

## **Health Risk Behaviours among Secondary School Athletes in Gboko L.G.A., Benue State**

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**Abstract:** *This study investigated health risk behaviours among secondary school athletes in Gboko L.G.A of Benue State. A descriptive survey design was adopted. A total of 452 student-athletes from all the secondary schools in the L.G.A. There was no sampling because the entire population were used for the study. A structured and validated questionnaire was the instrument used for data collection. Student-athletes generally involve in health risk behaviour such as alcohol consumption, tobacco smoking, poor feeding and engaging in risky sexual behaviours. However, on the effects of health risk behaviours, the athletes surprisingly stated that tobacco smoking does not affect their sports performance. Also, gender was found not be a determining factor in health risk behaviours among the student-athletes, therefore, the null hypothesis was accepted at .05 level of significance. It was concluded that the student-athletes are aware of behaviours that impede their athletic success. The study recommended concerned government agencies and parastatals in-conjunction with counsellors such as the psychologists and social workers, should formulate sustainable programmes*

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### **I. Introduction**

Health risk behaviours are on the increase among youths, even among secondary school athletes. This increase may be as a result of social media and easier access to the internet. According to Pollack (2004), health risk behaviours are those behaviours that can have adverse effects on the overall development and wellbeing of youths or that might prevent them from future success and development. This include behaviours that may cause immediate physical injury (such as fighting), as well as behaviours with cumulative negative effects (substance use). Laursen and Collins (2009) stated that health risk behaviours affect youths by disrupting their normal development or preventing them from participating in typical experiences for their age group. For example; teen pregnancy can prevent youths (females) from experiencing typical adolescent events such as graduating from school or developing close friendship with peers. Among other authorities, Nutler (2003) identified alcohol consumption, poor nutrition, tobacco use and risky sexual behaviours as health risk behaviours. These health risk behaviours play vital roles in determining athletic success, even among secondary school athletes. Athletes that do not feed nutritiously, take lots of alcohol and smoke cigarette would definitely perform below expectations, and those that engage in illicit sexual affairs would be distracted in their sports, thereby, leading to poor performance. In the opinion of Gultmacher (2013), health risk behaviours cause a large number of collegiate athletes' deaths and injury, and also have negative impact on broader society.

Alcohol consumption is a health risk behaviour which may be found among secondary school athletes. In the description of American Psychiatric Association (2004), alcohol refers to the primary alcohol ethyl alcohol (ethanol), the predominant alcohol in alcoholic beverages. Ethanol is produced by fermenting sugar or yeast. In the opinion of Natkaniel (2006), alcohol slows the body down and can have effects up to one day after in such ways as; influencing balance reaction time and complex motor skills; and information processing; affects performance and hangovers can result in symptoms of headache, nausea, diarrhea, fatigue, dehydration; and body aches that can diminish athletic performance. Bellieni and Buonocore (2009) asserted that few athletes realize that consuming alcohol after a workout, practice or competition can cancel out any physiological gains from an activity. Not only does long term alcohol consumption diminish protein synthesis resulting in a decrease in muscles build-up, but even short-term alcohol drinking can impede muscle growth. Because alcohol consumption affects sleep, the body is deprived of human growth hormone (HGH), and this hormone is part of the normal muscle building and repair process and the body's way of telling itself that muscle needs to grow bigger and strengthen. However, alcohol consumption can decrease the secretion of HGH by as much as 70%. Furthermore, Schep, Slaughter, Valex and Beasley (2009) enumerated the effects of alcohol consumption on

athletes, and they include; impedes the process of learning plays and strategies which is essential for peak performance; disrupts the sequence and duration of normal sleep and sleep deprivation suppresses normal hormonal levels, decreases oxygen availability and endurance; shortens attention span, and slows down brain and body activities for up to 3days. To this study, alcohol consumption is the act of taking alcoholic beverages by secondary school athletes which can impede their athletic performance.

