

Drugs in Sports: A Big Issue

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Abstract:

A substance that alters the physiological and psychological process of the person is referred to as Drug. When drug is taken in an optimum amount after the prescription, it works as a medicine because these drugs are used for the diagnosis, prevention and treatment of disease. But when the quantity of the drug increase with in short period of time have adverse effect on health. Now these days, these drugs are used by athletes in sports because the performance of athletes can be improved and enhanced is termed as doping and they are ready to face challenges during sports. But performance enhancing drugs in sport has been made a major problem. According to rules of sports, no player can take unfair advantages over other players by the mean of any method. This paper represent the role of drugs in the life of athletes. It also discuss about the organization The Olympic Movement Anti-Doping Code (OMADC) and The World Anti-Doping Authority (WADA) which have code for the sport athletes and some prohibited drug and their derivatives, and prohibited methods. The most prohibited drug is anabolic steroids and followed by the stimulants and diuretics.

Keywords: Drug, Doping, World Anti-Doping Authority, Olympic Movement Anti-Doping Code

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Introduction

All athletes compete on the level playing field is assumed by the integrity of the sport. For governing bodies of individual sports, the use and abuse of performance-enhancing drugs (PEDs) have become a universal that creates complex challenges. Because of their adverse effects and performance actions, drugs are the unacceptable and illegal part of sports. The prohibited drugs are very helpful in muscle mass increment, strength and resistance to fatigue and the most important advantage is the central nervous system impact by which athletes make more aggressive during training and competition period. Many factors contribute to the athletes in which psychological and social support factors play a vital role to engage in drug abuse. The factors may be desired to enhance performance, ego high perception, the concern of athletes on their own mistakes, the lack of self-confidence, low social support and so on. Many athletes believe that they can enhance their performance by the use of the drug in a short period of time in spite of adapting advanced techniques. Athlete's general psychology say that performance matters in their sports, it does not matter how they achieve it (Kaur, Masaun and Bhatia, 2014).

It has been observed for thousands of years that the physical performance and development of muscles are enhanced by the use of drugs. Today, different types of drugs are employed by an individual for improving their athletic performance and physical appearance. The fixation of society on winning race and better physical looks increase the demand for performance-enhancing drugs. According to Cireli *et al* report in 1992, 60% of athletes use the doping. Laure in 1997 stated that the children or sports teenagers approximately 3-5% and 5 to 15% adult sportsmen take doping drugs. (Ozdemir *et al.*, 2005)

Since the ancient time, the performance in sports is improved by the use of drugs. In competition, the advantage is gained by the drugs, is called doping. The drugs remain a serious issue because they put the health of athlete's in risk and the integrity and reputation of the sport are also in threat. According to International Olympic Committee (IOC), Doping is defined as *'the use of any substance foreign to the body and taken with the sole intention of increasing in the unfair manner his/her performance in competition'*. The definition of substance use by the European Union 'the intention of increasing the athletic performance by the specific methods and

techniques do not matter at all (Frenger, Pitsch and Emrich, 2016).

Another definition of Doping was defined by the World Anti-Doping Agency (WADA) which was established in 1999 and gave the definition in 2004 as *'occurrence of one or more of the following anti-doping rule violations mentioned in the WADA code'*. These are anti-doping rule violation which is mentioned in WADA code:

- In the athlete's body, the existence of any prohibited substance or its metabolites.
- If the prohibited substance and prohibited methods are used.
- If the collection of the sample is refused or evaded.
- For out of competition testing, the athlete availability's violation is done which includes the failure to provide the required information that is confirmed based on the reasonable rules.
- The attempt to tamper by the use of any part of doping control.
- If prohibited methods and prohibited substances are possessed.
- Trading of any prohibited substance or prohibited method.
- The prohibited substance or prohibited method for any athlete are managed. (Beotra, 2013)

Performance Enhancing Drugs

There are different types of PED such as Anabolic steroids, stimulants, Human growth hormone and supplements. These drugs are prohibited by WADA.

- Anabolic steroids – These are the synthetic drugs by which proteins stimulate and help build non-fat muscle mass. The athletes become stronger and can play for a long period of time. The type of steroid is Tetrahydrogestrinone, is also known as THG or The Clear used by the high profile athletes.
- Stimulants: It is the type of drug that helps to boost up the athlete's energy level and also helpful after energetic training. An example is an amphetamine.

- Human Growth Hormone (HGH) is provided if it is prescribed and injection is a method of administration. But athletes use this drug for improving endurance and strength.
- Another drug is Androstenedione also called andro. This drug was prohibited by the National Football League (NFL), Olympics, National Collegiate Athletic Association (NCAA) and then, Major League Baseball (MLB). The body process testosterone with the help of it. (Kaur, Masaun, and Bhatia, 2014).

