for completeness and accuracy and a clear procedure was developed for scoring them appropriately so as to make them accessible when needed for analysis.

Ethical Consideration

The ethical approval was obtained from University of Ilorin Ethical Review Committee. The ethical approval covers the following:

- i) The Principle of Beneficence: It requires the researcher to do well and above all, do no harm. There was no manipulation of individuals and no treatment were withheld from any individual who may refuse to participate.
- ii) The Principle of Respect: It sometimes refers to respect for human dignity. It holds that persons have the right to determine whether they wish to participate in a study or not. Therefore, consent must be sought from each participant.
- iii) The Principle of Justice: It holds that study participants should be treated fairly. This implies that there was no prejudice on the part of the participants who refused to participate in the study.

Method of Data Analysis

Demographic data of the respondents and answers to research questions were analyzed using descriptive statistics of frequency counts, percentage and mean. All the nine postulated null research hypotheses were tested with aid of inferential statistics of Chi-square and regression at 0.05 alpha level of significance. Retrieved copies of questionnaire were

arranged, edited, collated and coded accordingly. Data entry processing and analysis were done with the use of Statistical Package for the Social Sciences (SPSS) software, version 23.0. All the research questions were answered using Percentage while inferential Statistic of Chi-Square were used to analyze data generated of the postulated hypotheses for the study at 0.05 alpha level.

CHAPTER FOUR

RESULTS AND DISCUSSION OF FINDINGS

The main purpose of this study was to determine prevalence, determinants and self-reported effects of drug abuse among athletes in National Athletics Championship. The study also sought to investigate the Codeine as a prevalence drug abuse among athletes, Marijuana as a prevalence of drug abuse among athletes, Use of Tramadol as a drug abuse and performance of athletes, Prevalence Drug Abuse Among Athletes; Financial reward determinant of drug abuse, Belief of athletes and drug abuse, Training facilities and drug abuse among athletes; and Physical health problem, Physiological problem, Psychological problem among athletes in National athletics Championship in Nigeria.

Six hundred copies of the questionnaire were distributed to respondent in which 600 questionnaires were properly filled and accounted for. Therefore, relevant data were collected from six hundred respondents properly completed their questionnaire. The data collected from the respondents were analyzed using descriptive and inferential statistics. Nine null hypotheses including the main hypothesis were generated and tested at 0.05 level of significance. This chapter therefore, presents the results obtained from the analysis of data and the interpretation of the findings on the study. The results are presented in three sections. The first section provides the descriptive (demographic) data, while the second section was analyzed with the use of inferential statistics. The results obtained on the null hypotheses postulated and tested are presented in this chapter.

Descriptive Data Analyses

Table 3: Table analysis on relationship the demographic data of the respondents

Variables	Frequency	Percentage
Age range		
15-20 years	50	8.0
21-26 years	110	18.0
27-32 years	120	20.0
33-38 years	230	39.0
39 years and above	90	15.0
Total	600	100.0
Religion		
Christianity	300	50.0
Muslim	272	45.3
African Traditional Rel.	28	4.7
Total	600	100.0
Ethnicity		
Hausa	175	29.2
Yoruba	200	33.3
Ibo	195	32.5
Others	30	5.0
Total	600	100.0
Qualification		
1st leaving School Cert.	6	1.0
SSCE	19	3.0
NCE	40	7.0
OND	75	12.0
HND	150	25.0
B.Sc	180	30.0
Master Degree	120	20.0
Ph.D	10	2.0
Total	600	100
Marital Status		
Married	380	63.0
Divorced	165	28.0
Widow	35	6.0
Widower	20	3.0
Total	600	100.0
Occupation		
Students	195	32.5
Civil servant	110	18.3
Self employed	145	24.2
Artisan	90	15.0
Trader	40	6.7
Others	20	3.3
Total	600	100.0

Demographic characteristics of respondents

Table 3 indicates that 50 (8.0%) of the respondents were between age range of 15- 20 years, 110 (18.0%) of the respondents were between age range of 21- 26 years, 120 (20.0%) of the respondents were between age range of 27- 32 years while 90 (15.0%) of the respondents were between age range of 36 years and above; for religion, 300 (50.0%) of the respondent were Christianity, 272 (45.3%) of the respondents were Muslim while 28 (4.7%) of the respondents were African Traditional worshipers; for ethnicity, 175 (29.2%) of the respondents were Hausa, 200 (33.3%) of the respondents were Yoruba, 195 (32.5%) of the respondents were Ibo while 30 (5.0%) of the respondents were others; for educational qualification, 6 (1.0%) of the respondent had 1st leaving School certificate, 19 (3.0%) of the respondents had SSCE, 40 (7.0%) of the respondents had NCE certificate, 75 (12.0%) of the respondents had OND certificate, 150 (25.0%) of the respondents had HND certificate, 180 (30.0%) of the respondents had B.Sc certificate, 120 (20.0%) of the respondents had Master Degree certificate while 10 (2.0%) of the respondent had Ph.D. certificate; for marital status, 380 (63.0%) of the respondents were married, 165 (28.0%) of the respondents were divorced, 35 (6.0%) of the respondents were widow while 20 (3.0%) of the respondents were widower; for occupation status, 195 (32.5%) of the respondents were students, 110 (18.3%) of the respondents were civil servants, 145 (24.2%) of the respondents were self employed, 90 (15.0%) of the respondents were Artisan, 40 (6.7%) of the respondents were traders while 20 (3.3%) of the respondents were others. This implies that respondents between age range of 27-32 years were more than other respondents in the group, majority of the respondents were Christianity; Yoruba respondents were more than others in the group; First Degree certificate participated more than other qualification holders, majority of the respondents were married; self employed respondents were in majority.

