Drug-Abuse and Prevention Strategies Among Secondary-School Athletes Participating in Football and Athletics in Port-Loko District, Northwest Region, Sierra Leone

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Abstract

This study investigates the prevalence of drug abuse among secondary schools' athletes participating in football and athletics within the Port-Loko District, North-west-region of Sierra Leone. Rising concerns about the impact of drug use on athletic performance, health, and academic success necessitated a comprehensive analysis of the factors contributing to substance abuse in this demographic through a mixed methods approach, including surveys/questionnaire, interviews and focus group-discussions with athletes, coaches, sport masters and parents. The research identified key trends in drug consumption, motivation behind usage, and the socio-economic factors influencing these behaviors. The population of the study included 400 pupils athletes in selected secondaryschools within Port-Loko District formed the population and sample size 200 was done by simple random sampling and purposive sampling. Data was collected with instruments like questionnaires, interviews and focus-group-discussions. Data was analyzed using the IB-SPSS software version 25 and results translated into tables and charts. Findings revealed that considerable proportion of athletes are exposed to various substances, predominantly stimulants, and performance-enhancing drugs, often driven by the pressures to excel in sports and the absence of adequate knowledge regarding the risks associated with drug use. The research underscores the critical role of peerinfluence, accessibility of drug, and the need for improved educational resources. In response to these findings, the research proposes targeted prevention strategies tailored to the unique-environment of secondary-school sports. Recommendations include the implementation of comprehensive drugeducation-program, increase involvement of stakeholders and parents in sports education, and the establishment of support system that encourage healthy-life-style choices among youth-athletes.

Keywords: Athletics, Drug-Abuse, Participation, Prevention, Strategies, Secondary-School-Athletes.

Introduction

Drug abuse among adolescence is a significant public health concern, particularly in regions where youths engage in sporting activities. This research article aims to investigate the prevalence of drug abuse among secondary school athletes actively involved in sports in Port Loko district Northwest Region, Sierra Leone and to identify effective prevention strategies tailored to this demographic. Drug abuse in Port Loko District

and by extension Sierra Leone in the contemporary time has become one issue that cast a gloomy shadow to the entire Sierra Leonean society especially among secondary school athletes. The height of drug trafficking issues in Sierra Leone has surged recently with a good number of youths and adults involved in its use and abuse.

Nevertheless, the usage of drug either by secondary school athletes or other members of the larger society in all its ramifications

 appears to be a community social problem. This problem is widely spread and it affects all and sundry. In order words, this wide spread use and abuse entice people from all works of life and beyond the human destruction caused by drug dependence is the damage to traditional and life style. Studies have also shown that drug abuse wrecks individual, shatter families and weakens entire society with its burden of economic loses, health cost and increased lawlessness and crime. The effects of drug abuse on student athletes are impacting physical health, multifaceted, mental well-being, and academic performance. Research by Jalloh et al,[1], 2023 indicates that drug abuse can lead to a range of physical health issues, including cardiovascular problems, liver damage, and hormonal imbalances. Psychologically, athletes may experience increased anxiety, depression, and a higher risk of developing substance use disorders. Academically, drug abuse is associated with decreased concentration, lower grades, and higher dropout rates [2], Kamara & Sesay, 2024. Doping, defined as use of drugs or other substances for performance, improvement has become an important subject in virtually every sport and has been discovered in athletes of all ages and at every level of sports competition, for rates of use of a variety of substances, whether doping agents or recreational substances, among different populations of athletes as reported in various recent research studies. Athletes, too, can fall prey to the temptation to turn to heroine after abusing painkillers. In recent years, there have been a lot of apprehensions about the transition from painkiller abuse to heroin use and addiction.

Drug and substance abuse has led to many problems in secondary schools especially strikes and disturbances of cliques which ever normally experienced in schools at normal school sessions or during inter house Games and Track and field events Athletics competitions.

The adolescent years are critical for development, and participation in sports can have both positive and negative influences on youth behavior, while sports can promote healthy lifeless, they may also expose students to drug use either as a means of enhancing performance or due to peer pressure, understanding the dynamics of drug abuse in the context is essential for developing effective prevention strategies. The intake of drugs by secondary school Athletes in Port Loko.

