

**KNOWLEDGE AND ATTITUDE TOWARDS  
INJURY PREVENTION AMONG AMATEUR  
FOOTBALL PLAYERS AT THE UNIVERSITY OF  
ILORIN STADIUM**

**BY**

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## CERTIFICATION

This project by ADEYEMI, MOYINOLUWA DORCAS is accepted in its present form as satisfying the requirement for the award of Bachelor of Physiotherapy in (BPT) degree of the Department of Physiotherapy, Faculty of Basic Medical and Health Sciences, Thomas Adewumi University, Oke, Kwara state

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## **DEDICATION**

This work is dedicated to God; my Source of Strength, my Help and my Sustainer and to my loving parents, big brother and siblings whose unending care, unwavering support, provision and prayers kept me through medical school and were invaluable in the successful completion of this work.

## ABSTRACT

Football, being one of the most widely played and celebrated sports globally, is inherently a high-risk activity with a significant prevalence of injuries among players. Musculoskeletal injuries, particularly those affecting the lower extremities such as muscles, ligaments, and tendons. This study assessed the level of knowledge, attitude, and practice of injury prevention among amateur football players at the University of Ilorin Stadium, Nigeria.

A descriptive cross-sectional study design was employed, with data collected using a structured questionnaire. Analysis was conducted using the Statistical Package for Social Sciences (SPSS) version 25.0, and descriptive statistics such as frequency and percentage were used to summarize the data.

74 respondents participated in the study. The findings revealed a high level of knowledge 74.3% and a positive attitude 79.7% toward injury prevention among the players, with moderate engagement 64.9% in injury prevention practices. While players expressed enthusiasm for injury prevention initiatives, players attributed injuries most frequently to hard tackles 81.1%, poor pitch quality 66.2%, and too much training 58.1%. The most common injury types identified by players included thigh 82.4%, knee 73.0%, and ankle 78.4% injuries, with the knee 77.0% being the top priority for prevention. Facilitators such as coach involvement 66.2%, availability of medical staff 59.5%, and player motivation 70.3% were identified as beneficial.

In conclusion, the study reveals a high level of knowledge and a strongly positive attitude towards injury prevention among amateur football players at the University of Ilorin Stadium.

**Keywords:** Knowledge, Attitude, Injury prevention, Amateur football players Sport injury awareness

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# CHAPTER ONE

## INTRODUCTION

### 1.1 Background of Study

Modern football originated in Britain in the 19th century. Though “folk football” had been played since medieval times with varying rules, the game began to be standardized when it was taken up as a winter game at public schools (Peter *et al*, 2025). The Football Association, formed in 1863, codified the rules of the game and hosted the first cup competition between regional football clubs in Britain (Peter & Bernard, 2024). Football is the most popular sport worldwide, played by athletes of all ages, associated with a high level of injury. Injuries occur during football matches and practice because of a high-speed combination and full contact.

Football is the world’s most popular ball game in numbers of participants and spectators. Simple in its principal rules and essential equipment, the sport can be played almost anywhere, from official football playing fields pitches to gymnasiums, streets, school playgrounds, parks, or beaches. Football’s governing body, the Fédération Internationale de Football Association (FIFA), estimated that at the turn of the 21st century there were approximately 250 million football players and over 1.3 billion people “interested” in football; in 2010 a combined television audience of

more than 26 billion watched football's premier tournament, the quadrennial month long World Cup finals(Richard & Eric ,2025).

Football is the most popular sport in Nigeria. The Nigeria national football team competes regularly for international titles and many Nigerian footballers compete in Europe, particularly in England (Doyle *et al*, 2013). Like most sports, football carries a risk of injury for players, both at professional and amateur level and in all age-groups(Barengo *et al* 2014). The global reach of football and its impact in various spheres, including commerce, peace and diplomacy and recognizing that football creates a space for cooperation. The day underscores football's unique role as a globally beloved game and its potential to contribute positively to development and humanitarian goals worldwide (Richter 2025)

Participating in sports has many health benefits, but participation also increases the risks of injury (Emery & Tyreman, 2009). Sports injuries can occur while participating in training or during competitions (Szukics *et al*, 2022), and these injuries differ in terms of mechanism, how the injury presents in different athletes and how that injury can be managed (Bahr *et al*, 2020). Furthermore, the frequency of sports injuries may depend on the type of sports (e.g. high-risk sports) and level of performance (e.g. amateur athletes; Backx *et al*, 1991; Szukics *et al*, 2022). Despite the known risks and consequences, implementation in real-world settings is a major problem (Owoeye *et al*, 2018), and low or non-adherence to prevention programs by many stakeholders, including the athletes is a significant contributing factor (Owoeye *et al*, 2018)

The high rates of injury in athletes and the impact on the athletes and the community brings about many injury prevention strategies in the literature to help reduce the occurrence of injury. These include training strategies, sports rules and policies modification, and equipment recommendations (Emery & Meeuwise, 2010; Emery *et al*, 2020; Kroncke *et al*, 2008; Stephenson *et al*, 2021). In fact, sports injury prevention strategies have been shown to reduce the occurrence and severity of injuries (Emery *et al*, 2015). However, a key barrier is adherence, and it has been hypothesized that understanding the factors that influence this low or non-adherence rate may be the next logical step in this field of research (Verhagen *et al*, 2010). In this regard, efforts should be made to understand the behavioural and social aspects of sports injury and prevention (McGlashan & Finch, 2010), as it is important to understand athletes' attitudes towards injury and safety (Finch *et al*, 2002)

According to the Canadian Community Health Survey report, 66% of injuries among youth were sport-related (Billette & Janz, 2011). Internationally, sport and recreational injury accounts for 32% to 55% of all injuries in young boys and 19% to 59% of all injuries in young girls across eight countries (Pickett *et al*, 2005). Also, in a retrospective study by Williams *et al*. (2017) among collegiate football athletes, results showed that this cohort was exposed to injuries more than sixty-seven thousand times in three years. It was reported that 40% of youth injuries treated in Canadian hospitals' emergency departments were sports-related (Public Health Canada, 2013). Furthermore, sports injuries are estimated to cost Canadians greater than \$187 million annually (Parachute, 2015;

Yanchar *et al*, 2012). Despite this, 94% of students in high school participated in sports (Emery *et al*, 2006).

The incidence of sports injuries may be influenced by athletes' level of performance such as professional or amateur athletes (Szukics *et al*, 2022). As defined by the NCAA, amateur athletes are individuals who do not play professionally (i.e, are not in a professional team or do not receive money more than actual or necessary expenses) (NCAA, n.d.). In the NCAA context, amateur athletes include student-athletes in high school preparing to enter college or already in college. Sports injury is widespread in this population of athletes (Emery *et al*, 2006; Powell & Dompier, 2004). According to Pickett *et al*. (2005), sport and recreational injury accounts for 32% to 55% of all injuries in young boys and 19% to 59% of all injuries in young girls across eight countries. Moreover, despite the high injury rate, there is still a high level of participation in high-risk sports (Emery *et al*, 2006; Powell & Dompier, 2004), indicating a persistent risk that requires attention in this vulnerable population.

## **1.2 Statement of Problem**

Football, being one of the most widely played and celebrated sports globally, is inherently a high-risk activity with a significant prevalence of injuries among players. Musculoskeletal injuries, particularly those affecting the lower extremities such as muscles, ligaments, and tendons (Chaudhuri *et al* 2024). Furthermore, external factors such as uneven playing surfaces or poor ground conditions exacerbate the risk of injuries

by placing undue stress on the musculoskeletal system (Chaudhuri *et al* 2024).

Despite the growing recognition of the importance of sports in promoting physical and mental health, inadequate knowledge and improper implementation of preventive measures among football players remain pressing issues. Previous studies suggest that limited awareness of injury prevention strategies, including the necessity of dynamic warm-ups, stretching, and muscle-strengthening exercises, contributes significantly to the high incidence of injuries in football. The lack of proper training and the absence of muscle balance and strength conditioning further predispose players to injuries, undermining their performance and overall well-being (Chaudhuri *et al* 2024).

This study aims to address the existing gaps by exploring the knowledge, attitude, and practice of injury prevention strategies among amateur football players, with a focus on identifying barriers and recommending actionable solutions for better implementation and to provide answers to the following questions

1. What is the level of knowledge of injury prevention among amateur football players?
2. What is the level of attitude toward injury prevention among amateur football players?

### **1.3 Aim of the Study**

The main aim of the research was to determine the knowledge and attitude of injury prevention among amateur football players at the University of Ilorin Stadium

#### **Specific Objectives**

Specific objectives of the study were to :

- 1.To determine the level of knowledge of injury prevention among amateur football players
2. To determine the attitudes toward injury prevention among amateur football players

### **1.4 Significance of the Study**

This study on the evaluation of knowledge and attitude towards Injury prevention among Ilorin metropolis, is significantly linked with the United Nations(UN) Sustainable Development Goals (SDG) 3: Good Health and Well-being, which aims to ensure healthy lives and promote well-being for all at all ages. It is hoped that the findings this study will provide more insights to the importance of injury prevention among amateur football players as well as the positive role it plays in the impact of players' safety, performance and career longevity. Insights from the research will help coaches and physiotherapist design training programs incorporating physiotherapy principle for for sustaining fitness. Finally this study



contributes to filling research gaps in sport physiotherapy for injury prevention in Nigeria.

### **1.5 Scope of the Study**

The scope of this study focused on amateur football players who train at the University of Ilorin Stadium. This study aims to assess the level of knowledge and the attitude of amateur football players and explore possible gender differences. This study was limited to the specific context of stadium football players to provide insights into athletes understanding and attitude towards injury prevention

### **1.6 Definition of Terms**

**Amateur:** Amateur athletes are individuals who do not play professionally (i.e, are not in a professional team or do not receive money more than actual or necessary expenses)(National collegiate Athletic Association).

**Attitude:** Attitude. Attitude indicates an individual evaluation (positively or negatively) of a behaviour or whether to engage in a behaviour (Crocker *et al*, 2021).

**Football player:**A sports-person who plays one of the different types of football. (Wikipedia, 2025)

**Injury prevention:** Injury prevention is defined as activities to prevent, ameliorate, treat, and/or reduce injury related disability and death (David *et al*, 2006).

