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Research Article

A Study About Causes And Consequences Of Performance Enhancing Drug Usage Among The Sports Students In Chennai

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ABSTRACT
This study investigates the causes and consequences of performance-enhancing drug (PED) usage among sports students in Chennai, employing explanatory research methods. A sample of 500 sports students was interviewed using unstructured interviews to gather primary data, complemented by secondary data from existing literature and reports. The research identifies several factors influencing PED usage, including peer pressure, the desire for enhanced performance, and the influence of coaches and trainers. Consequences of PED usage were found to range from physical health risks to psychological and ethical implications, as well as potential impacts on academic and career prospects. The findings underscore the need for comprehensive education and stricter regulations to mitigate PED usage among young athletes.

KEYWORDS:- Performance enhancing drugs, Sports students, Health Consequences, Ethical implications, Educational programs.

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INTRODUCTION

Sport is defined as an activity that involves physical exertion and skill, typically in which individuals or teams compete against one another. Sports hold significant importance in all aspects of human life, contributing greatly to personal development, societal norms, and cultural values. Engaging in sports helps in building character and shaping personality. Understanding modern society and culture is incomplete without recognizing the role of sports. As a crucial part of our social and cultural fabric, sports possess a commercial influence that can impact global events both positively and negatively. They have the power to incite conflicts and foster international peace, and governments worldwide allocate public resources to support sports. Sports play a vital role in school and college life, aiding in the comprehensive development of students. Participation in sports activities enhances students' physical fitness, teamwork, leadership skills, and discipline. In educational institutions, sports are integrated into the physical education curriculum and offered as extracurricular activities. These activities not only keep students active and healthy but also provide them opportunities to compete and represent their schools in various tournaments.

GOVERNMENT JOBS FOR SPORTS STUDENTS IN INDIA

The Indian government provides various job opportunities for sports students, recognizing the importance of sports in fostering a healthy and active nation. Sports students can find employment in government agencies such as the Sports Authority of India, Indian Railways, and the Indian Armed Forces. The Sports Authority of India offers roles like coaches, trainers, and administrative staff. Indian Railways employs athletes through their sports quota in various disciplines. The Indian Armed Forces also offer positions for sports students in the army, navy, and air force through their sports quota. These job opportunities

provide financial stability and allow athletes to continue pursuing their passion for sports while serving the country.

HISTORY OF DRUG USAGE IN SPORTS

Athletes have used performance-enhancing drugs for thousands of years in hope to increase strength, speed and endurance. Ancient Greeks experimented with herbs, wine potions and hallucinogens. They ate animal hearts or testicles as they sought the most powerful performance-enhancer to prepare for the Olympic Games. Roman gladiators ingested stimulants to run faster and boost energy. In the early 20th century, athletes widely used mixtures of heroin, cocaine and other ingredients. Finally, in 1928, the international association of athletics federation prohibited doping, or the use of performance-enhancing drugs, by athletes. Not all performance-enhancing substances are illegal or harmful to the body. For example, an athlete might drink a cup of coffee to boost energy before a game or practice. However, many sports fans and athletes are aware of steroid abuse in sports. Likewise, some athletes use illegal stimulants to push themselves further in a race to be the best. Athletes might take steroids to help the body produce more proteins which increases muscle size and strength. They might also take steroids to increase aggressiveness and be more competitive out on the field or in the ring. Like any drug, steroid use comes with many risks affecting health and career. Despite health risks and drug policies, athletes continue to use performance-enhancing drugs like steroids and stimulants. For example, between 2005 and 2015, 47 mlb players were suspended for using banned drugs. In the nfl, suspensions jumped from 21 in 2011 to 82 in 2012. Baseball and football are not the only sports affected by steroid abuse, and it is difficult to say what sport has the most drug use. Doping affects all sports and any athlete could turn to drugs to enhance performance and cope with the pressure to win. Nevertheless, it has been reported that cycling had the greatest number of positive test results for doping in the Olympics, followed by weightlifting, boxing, triathlon and baseball. The exact number of athletes who are doping is unknown because many athletes do not want to admit they use performance-enhancing drugs. Whether or not a performance-enhancing drug is legal or illegal depends on the substance. The world anti-doping agency (wada) provides a list of drugs that it prohibits. Most drugs, like anabolic steroids, are illegal without a valid prescription. Since 1991, anabolic steroids have been a schedule iii drug on the federal list of controlled substances. The possession or sale of anabolic steroids without a prescription can lead to jail time and thousands of dollars in fines.

