

The Mind Fullness of Manoeuvre and Mishandle of Drugs in Sports

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மலர்: 11

சிறப்பிதழ்: 1

மாதம்: ஏப்ரல்

வருடம்: 2024

P-ISSN: 2321-788X

E-ISSN: 2582-0397

DOI:

<https://doi.org/10.34293/sijash.v11iS1-April.7749>

Introduction

The word Drug, taken from French word Drogue which means Dry Herb, strongly suggests that earliest drugs were taken out from plant sources. Earliest people used to treat diseases by some unconventional methods, using plants, animal products and minerals, of them plants were given priority.

It is the most abused group out of all the categories of drugs. The anabolic agents are used clinically for the treatment of various ailments, but athletes use these drugs to increase muscle mass, protein metabolism, etc. The commonly used anabolic steroids are nandrolone, stanozolol, testosterone, etc.

The first known death of an athlete, which was related to drugs, was a cyclist who had taken a “speed ball” of heroin and cocaine. The most famous early case of drug abuse, however, occurred in the 1904 Olympic Games in St. Louis. Marathon winner Thomas Hicks, of the USA, collapsed after the race as throughout the race he was repeatedly given doses of strychnine and brandy. After returning from the 1952 Olympics, US weight-lifting coach Hoffman started searching for a hormone that would help gain in weight and strength as he was convinced that the successful Soviet team had used some “hormone stuff”. The product he got was Dianabol, an anabolic steroid first produced in 1958. During the 1950s and 1960s, there were no rules forbidding the use of pharmaceuticals and, as the news of Dianabol spread among sportsmen, cyclists, skiers and other athletes realized the importance of the substance and used it.

Banned Substances

In 1967, the International Olympic Committee (IOC) Medical Commission was formed, which published a banned list of performance enhancing drugs.

Anabolic Steroids

A compound which is considered to be responsible for the construction of muscle mass. From the 1940s androgens were used to treat problems associated with trauma, burns, surgery and radiation therapy.

Stimulants

The basic effect of stimulants is to get messages to a complex pathway of neurones in the brainstem that is responsible for maintaining consciousness. The nervous system is stimulated, speeding up heart rate and raising blood pressure.

Narcotic Analgesics

Painkillers are used normally in life, but in sports, especially tolerance to pain is needed and injuries are common these substances are used.

Beta Blockers

Originally used by patients with irregular heartbeats, beta blockers relieve stress by controlling the level of adrenaline and lowering the heart rate. They are used by show business performers.

Diuretics

These substances cause the kidneys to produce more urea and speed up waste disposal process. They are used for reducing fluid levels by competitors in weight-controlled sports.

Peptide Hormones

Peptide hormones are water-soluble hormones composed of a few amino acids that introduce a series of chemical reactions to change the cell's metabolism. Examples of peptide hormones and analogues are human Growth Hormone (hGH), human Chorionic Gonadotropin (hCG), and Erythropoietin (EPO).

Health Risks

There are definite health risks associated with the use of alcohol and illegal substances. Alcohol or any other drug used in excess over time can produce illness, disability, and death. The health consequences of substance abuse may be immediate and unpredictable, such as cardiac arrest with cocaine use, or more subtle and long term damage, such as liver deterioration associated with the prolonged use of alcohol. In addition to health related problems, other concerns relating to substance abuse include the following:

Alcohol

Alcohol is often not thought of as a drug largely because its use is common for both religious and social purposes in most parts of the world. It is an addictive drug, however, and compulsive drinking in excess has become one of modern society's most serious problems. Health hazards associated with the excessive use of alcohol or with alcohol dependency include dramatic behavioral changes, retardation of motor skills, and impairment of reasoning and rational thinking. These factors result in a higher incidence of accidents and accidental death for such persons than for nonusers of alcohol. Nutrition also suffers and vitamin and mineral deficiencies are frequent. Prolonged alcohol abuse causes bleeding from the intestinal tract, damage to nerves and the brain, psychotic behavior, loss of memory and coordination, damage to the liver often resulting in cirrhosis, impotence, severe inflammation of pancreas, and damage to the bone marrow, heart, testes, ovaries and muscles. Damage to the nerves and organs is usually irreversible. Cancer is the second leading cause of death in alcoholics and is 10 times more frequent than in nonalcoholic. Sudden withdrawal of alcohol from persons dependent on it will cause serious psychological withdrawal symptoms.

Drugs

The use of illicit drugs usually causes the same general type of physiological and mental changes as alcohol, though frequently those changes are more severe and more sudden. Death or coma resulting from overdose of drugs is more frequent than from alcohol.

Cocaine

Cocaine most often appears as a white crystalline powder or an off-white chunky material. Cocaine is the most powerful stimulant of natural origin and is most commonly inhaled as a powder. It can be dissolved in water and used intravenously. The cocaine extract (freebase/crack) is smoked. Users progress from infrequent use to dependence within a few weeks or months, psychological and behavioral changes resulting from use include over-stimulation, psychotic behavior, social isolation, and memory problems. An overdose produces convulsions and delirium and may result in death from cardiac arrest. Discontinuing the use of cocaine requires considerable assistance, close supervision, and treatment.

