

EXPLORING KNOWLEDGE, ATTITUDE, PERCEPTION OF DOPING IN CRICKET PLAYERS OF FAISALABAD

Original Research

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ABSTRACT

Background: Doping, the use of illegal performance-enhancing drugs by athletes, is considered a form of cheating in sports. Authorities like the International Olympic Committee (IOC) and other international sports organizations strictly prohibit doping to maintain the integrity of competition and the health of athletes. Prolonged use of these substances can disrupt the body's natural hormone production, leading to severe health issues, including organ enlargement, liver damage, and fertility problems.

Objective: The objective of this study was to evaluate the knowledge, attitudes, and perceptions of cricket players in Faisalabad regarding doping practices.

Methods: A cross-sectional study was conducted in various cricket clubs and academies in Faisalabad, involving a sample size of 264 players. Participants were selected using a non-probability, purposive sampling technique. Data was collected using a comprehensive five-part questionnaire that covered personal information, knowledge of doping substances, reasons for doping, attitudes towards doping, and the use of doping agents among sportsmen. The data collection process ensured informed consent and confidentiality.

Results: The study revealed that 264 participants exhibited a reasonable level of knowledge about doping and its substances. Most respondents demonstrated a positive attitude against doping, with a significant majority (over 75%) recommending not to use performance-enhancing drugs. However, despite the overall positive attitude, the results indicate a need for more proactive doping prevention strategies to strengthen these attitudes further and minimize doping incidences among players.

Conclusion: This study highlights that while cricket players in Faisalabad have a fair understanding and generally positive attitudes toward doping, incorporating additional educational strategies and training is essential to enhance their awareness and reinforce the anti-doping culture in sports.

Keywords: Athletes, Cricket doping, Doping prevention, Doping substances, Drug abuse in sports, Performance-enhancing drugs, Sports ethics, Sports integrity, Sports medicine, Sports performance, Sportsmen health, Steroid abuse.

INTRODUCTION

Doping is the use of certain medications to improve athletic performance. Drug usage in sports is becoming one of the biggest problems. It is important to remember that excessive and repetitive use of chemicals to achieve certain effects is included in the category of drug misuse in top sports. We call the use of drugs and other substances that are illegal in competitive sports "doping." Performance-enhancing drugs are another term for medications used by athletes to improve their athletic performance (PEDs) (1). The prohibition of doping in sports aims to preserve the integrity of sports and the fair-play concept, shield players' health from any doping risks, and act as positive role models for a large number of young people who look up to sports characters (2). Numerous illegal performance-enhancing drugs, including stimulants and anabolic-adrenergic hormones, are well known for their ability to cause serious health issues, including cardiac attacks (3). Doping is seen as a major sports offence that can have a variety of detrimental repercussions, such as losing championship titles, being disqualified from the competition, having one's reputation damaged, and having ill health. Doping is regarded as premeditated conduct, therefore an athlete's decision-making process behavior (4). Athletes who intentionally or inadvertently use a forbidden drug or employ a prohibited method are also in violation of the Anti-Doping Rules. Prohibited techniques fall into three primary categories: doping of genes and cells, chemical and physical (5).

Notable illicit performance-enhancing substances including stimulants, anabolic steroids, and growth hormone are included in the list, along with lesser-known doping substances like painkillers, diuretics, and β -blockers. Opioids help reduce the pain associated with fatigue and severe injuries, while diuretics are used to reduce an athlete's weight and prevent the detection of banned substances by lowering the amount found in urine as a consequence of increased urination (6). β -blockers, are helpful, nonetheless, in specific activities like shooting and archery that need for mental focus (7). Over the past few decades, the sports industry has undergone significant growth, transforming from an amateur pastime into a highly competitive professional sector that attracts investment of billions of dollars (1). An athlete's drive for fame, dominance, and even financial gain appears to be the motivation behind their use of both legal and illicit doping drugs and/or techniques (8). Most concerning, doping is no longer exclusive to professional athletes. Numerous studies have documented the use of doping substances by young athletes in schools, amateurs who do not compete, and patrons of gymnasiums; many of these individuals are motivated by physical beauty rather than need (3). According to estimates, 1-3 million Americans and 50,000–100,000 Swedes, or around 1% of each country's total population, has abused anabolic steroids. Similarly, it was discovered that growth hormone has been taken as an anabolic aid by up to 5% of US high school pupils (1).

