Is Doping Wrong Anyway?

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Abstract

Doping is the action or substance use which is prohibited by international regulation. Why do they dope when they already know that it is prohibited. Athletes who dope are seeking to gain a competitive advantage over their rivals. But athletes seek to gain competitive advantages in numerous ways & many of these are not banned. The consequences of doping are health, social, financial and legal problems. The consequences of health are physical and mental problems. Surely, most of the players and populations think that doping should be prohibited. As it is against the defined rules & laws governing sport. It is unfair and goes against the level playing field ideal. The World Anti-Doping Code (WADA Code) states that "Anti-doping programs seek to preserve what is intrinsically valuable about sport." Doping, like no other issue, hits athletes where it hurts: at their one shot at glory, at their own opportunity of a gold medal. That is why we must continue to work together to protect clean athletes.

Key Words

Doping, Athletes, World Anti-Doping Code

Introduction

The IOC (International Olympic Committee) defines doping as follows: "Doping is the intentional or unintentional use of prohibited substances and prohibited methods on the current doping list." [1]. Since 2004, this definition has been accepted as international standard. Thus, doping is the action or substance use which is prohibited by international regulation.

However, doping has been prevalent all over the world since ancient times. There have been several studies to report the prevalence of doping. Over 30% of athletes participating in 2011 World Championships admitted to having used banned substances during their careers [2-12]. According to a study commissioned by WADA (World Anti Doping Agency), 44% of them had used banned

접수일 : 2022년 8월 16일 게재 승인일 : 2023년 7월 24일 Corresponding Author: Chang–Hyung Lee, M.D., Ph.D. Department of Physical Medicine and Rehabilitation, Pusan National University Yangsan Hospital, 20, Geumo–ro, Mulgeum–eup, Yangsan 50612, Korea Tel: 82–55–360–2873 Fax: 82–55–360–2824 E-mail: aarondoctor@gmail.com substances. Nevertheless, only 0.5% of those tested were caught. In another example, the entire Russian track and field team was banned from the 2016 Olympic Games, due to the Russian State sponsoring their doping program [3].

Doping is currently prohibited in sports. However, it can be beneficial to question, not only why it is prohibited, but why athletes are still attempting the practice. Are there any other absolute reasons doping should be prohibited? In this study, I will discuss the two conflicting conceptions, in the perspective of the players, and general opinions.

Main Text

Histories of Doping

For athletes, doping and medication abuse present a considerable risk to health and give them an unfair advantage over other athletes. This goes against the principle of fair play that is inherent in sport and competition. In spite of this, doping has widely been used, from ancient chariot racing to more recent controversies in baseball and cycling [13]. The general trend among authorities and sporting organizations over the past several decades has been to strictly regulate the use of drugs in sport. The main prohibition reasons are the health risks and the equality of opportunity for athletes. Foremost, authorities are concerned with the exemplary effect of drug-free sport for the public. Anti-doping authorities state that using doping drugs goes against the general concept that is "spirit of sport." The use of prohibited drugs in sports goes back centuries to the invention of the concept of sports. In ancient times, sports players often took diets and treatments which aided muscle power [3]. For example, in Scandinavian cases, athletes drink a mixture called "butotens (from the Amanita muscaria mushroom)" to greatly increase their physical power [14]. The German doctor Albert Schweitzer: Gabon (19th)

"They toil vigorously all day without feeling hungry, thirsty or tired and all the time showing a happiness and gaiety." [15]. The ancient Olympics in Greece are alleged to have had forms of doping. In ancient Rome, athletes drank herbal infusions to strengthen them [16].

There are many reports of doping in cyclists. Abraham Wood (walking race in Britain), said in 1807 that he had used laudanum (which contains opiates) to keep him awake for 24 hours while competing against Robert Barclay Allardyce [4]. The Illustrated London News chided: "It may be an advantage to know that a man can travel 520 miles in 138 hours, and manage to live through a week with an infinitesimal amount of rest, though we fail to perceive that anyone could possibly be placed in a position where his ability in this respect would be of any use to him [and] what is to be gained by a constant repetition of the fact [5]." Nitroglycerine (can stimulate the heart after cardiac attacks and which was credited with improving riders' breathing) users suffered hallucinations from the exhaustion and perhaps the drugs. The American champion Major Taylor refused to continue the New York race, saying: "I cannot go on with safety, for there is a man chasing me around the ring with a knife in his hand." [6]. One report said, "An athletic contest in which the participants 'go queer' in their heads, and strain their powers until their faces become hideous with the tortures that rack them, is not sport, it is brutality." [7].