Research Questions:

Research Questions 1: What is the prevalence of codeine abuse among athletes in National athletics championship in Nigeria?

Table 4: prevalence of codeine abuse among athletes in National athletics championship in Nigeria

S/N	ITEMS	YES (%)	NO (%)
1.	I constantly use codeine to enhance my performance	315 (52.5)	285 (47.5)
2.	Codeine is very effective in sport as it often enhancing performance of athletes.	270 (45.0)	330 (55.0)
3.	Use of codeine help athletes to win more medals during competition	360 (60.0)	240 (40.0)
4.	Codeine helps to boost athlete performance in any competition.	360 (60.0)	240 (40.0)
	Total Average	1665 (55.0)	1335(45.0)

Table 4 presents the prevalence of codeine abuse among athletes in National athletics championship in Nigeria. The table indicated that respondents in support of YES (55.0%) were more than respondents in support of NO (45.0%). And this implies that codeine abuse is more prevalence drug abuse among athlete.

Research Questions 2: What is the Prevalence of Marijuana abuse among athlete's in National athletics championship in Nigeria?

Table 5: Prevalence of Marijuana abuse

S/N	ITEMS	YES(%)	NO(%)
5.	Marijuana is one of substance that is commonly abused by the athletes in order to boost their performance in a competition.	315 (52.5)	285 (47.5)
6.	Constant intake of marijuana by athletes usually lead to proactive that sometimes hinder their performance in a competition.	375 (62.5)	225 (37.5)
7.	Most athletes who are addicted to marijuana often end up performing woefully.	360 (60.0)	240 (40.0)
8.	Used of marijuana and other related substances constantly has nothing to do with the athlete's performance in a competition.	264 (44.0)	336 (56.0)
	Total Average	1314(55.0%)	1086 (45.0%)

Table 5 presents the Prevalence of Marijuana abuse among athletes in National athletics championship in Nigeria. The table indicated that respondents in support of YES (55.0%) were more than respondents in support of NO (45.0%). And this implies that Marijuana abuse is more prevalence drug abuse among athlete.

Research Questions 3: What is the Prevalence of tramadol abuse among athletes in National athletics championship in Nigeria?

Table 6: Prevalence of tramadol abuse

S/N	ITEMS	YES(%)	NO(%)
9.	Tramadol substance is usually abused by athlete to enhance their performance.	321 (53.5)	279 (46.5)
10.	Constant use of tramadol has negative effect on athletes performance especially during National championship.	327 (54.5)	273 (45.5)
11.	Majority of the athletes who constantly used tramadol as a performance enhancing drug often end up having injuries like muscle cramp during their races in a competition.	384 (64.0%)	216 (36.0%)
12.	Athletes who constantly used tramadol only excel in local competitions but usually perform below expectation in a National competition.	372 (62.0)	228 (38.0)
	Total Average	1404(58.0%)	996 (42.0%)

Table 6 presents the Prevalence of tramadol abuse among athletes in National athletics championship in Nigeria. The table indicated that respondents in support of YES (58.0%) were more than respondents in support of NO (42.0%). And this implies that tramadol abuse is more prevalence drug abuse among athlete.

Research Questions 4: Will financial reward for outstanding performance be a determinant for drug abuse among athletes in National athletics championship in Nigeria?

Table 7: Frequency, mean and ranking of financial reward for outstanding performance

S/N	ITEMS	SA	A	D	SD	Mean	Rank
16.	Huge amount of money attached to the wining medals make athletes to engage in doping in order to enhance their performance in National Championship.	189(31.0)	171(28.0)	189(32.0)	51(9.0)	2.83	1 st
17.	Meeting the expectations of stakeholders such as spectators, media and corporate bodies in term of prize award to the winner usually lead athletes to engage in performance enhancement drug.	195(32.0)	120(20.0)	249(42.0)	36(6.0)	2.79	2 nd
18.	Accomplishment of financial reward usually lead athletes to abuse drug before and during competition	132(22.0)	225(37.0)	141(24.0)	102(17.0)	2.69	3 rd
19.	Financial reward for outstanding performance by athletes can sometimes lead to occurrence of drug abuse among athletes in National Championship.	132(22.0)	219(36.0)	183(31.0)	66(11.0)	2.64	4 th

Table 7 presents the financial reward for outstanding performance as a determinant for drug abuse by the athletes in National athletics championship in Nigeria. The table indicated that respondent in support of Strongly Agree (SA) and Agree (A) were more than respondents who were in support of Disagree (D) and Strongly Disagree (SD). And this implies that financial reward for outstanding performance will be a determinant for drug abuse among athletes in National athletics championship in Nigeria. The table indicates that

item 16 (with mean score of 2.83), item 17 (with mean score of 2.79) and item 18 (with mean score of 2.69) were ranked 1st, 2nd and 3rd respectively. The items stated that “Huge amount of money attached to the wining medals make athletes to engage in doping in order to enhance their performance in National Championship”, “Meeting the expectations of stakeholders such as spectators, media and corporate bodies in term of prize award to the winner usually lead athletes to engage in performance enhancement drug” and “Accomplishment of financial reward usually lead athletes to abuse drug before and during competition” are regarded as the most financial reward for outstanding performance as a determinant for drug abuse by the athletes in National athletics championship in Nigeria.

