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Athletes' Sports Interest As Correlate Of Utilization Of Doping Substances In Nigeria

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Abstract: ***The study investigated elite athletes' sports interest as correlate of doping substances in tertiary institutions in Nigeria. The study examined the extent to which the types of sports engaged by the elite athletes influence the use of performance-enhancing substances in tertiary institutions in Nigeria. The study adopted a descriptive survey research design. A study sample of 510 elite athletes in thirty tertiary institutions from ten states (Ekiti, Oyo, Kwara, Kogi, Kaduna, Lagos, Osun, Ogun, Edo and Bauchi) was selected using purposive, simple and stratified random sampling techniques. A 21-items self-developed and validated questionnaire was used for the study. A reliability coefficient of 0.81 was obtained fro the instrument used for the study. Frequent counts, percentages, means cores, chi-square, ANOVA and Scheffe were used to analyse the data collected. Findings of the study revealed that there was a significant influence of types of sports on doping substances used. Elite athletes in team and individual sports were involved more in the utilization of doping substances than dual sports. It was therefore, recommended that the integrity of sports participation should be highly emphasized rather than focusing on winning-at-all-cost. The use of both cognitive and behavioural approaches should be of help for both the athletes and athletes' support personnel.***

Keywords:- Doping, sportsmen and women, athletes, ergogenic drugs, multiple drugs and psychological drugs.

Introduction

The utilization of performance-enhancers is considered unethical by most international sports organizations (International Association of Athletics Federation, 2010 and International Olympic Committee (IOC) Medical Commission, 2006). It is an illegal and criminal practice used to gain an unfair advantage over others. This cheating practice was totally banned by world Anti-Doping Agency (WADA) code (2006) and IOC Medical Commission (2006) mainly for the alleged health risks of doping substances in the body systems, the equality of opportunity for athletes and alleged exemplary effect of clean (doping-free) sports for the public.

Doping as the use of performance enhancing substances is a threat to the principle of modern competitive sports in the 21st Century. This habit among the athletes is a stumbling block to the realization of honesty, free, fair, modesty and play true sports competitions as laid down by the international sports policy (WADA code, 2006), regardless of various types of sports.

The crazy and ruthless desire to win-at-all cost in various types of sports have led to the birth of genetically modified athletes just as beast used sports, have not been spared the doping ordeal. This ugly trend has smothered the reputation of sports and sporting icons and also put their lives on the line. Many spectators doubt the genuine ability of the champions on the podium and wondering the shiny medal handed out will not be retrieved years down the line.

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In every sports (individual, dual and team), the athletes who wish to have an unfair advantage resort to doping but in the long run, it brings him or her not glory but degeneration. In short, athletes who use banned performance-enhancers regardless of types of sports normally aim at (least) six aspects of physical fitness (speed, strength, power, endurance, accuracy and agility) that a competitor needs to surpass the limits of natural human capability. This ironically contradicts the basic principles of sports, which is to promote health and healthy living. The fact however remains that, modern competitive sports are crowded with so much glory and rewards that they have become irresistible emotionally, socially and economically. Toward this, the athletes used specific methods of sports on the basis of physiological, sociological and psychological factors regardless of types of sports they engage.

Study has shown that the boxers and cyclists were using a mixture of brandy, heroine and cocaine often referred to as speed ball (WHO, 2010). Furthermore, weight lifters, sprinters, short putters and swimmers were involved in the use of banned substances such as anabolic steroids, nandrolone, EPO, hGH, narcotics, diuretics and blood doping (Higgins, 2006; Arthur, 2012 and Eno-Abasi, 2013). Regardless of types of sports engaged by athletes, an athletics contest involving banned drugs which the participants go 'quer' in their heads and strain their powers until their faces become hideous with the tortures that rack them, it is not sports, but brutality, cheating and criminal act (McCullah, 1976). It appears that anabolic steroids may improve performance only when strength, speed and endurance are the primary components of the sports for the sprinters, cyclists, weight lifters, boxers, soccer's restless, shot putter (throwing event), long distance runners and when usage is combined with an intensive training programme (Yesalis and Cowart, 1998).

Similarly, the utilization of stimulant drugs such as cola drinks, amphetamine, xanthenes, cocaine, caffeine and most supplements are very common among athletes virtually in all sports of international standard (Julein, 2008). The usage of these drugs earlier mentioned improves athletes' performance by increasing alertness through inhibition of mental and physical fatigue, regardless of perceived side-effects such as death due to seizures, damage to the cardiac muscle or stroke and on the type of sports (Doweiko, 1996).