**Knowledge:** is the collection of experience, appropriate information and skilled insight which offers a structure for estimating and integrating new experiences and information (Mohajan, 2016)

## **1.7 Abbreviations and Acronyms**

**FIFA:** Federation Internationale de Football Association

**KAP:** Knowledge Attitudes and Practices

**NACC:** National Collegiate Athletic Association

**SDG:** Sustainable Development Goals

**UN:** United Nation

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Football and its Role in Nigerian Society**

Nigeria, a country on the western coast of Africa, boasts a rich cultural heritage where sports, particularly football, have played a significant role (Anthony *et al*, 2024). Among various sports such as badminton, basketball, and boxing, football stands as the most popular and widely followed sport in Nigeria (Olaorun, 2018). Over the past three decades, Nigerian football has garnered global attention for its remarkable achievements and contributions to the sporting world (Chuka, 2022).

Football was introduced to Nigeria by the British in the early 20th century, with the first documented match held in 1904. By the 1950s, football had solidified its place as Nigeria's national sport (Alegi & Peter, 2010).

Beyond its entertainment value, football played a critical role during Nigeria's nationalist movements, serving as a symbol of pride and a tool for political mobilization. Nnamdi Azikiwe, a prominent figure in Nigeria's fight for independence, utilized football to unify citizens and inspire the pursuit of freedom (Alegi & Peter, 2010). Azikiwe's efforts included tours across the country and the establishment of the West African Pilot newspaper in 1937, which not only popularized football but also fostered a sense of national identity and pan-Africanism (Fatiu, 2023).

Today, Nigerian footballers are recognized on international stages, with many excelling in European leagues, especially in England (Doyle, 2013). The Nigerian national football team, also known as the Super Eagles, has

achieved significant milestones, including multiple appearances in the FIFA World Cup and outstanding performances in youth tournaments such as the U-17 World Cup (Waldstein, 2014). Nigeria's youth teams, such as the Golden Eaglets and Flying Eagles, have consistently brought glory to the nation through their successes in international competitions.

The women's national team, the Super Falcons, has equally made its mark, dominating African women's football by winning several Confederation of African Football (CAF) championships and representing Nigeria in FIFA Women's World Cups (Fatiu, 2023).

## **2.2 Football Clubs in Ilorin**

Ilorin is the capital city of Kwara state located in the western region of Nigeria. As of the 2006 census, it had a population of 777,667, making it the 7th largest city by population in Nigeria. Ilorin has an 18,000 capacity stadium and two professional football teams; Kwara United football club playing in the top tier league of Nigeria professional football league (N.P.F.L) which is run by the league Management company; and ABS FC in the second division which is Bet9ja Nigeria National League (Bashir, 2021).

Kwara United Football Club is a Nigerian football club based in Ilorin. They play in the top division in Nigerian football, the Nigeria Professional football League after promotion in 2017 from the Nigeria National League. Their home stadium is the Kwara State Stadium. Abubakar Bukola Saraki FC is a Nigerian association football club from Ilorin, Nigeria. They were promoted to the Nigeria Premier League at the end of the 2009–10 season.

They played their debut season's home games in Offa and Bauchi while the Kwara State Stadium was being renovated. They were put up for sale in July 2011 and bought by outgoing Kwara State governor Bukola Saraki for 250,000,000 naira, making them and Jos university teaching hospital football club the only Premier League teams that are not state-owned. In 2011, the team was renamed from Bukola Babes to Abubakar Bukola Saraki football club. In 2016, the team returned to the Nigeria Professional Football League (Olaorun, 2018). The coach is named: Henry Makinwa. Other football club in Ilorin Include : Kwara Ladies F.C, Injectors e.t.c.

### **2.3 Common Injuries in Football**

According to The International Olympic Committee Injury and Illness Epidemiology Consensus, injury is “tissue damage or other derangement of normal physical function due to participation in sports, resulting from rapid or repetitive transfer of kinetic energy” (Bahr *et al*, 2020). Sport-related musculoskeletal injuries are a common health issue in athletes that can lead to reduced performance (Wang *et al*, 2024). Musculoskeletal injuries are common as a result of the repetitive physical stress (Louis *et al*, 2019). Stress fractures in the weight bearing bones should always be suspected when ultra endurance athletes present with pain over bony structures. Most stress fractures can be treated with activity modifications but some such as femoral neck and tibial shaft stress fractures may require operative fixation (Louis *et al*, 2019). The knee seems to be the most frequent source of injuries in ultra endurance athletes (Louis *et al*, 2019). Patello-femoral symptoms from tendon injuries or chondral problems are

common injuries and can be challenging to treat. Lower leg, ankle, and foot injuries also make up significant portion of ultra endurance injuries (Louis *et al*, 2019). Some of the most common injuries in football athletes include anterior and posterior glenohumeral instability, acromioclavicular pathology (including separation, osteolysis, and osteoarthritis), rotator cuff pathology (including contusions, partial thickness, and full thickness tears), and pectoralis major and minor tears (Daniel *et al*, 2015). Maxillofacial injuries sustained playing sports are becoming increasingly common, and in the UK where football is the most popular team sport, associated maxillofacial injuries are a regular occurrence. (Gallagher *et al*, 2022). Hamstring strain injuries are common in a number of sports and incidence rates have not declined in recent times (David *et al*, 2012). The most common injury types among footballers strains, sprains and contusions (Oliver *et al*, 2013). There is some evidence that the risk of traumatic injuries and , in particular, of sustaining a fracture, contusion, or concussion was higher during match play than in practice sessions (Oliver *et al*, 2013). There is a common constellation of injuries that are seen frequently in professional football. Much attention has been focused on concussions and their long term outcomes. Other common causes of morbidity include cervical spine injuries, knee injuries including anterior cruciate ligament and other ligamentous injuries, ankle sprains and medical issues including cardiac and sickle trait (David *et al*, 2013).

## 2.4 Mechanism of Sports Injury

Injury mechanism can be described as an “inciting event” leading to an injury (Bahr & Krosshaug, 2005). From a biomechanical perspective, considering tissue properties and load characteristics, an injury occurs when the energy transfer to the tissue and the mechanical load is more than the tissue's load tolerance (Bahr & Krosshaug, 2005). Bahr *et al.* (2020) stated that sports injury may result from direct participation during competition or training (e.g, a collision between players) and may occur from indirectly participating in activities related to competition or training (e.g, athlete slipping and sustaining an injury when in the training camp).

Additionally, the authors mentioned that the mechanism of injury in sports could be further classified into contact and non-contact mechanism in which acute type of injury can be contact or non-contact in nature and overuse injury by nature are non-contact (Bahr *et al.*, 2020). Non-contact acute injury has no evidence of disruption of a player's movement patterns, for example, a basketball player landing and twisting their ankle with no contact with other players (Bahr *et al.*, 2020). Contact mechanism of injury can be direct contact with another athlete (e.g, a soccer player sustains an anterior cruciate ligament tear as a result of a direct tackle to the knee) or with an object (e.g, a volleyball player being hit in the face by a spiked ball, resulting in a concussion). Also, it can be indirect through another athlete (e.g, anterior cruciate ligament tear in a handball player landing off-balance after being pushed on his shoulder by an opponent while in the air) or through an object (e.g, a downhill skier suffers concussion from

a crash after hitting the gate with his knee; Bahr *et al*, 2020). All these demonstrate how acute injury can occur in sport.

## **2.5 Risk Factors of Sports Injury**

Earlier in the above review, it was described that sports injury mechanism is the inciting event leading to an injury. Although sports injuries may appear to have been caused by a single inciting event, the beginning of an injury starts from a complex interaction between internal and external risk factors (Bahr & Krosshaug, 2005). Internal factors such as age, sex, and body composition influence the risk of sustaining injuries, predisposing the athlete to injury. External factors such as equipment and training surface may modify injury risk, making the athlete even more susceptible to injury (Bahr & Krosshaug, 2005). The presence of internal and external risk factors makes the athlete susceptible to injury; however, the mere presence of these risk factors is insufficient to produce injury. The sum of these risk factors and their interaction leads to the athlete getting injured in a given situation (Bahr & Krosshaug, 2005). The inciting event is the final link in the series that causes an injury, and such events are regarded as necessary causes. These inciting events are usually directly associated with the onset of injury (Meeuwisse, 1994; Meeuwisse *et al*, 2007).

Herrington and colleagues (2019) provided detailed lists of these factors involved in the risk of injury occurrence. These are non-modifiable factors, training-related factors, health factors, motor control, environmental factors, conditioning, psychological factors, other factors, and additional demands. Non-modifiable factors include sex, age, maturation stage, body



type, genetics, and past injury history of the athlete. Training-related factors are the volume, load, intensity, nature of training, training & competition schedule, and rest. Health factors comprise diet, medication, previous treatments, medical issues, general health, fatigue, and sleep. Motor control factors include habitual postures & movement patterns, muscle tone, biomechanics, sport-specific movements, and technique. Environmental factors are the playing surface, equipment, weather, and coaching. Conditioning factors comprise muscle strength, endurance, muscle length, joint range, and chronic capacity. Psychological factors include cognitive beliefs, fear, coping strategies, self-efficacy, catastrophizing, and emotional status (stress, anxiety, depression). Other factors like sport-specific skill level, ranking & status, and short and long

## **2.6 Mode of Onset of Sports Injury**

Understanding the mode of onset of sports injury is also vital in understanding sports injury and is directly associated with injury mechanisms (Meeuwisse, 1994; Meeuwisse *et al*, 2007). Traditionally, injuries have been classified into those with a sudden onset and those with a gradual onset. Sudden onset injuries were considered to be those that resulted from a specific identifiable event. On the contrary, gradual-onset injuries were considered to be those that lack a definable sudden, precipitating event as the onset (Bahr *et al*, 2020). According to Bahr and colleagues (2020), sports injuries should be classified as overuse (gradual) or acute injury (sudden). Consideration is also given to acute injury that occurs due to overuse injury (Bahr *et al*, 2020). Acute injury occurs due to an exchange of large quantities of kinetic energy, like a collision

between athletes. An overuse injury is a gradual retention of low-energy transfer over time (e.g, the development of tendinopathy caused by repetitive movement or stress fracture). An acute injury that results from overuse injury is a combination of both (e.g. an athlete with a repetitive training regime can develop tendinopathy or tendon weakness but also sustains an acute tendon tear during a jump; Bahr *et al*, 2020).