However, item 19 (with mean score of 2.64) was ranked 4th respectively. The item was the least financial reward for outstanding performance as a determinant for drug abuse among athletes in National athletics championship in Nigeria. Since all the items have mean scores that are above the mid-mean score of 2.50. It implies that the respondents agreed that all the items are the financial reward for outstanding performance as a determinant for drug abuse among athletes in National athletics championship in Nigeria.

Research Questions 5: Will beliefs of performance enhancement drug be a determinant for drug abuse among athletes in National athletics championship in Nigeria?

Table 8: Frequency, mean and ranking of Beliefs of performance enhancement drug

S/N	ITEMS	SA	A	D	SD	Mean	Rank
20.	Belief of athletes in drugs to enhance their performance lead to drug abuse.	189(31.0)	171(28.0)	189(32.0)	51(9.0)	2.83	1 st
21.	Belief of athletes in drug is that it often help them to win and become popular.	195(32.0)	120(20.0)	249(42.0)	36(6.0)	2.79	3 rd
22.	Belief of athletes on supplement drug to supply energy in order to enhance their performance lead to drug abuse.	132(22.0)	225(37.0)	141(24.0)	102(17.0)	2.64	5 th
23.	Belief of athletes on drug is that they cannot perform without taking hard drug which lead to drug abuse in competition	132(22.0)	219(36.0)	183(31.0)	66(11.0)	2.69	4 th
24.	Athletes belief that use of drug often bring fame in a competition	180(30.0)	162(27.0)	222(37.0)	36(6.0)	2.81	2 nd

Table 8 presents the beliefs of performance enhancement drug be a determinant for drug abuse among athletes in National athletics championship in Nigeria. The table indicated that respondent in support of Strongly Agree (SA) and Agree (A) was more than respondents who were in support of Disagree (D) and Strongly Disagree (SD). And this implies that beliefs of performance enhancement drug be a determinant for drug abuse among athletes in National athletics championship in Nigeria. The table indicates that item 20 (with mean score of 2.83), item 24 (with mean score of 2.81) and item 21 (with mean score of 2.79) were ranked 1st, 2nd and 3rd respectively. The items stated that “Belief of athletes in drugs to enhance their performance lead to drug abuse”, “Athletes belief that use of drug often bring fame in a competition” and “Belief of athletes in drug is that it often help them to win and become

popular” are regarded as the most beliefs of performance enhancement drug be a determinant for drug abuse among athletes in National athletics championship in Nigeria.

However, item 22 (with mean score of 2.64) was ranked 5th respectively. The item was the least beliefs of performance enhancement drug be a determinant for drug abuse among athletes in National athletics championship in Nigeria. Since all the items have mean scores that are above the mid-mean score of 2.50. It implies that the respondents agreed that all the items are the beliefs of performance enhancement drug be a determinant for drug abuse among athletes in National athletics championship in Nigeria.

Research Questions 6: Will facilities be a determinant for drug abuse among athletes in National athletics championship in Nigeria?

Table 9: Frequency, mean and ranking of facilities be a determinant for drug abuse

S/N	ITEMS	SA	A	D	SD	Mean	Rank
25.	Accessibility to training facilities by the athletes often make them to engage in performance enhancement drug which lead to drug abuse in a National Championship.	150(25.0)	213(35.0)	144(24.0)	93(16.0)	2.70	4 th
26.	Lack of training facilities to be used by the athletes in preparing for National Championship often lead to drug abuse	180(30.0)	201(33.0)	129(22.0)	90(15.0)	2.78	2 nd
27.	Inadequate preparation as a result of inadequate training facilities constitute to high rate of drug abuse among National athletes.	165(27.0)	159(26.0)	237(40.0)	39(7.0)	2.75	3 rd
28.	Restriction of Athletes to use training facility to prepare for competition usually lead to drug abuse.	210(35.0)	273(45.0)	78(13.0)	39(7.0)	3.09	1 st

Table 9 presents the facilities be a determinant for drug abuse among athletes in National athletics championship in Nigeria. The table indicated that respondent in support of Strongly Agree (SA) and Agree (A) was more than respondents who were in support of Disagree (D)

and Strongly Disagree (SD). And this implies that facilities determinant for drug abuse among athletes in National athletics championship in Nigeria. The table indicates that item 28 (with mean score of 3.09), item 26 (with mean score of 2.78) and item 27 (with mean score of 2.75) were ranked 1st, 2nd and 3rd respectively. The items stated that “Restriction of Athletes to use training facility to prepare for competition usually lead to drug abuse”, “Lack of training facilities to be used among athletes in preparing for National Championship often lead to drug abuse” and “Inadequate preparation as a result of inadequate training facilities constitute to high rate of drug abuse among National athletes” are regarded as the most facilities determinant for drug abuse among athletes in National athletics championship in Nigeria.

However, item 25 (with mean score of 2.70) was ranked 4th respectively. The item was the least facilities determinant for drug abuse among athletes in National athletics championship in Nigeria. Since all the items have mean scores that are above the mid-mean score of 2.50. It implies that the respondents agreed that all the items are the facilities determinant for drug abuse among athletes in National athletics championship in Nigeria.

Research Questions 7: What are the physical self-reported effects of drug abuse among athletes in National athletics championship in Nigeria?

