

Knowledge and Awareness of Athletes towards Doping: A Brief Study

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This study was conducted for the assessment of the knowledge and awareness towards doping. The study assessed the knowledge and the awareness of athletes of Punjabi University, Patiala towards Doping substances. Total 60 male athletes (30 Ball game athletes and 30 Track & Field events athletes) were selected, who have at least participated at state level and who were ready to give their response and participate in the present study. The data was collected with the help of W. J. Kamenju's questionnaire, which comprises 11 questions of knowledge and Awareness in part 'B'. Simple percentage methods were used to interpret and tabularize the data. The results have shown that the percentage of knowledge and awareness of ball game athletes is higher than track & field athletes about doping.

Keywords: Doping, Performance Enhancing Drugs, Knowledge, Awareness, Ball game sports, Track & Field events, Athlete, Sports

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Introduction

Doping in sports is not a new concept its roots are very nasty and deep inside sports from ancient times. According to **T Graf-Baumann** ancient Greek athletes are known to have used special diets and stimulating potions to strengthen themselves. In modern era strychnine, caffeine, cocaine, and alcohol were often used by cyclists and other endurance athletes in the nineteenth century. Thomas Hicks sprinted to victory in the Olympic marathon of 1904 in Saint Louis with the help of raw eggs, injections of strychnine, and doses of brandy administered to him during the race (**Anti-Doping textbook, 2015**). Nowadays, doping has grown into a more systematic doping pattern that includes the entire team. Recently in 2016, a state-sponsored doping program involving the Russian teams had banned up to 118 athletes from participating in the 2016 Rio Olympic Games (**Roan D. 2016**).

Doping in India

India has a large number of athletes who found guilty in doping tests. According to the reports of **Sportstar** article published on November 1, 2022, 62 Indian athletes are currently serving suspensions for anti-doping rules violations as per Athletics Integrity Unit (AIU) of World Athletics. India is only behind Russia whose 87 Athletes are serving suspensions at present. In recent cases Kamalpreet kaur, the 26 year old Indian discus thrower was banned for three years after she tested positive for a prohibited substance earlier this year. Traces of Stanozolol (An Anabolic Steroid) found in her sample. Later she admitted that she was totally unaware about that. Kaur is the third Indian athlete to be suspended by the AIU this year. Earlier sprinter Dhanalakshmi and discus thrower Navjeet Kaur Dhillon was suspended for three year, both admitted their offence in time (**Mandeep Singh, 2022**).

In 2021 Woolway et al conducted a study in which 1,225 athletes from Germany, Greece, Italy, Russia, and the United Kingdom responded to measures assessing their general values, spirit of sport values, and their perceived importance of "clean sport." There were significant differences between participant nationality and their perceived importance of clean sport, most important general values, and spirit of sport values. Moderate

Positive correlations were observed between the perceived importance of clean sport and honesty and ethics and respecting the rules of sport. The results highlight the need to better tailor anti-doping interventions to the cultural backgrounds and predefining characteristics of an athlete. **In 2018 Jaipal and Dr. Ashok Kumar** conducted a study to examine the awareness towards doping. Total 50 amateur male sportspersons and 50 female sportspersons were randomly selected to participate in the study. The results of study showed that the male sportsperson more awareness than female sportspersons towards doping. **In 2013 Ratko Pavolovic and Kemal Indrizovic** conduct a study on 100 students in terms of statistics on the use of Doping, knowledge and awareness about the negative effects of doping are insufficient. It is therefore the needs for additional education on this issue is needed to the students those are the future of sports.

Excepting intentional doping, unintentional doping may occur if the athletes practice self-medication without consulting the healthcare professionals. This is particularly common among athletes with medical knowledge (**Johnson D., et al**)

Objective

The objective of the study was the evaluation of knowledge and awareness about doping in athletes of Punjabi University, Patiala

Methodology

The data was collected with convenient sampling method. Total 60 athletes were selected to participate in the present study, who at least has participated at state level competitions. From which 30 athletes were from ball game sports (10 each from Football, Basketball and Hockey) and other 30 were from track & field events. The questionnaire was developed by W. J. Kamenju which was used for collection the data. For the easiness of athletes the questionnaire also translated into Hindi, because most of athletes find it difficult to understand English. The 'B' part of questionnaire comprises 11 questions of awareness and knowledge. The respondents gave on 'Yes' or 'No' answers. The questionnaire was answered when the athlete was resting and in fresh and happy mood. The results were assessed using Microsoft excel software and the simple percentage was used to analyze the data.

Result

The athletes, who are selected for study as subjects, were given the proper instructions and explanations about purpose of the study. The subjects were asked, if they are mentally and physically fit to give the proper response.