## **2.7 Sports Injury Type/Location in the Body**

Sports injuries can be classified according to their aetiology type (i.e. the cause of the injury) and location in the body. Bahr *et al.* (2020), in their consensus statement on methods for recording and reporting epidemiological data on injury and illness in sports, categorized sports injury into specific regions of the body: head, neck, shoulder, upper arm, elbow, forearm, wrist and hand, chest, thoracic spine, lumbar spine, pelvis/buttock, hip/groin, thigh, knee, lower leg, ankle, and foot injuries. Some of these injuries were further classified into aetiology type and even to the level of diagnosis. This was done to highlight the most significant injuries in sports. The authors mentioned the following as significant injuries: concussion was highlighted as the most common head injury; shoulder injuries were divided into acute dislocation, hematoma, and joint sprain (acromioclavicular and glenohumeral); knee injuries were classified into knee cartilage injury (meniscal cartilage injury) and knee ligament injury (medial collateral ligament injury, anterior cruciate ligament injury, posterior cruciate ligament injury, posterolateral corner and lateral collateral injury). The last significant injuries mentioned were

at the ankle, consisting of lateral ligament sprain and syndesmosis pain (Bahr *et al*, 2020).

Sports Injury Prevention and Injury prevention programs it has been recognized that there is a high participation in sports across all ages and this participation is highest among youth and young adults (Billette & Janz, 2011; Sheu *et al*, 2016). This high participation in sports brought about increased injury rates not only in youth but in the adult population as well (Emery & Tyreman, 2009; Sheu *et al*, 2016). Previous studies have shown that 20% of schoolchildren will miss at least one day of school per year due to sports injuries, and one in three youth seek medical attention for sports-related injuries per year (Emery *et al*, 2006). Even adults lose at least one day a year from work as a result of sport-related injuries (Sheu *et al*, 2016). Apart from the significant impact sports injury has on the health of those participating in sports, the financial impact is huge. In Canada, it has been estimated that sports injury treatment will cost Canadians greater than \$187 million annually (Parachute, 2015; Yanchar *et al*, 2012). These health and financial burden caused by sports injury shows that there is a need to implement evidence-based injury prevention strategies to reduce the risk of injury in youth, and also across the lifespan.

Injury prevention programs are those strategies put in place to reduce the number of injuries as well as the severity and extent of injuries (Emery *et al*, 2015). Injury prevention strategies in sports typically focus on modifiable risk factors and they are training strategies, rules, and equipment (Emery *et al*, 2020; Stephenson *et al*, 2021). Training

strategies focus on athletes-related (motor control) risk factors such as strength, endurance and balance through neuromuscular exercise interventions. Environmental risk factors are targeted through rule modification and equipment strategies (e.g. body checking in youth ice hockey, wearing of the helmet in ice hockey, wearing of knee and ankle braces, wicket keeping or fielding close to the batter in cricket, disallowing jewellery while playing in soccer ( Emery *et al*, 2020; Stephenson *et al*, 2021). These three prevention strategies will be further discussed in the following paragraphs.

Training strategies (also called neuromuscular training strategies) have been evaluated in most prospective studies (RCT, quasi-experimental, and cohort studies; Emery & Pasanen, 2019). Neuromuscular training strategies (NMT) are typically led by a coach or trainer, ideally following a comprehensive coach training workshop by a physiotherapist or a strength and conditioning coach who is an expert in delivering NMT workshops (Emery & Pasanen, 2019).

Typically, NMT consists of exercises aimed at improving balance, strength, and agility (e.g, coordination, cutting and landing techniques; Emery *et al*, 2015). NMT programs are often introduced as part of an extended warm-up program, with other components that include aerobic, balance, strength, and agility. Ideally, levels of progression are built into each NMT exercise component such that participants can progress as they want. However, these programs have to be feasible and fit in a real-world sports setting (Emery & Pasanen, 2019).

Rule modification and policy changes are important aspects in regulating sports, although some have been implemented specifically to reduce the risk of injury. One example of this evidence-based policy is body checking in youth ice hockey (Emery & Pasanen, 2019). Body checking is a strategy used to gain competitive advantage by changing direction or leaving the established skating lane to make contact with the body of the opponent, or using hips, shoulders, or arms to push off and separate the opponent from the puck (Emery *et al*, 2020). Previous findings have shown that policy change disallowing body checking is associated with fewer injuries in youth ice hockey (Emery *et al*, 2020).

Lastly, the use of protective equipment in sports may help to prevent musculoskeletal injury and/or severity in sports (Emery & Pasanen, 2019). Examples of this equipment are bracing/taping and wrist guards. Dizon and Reyes (2010) examined the protective effect of ankle bracing and taping among previously injured adult and youth athletes. The risk of ankle sprain re-injury was reduced by 69% and 71%, respectively. However, the evidence surrounding the preventative effect of bracing/taping did not support using them as a primary prevention strategy in healthy populations with no previous history of ankle/knee injury (Yang *et al*, 2005). Also, wrist guard use in snowboarding revealed a significant protective effect in reducing the risk of wrist injury, wrist fracture, and wrist sprains (Russel *et al*, 2007). Although there is some evidence to support the use of protective equipment in youth sports, there is also evidence that they are underused (de Nooijer *et al*, 2004; Kroncke *et al*, 2008). A combination of educational approaches (social media) and

policy may be a good way to promote the use of protective equipment where required (Emery and Pasanen, 2019).

## **2.8 Attitudes of Athletes Toward Injury**

Athletes' attitudes toward injury risk and prevention are associated with the uptake of preventive measures among youth sports participants (Iversen & Friden, 2009). Perceived susceptibility to injury (Kroncke & Niedfeldt, 2008), social influences (De Nooijer *et al*, 2004), and dislike of prevention strategies (Miller *et al*, 2006) have all been shown to influence prevention behaviours in a variety of competitive and recreational sports. Adherence to treatment regimens, including injury rehabilitation, is also an extremely complex issue. It has been argued that more than 200 variables influence commitment to prescribed treatments (Meichenbaum & Turk, 1987). The attitude of youth athletes regarding sports injuries has been highlighted in the literature. It has been reported that children feel that the best players should continue playing when they are hurt (Mickalide & Carr, 2012). A survey of 1000 youth athletes reported that almost half had played down an injury so they could continue playing or had felt pressured to do so (Safe Kids Worldwide, 2014). Although athletes need to have the essential knowledge to feel adequately empowered to report injury symptoms as they present (Taylor & Sanner, 2017), this alone does not guarantee better injury-reporting behaviours (Kurowski *et al*, 2014). Attitudes toward injury reporting are vital to prevention (Register-Mihalik *et al*, 2013). For example, failing to comprehend the seriousness of a concussion may prevent youth athletes from reporting symptoms and keep them from seeking appropriate care

when experiencing symptoms (Register Mihalik *et al*, 2013). While investigating the reporting of the history and attitudes towards concussion in a collegiate/varsity athletic population (n= 262), found that almost half of those with a history of concussion reported that they had intentionally concealed concussion symptoms to allow them to continue playing in a game (Torres *et al*, 2013). Furthermore, despite acknowledging they had been formally educated about the risks of concussion, 22% of the surveyed athletes indicated they would be “unlikely” or “very unlikely” to report a concussion to their coach or athletic trainer in the future. They also noted that while concussion education is clearly essential, their findings in this college/university cohort suggested that receiving education would not motivate them to report concussions in the future (Torres *et al*, 2013). It has also been suggested, regardless of whether concussion education has been received, collegiate/varsity athletes will play or train through concussion, or indeed any injury, to protect their scholarships, gain peer acceptance, as well as obtaining or maintaining coach support (Malinauskas, 2008). Likewise, Chrisman *et al*. (2013) also suggested that high school varsity athletes will hesitate to report their injury, particularly if there is no significant pain or observable disability.

## **2.9 The Implication for Injury Prevention Programs.**

Efforts to design and implement effective injury prevention programs in sports have been studied in the medical community for many decades (Emery *et al*, 2010; Gilchrist *et al*, 2008; Hagglund *et al*, 2009). The success of these programs involves many factors and depends on the

identification of the injury risk, analyzing the mechanism of injury, the qualitative content of the injury prevention program, compliance, and adherence to the prescribed evidence-based programs (Fortington *et al*, 2015; McKay & Verhagen, 2016). In addition, insight into the behavioural context in which injury prevention will be implemented is necessary for injury prevention programs (Finch, 2006).

Taking into account the attitudes, beliefs, opinions, and perceptions of the people directly involved (coaches and athletes) in injury prevention when designing and implementing injury prevention programs may increase the odds of successful injury prevention in real-life sports settings (Fokkema *et al*, 2019; Shamlaye *et al*, 2020). These behavioural factors greatly affect compliance (Silvers-Granelli *et al*, 2018) and adherence (Rees *et al*, 2022) rates to injury prevention programs.

Compliance refers to “the act of an individual conforming to professional recommendations with regard to prescribed dosage, timing and frequency of an intervention” while adherence “is a process influenced by the environment, recognizing that behaviour is shaped by social contexts as well as personal knowledge, motivations, skills and resources” (McKay & Verhagen, 2016, p. 382). Although researchers have used these terms interchangeably, adherence is said to be more appropriate when capturing dynamic and complex changes required to assess interventions over time (Owoeye *et al*, 2018).

Research on adherence to Injury prevention programs among coaches and athletes is sparse in the literature, but the existing research suggests that



these prevention programs are underused (Dix *et al*, 2021). The cost of injury prevention programs and lack of education in injuries and prevention programs have been suggested as potential barriers to implementation (Dix *et al*, 2021). The burden of adoption is not on the coaches alone; the athletes themselves are also key to successfully implementing an injury prevention program (Martinez *et al*, 2017). So, it is essential to understand the attitudes and motivations of the athletes so that efforts can be targeted in the widespread use and ultimately, adherence to injury prevention programs (Martinez *et al*, 2017).

## **2.10 The Role of Physiotherapy**

Physiotherapy, as defined by World Physiotherapy (2023), is a healthcare profession dedicated to optimizing human function and movement to maximize physical potential. It focuses on identifying and enhancing quality of life and movement across promotion, prevention, treatment, habilitation, and rehabilitation. This field employs physical approaches to foster, maintain, and restore physical, psychological, and social well-being, acknowledging diverse health statuses. It is a science-based discipline, committed to expanding, applying, evaluating, and refining the evidence that underpins its practice, with clinical judgment and informed interpretation at its core (Chartered Society of Physiotherapy, 2007). In essence, physiotherapy offers a holistic approach to preventing, diagnosing, and therapeutically managing pain, movement disorders, or optimizing function to improve community health and welfare, whether at an individual or population level (WCPT, 2023).