Moreover, 2.8 million recreational athletes in the US were said to have experimented with ephedrine as a stimulant in 2001. Doping is defined in the Olympic Movement Anti-Doping Code by the International Olympic Commission (IOC) as "the use of an expedient (substance or method) that is potentially harmful to athletes' health and/or capable of enhancing their performance, or the presence in the athlete's body of a prohibited substance or evidence of its use or evidence of the use of a prohibited method." This definition was established in 1999. The World Anti-Doping Agency (WADA) publishes an annually updated list of drugs and doping techniques that are banned by the IOC. The World Anti-doping Agency (WADA) reports that 1,009 adverse analytical findings (AAFs) out of 149,758 samples examined in 2020 accounted for 0.67% of all AAFs. Studies, however, indicate that the percentage of doping in sports may be as high as 25%, and that WADA's estimates are likely underestimated (9). It has been proposed that effective education is the primary means of addressing the core cause of the issue using doping prevention techniques. Thus, WADA's drug education initiatives are believed to be crucial in fostering a culture of clean sports. The existing degree of athletes' doping awareness might serve as a starting point for creating educational initiatives that are successful. Furthermore, it has been found that doping attitudes and behaviors are reliable indicators of athletes' intentions to utilize doping (10).

Global anti-doping initiatives are mostly divided into two strategies. First, in order to identify doping in sportsmen, WADA a worldwide regulatory organization, and related laboratories have created a growing number of dependable diagnostic instruments and procedures (12). Second, the sports community as a whole is especially conscious of how crucial it is to pinpoint the sociodemographic, cultural, educational, and sport-specific variables that are linked to players' doping behaviors. These variables are thoroughly studied and included in organized anti-doping initiatives, with the primary goal being to identify, promote, and regulate risk factors for doping behavior in athletes (3). The first strategy is repressive in that it targets athletes who use performance-enhancing drugs and penalizes them as a result. Conversely, the second approach—that is, identifying the protective or predictive factors of doping-behavior is more preventive in nature, working to create a negative perception of doping and, as a result, more successful in creating a general anti-doping environment in sport and society at large (13). Even while doping research has definitely contributed to a decrease in doping in international sports, sportsmen using PES to obtain an unfair edge over rivals is still a problem. Positive attitudes toward doping and the perception of social norms have been found to be associated with doping intention and practice in previous research on the psychological and personal determinants of performance enhancing substances in exercises (14). Doping control is not just relevant to elite sportspeople. It is a widespread societal issue. This is because the desire to improve performance is a social phenomenon, and physical

strength, competence, social skills, and beauty are often linked (15). To make well-informed decisions, we need a solid foundation, which can be established through focused educational initiatives. Effective learning and long-lasting results in sport and health education require an understanding of individual requirements and histories. Optimizing performance is becoming increasingly popular, especially among young people, both in and out of competitive sports, with the possibility of drug use (16). Research will help to teach athletes about the risks and consequences of performance enhancing substance, promoting a safe sporting environment. It's all about maintaining integrity in sports. The rationale behind research on doping in athletes is to ensure fairness in sports and protect the health and well-being of sportsmen.

METHODS

A cross-sectional study was conducted in Young Prince Cricket Club, Railway Cricket Club, MS Cricket Academy, and Saeed Ajmal Cricket Club in Faisalabad. The study took four months to complete following the approval of the research synopsis. A total of 249 cricket players were recruited using a non-probability, purposive sampling technique. Participants were selected based on their willingness to collaborate with the researchers and participate fully in the study. Screening was carried out using a self-generated form developed according to specific inclusion and exclusion criteria. All participants provided informed consent prior to their inclusion in the study. The criteria for inclusion required participants to be between the ages of 19 and 26 years, have at least six months of game experience, and be affiliated with registered cricket clubs or academies. Players who were inconsistent participants (e.g., those playing recreationally only), had any structural deformity, a history of trauma, or were unwilling to participate were excluded from the study. Data was collected using a structured questionnaire composed of five sections: personal information, knowledge of doping substances, views on reasons for doping, attitudes toward doping, and the use of doping agents among sportsmen. After obtaining consent, the questionnaire, which utilized a Likert scale, was distributed to the participants. They were asked to complete it, providing responses on each of the listed areas. The questionnaire aimed to gather comprehensive information regarding the participants' knowledge, attitudes, and behaviors related to doping.

