Doping in sports: An overview of ancient and modern history of doping

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Abstract
Whenever societies had prized sports competitions athletes had found ways to get advantages and success. Most efforts have wasted into finding ways to train and eat better, but sometimes efforts may go even further. The story was same in Ancient period also when athletes used to eat performance enhancers from plants as well as from animals. But in modern era transformation of plants and animals replaced with pharmacological substances. The goal of the present paper is to apprise about the most burning issue of the present sports society that is "Doping". Paper surveys the word 'Dope'. It reveals the ancient history of doping and modern history as well from Roman periods to Ban Johnson doping scandal in 1988, Seoul Olympic, Korea. Paper covers many doping cases, deaths from doping and many banned on athletes by the anti-doping authorities in sports societies. Further paper concluded with the main cause behind the doping and use of performance enhancers by the athletes.

Keywords: Sports doping, olympic, history and WADA

Introduction
Prize and rewards in sports competitions had attracted players to adopt unfair means in order to attain success. Most efforts have been wasted to finding ways to train and eat better, but sometimes efforts may go even beyond. Ancient Greek athletes ate the animal testicles, with thought that the male animal sex organ would provide special strength and muscle size. Observing the effects of castration on animals, herders and farmers had known for centuries that removing the testes weakened male strength, aggressiveness, and sexual desire. It stood to reason that doing the opposite consuming testes would improve athletic skill and sexuality. Ancient athletes and warriors also searched for stimulants from plants that would improve endurance and courage. Greek soldiers ate hallucinogenic mushrooms, and Roman gladiators used stimulants. Strength and endurance proved most crucial for battles, hunts, and rituals, but the benefits of plants with energizing properties could aid in sporting events as well.

Origin of Word “Doping”
The term Doping has derived from Dutch word ‘Dop’ comes from the Kaffir dialect of South Africa. It referred to the use of stimulating liquor by tribe members during religious ceremonies. Dutch settlers to South Africa adopted the term. By 1865 it had spread to Amsterdam, where swimmers in a canal race were accused of taking ‘dop’, an alcoholic drink made of grape skins, it was taken as stimulant and used in ceremonial dances in 18th century South Africa. South African, Zulu warriors were also taken it for performance enhancement (Fred, 2007). Another idea about doping word is that it comes from the Dutch language ‘doop’ (a thick dipping sauce) that entered American slang to describe how robbers stupefied victims by mixing tobacco with the seeds of jimsonweed which contains a number of tropane alkaloids, causing sedation, hallucinations and confusion. By 1889, ‘dope’ was used in connection with the preparation of a thick viscous preparation of opium for smoking, and during the 1890s this extended to any stupefying narcotic drug. English Dictionary referring (1889) to a narcotic mixture of opium used for racehorses. With the letter e added since then, dope has taken on many meanings, including recreation drugs, while doping most often refers to the human use of drugs in sporting activities (Robert & Kirk, 1991).
Historical Perspective of Doping
The Use of drugs to enhance performance in sports has certainly occurred since the time of the origin of Olympic Games. The origin of the word `doping` is attributed to the Dutch word ‘doop’ which is a viscous opium juice, the drug of choice of the ancient Greeks. The ancient Olympic champions were professionals who competed for huge cash prizes as well as olive wreaths. The number of methods what we would call cheating were not considered as illegal and perfectly acceptable and safe in the field of games and sports. So just for the sake of earn the Olympic fame. The widespread use of medicinal products for the improvement of the health from the disease can be traced back to the Greek physician, Galen in the third century B.C. it was Galen who noted that the ancient Greek athletes used stimulants and drugs to enhance their physical performance during their participation in ancient sports events. Athletes took special diets and taken various substances to improve their physical capabilities. It was documented that in Olympic Games of 668 B.C the winner of sprint took special diet of dried figs Finlay & Plecket (1976). The Ancient Egyptians used to have special drink made from the hooves of asses, which have been ground and boiled in oil, then flavored with rose petals and rose hips, to improve the physical performance. In Roman times, gladiators used stimulants to maintain energy levels after injury and same behavior was noted by medieval knights Donohoe and Johnson (1986) [9]. Throughout the history there were many examples about the special mixture taken by athletes to get extra edge of success and helped them to achieve in different circumstances of energy or illness even during provide shortcut to enhance performance in such conditions (Mottram, 2002) [1].
According to the report of Philostratos and Galen various remedies were used to enhance athletic performance as early as the end of third century B.C Burstin (1963). Chinese physician also recommended the use of Ma Huang (as extract from the plant Ephedra) to increase the physical performance over 5000 years ago, when this drug was usually used to suppress coughing and to stimulate circulation Abourashed, et al. (2003). The Indian physician Sutruta also recommended the eating of testicals to enforce virility around 300 B.C and Huns consumed testicals before battle, obviolously with the same aim Chinery (1983). Hallucinogenic mushrooms were used in the third century B.C to enhance performance during Olympic Competitions which were held between 776 B.C and 393 A.D Burstin (1963); Prokop (1970), (1972); Hanley (1983). The eggs, meat, blood may be said as nutrients and nutritional supplements but bull testicals, alcoholic drinks, real drugs like substances may effect on performance. Which was also act same as present time. The antique "Doping" was strictly prohibited by the rules of the classic Olympic games, just same as today. The punishments-sanctions were more severe in the old Greek Olympic as well as horse doping Prokop (2002). It was documented that even death penalties were also given to the defaulters. When king Theodouis abolished the Ancient Games in 394 A.D, the reason he gave were Olympics game had become "A hotbed of cheating, affronts to human dignity and doping" (Dirix & Sturbois, 1998) [5].