Sports physiotherapy is a specialized branch of physiotherapy that addresses injuries specific to athletes, which often differ from general injuries (Ashok & Vardri, 2022). It is defined as a recognized professional role demonstrating advanced competencies in promoting safe physical activity, providing expert advice, and adapting rehabilitation and training interventions. These efforts are crucial for preventing injury, restoring optimal function, and enhancing sports performance in athletes of all ages and abilities, while upholding high professional and ethical standards (Ashok & Vardri, 2022).

The sports physiotherapist collaborates closely with coaches and athletes to enhance performance, leveraging a unique blend of knowledge encompassing anatomy, physiology, biomechanics, exercise therapy, and kinesiology (Maria, 2015). Their essential role in international and elite sports, as well as at all other levels, is to provide treatment and rehabilitation for injuries. They also offer performance support through injury prevention strategies, ongoing maintenance, and recovery interventions (Grant *et al*, 2014).

Athletes, due to their high level of physical performance, place considerable stress on their joints, bones, and muscles. This makes them particularly susceptible to injuries, necessitating specialized care from healthcare professionals like sports physiotherapists (Abdallah, 2019). Football, being a full-contact sport, frequently exposes players to physical impacts. Given the game's hyper-physical nature, it is essential for players to have a physiotherapist readily available (Fatou, 2023). According to Tippet (as cited in Cabbie *et al*, 2006), the therapist's responsibilities

extend beyond treatment, prevention, and rehabilitation of injuries to include educating athletes and coaches, and managing the risks and precautions necessary to prevent injury occurrence. Proprioception, coordination flexibility, strengthening, pre-season screening and testing, and proper warm-up and cool-down routines are also integral to their role.

Physiotherapists are vital members of the sports medicine team, actively involved in preventing and managing injured athletes from the acute injury stage through rehabilitation (Macedo *et al*, 2019). A study revealed that athletes expect informational support from physiotherapists, which significantly shapes their expectations in injury rehabilitation (Washington-Lofgren *et al*, 2004). Physiotherapy is an important tool in a sportsman's support system. Having a physiotherapist on the field, prepared to administer immediate physical "first-aid" in case of injury, can significantly accelerate recovery. A physiotherapist can also provide substantial pain relief.

Physiotherapy encompasses techniques, primarily movement-based, used for the rehabilitation or therapy of individuals with injuries, dysfunctions, or losses resulting from trauma or degeneration. Its role today is fundamental not only for athletes but for anyone with a bodily injury or dysfunction (Soccer Inter-Action Academy, 2023).

Physiotherapists are typically integrated into sports teams alongside other healthcare professionals. In such settings, athletes' knowledge and perceptions of physiotherapy services influence their overall attitude toward these services and their willingness to collaborate with the

physiotherapist for post-injury rehabilitation. It is crucial for players to be thoroughly rehabilitated after injuries before returning to pre-injury performance levels (Sherker, 2002).

Football players commonly sustain injuries to their shoulders, knees, and ankles. Due to the high-contact nature of the sport, many areas of the body are vulnerable. Some of the most severe football injuries are not always overtly visible, and a physiotherapist treats all football injuries with gravity. Through appropriate exercise and treatment, players can return to the field as swiftly as possible. Physiotherapy also aids in pain relief. Expert physiotherapists facilitate rehabilitation using electrical modalities or manual techniques to accelerate the healing process and restore a footballer to their maximal attainable fitness. Additionally, clarifying expectations is crucial in rehabilitation as it helps athletes reduce uncertainties and anxieties about the unknown by enhancing their sense of control (David *et al*, 2013). According to Solomon (2013), the primary objective of physiotherapy in injury rehabilitation is to treat and fully rehabilitate the athlete post-injury or post-operation to prevent subsequent injuries and enable the athlete to return to their sport in the shortest possible time. Furthermore, during a match, the sports physiotherapist's role in a football team is to attend to players who experience mishaps. This may involve entering the pitch if necessary or providing care once the player has been substituted (SIA, 2023).

Studies by Soderman *et al*. (2000) and Mclean (2014) highlighted key physiotherapy roles: assisting in minimizing and preventing injuries,

rehabilitating injured players, implementing performance enhancement programs, and intervening during on-field injuries.

A crucial function of the physiotherapist in a football team is to continuously monitor all players, particularly those reporting any discomfort or ailment. Beyond treatment, they must design specific tasks or loads for each player requiring it. It is also the physiotherapist's responsibility, in conjunction with the physical trainer, to determine whether a player with an ailment or discomfort can continue normal training or needs a few days of specific work to prepare them for the next training session or match with minimal re-injury risk (SIA, 2023). This is particularly important for players recovering from long-term injuries, to prevent recurrence or relapse during their recovery process (SIA, 2023).

Various types of sports injuries, from muscle strains and ligament sprains to dislocations and fractures, benefit from physiotherapy. This treatment regimen effectively combines strengthening and flexibility exercises throughout the rehabilitation process. Moreover, progressive exercises are integrated into the treatment program to ensure the injured area returns to a fully functional state. The focus is on professional injury treatment and guiding the athlete through every step to achieve complete recovery, with therapy tailored to the individual, their injury, and their specific sport (Mortha, 2018).

Another vital aspect of physiotherapy involves the use of manual therapies, such as massage and mobilization, to alleviate pain and inflammation. These therapies also improve range of motion and flexibility, which are

essential for complete recovery. In addition to physical therapies, physiotherapists educate athletes on pain and injury management, covering proper body mechanics, injury prevention, and self-care techniques. Physiotherapy also addresses the psychological dimension of injury recovery, including developing coping strategies like stress management to help athletes navigate the emotional and mental challenges of being injured (Fatiu, 2023).

Physiotherapy plays a critical role in the rehabilitation of sports injuries by combining exercises, manual therapies, and education, physiotherapists assist athletes in recovering from injuries, reducing the risk of re-injury, and enhancing overall function and performance. For an athlete who has sustained an injury, collaborating with a physiotherapist as part of their rehabilitation plan is crucial for a full recovery and a successful return to their sport (Fatiu, 2023).

## Summary of analysis of core literature

| S/N | Authors                        | Study Objectives                                                                                                                                                    | Key findings                                                                                                                                                        | Research Gap                                                                                                                                                        |
|-----|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Geertsema <i>et al</i> 2021    | disparity between players' high level of injury prevention practice and positive attitudes/beliefs, and the lack of permanent medical staff in some domestic clubs. | disparity between players' high level of injury prevention practice and positive attitudes/beliefs, and the lack of permanent medical staff in some domestic clubs. | disparity between players' high level of injury prevention practice and positive attitudes/beliefs, and the lack of permanent medical staff in some domestic clubs. |
| 2   | Carolyn <i>et al</i> , 2015    | evaluate the efficacy of injury prevention neuromuscular training strategies in youth sport.                                                                        | Neuromuscular training strategies have a combined preventative effect in reducing the risk of lower extremity injury in youth sport                                 | The primary research gap identified is the lack of uptake and ongoing maintenance of neuromuscular training prevention programs in practice.                        |
| 3   | Ashok, N., Vardri, K.P. (2020) | Knowledge of sport physiotherapy among university professional sports players                                                                                       | High percentage of players have good knowledge about sports physiotherapy                                                                                           | Limited to professional non contact sport players only                                                                                                              |
| 4   | Söderman <i>et al</i> 2000     | investigate whether training on a balance board could reduce the amount of traumatic injuries of the lower extremities in                                           | No significant differences were found between the balance board training group and the control group in the number, incidence, or type of traumatic                 | The lack of overall injury prevention and the higher major injury rate in the intervention group.                                                                   |

|   |                           |                                                                                                                                                                                    |                                                                                                                                                                                           |                                                                                                                                          |
|---|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
|   |                           | female soccer players.                                                                                                                                                             | lower extremity injuries.                                                                                                                                                                 |                                                                                                                                          |
| 5 | Fatiu, A. (2023).         | Awareness and Utilization of physiotherapy services among Kano Pillars Footballers                                                                                                 | There is High awareness and low utilization of physiotherapy services among the participants                                                                                              | Professional Athletes in different regions not studied                                                                                   |
| 6 | Owoeye <i>et al</i> 2013  | Assess the knowledge and behaviour of male youth football players regarding Injury Prevention in Football (IPF) and the availability of medical care for these players in Nigeria. | No Link Between Experience/Position and Knowledge: No statistically significant relationship was found between years of football experience or playing position and IPF knowledge scores. | Deficient knowledge and inconsistent injury-prevention behaviours among Nigerian male youth football players.                            |
| 7 | Barengo <i>et al</i> 2014 | evaluate the impact of the FIFA 11+ program on injury incidence, compliance, and cost-effectiveness when implemented among football players.                                       | The FIFA 11+ program significantly reduces injury incidence in amateur football players, with considerable reductions ranging from 30% to 70% observed in teams that implemented it.      | challenges and strategies for effective and widespread implementation of the FIFA 11+ to ensure high compliance across amateur football. |



## **CHAPTER THREE**

### **MATERIALS AND METHODS**

#### **3.1 Participants**

The participants of this study comprised both male and female amateur football players at the University of Ilorin Stadium.

##### **3.1.1 Participants Selection**

This study involved 74 amateur football players at the University of Ilorin Stadium.

#### **3.2 Inclusion Criteria**

- i. Amateur football players at the University of Ilorin stadium who consented to participate in the study.
- ii. Amateur football players aged 16 years and above.

#### **3.3 Exclusion Criteria**

- i. Amateur football players who were unwilling to participate or complete the questionnaire
- ii. Amateur football players who had not played football within the past 3 months

#### **3.4 MATERIAL/INSTRUMENT**

##### **3.4.1 Instrument**

The instrument used for this study was an injury prevention questionnaire by Geertsema, *et al.* (2021).

### **3.4.2 Description of Instrument**

This self report questionnaire (Appendix II) adapted from an injury prevention questionnaire by Geertsema *et al.* Br J Sports Med 2021. The survey consisted of 12 questions and took about 6-10 minutes to complete and focused on assessing the level of knowledge of injury prevention among amateur football players and the focused on assessing amateur football players attitude towards injury prevention. Question design focused on three dimensions of the RE-AIM framework: Reach, Adoption, Implementation. Included question assessed 1.knowledge of injury risk and types in football, 2. attitude and belief towards injury prevention, 3. injury prevention practices in their clubs. Five-point likert scales were used although the addition of a ‘don’t know’ option resulted in six response options. This was considered an optimal compromise between measurement precision and simplicity. For this study the questionnaire consisted of 3 section:

Section 1 collected the socio-demographic information of participants such as age gender, playing position, duration of football play, club.