The collected data was then analyzed using the Statistical Package for Social Sciences (SPSS) software, Version 26. For the quantitative analysis, frequency and mean values were calculated, along with standard deviations to describe the data distribution. Pearson correlation was employed to identify any significant correlations between the knowledge and attitudes regarding different doping substances among the respondents. Ethical approval for the study was obtained from the university's research board. Additionally, formal consent was acquired from the various cricket clubs involved in the research to ensure their support and collaboration. All participants were guaranteed that their data would be used solely for research purposes, and their anonymity and confidentiality would be preserved. Before obtaining consent, participants were provided with comprehensive information about the study's purpose and procedures, ensuring that they were fully aware of their role and the voluntary nature of their participation. This informed approach aimed to foster transparency and maintain ethical standards throughout the research process. The study's structured and ethical methodology allowed for the collection of reliable and valid data, supporting a comprehensive analysis of the knowledge, attitudes, and perceptions of doping among cricket players in Faisalabad.

RESULTS

In this study, 249 respondents were asked about their perception of the effects of doping on athletic performance. The participants were divided into three age groups: 36.5% (n=91) were aged 25-26, 35.7% (n=89) were aged 19-21, and 27.7% (n=69) were aged 22-24. Additionally, participants had varying levels of game experience, with 34.1% (n=85) having 2-3 years of experience, 26.1% (n=65) with 1-2 years, 23.7% (n=59) with 6-12 months, and 16.1% (n=40) having more than 3 years of experience. The study assessed their views on substances with potential doping effects, such as amino acids, anabolic steroids, diuretics, energy drinks, growth hormones, and others. The participants' responses varied, showing that while some had knowledge of doping agents, others were uncertain about the effects of certain substances. Table 1 summarizes the participants' perceptions regarding the impact of doping on performance.

Table 1: Effect of Doping on Performance

	Frequency	Percent
Strongly Disagree	47	18.9
Disagree	105	42.2
Neutral	29	11.6
Agree	18	7.2
Strongly Agree	50	20.1
Total	249	100.0

Table 1 demonstrates the distribution of participants' responses on the effect of doping on performance. The majority, 61.1%, either strongly disagreed (18.9%, n=47) or disagreed (42.2%, n=105) that doping enhances performance. A smaller percentage remained neutral (11.6%, n=29), while 27.3% either agreed (7.2%, n=18) or strongly agreed (20.1%, n=50) that doping has a positive impact. These findings indicate that most respondents do not perceive doping as beneficial for athletic performance, highlighting a general skepticism within the cricket players surveyed. This suggests that there may be a need for further education to clarify misconceptions and reinforce the negative health impacts of doping.

Table 2: Ethical Considerations of Doping

	Frequency	Percent
Strongly disagree	114	45.8
Disagree	88	35.3
Neutral	41	16.5
Agree	6	2.4
Total	249	100.0

A total of 249 responses were collected and analyzed 114 respondents (45.8%) strongly disagreed that doping is an ethical deed in sports. 88 respondents (35.3%) expressed disagreement with the idea of doping being considered ethical. 41 respondents (16.5%) maintained a neutral stance on the ethicality of doping in sports. Only 6 respondents (2.4%) agreed that doping could be considered an ethical deed in sports.

Table 3: Role of Physiotherapists in Providing Awareness about Doping Adverse Effects Survey Results

	Frequency	Percent
Disagree	15	6.0
Neutral	17	6.8
Agree	44	17.7
Strongly agree	173	69.5
Total	249	100.0

A total of 249 responses were collected and analyzed. 15 respondents (6.0%) disagreed with the notion that physiotherapists play an important role in giving awareness about the adverse effects of doping. 17 respondents (6.8%) maintained a neutral stance on the importance of physiotherapists in this regard. 44 respondents (17.7%) agreed that physiotherapists have a significant role to play in providing awareness about doping's adverse effects. A substantial majority of 173 respondents (69.5%) strongly agreed that physiotherapists play an important role in giving awareness about the adverse effects of doping.