Modern History of Doping
Modern drug use in sports reflects much the same desire as in the past but differs in effectiveness. There are not proper documents about the use of drugs in sports in a large gap of time from Greek Olympic through the Middle Ages to our modern times. Before the active flag off against the doping by IAAF, numerous individual cases were note in the late nineteen and second half of the twentieth century when official testing of athletes were initiate. The IAAF was the first body with proper definition of doping and regulations against doping ban of the use of stimulants substances in sports. Yet not all efforts were complete without the proper testing possibilities were available. Even after the important steps were taken by the IAAF numerous cases were reported by the Ludwing Prokop ( Prokop , 1957, 1970,1972, 2002). The first case of doping was detected when a Dutch swimmer used stimulant at British Channel Swimming event in 1865 Pini (1964). The death of the Dutch cyclist Linton in the Paris-Bordeaux race had correlated to an overdose of caffeine and heroin in 1886. Few events also contributes to increase the usages of drugs, alcohol, cocaine, caffeine , heroin, nitroglycerol and strychnine like six day cycling race established in 1879, professional boxing even dog and horse races. The death of the marathon runner Thomas hicks 1904 at St. Louis Olympic consumed the raw eggs and brandy injections of strychnine during the run. Except this various other mixtures were used by the athletes such as: Alchohol, Caffeine and Nitroglycerol, Cocaine and heroin, Alchohol and Cocaine Dorendo Pietri, London (1908). As in 1920 summer Olympic in Antwerp, Balgium one of the American, Charlie Paddock drunk sherry with raw eggs before his 100 meter sprint final and won the race (Eichner & Randy, 2004 ). In 1936 Berlin summer Olympic at Germany the winner of the 100 meter backstroke gold medalist in 1932 Olympic named Eleanor Holm an American women swimmer was disqualified for acute alcoholism (Todd et al., 2003). In 1930 Amphetamines produced and replaced strychnine and become more popular in athletes but it is going to be more harmful indication for the future of the Olympic competition and fair play ideology William, D., (2001). A scientific research in 1927 isolation of testosterone was also milestone research in the field of doping. Fred Koch extracting testosterone by pulverizing tons of bull testicals and treating the testosterone with benzeme and aceton to obtain its essence (Todd &Terry, 1987) [21]. In 1952 summer Olympic in Helsinki, Finland the first use of testosterone in athletics had acknowledged. The Soviet Union weightlifter dominated in the event with use of testosterone as Bob Hoffman USA weight Lifting coach said to the associated press Almond (1984). It had confirmed in 1954 at World Weight lifting Championship in Vienna, Austria by Soviet Doctors to U.S team Physician Dr. John Ziegler that Soviets are indeed experimenting with testosterone. John Ziegler also worked on testosterone with collaborations of CIBA a Swedish Pharmaceutical Company to refine and reduce the side effects of testosterone. Now fight of hegemony begin after creation of Dianabol at 1956 summer Olympic in Melbourne, Australia, use of testosterone was allowed to take by the Soviet Sports system to beat the USA team results Soviet weight lifter begins to lift twice of their body weight after use of testosterone (Kremenik, M. et al., 2006) [3]. Few physician disagreed with the resolution and considered anabolic steroid and other medicines were not enhancing the performance in sports and also safe. It results 1960 Olympic as medicine Olympic and explosion of drug use saw clearly specifically in weightlifting and strength event in track and field.(14) Danish cyclist Knut Jensen in 1960 at Rome Olympic games found died and amphetamines named Ronicol found in his blood after autopsy. In 1961 in US Olympic trial of swimming in women section 3 of the US swimmer were used amphetamines a report of IOC bulletin Marie Therese Eyquem submitted in 1961 against use of male hormone by the famous athletes Buti, Antonio & Fridman Soul (2001) [22]. Even IOC keep them self