Table 10: Frequency, mean and ranking of physical self-reported effects of drug abuse

S/N	ITEMS	SA	A	D	SD	Mean	Rank
29.	Physical discomfort is one of self-reported effect of drug abuse that usually hinder their performance	209(34.0)	186(31.0)	132(22.0)	78(13.0)	2.86	1 st
30.	Physical injuries sustained is a self-reported effect of drug abuse that often occur to athletes as a result of poor performance	195(32.0)	117(19.0)	255(43.0)	33(6.0)	2.79	2 nd
31.	Physical Injuries such as Strain, Sprain and Wounds are self-reported physical effect of drug abuse among National athletes	102(17.0)	234(39.0)	195(32.0)	69(12.0)	2.61	3 rd
32.	Physical problem such as physical disabilities is a self-reported effect of drug abuse that occur to athletes.	123(20.0)	189(31.0)	171(29.0)	117(20.0)	2.53	4 th

Table 10 presents the physical self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. The table indicated that respondent in support of Strongly Agree (SA) and Agree (A) was more than respondents who were in support of Disagree (D) and Strongly Disagree (SD). And this implies that physical self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. The table indicates that item 29 (with mean score of 2.86), item 30 (with mean score of 2.79) and item 31 (with mean score of 2.61) were ranked 1st, 2nd and 3rd respectively. The items stated that “Physical discomfort is one of self-reported effect of drug abuse that usually hinder their performance”, “Physical injuries sustained is a self-reported effect of drug abuse that often occur to athletes as a result of poor performance” and “Physical Injuries such as Strain, Sprain and Wounds are self-

reported physical effect of drug abuse among National athletes” are regarded as the most physical self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

However, item 32 (with mean score of 2.53) was ranked 4th respectively. The item was the least physical self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. Since all the items have mean scores that are above the mid-mean score of 2.50. It implies that the respondents agreed that all the items are the physical self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

Research Questions 8: What are the physiological self-reported effects of drug abuse among athletes in National athletics championship in Nigeria?

Table 11: Frequency, mean and ranking of physiological self-reported effects of drug abuse

S/N	ITEMS	SA	A	D	SD	Mean	Rank
33.	Physiological problem like inability of body system to function well is a self-reported effect of drug abuse that sometimes happen to athletes.	156(26.0)	231(38.0)	128(21.0)	87(15.0)	2.760	3 rd
34.	Weight problem is a self-reported effect of drug abuse among athletes.	102(17.0)	234(39.0)	195(32.0)	69(12.0)	2.61	5 th
35.	Muscular deformity is a self reported effect of drug abuse that happen to athlete during competition.	186(31.0)	177(29.0)	189(32.0)	48(8.0)	2.83	1 st
36.	Health disorder is a self reported effect of drug abuse that usually happen to athletes.	186(31.0)	129(21.0)	243(41.0)	42(7.0)	2.765	2 nd
37.	Sudden changes in body physique of athletes is a self-reported effect of drug abuse	138(23.0)	225(37.0)	135(23.0)	102(17.0)	2.66	4 th

Table 11 presents the physiological self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. The table indicated that respondent in support of Strongly Agree (SA) and Agree (A) was more than respondents who were in support of Disagree (D) and Strongly Disagree (SD). And this implies that physiological self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. The table indicates that item 35 (with mean score of 2.83), item 36 (with mean score of 2.765) and item 33 (with mean score of 2.760) were ranked 1st, 2nd and 3rd respectively. The items stated that “Muscular deformity is a self reported effect of drug abuse that happen to athlete during competition”, “Health disorder is a self reported effect of drug abuse that usually happen to athletes” and “Physiological problem like inability of body system to function well is a self-reported effect of drug abuse that sometimes happen to athletes” are regarded as the most physiological self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

However, item 34 (with mean score of 2.61) was ranked 5th respectively. The item was the least physiological self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. Since all the items have mean scores that are above the mid-mean score of 2.50. It implies that the respondents agreed that all the items are the physiological self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

Research Questions 9: What are the psychological self-reported effects of drug abuse among athletes in National athletics championship in Nigeria?

Table 12: Frequency, mean and ranking of psychological self-reported effects of drug abuse

S/N	ITEMS	SA	A	D	SD	Mean	Rank
38.	Emotional disorder such as stress, tension and anxiety are self-reported effect of drug abuse among athletes.	165(27.0)	255(43.0)	114(19.0)	66(11.0)	2.86	2 nd
39.	Panic is a self-reported effect of drug abuse that often constitute health problem for athletes	141(23.0)	231(39.0)	150(25.0)	78(13.0)	2.72	5 th
40.	Psychological disorder as a result of bad behaviour is a self-reported effect of drug abuse that often occur among athletes	180(30.0)	231(38.0)	126(21.0)	63(11.0)	2.88	1 st
41.	Mental disorder is a self-reported effect of drug abuse	162(27.0)	183(30.0)	189(32.0)	66(11.0)	2.73	4 th
42.	Fear to compete with other athletes is one of the self-reported effect of drug abuse	159(26.0)	207(34.0)	153(26.0)	81(14.0)	2.74	3 rd

Table 12 presents the psychological self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. The table indicated that respondent in support of Strongly Agree (SA) and Agree (A) was more than respondents who were in support of Disagree (D) and Strongly Disagree (SD). And this implies that psychological self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. The table indicates that item 40 (with mean score of 2.88), item 38 (with mean score of 2.86) and item 42 (with mean score of 2.74) were ranked 1st, 2nd and 3rd respectively. The items stated that “Psychological disorder as a result of bad behaviour is a self-reported effect of drug abuse that often occur among athletes”, “Emotional disorder such as stress, tension and anxiety are self-reported effect of drug abuse among athletes” and “Fear to compete with other athletes is

one of the self-reported effect of drug abuse” are regarded as the most psychological self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