There are some doping reports in weightlifters as well. The father of anabolic steroids was John Ziegler (physician for the weightlifting team 1917-1983, USA). Ziegler learned from his Russian colleague that the Soviet weightlifting team's success was due to their use of testosterone [17]. This resulted in the creation of methandrostenolone. During the Olympics that year, the Danish cyclist Knud Enemark Jensen collapsed and died while competing in the 100-kilometer (62-mile) race [7]. An autopsy later revealed the presence of amphetamines & a drug called nicotinyl tartrate in his system.

In the 1988 Seoul Olympics, there was a historical episode in field track games. Canadian Ben Johnson's

victory in the 100 m at the 1988 Summer Olympics faced controversy. He subsequently failed the drug test when stanozolol was found in his urine which later admitted to using the steroid as well as Dianabol, testosterone, Furazabol, & human growth hormone, amongst other things [8]. Carl Lewis was then promoted one place ahead to take the Olympic gold title. In 2003, the United States Olympic Committee (USOC), gave copies of documents to Sports Illustrated which revealed some 100 American athletes who failed drug tests (including Carl Lewis) [9].

The reason why they dope

Next, we have to understand the reason they dope. Why do they dope when they already know that it is prohibited. However they still attempted doping. What is the fundamental and basic reason for doping in players?

Goldman's dilemma can be used to explore athletes' thought process. This question was posed to elite athletes by physician, osteopath and publicist Bob Goldman, asking "whether they would take a drug that would guarantee them success in sport, but cause them to die after 5 years" [9]. In his research, as in previous research by Mirkin, approximately half the athletes responded that they would take the drug.

Then, we can also think of dope in terms of fairness. Which is fair? In terms of morality, we can think of the dope in many aspects. Why is doping morally wrong? Would it be morally wrong if it wasn't against the rules? Athletes who dope are seeking to gain a competitive advantage over their rivals. But athletes seek to gain competitive advantages in numerous ways & many of these are not banned. If it's wrong to enhance your performance by doping, why is it not also wrong to enhance your performance by taking dietary supplements, for instance, or carb-loading, or by training at altitude? [10,12]

There are situational reasons for doping. Doping consists of individual factors and socio-cultural and systemic factors. Doping action is the summation of diverse background reasons: social background and experiences, team/club/sport culture, sport governance systems, perceived efficacy of the anti-doping system, and so on. In addition to this background, an individual's desire to win or gain advantages of some type is added which is an issue of personal responsibility and culpability: the desire for winning, improvement, pain management, recovery, career longevity, economic gains, and belonging [10,11].

Thus we can list the reasons of doping as follows: Pressure to perform, injury treatment, ignorance of the players, to overcome their performance limits, failure to succeed [11,12].

Pressure to perform is the main reason for doping. Pressure to perform at their best, either from outside or from themselves, can resort to doping as they cannot see any other way. Injury is also a crucial factor of doping. Injuries are part and parcel of elite sport, and lengthy physical restrictions and problems can lead athletes to take banned substances in an attempt to accelerate the healing process. Many athletes also do not know precisely which substances & methods are on WADA's official prohibited list. Due to their ignorance, doping is commonly attempted. While they practice they experience the performance limits and become frustrated. Some athletes cannot or will not accept their natural limits. In that case, doping is also the way to overcome their limits. Often failure to endure the hard training leads to seeking doping. Training hard and preparing thoroughly for competitions and games is sometimes not enough.

What are the consequences of doping?

The consequences of doping are health, social, financial and legal problems. The consequences of health are physical and mental problems [18]. First, there are physical problems. It can be severe, depending on the substance, dose and regularity of use, and the damage done to the body cannot be reversed in many cases. Certain side-effects can even be lifethreatening. In addition, there is are mental problems. They can also affect and impair the mind, with effects ranging from anxiety & hallucinations, to permanent psychosis, all having been scientifically linked to doping. Social consequences can also occur as a result of doping. Doping has a significant effect on an athlete's entire life, a loss of standing, respect and credibility, the media & public will not believe a negative test again in the future. Often the players have a bad image and are socially isolated. Financial consequences also occur as a result of doping. The sponsors of the players have to be refunded and prize monies returned. The players can't continue to live in the manner to which they're accustomed. Finally legal consequences also occur due to doping. Athletes who dope are banned from sporting competitions & organised training. As a rule, bans last for at least several months and if the athlete reoffends, potentially for life.

