

e-ISSN: 2319-8753 | p-ISSN: 2320-6710

EDIA

International Journal of Innovative Research in SCIENCE | ENGINEERING | TECHNOLOGY

# INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

808

IN SCIENCE | ENGINEERING | TECHNOLOGY

Volume 9, Issue 12, December 2020

INTERNATIONAL STANDARD SERIAL NUMBER INDIA

### Impact Factor: 7.512

9940 572 462

6381 907 438

 $\bigcirc$ 







| e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 7.512|

|| Volume 9, Issue 12, December 2020 ||

## Comparative Analysis of use of Doping Drugs among Team Games and Individual Players at Asian and Olympics Games

Kavit Singh<sup>1</sup>, Manoj Pathak<sup>2</sup>, Dr.Zulfqar Ashraf Wani<sup>3</sup>, Mohd Haroon<sup>4</sup>, Pervaiz Perray<sup>5</sup>, Sajad Ahmad<sup>6</sup>

M.Phil Student of Physical Education, Rabindranath Tagore University, Bhopal, India<sup>1</sup>

Supervisor, Dept. of Physical Education, Rabindranath Tagore University, Bhopal, India<sup>2</sup>

Lecturer, Dept. of Sociology, Government Degree College, Ramkote, Jammu, India<sup>3</sup>

Research Scholar, Dept. of Physical Education, Rabindranath Tagore University, Bhopal, India<sup>4</sup>

Research Scholar, Dept. of Sociology, Barkatullah University, Bhopal, India, Bhopal, India<sup>5,6</sup>

**ABSTRACT:** In the present competitive world it has little to do with the reality of the modern sports. The Athletes are rewarded for winning at every level of competition. The second place holder is viewed as the "first loser". A coach's job security is directly related to his team's success. It is not surprising that athletes and coaches are sacrificing and tacking great risk in order to obtain a competitive edge and enhance performance at all costs. The use of substances by athletes is believed to have performance-enhancing qualities is certainly not a new phenomenon. The Greek physician Galen, writing in the third century BC, reported that athletes in Ancient Greece used stimulants to enhance their performance. The world became actually aware of the extent and benefits of doping in sports when Ben Johnson's gold medal was stripped in the 1988 Seoul Olympics for using the steroid Stanazalol. Doping became so prevalent in Olympic sport that some argued that all records should be discarded or put on hold until all forms of doping could be detected and stopped. Through the 1980s and 1990s, clandestine doping programs spread from sport to sport guided by modern, albeit unethical, pharmacists and sports medicine professionals.

KEYWORDS: Olympics, Doping, Athletes and Performance

#### **I.INTRODUCTION**

The performance enhancement in Olympic and professional sport has now become a medical, ethical, and legal problem for modern athletes and athletic organizations. This is primarily due to the amount of money associated with winning of medals at various levels. Multimillion dollar contracts, appearance fees, international endorsement and sports merchandising represent a billion dollar industry. When Sports Illustrated interviewed a cohort of elite Olympic athletes, one of the questions was: "If you were given a performance enhancing substance and you would not be caught and win, would you take it?" 98% of the athletes responded "Yes". The more chilling question was: "If you were given a performance enhancing substance and you would not be caught, win all competitions for 5 years, then die, would you take it?" More than 50% said "Yes".2 The Athletic performance enhancement can be gained using various diets, training routines and hard work.

However, it can and has been achieved since ancient competitions by using a wide variety of physiological, mechanical and pharmacological doping techniques. As prize money and endorsement rewards increased, so did the science and abuse of performanceenhancing techniques. Today no sport is spared without the cloud of cheating and using illegal performance enhancement. These same doping programs are moving out of the professional sports market to our youth and other at-risk populations at alarming rates.

The use of substances by athletes is believed to have performance-enhancing qualities is certainly not a new phenomenon. The Greek physician Galen, writing in the third century BC, reported that athletes in Ancient Greece used stimulants to enhance their performance. In Ancient Egypt athletes similarly had special diets and ingested various



| e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 7.512|

|| Volume 9, Issue 12, December 2020 ||

substances which, might have improved their physical capabilities, whilst Roman gladiators and knights in mediaeval jousts used stimulants after sustaining injury to enable them to continue in combat. It was in 1904 Olympic games that the marathon runner namely Thomas Hicks used a mixture of brandy and strychnine and nearly died. The mixtures of strychnine, heroin, cocaine, and caffeine were used widely by athletes. Each coach or team developed its own unique secret formulas. This was common practice until heroin and cocaine became available only by prescription in the 1920s.

During the 1930s, it was amphetamines that replaced strychnine as the stimulant of choice for athletes. In the 1950s, the Soviet Olympic team first used male hormones to increase strength and power. When the Berlin Wall fell, the East German government's program of performance enhancement by meticulous administration of steroids and other drugs to young athletes was exposed. These well-documented and controlled hormonal doping experiments on adolescent athletes by the East German Sports Medical Service yielded a crop of gold medalists. These were mostly young females as they responded more dramatically to male. These athletes suffered severe medical abnormalities, including premature death.