However, item 39 (with mean score of 2.72) was ranked 5th respectively. The item was the least psychological self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. Since all the items have mean scores that are above the mid-mean score of 2.50. It implies that the respondents agreed that all the items are the psychological self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

Research Hypotheses

Hypothesis 1: *Codeine will not be a prevalence drug abused among athletes in National athletics championship in Nigeria*

Table 13: Chi-square analysis on codeine as prevalence drug abused among athletes in National athletics championship in Nigeria

S/N	ITEMS	YES	NO	Row total	df	Cal. X ² Value	Cri. value	Remark
1	I constantly use codeine to enhance my performance	315 (52.5)	285 (47.5)	600				
2	Codeine is very effective in sport as it often enhancing performance of athletes.	270 (45.0)	330 (55.0)	600				
3	Use of codeine help athletes to win more medals during competition	360 (60.0)	240 (40.0)	600	3	297.0	7.81	Ho Rejected
4	Codeine help to boost athlete performance in any competition.	360 (60.0)	240 (40.0)	600				

The findings from table 13 indicate that calculated Chi-square value of 297.00 and the table value of 7.81 with the degree of freedom of 3 at 0.05 level of significance. Since the calculated chi-square value was greater than the critical value, the null hypothesis was rejected. This implies that Codeine will be a prevalence *drug* abused among athletes in National athletics championship in Nigeria.

Hypothesis 2: *Marijuana will not be a prevalence drug abused among athletes in National athletics championship in Nigeria.*

Table 14: Chi-square analysis on marijuana as prevalence drug abuse among athletes in National athletics championship in Nigeria

S/N	ITEMS	YES	NO	Row total	Df	Cal. X ² Value	Cri. value	X ²	Remark
5.	Marijuana is one of substance that is commonly abuse by the athletes in order to boost their performance in a competition.	315 (52.5)	285 (47.5)	600					
6.	Constant intake of marijuana by athletes usually lead to proactive that sometimes hinder their performance in a competition.	375 (62.5)	225 (37.5)	600					
7.	Most athletes who are addicted to marijuana often end up performing woefully.	360 (60.0)	240 (40.0)	600	3	443.0	7.81		Ho Rejected
8.	Used of marijuana and other related substances constantly has nothing to do with the athletes performance in a competition.	264 (44.0)	336 (56.0)	600					

The findings from table 14 indicate that calculated Chi-square value of 443.00 and the table value of 7.81 with the degree of freedom of 3 at 0.05 level of significance. Since the calculated chi-square value was greater than the critical value, the null hypothesis was rejected. This implies that Marijuana will be a prevalence drug abused among athletes in National athletics championship in Nigeria.

Hypothesis 3: *Tramadol will not be a prevalence drug abused among athletes in National athletics championship in Nigeria.*

Table 15: Chi-square analysis on Tramadol as prevalence drug abuse among athletes in National athletics championship in Nigeria

S/N	ITEMS	YES	NO	Row total	Df	Cal. X ² Value	Cri. value	Remark
9.	Tramadol substance usually abused by athlete to enhance their performance.	321 (53.5)	279 (46.5)	600				
10.	Constant use of tramadol has negative effect on athletes performance especially during National championship.	327 (54.5)	273 (45.5)	600				
11.	Majority of the athletes who constantly used tramadol as a performance enhancing drug often end up having injuries like muscle cramp during their races in a competition.	384 (64.0%)	216 (36.0%)	600	3	665.85	7.81	Ho Rejected
12.	Athletes who constantly used tramadol only excel in local competitions but usually perform below expectation in a National competition.	372 (62.0)	228 (38.0)	600				

The findings from table 15 indicate that calculated Chi-square value of 665.85 and the table value of 7.81 with the degree of freedom of 3 at 0.05 level of significance. Since the calculated chi-square value was greater than the critical value, the null hypothesis was rejected. This implies that Tramadol will be a prevalence drug abused among athletes in National athletics championship in Nigeria.

Hypothesis 4: *Financial reward for outstanding performance will not significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria.*

Table 16: Chi-square analysis on financial reward as determinant for outstanding performance among athletes in National athletics championship in Nigeria

S/N	ITEMS	SA	A	D	SD	Df	Cal. X ² Value	Cri. value	X ²	Remark
16.	Huge amount of money attached to the winning medals make athletes to engage in doping in order to enhance their performance in National Championship.	189 (31.5)	171 (28.5)	189 (31.5)	51(6.5)					
17.	Meeting the expectations of stakeholders such as spectators, media and corporate bodies in term of prize award to the winner.	195 (32.5)	120 (20.0)	249 (41.5)	36(6.0)					
18.	Accomplishment of financial reward usually lead athletes to abuse drug before and during competition	132 (22.0)	225 (37.5)	141 (23.5)	102 (17.0)	9	16.92	214.86		Ho Rejected
19.	Financial reward for outstanding performance by athletes can sometimes lead to occurrence of drug abuse among athletes in National Championship.	132 (22.0)	219 (36.5)	183 (30.5)	66(11.0)					

The findings from table 16 indicate that calculated Chi-square value of 214.86 and the table value of 16.92 with the degree of freedom of 9 at 0.05 level of significance. Since the calculated chi-square value was greater than the critical value, the null hypothesis was rejected. This implies that financial reward for outstanding performance will significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria.