ADVANTAGE AND DISADVANATGES OF USING PED IN SPORTS

Using performance-enhancing drugs (PEDs) in sports has been a controversial topic for many years. Here are some advantages and disadvantages associated with their use:

Advantages

1. Enhanced Performance:
- Improved Strength and Endurance: PEDs can significantly increase muscle mass, strength, and endurance, allowing athletes to perform at higher levels.
- Faster Recovery: Some PEDs help reduce recovery time between workouts and competitions, enabling athletes to train harder and more frequently.
- Increased Stamina and Alertness: Certain stimulants can improve focus, concentration, and overall alertness, which can be crucial in both training and competition.
2. Competitive Edge:
- Breaking Records: PEDs can help athletes achieve record-breaking performances, setting new standards in their sports.
- Career Longevity: By enhancing recovery and performance, athletes might extend their careers and maintain peak performance for longer periods.
3. Financial and Commercial Benefits:
- Sponsorship and Endorsements: Higher performance can lead to increased visibility, attracting lucrative sponsorship deals and endorsements.
- Prize Money: Enhanced performance often leads to better competition results, translating into higher prize money and financial rewards.

Disadvantages

1. Health Risks:
- Short-term Effects: Side effects can include high blood pressure, liver damage, aggressive behavior, and cardiovascular issues.
- Long-term Effects: Prolonged use of PEDs can lead to severe health problems, including hormonal imbalances, heart disease, liver and kidney damage, and mental health issues such as depression and anxiety.
2. Ethical and Legal Issues:
- Fairness and Integrity: PED use undermines the integrity of sports, creating an uneven playing field where success is influenced more by drug use than by natural talent and hard work.
- Bans and Legal Consequences: Athletes caught using PEDs face suspensions, bans from competition, stripping of titles, and legal consequences. This can tarnish their reputation and career.
3. Dependency and Addiction:
- Psychological Dependence: Athletes might become psychologically dependent on PEDs, feeling they cannot compete without them.
- Addiction: Certain PEDs have addictive properties, leading to physical dependence and severe withdrawal symptoms.
4. Negative Impact on Youth and Society:
- Role Models: Professional athletes are role models. Their use of PEDs can send the wrong message to young athletes, encouraging drug use to succeed in sports.
- Cultural Impact: Widespread use of PEDs can foster a culture of cheating and dishonesty, eroding the values of sportsmanship and fair competition.

5. Testing and Regulations:
- Constant Monitoring: Athletes must undergo frequent and sometimes invasive drug testing, which can be stressful and disruptive.

- Evolving Substances: The development of new PEDs often outpaces testing technologies, leading to ongoing challenges in maintaining clean sports.

REVIEW OF LITERATURE

Unal, Mehmet et. al.,(2004) observed that gene or cell doping is defined by the world anti-doping agency as "the non-therapeutic use of genes, genetic elements and/or cells that have the capacity to enhance athletic performance". New research in genetics and genomics will be used not only to diagnose and treat disease, but also to attempt to enhance human performance. In recent years, gene therapy has shown progress and positive results that have highlighted the potential misuse of this technology and the debate of 'gene doping'. Gene therapies developed for the treatment of diseases such as anemia, muscular dystrophy and peripheral vascular diseases are potential doping methods. With progress in gene technology, many other genes with this potential will be discovered.5

Gaffney, Gary R et. al.,(2007) analyzed that unethical athletes and their mentors have long arrogated scientific and medical advances to enhance athletic performance, thus gaining a dishonest competitive advantage. Building on advances in genetics, a new threat arises from athletes using gene therapy techniques in the same manner that some abused performance-enhancing drugs were used. Gene doping, as this is known, may produce spectacular physiologic alterations to dramatically enhance athletic abilities or physical appearance. Performance-enhanced genetics will likewise present unique challenges to physicians in many spheres of their practice.6