The international amateur athletic federation was the first international body of sports to take this issue of drugs seriously. In 1928, they banned participation from doping, but with no testing available, they had to rely on the word of athlete that they were clean.

The world became actually aware of the extent and benefits of doping in sports when Ben Johnson's gold medal was stripped in the 1988 Seoul Olympics for using the steroid Stanazalol. The International Olympic Committee (IOC) medical commission had established a list of prohibited substances in 1967 and introduced anti-doping testing of athletes in the 1972 Munich Games. It was clear at this point that doping did work and, if gone undetected, would win gold medals. East German scientists from the state-run doping programs at Kreischa and Leipzig, who were disgraced in their own country, where now in demand in Asia, former Soviet Bloc nations and sports organizations worldwide that wanted to promote their status.

Doping became so prevalent in Olympic sport that some argued that all records should be discarded or put on hold until all forms of doping could be detected and stopped. Through the 1980s and 1990s, clandestine doping programs spread from sport to sport guided by modern, albeit unethical, pharmacists and sports medicine professionals. In 1999, the IOC organized a World Conference on Doping in Sport in response to a shocking discovery of massive amounts of performance enhancing drugs and paraphernalia by French police at the 1998 Tour de France. It was at this meeting that an independent global agency was founded, the World AntiDoping Agency (WADA). Its mission was to work independently of the IOC, sports organizations and governments to lead the fight against doping in sport. 7 In the late 1990s, the IOC took the initiative in a more organized battle against doping, leading to the formation of the world anti doping agencies (WADA) in 1999. The 2000 summer Olympics and 2002 winter Olympics have shown that effort to be alimentative performance enhancing drugs from Olympics not over, as several medalists in weightlifting and cross-country skiing were disqualified due to falling drugs test. During the 2006 winter Olympics, only one failed in drugs test and had a medal revoked. The IOC established drugs testing regiment has set the whole wide benchmark that other sporting federation attempted to emulate. During the Beijing games, 3,667 athletes were tested by the IOC under the auspicious of the world anti doping agency. Both urine and blood testing use in coordinate effort to detect banned substance recent blood transfusion.

While several athletes were barred from competition in Beijing 2008. What follows is list of all the athletes that have tested positive for banned substance ether during or after an Olympics games in which they competed. Any medal listed was revoked by the IOC. Despite years of aggressive anti-doping testing by international sports federations such as those for cycling, athletics and soccer, steroid abuse scandals involving high profile athletes continue to be front page news across the globe. Professional sports in the United States are not subject to extensive anti-doping programs, as players' unions and collective bargaining agreements prevented such extensive testing to be put into place. However, they did establish limited anti-doping programs, as the professional sports organizations recognized the potential of doping to harm athletes and their sport. In 1998, when Mark McGuire, an American baseball player, broke Roger Marris' home run record, it was revealed that he had been taking a supplement containing a precursor to nandrolone, a steroid. At that time Major League Baseball did not ban steroids and did not believe that steroids were a problem within the league. However, subsequent government investigations and former players revealed that steroid abuse was a problem in the League, which resulted in a limited steroid testing program.



| e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 7.512|

|| Volume 9, Issue 12, December 2020 ||

In 2003, another significant event in the understanding of the institutional nature of doping occurred. A syringe was anonymously sent to a WADA-accredited laboratory in Los Angeles that contained tetrahydrogestrinone (THG), a "designer" steroid that was not known and not on the current WADA prohibited list, made specifically to avoid detection by modern anti-doping technologies. This led to a series of investigations resulting in the indictment and subsequent conviction of individuals running a performance-enhancing program for professional athletes at the BALCO pharmacy in San Francisco. In May 2006, Spanish police arrested five people and seized a variety of banned performance-enhancing drugs and blood-doping supplies at a Madrid doping clinic. Here, professional athletes would receive medically-supervised injections of hormones and other performance-enhancing drug regimes. The 40-page police report included a clear paper trail of doping procedures on at least 50 professional cyclists. The report was given to the International Cycling Union, which led to the 8 disgualification of 23 professional cyclists, virtually all the top contenders from the 2006 Tour de France. The final of the 2006 Tour was also tarnished, as the champion, Floyd Landis, was found to have a positive anti-doping test for steroids. Landis was stripped of the championship and discharged from his team. At this writing the result is being challenged by Landis and his legal and medical experts, claiming that the test was invalid since several errors were made in the collection, analysis and reporting of the results. In a separate investigation in Paris in 2006, 23 individuals were sentenced to 4 years in jail for trafficking a cocktail of amphetamines and other performance-enhancing drugs known as "Belgium Pot" to professional cyclists. Making this problem even more complex, in the June 2006 issue of the Journal of Applied Physiology, an article from Stanford University reported that Viagra can be used to increase by approximately 45% the performance of cyclists in high altitudes, suggesting a whole new class of performance-enhancing drugs not restricted to cycling.9 In October of that same year, the cricket world was shocked to learn that two Pakistani fast bowlers, Shoaib Akhtar and Mohammad Asif, tested positive for the steroid nandrolone.