Hypothesis 5: *Beliefs of performance enhancement drug will not significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria.*

Table 17: Chi-square analysis on Beliefs of performance enhancement drug as determinant for drug abuse among athletes in National athletics championship in Nigeria

S/N	ITEMS	SA	A	D	SD	Df	Cal. X ² Value	Cri. X ² value	Remark
20.	Belief of athletes in drugs to enhance their performance lead to drug abuse.	189 (31.5)	171 (28.5)	189 (31.5)	51(8.5)				
21.	Belief of athletes in drug is that it often help them to win and become popular.	195 (32.5)	120 (20.0)	249 (41.5)	36(6.0)				
22.	Belief of athletes on supplement drug to supply energy in order to enhance their performance lead to drug abuse.	132 (22.0)	225 (37.5)	141 (23.5)	102 (17.5)	12	21.03	216.90	Ho Rejected
23.	Belief of athletes on drug is that they cannot perform without taking hard drug which lead to drug abuse in competition	132 (22.0)	219 (36.5)	183 (30.5)	66(11.0)				
24.	Athletes belief that use of drug often bring fame in a competition	180 (30.0)	162 (27.0)	222 (37.0)	36(6.0)				

The findings from table 17 indicate that calculated Chi-square value of 216.90 and the table value of 21.03 with the degree of freedom of 12 at 0.05 level of significance. Since the calculated chi-square value was greater than the critical value, the null hypothesis was rejected. This implies that beliefs of performance enhancement drug will significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria.

Hypothesis 6: *Training facilities will not significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria.*

Table 18: Chi-square analysis on Training facilities as determinant for drug abuse among athletes in National athletics championship in Nigeria

S/N	ITEMS	SA	A	D	SD	Df	Cal. Value	X ²	Cri. X ² value	Remark
25.	Accessibility to training facilities by the athletes often make them to engage in performance enhancement drug which lead to drug abuse in a National Championship.	150 (25.0)	213 (35.5)	144 (24.0)	93 (15.5)					
26.	Lack of training facilities to be used by the athletes in preparing for National Championship often lead to drug abuse	180 (30.0)	201 (33.5)	129 (21.5)	90 (15.0)					
27.	Inadequate preparation as a result of inadequate training facilities constitute to high rate of drug abuse among National athletes.	165 (27.5)	159 (26.5)	237 (39.5)	39 (6.5)	9	16.92		427.50	Ho Rejected
28.	Restriction of Athletes to use training facility to prepare for competition usually lead to drug abuse.	210 (35.0)	273 (45.5)	78 (13.0)	39 (6.5)					

The findings from table 18 indicate that calculated Chi-square value of 214.86 and the table value of 16.91 with the degree of freedom of 9 at 0.05 level of significance. Since the calculated chi-square value was greater than the critical value, the null hypothesis was rejected. This implies that Training facilities will significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria.

Hypothesis 7: *Physical effects will not significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria*

Table 19: Chi-square analysis on Physical effects as self-reported effects of drug abuse among athletes in National athletics championship in Nigeria

S/N	ITEMS	SA	A	D	SD	Df	Cal. X ² Value	Cri. value	X ²	Remark
29.	Physical discomfort is one of self-reported effect of drug abuse that usually hinder their performance	209 (34.0)	186 (31.0)	132 (22.0)	78 (13.0)					
30.	Physical injuries sustained is a self-report effect of drug abuse that often occur to athletes.	195 (32.5)	117 (19.5)	255 (42.5)	33 (5.5)					
31.	Physical Injuries such as Strain, Sprain and Wounds are self-reported physical effects.	102 (17.0)	234 (39.0)	195 (32.5)	69 (11.5)	9	16.92	187.92		Ho Rejected
32.	Physical problem such as physical disabilities is a self-reported effect of drug abuse that occur to athletes.	123 (20.5)	189 (31.5)	171 (28.5)	117 (19.5)					

The findings from table 19 indicate that calculated Chi-square value of 187.92 and the table value of 16.92 with the degree of freedom of 9 at 0.05 level of significance. Since the calculated chi-square value was greater than the critical value, the null hypothesis was rejected. This implies that Physical effects will significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

Hypothesis 8: *Physiological effects will not significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.*

Table 20: Chi-square analysis on Physiological effects as self-reported effect of drug abuse among athletes in National athletics championship in Nigeria

S/ N	ITEMS	SA	A	D	SD	Df	Cal. X ² Value	Cri. value	X ²	Remark
33	Physiological problem like inability of body system to function well is a self-reported effect of drug abuse.	156 (26.0)	231 (38.5)	128 (21.0)	87 (14.5)					
34	Weight problem is a self-reported effect of drug abuse among athletes.	102 (17.0)	234 (39.0)	195 (32.5)	69 (11.5)					
35	Muscular deformity is a self-reported effect of drug abuse.	186 (31.0)	177 (29.5)	189 (31.5)	48 (8.0)	12	21.03	214.11		Ho Rejected
36	Health disorder is a self-reported effect of drug abuse that usually happen to athletes.	186 (31.0)	129 (21.0)	243 (40.0)	42 (7.0)					
37	Sudden changes in body physique of athletes is a self-reported effect of drug abuse	138 (23.0)	225 (37.5)	135 (22.5)	102 (17.0)					