Against doping in sports

The question of whether you are for or against doping in sport is also clearly important. If you are against doping in sport, as most people are, there are a number of arguments you might run here. To support one side of them, we should understand the thoughts of both sides. What are the reasons for sides who are against doping in sport? [11,12]

Surely, most of the players and populations think that doping should be prohibited. As it is against the defined rules & laws governing sport. It is unfair and goes against the level playing field ideal. It also represents a health risk and is harmful to the individual. Doping harms the athletes who choose not to dope. Doping contravenes other values defined as the 'spirit of sport.' Doping sends an unacceptable message about the place & impact of sport in society. Anti-doping advocates vary in their relative emphasis on the above arguments.

For Doping in Sports

However, there are also many reasons to support doping. In the previous reports, they showed the reasons for doping [11,12].

The level playing field ideal is a myth. There are

numerous legal performance enhancing strategies that are unequally available across sports and countries such as expensive training facilities & programs, technologically superior equipment, nutritional, medicinal & other aids [19]. Current banned drugs & substances are not inherently harmful, nor the biggest sources of risk & harm when you consider injury rates & long-term physical outcomes in some sport. The true spirit of elite sporting competition is closer to the Athenian ideal of superhuman effort at any cost (including risks and injuries), and doping is consistent with that.

Supervised regulated use of performance enhancing drugs and substances, or other banned practices (e.g. blood transfusions) would reduce health risks and harms. Prohibition policies & punitive measures create hidden, uninformed, and riskier doping which exacerbates health & other harmful effects. Again, people who argue for doping in sport may place different weight on some of the above arguments over others. Further, belief in one or the other of these arguments doesn't commit you to all of them.

Identifying the moral culprit could also be explained in this sense. Banned substances are typically synthetic so they artificially enhance athletic performance. If the point of sport is to test the natural limits of human nature then, by artificially extending those limits, doping is at odds with the essence of sport. Many banned substances (anabolic steroids) are synthetic. But many naturally occurring substances, such as Erythropoietin (EPO), and techniques that involve no synthetic substances (i.e. blood doping) are also banned. Conversely, many synthetic enhancements are permitted (e.g.latest in streamlined clothing, cycling helmets, running shoes).

Thus we can conclude the reasons of doping as follows:

Intended effect

Blood doping is supposed to increase red blood cell supply, thereby increasing stamina. But other means of achieving this effect are permitted. E.g.) Altitude tents are currently not on WADA's prohibited list. Coercive effect of doping ("arms race")

If some athletes are at an advantage because they are doping, it puts pressure on others to dope too. But elite sport is already highly coercive. To remain competitive, athletes have to submit themselves to harsh training regimes & controlled diets that potentially cause longterm harm.

If such measures produce better results, then all athletes have to adopt these measures.

How can we conclude between these two opinions? What are the main considerations?

In spite of these different opinions there are crucial points that we could think over. This is the matter of 'cheating and unfair advantage'. The most obvious answer is that doping confers an unfair advantage. But the advantage is only unfairly gained because doping is banned. By contravening the rules the doping athlete gets an advantage that her more rule-abiding competitors don't get. There are lots of ways in which athletes seek to gain advantage over their rivals: by using the best coaches, training techniques, dietary regimes, and so on. But we view these methods of gaining advantage as fair because they are within the rules. The unfairness of the advantage secured by doping seems to be conferred simply by the fact that it is against the rules, and therefore cheating [19].

Considerations from controversies: A way forward

If there's no prospect of a clear, non-arbitrary justification for why doping is wrong, one option would be to allow doping in some form or other. Many find that unappealing, presumably because the moral intuition that doping is wrong is so strongly felt. But if it is to be maintained, we need to find another way of justifying it [11,12,18,20].

Here's one suggestion: give up the view that doping is intrinsically morally wrong, and replace it with the view that the ban on doping is justified in the same way that the rules of any particular sport are justified. In this sense, a revised WADA anti-doping code has been suggested [20]. The rules of any sport are arbitrarily designed with various aims in mind

: to facilitate an even contest between the competitors

; to reward certain skills & virtues

; to produce an entertaining spectacle and so on.

