



THE ROLE OF SPORTS PHARMACIST TO PREVENT DOPING IN SPORTS

Devanadhan R. R., Sangeetha M.* and Bakkiya Selvan V.

Department of Pharmaceutical Chemistry, PSG College of Pharmacy, Peelamedu Coimbatore – 641004, Tamil Nadu, India.



*Corresponding Author: Sangeetha M.

Department of Pharmaceutical Chemistry, PSG College of Pharmacy, Peelamedu Coimbatore – 641004, Tamil Nadu, India.

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ABSTRACT

Pharmacists are playing a bigger and bigger part in keeping athletes from doping. Pharmacists have a considerable amount of knowledge regarding medications, their effects, and the possibility of abuse due to the fight against performance-enhancing drugs, or PEDs. Due to this, druggist play a importantl role in discouraging the usage of stimulants. This makes them play a key role in drug regulation. They help through education. Counseling athletes, coaches and support staff regarding prohibited substances and the dangers of their use. Doctors make sure that the drugs prescribed to athletes comply with anti-doping regulations, particularly in connection with the using of prescription drugs. Athletes need to be able to identify fake and counterfeit medications, that may include various chemicals in order to protect their health and its performances. we have to make sure that various steps that have been taken against doping and are implemented. Druggist need to make sure that they have been collaborated with the teams of sports as well as some anti-doping organizations. Giving athletes therapeutic exemption guidelines (TUE) enables them to receive the care they require but not violating the policies that are governed by it. Additionally, through personal public relations and public health initiatives, pharmacist need to educate to the public that the hazards of doping in sports. Finally, pharmacists' participation in drug prevention promotes safe play. Ensure the players' safety and the fairness of the game. Their vast experience and deep ties to the medical community make them indispensable components of the anti-doping framework. It highlights how important it is.

KEYWORDS: Anti- doping, Pharmacist, Prevention, Adulterations.

INTRODUCTION

A fair competition where success comes from skill, practice, and dedication rather than performance-enhancing drugs.^[5] It is necessary to maintain the integrity of the sports. Athletes who take drugs are not only dangerous to their own health.^[10] but also betrays the values of sports and Trust of sponsors and stakeholders Athletes who strive to reach the pinnacle of their performance. More likely to take illegal drugs.^[8] In this complex environment Sports pharmacists are critical to the fight against doping as the ethical guardians of athletes' welfare and competition. This study examines the many contributions of sports pharmacists in detail.^[12] Emphasis is placed on their role in research, teaching, medication management, compliance and teamwork within the athletic community. Educating players on this matter is one of their main duties. Sports pharmacists^[1] don't just inform athletes about banned drugs. But it also supports safe training and rehabilitation methods. They stressed the importance of proper diet, hydration and not using banned substances. Legitimate Performance Enhancement Techniques^[2] Sports pharmacists help athletes make informed decisions about their

performance and health by promoting a culture of awareness and knowledge when it comes to treatment.^[15] Drug therapy is occasionally necessary for an athlete's actual medical needs. And these treatments may involve the use of prohibited drugs. Sports pharmacists help athletes in these situations by guiding them through the medical use exemption (TUE) application process. The druggist also play a major role in governing the sports person that to avoid doping and they campily teaches the health hazards of these various doping items.^[17] They play a crucial role in maintaining the personal connection between each other and enhances their performances in various field of sports.^[14] They not only teaches but guide them against the doping. The pharmacist play a ambience role in managing the rules and regulations that are goverend by it. They are not only guiders but act as an personal assistant to them in various ways in the field of sports. The rules and regulations are well known by them to guide towards the victory. The druggist are the real warriors who knows about the drugs and the action amongst them, that makes them to ruine the whole field of sports. The strict and stringent rules have to maintained and the fair play should be regularised in the

field of sports. they play an immense role in maintaining the crue of sports athlets in various fields of game.^[12] They not only focus on the single play where they have to play a multiple role in the field of sports. On up on the various ideology we have to an importance of pharmacist in the field of sports.^[8]

METHODS

Using The Preferred Items for Meta- Analyses extension and Systematic Reviews the scoping review for the extension of (PRSIMA-ScR) as a framework for the data gathering, a scoping review of the literature was conducted. The use of a scoping review methodology was made because, in accordance with Munn *et al.* Scoping reviews are used to pinpoint with the body of literature and scope of thinking with the define terms, or Examine the methods used in study. Furthermore to the general character of the studyissue and the expected dearth of studies is in this region.