Nutrition is the sum of food consumed by individuals, including athletes. Latham and Vierra (2008) defined nutrition as the process of taking in nutrients from food one eats which is needed for energy, maintenance of tissues and regulation of bodily processes. It is also the intake of food considered in relation to the body's dietary need (Tiplon, 2010). Furthermore, nutrition involves an adequate, well balanced diet combined with regular physical activity is a corner stone of good health, while poor nutrition can lead to reduced immunity, increased susceptibility to disease, impaired physical and mental development, and reduced productivity. Rosenbloom and Coleman (2012) stated that poor food choices day after day can lead to deficiencies resulting in chronic conditions such as iron deficiency or low bone mineral density. Whether the focus injury prevention or rehabilitation, the authors submitted that getting adequate calories, carbohydrate, protein, fluids, vitamins and minerals are all important. According to Tiplon (2013), poor nutrition causes fatigue in athletes, dehydration, poor iron status and limiting of carbohydrate storage in the liver or muscle. Daniels (2013) listed the different effects of poor nutrition on athletes and they include; poor performance, prolonged recovery, immune suppression, weight changes, ceasing of menstruation in female athletes, drastic decrease in the growth of sex hormone such as testosterone, and creates greater risk of many other diseases and health problems.

Tobacco is a green leafy plant that is grown in warm climates. After it is picked, it is dried, ground-up and used in different ways. According to Rhoda (2007), tobacco can be smoked in a cigarette, pipe or cigar, and can be chewed (called smokeless tobacco or chewing tobacco) or snuffed through the nose. Nicotine is one of the more than 4,000 chemicals in cigarette which makes tobacco addictive. The nicotine in tobacco makes it a drug which mean that when one uses tobacco, it changes the body in some way. Generally, tobacco use has negative effects on people, including athletes. Relli (2006) asserted that smoking affects the bones and joints, putting the athletes at increased risk for developing conditions such as osteoporosis, rheumatoid arthritis, low back pain, bursitis, tendonitis, sprains, fractures, and slower recovery from injuries. Brandt (2007) opined that athletes that use tobacco obtain less benefit from physical training, they experience disturbed sleep patterns, have less muscle strength and flexibility, suffer from shortness of breath almost three times often as non-smokers, require more time to heal after an injury or risk not healing at all, and are nearly twice likely to suffer an injury than non-smokers. Brandt further stated that smoking is a serious hindrance to athletic performance as it inhibits oxygen supply to the brain, heart and muscles, weakens the skeleton and raises the blood pressure. Center for Disease Control, CDC, (2013) reported that smoking has a range of adverse effects on the body of athletes during exercise and they include; reduction of endurance, increase strain on the heart, prevents fat burning, prevent muscle gain, and restricts the airways leading to shortness of breath.

Risky sexual behaviour is yet another health risk behaviour. According to Roughgarden (2004), sexual behaviors include conduct and activities which are intended to arouse the sexual interest of another such as strategies to find or attract partners (courtship and display behaviour) or personal interaction between individuals (for instance, foreplay). Agnew (2007) defined risky sexual behaviour as a behaviour that increase one's risk of contracting sexually transmitted infections and experiencing unintended pregnancies. Risky sexual behaviours include; having sex at an early age; having multiple sexual partners; having sex while under the influence of alcohol or drugs, and unprotected sexual behaviours. To Meece (2008), risky sexual behaviours include; unprotected mouth to genital contact; early sexual activity before the age 18years; having anal sex or a partner who does; exchange of sex for drugs or money. In the opinion of King (2009), risky sexual behaviour puts people at risk of sexual transmitted infection; unplanned pregnancy; and being in a sexual relationship before being mature enough to know what makes a healthy relationship. Teens and young adults are at higher risk than adults, which secondary school athletes' fall into the category. Stating the effects of risky sexual behaviour on athletes, Kontula and Mannila (2009) observed that athletes engage in risky sexual behaviours at a higher frequency with more sexual partners than their college peers, and this have negative effects on their general wellbeing and sports performance. Sex often times makes people feel physically and emotionally satisfied, an effect that might take away the motivation and drive necessary to perform in athletic competitions (Tha and Thatkar, 2010).

Secondary school athletes are those participants that engage in sport activities without remuneration (Nussbaum, 2003). These athletes not only ensure that they win laurels for their various schools, but also strive to be excellent in their academics. These dual responsibility place student-athletes at the position of stress, which predisposes them to engage in health risk behaviours, with the aim of meeting up with academic and family expectations, not forgetting personal goals and desires. According to Gayles (2004), student-athletes generally face six distinctive challenges, and they are; balancing athletic and academic responsibility; balancing social activities with athletic responsibility, balancing athletic success and or failures with emotional stability,

balancing physical health and injury with the need to continue competing, balancing the demands of relationship with entities such as coaches, team mates, parents and friends, and addressing the termination of one's college athletic career. Because of the numerous tasks student-athletes face, bearing in mind their maturity level, they appear to higher at risk for certain lifestyle such as smoking, poor eating and reckless sexual activity. Student-athletes, both males and females, in secondary schools in Gboko L.G.A. may not be excluded.