They have no intrinsic moral significance. The rule banning doping in any given sport could simply be one of these rules, no more morally weighty than the offside rule in football.

Rather than adopting a uniform, homogeneous view on doping across all sports, it has delegated to individual sporting bodies decisions about how to deal with doping athletes within that sport.

Perhaps we should curb our moral outrage. Rules against doping in a particular sport are no more morally weighty than any other rule in that sport.

WADA Ethics Panel

The World Anti-Doping Code 2021 (WADA Code) states[21] that "Anti-doping programs seek to preserve what is intrinsically valuable about sport." This intrinsic value is often referred to as "the spirit of sport". It is the essence of Olympism, the pursuit of human excellence through the dedicated perfection of each person's talents. It is how we play true.

The spirit of sport is the celebration of the human spirit, body and mind, & is reflected in values through sport, including Ethics, fair play and honesty; health; excellence in performance; character and education; fun and joy; teamwork; dedication and commitment; respect for rules and laws; respect for self and other Participants; courage; community and solidarity."

Fairness and Justice

Although individuals are fundamentally different & not equal, & the circumstances under which athletes might have to train are not the same (e.g. differences in resources). Thus the efforts should be made in sport to provide equal opportunity and to facilitate fair competition. WADA considers drug-enhanced performance incompatible with athletic (& human) excellence. Doping exposes athletes to unacceptable

health risks.

Risk of Harm

The WADA Code mentions health as an important value. Although it is clear that elite sport might expose athletes to health risks, it doesn't remove the necessity of considering the significant risks of harms that might be the consequence of the use of performance-enhancing substances.

Science-based

Any decision, recommendation or policy should be based on the best available scientific evidence.

Transparency

In order to promote open dialogue, public trust & integrity, the rationale & process for any decision, as well as ensuing policy recommendations should be as transparent as practicable.

Proportionality

The proportionality principle exists in both law and ethics. It is a rational & coherent approach that tries to balance various principles & values

- whether the relationship between the means used to achieve that policy & its goals is proportional
- (2) whether other means could be used to achieve the same goal
- (3) whether the policy causes any harm to the individual
- (4) whether alternative options might lead to less harm
- (5) how to balance anti-doping objectives with the other rights of individuals (e.g., right to privacy; nondiscrimination)

Education/Public/Athlete Engagement

Anti-doping is a normative position based on concern for the health & welfare of athletes & for the ideals of sport (i.e. the spirit of sport).

Whenever possible, WADA should put effort into the education of athletes & the public.

The long-term success of anti-doping depends upon the cultivation & strengthening of anti-doping attitudes & the practice of healthy & fair sport.

Values and Integrity:

"Win at All Costs" culture can continue to threaten

sport, the public & vast majority of athletes value the importance of fair play as they always have. It encourages athletes to take shortcuts, enticing them with more money, & with the entourage persuading the athlete to break the rules so that that support person can also benefit from the athlete's success There is a huge amount of temptation for athletes to cut corners.

Thus the previous reports suggested to say affirmative action toward doping [11,12]. Values such as fair play; a respect for your opponent & the officials; healthy regard for the rules of sport; honesty over dishonesty; ethical behaviour from athletes-doing what is right.

Say No to Doping. Ethics in sport help us distinguish what is right from what is wrong.

By sticking to strong values, we in the anti-doping community can improve society by protecting clean athletes.

Conclusion

Final Recommendations: What's your choice?

Replacing a War on Doping with Protection of a Clean Athlete

We often use 'war on doping' to promote 'clean sport' & protecting 'clean athletes'. However, it is a negative term. Although this movement has a good virtue, conflicting ways can have unnecessary opponents and need extra time. Rather we should change it to positive terms on the basis of public sympathy. It is certain that the clean athletes are the overwhelming majority, after all [22].

Longer, four-year sanctions for intentional doping cheats; more effective testing & rules that better recognize can improve conditions. Increasing and improving research, both in science and also in social science can also enhance a compliance program. Doping, like no other issue, hits athletes where it hurts: at their one shot at glory, at their own opportunity of a gold medal. That is why we must continue to work together to protect clean athletes.

Here are the 11 rules to prevent doping [11,12].

1. Doping is cheating

Respect your team-mates and your sport, but most of all respect yourself. The real winner is the one who has played by the rules.