Section 2 included questions related to knowledge and attitude about sports injuries

Section 3 included questions regarding how injury prevention is practised in the club/team

## **3.5 Methods**

### **3.5.1 Sampling Techniques**

The participants were selected using a convenience sampling technique and only those who gave their consent and met the inclusion criteria were included in the study. Amateur football players who were readily available and willing to participate at the university of Ilorin stadium were recruited as participants. This method was chosen due to its practicality and accessibility; however it is acknowledged that convenience sampling may introduce selection bias and limit the generalizability of the findings.

### 3.5.2 Sample Size Determination

The research participants were amateur football players from the University of Ilorin Stadium. A total of about 80 amateur football players were used for this research. Taro Yamane's formula was used to get a good representation of the total sample size

Sample size formula is Taro Yamane's formula:

$$n = \frac{N}{1 + N(e^2)}$$

n=sample size

N= Population size

e= Margin of error

Where N= 80

e= 0.05

$$n = \frac{80}{(1+80(0.05^2))}$$

$$n = \frac{80}{(1+0.2)}$$

$$n = 80/1.2$$

$$n = 66.67$$

$$n = 67$$

Attrition rate of 10% was considered

$$n = n + (n \times 0.10)$$

$$n = 67 + (67 \times 0.10)$$

$$n = 67 + 6.7$$

$$n = 73.7$$

Therefore the total sample size is 74

### **3.6 Research Design**

This study was a descriptive cross sectional design using a self-administered questionnaire

### **3.7 Ethical Consideration**

Ethical approval was sought and obtained from the Health Research Ethics Committee of the University of Ilorin Teaching Hospital, Kwara State (Appendix III) on the 26/11/2024 UITH/CAT/189/VOL.21/834 and participants were required to sign an informed consent form (Appendix II). The specific aim and objective of the study will be clearly communicated to all participants as outlined in the informed consent form. The

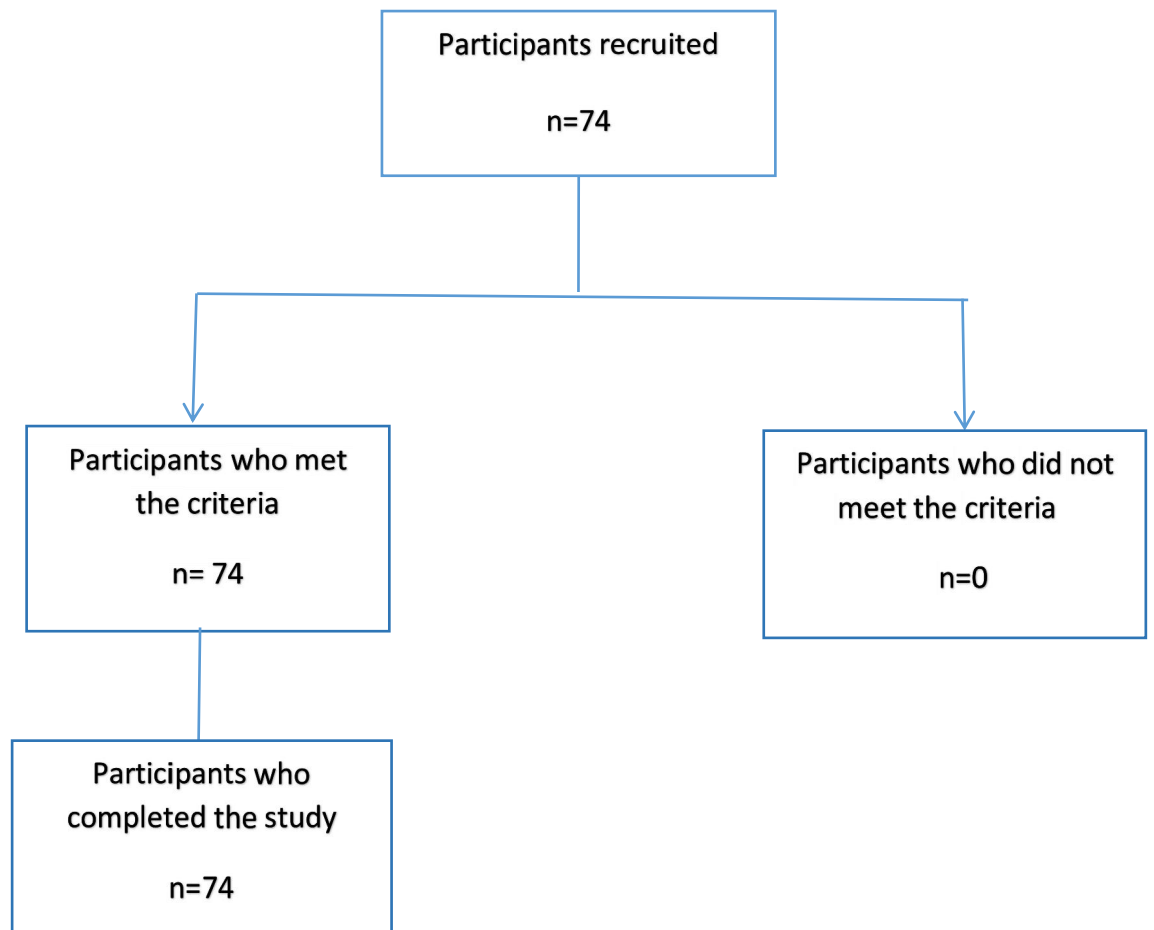
participants were also assured of the confidentiality of their response and all information obtained will be securely stored.

### **3.8 Procedure for Collecting Data**

Participants were recruited based on inclusion criteria, and informed consent was obtained by providing clear information about the study's purpose and procedures. A structured questionnaire was administered over a period of three months, from the 25th of January till March 31st 2025. The participants were approached at the field before the start of their game, and printed questionnaires along with pens were distributed which were filled out and submitted immediately after. Data security was prioritized, adhering to data protection guidelines and safeguarding against unauthorized access.

### **3.9 Data Analysis**

Data was analysed using the Statistical Package for Social Sciences (SPSS) version 25.0 and summarized using descriptive statistics of bar chart, pie chart, percentage mean and standard deviation.



**Figure 1 The study flowchart**

## **CHAPTER FOUR**

### **RESULTS**

#### **4.1 Socio-Demographic Variables**

The socio-demographic profile of the 74 amateur football players in Table 1 shows the distribution of the respondents that participated in the study. It was revealed that for age, the majority of the respondents with 29.7% were within the age range of 20–24 years. Sex revealed that the majority of the respondents with 91.9% were male. For playing position, the majority of the respondents with 37.8% played as mid fielders. Regarding football club, the majority of the respondents with 13.5% were from Emirate United. Lastly, duration of amateur football career revealed that the majority of the respondents with 14.9% had played for 3 years.

#### **4.2 Knowledge of and Attitude Towards Injury Prevention Among the Study Population**

In Table 2, a total of 48.6% perceived the risk of sustaining injury in football as high, while 36.5% considered it moderate. In terms of importance placed on injury prevention a large proportion 74.3% considered injury prevention to be very important, with another 20.3% regarding it as moderately important. A small number 2.7% each felt it was not very important or had no opinion on the matter. Commonly identified types of injuries included thigh 82.4%, knee 73.0%, and ankle 78.4% injuries. When asked which injuries were most important to

prevent, the knee 77.0% was a top priority, followed by thigh 70.3% and head injuries 64.9% ankle 56.8% and the groin 41.9% were highlighted. Players most frequently attributed injuries to hard tackles 81.1%, too much training 58.1%, and poor pitch quality 66.2%. Additionally, 66.2% of respondents reported having previously received advice about injury prevention programmes. It is therefore concluded that there is a high level of knowledge regarding injury prevention among amateur football players at the University of Ilorin stadium.

When asked about the statement that prioritizes football over injury prevention, 36.5% disagreed and 32.4% totally disagreed, rejecting the notion. Furthermore, 43.2% fully agreed and 37.8% agreed that coach motivation positively influences their own motivation to engage in prevention exercises. When directly asked how they feel about injury prevention measures, 35.1% reported feeling very positive, while 44.6% felt positive. It is therefore concluded that there is a positive attitude toward injury prevention among amateur football players at the University of Ilorin stadium.

### **4.3 Practice of Injury Prevention Among the Study Population**

Table 3 reveals how injury prevention is practised among amateur football players. A large portion of the respondents indicated access to essential medical support within their clubs, with 25.7% having a team physiotherapist and 10.80% having access to a doctor not dedicated to the team. Furthermore, 66.2% reported that their team had implemented

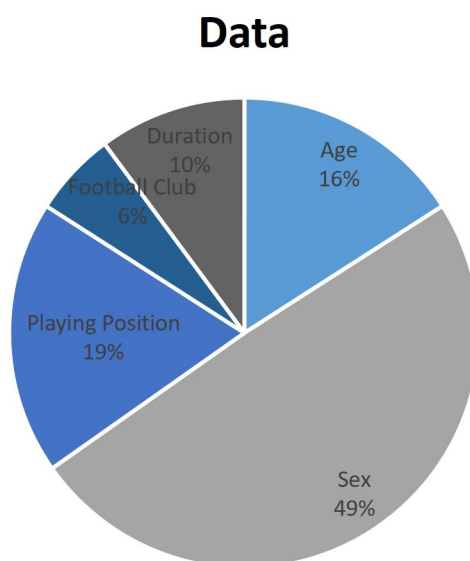


injury prevention training during the season, focusing mostly on thigh 32.4%, knee 27.0%, and ankle 17.6% injuries. The data indicate a moderate level of medical support among the amateur football players at University of Ilorin stadium.