#### **II.CONCLUSION**

This brief overview suggests not only the historical and institutional nature of doping by athletes, but also the international development of a clandestine and sophisticated distribution network of black market doping programs that follows the modern sports industry. Today performance enhancing programs and drugs are not the exclusive province of elite athletes, but have spread to health clubs, high schools and other at-risk populations, creating an over \$1.4 billion US dollar industry that is growing daily as new compounds are synthesized and marketed. There are literally hundreds of known doping substances and an equal number of designers, veterinary, and yet to be identified drugs and techniques abused in sports today. The 2006 WADA list of prohibited substances includes the following major categories: anabolic agents (i.e., exogenous anabolic androgenic steroids such as androstendiol, boldenose, closterbol and danazol; endogenous anabolic androgenic steroids such as dihydroxytestosterone and testosterone, and other anabolic agents such as clenbuterol and tibolone); hormones and related substances (i.e., EPO, hGH, insulin-like growth factors, mechno growth factors, gonadotropins, insulin and corticotrophins); beta-2 agonists (i.e., terbutaline, salbutamol, etc.); agents with anti-estrogenic activity (i.e., anastrozole, letrozole, clomiphene, etc.); diuretics (furosemide, hydrochlorothiazide, etc.) and other masking agents (such as epitestosterone, probenecid, plasma expanders, etc.); stimulants (amphetamines, ephedrine, cocaine, etc.); narcotics (morphine, oxycodone, etc.); cannabinoids (marijuana, hashish), and glucocorticosteroids (allowed externally but not internally). WADA also lists prohibited methods, including enhancement of oxygen transfer (blood doping, efaproxial, etc.), chemical and physical manipulation (tampering or substitution of sample) and gene doping. In addition, WADA prohibits alcohol and beta- blockers.

The only Olympic death linked to athlete's drugs abuses was at the Rome games 1960. During the cycling road race, Danish Cyclist KnudEnmark Jenson fell from his bicycle and later he died. It was reported that he was under the influence of amphetamine, which has caused him to lose consciousness during the race. The death of Jenson exposed to the world about endemic drug use by the elite athletes. By the mid-1960s sports federation and started to ban the use of performance enhancing drugs. The IOC followed suit in 1967 by establishing a medical commission that banned the practices of doping, Doping was defined as the use of substance or techniques in any forms or 11World Anti-Doping Agency. 2006 prohibited substances list. www.wada-ama.org 11 quantity alien or unnatural to the body, and unfair methods to improve in competition12.

#### REFERENCES

1. Prendergast HM1, Bannen T, Erickson TB, Honore KR. The toxic torch of the modern Olympic Games. Vet Hum Toxicol. 2003 Mar;45(2):97-102.



| e-ISSN: 2319-8753, p-ISSN: 2320-6710| <u>www.ijirset.com</u> | Impact Factor: 7.512|

#### || Volume 9, Issue 12, December 2020 ||

- 2. Bamberger M. Yeager D. Over the edge. Sports Illustrated. 1997; 14:62–70.
- 3. Wadler GI. Hainline B. Philadelphia: David; 1989. Drugs and the athlete.
- 4. Donohoe and Johnson, 1986: 2-3; Houlihan, 2002: 33; verroken, 2005: 29
- 5. Franke WW. Berendonk B. Hormonal doping and androgenization of athletes: a secret program of the German Democratic Republic. Clin Chem. 1997;43:1262–1279.
- 6. Begley, Sharon (2008-01-07) "the drug charade". Newsweek http://www.newsweek.com/id/86079/output/print. Retrieved 2008-08-27
- 7. Longman, jeer (2001-04-22) "just fowling orders, doctors orders". The New York Times.
- 8. Hsu AR. Barnholt KE. Grundmann NK, et al. Sildenafil improves cardiac output and exercise performance during acute hypoxia, but not normoxia. Appl Physiol. 2006;100:2031–2040.
- 9. Healthy NJ. Performance enhancing drugs. www.healthynj.org.
- 10. BengtO.Eriksson, Tore Mellstrand, Lars Peterson, Per Renstrom and Nils Svedmyr "Sports Medicine health & Medication" Guinness Publishing Ltd. 1990 pp. 366-375.
- 11. Sonksen PH. Insulin, growth hormone and sport. J Endocrinol. 2001;170:13-25.
- 12. Buckley WE. Yesalis CE. Friedl KE, et al. Estimated prevalence of anabolic steroids use by male adolescents. JAMA. 1988;260:3441–3445.
- 13. BengtO.Eriksson, Tore Mellstrand, Lars Peterson, Per Renstrom and Nils Svedmyr "Sports Medicine health &Medication"uinness Publishing Ltd. 1990 pp. 366-375.
- 14. Begley, Sharon (2008-01-07) "the drug charade". Newsweek http://www.newsweek.com/id/86079/output/print. Retrieved 2008-08-27



Impact Factor: 7.512





## INTERNATIONAL JOURNAL OF INNOVATIVE RESEARCH

IN SCIENCE | ENGINEERING | TECHNOLOGY





www.ijirset.com