Secondary schools are becoming a very serious case. Recently, most of the many troubles caused by students in Port Loko District secondary schools are as a result of drug abuse. Few years ago, a female pupil was stabbed and killed by a male pupil and when the case was investigated the male pupil was found to abused too much of drugs [3] Criminal investigation Department police F, division Port Loko District 2023. There are so many instances in Port Loko District secondary schools, where pupils have confronted their teachers physically because these students were caught red handed by their teachers abusing drugs [4], school authorities, Port Loko District secondary schools, 2021.

Against this background and judging from the problems outlined above, this research ascertaining drug abuse and prevention strategies for junior and senior secondary school Athletes in Port Loko District as a study area.

Aim

The aim of this study is to investigate Drug abuse and Prevention Strategies among Junior and Senior Secondary School athletes participating in Football and Athletics in Port Loko District, Northwest Region, Sierra Leone.

Objectives

1. To investigate Drug abuse and prevention strategies for junior and senior secondary

- school Athletes in Port Loko District.
- To assess the prevalence and types of drugs abused among Junior and senior Secondary athletes participating in sports in Port Loko District.
- 3. To identify factors (social, environmental psychological) contributing to drug abuse among secondary school athletes in Port Loko District.
- 4. To promote tailored prevention strategies in addressing drug abuse among secondary school athletes and their effectiveness.
- 5. To identify the effects of drug abuse on student athletes in Port Loko District.
- 6. To examine methods of abusing drugs by student athletes in Port Loko District

7. To recommend suitable measures to combat drug abuse in Port Loko District.

Methods

Population

400 hundred secondary schools athletes who participate in football or track and field athletics in Port Loko District.

Sample

A representative sample of 200 athletes from various schools ensuring diversity in term of gender and types of sport. Data collection instrument are structured questionnaire are developed that includes demographic information. Use of observation checklist, interviews and focus group discussion.

Findings and Discussions

Table 1. Respondents' Perception on commonly Abused Drug

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Alcohol	24	12.0	12.1	12.1
	Marijuana	26	13.0	13.1	25.3
	Tramadol	34	17.0	17.2	42.4
	Kush	57	28.5	28.8	71.2
	Tabacco	30	15.0	15.2	86.4
	Ataya	27	13.5	13.6	100.0
	Total	198	99.0	100.0	
Missing	System	2	1.0		
Total		200	100.0		

Table 1. above clearly display demonstrate the most commonly drug abuse in the northwest region of Port Loko district and in the country of Sierra Leone as a whole. The research survey results indicate that 28% is the most commonly drug abuse that is 'Kush, 17% involves the abuse of tramadol, 15% represent 13% involves the misuse of tobacco. Marijuana, 13% involves in Ataya and 12% are involved in the misuse of alcohol. The problem of athletes turning to addiction is not one that happens in isolation. Research indicates that misusing controlled substances

takes place across all sports and athletic competitions. Various aspects of athletic life are conducive to drug misuse; in addition to performance enhancement, athletes take drugs (or are given drugs to take) to medicate injuries, and to deal with mental and emotional stress that comes from life on and off the field, track, court, or ring, and even after retirement. Consuming these drugs (especially in a high-pressure and high-risk environment, like professional sports and athletics) presents a significant risk of developing an addiction to them.

Table 2. Respondents' Opinion on Reasons for Drug Abuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	performance enhancement	42	21.0	21.1	21.1
	pressure to win	42	21.0	21.1	42.2
	Coping with stress	29	14.5	14.6	56.8
	help them in their studies	32	16.0	16.1	72.9
	to be bold and brave	41	20.5	20.6	93.5
	peer group influence	13	6.5	6.5	100.0
	Total	199	99.5	100.0	
Missing	System	1	.5		
Total		200	100.0		

Table 2. overhead illustrate the opinion of respondents interviewed on the reasons of drug abuse among athletes. The research result bound that 21% of drug abuse among athletes is because of "performance enhancement, 21% again is for pressure to win, 20% is to be bold and brave, 16% is to help them in their studies while 14% signify coping with stress and 6% is due to peer influenceAddiction and substance use amongst athletes can be hard to overcome due to the stigma of addiction. Listen to our Addiction Talk interviews with past and present professional athletes and their struggles with addiction. When athletes abuse substances whether it's drugs or alcohol, it's usually to cope with behavioral health issues going on

such as anxiety, depression, or an eating disorder. It can also be driven by a desire to fit in with their peers simple description of the effects of using drugs is often more effective than a long lecture filled with drug horror stories. Using short, to-the-point descriptions of the negative effects of drugs -- such as those listed below -- will work well in capturing your students' attention and keeping them engaged. Drugs can have lasting effects on the brain and body. Using drugs often compromises judgment and physical abilities and makes a person unable to perform in a variety of contexts: Academics, Athletics. Music or dramatic arts, Decision making in everyday situations, Driving any kind of vehicle. Operating equipment or tools.