**Table 1: Socio-demographic characteristics of respondents (n=74)**

| DEMOGRAPHY              | FREQUENCY | PERCENTAGE (%) |
|-------------------------|-----------|----------------|
| <b>Age (in years)</b>   |           |                |
| 16–18                   | 14        | 18.9           |
| 19–21                   | 17        | 23.0           |
| 22–24                   | 22        | 29.7           |
| 25–27                   | 13        | 17.6           |
| 28–30                   | 8         | 10.8           |
| <b>Sex</b>              |           |                |
| Male                    | 68        | 91.9           |
| Female                  | 6         | 8.1            |
| <b>Playing Position</b> |           |                |
| Defender                | 23        | 31.1           |
| Striker                 | 20        | 27.0           |
| Midfielder              | 28        | 37.8           |
| Goalkeeper              | 4         | 5.1            |
| <b>Football Club</b>    |           |                |
| Emirate United          | 10        | 13.5           |
| Manchester              | 6         | 8.1            |
| Barcelona               | 5         | 6.8            |
| Jad FC                  | 4         | 5.4            |
| Marine FC               | 4         | 5.4            |
| Unilorin Warrior        | 6         | 8.1            |
| Real Eagles             | 4         | 5.4            |
| Quantity Surveying      | 3         | 4.1            |
| Sporting Lagos          | 5         | 6.8            |
| Club Brugge             | 3         | 4.1            |
| Elite Club              | 4         | 5.4            |
| Invictus                | 3         | 4.1            |

|                                                    |          |            |
|----------------------------------------------------|----------|------------|
| Laureates                                          | 2        | 2.7        |
| Nunsa                                              | 3        | 4.1        |
| Physiotherapy                                      | 2        | 2.7        |
| LIS                                                | 2        | 2.7        |
| Sunshine                                           | 3        | 4.1        |
| <b>Duration of Amateur Football Career (years)</b> |          |            |
| 1                                                  | 8        | 10.8       |
| 2                                                  | 9        | 12.2       |
| 3                                                  | 11       | 14.9       |
| 4                                                  | 10       | 13.5       |
| 5                                                  | 9        | 12.2       |
| 6                                                  | 8        | 10.8       |
| 7                                                  | 7        | 9.5        |
| 8                                                  | 5        | 6.8        |
| 9                                                  | 4        | 5.4        |
| <b>10</b>                                          | <b>3</b> | <b>4.1</b> |



**Figure 2: Showing socio-demographic variables**

**Table 2: Knowledge of and Attitude towards Injury Prevention among the Study Population**

| Item                            | Response             | Frequency | Percentage (%) |
|---------------------------------|----------------------|-----------|----------------|
| Risk of injury                  | High                 | 36        | 48.6           |
|                                 | Moderate             | 27        | 36.5           |
|                                 | Low                  | 9         | 12.2           |
|                                 | Don't know           | 2         | 2.7            |
| Importance of preventing injury | Very important       | 55        | 74.3           |
|                                 | Moderately important | 15        | 20.3           |
|                                 | Not very important   | 2         | 2.7            |
|                                 | Don't know           | 2         | 2.7            |
| Types of injury exposed to      | Thigh                | 61        | 82.4           |
|                                 | Ankle                | 58        | 78.4           |
|                                 | Knee                 | 54        | 73.0           |
|                                 | Groin                | 39        | 52.7           |
|                                 | Head                 | 32        | 43.2           |
|                                 | Other                | 7         | 9.5            |
| Most important to prevent       | Knee                 | 57        | 77.0           |
|                                 | Thigh                | 52        | 70.3           |
|                                 | Head                 | 48        | 64.9           |
|                                 | Ankle                | 42        | 56.8           |
|                                 | Groin                | 31        | 41.9           |

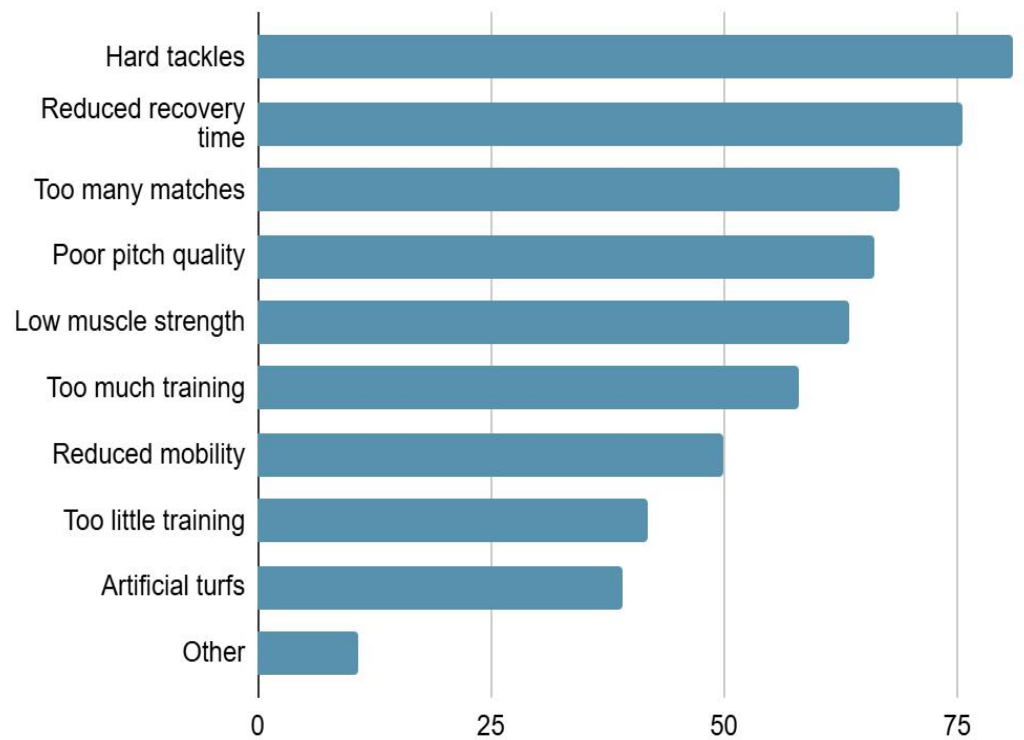
|                                              |                       |    |      |
|----------------------------------------------|-----------------------|----|------|
| Common reasons for injuries                  | Other                 | 6  | 8.1  |
|                                              | Hard tackles          | 60 | 81.1 |
|                                              | Reduced recovery time | 56 | 75.7 |
|                                              | Too many matches      | 51 | 68.9 |
|                                              | Poor pitch quality    | 49 | 66.2 |
|                                              | Low muscle strength   | 47 | 63.5 |
|                                              | Too much training     | 43 | 58.1 |
|                                              | Reduced mobility      | 37 | 50.0 |
|                                              | Too little training   | 31 | 41.9 |
|                                              | Artificial turfs      | 29 | 39.2 |
| More important to play than prevent injuries | Other                 | 8  | 10.8 |
|                                              | Disagree              | 27 | 36.5 |
|                                              | Totally disagree      | 24 | 32.4 |
|                                              | Not sure              | 11 | 14.9 |
|                                              | Agree                 | 6  | 8.1  |
|                                              | Fully agree           | 4  | 5.4  |
|                                              | Don't know            | 2  | 2.7  |
| Coach motivation affects                     | Fully agree           | 32 | 43.2 |

players

|                          |                   |          |            |
|--------------------------|-------------------|----------|------------|
|                          | Agree             | 28       | 37.8       |
|                          | Disagree          | 6        | 8.1        |
|                          | Not sure          | 5        | 6.8        |
|                          | Totally disagree  | 2        | 2.7        |
|                          | Don't know        | 1        | 1.4        |
| Feeling about prevention | Positive          | 33       | 44.6       |
|                          | Very positive     | 26       | 35.1       |
|                          | Neutral           | 9        | 12.2       |
|                          | Negative          | 3        | 4.1        |
|                          | Very negative     | 2        | 2.7        |
|                          | Don't know        | 1        | 1.4        |
| Received advice before   | Yes               | 49       | 66.2       |
|                          | No                | 20       | 27.0       |
|                          | <b>Don't know</b> | <b>5</b> | <b>6.8</b> |

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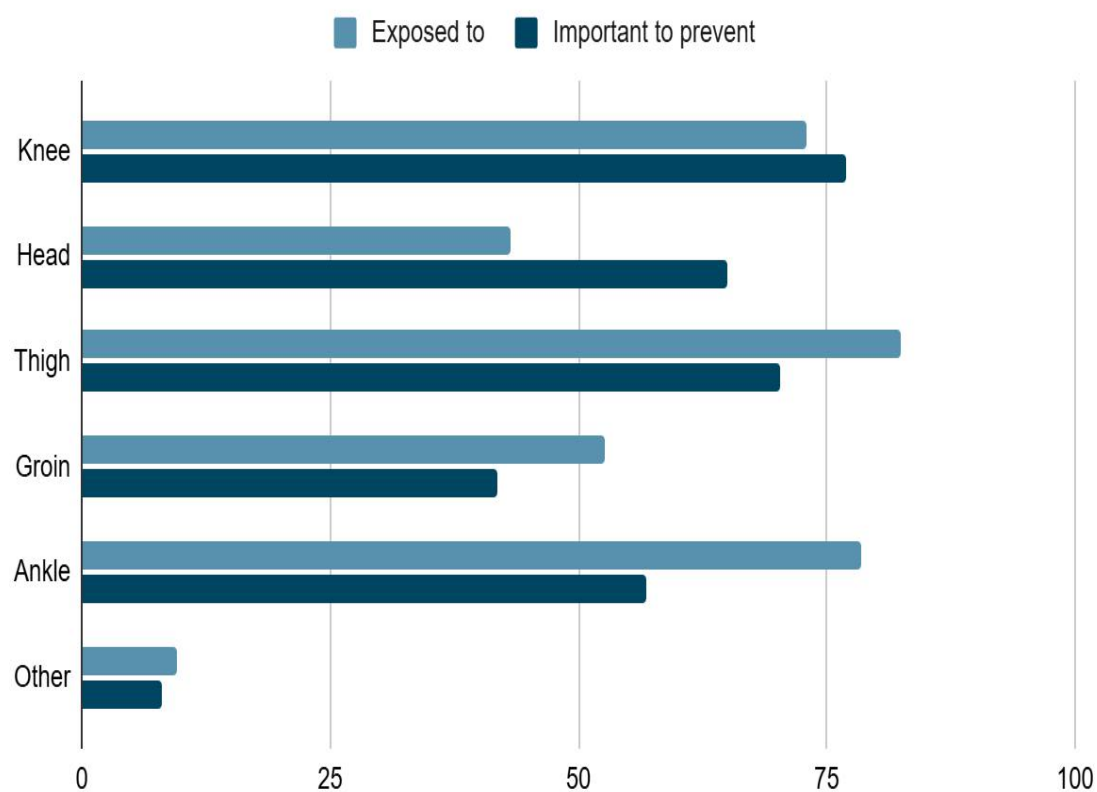
## Common reasons for injuries