Baron, d. A., Martin, d. et. Al.,(2007) observed that doping is now a global problem that follows international sporting events worldwide. International sports federations, led by the international olympic committee, have for the past half century attempted to stop the spread of this problem, with little effect. It was expected that, with educational programs, testing, and supportive medical treatment, this substance abusing behavior would decrease. Unfortunately, this has not been the case. In fact, new, more powerful and undetectable doping techniques and substances are now abused by professional athletes, while sophisticated networks of distribution have developed. Professional athletes are often the role models of adolescent and young adult populations, who often mimic their behaviors, including the abuse of drugs.

Dhar, r., Stout et. Al.,(2005) studied that athletes commonly use drugs and dietary supplements to improve athletic performance or to assist with weight loss. Some of these substances are obtainable by prescription or by illegal means; others are marketed as supplements, vitamins, or minerals. Nutritional supplements are protected from food and drug administration regulation by the 1994 us dietary supplement health and education act, and manufacturers are not required to demonstrate proof of efficacy or safety.

Smith, Aaron ct et. Al.,(2015) studied that recent exposes of drug use in sports suggest that doping might be more problematic than doping-control test results reveal. A zero-tolerance (zt) model, which aims to eliminate the use, has dominated the thinking of sport's policy makers over the last 15 years. In light of the limitations associated with zt-based policy, we propose an alternative policy, one based on controlled use and harm reduction principles. We argue that substance control policies underpinned by harm reduction (hr) principles of social utility and public value will deliver superior social outcomes. First, a harm reduction approach better accommodates the competitive realities of sports and the impact of elite sports' emphasis on performance at all costs. Second, hr priorities athlete welfare over sport and brand reputation. While appreciating the regulatory and risk management responsibilities of sports' governing bodies, the hr model offers greater space to the athlete's right to privacy, and right to personal autonomy.

Debasis bagchi et. al.,(2019) observed that the athletes in all levels of accomplishment—amateur, professional, olympic—pursued biological substances, pharmacological agents, and covert doping procedures to obtain any edge in competition leading to greater achievement. As athletic pursuits became more competitive, and more lucrative, any additional improvement in performance leads to increased individual recognition, greater rewards, and increased acclaim—perhaps worldwide accolades. Thus performance-enhancing drugs (peds) were developed to improve athletic numbers by enhancing cognition, stamina, strength, and power above and beyond what accepted traditional training methods produced. Chemists and pharmacologists superseded the known peds—which included stimulants, anabolic steroids, growth hormones, metabolic regulators, and diuretics—with powerful esoteric substances derived from contemporary medical research advancements.

Watson, c. James et. al.,(2022) analyzed that the rules of fair play in sport generally prohibit the use of performance-enhancing drugs (peds). The world anti-doping agency (wada) oversees global antidoping regulations and testing for elite athletes participating in olympic sports. Efforts to enforce antidoping policies are complicated by the diverse and evolving compounds and strategies employed by athletes to gain a competitive edge. Now between the uniquely proximate 2021 tokyo and 2022 beijing olympic games, we discuss wada's efforts to prevent ped use during the modern olympic games.12

RESEARCH METHODOLOGY

The study investigates the growing issue of alcohol, drug, and tobacco use among youth, focusing on young athletes in Chennai to understand patterns of performance-enhancing drug abuse. This explanatory research aims to develop strategies for prevention and control, aiding parents, teachers, and policymakers in addressing contributing factors. Researchers selected a

sample of 50 sports students from an initial survey of 500, identifying those who used drugs during sports events. Data was collected through survey and unstructured interviews for primary data, while secondary data was sourced from journals, research papers, articles, and websites.

OBJECTIVES

- To find out the causes of drug usage among the respondents.
- To explore the consequences of drug usage among the respondents.
- To know the socio- economic conditions of the respondents.