2. Get informed

Consult your team doctor or databases. Always double-check any medication

3. Check WADA's prohibited list

Always check the list before taking any medication

4. Focus on good nutrition

A balanced and healthy diet can improve performance and provide all the nutrients and energy you need.

- 5. Be very careful with supplements Be careful with supplements and avoid them if you are not 100% sure about their contents
- 6. Do not risk your career

It is against the rules to make, sell, buy or attempt to traffic any prohibited substance or method, or to possess, administer or attempt to administer any prohibited substance or method.

7. Avoid social drugs

Social drugs such as marijuana & cocaine are a threat to your health and could harm your career as well as your personal life.

8. Anabolic steroids are harmful

Anabolic steroids lead to hair loss, severe acne, shrinking testicles, the development of breasts in males, early heart diseases, and potentially dangerous psychological side effects

9. Don't forget your whereabouts

Remember to make yourself available for testing when required

- 10. Never refuse a test or tamper with a sample The falsification, exchange, or destruction of a test sample and evading, refusing or failing to submit to sample collection is a violation of the rules.
- 11. Therapeutic use exemption

If you have a significant health problem, you may apply for a therapeutic use exemption to use a prohibited substance or method.

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REFERENCES

- World Anti-Doping Code in 2021. https://www.wadaama.org/sites/default/files/resources/files/2021_wada code
- Ulrich R, Pope Jr HG, Cléret L, Petróczi A, Nepusz T, Schaffer J, et al. Doping in two elite athletics competitions assessed by randomized-response surveys. Sports Med 2018;48:211-9.
- News from https://www.si.com/olympics/2016/06/17/ russia-track-and-field-doping-ban-2016-olympics-iaafdecision
- Beck KL, Thomson JS, Swift RJ, von Hurst PR. Role of nutrition in performance enhancement and postexercise recovery. J Sports Med 2015;6:259-67.
- 5. Danica Bonello spiteri by D Bonello Spiteri. The use of performance enhancing drugs in sports: Doping. 2012.
- 6. The use of banned performance | thanigai arasan-Academia.edu. https://www.academia.edu > 8636138.
- 7. The use of performance enhancing drugs in sports: Doping. https://www.um.edu.mt > library > oar > bitstream
- Doping at the tour de france. https://bahasa.wiki > Doping_at_the_Tour_de_France
- 9. https://dopeapps.rw > about dopeapps
- Møller, V. Knud Enemark Jensen's death during the 1960 Rome olympics: A search for truth? Sport in History 2005;25:452-71.
- THE SEOUL OLYMPICS THE SEOUL OLYMPICS; Johnson Loses Gold to Lewis after Drug Test

by Michael Janofsky, Special To the New York Times Sept. 27, 1988.

- Goldman, Robert, Ronald Klatz. Death in the locker room: drugs & sports, 2 ed. Elite Sports Medicine Publications; 1992 p. 24. ISBN 9780963145109.
- From Wikipedia, the free encyclopedia. http:// en.wikipedia.org/wiki/Use of performance-enhnacing drugs in sport.
- Schweitzer, albert: à l'orée de la forêt vierge, récits et réflexions d'un médecin en afrique équatoriale française, albin michel, france 1952.
- Kumar RS. Competing against doping. Br J Sports Med 2010;44:i8.
- Heartland Pennsylvania firsts First use of anabolic steroids in sports. Archived from the original on October 27, 2009. Retrieved 2008-08-14.
- 17. Doping: More than 30% of athletes at 2011 Worlds

admit to doping. BBC Sport. 29 August 2017.

- Why is doping wrong anyway? Department of philosophy logic and scientific method. The London of economics and political science 2016. 17 August.
- 19. Why athletes say no to doping? Examining the reasons underpinning athletes' decision not to dope A report prepared by the institute of coaching and performance, university of central lancashire prof Dave Collins Dr. Áine MacNamara Rosie Collins Prof Richard Bailey.
- 20. CHASING AN EDGE The human reasons why athletes who dope get away with it the logistics of drug testing, and the reliance on the competence and thoroughness of each country's efforts, makes catching cheaters extra difficult. by David Epstein propublica Aug. 31, 2015.
- 21. https://www.wada-ama.org > files > resources > files
- 22. Anti-Doping Education and Learning (wada-ama.org) 2021.