**Figure 3 : Showing the players understanding of common causes of injuries**



percentage



**Figure 4 Showing the types of injuries players know they are exposed to, believe are important to prevent.**

**Table 3: Practice of Injury Prevention among the Study Population**

| Items                                                  | Responses                                             | Frequency | Percentage (%) |
|--------------------------------------------------------|-------------------------------------------------------|-----------|----------------|
| Medical support staff available (multiple responses)   | Team doctor                                           | 12        | 16.2%          |
|                                                        | Team physiotherapist                                  | 19        | 25.7%          |
|                                                        | Massage therapist                                     | 7         | 9.5%           |
|                                                        | Sports scientist/Strength coach                       | 6         | 8.1%           |
|                                                        | Access to doctor (not dedicated to your team)         | 8         | 10.8%          |
|                                                        | Access to physiotherapist(not dedicated to your team) | 6         | 8.1%           |
|                                                        | No medical support                                    | 10        | 13.5%          |
|                                                        | Don't know                                            | 6         | 8.1%           |
| Injury prevention training this season                 | Yes                                                   | 49        | 66.2%          |
|                                                        | No                                                    | 17        | 23.0%          |
|                                                        | Don't know                                            | 8         | 10.8%          |
| Type of injuries tried to prevent (multiple responses) | Head                                                  | 9         | 12.2%          |
|                                                        | Thigh                                                 | 24        | 32.4%          |
|                                                        | Knee                                                  | 20        | 27.0%          |
|                                                        | Ankle                                                 | 13        | 17.6%          |

Groin

8

10.8

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## **CHAPTER FIVE**

### **DISCUSSION, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 Discussion**

This study examined the Knowledge, Attitude, and Practice of Injury Prevention among Amateur Football Players at the University of Ilorin Stadium. It was revealed in the study that there is a high level of knowledge regarding injury prevention among the participants, suggesting that amateur football players in this setting are well-informed about techniques and strategies to prevent injury. This aligns with (Verhagen *et al*, 2010) who emphasized that awareness and education are foundational elements for reducing sports injuries among athletes. Similarly, (Williams *et al*, 2017) noted that increased knowledge empowers athletes to adopt preventive measures more effectively, which can significantly reduce injury rates.

The findings also showed that amateur players at the University of Ilorin Stadium demonstrated a positive attitude toward injury prevention. Most respondents agreed with the importance of injury prevention strategies and expressed readiness to apply them. This is consistent with the findings of (Szukics *et al*, (2022), who observed that athletes with a positive attitude towards injury prevention programs were more likely to engage with them and report better outcomes. (Yanchar *et al*, 2012) also noted that attitudinal orientation plays a major role in sustaining injury

prevention behaviour, particularly in community and amateur-level sports environments.

Furthermore, injury prevention was actively and moderately practised among the amateur football players in the study area. (Verhagen *et al*, 2010) also emphasized that combining knowledge with habitual practice is crucial for effective injury prevention. While participants expressed enthusiasm for injury prevention training, the feasibility of long and non-specific programs was limited. This supports (Szukics *et al*, 2022), who noted that Additionally, player motivation and coach education were found to be critical facilitators, echoing the findings of (Yanchar *et al*, 2012), which highlighted the role of trained support personnel in enhancing injury prevention outcomes.

## **5.2 Conclusion**

In conclusion, the findings of this study reveal a high level of knowledge and a strongly positive attitude toward injury prevention among amateur football players at the University of Ilorin Stadium. This implies that players are not only well-informed about strategies to prevent sports-related injuries but also value and support the importance of injury prevention in their training routines. The combination of strong awareness and favourable disposition provides a solid foundation for the adoption of injury prevention programs. These findings depict the potential effectiveness of targeted interventions when built upon an already knowledgeable and motivated athlete population.

### **5.3 Recommendation**

Based on the findings from the study, the following recommendations were made:

1. Injury prevention education should be formally integrated into regular training sessions to further strengthen and sustain the high level of knowledge among amateur football players.
2. Coaches and team leaders should continuously reinforce the positive attitude toward injury prevention by highlighting its benefits and recognizing adherence during practices.
3. Training programs should be adjusted to include flexible, time-efficient injury prevention routines that are easy to incorporate into existing schedules.

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# APPENDIX ONE

## INFORMED CONSENT FORM

Dear respondent,

My name is ADEYEMI, MOYINOLUWA DORCAS a final year student of Physiotherapy department, Faculty of Basic Medical Sciences, Thomas Adewumi University, Oke-Ireshe. I am conducting a research titled "KNOWLEDGE AND ATTITUDE OF INJURY PREVENTION AMONG AMATEUR FOOTBALL PLAYERS AT THE UNIVERSITY OF ILORIN STADIUM". I will provide a Questionnaire that would require you to fill in some of your Personal bio-data, and other Research-appropriate data.

The data supplied in this questionnaire will only be utilized for the research purpose. Kindly read the instructions carefully and answer each question as honestly and accurately as you can. It is your right to either accept or refuse to participate in this study. You may ask questions or seek clarifications if you have any worries about this research; we would be ready to answer them.

I \_\_\_\_\_ hereby  
testify that I have been fully informed about the research and what it entails. I therefore consent to be part of this research as a participant and promise to cooperate and be committed up to the end of the research.

Researcher's Signature

.....

Participant's Signature

.....

Date.....

Date.....

## APPENDIX TWO

### QUESTIONNAIRE

**Title: Survey on the knowledge and attitude of injury prevention among amateur football players at the University of Ilorin stadium, Nigeria.**

#### **Introduction**

Dear participant,  
Thank you for participating in this survey. Your input is valuable in understanding the Knowledge and attitude of injury prevention among amateur football players at the University of Ilorin Stadium, Kwara state. Please answer the following questions honestly and to the best of your knowledge.

#### **Section 1: Demographic information**

1. Age : \_\_\_\_\_
2. Playing position: \_\_\_\_\_
3. Sex : \_\_\_\_\_
4. Duration of professional football career: \_\_\_\_\_
5. Registered Football club: \_\_\_\_\_

#### **Section 2: General**

1. In your opinion, how big is the risk to you as a footballer of sustaining an injury?

- ☐ High
- ☐ Moderate
- ☐ Low
- ☐ Don't know

2. How important do you think it is for you as a footballer to try to prevent injuries?

- ☐ Very important
- ☐ Moderately important
- ☐ Not very important

☐ Don't know

3. What kind of injuries do you think footballers are exposed to? (multiple answers possible)

☐ Head

☐ Thigh (hamstrings or quadriceps)

☐ Knee

☐ Ankle

☐ Groin

☐ Other (please specify)

4. What kind of injuries do you think are the most important to prevent? (multiple answers possible)

☐ Head

☐ Thigh (hamstrings or quadriceps)

☐ Knee

☐ Ankle

☐ Groin

☐ Other (please specify)

5. What do you think are the most common reasons for injuries among footballers? (multiple answers possible)

☐ Too little training

☐ Too much training

☐ Too many matches

☐ Hard tackles

☐ Low muscle strength

☐ Reduced mobility

☐ Reduced recovery time between matches

☐ Artificial turfs

- ☐ Poor pitch quality
- ☐ Other (please specify)

6. To what extent do you agree with this statement: “It is more important to use the training time to play football than to do injury prevention exercises”?

- ☐ Fully agree
- ☐ Agree
- ☐ Not sure
- ☐ Disagree
- ☐ Totally disagree
- ☐ Don't know

7. To what extent do you agree with this statement: “The motivation of the coach affects the players' motivation to do injury prevention exercises”?

- ☐ Fully agree
- ☐ Agree
- ☐ Not sure
- ☐ Disagree
- ☐ Totally disagree
- ☐ Don't know

8. How do you feel about injury prevention measures?

- ☐ Very positive
- ☐ Positive
- ☐ Neutral
- ☐ Negative
- ☐ Very negative
- ☐ Don't know

9. Have you previously received advice about injury prevention programmes?

- ☐ Yes
- ☐ No
- ☐ Don't know

### **Section 3: INJURY PREVENTION CLUB**

10. Regarding the medical support staff available to you in your club (not national team), do you have (multiple answers possible):

- ☐ A team doctor
- ☐ A team physiotherapist
- ☐ A team massage therapist
- ☐ A team sports scientist/strength and conditioning coach
- ☐ Access to a doctor (not dedicated to your team)
- ☐ Access to a physiotherapist (not dedicated to your team)
- ☐ Access to a massage therapist (not dedicated to your team)
- ☐ Access to a sports scientist/strength and conditioning coach (not dedicated to your team)
- ☐ No medical support
- ☐ Don't know
- ☐ Other (please specify):

11. Has your team done any injury prevention training or carried out other preventive measures to reduce the risk of injury during this season?

- ☐ Yes
- ☐ No
- ☐ Don't know

12. If yes, what kind of injuries have you tried to prevent (multiple answers possible)?



- ☐ Head
- ☐ Thigh (hamstrings or quadriceps)
- ☐ Knee
- ☐ Ankle
- ☐ Groin
- ☐ Other (please specify)

## APPENDIX THREE

### UNIVERSITY OF ILORIN TEACHING HOSPITAL

*Chairman:*

*Chief Medical Director:*

**PROF. YUSSUF ABDULLAH D.**

(MB; BS., FMC Psych., Cert. Health Plan. & Mgt.,  
Cert. Health Inform. Mgt., MCH, FIIA, FAPA, FCAI)

*Ag. Chairman, Medical Advisory Committee:*

**PROF. BILIAMINU S.A.**

MB; BS., (Ilorin), FMCPATH;  
Cert. in Clin. Embryology (Chennai).

*Director of Administration:*

**MR. A.F. AGBANA**

B.Sc., M.Sc., FCAI, MACHE, MIHM, AHAN.



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Our Ref: \_\_\_\_\_

26/11/2024

Date: \_\_\_\_\_

**Adeyemi Moyinoluwa Dorcas**  
Dept. of Physiotherapy,  
Faculty of Health Sciences,  
Thomas Adewumi University  
Oko  
Kwara State.

#### APPROVAL TO COLLECT DATA FROM THE HOSPITAL

Please refer to your application on the above subject matter.

I am directed to convey Management's approval of your request to collect data from the Hospital. You are please requested to use the data strictly for the purpose stated in your application.