The findings from table 20 indicate that calculated Chi-square value of 214.11 and the table value of 21.03 with the degree of freedom of 9 at 0.05 level of significance. Since the calculated chi-square value was greater than the critical value, the null hypothesis was rejected. This implies that physiological effects will significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

Hypothesis 9: *Psychological effects will not significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.*

Table 21: Chi-square analysis on Psychological effects as self-reported effect of drug abuse among athletes in National athletics championship in Nigeria

S/N	ITEMS	SA	A	D	SD	Df	Cal. X ² Value	Cri. value	X ²	Remark
38.	Emotional disorder such as stress, tension and anxiety are self-reported effect of drug abuse among athletes.	165 (27.5)	255 (42.5)	114 (19.0)	66(11.0)					
39.	Panic is a self-reported effect of drug abuse that often constitute to health problem of athletes	141 (23.5)	231 (38.5)	150 (25.0)	78(13.0)					
40.	Psychological disorder as a result of bad behaviour is a self-reported effect of drug abuse.	180 (30.0)	231 (38.5)	126 (21.0)	63(10.5)	12	21.03	326.10		Ho Rejected
41.	Mental disorder is a self-reported effect of drug abuse	162 (27.0)	183 (30.5)	189 (31.5)	66(11.0)					
42.	Fear to compete with other athletes is one of the self-reported effect of drug abuse	159 (26.5)	207 (34.5)	153 (25.5)	81(13.5)					

The findings from table 21 indicate that calculated Chi-square value of 326.10 and the table value of 21.03 with the degree of freedom of 12 at 0.05 level of significance. Since the calculated chi-square value was greater than the critical value, the null hypothesis was rejected. This implies that psychological effects will significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

Summary of Findings

The following are the findings of the study;

It was revealed that respondents between age range of 27-32 years were more than other respondents in the group, majority of the respondents were Christianity; Yoruba respondents were more than others in the group; First Degree certificate participated more than other qualification holders, majority of the respondents were married; self employed respondents were in majority. The prevalence of codeine, Marijuana and tramadol abuse among athletes in National athletics championship in Nigeria were high; financial reward for outstanding performance will be a determinant for drug abuse among athletes in National athletics championship in Nigeria; beliefs of performance enhancement drug will be a determinant for drug abuse among athletes in National athletics championship in Nigeria; facilities will be a determinant for drug abuse among athletes in National athletics championship in Nigeria

The following “Physical discomfort is one of self-reported effect of drug abuse that usually hinder their performance”, “Physical injuries sustained is a self-reported effect of drug abuse that often occur to athletes as a result of poor performance” and “Physical Injuries such as Strain, Sprain and Wounds are self-reported physical effect of drug abuse among National athletes” are regarded as the most physical self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

The following “Muscular deformity is a self reported effect of drug abuse that happen to athlete during competition”, “Health disorder is a self reported effect of drug abuse that usually happen to athletes” and “Physiological problem like inability of body system to function well is a self-reported effect of drug abuse that sometimes happen to athletes” are regarded as the most physiological self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

The following “Psychological disorder as a result of bad behaviour is a self-reported effect of drug abuse that often occur among athletes”, “Emotional disorder such as stress, tension and anxiety are self-reported effect of drug abuse among athletes” and “Fear to compete with other athletes is one of the self-reported effect of drug abuse” are regarded as the most psychological self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

Discussion of Findings

Hypothesis 1: Codeine will not be a prevalence drug abused among athletes in National athletics championship in Nigeria. This hypothesis was rejected meaning that Codeine will be a prevalence drug abused by the athletes in National athletics championship in Nigeria And this support the statement of reported by Adegboyega (2014) that 89,166 cases out of which 1,222 athletes tested positive by IOC Medical Commission.

Hypothesis 2: Marijuana will not be a prevalence drug abused among athletes in National athletics championship in Nigeria. This hypothesis was rejected meaning that Marijuana will be a prevalence drug abused among athletes in National athletics championship in Nigeria. And this report from (IOC Medical Commission, 2007) that International Paralympics Committee sanctioned nine athletes between 2005 and 2006 for anti-do-ping rule violations for a period of two years in sporting events such as power lifting, shooting, athletics and archery.

Hypothesis 3: Tramadol will not be a prevalence drug abused among athletes in National athletics championship in Nigeria. This hypothesis was rejected meaning that Tramadol will be a prevalence drug abused among athletes in National athletics championship in Nigeria. And this support the view from the following studies that the most common illicit drugs used as performance enhancing agents by athletics include anabolic agents, amphetamine, cocaine, ephedrine, caffeine and diuretics Oshodin, 2004; Laker, 2005

and Synthetic Report, 2007. The use of illicit drugs did not become a major issue in sports until after the 1988 Olympics in Mexico, when many athletes set new records). In Nigeria, the illicit use of drugs to enhance performance by elite athletes in Nigeria has been a source of embarrassment not only to government but also to sports administrators, coaches and spectators (Akosu, 2007)

Hypothesis 4: Financial reward for outstanding performance will not significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria. This hypothesis was rejected meaning that Financial reward for outstanding performance will significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria. And this support the view of Jean, (2006) that Given the extensive pressure on skilled athletes to succeed and be competitive, a view held and often communicated by their coaches and corporate sponsors, it is not surprising that performers explore all possible avenues to reach-perhaps even go beyond-their performance potential. The sources of this pressure are rarely identified in combating drug use. As indicated earlier, coaches and sponsors can and often do contribute to the competitors' dilemma by reinforcing the need to win at any cost. The expectations of parent, media, and peers only fuel the pressure to maximize performance by artificial substance abuse

Hypothesis 5: Beliefs of performance enhancement drug will not significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria. This hypothesis was rejected meaning that Beliefs of performance enhancement drug will significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria. And this support the view of NIDA, (2015) that the most common physical cause for ingesting drugs is attempting to enhance performance. Depending on the drug being taken, the athlete may be seeking benefits such as increased strength, endurance, alertness, and aggression, or decreased reaction time, fatigue, anxiety, and muscle tremor.

