Awareness Attitudes and Information About Doping Substances

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Abstract

Performance-enhancing drugs are substances that are used to improve any form of athletic performance in athletes. The point in the discussion that drugs must be banned for the players because they are harmful to health is not easy to justify. Many athletes have been found positive on testing for the drugs that were either banned or restricted in use by the government over the years because they are widely available as a part of the over-the-counter remedies. Moreover, the government has also ratified some of the more obvious anomalies recently such as caffeine.

On the other hand, some of the substances, such as ephedrine, remain on the list of banned drugs despite the fact that they are widely available to elite players due to their general availability in medicinal products. Furthermore, the ideology associating sports with healthy lifestyles is largely compromised by sponsorship between the sports agencies and the manufacturers of alcohol and tobacco. The purpose of this research study is to collect and understand information about the awareness and attitudes of banned substances, substance use and fear of doping violation, the source of substance and doping information, and doping and drug information. Keeping this objective in mind, a total of nineteen questions have been categorized into four tables. Data has been collected through questionnaires filled by the selected population which consisted of Major League Baseball players. Collecting and statistically analyzing this information is critical because a research gap has been found during the literature review in this regard. More importantly, this study will provide a set of collected data that researchers and practitioners in the future can use for several household searches.

Introduction

The definition of performance-enhancing substances are substances that are used to improve any form of athletic performance in athletes. These substances are more commonly referenced in the media and by most professional sports leagues and college athletic conferences as performance-enhancing drugs or peds. PEDs are substances or chemicals and, in some cases, procedures that are designed to give an athlete an advantage in their sport. For example, steroids and hormones like testosterone are used to increase muscle mass and strength. These drugs are illegal and are banned by professional and amateur sports organizations throughout the world. Along with rigorous training, PEDs can make an athlete stronger and faster than he/she could become without the use of the PED.

Simply put, these drugs are designed and they are used to increase athletic performance.

The most commonly used PEDs are anabolic steroids, human growth hormone (HGH), and creatine. PEDs have a major impact on the human body's biological functions. PEDs are dangerous and can be deadly. PEDs can impact a person physiologically by causing acne, male pattern baldness, and liver damage. Some can lead to psychological issues such as increased aggressiveness and sexual appetite. These drugs impact both male and female athletes. Some of the ways they impact male athletes are breast tissue development, shrinking of the testicles and impotence. Female athletes are physically impacted by the deepening of their voices, the change in breast development, and the abnormal growth of hair on their bodies.

But even after an athlete has decided to stop taking PEDs because their career has ended or the health impact of taking them makes it necessary to stop, it isn't that simple. The withdrawal from a PED can be as bad as the negative impact that it has on the body while taking then because it can cause a person to suffer from depression and, in some cases, lead to suicide.

So why do sports leagues care about what a player decides to do to his or her own body? Surely, it can't be that they care about the athlete's physical or mental well-being. Why do they care what a person is willing to do to be successful? Major League Baseball has been on a quest to ban PEDs and those who use them from their sport for years.

In June 2013, Jacob Beck wrote an article in The Atlantic titled, The Only Good Reason to Ban Steroids in Baseball: To Prevent an Arms Race. His subtitle was, A philosophy scholar investigates six dumb lines of logic—and one compelling one—for opposing performance-enhancing drug use among MLB players.

At the time of the article, MLB was finding out and investigating that some of their players were purchasing PEDs illegally from a clinic in Miami, Florida. Beck wrote that "major league baseball is reportedly on the verge of the largest drug bust in sports history." Star players like Ryan Braun and Alex Rodriquez were caught up in this sting and were ultimately suspended from major league baseball as a result of their PED use.

In his article, Beck gives seven reasons to ban PEDs from MLB. The first six he gives he believes aren't a valid reason, but the 7th is why he believes that they should be banned.

Significance

The purpose of this research study is to collect and understand information about the awareness and attitudes of banned substances, substance use and fear of doping violation, the source of substance and doping information, and doping and drug information. Moreover, this study is aimed at collecting information regarding elite athletes and the type of performance-enhancing drugs that they use. It is also aimed at identifying the extent to which the athletes might have used the drugs in their lives. It

also collects and presents information regarding the influence of the sex of participants, chronological age, and the type of sports they have been engaged in over the past several years. It also investigates the reasons, such as the large-scale sponsorships between the sports body and the manufacturers of alcohol and tobacco, their effect on this health, their accessibility to these banned or restrictive use drugs, accessibility of the natural-performance enhancing drugs or treatments, the association of the sports agency with manufacturers of alcohol and tobacco, the doping policy of the government, and the role the elite athletes themselves than play in this regard and others, behind the excessive use of prohibited performance-enhancing drugs. Collecting and statistically analyzing this information is critical because a research gap has been found during the literature review in this regard. More importantly, this study will provide a set of collected data that researchers and practitioners in the future can use for several household searches. Furthermore, this study questions that if a provision must be introduced by the governments to forbid a competitor from competing while injured.

