

## Sports Injuries among Athletes in Ideato, Imo State

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### Abstract

*The study was descriptive in nature with the main purpose of determining sports injuries, causes and preventive measures among athletes in Ideato, Imo State. Three objectives guided the study. The population was 192 athletes registered with the Ideato Sports Unit comprising Ideato North and South LGAs, Imo State. The sample for the study consisted of 30 active athletes selected through purposive sampling technique. The instrument used for data collection was a 30-item questionnaire developed by the researchers. The instrument was validated by three experts in public health, health and physical education. A pretest of the instrument was conducted and the data generated were subjected to Spearman's Rank order correlation coefficient with a value of 0.85 achieved. Descriptive statistics of frequency and percentage were used for data analysis. Results showed that the most common sports injuries among athletes in Ideato were sprain (93.0%), strain (90.0%), and dislocation (83.3%). The result also showed that rough tackle or challenge from opponents (86.7%) and overuse (80.0%) were the most common causes of sports injuries in the area while the use of drugs was the least cause of sports injuries identified by the respondents. The most frequently indicated preventive method by the study sample was proper warming-up/conditioning (83.3%). Others included regular use of safety equipment and adequate supervision by coaches which tied at 70.0 per cent. One of the recommendations made in the study included formulating policies to prevent sports injuries and enforcing them strictly among athletes in Ideato, Imo State.*

**Keywords:** Injury, Sports injury, Athlete and prevention

### Introduction

Sports injuries are major problems of athletes all over the world. They are found in athletics such as sprints, throws and jumps. Dansu (2016) reported that sports cause up to 7 million injuries among Americans every year. According to Butcher and Krotee (2002), in United States of America-USA approximately 8000 persons drown each year; injuries in basketball amounted to 640755; cycling 580119; baseball 433799; roller-skating 97842; skateboarding 82428. From the same report children and teens in USA were highly susceptible to sport injuries with more than 3.5 million cases each year. The statistics from other parts of the world might be the same. Azubuike and Okojie (2009) reported that sports injuries were prevalent among Nigeria athletes. For instance, a total of 140 injuries were recorded in the 2009 KADA Games alone (Owoye, 2010). Indeed injuries are serious problems facing sporting activities at the moment.

Injury is any damage or harm to the body. World Health Organization-WHO (2001) defined injury as the physical damage that results when a human body is suddenly or briefly subjected to intolerable levels of energy. According to Gumusdag (2021), injury is expressed as the condition

that occurs before; during and after birth and that the organs have difficulty in performing their functions. Participating in sports makes one prone to injury.

Sports injury, according to Rehab (2020), is a physical damage to the body or body parts as a result of participating in sports activities. Sirinivasa (2022) described sports injuries as those that occur when engaging in sports or exercise. A participant in a sport's activity is referred to as an athlete. An athletic injury, therefore, is any physical or observable damage to body tissue produced by the transfer of energy experienced or sustained by an athlete during participation in sports. Many athletes are involved in individual sports where no professional medical support is provided. Under that kind of situation prevention of sports injury becomes highly necessary. Prevention of sports injury has to do with measures taken to reduce bodily harm as a result of participating in sports. Enemu and Obayi (2021) described preventive measures as strategies that will help curb the outcome of an illness or unhealthy situation. Okeke, Charles-Unadike, Eze-Ufodiana, and Nwachukwu (2021) stated that preventive measures are actions taken to avoid something harmful happening. In the context of this study the hazardous thing to be avoided is sports injury.

Sports injury is as old as sports itself. Ancient people that engaged in games such as boxing, wrestling, foot racing, field hockey and bowling documented cases of injuries. It is unfortunate that injuries often mar events that are aimed at improving the participant's health and entertaining the general public. At the present injury is particularly rampant in competitive sports, health and fitness clubs (Egwu, Adesanmi, Ademowegun, & Mbada, 2021; Gumusdag, 2021).