Table 3. Respondent Perception on Sources of Drug

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ghettos	68	34.0	34.2	34.2
	drug sellers	56	28.0	28.1	62.3
	drug traffickers	25	12.5	12.6	74.9
	peer group	50	25.0	25.1	100.0
	Total	199	99.5	100.0	
Missing	System	1	.5		
Total		200	100.0		

Table 3. surface elaborate on the sources of drug abuse among athletes. the views of respondents interviewed on the sources of drug is that, 34% of drugs are from ghettos,

28% are from drug sellers, whereas 25% are from peer group while 12% are from drug traffickersDuring the past two decades, prevention specialists have responded to

concerns about youthful substance use by developing a variety of programs. The most effective of these programs have been based upon our understanding of the risk and protective factors involved. While studentathletes generally share the same level of risk as other high school students, as a group, they may have other characteristics that can be considered. In addition, the special socializing experience of participating in athletics may present special opportunities for prevention. Exposure to alcohol and popular drugs of abuse such as kush, tobacco, tramadol, Ataya, marijuana, cocaine and club drugs among adolescents and young adults in high school, college and the work force is a common,

though disturbing, phenomenon. Such exposure is often viewed as "normative" (both statistically and developmentally) even though the contact carries with it potentially serious and even life-threatening consequences. The most prevalent experience among adolescents and emerging adults is with beverage alcohol though exposure rates to street drugs such as tramadol, kush, ataya, marijuana and ecstasy remain significant [5] (Johnston & O'Malley, 2001). Heavy drinking and experimenting with other drug use have been viewed as "rites of passage" for many students not only in college [6] Vicary & Karshin, 2002 but also those transiting the high school years al, 2021.

Table 4. Respondent Perception on Methods of Abusing Drug

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Smoking	37	18.5	18.9	18.9
	drinking	50	25.0	25.5	44.4
	sneezing	42	21.0	21.4	65.8
	injection	28	14.0	14.3	80.1
	piercing of the skin	39	19.5	19.9	100.0
	Total	196	98.0	100.0	
Missing	System	4	2.0		
Total		200	100.0		

Table 4. above demonstrate the persuasion of respondents interviewed on the methods of drug abuse among athletes. The investigating result précis that 25% of the athletes do drinking including the taking of tramadol, 21% sniff drug, 19% do the piercing the of skin in taking drug whereas 18% do smoking and 14% do the injection taking of drugs. 55% of students did not participate in any school sports and 32% reported substance use. Intramurals were negatively associated with cannabis, tramadol, kush use and cigarette use among all students and e-cigarette use among

females. Varsity sports were associated with lower odds of cigarette use among all students and cannabis, kush, tramadol use among males. In contrast, participating in varsity sports was associated with increased odds of binge drinking, smoking, injecting, sniffing and e-cigarette use among all students. Participating in both intramurals and varsity sports was associated with increased odds of binge drinking and e-cigarette use but with decreased odds of cannabis use and cigarette use [7].

Table 5. Respondents' Opinion on Drug Prevention

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Health Education	55	27.5	27.5	27.5
	Parents and teachers involvement	29	14.5	14.5	42.0
	seminars and sensitization of drug abuse	25	12.5	12.5	54.5
	implementation of drug policy	54	27.0	27.0	81.5
	peer group restriction	37	18.5	18.5	100.0
	Total	200	100.0	100.0	

Table 6. Respondents Perception on Effects of Drug Abuse

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	mental problem	56	28.0	28.3	28.3
	criminal practices	50	25.0	25.3	53.5
	poor academic performance	40	20.0	20.2	73.7
	always desperate	39	19.5	19.7	93.4
	fatigue and lack of attention	13	6.5	6.6	100.0
	Total	198	99.0	100.0	
Missing	System	2	1.0		
Total		200	100.0		