Gender is the range of characteristics pertaining to, and differentiating between masculinity and femininity (Masood, 2009). Depending on the context, the author stated that these characteristics may include; biological sex based social structures (including gender roles and other social roles) or gender identity. Gender plays a role in the engagement of athletes in health risk behaviours. Henry, Kosciak, Fleming, Landry and Kokotailo (1996) in a study to determine the prevalence of alcohol and other drug use, and health risk behaviours among a general university population, and to compare health risk-taking behaviours between gender and university athletes and non-athletes peers. It was found that risk taking behaviours varied by gender with men athletes showing more risk behaviours than women athletes. In a report by Sargent (2010), early and sustained participation in sports and physical activity appear to act as risk factor for increased sexual risk-taking among male than female during early adulthood. That is, boys who begin their athletic careers early and continue being physically active throughout adulthood take more risk than the female athletes (Sargent, 2010). In summary, boys (males) tend to be involved in health risk behaviours than the female counterpart, and this may be the same among athletes in secondary schools in Gboko L.G.A. The study specifically answered the following research questions:

1. What are the health risk behaviours engaged in by secondary school athletes in Gboko L.G.A., Benue State?
2. What are the effects of health risk behaviours engaged in by secondary school athletes in Gboko L.G.A., Benue State?

### Hypothesis

1. There is a significant difference in the health risk behaviours of secondary school athletes in Gboko L.G.A. of Benue State

## II. Methods

The descriptive survey research design was used for the study.

**Participants:** A total of 452 student-athletes in the six government-owned secondary schools in Gboko L.G.A. consisted the population and sample for the study. Out of the entire population, 241 were male while 211 were female student-athletes.

**Instrument:** A two-sectioned and validated questionnaire titled Health Risk Behaviour of Secondary School Athletes Questionnaire (HRBSSAsQ) was used for data collection. Cronbach alpha coefficient yielded 0.76 which was considered high enough for the study. Section A of the questionnaire collected demographic data while section B obtained information on the student-athlete's response regarding health risk behaviours and their effects on a 4-point rating scale of Always (A), Occasional (OC), Seldom (S) and Never (N).

**Data Collection and Statistical Analysis:** Access to the student-athletes was gained through games masters/mistresses in the various secondary schools after obtaining permission from the school principals. Research assistants were used to facilitate faster administration and retrieval of the instrument. 11 copies of the questionnaire were not used for data analysis because they were not properly filled, hence, 441 copies were analyzed. Mean scores were employed to describe the collated data with 2.50 as the criterion mean while test of significant difference (t-test) was used to verify the null hypothesis at 0.05 level of significance.

## III. Results

Table 1

Health risk behaviours of the respondents (n=441)

Items	Mean	SD
1. Alcohol consumption	2.79	.962
2. Poor Nutrition/feeding	2.45	.935
3. Tobacco use	2.82	.991
4. Risky sexual behaviours	2.89	.893
Grand mean = 2.73		

Table 1 presents the health risk behaviours of the secondary school athletes. The obtained grand mean is greater than the criterion mean ( $2.73 > 2.50$ ) while risk sexual behaviour happened to be the most engaged health risk behaviour of the student-athletes (mean = 2.89).

**Table 2**

Health risk behaviours of the respondents (n=441)		
Items	Mean	SD
<b>Effects of Alcohol Consumption</b>		
1. I feel regrets after taking alcohol	2.75	1.126
2. I perform poorly in training after taking alcohol	2.54	.975
3. Alcohol intake hinders mu muscles growth	2.60	.888
4. My decisions during competitions are not quick after taking alcohol	2.58	1.066
<b>Grand Mean = 2.61</b>		
<b>Effects of Poor Nutrition</b>		
5. I feel weak whenever I do not feel well	2.82	.991
6. Poor feeding reduces my recovery rate from injury	2.69	1.043
7. I experience sudden weight change due to inadequate feeding	2.80	1.065
8. My endurance rate is poor whenever I do not feed well	2.71	.912
<b>Grand Mean = 2.76</b>		
<b>Effects of Tobacco Smoking</b>		
9. Smoking makes it difficult for me to breath well	2.43	.930
10. My body changes whenever I smoke	1.91	.879
11. Tobacco use affects my athletic performance	2.30	.823
<b>Grand Mean = 2.21</b>		
<b>Effects of Risky Sexual Behaviours</b>		
12. I loose drive for sports events after sexual activities	2.75	1.126
13. I contact disease or get pregnant after unprotected sex	2.63	1.014
14. I perform poorly in sports events after sexual activities	2.80	1.065
15. My desire to win goes down after sexual activities	2.60	.888
<b>Grand Mean = 2.70</b>		