These kinds of sports are common in all parts of the world including Nigeria with the concomitant body harms (Alfred, Sunday, & Udobong, 2019). Sports injuries are of different degrees. Rehab (2020) categorized them into mild, acute and severe injuries. Mild injury, according to the author, can be endured or overlooked and might even take few hours or days to heal. Some mild injuries include dehydration, heatstroke and bruises. Acute injury on the other hand is not so bad but could take months to heal. This includes injury to the musculoskeletal system especially to the knee, bone fracture and tear in the tendon. They result from twisting such as when gymnast lands improperly tearing ligaments in the ankle. The most serious form of sports injuries are the severe ones. According to Aroen et al. (n.d.), severe sports injuries can cause lifelong disability. They can even lead to death if they are not attended to immediately since they might involve the spinal cord or brain. In the case of football which is typical of other sports, injury severity is the number of days that have elapsed from the date of the player's return to full participation in team training and availability for match selection (Fuller et al., 2006). Bahr and Engebretsen (2009) reported that injury severity in sports is 1000 times more among football players than high risk industrial occupation. This is grave and demanded urgent investigation like the present one.

Researchers have categorized the variables that are responsible for athletic injury into physical and psychological factors (Weinberg & Gould, 2003). The physical factors include muscle imbalance, high speed collisions, overtraining and physical fatigue. Bello et al. (2020) outlined the precipitants of physical factors of sports injury as inadequate physical conditioning and warming-up procedures, faulty biomechanical techniques used by athletes, deficient sports

equipment, poor quality protective apparel, dangerous sports surfaces and of course, illegal and aggressive physical contact from opponents.

Until recent times, the causes of sports injury were never considered to be psychologically induced. However, at the present, researchers and sports psychologists have tried to define the psychological variables that affect susceptibility or tolerance to sports injuries. Stress level is an important antecedent of athletic injuries (Slanic et al., 2014). It was clearly shown that athletes with higher levels of life stress experience more injuries than those with less stress in their lives (Sunmonu & Ugwuegede, 2019).

Epidemiology of sports injury is abundant in literature, both foreign and local (Butcher & Krotee, 2002; Dansu, 2016; Lee, Park, Oh, Kim, 2020; Owoye, 2010). Lee et al. in a study among students in a Korean university showed that there was high prevalence of injuries among the sports participants and the most common injuries, according to the report, were sprains, ruptured ligament and bruising. Owoye (2020) showed that sports injury among athletes in University of Lagos was high. Slanic et al. (2014) in an analysis of sports injuries in Kosovska, Mitrovica revealed that the extent of sports injuries was influenced by poor physical fitness, muscle imbalance, anatomical abnormalities, poor nutrition and period of intensive growth. Similarly, individuals who have low self-esteem are pessimistic, low in hardness and higher level of trait anxiety experience more athletic injuries (Ford & Gordon, 2000). The authors also reported that such people have been shown to lose more time as a result of their injuries. A study by Cupal and Brewer (2001) likewise showed that psychological interventions positively influenced athletic injury recovery. In Nigeria the report of pattern of sports injury is not quite different from what obtained in other parts of the world. Report from the KADA games 2009 indicated that over 60 per cent of the injuries presented by the athletes were from basketball, cricket, hockey, rugby and baseball (Owoye, 2010). Bello et al. (2020) reported that rough tackle was the major cause of injuries among amateur football players in Kano with the lower extremities being the most affected body parts.

The modern Olympic Games were not even devoid of spots injury. In summer, Tokyo Olympic Games 2020, the most prevalent sports injuries were ankle sprains and thigh strains (Anthony, 2021). The author reported that a majority (72.5%) of the injuries were in competition; one-third of the injuries were caused by contact with another athlete followed by overuse (22%) and non-contact incidents (20%). Injuries were reported in all sports, but incidents and characteristics varied substantially. Anthony also indicated that many of the athletes sustained painful injuries that would live long in their memories and that of their fans. Tournay, Sangnier, Cotte, Langlois and Coquant (2014) identified some sports injuries such as neck breaks, elbow fracture, collar fracture, brain injury, dislocation among others. Acute injuries accounted for the majority of the reported body harms.

