

Effect of Doping on Performance of Sportspersons

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Abstract – Doping or the use of drugs in athletics is not only an elite concern but also more so in athletics. Doping identification puts a significant focus in scientific literature, although the adverse effects on the safety of athletes is seldom addressed by doping officials. Androgenic anabolic steroids are popular for their positive muscle mass and strength effects. Human growth hormone also increases muscle mass, but more extracellular fluid rises, not the actual muscle mass. Growth hormone is not a significant impact on muscle stamina, stamina or aerobic ability for recreational athletes; it promotes anaerobic activity.

The administration of erythropoietin improves the ability of blood carrying oxygen to boost endurance, whereas systemic control of the beta adrenergic agonist may have a positive effect on sprint performance, and beta adrenergic agonists may minimize muscle trembling. Such medicines can thus enhance the physical output in selective ways. However, most doping agents have serious effects, particularly when combined, at high doses, and for a long time.

Key Words: Doping or Drug Abuse, Athletes, Sports Performance etc.

INTRODUCTION

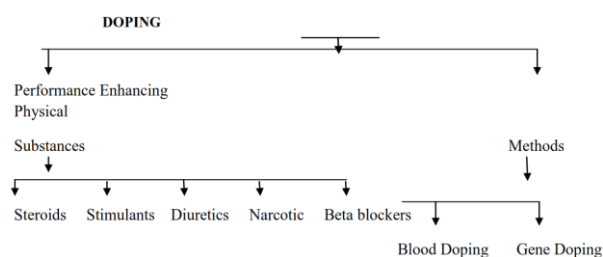
Doping is the use of banned sports substances by professional athletes in organized sport. The term doping is commonly used by sports competitive organizations. Drug usage to enhance the success of most major sporting organizations, including the International Olympic Committee, is deemed unacceptable and thus banned. In addition, overt behavior taken by athletes (or athletic programs) to prevent punishment worsen ethical violations with open frustration and cheating. The use of drugs in sports goes back centuries to the very beginning of the sports idea. In ancient times, when a nation's best athletes or warriors were chosen, they were fed diets and viewed as helping to improve the muscles. For example Berserkers may drink a mixture called butotens in the Scandinavian mythology, so that their physical strength can be greatly enhanced at the expense of madness. The hypothesis was, although it was contested, that the mixture was made from the Mushroom Amanita.

- When any athlete uses banned substances or methods to improve in sports it is called as doping.
- Doping means athletes taking illegal substances to improve their performance; For Example – Drugs and Steroid used. Doping controlling agencies:-

WADA = World Anti-Doping Agency

NADA = National Anti-Doping Agency

CLASSIFICATIONS OF DOPING



PERFORMANCE ENHANCING SUBSTANCES:

- **Anabolic steroids (Androgenic agents):**

Androgenic compounds such as anabolic steroids are the most widely used drugs. Typically, anabolic steroids are administered in tablet form or injected into muscles. In creams or gels, others are added to the skin. This allows athletes to train more and get faster and muscle building.

- **Stimulants:**

They warn athletes and can resolve fatigue impacts by increasing heart velocity and blood flow. The

athlete uses a pill, an injection or a spray to boost cocaine, amphetamines, modafinil, etc.

- **Diuretics:**

They are used to remove fluid from the body, which can hide other drug use or in sports such as boxing and horse riding, help competitors "make the weight."

- **Narcotic Analgesics and Cannabinoids:**

They are employed to disguise wounds or tiredness – but they can make lesions worse in practice. Drugs such as morphine, cocaine, are opioids. Which are used by athletes to relieve pain and anxiety. Nonetheless, opiate – the painkiller codeine derived is allowed.

- **Beta Blockers:**

In sports like archers and firefighting, the use of beta-blocker drugs that are recommended for avoiding heart failure and high blood pressure is forbidden, as it keeps the heart rate down and eliminates trembling. For example:- Archery, Shooting, Golf etc.

PHYSICAL METHODS:

- **Blood Doping:**

It is the process of increasing the red blood cells by blood transfusion. It is less common, where blood is removed from the body and injected back in later to boost oxygen levels. There are two types:

- a. Autologous Doping: Help to increase oxygen in the blood.
- b. Homologous Doping: Increase strength in the muscles.

- **Gene Doping:**

Gene doping is cell or gene manipulation to increase the efficiency of the body in sports. The functioning of ordinary healthy cells can be strengthened. Throughout muscle and bone growth, gene therapy plays a significant role. It also accelerates the repair of the injured tendon and ligament.

SIDE EFFECTS OF DOPING ON SPORTSPERSON:

- **Anabolic Steroids:**

This can lead to blood pressure, sudden heart attack, shifting mood, violence, depression. This may also cause males to be bald and impotent. (Men's small amount of sperm). It increased women's facial hair and voices.

- **Stimulants:**

Causes insomnia, anxiety and aggression. It directly effects on the central nervous system and cardio vascular system. For Example – Poor judgment.

- **Diuretics:**

Cause dehydration, drowsiness and mineral imbalance, kidney damage.

- **Narcotics:**

Can cause of loss of balance and co-ordination, cause drowsiness, vomiting, constipation. It may cause fainting and coma.

- **Beta blockers:**

Reduces endurance, headache and weak digestion. Risk of heart attack due to slow heart rate.

CONCLUSION:

Doping or substance misuse is a big issue with potential root causes for athletes. The desire to be the best in sport dates from old days as well as the use of drugs to boost results. With that pressure from athletes, it is not shocking that athlete's substance abuse is virtually everywhere. Evidence based healthy options for the best diet, best fitness methods and psychological approaches to enhancing success should be provided by trainers, coaches, physical instructors and other healthcare professionals, all leading to athletes trust their natural abilities.

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