Narcotics/analgesics (heroine, morphine and opiods are sued by athletes for their sleep-inducing and pain-killing properties to slow or stop the inflammation and swelling of tissues to reduce fever and produce feeling of well-beings (Julien, 2008 and WHO, 2010). As pain suppressants, these drugs enable an injured athlete to continue playing despite tissue damage and other injuries. It has been observed that the beta-androgenic blockers on performance slow heart rate, decrease anxiety and steadying natural body of athletes in sports such as rifle and pistol shooting, archery, bowling and golf. Similarly, athletes such as wrestlers, weight lifters and boxers are fond of using diuretics to make weight for the competition. Others use it to overcome fluid retention – often to modify the excretion rate of urine in other to alter the concentrations of banned drugs such as anabolic steroids.

An attempt by the athletes to improve their performances beyond their natural physical ability has direct link to genetics and training, which may lure them to the utilization of sports ergogenic, such as vitamins, amino acids, anabolic steroids, caffeine, blood doping, oxygen inhalation and creating (Johnson, 2007 and Arthur, 2012). These drugs earlier mentioned are banned by the International Sports Associations due to legal consideration, ethical issues related to cheating and creating an unfair advantage, medical, psychological and sociological problems (WADA code, 2006 and IOC Medical Commission, 2011). This study therefore, investigated the types of sports as correlate to the utilization of doping by

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athletes in Nigeria. In a bid to accomplish this task, a study question and hypothesis were generated and tested respectively for the study.

Research Question: To what extent do the types of sports engaged by athletes in tertiary institutions influence doping?

Hypothesis: There is no significant influence of athletes' types of sports on the use of doping substances.

Methods

The study was a descriptive survey research design and it involved 510 elite athletes drawn from 10 states (Ekiti, Oyo, Kwara, Kogi, Kaduna, Lagos, Bauchi, Edo, Osun, Ogun) using purposive, simple and stratified random sampling techniques. The study sample was drawn purposively from those who represented their educational institutions in NCEGA, NIPOGA and WAUG at least once. 51 elite athletes were selected from each state using simple stratified random sampling techniques.

A self-structured questionnaire on the influence of athletes' sports interest on the utilization of adopting substances. The experts in Human Kinetics and Health Education and Measurement and Evaluation validated the instrument. The instrument was pilot tested with 50 participants selected outside the actual sample used for the study. Using Pearson Product Moment Correlation statistics, a reliability coefficient of 0.81 was obtained.

The instrument was administered on 510 elite athletes while in training programmes at their various training venues fro various sports competitions at NICEG, NIPOGA, NUGA and NUGA levels. All the 510 copies of questionnaire administered were duly completed and returned (representing 100% return rate). The data collected were analyzed using frequency counts, percentages and means scores for the research question. The hypothesis formulated was tested using chi-square, t-test and ANOVA at 0.05 level of significance. A Scheffee post-Hoc analysis was sued to locate the significant F-ratio.

Results

Research Question: To what extent do the types of sports engaged in by athletes in tertiary institutions influence doping?

Table 1: Percentage analysis on the types of sports engaged in by respondents.

Types of Sports	Male		Female	
	N	%	N	%
Individual sports				
Athletics	42	16.7	47	18.43
Weight lifting	34	13.33	22	8.63
Gymnastics	1	0.39	4	1.57
Dual sports				
Badminton	4	1.57	3	1.18
Table Tennis	4	1.57	6	2.35
Tennis	4	1.57	18	7.06
Boxing	2	0.78	3	1.18
Taekwando	11	4.31	1	0.39
Wrestling	6	2.35	0	0.00
Team sports				
Basketball	33	12.94	26	10.20
Football	52	20.39	47	18.43
Handball	21	8.24	49	19.22
Hockey	9	3.53	7	2.75
Volleyball	32	12.55	22	8.63

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Table 1 shows the types of sports engaged in by the respondents. The table revealed that 52 (20.39%) males and 4 (18.43%) female respondents indicated football as their sports interest. Similarly, it was reported that athletics attracted 42(16.47%) male and 47(18.43%) female respondents. Furthermore, the result shoed that 33(12.94%) males and 26(10.20%) females were involved in basketball while 34(13.335) males and 22(8.63%) females indicated weight lifting as their sports. Volleyball as a team sport was with 25(4.9%) males and 22(8.63%) females while handball attracted 21(8.24%) males and 49(19.22%) females.