Sally (2020) stated that in the Rio Olympic more than 1100 (8%) athletes were injured. According to the author, sports with the highest rates of injury were cycling, boxing, mountain hiking, taekwondo, water polo and rugby. Twenty per cent (20%) of the injuries were classified as severe.

It is clear that no sports competition, whether organized or not, recreational or competitive is devoid of injuries. If sports injuries can occur in highly organized sports competition like the Olympics Games as aforementioned, one can imagine the situation in locally organized

competitions like the ones in Ideato. This is because experience has shown that many of the athletes in Ideato did not engage in warm-up exercises before competition, some did not have protective equipment like football boots, helmet, shin guard, spike shoes and others. Worse still there were no well-defined rules that govern these sports in the area of the present study. Where there were rules they were rarely complied with.

Consequently, there had been reported cases of fractures, dislocations sprains, strains, fainting in the field of play in the area of this study. However, the forms, causes and ways to prevent such body harms among athletes have not been investigated, to the best of the knowledge of the researchers, hence this study.

### **Research Questions**

The following research questions guided the study.

1. What were the common types of sports injuries among athletes in Ideato, Imo State?
2. What were the main causes of injuries among athletes in Ideato, Imo State?
3. What preventive measures could reduce the incidence of sports injuries among athletes in Ideato, Imo State?

### **Methods**

The study was a descriptive survey. It was carried out in Ideato, Orlu Senatorial Zone of Imo State. Ideato is located on the northern axis of Imo State and has boundary with Anambra State. It consists of Ideato North and Ideato South Local Government Areas (LGAs). The area is sub-urban and it is noted for organizing cultural festivals like the Ikeji festival. Sports activities and athletic events such as football, volley ball, sprints, basketball, traditional wrestling and many other traditional sports competitions characterize such festivals. The many primary and secondary schools fields, and village squares in Ideato provided playing grounds for these sporting activities. There are talented amateur and professional sports men and women in Ideato that were likely to be exposed to sports injuries which necessitated this study.

The population for the study consisted of 192 active athletes registered with the sports units in Ideato North and Ideato South LGAs (Ideato Zonal Sports Unit, 2021). The sample for the study was 30 athletes. The sample was selected through purposive sampling technique. Purposive sampling technique was adopted in selecting the participants in order to ensure that only those that had engaged in active sports for at least five (5) years prior to the period of this study and were up to 18 years old were involved.

A close-ended questionnaire referred to as ‘Sports Injury and Prevention Questionnaire’ (SIJuPQ) developed by the researchers was utilized for data collection. The questionnaire was validated by three experts in public health, health and physical education. Their inputs were used to modify the final SIJuPQ. Respondents were required to tick (√) the options provided in the instrument as it applied to them. The 30-item SIJuPQ had sections A, B and C. Section A sought information on common injuries experienced in sports; section B sought information on causes of sports injuries whereas section C sought information on sports injury prevention. No demographic information or socio-economic variables were required from the athletes. This was to preserve the anonymity of both the respondents and the data generated in this study.

The reliability of the instrument was determined by a pretest conducted among 10 athletes in Orlu LGA of Imo State. Orlu was chosen because it has cultural festivals similar to those of Ideato. The data generated were subjected to Spearman's Rank order Correlation Coefficient and a value of 0.85 was achieved. The SIJuPQ was thus considered appropriate for collecting data for the present study.

The authors distributed the copies of the SIJuPQ to the 30 selected athletes who were required to fill in and return on the spot. Collecting the copies of the questionnaire on the spot was to make sure that the respondents filled in the questionnaire by themselves and also ensure that the return rate was high. Collecting the copies of the questionnaire on the spot was important since the sample size was small. Consequently, the return rate was 100 per cent and the data generated were utilized for data analysis. Data analysis was carried out manually with the aid of simple adding machine. In line with Gumusdag (2021) all damage that occurred in sports by the athlete were recorded as sports injury. Frequency and percentage were utilized for answering the research questions posed to guide the research.