Literature Review

There are several reasons that support the use of prohibited performance-enhancing drugs in the players, such as the use of natural performance-enhancing techniques; these treatment plans are not prohibited but equally dangerous to the health of the players. However, large-scale sponsorship is one important feature of modern sports. The sponsorship is provided by the manufacturers of two of the most produced drugs, i.e., tobacco and alcohol. It is questionable that an organization that bans the players from using performance-enhancing drugs on the basis that they are unhealthy accepts sponsorship from such manufacturers. Recently, the Royal Society for the Encouragement of Arts, Manufactures, and Commerce published a Commission report and used nine criteria grouped under three headings, i.e., social harms, the likelihood of dependence, and physical harm, to develop a matrix of drug-related harms (2007, p.316-7). Alcohol was ranked fifth on this basis (RSA Commission Report, 2007, p.316-7). Therefore, concerns have already been raised about the acceptance of sponsorship from drug manufacturers by a sports body that prohibits using performance-enhancing drugs on the basis that they are harmful. For instance, Budweiser organized a global campaign urging FIFA to end its sponsorship with alcohol manufacturers. For the 2006 World Cup and Washington-based Center for Science in the Public Interest, Budweiser was an official partner (Center for Science in Public Interest, 2006).

Along with the concerns rising about the sports body’s sponsorship with alcohol manufacturers, its relationship with the tobacco industry has been a matter of concern as well. Most importantly, the medical case against tobacco appears to be much stronger than the medical case against any other drug that is prohibited from being used by the players. Moreover, the sports body’s relationship with the tobacco industry raises questions concerning the link between the sports industry and the promotion of health. For instance, it has been pointed out that smoking is injurious to health by the Department of Health in Britain (1998, p.20). More recently, the Clinical Trial Service Unit at Cambridge University indicated that at least twenty-one percent of all deaths in the United States are

attributed to smoking (Peto et al., 2006, p.510-12). Therefore, it can reasonably be suggested that the ideology associating sports with healthy lifestyles is largely compromised by such sponsorships.

The point in the discussion that drugs must be banned for the players because they are harmful to health is not easy to justify. It has been suggested that such a stance is particularly not easy to justify regarding traditional jurisdiction (O'Leary, 2001). He raises the question of whether a provision must be introduced by the government to forbid a competitor from competing while injured (O'Leary, 2001, p.301). In turn, it raises a series of questions regarding health risks and the behavior of management in elite sports over these risks. The most important in this discussion is that an abundance of literature indicates that elite sports players take, or are expected to take, serious risks associated with their health. Young (1993) stated that sports at the professional level present a hazardous and violent workplace that contains an industrial disease. He further stated that none of the injuries in sports such as rugby, soccer, ice hockey, football, and the like could be compared to any other single milieu such as construction site workers, oil drillers, and risky and labor-intensive settings of minors (Young, 1993, p.373).

Guttmann (1998), in a similar fashion, pointed out that the severity and frequency of injuries in the American football have dropped the average professional life a player down to less than three-and-a-half years. It indicates that the players cannot register for the league's pension plans as they do not qualify for them due to short professional careers. Thus, elite sports are more likely to take performance-enhancing drugs to increase the lifespan of their careers. For this purpose, they are likely to take risks with their health as they continue to compete while injured due to the lack of legislation on it, as pointed out by O'Leary (2001). Roderick (1998) noted that a culture of risk is an important aspect of the sporting culture at a professional or elite level; such a culture normalizes injuries, pain and playing hurt. Such tolerant behaviors towards injuries and pains are deemed to be a prerequisite for career success (Roderick, 2000).

Another matter of concern that somehow supports the use of prohibited performance-enhancing drugs in the players is the use of natural performance-enhancing techniques; they are not prohibited but equally dangerous to the health of the players. For instance, many professional athletes use the process of carbohydrate loading; it is an intensive seven-day training session in which the participants deplete glycogen stores, followed by the consumption of a protein-rich diet. They only consume a sugar- and starch-rich diet over the next three days of the session, which maximizes the number of glycogen stores in their muscles. This intensive process can consequently cause irritability, dizziness, fatigue, nausea, and hypoglycemia in elite players (British Medical Association, 2002, p.10).