ELIGIBILITYCRITERIA

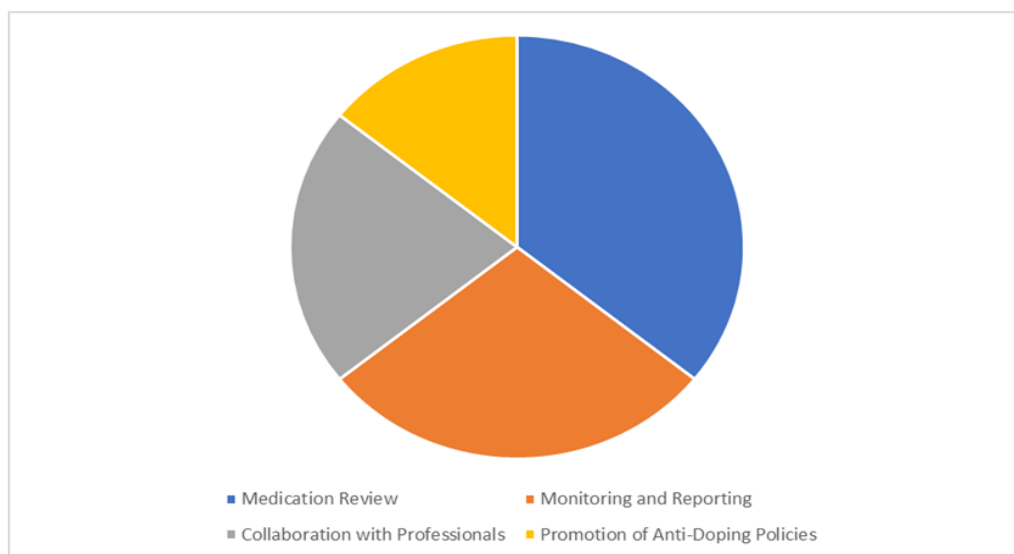
Articles having complete texts available from March 2021 (the year WADA was established) and earlier in peer-reviewed publications that were published in the English language were considered for inclusion. The articles were considered pertinent that will be included

for evaluation of the experienced person in the field of sports, function, on duty of Druggist or pharmacy students in restricting the sports persons from using illegal substances. In addition any examination of cognizance, undesirable behaviours, and views, or any actions taken by the people of sports in the context of substance will get abused. publications written in English or any other languages or omitted were papers were published in late 1999 and those that did not concentrate on the desired subject. Commentaries were not included in the articles. editorials, reviews of relevant literature, and papers whose complete texts were unavailable.

SOURCES OF INFORMATION

MEDLINE, International Pharmaceutical Abstracts, SPORTD iscus, and Scopus is among the electronic databases that were looked through relevant material. A plan for searching was created. The three key concepts: the athlete, the performance-enhancing material, and the pharmacist. The performance-enhancing drug, and the athlete. There were search restrictions on Take into consideration the inclusion criteria, limiting the sources based on their publication date and language (English). Further resources were foundby means of citation chains. An example of an Embase final search approach is described in S1 of the Supplementary Material.

PIE CHART REVIEWING AN ROLE OF PHARMACIST IN DOPING



Tables illustrating the doping in sports in relation with drugs

Table 1: Commonly Abused Drugs in Sports.

Drug Category	Substance	Effect on Performance	Status
Anabolic Steroids	Testosterone	Increases muscle mass and strength	Prohibited
	Nandrolone	Enhances recovery and muscle growth	Prohibited
Stimulants	Amphetamines	Increases alertness, energy, and endurance	Prohibited
	Ephedrine	Improves aerobic performance	Prohibited
Diuretics	Furosemide	Rapid weight loss and masking agent for other drugs	Prohibited
Beta-2 Agonists	Salbutamol	Increases lung capacity and exercise performance	Prohibited (in excess)
Hormones	Human Growth Hormone	Promotes muscle growth and recovery	Prohibited

	Erythropoietin (EPO)	Enhances red blood cell production, improving endurance	Prohibited
Cannabinoids	THC	Pain relief; may impair motor skills	Prohibited

Table 2: Doping Control Methods and Their Importance.

Method	Description	Importance
Urine Testing	Collection and analysis of urine samples	Detects many banned substances
Blood Testing	Analysis of blood samples	Identifies substances like EPO and steroids
Biological Passport	Monitors athlete's biological variables over time	Detects irregularities that may indicate doping
Out-of-Competition Testing	Random testing when athletes are not competing	Reduces the chance of evading detection

Table 3: Impact of Doping on Sports.