Table 1: Knowledge and Awareness of athletes towards Doping

Enclosed as Annexure 01

As calculated Table 1 the ball game athletes have more Awareness towards Doping, when we check table responses and calculate their percentiles we find that in response to 1st question 70% ball game athletes were familiar to World Anti-Doping Code, in their comparison 63.33% track & field athletes have knowledge about the same. 43.33% track & field athletes know sportspersons who have used performance enhancing substance was less than ball game athletes (53.33%). Track & field athletes (43.33%) know more friends and peer sportspersons, who use performance enhancing substances than ball game athletes (36.67%), which means more athletes, are engaged in doping from track and field events. In response to Q. no. 4 83.33% track & field athletes and 66.67% ball game athletes considered it their own duty to not to breach anti-doping regulations. 100% ball game athletes agrees that sportspersons should be educated on Anti- doping regulation as compare to only 83.33% track & field athletes were agreed with the same. 76.67% ball Game athletes and 73.33% track & field athletes were agreed that Athletes should be tested for Performance Enhancing-substance/ drugs at all levels of Competition. In response to Q. no. 7 only 26.67% track & field athletes and 46.67% ball game athletes agrees that they have learnt anything about performance enhancing drugs, which their lack of education about Doping PES. In response to last question only 36.67% track & field athletes and 66.67% ball game athletes consider their awareness on doping and PES to be adequate, which means they lacks in confidence to consider themselves fully aware about consequences of doping.

Table 2: Athletes should be tested for Performance Enhancing-substance/ drugs at all levels of Competition

Enclosed as Annexure 02

Table 2 showed that track & field athletes are more aware about different substances of doping as compare to ball game athletes. The above table shows that athletes are more aware about Anabolic Steroid, Caffeine and Blood Doping rather than other ways of doping. More 50% track & field athletes knew about Erythropoietin, in comparison ball game athletes are very few who have an idea about Erythropoietin. Athletes of both domains lacks awareness about Amphetamines. Majority of athletes agreed that alcohol and cocaine don't enhance sports performance. Notably most of the athletes don't even know the names of Amphetamines or Erythropoietin, so they are fully unaware about the physical and mental harms of these drugs.

Discussions

As per the results of the study showed in both tables it indicates that there is clear lack of knowledge about performance enhancing drugs and doping in athletes of state level and even national level athletes too short of proper knowledge about some common doping methods. Drugs and PES which were asked about are very common and athletes use them, but they are unaware about the harmful effects of these drugs. Even though the study has limitations like Sample size, conducted at a particular place, but still it give us right information about the problem. The researchers suggest for core educational and awareness programs for athletes of all levels, to give them right knowledge and awareness about Doping.

Annexure

Annexure 01

Table 1: Knowledge and Awareness of athletes towards Doping

Sr. No.	Details of the Questions	Ball Game Athletes		Track & Field Athletes	
		Yes	No	Yes	No
1.	I am familiar with the World Anti-Doping Code.	21 (70%)	9 (30%)	19 (63.33%)	11 (36.67%)
2.	I Personally know Sportsperson who have used Performance-enhancing Substances.	16 (53.33%)	14 (46.67%)	13 (43.33%)	17 (56.67%)
3.	My peer Sportsperson use Performance enhancing Substance.	11 (36.67%)	19 (63.33%)	13 (43.33%)	17 (56.67%)
4.	It is the duty of Sportsperson to ensure they don't breach the Anti-Doping regulations.	20 (66.67%)	10 (33.33%)	25 (83.33%)	5 (16.67%)
5.	Sportspersons should be educated on Anti-Doping regulations regularly.	30 (100%)	0 (0%)	25 (83.33%)	5 (16.67%)
6.	Athletes should be tested for Performance Enhancing-substance/ drugs at all levels of Competition.	23 (76.67%)	7 (23.33%)	22 (73.33%)	8 (26.67%)
7.	I have learnt about Performance-Enhancing Drugs.	14 (46.67%)	16 (53.33%)	8 (26.67%)	22 (73.33%)
8.	I consider my awareness on doping and PES to be adequate.	20 (66.67%)	10 (33.33%)	11 (36.67%)	19 (63.33%)

Annexure 02

Table 2: Athletes should be tested for Performance Enhancing-substance/ drugs at all levels of Competition

The substances/ drugs that can enhance sports performance	Ball Game		Track & Field		Total	
	Yes	No	Yes	No	Yes	No
Alcohol	6	24	4	26	10	50
Erythropoietin	2	28	17	13	19	41
Blood Doping	21	9	23	7	44	16
Stimulants	20	10	15	15	35	25
Caffeine	25	5	20	10	45	15
Anabolic Steroid	23	7	25	5	48	12
Cocaine	4	26	3	27	7	53
Amphetamines	3	27	6	24	9	51

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