Table 2 shows the responses of the secondary school athletes on the effects of the different health risk behaviours on their wellbeing and sports performance. On the effects of alcohol consumption, a grand mean score of 2.61 was recorded which is greater than the criterion mean of 2.50. This shows that the listed effects are the experiences the athletes encounter when they consume alcohol.

On the effects poor nutrition, a grand mean of 2.76 was recorded. From the result, the grand mean is greater the criterion mean, therefore, the secondary school athletics acknowledged that the items are after effects they experience when they do not feed well.

The result on the effects of tobacco smoking on the athletes, the grand mean recorded was less than the criterion mean,  $2.21 < 2.50$  . The result shows that the athletes do not experience the items listed after smoking tobacco.

Also, the effects of risky sexual behaviours on the athletes were recorded. The grand mean obtained was greater than the criterion mean,  $2.70 > 2.50$ . This indicates that the items listed are considered effects of engaging in risky sexual behaviours by the student-athletes.

Table 3: T-test of significant difference on health risk behaviours of the athletes based on gender

Items	Gender	N	mean	SD	df	t-cal	t-tab	L/S	Decision
Alcohol	Male	235	2.67	.936					
	Female	206	2.68	.957	439	.141	1.960	.05	accepted
Poor nutrition	Male	235	2.26	1.057					
	Female	206	2.14	1.030	439	1.187	1.960	.05	accepted
Tobacco use	Male	235	2.40	.988					
	Female	206	3.37	.932	439	.379	1.960	.05	accepted
Risky sexual/B	Male	235	2.61	1.015					
	Female	206	2.67	.934	439	1.137	1.960	.05	accepted

Not significance

Table 3 shows the significant difference in the risk health behaviours among the athletes according to gender. From the table, the t-cal are less than the t-table as follows: alcohol consumption ( $1.141 < 1.960$ ); poor

nutrition (1.187 < 1.960); tobacco use (.379 < 1.960); and risky sexual behaviour (1.137 < 1.960). Consequently, the null hypothesis was supported/accepted.

#### **IV. Discussions**

The findings on the health risk behaviours among athletes in the various secondary schools yielded a grand mean of 2.76 which indicated that the athletes engage in the mentioned health risk behaviours. The results is not surprising because it is in line with Nutler (2003) who identified alcohol consumption, poor nutrition, tobacco use and engaging in risky sexual behaviours as health risk behaviours constant among the athletes. The finding maybe attributed to the fact that these behaviours are mostly seen among youths which the secondary school athletes fall into the age bracket. Also, owing to the fact that these athletes because they attain lime-light among their peers may predispose them to some behaviours that are not healthy for their general wellbeing and athletics performance. In addition, demands placed on these young athletes such as; demand of academic excellence and athletics success, may be contributory factors to the athletes engaging in behaviours that are detrimental to them in order to momentarily free their minds from the demands. On this, Guttmacher (2013) stated that health risk behaviours cause a large number of collegiate athletes' death and injury, and also have negative impact on broader society.

The findings revealed the effects of the different health risk behaviours on the secondary school athletes. On the effects of alcohol consumption, the athletes attested that alcohol affect their sports performance negatively. This result is expected because generally no human body remains same after consuming alcohol, and athletes are not excluded. Alcohol consumption negatively affects people's ability to concentrate, judge correctly and impedes growth. In support, Schep, Slaughter, Valex and Beasley (2009) asserted that on athletes, alcohol consumption impedes the process of learning plays and strategies which are essential for peak performance; disrupts the sequence and duration of normal sleep and sleep deprivation suppresses normal hormonal levels; decreases oxygen availability and endurance; shortens attention span; and slows down brain and body activity for up to three days.