Aspect	Description	Consequence
Fair Play	Compromises the integrity of competition	Erodes trust among athletes and fans
Health Risks	Associated with severe health issues	Long-term medical problems, addiction
Legal Consequences	Violations of anti-doping regulations	Suspensions, fines, and loss of reputation
Career Impact	Can lead to bans and disqualification	Loss of endorsements and career opportunities
Public Perception	Alters the image of the sport	Increased scrutiny and skepticism among fans

DISCUSSION

The knowledge of doping in athletics has received a lot of attention recently as a result of high-profile scandals that have brought a lot of attention to this case. Sports druggist play an immense role in high up the ethical standards, and athletes use various techniques to protect the well-being of athletes and improve performance in field sports. This discussion explores the many duties performed by sports pharmacists in vast detail, emphasizing the consequences of their duty and the larger picture of anti-doping start up in sports. A key component of doping management is teaching, and sports pharmacists are in a unique position to give athletes the essential knowledge that they need in the field of sports. Most athletes, especially those who competing at the amateur level, may not be fully aware of all the drugs and their distributions that they take in, including over-the-counter drugs. Regulated the educational things that can be tailored to particular populations and sports, pointing out the negative effects of doping and the significance of following anti-doping laws. Sports pharmacists inform the public about what is needed risks in order to support and guide athletes' general well-being and health, pertaining to illegal drugs. This helps them to avoid doping. For athletes, the confluence of legal medical care with anti-doping laws presents formidable obstructions. Athletes frequently have long-term medical ailments that mediate medicine, which may contain drugs that are prohibited by WADA. This is where sports pharmacists come into an play even the highest. Sports pharmacists helps them to make sure that athletes can receive necessary treatments without being penalized by helping athletes apply for Therapeutic Use Exemptions (TUEs). The requirements can be

laborious and often call for substantial paperwork and medical documentation before a prescription can be written. Sports druggists, with their expertise and understanding, may assist athletes in putting their health first while adhering to environmental regulations. Guiding an integrity-based traditional in sports is just as important as avoiding fine while adhering to anti-doping legislation. Sports pharmacists are essential in encouraging moral and ethical behavior in athletes by helping them to develop a feeling of accountability. This is especially crucial at a time period when athletes are under more pressure to achieve since social media platform had increased their visibility and influences their decisions. Sports leagues and drug dealers can collaborate closely to provide instructional materials and unambiguous policies. This enhances the importance of anti-doping and the necessities for cooperation. Sports pharmacists give seminars and lectures to encourage athletes to take responsibility for their actions. cheering up of moral behavior is the single and one of their main duties. This is especially important at this time. Athletes are under increasing pressure to succeed, and social media increases their exposure and shapes their decisions. Pharmacists and athletic groups should collaborate closely to provide instructional materials and rules that highlight the need of compliance, and is emerging as a pioneer in scientific cooperation. This means staying up to date on the latest advancements in drugs and doping techniques and participating in research projects that seek to clarify the motivations behind doping habits. Furthermore, the sports pharmacists have new avenues for contribution with the growth of tailored nutrition and accurate medicine. This novel strategy can guide in reorienting attention away

from doping for performance improvement and toward legal and healthy ways to increase athletic capacity. Coaches, trainers, dietitians, and sports pharmacists are just a few of the stakeholders who must contribute and work together to combat doping in sports. Every member of this interdisciplinary team contributes in a different way to the promotion of athletes' integrity and well-being throughout competition. Coaches and trainers can benefit from the advice of sports pharmacists, who can offer safe supplements and anti-doping measures for performance enhancement. This responsibilities guarantee that every member of an athlete's support system has the same perspective on performance and health, resulting in a unified plan that put moral behavior at the first priority. Sports pharmacists can also help and guide various organizations that create thorough anti-doping rules that take into an account input from several levels.

CONCLUSION

The education or experience, pharmacists may be extremely helpful in helping athletes avoid using illegal substances by giving them correct information about medications and offering assistance. One of the main obstacles found was lack of pharmacist of expertise in assurance and the field, emphasizing of necessity to the pharmacist to acquire expertise may understanding via instructional programs as well as for the defining and elucidation of particular roles and obligations under any national guideline. Further studies and To know the accurate educational needs, stronger backing from to national anti - doping organizations and the committees. The pharmacological association is critical to sports guidance. Druggist obligations are to carry out their designated roles responsibilities and the role in the prevention of unwanted use of illegal drugs by the people of sports, by improving the pharmacists' capacity to work in this evergreen field.

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