Table 5. overhead display the opinion of respondents interviewed on the prevention of drug among athletes. The survey indicated that 27% of the respondent interviewed demands Health education, 27% demand the implementation of drug policy whereas 18% group restrictions, favoured peer favoured parents and teachers' involvement and 12% demands seminars and sensitization on drug abuse among the athletes. Preventing drug use among athletes and students involves creating supportive environment. implementing comprehensive drug education programs, and addressing risk factors early on. This includes fostering positive relationships, developing strong values, and promoting healthy lifestyles. Integrate drug education into the curriculum, promote healthy coping mechanisms, foster positive school environment, involve parents and families,

build self-esteem and confidence, promote healthy relationships, Make it a school-wide effort [8] Drug Enforcement Administration, 2024.

Table 6. above show the perception of respondents interviewed on the effects of drug abuse among athletes. The result outcomes designate that 28% will be having mental problem, 25% will be involving in criminal practices, whereas 20% leads to poor academic performance, while 19% present always desperate and 6% leads to athlete's body fatigue and lack of attention. The risk factors that affect both sports activities and drug abuse, such as the feeling of physical disproportion and desire for slimming and fitness, should be considered and their related interventions should be designed. Effective monitoring should increase on sports halls out of university - As one of the possible areas for

recommending and encouraging female athletes to use various types of harmful drugs. Preventive programs should be designed for drug abuse both separated and specialized – in terms of time and content- for males and females and consider their psychological and social differences. Expanded student sports teams and students - especially females –

should have been encouraged to participate more in them. The findings of this study suggest that membership in sports teams of a college, especially for females should be expanded, and preventive programs should be designed through sport in a professional way – in terms of timing and content- for males and females.

Table 7. Respondents Perception on Suggestion to Pupils Abusing Drug

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	campaigns and senimars on drug abuse	57	28.5	29.1	29.1
	constant monitoring and counselling	25	12.5	12.8	41.8
	drug policy enforcement	26	13.0	13.3	55.1
	parents, teachers and community involvment	26	13.0	13.3	68.4
	ban of all clubs	42	21.0	21.4	89.8
	abstain from peer group	20	10.0	10.2	100.0
	Total	196	98.0	100.0	
Missing	System	4	2.0		
Total		200	100.0		

7. surface Table show respondent suggestion of handling drug abuser among school athletes. The survey revealed that 28% present e campaign and seminars on drug, 21% is to ban all clubs, while 13% is to implement drug policy, whereas 13% is the involvement of parent and teachers, 12% is to constant monitoring and counseling and 10% is to abstain from peer group influence. An important step in addressing this issue of substance abuse is through prevention, which may be in the form of team- and communitybased didactic education programs [9], Reardon & Creado, 2014. Athletes who may already be struggling with substance abuse should be seen by clinicians, who can help them through empathetic motivational interviewing [10] Reardon & Creado, 2014. When counseling young athletes, clinicians should address their goals (i.e., sport versus life after sport) and discuss any conflicts between personal values and drug-behaviors

they may be facing [11] Reardon & Creado, 2014. Although resistance may be felt by athletes towards clinicians when discussing drug abuse, clinicians should avoid argument and propose different alternative ideas without imposing, heavily suggesting, or insisting upon them.

Perhaps the most important thing clinicians, family members, and community members can do to address this issue is encourage athlete self-worth/efficacy.[12] Reardon & Creado, 2014. In other words, we need to ensure that athletes know they are "good enough", and that "winning", or "success" should not be dependent on the inappropriate use of substances, rather hard work and determination. Athletes who are physically dependent on drugs, though, may pharmacologic interventions (such as naltrexone opioid for and/or alcohol dependence) [13] Reardon & Creado, 2014.

The Study Revealed that:

- The types of drugs students abused in school included Alcohol, Marijuana, Tobacco cigarettes, cigar,' Tabataba', Tranquilizers, Coffee, Tea, Ataya, Cocaine, Kush, tramadol etc.
- Sources of drugs for pupils are from Ghettos, peer group, Drug stores, drug dealers
- 3. Methods of abusing drugs in schools include- smoking, d, Sniffing and Injecting
- 4. Drug abuse is very detrimental/harmful to the health of pupil athletes
- 5. Drug abuse will lead to indiscipline to the school and sports
- 6. Drug abuse will lead to poor performance in academic studies
- 7. Drug abuse will lead pupil athletes to commit socio-economic problems in the community, i.e., stealing, gambling, fighting, disobedience and insolence to elders in the community

Reasons for Pupil Athlete's Abuse of Drugs in Schools Included:

- 1. To be brave and bold
- 2. To imitate parents/elders.
- 3. Peer group influence.
- 4. Lack of jobs/ employment
- 5. Help them in their studies.