LIMITATIIONS

- The duration of the study is short and limited.
- The sample size for this present study was small.
- The research couldn't read out the entire female population as they were afraid and not ready to answer the questions related to the substance abuse.

CASE STUDY 1

Kaif Khan, a 24-year-old Muslim postgraduate, has a keen interest in football. Supported by his parents and inspired by famous personalities, he has pursued his passion with the guidance of family and friends. Kaif practices daily for four hours in the playground near his area, utilizing methods such as running and joking to enhance his skills. He follows a divided diet, alternating between a cross-diet and a normal diet over seven days.

Throughout his schooling and at the state level, Kaif has achieved notable success, largely supported by his family. In 2023, he began using supplements at the insistence of his coach and with the support of his family. Although initially accepted as a normal part of his routine, Kaif has experienced decreased usage due to mood swings and anxiety. Before using supplements, Kaif managed his studies effectively and was not involved in drug use. He expresses a commitment to refrain from using drugs in the future.

Kaif Khan's case highlights the importance of familial support and personal dedication in pursuing athletic endeavors. While his commitment to football and his achievements demonstrate his passion and skill, the introduction of supplements raises concerns about their impact on his mental well-being. The decrease in supplement usage due to mood swings and anxiety underscores the need for caution and awareness when incorporating such substances into training regimens.

Moving forward, Kaif should prioritize his mental health and seek alternative methods to enhance his performance that do not compromise his well-being. Open communication with his coach and family about his struggles with mood swings and anxiety is essential to ensure a holistic approach to his athletic development. Additionally, Kaif's resolve to abstain from future drug use is commendable and should be supported by ongoing education and reinforcement of positive habits.

CASE STUDY 2

Rithish, a 21-year-old male undergraduate student, hails from a family of three members. He has a keen interest in bodybuilding, which was initially sparked by the influence of friends and family. Rithish embarked on this journey with self-guidance and supplemented his knowledge through various media sources. Although he lacked formal coaching, he diligently practiced running, jogging, and warm-up exercises for approximately six hours daily at the gym.

In pursuit of achieving his bodybuilding goals, Rithish adopted a disciplined approach towards nutrition, maintaining a balanced diet. However, he resorted to the use of supplements, including anabolic steroids, dianobal tablets, prednisotore injections, and creatine powder, to enhance his performance and muscle growth.Despite experiencing symptoms such as fatigue, sleeplessness, stress, and body pain, Rithish continued using these supplements under the guidance of his peers and without consulting healthcare professionals. It wasn't until the impact of these substances on his health and behavior became evident that Rithish realized the potential dangers associated with their usage.Upon reflection and with the support of his family, Rithish decided to discontinue the use of supplements, acknowledging the adverse effects they had on his well-being. He recognized the importance of prioritizing his health over short-term performance gains and made a commitment to refrain from using such substances in the future.

Rithish's case underscores the significant influence of social circles and media on individuals' choices, particularly regarding fitness and performance enhancement. It also highlights the risks associated with the unsupervised use of supplements, including adverse health effects and behavioral changes .Moving forward, Rithish's decision to abstain from supplement usage demonstrates a commendable commitment to his long-term well-being. However, his experience serves as a cautionary tale for others, emphasizing the importance of seeking professional guidance and prioritizing health and safety in athletic pursuits.

CASE STUDY 3

Sathish Raj is 24 year old boy he had completed his undergraduate and comes from a family with a background in sports, with four family members being athletes.He is self-motivated and draws inspiration from famous personalities in sports.Sathish Raj follows coach-guided methods, including daily three-hour practice sessions at home, warm-up routines, and running exercises.He adheres to a structured diet plan that includes cross-dieting, protein-rich meals, and plant-based nutrition.Sathish Raj has actively participated in sports at both state and school levels.He receives guidance from both his family and coach in pursuing his athletic endeavors.Sathish Raj has resorted to using additional supplements, including Cannabinoid and creatine, without proper consultation or guidance.He has experienced adverse effects such as fatigue, dehydration, stomach burning, and reduced stamina, possibly due to unknown drug usage.Sathish Raj has

recognized the negative impact of drug usage on his physical and mental well-being, leading to difficulties in concentration on his studies.Despite having prior knowledge of the risks associated with drug usage, he continued its consumption, albeit with a decision to discontinue in the future.The use of drugs has led to mental health issues, affecting his ability to focus on academic pursuits.