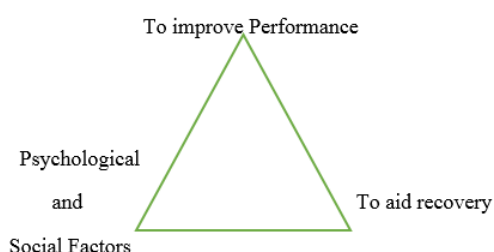


Figure 1: - Reason for taking PEDs

Drug and Sport in Society

According to some social scientists, the use of drugs in the sports is considered as a social phenomenon that is related to a myriad of sociocultural factors. Sociocultural factors like gender, ethnicity, poverty, and marginalization are identified by these social scientists for explaining the drug usage and sports participation between different sections of the human population. They claim that initialization and maintenance of drug use, and in sports participation, a vital role is played by the sociocultural factors. Sport and artistic activities that are comprised by 'Providing Alternative' model. This model has a goal to keep the young generation away from drugs by promoting the healthy lifestyle.

Because of this goal, it has been considered as a promising preventative model. Mellanby, Rees, and Tripp in 2000 suggested that the promotion of drug prevention and the engagement of the community in it can be possible by the programmes which are generally for the young people using sport, have an important effect on the results. In the same way, another researcher Lisha, Carano, and Deluchhi in 2014 gave the report that the less use of marijuana by the youth who are engaged in the sports. According

to Kwan et al., in 2014 found that the rate of using the drug is decreased as the participation in sports increase. It is a big problem to find a positive correlation between drug usage and sports activity because various factors affect this relationship. The mixed relationship is seen between the sports participation and drug usage among young people. In 2016, Creado and Reardon proposed some athletes use an illicit drug for improving their physical built and performance. Gender, class, and status are the sociocultural variables have thoughtful effects on drug use between sports participants and non-participants. Hence, there is a need to focus on the socio-economic and cultural factors for the better understanding of sports participation and drug usage relationship (Rambareem, Mousavi and Ahmadi, 2017).

Origins of Drug Testing

From the ancient time, the use of the drug is being increased day by day which gives the adverse effect on the body as well as lifestyle. It is very important to develop and then implementation of preventive activities because of adverse health effects (Reproductive problems, hepatic dysfunction, and testicular atrophy) by the use of drugs (Wiefferink et al., 2007). For reducing the use of these illicit drugs, many organization works in which The Olympic Movement Anti-Doping Code (OMADC) and The World Anti-Doping Authority (WADA) are the organizations. They test the drug in the human body and have some rules.

The Olympic Movement Anti-Doping Code (OMADC)

Because of the development and increment in the use of drugs in the field of sports, the drug testing was evolved. First coordinated testing was an effort by the International Olympic Committee (IOC) for the detection of anabolic steroids at the Montreal Olympics 1976. Before this organization, many sporting bodies already had rules of anti-doping for testing procedures to implement their particular rules. Though, only IOC organizes the anti-doping programme at an international level by the development of OMADC. OMADC are applied for the Olympic Games, World Championships and those sports competing in the Olympic competition. OMADC have some methods to know the anti-doping rules, various examples of inconsistent application are present for those sports that are

excluded from the anti-doping rules and have their own rules and regulations for a particular sport.

WADA- The World Anti-Doping Authority

In November 2009, The World Anti-Doping Authority (WADA) has its 10th anniversary. This organization was established in 1999 for promoting, coordinating and monitoring the fight which is against the doping in sport internationally. The acceptance that is unanimous resulted in a consultation time having code at the conference on Doping which was organized globally in March 2003 at Copenhagen.

In 2004, Code of WADA was introduced and for the promotion, coordination, and regulation of anti-doping rules, WADA programs were outlined. The universal acceptance by sporting federations of WADA code has the filtering down effect on the local level which ensured that individual participant binds to the agreement to the code by the membership to the particular sporting organization. Core articles and non-core articles are contained by the code. The core articles and agreement for promoting the non-core articles should be implemented by the sporting organizations that accept the code.

The prohibited list which was prepared and published by WADA have an international standard to identify the substances and methods that are prohibited in competition, out of competition and in particular sports. The list of drugs is updated annually and list committee determines the list again. The significant increment in the number of testing procedures and detection of performance-enhancing drugs in sport is the result of the management of anti-doping rules (Greenhow, 2010).