Strategies of the School for the Prevention of Drug Abuse Include:

- 1. Educating pupils on drug abuse and its effects
- 2. Guidance and counseling sessions
- 3. Seminars, workshops, Sensitization
- 4. destruction of all Ghettos around school community
- Enhance policies and enforce strict disciplinary measures against drug abusers e.g. Suspension/expulsion of pupils abusing drugs
- 6. Peace building mediation on drug abuse
- 7. Experience sharing

 Collaboration of school authorities, law enforcement officials, and community stakeholders

Constraints/ Problems on Drug Abuse in School Included:

- 1. Lack of funds to organize seminars/workshops on drug abuse
- 2. Disciplinary problem
- 3. Lack of cooperation from parents, law enforcement officials and school authorities for students using drugs
- 4. Inadequate resources
- 5. Inadequate guidance counseling on drug abuse in secondary schools
- 6. Lack of attention and retention of students in class
- 7. Lack of transport facilities
- 8. Effective NGOs involvement to fight against drug abuse
- 9. The police and the school not working together.

Justification

The research provides valuable insight into the issue of drug abuse among adolescents in Port Loko District and contributing to the development of effective prevention strategies. The findings will be beneficial for educators. policy makers and health professionals, stakeholders working to promote healthy behaviors among youths. The impact of sports participation is often associated with positive outcomes such as improved physical health, social skills, and academic performance. In conclusion, the justification for studying drug abuse among secondary school athletes actively participating in sports is multifaceted encompassing public health education, social and policy dimensions. By addressing this issue, the study aims to contribute to the development of effective prevention strategies that promote healthy behaviors and supports the well-being of young athletes.

Conclusion

The research concluded that:

- 1. There is abuse of drugs by pupil athletes in secondary schools in Port Loko District
- 2. Pupil athletes get these drugs from various sources
- 3. That pupil athletes use different methods of abusing drugs like smoking, sneezing, injecting and drinking
- 4. That all harmful/dangerous drugs are detrimental to the health of pupil athletes
- 5. That drug abuse will lead to criminal offences and indiscipline in communities
- 6. That a number of reasons advanced for pupils abusing drugs are not tangible enough for personal wellbeing but detrimental to pupils' health.

Recommendations

From the findings and conclusion, the study recommends that:

- 1. In order to address the extent of drug abuse in secondary schools, each school should set up and update strict rules and regulations against the practice among pupils. These rules and regulations should be displayed publicly so that both staff and pupils become aware of them. Parents and guidance be notified about such rules and regulations in the school during Community Teachers; Association meetings (CTA meetings)
- 2. Every School Board of Governors and Management should appoint an effective team of interested, committed staff and community members to plan and carry out drug prevention strategies and intervention programs. Such programs may include needs assessment of staff and students to gain an understanding of root causes and the dissemination of information on drug use and abuse to parents, / guardians, stakeholders and students.
- 3. School Boards of Governors in conjunction with the Ministry of Basic and

- Senior Secondary Education should set up well equipped and formidable Guidance Counseling units in all schools to advice on the dangers of drugs use and abuse among students. These units should also seek out drug users among pupils and refer such cases to medical personnel for therapeutic treatment.
- 4. School Boards of Governors and management should institute stringent permissive measures to discourage students from drug use and abuse.
- 5. School Boards of Governors and Management should investigate and endeavor to discover drug dealers among pupils. If found, such drug dealer should be punished accord and persuaded to abandon the practice.
- 6. Government, non- Governmental Organizations and school management must embark on nationwide sensitization campaign on drug use and abuse. Organizing rallies, radio and television discussions, posters and public lectures.
- 7. Government through the police department ensures that barn or removal of all areas or places or places around schools where drugs are sold/used. Owners of ghettos and places should be warned initially and punished if they resisted admonition.
- 8. School management and staff must search for areas/places found around the school premises and inform the police for action.
- 9. Government must institute policies and ensure that negative drug advertisement is banned or removed from the mass media, Radio/television must be made not to carry any publicity on drugs and drug related substances.