Sathish Raj's case underscores the importance of seeking professional guidance and adhering to healthy practices in pursuing athletic goals. His experience highlights the dangers of unregulated supplement use and the significant impact it can have on both physical health and mental well-being. Moving forward, Sathish Raj needs support to overcome the challenges he faces, including addressing his mental health concerns and refocusing on his academic endeavors while maintaining a healthy lifestyle devoid of substance abuse.

CASE STUDY 4

Mugesh, a 22-year-old male, discovered his passion for powerlifting at a young age. Despite his educational qualification being at the undergraduate level, his dedication to the sport was unwavering. Inspired by media representations and supported by family and friends, Mugesh pursued powerlifting as both a hobby and a competitive endeavor. However, his journey was not without its challenges, particularly concerning his health and the use of supplements.Mugesh's interest in powerlifting stemmed from his involvement in karate at the national level during his school years. The discipline and strength required in martial arts seamlessly transitioned into his powerlifting pursuits. His training regimen primarily focused on key powerlifting exercises such as deadlifts, squats, and bench presses. Mugesh allocated 40 to 60 minutes daily for training, dividing his practice sessions between a local gym and his home setup.Despite his dedication, Mugesh encountered health complications, notably stomach burns, overheating, and dehydration. Concerns were raised by his parents, who observed these symptoms and worried about his well-being. Mugesh attributed these issues to his status as a beginner in the sport and the use of creatine monohydrate, a supplement recommended by his coach. While his family was aware of his supplement intake, they were troubled by its potential impact on his health.Recognizing the need to prioritize his health, Mugesh took proactive measures to address his symptoms. He educated himself about the supplements he was consuming and their potential side effects. In consultation with his coach and family, Mugesh decided to discontinue his use of creatine monohydrate and instead focused on a natural, balanced diet to support his training efforts. By reducing his reliance on supplements and incorporating recovery strategies, Mugesh aimed to mitigate the adverse effects on his health while continuing his pursuit of excellence in powerlifting.

Mugesh's case highlights the importance of balancing passion for sport with considerations for personal well-being. While supplements can offer benefits, they must be used judiciously and under professional guidance to avoid adverse health outcomes. Mugesh's decision to prioritize natural recovery methods underscores his commitment to both his athletic ambitions and his long-term health and serves as a valuable lesson for aspiring athletes navigating similar challenges.

CASE STUDY 5

Salman is 24 old an undergraduate student who is passionate about cricket. Inspired by his cricket idol Thala Dhoni and guided by his father as a role model, Salman has been actively involved in the sport. He receives support from family and friends, who encourage his pursuit of cricket.

Training Regimen: Salman dedicates one hour daily for cricket practice, focusing on running, warm-up exercises, and on-ground training. He follows a self-guided approach, drawing motivation from his own aspirations and the support of his social circle.Nutrition and Supplements: Salman does not follow a specific diet plan but relies on home-cooked food for sustenance. In addition to his regular diet, he incorporates supplements like Proipitch protein and Proburst added support in his training. He manages the usage of supplements moderately and uses them when needed.AchievementsSalman has achieved success at the state level in cricket, showcasing his dedication and talent in the sport. His commitment to self-improvement and his proactive approach towards enhancing his performance highlight his passion for cricket.Impact on Studies: Salman's involvement in cricket and his use of supplements have had some impacts on his studies. Before incorporating supplements into his routine, he did not face challenges in his academic pursuits. However, he now experiences some disruptions due to the additional time and focus required for his cricket training and recovery measures.Recovery Measures Salman adopts various recovery measures, including maintaining a balanced food diet, engaging in physical activities, and practicing intermittent fasting for 16 hours. These strategies help him recuperate from intense training sessions and maintain his overall well-being.Future Considerations: While Salman currently manages his supplement usage responsibly, he acknowledges the possibility of using drugs in the future if deemed necessary. However, he understands the importance of making informed decisions and prioritizing his health and athletic performance.