**Dr. Akinwale S.G** is to give close supervision to this study.



## APPENDIX FOUR

### RAW DATA

#### A1

| Age   | Frequency | Percent (%) | Valid Percent (%) | Cumulative Percent (%) |
|-------|-----------|-------------|-------------------|------------------------|
| 16–18 | 14        | 18.9        | 19.0              | 19.0                   |
| 19–21 | 17        | 23.0        | 23.0              | 42.0                   |
| 22–24 | 22        | 29.7        | 30.0              | 72.0                   |
| 25–27 | 13        | 17.6        | 18.0              | 90.0                   |
| 28–30 | 8         | 10.8        | 11.0              | 100.0                  |
| Total | 74        | 100.0       | 100.0             |                        |

#### A2

| Sex    | Frequency | Percent (%) | Valid Percent (%) | Cumulative Percent (%) |
|--------|-----------|-------------|-------------------|------------------------|
| Male   | 68        | 91.9        | 92.0              | 92.0                   |
| Female | 6         | 8.1         | 8.0               | 100.0                  |
| Total  | 74        | 100.0       | 100.0             |                        |

#### A3

| Playing Position | Frequency | Percent (%) | Valid Percent (%) | Cumulative Percent (%) |
|------------------|-----------|-------------|-------------------|------------------------|
| Defender         | 23        | 31.1        | 31.0              | 31.0                   |
| Striker          | 20        | 27.0        | 27.0              | 58.0                   |
| Midfielder       | 28        | 37.8        | 38.0              | 96.0                   |
| Goalkeeper       | 3         | 4.1         | 4.0               | 100.0                  |
| Total            | 74        | 100.0       | 100.0             |                        |

**A4**

| Football Club      | Frequency | Percentage (%) | Valid Percent (%) | Cumulative Percent (%) |
|--------------------|-----------|----------------|-------------------|------------------------|
| Emirate United     | 10        | 13.5           | 14.0              | 14.0                   |
| Manchester         | 6         | 8.1            | 8.0               | 22.0                   |
| Barcelona          | 5         | 6.8            | 7.0               | 29.0                   |
| Jad FC             | 4         | 5.4            | 5.0               | 34.0                   |
| Marine FC          | 4         | 5.4            | 5.0               | 39.0                   |
| Unilorin Warrior   | 6         | 8.1            | 8.0               | 47.0                   |
| Real Eagles        | 4         | 5.4            | 5.0               | 52.0                   |
| Quantity Surveying | 3         | 4.1            | 4.0               | 56.0                   |
| Sporting Lagos     | 5         | 6.8            | 7.0               | 63.0                   |
| Club Brugge        | 3         | 4.1            | 4.0               | 67.0                   |
| Elite Club         | 4         | 5.4            | 5.0               | 72.0                   |
| Invictus           | 3         | 4.1            | 4.0               | 76.0                   |
| Laureates          | 2         | 2.7            | 3.0               | 79.0                   |
| Nunsa              | 3         | 4.1            | 4.0               | 83.0                   |
| Physiotherapy      | 2         | 2.7            | 3.0               | 86.0                   |
| LIS                | 2         | 2.7            | 3.0               | 89.0                   |
| Sunshine           | 3         | 4.1            | 4.0               | 93.0                   |
| Total              | 74        | 100.0          | 100.0             |                        |

**A5**

| Duration of Amateur Football Career | Frequency | Percentage (%) | Valid Percent (%) | Cumulative Percent (%) |
|-------------------------------------|-----------|----------------|-------------------|------------------------|
| 1                                   | 8         | 10.8           | 11.0              | 11.0                   |
| 2                                   | 9         | 12.2           | 12.0              | 23.0                   |

|       |    |       |       |       |
|-------|----|-------|-------|-------|
| 3     | 11 | 14.9  | 15.0  | 38.0  |
| 4     | 10 | 13.5  | 14.0  | 52.0  |
| 5     | 9  | 12.2  | 12.0  | 64.0  |
| 6     | 8  | 10.8  | 11.0  | 75.0  |
| 7     | 7  | 9.5   | 10.0  | 85.0  |
| 8     | 5  | 6.8   | 7.0   | 92.0  |
| 9     | 4  | 5.4   | 5.0   | 97.0  |
| 10    | 3  | 4.1   | 4.0   | 100.0 |
| Total | 74 | 100.0 | 100.0 |       |

## B

| Items                           | Frequency | Percentage (%) | Valid Percent (%) | Cumulative Percent (%) |
|---------------------------------|-----------|----------------|-------------------|------------------------|
| Risk of injury                  |           |                |                   |                        |
| High                            | 36        | 48.6           | 48.6              | 48.6                   |
| Moderate                        | 27        | 36.5           | 36.5              | 85.1                   |
| Low                             | 9         | 12.2           | 12.2              | 97.3                   |
| Don't know                      | 2         | 2.7            | 2.7               | 100.0                  |
| Importance of preventing injury |           |                |                   |                        |
| Very important                  | 55        | 74.3           | 74.3              | 74.3                   |
| Moderately important            | 15        | 20.3           | 20.3              | 94.6                   |
| Not very important              | 2         | 2.7            | 2.7               | 97.3                   |
| Don't know                      | 2         | 2.7            | 2.7               | 100.0                  |
| Types of injury exposed to      |           |                |                   |                        |
| Thigh                           | 11        | 14.3           | 14.3              | 14.3                   |

|                             |    |      |      |       |
|-----------------------------|----|------|------|-------|
| Ankle                       | 15 | 20.7 | 20.7 | 35.0  |
| Knee                        | 24 | 35.8 | 35.8 | 70.8  |
| Groin                       | 3  | 3.6  | 3.6  | 74.4  |
| Head                        | 12 | 16.4 | 16.4 | 90.8  |
| Other                       | 7  | 9.2  | 9.2  | 100.0 |
| Most important to prevent   |    |      |      |       |
| Knee                        | 30 | 40.9 | 40.9 | 40.9  |
| Thigh                       | 4  | 5.5  | 5.5  | 46.4  |
| Head                        | 13 | 18.0 | 18.0 | 64.4  |
| Ankle                       | 13 | 18.0 | 18.0 | 82.4  |
| Groin                       | 3  | 3.6  | 3.6  | 86.0  |
| Other                       | 10 | 14.0 | 14.0 | 100.0 |
| Common reasons for injuries |    |      |      |       |
| Hard tackles                | 11 | 14.8 | 14.8 | 14.8  |
| Reduced recovery time       | 5  | 7.1  | 7.1  | 21.9  |
| Too many matches            | 18 | 24.5 | 24.5 | 46.4  |
| Poor pitch quality          | 15 | 20.0 | 20.0 | 66.4  |
| Low muscle strength         | 2  | 2.4  | 2.4  | 68.8  |
| Too much training           | 9  | 12.7 | 12.7 | 81.5  |
| Reduced mobility            | 2  | 2.4  | 2.4  | 83.9  |
| Too little training         | 0  | 0.0  | 0.0  | 83.9  |
| Artificial turfs            | 4  | 4.8  | 4.8  | 88.7  |

|                                              |    |      |      |       |
|----------------------------------------------|----|------|------|-------|
| Other                                        | 8  | 11.3 | 11.3 | 100.0 |
| More important to play than prevent injuries |    |      |      |       |
| Disagree                                     | 27 | 36.5 | 36.5 | 36.5  |
| Totally disagree                             | 24 | 32.4 | 32.4 | 68.9  |
| Not sure                                     | 11 | 14.9 | 14.9 | 83.8  |
| Agree                                        | 6  | 8.1  | 8.1  | 91.9  |
| Fully agree                                  | 4  | 5.4  | 5.4  | 97.3  |
| Don't know                                   | 2  | 2.7  | 2.7  | 100.0 |
| Coach motivation affects players             |    |      |      |       |
| Fully agree                                  | 32 | 43.2 | 43.2 | 43.2  |
| Agree                                        | 28 | 37.8 | 37.8 | 81.0  |
| Disagree                                     | 6  | 8.1  | 8.1  | 89.1  |
| Not sure                                     | 5  | 6.8  | 6.8  | 95.9  |
| Totally disagree                             | 2  | 2.7  | 2.7  | 98.6  |
| Don't know                                   | 1  | 1.4  | 1.4  | 100.0 |
| Feeling about prevention                     |    |      |      |       |
| Positive                                     | 33 | 44.6 | 44.6 | 44.6  |
| Very positive                                | 26 | 35.1 | 35.1 | 79.7  |
| Neutral                                      | 9  | 12.2 | 12.2 | 91.9  |
| Negative                                     | 3  | 4.1  | 4.1  | 95.9  |
| Very negative                                | 2  | 2.7  | 2.7  | 98.6  |
| Don't know                                   | 1  | 1.4  | 1.4  | 100.0 |
| Received advice before                       |    |      |      |       |

|            |    |      |      |       |
|------------|----|------|------|-------|
| Yes        | 49 | 66.2 | 66.2 | 66.2  |
| No         | 20 | 27.0 | 27.0 | 93.2  |
| Don't know | 5  | 6.8  | 6.8  | 100.0 |

### C

| Items                                   | Frequency | Percentage (%) | Valid Percent (%) | Cumulative Percent (%) |
|-----------------------------------------|-----------|----------------|-------------------|------------------------|
| Medical support staff available         |           |                |                   |                        |
| Team doctor                             | 12        | 16.2           | 16.2              | 16.2                   |
| Team physiotherapist                    | 19        | 25.7           | 25.7              | 41.9                   |
| Massage therapist                       | 7         | 9.5            | 9.5               | 51.4                   |
| Sports scientist/Strength coach         | 6         | 8.1            | 8.1               | 59.5                   |
| Access to doctor (not dedicated)        | 8         | 10.8           | 10.8              | 70.3                   |
| Access to physiotherapy (not dedicated) | 6         | 8.1            | 8.1               | 78.4                   |
| No medical support                      | 10        | 13.5           | 13.5              | 91.9                   |
| Don't know                              | 6         | 8.1            | 8.1               | 100.0                  |
| Injury prevention training this season  |           |                |                   |                        |
| Yes                                     | 49        | 66.2           | 66.2              | 66.2                   |
| No                                      | 17        | 23.0           | 23.0              | 89.2                   |
| Don't know                              | 8         | 10.8           | 10.8              | 100.0                  |
| Type of injuries tried to prevent       |           |                |                   |                        |
| Head                                    | 9         | 12.2           | 12.2              | 12.2                   |



|       |    |      |      |       |
|-------|----|------|------|-------|
| Thigh | 24 | 32.4 | 32.4 | 44.6  |
| Knee  | 20 | 27.0 | 27.0 | 71.6  |
| Ankle | 13 | 17.6 | 17.6 | 89.2  |
| Groin | 8  | 10.8 | 10.8 | 100.0 |