away from the science and medicine aspects of sports until IOC not started the testing the athletes for using performance enhancing drugs. This was also the huge reason behind the instance cases of medicine and drugs uses just before the Mexico summer Olympic Games in 1968. Sports and Political authorities were only reviewing the resolution and making rules against doping. But practical testing was still nowhere in the picture. But European council and IOC subcommittee came together in 1963 and declared to fight against the uses of drugs and medicine in sports. They took measures and decided to make International body against doping. This collaboration was mainly concern about to aware the officials, players, athletes and promoters about the danger of doping. Dope test was also recommended. It was also discussed in 1964 World Conference of doping at Belgium and supported the recommendation of European Council and I.O.C. Dr. Porritt also recommended doping policy in 63th Congress at Tokyo in 1964 and requested to various supporting organizations to make aware to their athletes about examination and testing of doping. At the same time many resolution and measures have been taken by various International sports authorities like IOC, International Cycling Union etc. Dirix A (1998) [3]. Just prior to the Tokyo Olympic a Danish cyclist Mogens Frey was terminated from his team due to uses of doping Underwood John (1964) [19]. Now Countries were taking doping seriously but 1965 VEB Jenapharm, a german pharmaceutical company synthesis the anabolic steroid Oral Turinabol which was later used by East German athletes. Till 1966 meeting was organized by the different sports authorities and Committees recommendation were also given to IOC but no strong decision was taken by any sports authority. Finally on May 1967 IOC announces to adopt drug testing policy in Tehran, Iran a list was also made of the substances to be banned and decided to do urine sampling for dope testing in the 1968 Olympic Games. Medical commission was also formed by IOC in same year commission decided its limitation however no test was yet planned for anabolic steroid Wynn, A. (2004) [20]. It was first time IOC gave definition of doping as “The use of substances or techniques and any form or quality alien or a natural to the body with an exclusive aim to obtaining an artificial or unfair increase of performance in competition. Todd, T., (1987) [21]. The danger of uses of illegal substances and doping techniques and their bad effects proved when in 1967 tour De France one of the British cyclist Tommy Simpson collapsed and died, autopsy reported the presence of different type of amphetamines in his body. Another case of cyclist Yves Mottin died with high dose of amphetamines in 1968. As the Olympic games at Mexico started in 1968 lots of rumors of drug uses were also abound there was talk about West German super steroid, African Chewing Kat, a Herb from red sea coast to reduce fatigue enhance combat endurance, from Soviet side and anti-tension drug and a pro concentration pill, East German caffeine concentration to boost energy in amphetamines form, which has been made illegal for these Olympics, from West Germany cannot be detected by the drug test. Strategy was made and Olympic Committee was decided to take urine test before competition. Athlete who found guilty not allowed playing. But athletes using anabolic steroid was tension free as Dr. Manfred Hoppner East German team physician put Margitta Gummel a German female shot putter on steroid named oral turinabol. As there was no test for steroid detection German female shot putter Gummel Margitta won gold medal in that Olympic with new world record