Drugs Prohibited in Sports by WADA

In 1967, IOC devised a list of prohibited drugs that consisted only narcotics, stimulants, and analgesics. In this list, only 40 or 50 were included at that time. Until the constitution of WADA in 1999, these drugs are upgraded by IOC Medical Commission. By the WADA, the banned list was updated by the inclusion of the new group in the banned or existing group. In recent, more than 300 drugs and metabolites are present in the list that comes in these categories of drugs:

Prohibited Substance in Sports

- S0 – Substances which is Nonapproved
- S1 – Agents of Anabolic
- S2 – Hormones of peptide, growth factors and their related substances
- S3 – Beta-2 agonists excluding salbutamol, salmeterol, and formoterol
- S4 – Hormone and metabolic modulators
- S5 – Diuretics and other masking agents
- S6 – Stimulants
- S7 – Narcotics
- S8 – Cannabinoids
- S9 – Glucocorticosteroids

Prohibited Methods in Sports

- M1- Blood and blood components Manipulation
- M2 – Manipulation of Chemical and physical
- M3 –Doping of Gene

Substances Prohibited in Specific Sports

- P1- Alcohol
- P2- Beta-blockers (Beotra, 2013)

Review of Literature

Ozdemir *et al.*, (2005) Studied about the doping and performance enhancing drugs (PED) in the Sivas, Turkey. They concluded that only 71 subjects out of 883 subjects use the PED. The rate is higher in athletes (14.5%) rather than non-athletes (1.8%). The athlete's education must have a top priority and attention should be paid to the young population who are facing challenges due to the health problems caused by the use of drugs.

Greenhow, (2010) concluded that the great flexibility and an opportunity for the sporting tribunal can be provided by the incorporation of discretionary powers in WADA in 2009. It will be interesting if trading society test permits a review which is based on the business of sport with the question whether the sanctions of drug abuse are still acceptable and necessary' for the protection of

legitimate interests. In the business of sports, the questions surrounding the relative equality of bargaining power may give growth to an examination of parties and consideration of unconscionability or provisions of the Trade Practices Act.

Mifsud, Attard, and Attard, (2011) proposed about the WADA (World Anti-Doping Authority) which is updated every year. In spite of having the anti-doping drugs rules, the testing of drug doping is irregular. By the report of numbers of positive cases, it becomes necessary for local stakeholder that they should be aware and educated about the rules of WADA list that contains about the which medicine is prohibited and which medicine should be given.

WADA and FIFA's anti-doping strategies point toward the education and prevention of the drug abuse. The main motive of these organization is to protect the players from risk and ensure about equal chances for all competitors by applying the doping control regulations, positive sample data collection, research support and collaboration with other organizations.

Reardon and Creado, (2014) stated that in all sports and age groups the drugs are taken by athletes. They gave many suggestions; provide should tell the athlete about the risk of continued use of drugs and encourage the athlete for the discontinuous use of the abused substance, Different sports and different levels of competition have great variance in drug testing programs. For the determination of the deterrent efficiency of various types of performance-enhancing drugs screening programs, high quality, prospective, and randomized trials should be undertaken. And ineffective programs of PED should be changed, the sign and symptoms of drug abuse with the change in behavior and health should be recognized by the Physicians, trainers, coaches, parents, and others as they must be trained and many other suggestions were given by the researchers. In the end, they said, safe alternatives to PED use should be provided to athletes that include optimal nutrition, weight-training strategies and psychological approaches by which the performance is improved.

Kaur, Masaun, and Bhatia, (2014) stated that a major problem is drug abuse in athletes which have potential causes. many persons such as trainers, coaches, psychiatrists and psychologists, and

physiotherapists should give safe alternatives to PED use that include optimal nutrition, Plans for weight-training, and psychological approaches for improving the performance. These factors help to increase the athlete's confidence in their natural abilities. To encounter the pressure of any competition, they should guide athletes towards the positive approach. Coaches should praise their athletes whether they win or lose, they should never criticize them for their mistake while they should motivate them to learn from their mistakes.

Rambaree, Mousavi, and Ahmadi, (2017) try to find out the relation between drug use and sports participation among the young generation in the area of Mauritius. In their research they found three main points for the wellbeing young people; age is an important factor in drug usage between young people, Drug use can be reduced by the engagement in sports and the last one is the numbers of the female is less in sports compare to males. The sociocultural lens is very useful in the understanding of connections between sports participation and drug usage. In Mauritius, policymaker should continue their efforts towards the participation of Youngers in sports and campaign against drug usage by the youth association and clubs.

Conclusion

Doping means the use of drugs in sports for enhancing the performance. With the improvement in the performance, the drugs are harmful to the health for both physically and mentally. The sports activity can be helpful in reducing the drug use as more engaged in the activity can divert the common young population from drugs. This paper studied the performance-enhancing drug (PED). It is observed that the drug usage is increased as the age increase. Most of the young population are engaged in it. To reduce the pressure of competition in sports activities, athletes take heavy drugs and then perform in the playground. It is concluded that the providers should aware the athletes about the risk of drug usage. The education programme on drugs and their adverse effect should be run. And different youth programme regarding sports should be initiated by which the discontinuous use of the drug can be increased. Coacher should support their player in every condition (win or loss) and give a chance to improve their mistake in the game.



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