## Results

**Table 1: Summary of Common Sports Injuries among Athletes in Ideato (n=30)**

| S/N | Sports Injury         | Frequency | %    |
|-----|-----------------------|-----------|------|
| 1   | Fracture              | 19        | 63.3 |
| 2   | Sprain                | 28        | 93.3 |
| 3   | Abrasion              | 17        | 56.7 |
| 4   | Athlete's foot        | 9         | 30.0 |
| 5   | Heatstroke/exhaustion | 15        | 50.0 |
| 6   | Concussion            | 12        | 40.0 |
| 7   | Muscle injury         | 22        | 73.3 |
| 8   | Dislocation           | 25        | 83.3 |
| 9   | Strain                | 27        | 90.0 |
| 10  | Spasm                 | 16        | 53.3 |

Table1 shows that the most frequently indicated sports injury by the respondents was sprain (93.0%). It was followed by strain (90.0%) and then dislocation (83.3%). From the Table the least common injuries identified by the respondents were athlete's foot (30.0%), concussion (40.0%) and spasm (53.3%).

**Table 2: Summary of Causes Sports Injuries among Athletes in Ideato (n=30)**

| <b>S/N</b> | <b>Cause of Sports Injury</b>                      | <b>Frequency</b> | <b>%</b> |
|------------|--|------------------|----------|
| 11         | Lack of warm-up or conditioning before competition | 21               | 70.0     |
| 12         | Lack of required skill in sports                   | 20               | 66.7     |
| 13         | Lack of regular training                           | 19               | 63.3     |
| 14         | Use of bad equipment                               | 14               | 46.7     |
| 15         | Negligence on the part of the coach                | 23               | 76.7     |
| 16         | Use of drugs                                       | 8                | 26.7     |
| 17         | Lack of adequate sleep/rest                        | 12               | 40.0     |
| 18         | Lack of adequate nutrition                         | 16               | 53.3     |
| 19         | Improper coordination/balance                      | 10               | 33.3     |
| 20         | Lack of protective equipment                       | 18               | 60.0     |
| 21         | Rough tackle or challenge from opponent            | 26               | 86.7     |
| 22         | Overuse  | 24               | 80.0     |

Table 2 reveals that the most common cause of sports injuries is rough tackle or challenge from opponent (86.7%) followed by overuse (80.0%), negligence on the part of coaches (76.7%) and lack of warm-up/ conditioning (70.0%). The other causes of sports injuries identified by respondents were lack of required skills in the sports (66.7%), lack of regular training (63.3%) and lack of protective equipment (60.0%). The same Table shows that the least common cause of sports injuries was the use drugs (26.7%).

**Table 3: Summary of Sports Injuries Prevention among Athletes in Ideato (n=30)**

| <b>S/N</b> | <b>Method of Sports Injuries Prevention</b> | <b>Frequency</b> | <b>%</b> |
|------------|---|------------------|----------|
| 23.        | Regular use of safety equipment             | 21               | 70.0     |
| 24.        | Proper warming-up/conditioning              | 25               | 83.3     |
| 25.        | Drug use                                    | 10               | 33.3     |
| 26.        | Proper nutrition                            | 17               | 56.6     |
| 27.        | Use of ergonomic aids                       | 8                | 26.7     |
| 28.        | Adequate sleep/rest                         | 18               | 60.0     |
| 29.        | Adequate intake of water                    | 15               | 50.0     |
| 30.        | Adequate supervision by coach               | 21               | 70.0     |

Table 3 shows that proper conditioning before exercise (83.3%) was the most frequently cited preventive measure against sports injuries in Ideato area. It was followed by regular use of safety equipment and adequate supervision by coaches which tied at (70.0%), and adequate sleep/rest (60.0%). The use of ergogenic aids (26.7%) and the use of steroid (33.3%) were the least identified preventive options as shown in the Table.