Hypothesis 6: Training facilities will not significantly be a determinant for drug abuse by the athletes in National athletics championship in Nigeria. This hypothesis was rejected meaning that Training facilities will significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria. And this support the view of Reardon and Creado (2014) attempted to identify the reason for using anabolic steroids among elite race walkers. Increasing performance, the wish to win, and financial incentive (e.g.' commercial contracts and product endorsements) were the three principal motives to use banned performance-enhancing drugs. Forty-one percent of these athletes had heard of endurance walkers using such drugs. Apparently, the pressure of performing well in international events, especially the Olympic Games, exacerbates the problem.

Hypothesis 7: Physical effects will not significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. This hypothesis was rejected meaning that Physical effects will significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. And this support the view of National Institute on Drug Abuse, (2015) that Athletes also ingest drugs to cope psychologically with physical discomfort and to expedite recovery from injury. For example, athletes may feel that medical treatment is not sufficient to eliminate pain. They will take drugs to attenuate pain with no prescription and without the coach's knowledge.

Hypothesis 8: Physiological effects will not significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. This hypothesis was rejected meaning that Physiological effects will significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. And this support the view of NIDA, (2015) that Amphetamines are often used to control appetite and diuretics to reduce fluid weight. These drugs quickly reduce weight, allowing the athlete to compete in a lower, more favorable weight group or at a weight deemed more facilitative to success

Hypothesis 9: Psychological effects will not significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. This hypothesis was rejected meaning that Psychological effects will significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria. And this support the view of Reardon et al, (2014) that Emotions such as stress, tension and anxiety may be antecedent causes of ingesting drugs, particularly hallucinogens and beta blockers. Drugs taking attenuates the stress and tension associated with the pressures to succeed over a prolonged time period, such as a full season on longer. Thus, recreational drug use may reflect a short-term approach to managing stress and anxiety or be a vehicle for escaping an unpleasant present situation

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The study investigated Prevalence, determinants and self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

The related literature critically reviewed in this work is derived from scholar articles such as international, national and local journals, periodicals, projects, dissertations, internet, thesis and relevant textbooks. The following sub-headings were critically examined: Theoretical framework; Conceptual framework; Prevalence and incidence of drug use among athletes; Determinants of drug abuse among athletes; Reasons why people take drug; General Commonly Drug of Abuse by Athletes; Types of Drug that Athletes use; Self-reported effects of drug abuse among Athletes; Effects of Commonly Abused Drugs on Athletes; Signs and symptoms of drug abuse; General effects of drug abuse to body of an Athletes, and the people in the community; List of Nigeria Athletes who Abused Drugs; Appraisal of the literature Reviewed.

The research design that was adopted for this study was a descriptive research design of the survey type. The population for the study comprised of all National active (487) and (113) retired athletes in Nigeria. The population for the study were 600 athletes within the study area, in the 36 states including FCT Abuja in Nigeria. A multi-stage sampling procedure of purposive, stratified and systematic was used to sample respondents for this study.

Chapter four revealed the result and discussion of the finding while chapter five revealed summary, conclusions and recommendations

Conclusions

Based on the findings of this study that were obtained from the study the following major conclusions were drawn:

1. Codeine will be a prevalence drug abused among athletes in National athletics championship in Nigeria
2. Marijuana will be a prevalence drug abused among athletes in National athletics championship in Nigeria
3. Tramadol will be a prevalence drug abused among athletes in National athletics championship in Nigeria
4. Financial reward for outstanding performance will significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria
5. Beliefs of performance enhancement drug will significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria
6. Training facilities will not significantly be a determinant for drug abuse among athletes in National athletics championship in Nigeria
7. Physical effects will significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria
8. Physiological effects will significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria
9. Psychological effects will significantly be self-reported effects of drug abuse among athletes in National athletics championship in Nigeria.

Recommendations

Based on the findings of this study the following recommendations are made:

1. Athletes should be informed and discourage about drug abuse such as codeine, marijuana, tramadol to enhance their performance in sports because of the negative effects on the body.
2. The use of financial reward belief on performance enhance drug, and inadequate training facilities should be avoided to prevent drug abuse among athletes
3. Athletes should be discouraged and avoided from drug abuse so that it will not lead to devastating effect of physical, physiological and psychological effect of Athletes body and health.

Suggestions for Further Studies

The study investigated Prevalence, Determinants and Self-reported Effects of Drug Abuse among Athletes in National Athletics Championship in Nigeria. On the basis of the findings of this study the researcher suggested the following areas for future research studies:

This research work is limited to National Athletics Trial Championship, same studies can be replicated in other National Championship. Further research can also be carried out to cover other sporting events in Nigeria.

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