Conflict of Interest (COI)

The researcher considered conflict of interest as a crucial and very important factor that will undermine the success of any research work. Therefore, the researcher

decided to be not a party that will undermine his investigation. He therefore, makes it abundantly clear not to associate in any circumstances that will undermine or influence his research decision.

In the first instance the research is funded by him alone, he has no personal relationship, no professional affiliation, no perceived notion of biasness in data interpretation and ensuring transparency in methodology and findings.

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References

- [1]. Adams, R., & Green, T., 2024, The impact of drug abuse on academic performance among student athletes. *Journal of Sports Medicine*.
- [2]. Amiek, B., 1978, Abuse of chemical substances. *South Africa*.
- [3]. Arif, Hughes, Khant & Shafique., 1992, methodology of collecting data *UNESCO* publications.
- [4]. Awake magazine, 1996, National house hold survey on drug abuse, page 74-75. America
- [5]. Bai, A., Jalloh, M., & Sesay, M., 2022, Peer Influence and Drug Abuse Among Student Athletes in Sierra Leone. *Journal of Adolescent Health*, 70(3), 456-463.
- [6]. Bangs, B., 2001, Drug and related problems in Sierra Leone. Pamphlet. Freetown. *Private printing press*.
- [7]. Bangura, N. A., 1998, Drug use, misuse in Sierra Leone. Pamphlet. *Private printing press*.
- [8]. Beck, 1987, Effects of drugs to students. Press conference release. *Freetown*.
- [9]. Brima, 1999, World Tobacco Day. Ministry of Health and sanitation. *Sierra Leone*.
- [10]. Browne, J., & Smith, L., 2022, Peer influence and drug use in adolescent athletes. *International Journal of Adolescent Health*.
- [11]. Fofana, A., & Kamara, S., 2024, Drug Policy and Its Impact on Student Athletes in Sierra Leone. *International Journal of Drug Policy*, 102, 103-110.

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- [12]. Johnson, M., & Lee, A., 2022, Cannabis use among student athletes: A growing concern. *Sports Health Review*.
- [13]. Johnson, R., & Lee, T., 2022, Alcohol Use Among Adolescent Athletes: A Review of the Literature. *Substance Use & Misuse*, 57(5), 678-689.
- [14]. Kanu, A., Koroma, M., & Sesay, J., 2024, Methods of Drug Abuse Among Student Athletes: A Qualitative Study. *African Journal of Sports Medicine*, 12(1), 34-42.
- [15]. Kanu, F., Osei, A., & Thompson, R., 2024, Drug abuse prevention strategies in secondary schools: A case study in Sierra Leone. *African Journal of Public Health*.
- [16]. Koroma, M., Jalloh, M., & Fofana, A., 2025, Prevention Strategies for Drug Abuse Among Student Athletes: A Comprehensive Review. *Journal of Substance Abuse Treatment*, 120, 45-52.
- [17]. Miller, S., & Johnson, P., 2022, The role of education in preventing drug abuse among athletes. *Journal of Health Education*.
- [18]. Nguyen, T., Smith, J., & Browne, L., 2023, Peer support systems in sports: A preventive measure against drug abuse. *Journal of Youth Sports*.
- [19]. Osei, A., & Kanu, F., 2024, Parental involvement in drug abuse prevention among student athletes. *Journal of Family Studies*.
- [20]. Smith, J., Thompson, R., & Lee, A., 2021, Performance-enhancing drugs in youth sports: A review of the literature. *Journal of Sports Science*.

- [21]. Smith, L., Thompson, R., & Kamara, S., 2021, Types of Drugs Abused by Student Athletes: A Systematic Review. *Sports Medicine*, 51(4), 789-802.
- [22]. Thompson, R., 2023, The perceived benefits of drug use among student athletes. *Journal of Sports Psychology*.
- [23]. Thompson, R., Jalloh, M., & Bai, A., 2023, The Perception of Success in Drug Use Among Student Athletes. *Journal of Youth Studies*, 26(2), 123-135.
- [24]. Williams, D., & Green, T., 2023, Health consequences of drug abuse in adolescent athletes. *Journal of Adolescent Health*.