The secondary school athletes indicated the effects of poor nutrition on their sports performance. Interestingly, the finding generally corroborated those in related studies such as Rosenbloom and Coleman (2012) who stated that poor food choices day after day can lead to deficiencies resulting in chronic conditions like iron deficiency or low bone mineral density. The authors submitted that getting adequate calories, carbohydrate, protein, fluids, vitamins and minerals are all important on injury prevention or rehabilitation. Daniels (2013) observed that the effects of poor nutrition on athletes include; poor performance, prolonged recovery, immune suppression, weight changes, ceasing of menstruation in female athletes, drastic decrease in the growth of sex hormone such as testosterone, and greater risk of many other diseases and health problems. This finding is very important to help establish the negative impact of poor feeding on sports success. However, factors such as economic/financial condition of the parents of these athletes and low knowledge on the role nutrition/balanced diet on athletic performance may be connected with the present result of this study.

The response of the secondary school athletes on the effects of tobacco use is quite unexpected because smoking generally impacts negatively on humans' health let alone on athletes who engage on moderate and high intensity physical activities that places huge demands on the respiratory system. The result is not supported by Brandt (2007) who opined that athletes that use tobacco obtain lea benefit from physical training; experience disturbed sleep patterns; have less muscle strength and flexibility; suffer from shortness of breath almost three times often as non-smokers; require more times to heal after an injury or risk not healing at all; and are nearly twice as likely to suffer an injury than non-smokers. Literatures abound on the negative effects of tobacco use on athletes perform which makes it difficult to understand the response of the secondary school athletes that tobacco use does not impede their sports performance. CDC (2013) also reported that smoking has a range of adverse effects on the body of athletes during exercise and they include: reduction of endurance level, increases stress on the heart; permits fat burning; prevents muscle gain; and restricts the airways leading to shortness of breath.

The findings further reveal the response of the athlete on the effects of engaging in risky sexual behaviours. The finding is in consonance with reports such as Kontula and Mannila (2009) which has shown that athletes engage more in risky sexual behaviours than non-athletes. Risky sexual behaviours are those behaviours that are not only detrimental to the health of athletes but also creates unneeded distraction in their sports career. When athletes have multiple sexual partners, there is great demand to not only satisfy them but to ensure the secret of unfaithfulness is kept. This places the athletes at the situation of always trying to play-safe, thereby, expanding less time on the chosen sports. Tha and Thatlar (2010) noted that sex often time makes people feel physically and emotionally satisfied, an effect that might take away the motivation and drive necessary to perform in athletic competitions. Practically, when an athlete loses his drive and motivation to win, athletic success becomes a thing of the past.

The findings reveal furthermore that male athletes did not significantly differ from their female counterparts on health risk behaviours. This finding is inconsistent with that of Sargent (2010) who reported that

early and sustained participation in sports and physical activity appears to act as risk factor for increased sexual risk-taking among male athletes during early adulthood. This implies according to the author that boys who begin their athletic careers early and continue being physically active throughout take more sexual risk than the female athletes. By this finding, male and female secondary school athletes engage in same health risk behaviours and probably at same rate too. However, observations have shown that male athletes tend to be more care-free than the female counterparts, even in engaging in behaviours that are not healthy and detrimental to their athletic success. This finding therefore suggests that gender may not be a strong factor in determining health risk behaviours among secondary school athletes.

### **Implications for the Study**

This present study has successfully determined the health risk behaviours among athletes, most especially those in secondary schools, which is a vital step in designing a lasting enlightenment programme for athletes in schools. The finding of this study has added to the national data which subsequently will metamorph into a foundation upon which concerned governmental, non-governmental agencies such as world health organization, and sports agencies will initiate and map out future educative programmes on health risk behaviours and their effects in schools, irrespective of the sex of the students.

## **V. Conclusions**

The major findings of this study revealed that secondary school athletes in Gboko L.G.A. of Benue State engage heavily in behaviours that are detrimental to their health and athletic success. It is therefore concluded that those findings are important as they tend to show that both male and female athletes engage in similar health risk behaviours, thereby suggesting the urgent need for programmes piloted by psychologists and social workers that will help those athletes desist from such behaviours. This has implication for the establishment of functional programmes on wellbeing and athletic success which are unfortunately lacking in secondary schools.

## **VI. Recommendations**

It is recommended that secondary school authorities proactively initiate sustainable wellbeing programmes that will motivate athletes to resist behaviours that are capable of destroying their athletic career. In the light of the above recommendation, relevant educational institutional authorities, social workers, physical education specialists, psychologist, and other concerned professionals should pursue and advocate strategies and wellbeing programmes directed at promoting healthy behaviours among secondary school athletes. Also, there is urgent need for counsellors such as psychologist, social workers to be employed in schools to provide counseling and psychotherapy services to those young athletes.

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