Amphetamines/Methamphetamines (Speed, Love Drug, Ecstasy)

Amphetamines come in pill, capsule, or powder form. Methamphetamine can be smoked, snorted, orally ingested, and injected. It is accessible in many different forms and may be identified by color, which ranges from white to yellow to darker colors such as red and brown. Methamphetamine comes in a powder form that resembles granulated crystals and in a rock form known as "ice," which is the smoking version of methamphetamine that came into use during the 1980s. Patterns of use and associated effects are similar to cocaine. Severe intoxication may produce confusion, rambling or incoherent speech, anxiety, psychotic behavior, ringing in the ears, hallucinations, and irreversible

brain damage. Intense fatigue and depression resulting from use can lead to suicide. Large doses may result in convulsions and death from cardiac or respiratory arrest.

Heroin and Other Opiates

Heroin comes in various forms, but pure heroin is a white powder with a bitter taste. Most illicit heroin comes in powder form in colors ranging from white to dark brown. "Black tar" is another form of heroin that resembles roofing tar or is hard like coal. Color varies from dark brown to black. Heroin can be injected, smoked, or snorted. Intravenous injection produces the greatest intensity and most rapid onset of euphoria. Effects are felt in 7 to 8 seconds. Even though effects for sniffing or smoking develop more slowly, beginning in 10 to 15 minutes, sniffing or smoking heroin has increased in popularity because of the availability of high-purity heroin and the fear of sharing needles. Also, users tend to mistakenly believe that sniffing or smoking heroin will not lead to addiction.

"Designer" drugs similar to opiates include fentanyl, demerol, and "china white." Addiction and dependence develop rapidly. Use is characterized by impaired judgment, slurred speech, and drowsiness. Overdose is manifested by coma, shock, and depressed respiration, with the possibility of death from respiratory arrest. Withdrawal problems include sweating, diarrhea, fever, insomnia, irritability, nausea, vomiting, and muscle and joint pains.

Hallucinogens or Psychedelic Drugs

Hallucinogenic substances are characterized by their ability to cause changes in a person's perception of reality. Persons using hallucinogenic drugs often report seeing images, hearing sounds, and feeling sensations that seem real, but do not exist. In the past, plants and fungi that contained hallucinogenic substances were abused. Currently, these hallucinogenic substances are

produced synthetically to provide a higher potency; commonly abused illicit hallucinogens include lysergic acid diethylamide (LSD), phencyclidine (PCP), psilocybin mushrooms, mescaline, dimethyltryptamine (DMT), alpha-methyltryptamine (AMT), and 5- MeO-DIPT (Foxy). Naturally occurring hallucinogens include mescaline, peyote, and psilocybin. Use impairs and distorts one's perception of surroundings, causes bizarre mood changes and results in visual hallucinations that involve geometric forms, colors, and persons or objects. Users who discontinue use experience "flashback" consisting of distortions of virtually any sensation. Withdrawal may require psychiatric treatment for the accompanying persistent psychotic states. Suicide is not uncommon.

Solvent Inhalants (Glue, Lacquers, Plastic Cement)

The term "inhalants" refers to more than a thousand household and commercial products that can be abused by inhaling them through one's mouth or nose for an intoxicating effect. These products are composed of volatile solvents and substances commonly found in commercial adhesives, lighter fluids, cleaning solvents, and paint products. Their easy accessibility, low cost, and ease of concealment often make inhalants one of the first substances abused. Inhalant users can ingest substances in various ways that include inhaling directly from containers for products such as rubber cement or correction fluid, sniffing fumes from plastic bags held over the mouth and nose, or sniffing a cloth saturated with the substance. Fumes from these substances cause problems similar to alcohol. Incidents of hallucinations and permanent brain damage are more frequent.

Marijuana (Cannabis)

Marijuana is the most commonly used illicit drug. Marijuana is typically smoked in hand-

rolled cigarettes (joints), cigars (blunts), pipes, or water pipes (bongs). The active ingredient in marijuana is delta-9-tetrahydrocannabinol (THC), which is responsible for the potency and effects of marijuana intoxication. Over the past two decades, THC levels of marijuana in the United States have increased. Prolonged use can lead to psychological dependence, disconnected ideas, alteration of depth perception and sense of time, impaired judgment, and impaired coordination.

Damage from Intravenous Drug Use

In addition to the adverse effects associated with the use of a specific drug, intravenous drug user who use unsterilized needles or who share needles with other drug users can develop AIDS, hepatitis, tetanus (lock jaw), and infections in the heart. Permanent brain damage may also result.

Control of Drug Abuse

There are numerous governmental offices in many countries that deal with the control and oversee of drug manufacture and use, and the implementation of various drug laws. The Single Convention on Narcotic Drugs is an international treaty brought about in 1961 to prohibit the use of narcotics save for those used in medical research and treatment. In 1971 a second treaty the Convention on Psychotropic Substances had to be introduced to deal with newer recreational psychoactive and psychedelic drugs. The legal status of Salvia divinorum varies in many countries and even in states within the United States. Where it is legislated against the degree of prohibition also varies. The Food and Drug Administration (FDA) in the United States is a federal agency responsible for protecting and promoting public health through the regulation and supervision of food safety, tobacco products, dietary supplements, prescription and over-the-counter medications, vaccines, biopharmaceuticals, blood

transfusions, medical devices, electromagnetic radiation emitting devices, cosmetics, animal foods and veterinary drugs.

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