Table 4: Correlation Between the is Doping is Ethical Deed and Doping Effect Performance

Is Doping an ethical deed		Doping Performance	Effect
Is Doping an ethical deed	Pearson Correlation	1	.167**
	Sig. (2-tailed)		.008
	N	249	249
Doping effect Performance	Pearson Correlation	.167**	1
	Sig. (2-tailed)	.008	
	N	249	249

** . Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis reveals a statistically significant positive correlation between the perception of doping as an ethical deed and the belief in its effect on performance among cricket players in Faisalabad ($r = 0.167$, $p = 0.008$, $N = 249$). The value of Pearson correlation is 1.

DISCUSSION

A major objective of study was to check the awareness of doping, knowledge of doping and attitudes toward doping. Concerning about the knowledge and views of cricket players regarding doping and the knowledge of substances considered to have doping effects out of 249 total respondents 17.3% (n=43) know that anabolic steroids were used for doping purposes and almost 10.4% (n=26) agreed that growth hormones were used for performance enhancing. Narcotics were considered as doping agents by 51% (n=127) cricket players. Stimulants were marked as substances used for doping purposes by 9.2% (n=23) participants. There was a lack of knowledge regarding beta blockers being used for doping purposes and results showed that only 6.8% (n=17) students knew that beta blockers were used for performance enhancing purposes. Vitamins, amino acids and energy drinks were some substances added to the questionnaire to check the knowledge and views about substances being used for doping. These three substances had no doping effects but the lack of knowledge was showed by participants regarding usage of these drugs. Reasons for doping perception can be stated that the most important factor was to “doping effect performance” with approximately 7.2% (n=18) participants agreed on this, pick the easy option as a result of not having a desire to spend enough efforts to achieve the desired physical capabilities.” Attitudes of cricket players towards usage of doping agents were quite satisfactory with a large proportion of participants either strongly disagreed 45.8% or disagreed 35.3% that “taking a doping drug is an ethical deed”.

Nonetheless, it seems that 90% of the students were unaware that drugs, β -blockers, and diuretics were utilized as doping agents in sports. On the other hand, a notable percentage of between 60% to 80% believed that vitamins, energy drinks, and amino acids (AAs) may improve performance. The most significant motive for abusing drugs is "to change body shape and build muscle mass," as indicated by the mean values of the students' replies; almost 80% of the students agreed with this statement.(17) In a related research, the majority of pharmacy students in Japan understood the ins and outs of doping. Most pupils thought that doping was used to bulk up muscles and affect the contour of the body. The majority of bodybuilders don't worry about doping control tests since they don't compete in sporting events, which puts their health at risk. Although they had a negative attitude about doping, a research revealed that 15% of them had either tried or may use illicit performance-enhancing drugs in the future. 35.7% of respondents said that using doping drugs sometimes wouldn't be detrimental. 17.9% of respondents said that doping is morally wrong, demonstrating their unfavorable outlook (18). While this study provides valuable insights into the knowledge and attitudes of cricket players in Faisalabad regarding doping, it is important to acknowledge several limitations. Doping is a highly sensitive issue, and the self-reported nature of doping attitudes and behaviors may lead to social desirability bias, where participants might underreport or misrepresent their behaviors. Additionally, the study's focus on a single population within Faisalabad limits the generalizability of the findings to the broader cricket community. The timing of the study (conducted up to April 29, 2024) may also have been influenced by external factors, such as media coverage, recent doping scandals, or changes in doping regulations, all of which could have affected participants' responses. To enhance the depth and scope of future research, it is recommended that doping be addressed at every level of sports, both nationally and internationally, with workshops and seminars designed to raise awareness among not only players but also students and physiotherapists. Counseling should be provided to those involved or at risk, to support them in making informed and ethical choices regarding doping practices.

CONCLUSION

From above all results it can be concluded that the overall knowledge was reasonable and from this survey and other studies it is important to provide cricket players with adequate knowledge and practical training related to doping and doping substances. The attitude was positive against doping and most of them recommended not taking such drugs at all. Although the attitude was positive, doping preventing strategies should be incorporated to further increase the positivity of attitude.

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