Buti, A. & Fridman, S. (2001) [22]. Hence, Gunner Liljen Vall a Swedish use of stimulants by panta athlete in Mexico city Olympic to keep him calm and to hike the performance during event was detected. Then IOC adopted blood sampling to detect stimulants in 1969. Todd, T., (1987) [21]. Brigitte Berendok a German discus thrower submitted in an article for the West German publication Dictezz confessed that Decathletes, discus thrower, shot putter, weight lifter and many runners and jumpers being commonly used steroids as performance enhancer. Even the words of Al Oerter US discus Olympic champion also proved the use of anabolic steroids is so used in world that athletes are using to keep them on the top Buti and Fridman Supra et al. (2001) [23]. The anti-doping regime began to gain its present form in 1970s. The first prohibited list of substance being launched in 1971 by IOC medical commission which has included stimulants and narcotic analogesics Buti, A. & Fridman, S. (2001) [22]. This was the same list which is ongoing and updated every year by the WADA. In 1972 Olympic Munich IOC executed first comprehensive testing at international competition level. Every athlete was tested for banned substances. 1976 Montreal Olympic specific test was adopted to detect anabolic steroid and out of 11 athletes 8 found guilty of anabolic steroid and disqualify for games. In spite use of oral turinabol in form of blue pills as told vitamins East German swimming team did wonder and non as wonder girls and did clean sweep in every event of swimming. But clear effect of steroid was visible on them like their voice was as male voice, hair on face, it was exposed in 1990 after the reunion of Germany about the national policy which clear the secret of blue pills and made clear that in that year all athletes were treated with steroid and only those found defaulter who got caught planned was so comprehensive that involved research and test on the amount of time that athlete would test positive for performance enhancing drugs. Which make German athletes to pass the doping testing in 1976 Olympic in spite of taken of ample amount of steroids. The most famous Olympic doping scandal was positive testing of Ban Johnson in 1988 Seoul Olympic, South Korea. Johnson timing was the 09.79 and he finished first with world record but his performance brought him under doubts and radar of IOC medical commission. Sample took after the race and found positive with the presence of stanozolol in his urine a powerful anabolic steroid. His gold medal and world record taken back and medal awarded to his next fastest sprinter Carl Lewis an American sprinter (speed trap by Charlie Francis). Many developments have taken place from 1980-1990 time period changes in types of drugs that were banned and minor tweaks in the testing procedure. Now drugs were banned by IOC medical commission even which not came under the list of ergogenic aids and athletes using those as masking agents. Another revolution was recorded in the international anti-doping seen was the tour de France in 1998 one of the significant doping scandal impacted the entire field of sports history in response to the shocking recovery of the drugs by the French police in tour de France. The meeting was conducting to form the independent body to fight against the drugs without any pressure to control and to lead the fight against the doping Charlie, F. (2001).

Conclusion
Throughout the long history of sports and doping, participants have always remain looking for favor and advantages over their opponents, be it through training, technique, equipments or medicine. Steroids, human growth hormones and other performance enhancing drugs are merely the most recent development however there is strong subjective proof about the unfavorable effects of many performances enhancing
drugs. So sports authorities banned doping in sports.

Reference
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