Additionally, an examination of the drugs, both synthetic and natural, that are not prohibited and, thus, are widely used, such as anabolic steroids and several painkillers, reveals that they have a variety of potentially serious side effects. For example, the injections of local anesthetic drugs are legally allowed by the Medical Commission of the International Olympic Committee when medically justified (Sports Council, 1998, p.39). However, they should not be used in the field because they can produce cardiac disorders. They can even cause convulsions, central nervous system stimulations,

and death if used in very large doses. The provision of medical justification for using injections of local anesthetic drugs provides that they must enable the player to continue competing in the field (Donohoe & Johnson, 1986, p.95). It raises the question of whether the sports leagues care about the physical or mental well-being of the athletes or if they are only interested in keeping the value of the competition ranked more highly.

Similarly, several anti-inflammatory drugs being used to treat sports injuries on the spot are likely to cause serious health risks. For example, the use of non-steroidal anti-inflammatory drugs can cause diarrhea, nausea, and gastrointestinal pain. Although rarely, they can also cause photosensitivity, vertigo, dizziness, bronchospasm, and skin rashes, whereas renal failure is commonly caused in players with a history of kidney impairment. Moreover, the prolonged use of these drugs can result in perforation or ulceration of the intestines or stomachs (Simbler, 1999). Additionally, these drugs can impact a person physiologically by causing acne, male pattern baldness, and liver damage. Some can lead to psychological issues such as increased aggressiveness and sexual appetite. These drugs impact both male and female athletes. Some of the ways they impact male athletes are breast tissue development, shrinking of the testicles and impotence. Female athletes are physically impacted by the deepening of their voices, the change in breast development, and the abnormal growth of hair on their bodies.

From the discussion, the point has been made that despite the harmful effects of the drugs on the health of the athletes, many of them are legally allowed and are, thus, used by the elite players. However, there are a few drugs that are banned and restricted in use by the government for professional players but are available to the general public. Since they appear to present no threat to health, these drugs are widely used. Mottram (1999, p.1) has noted that many athletes have been found positive on testing for the drugs that were either banned or restricted in use by the government over the years because they are widely available as a part of the over-the-counter remedies. Moreover, the government has also ratified some of the more obvious anomalies recently. For instance, caffeine was banned before, but it is available over the counter now because it is no longer a banned substance. On the other hand, some of the substances, such as ephedrine, remain on the list of banned drugs despite the fact that they are widely available to elite players due to their general availability in medicinal products (World Anti-doping Agency, 2006).

Methodology

A questionnaire was developed to assess the perceptions of the athletes about the banned substance, their effect on this health, their accessibility to these banned or restrictive use drugs, accessibility of the natural-performance enhancing drugs or treatments, the association of the sports agency with manufacturers of alcohol and tobacco, the doping policy of the government, and the role the elite athletes themselves can play in this regard. The literature survey has indicated a research gap in a questionnaire survey addressing the objectives of this study. Therefore, the questions were adapted from the questionnaire used by Petroczi (2007) and the “Dietary Supplementation Questionnaire,

Version 2.0" (Reimer, 2002). By combining the two model questionnaires, a total of nineteen questions were formed for this survey. The questions were written in English. For the purpose of quantifying the data, a Linkert Scale of 5 points was used for all questions. The participants were instructed to respond if they agreed, strongly agreed, disagreed, strongly disagreed, or were unsure of the questions being asked of them through the survey questionnaires.

A variety of questions were asked of the participants. For the purpose of quantifying the collected data, a tabulation was carried out at the beginning of the survey. The nineteen questions were divided into four major categories: (I) awareness and attitudes of banned substances, (II) substance use and fear of doping violation, (III) source of substance and doping information, and (IV) doping and drug information. Information concerning the areas of doping, what medications to be used or not to be used, and the use of over-the-counter medications and prescription medications. The questionnaires were administered for a period of (___) months. The selected population consisted of Major League Baseball players. It was selected because baseball seems to be the professional league that has very publicly fought back against the use of performance-enhancing drugs and suspended some of its best players as well. The questionnaire was made available to the athletes. Both male and female athletes were encouraged to participate in the survey without discrimination. However, the participants were not obliged to disclose their names, and thus, the data was collected through questionnaires filled by anonymous participants. The athletes were also provided with a short verbal introduction to the research study before handing over the questionnaires so that they knew and understood the significance of the study. The human errors were mitigated to the minimum in this manner.

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