Table 2: Percentage analysis on the athletes' use of doping substances by types of sports

Types of Sports	Ergogenic Drug		Psychoactive Drug		Multiple Drug Users		Non-Drug Users	
	N	%	N	%	N	%	N	%
Individual sports								
Athletics	46	9.0	24	4.7	4	0.8	15	2.9
Weight lifting	26	5.1	10	2.0	16	3.1	4	0.8
Gymnastics	3	0.6	1	0.2	1	0.2	0	0
Dual sports								
Badminton	6	1.2	0	0	1	0.2	0	0
Table Tennis	8	1.6	0	0	2	0.4	0	0
Tennis	8	1.6	4	0.8	2	0.4	8	1.6
Boxing	2	0.4	2	0.4	0	0	1	0.2
Taekwando	11	2.2	1	0.2	0	0	0	0
Wrestling	4	0.8	1	0.2	1	0.2	0	0
Team sports								
Basketball	35	6.9	6	1.2	0	0	18	3.5
Football	49	9.6	14	2.8	10	2.0	26	5.1
Handball	32	6.3	8	1.6	10	2.0	20	3.9
Hockey	14	2.8	0	0	0	0	2	0.4
Volleyball	25	4.9	6	1.2	3	0.6	20	3.9

Table 2 revealed that irrespective of the types of sports engaged a high number of athletes used ergogenic substances. The number of athletes who used psychoactive substances is considerably less than those who used ergogenic substances. Athletes indulged in using multiple substances (3.1%) in weight lifting more in football (2.0%) and handball (2.0%) than users of psychoactive substances. The data also revealed that irrespective of substances used, a high number of users of doping substances among athletes are in team sports with a total of (155) (30.4%) respondents for ergogenic substances, 34(6.7%) respondents for psychoactive drugs and 23(4.5%) respondents fro multiple substances. This was followed by individual sports athletics with 9.0% for sports ergogenics. The users of psychoactive substances are almost similar in individual sports (6.9%) and team sports (6.8%).

Table 3: Chi-Square analysis on the use of doping substances by athletes' types of sports

S/N	Types of Sports	Ergogenic drugs	Psychoactive drugs	Multiple drugs	df	X^2cal	X^2tab	R
1.	Individual sports	75	35	21	4	10.43	9.49	S
2.	Dual sports	39	8	6				
3.	Team sports	155	34	23				

$P < 0.05$ (Significant)

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The date in table 3 showed that X^2cal value of 10.43 was greater than X^2tab value of 9.49 at df = 4 and P < 0.05 level of significance.

Therefore, there was a significant influence of athletes' types of sports in the extent of doping substance used. The athletes used ergogenic substances and multiple drugs significantly and more frequently in team sports than other sources (Individual and dial) while the respondents in individual sports used psychoactive drugs more than dual and team sports.

In order to examine the influence of gender of athletes on the use of doping substances and types of sports, a TWO-way ANOVA was computed. The results are presented in table 4.

Table 4: Two-Way ANOVA on use of doping substances by gender and types of sports.

Sources	SS	df	Ms	f-cal	f-tab
Sex (A)	2273.68	1	2273.68	10.70	3.84
Types of sports (B)	3415.68	2	1707.84	8.04	2.99
Two-way interaction (A & B)	2822.12	2	1411.06	6.64	2.99
Error term	107126.46	504	212.55		
Total	1246112.00	510			
Corrected total	116700.24	509			

P < 0.05 (significant)

Table 4 revealed that the effect of sex of respondents (factor A) f-cal 10.70 > f-tab 3.84; df = 1 and types of sports (factor B) f-cal 8.04 > f-tab 2.99; df = 2 at P < 0.05 level of significance. Therefore, the hypothesis was rejected. However, the sex by types of sports (A & B) interaction effects was statistically significant (df = 2; 510: f-cal 6.64 > 2.99, P < 0.05). Thus, the types of sports participated in by the respondents had a significant influence on the use of performance-enhancing substances. However, a Post-Hoc analysis using Scheffe for further multiple comparisons and for mean difference on the use of doping substances by types of sports revealed the result as presented below:

Table 5: Post-Hoc test Analysis (Scheffe) on multiple comparisons of use of doping substances and types of sports.

S/N	Types of Sports	Mean Value	Mean Difference		
			1	2	3
1.	Individual sports	48.13		3.43	-2.68
2.	Dual sports	44.70	-3.43		-6.11*
3.	Team sports	50.81	-2.68	6.11*	

The mean difference is significant at 0.05 level of significance.

Table 5 showed the mean values of individual sports (48.13), dual sports (44.70) and team sport (50.81). The mean difference between individual sports and dual sports was -3.43 with no statistical difference in the use of doping substances. Similarly, the mean difference between individual team sports was -2.68 indicating no significant difference on the use of doping substances.