### **Discussion**

Table 1 showed that the most frequently identified sports injury by respondents in Ideato was sprain. It was followed by strain and then dislocation. From the Table the least common sports

injuries identified by the respondents were athlete's foot, concussion and spasm. The finding corroborated Azubike and Okojie (2009); Owoye (2010); Owowe (2020), who in separate studies identified these kinds of sports injuries as prevalent among athletes in Nigeria generally. The result also agreed with Egwu et al. (2021), who found that sprain was very common among athletes in Nigeria. Therefore, this finding is not surprising since athletes in Ideato have typical attributes of their counterparts all over the country.

Findings from Table 2 revealed that lack of warm-up/conditioning, lack of required skills, lack of regular training, negligence on the part of coaches, lack of adequate nutrition, lack of protective equipment, rough tackle and overuse were common causes of sports injuries among athletes in Ideato. This result is in line with the findings of Bello et al. (2020) on the major causes of sports injuries among amateur football players in Kano. The finding was also in accord with Egwu et al. (2021), who indicated that unfriendly attacks, poor pitch, physical contact among other things were the causes of sports injuries among Nigeria school-age football players. The result was expected because it is common for athletes in Ideato to compete without protective equipment like football boots, spike shoes for track events, gloves for boxing or without warm-up exercises. The finding was also consistent with Slanic et al. (2014); Sunmonu and Ugwuegede (2019), who observed that sports injuries were precipitated by exogenous and endogenous factors. Athletes that have psychological problem, which is currently common among Nigerians including athletes in Ideato, are more likely to engage in negative behaviours which might predispose them to injuries. It is also noticeable in local competitions that coaches lack necessary training and experience required to control such injury inducing behaviours among athletes. It is surprising that only few athletes recognized drug use as a cause of sports injuries in this era when there is public outcry against substance use among youths in Nigeria generally. The finding is amazing because during festivals alcohol use and the urge to be 'high' are rampant in the area. An explanation to this is that the respondent might have resorted to socially desirable responses because of the condemnation of the behaviour. Another reason could be that since the use of some substances might be common in Ideato, the participants might no longer recognize substances categorized as drugs.

Results from Table 3 indicated that regular use of safety equipment, proper conditioning adequate sleep/rest, adequate intake of water and adequate supervision by coaches were identified as remedies to sports injuries in the area of the presents study. This result is consistent with results of other studies like Bahr and Engebretsen (2009), Cupal and Brewer (2001); Lee et al. (2020); Rehab's (2020) finding which showed that balance training program reduce lower extremity injuries in some sports, and that the use of sports-specific protective equipment like helmets were also effective in preventing sports injuries. The finding as well concurred with Gumusdag's (2021) report that field, equipment and individual precaution were measures that can be taken to prevent sports injuries.

## **Conclusion**

Most sports have risk of injury. The more contacts in a sport the greater the risk of injury. The common sports injuries in the area of this study identified by the respondents included fracture, sprain, stain, muscle rupture, dislocation and spasm. Most injuries among athletes in Ideato were due to lack of warm-up, lack of required skills in the sports, lack of regular training negligence, lack of sleep/rest, lack of protective equipment, rough tackle and overuse. From the results the injuries could be prevented by regular use of safety equipment, proper conditioning, adequate

sleep/rest and adequate supervision by coaches. However, athletes in competitive sports in Ideato need to be knowledgeable about the various kinds of injuries they are exposed to. They also need to be well informed about the possible causes of sports injuries if effective measures can be taken to reduce them. It is, therefore, recommended that trainings should be organized for them periodically. For instance, before the commencement of the sports competitions seminars and workshops need to be conducted for them. The aim of the training programme would be to empower the athletes to be able to identify accurately the types and causes of sports injuries. Additionally, at such fora the competitors should be educated on ways of preventing sports injuries.

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