Salman's case exemplifies the journey of a young athlete dedicated to his passion for cricket. His self-guided approach, supported by family and friends, has propelled him to achieve success at the state level. While his use of supplements and intense training regimen have impacted his studies to some extent, Salman remains committed to balancing his academic and athletic pursuits. Moving forward, he aims to continue his athletic journey responsibly, prioritizing his health and well-being while pursuing his dreams in cricket

Summary of the Findings

The researcher had conducted a study titled “A STUDY ABOUT CAUSES AND CONSEQUENCES OF PERFORMANCE ENHANCING DRUG USAGE AMONG THE SPORTS STUDENTS IN CHENNAI”.

Majority of the respondents (88%) are males, Remaining 12 percent of the respondents are females, from this data, it can be understood that males are showing more interest in sports due to societal factors and personal interest. Close to two - third of the respondents (62%) age is between 18 – 20 years, remaining 38 percent of the respondents age is between 21 – 23 years, Thus sports persons from the age group of 18 to 20 are more likely to show interest in sports, as they fall under the category of active beginners. Sportspersons older than 20 years of age mostly lose interest in sports as they like to earn for themselves by working. The mean age of the respondents is 20.14 years. More than three fourth of the respondents (76%) were studied up to degree, One fifth of the respondents (20%) studied up to HSC, Remaining 4 percent of the respondents studied up to SSLC, Hence, the students who possess degrees are more numerous as they participate in university matches and sports events to get job opportunities after their college studies. Less than three fourth of the respondents (72%) are Hindus, very few of the respondents (16%) are Christians, Remaining 12 percent of the respondents are Muslims, From this data, it is understood that Hindus are more numerous, whereas the rest of the members are from other religions, such as Muslims and Christians. Less than three fourth of the respondents (70%) belong to MBC. Few of the respondents (18%) belong to SC, Remaining 12 percent of the respondents belong to BC, Therefore, other backward classes are more numerous because of their social opportunities, and accordingly, the respondents belonging to scheduled castes and most backward classes are less numerous according to our data. Overwhelm majority of the respondents (94%) are living in nuclear family, Remaining 6 percent of the respondents are joint family, From this data, it can be understood that many of the families remain nuclear in this study. And very few respondents are from joint families. This shows the wide spread of nuclear family settings in society. Three fifth of the respondents (60%) plays team Performance enhancing drugs (peds) have been a contentious issue in the world of sports for decades. The use of peds has been known to give athletes an unfair advantage over their competitors and is widely considered to be cheating. Despite the widespread knowledge of the negative effects of peds, many athletes still continue to use them in order to gain an edge in competition. The use of peds in sports can have significant health consequences for athletes. Some of the common side effects of peds include liver damage, heart disease, infertility, and mood disorders. In addition to these physical side effects, peds can also have negative effects on an athlete's mental health. The pressure to perform at a high level, combined with the use of peds, can lead to increased anxiety, depression, and other mental health problems. Another issue with the use of peds in sports is that it undermines the integrity of the competition. The use of peds can create an uneven playing field, where athletes who use these substances have an unfair advantage over their competitors. This can lead to a situation where the best athlete does not necessarily win the competition, but rather the athlete who has access to the most advanced performance enhancing drugs.

Conclusion

Despite the negative effects of peds, some argue that their use should be allowed in sports. Proponents of this view argue that peds can help athletes recover from injuries more quickly and can allow them to perform at a higher level than they would be able to otherwise. However, this view is not widely supported, and most sports organizations have strict anti-doping policies in place to prevent the use of peds. In conclusion, the use of peds in sports is a complex issue with far reaching consequences. While some argue that their use should be allowed, most sports organizations have strict anti-doping policies in place to prevent the use of these substances. The use of peds can have significant health consequences for athletes and can undermine the integrity of the competition. As such, it is important for athletes to compete on a level playing field, without the use of performance enhancing drugs.

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