However, the mean difference between dual and individual sports considering the mean value of 44.70 was -3.43 indicating no significant difference in the use of doping substances by the athletes. The mean value between team sports (50.81) and individual sports (48.13) was -21.68 with no statistical significant difference in the utilization of doping substances. The mean difference between dual and team sports was 6.11

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which was considered highly significant in the use of doping substances. Therefore, there was a significant mean difference between dual and team sports in the use of doping substances by the athletes at 0.05 level of significance,

The findings in this study revealed that athletes' involvement in the utilization of doping substances is determined by the sports they participated in. generally, athletes in team sports and individual sport used ergogenic substances significantly more they athletes in dual sport (table 1) this finding is supported by Ansher (1977) that some athletes used performance – enhancers (anabolic steroids) in sport and games that requires strength, power, energy and speed and reduction of weight to meet the standard required for sport registration and physical performance the use of steroids by the athletes would improve performance only when strength is a primary component of the sport and to have uneven competitive edge over their opponent who wanted to complete through their national physical effort. This is an unethical and criminal act.

The study revealed that there was a significant influence of athletes types of sports in the extent of doping substances used. Sportsmen and women used spot ergogenic drugs significantly and more frequently in football, athletics and handball than other sources. This observation was similar to the report of Mandell (1999), Bells (2006 and Canroll (2001) that athletes used various ergogenic drugs (anabolic steroids, ephedrine, amphetamines) as performance – enhancers, considering the nature and types of sports in which they engaged. The utilization of sport ergogenic drugs in various sporting activities by athletes is to enable them perform beyond their natural physical abilities. Thus, the athletes' involvement in doping substance is a pointer to their beliefs that self-identities and self-worth are defined by their success as sport competitors regardless of the physical, psychological and social side-effects on them.

This study revealed that there was a significant difference in the proportion of athletes who used sport ergogenic drugs and those that used psychoactive drugs. Irrespective of the types of sport engaged a high number of athletes used ergogenic substances. This finding was similar to the report of Higgins (2006) that athletes utilized performance-enhancers depending on the nature and types of sports engaged.

Specifically, sex would determine doping among athletes. The number of male athletes who confessed their involvement in doping was higher than their female counterparts. From time immemorial, male athletes were more exposed to various sporting activities and even performance – enhancers earlier than their female counterpart (Higgins, 2006). Sportsmen have the ability to engage in various sporting activities and experiment drugs that can improve their performance towards a sport contest (Eno-Abasi, 2013) while their female counterparts are always engaged in daily endeavours that demand expending less energy speed, strength and endurance.

Conclusion

Based on the result of the study, it was therefore concluded that the type of sport participated by the athletes really determine the utilization of various performance – enhancers, considering their pharmacological properties and regardless of their perceived consequences. Significant influence was found among athletes using doping substance with respect to the se of the respondents and types of sports.

Recommendations

Considering the findings of this study, it was therefore recommended that:

1. The integrity of sports participation should be highly emphasized rather than focusing on winning at-all-costs for monetary and material rewards.
2. Incentives for excellent athletes and coaches should not be flamboyant to

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avoid side attraction to performance-enhancers.

3. Coaches employed and athletes should be properly screened and officially educated on the physical, psychological skills training counseling activities to counter boredom and other negative behavioural dispositions exhibited by athletes under doping.
4. There should be effective implementation of team and league drug policies, drug testing psychological skills training and counseling activities to counter boredom and other negative behavioural dispositions exhibited by athletes under doping.

References

Ansher, M. H. (1997). Psychology of drug use in sports. New York: Macmillan Publishers 851-876

Arthur, J.S. (2012). Erythropoietin: Blood, brain and beyond, London; John Wiley and Sons

Bells, A.P. (2006). Drug abuse, sports and homo-sexuality. New York. Sim & Schuster Press Ltd.

Canroll, C.R. (2001). Drugs in modern society. Dubugue: McBrown Publishers.

Doweiko, H.E. (1996). Concepts of chemical dependence (3rd ed) Pacific Grove

Eno-Abasi, S. (2013). Doping changing face of festering sore. The Guardian (may 4)

Higgins, A.J. (2006). From Ancient Greece to modern Athens. 3000 years of doping in horse competition. Journal of Veterinary Pharmacology and Therapeutics 29(1) 4-8

International Association of Athletics Federation (2010). Focusing dope-free sports. *IAAF publication 5-9*

International Olympic Committee (IOC) Medical Commission (2006). Anti-doping directives. International Olympic Committee, Switzerland 51(72)90=95.

Johnson, K. (2007). Italian anti-doping laws could mean 3 years in jail. USA Today (PDF)

Julier, R. M. (2008). A primer of drug action (11th ed) New York: Joseph E. Company 537.

Mandell, J. A. (1991). The Sunday Syndrome: A unique pattern of amphetamine abuse.

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