

**Assessment on the Implementation of Football Injury Prevention
Strategies: In the case of Some Selected Southern Nation
Nationalities and People Regional State Primer League Football
Clubs, Ethiopia**

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This is to certify that the thesis prepared by Sosina Adefres, entitled, Assessment on the Implementation of Football Injury Prevention Strategies: In the case of Some Selected Southern Nation Nationality and People Regional State Primer League Football Clubs and submitted in partial fulfillment of the requirements of Degree of Master of Science in Sport Science complies with the regulations of the university and meets the accepted standards with respect to originality and quality.

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ACRONYMS AND ABBREVIATIONS

ACL	Anterior Cruciate Ligament
FIFA	Federation of International Football Association
HKFC	Hawassa Kenema Football Club
IOC	International Olympic Committee
OA	Osteoarthritis
SAID	Specific Adaptation to Imposed Demands
SNNP	Southern Nation Nationalities and Peoples
SPSS	Statistical Package for the Social Sciences
UEFA	Union of European Football Association
WDFC	Wolaita Dicha Football Club

ABSTRACT

The purpose of this study was to assess the implementation of football injury prevention strategies: in the case of some selected clubs in south nation nationalities and people region primer league football clubs. Taking this as a general objective of the study, a comparative study research method is applied to investigate the problem. The target populations in the study were football players and coaching staffs who were participating in Wolaita Dicha football club and Hawassa Kenema football club. A comprehensive sample of 56 players and 12 coaching staffs were taken in the study. The data collection instruments designed for the studies were questionnaires, interview, and observation. The questionnaires were prepared for the players. The interview was conducted for the coaching staffs. The data collected from 40 players (16 questionnaires were discarded due to response errors) and 6 coaches through the interview were organized and analyzed using SPSS version 25. To attain the objectives of the study both descriptive and inferential statistic was applied. To test the significance between the two groups of club p. value is adjusted to 0.05 and then tabulated in tables. The data obtained from the interview were qualitatively analyzed in words. Based on the findings of the study it was found that there is Shortage of materials and equipment and also they don't use equipment designed to reduce injury risk, lack of availability of suitable playing surface, there is appropriate and fit sportswear, there is warm –up period during training and match session, and also they have a cool-down period during training session but they don't have cooling down period during match, not strength and flexibility training as a team or individually, not take appropriate carbohydrate intake, and here is lake of knowledge regarding to injury prevention. Based on the findings the following recommendations were drown. Coaches and players must know those injury prevention strategies and Implement them in their training and match session. Clubs should fulfill materials and equipment to reduce the risk of injury, employ qualified medical persons, and fulfill medical equipment's. Coaches Should prepare their training plan by including injury prevention strategies, they must follow the principle of training to eradicate the occurrence of injury in their clubs, Must encourage players to wear appropriate and fit sportswear, to take rest and to consume carbohydrates and fluid before, during, and after training and match. Players must do appropriate warming ups and cooling downs activities, Participate in flexibility and strength training to develop strength for their body parts. The concerned body should provide good facilities and equipment, Suitable playing field, Formulate a proposal to the concerned donor to get funds.

KEY WORDS: *Assessment, club, Coach, Coaching, Injury Prevention, Injury Strategies, League, players.*

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

Assessment is the systematic process of gathering information from many sources to make an appropriate educational decision. It identifies the strength and needs and contributes to the design and implementation of effective strategies. Sports injury assessment and management focus the area of interest to help players develop understanding and skill in theoretical principles and applied practices related to the prevention and care of injury in sport

A 'sports injury' can be defined as an injury that occurs during sporting activities or exercise. (Christer R., 2007), this can be broadened to include injuries affecting participation in sports and exercise and affecting athletes of all ages and all levels of performance. Even though we can identify the mechanism of an injury and its pathoanatomical correlate or diagnosis, its consequences may be very different for different athletes. For a professional player, there may be loss of earnings and the risk of losing contract and even career. For a club manager, it may mean losing an important player, perhaps at a crucial time, and the financial costs of a replacement player. For the team doctor, physiotherapist, fitness trainer or coach it will help to know how the injury will affect plans for the players' ongoing dietary and physical training program

Football is the popular sport in the world. In recent decades, its popularity has increased among males and females, to the point that there are about 300 million registered players, referees and technical staffs, 40million of who are female players. (M. Mayo *et al.*, 2014), at present, people start practicing sports at a younger age, thus forcing the rate of learning and the development of their biological condition. Along with the associated physical benefits, this level of demand at such early stages entails an increase of the associated risks and, therefore, the lesions derived thereof. Sport in general is the leading cause of injury among adolescents. Most lesions in football occur in the lower limbs, especially the knee and ankle. (Majewskiet *al*, 2006), studied 17,397 patients with 19,530 sports injuries over a period of 10 years and observed that the sport which caused most lesions was football, with 35%. On average, an elite footballer suffers between 1.5 and 7.6 lesions for every 1000 hours of

training and 12-35 lesions for every 1000 hours of competitive play. The main risk factors for injury are the level of play (higher risk among professionals than amateurs), the exercise load and the method of training. There are only very few small or non-randomized studies on the prevention of lesions. Among the most recent are those which implement the so-called ‘‘FIFA 11+’’one of the Federation of International Football Association (FIFA), a full warm-up program to reduce injuries among footballers aged over 14 years (M. Mayo *et al.*, 2014).

Today Football is played by young athletes, and it leads all other sports in the number of injuries sustained. In 2007, more than 920,000 athletes under the age of 18 were treated in emergency rooms, doctors' offices, and clinics for football-related injuries, according to the U.S. Consumer Product Safety Commission. Injuries occur during football games and practice due to the combination of high speeds and full contact. While overuse injuries can occur, traumatic injuries such as concussions are most common. The force applied to either bringing an opponent to the ground or resisting being brought to the ground makes football players prone to injury anywhere on their bodies, regardless of protective equipment (William N & Brett D., 2010).

According to Mohammed.A, 2016, Sports injuries are injuries that occur in athletic activities or exercising. They can result from accidents, poor training technique in practice, inadequate equipment, and overuse of a particular body part. In the United States, there are about 30 million teenagers and children alone that participate in some form of organized sport. About 3 million avid sports competitors 14 years of age and under experience sports injuries annually, which causes some loss of time of participation in the sport. In the process to determine what exactly happened in the body and the standing effects most medical professionals choose a method of technological medical devices to acquire a credible solution to the site of injury. Prevention helps reduce potential sports injuries. It is important to establish participation in warm-ups, stretching and exercises that focus on main muscle groups commonly used in the sport of interest

Knowledge regarding risk factors and injury mechanisms are necessary in order to develop effective preventive measures against football injuries. Risk factors are traditionally divided into two main categories: internal (or intrinsic) athlete related risk factors and external (or

extrinsic) environmental risk factors. Internal Factors Related to the Football Player Age, Gender, Physical Fitness, Flexibility, Muscle Strengthening, and Skill Level/Level of Play. External Factor Related to the Playing Environment Warm Up, Playing Surface, and equipment (Surjani C *et al.*, 2014).

In a review of the present literature, we found varying evidence on the prevention of sports injuries especially football injury. In spite of many promising efforts on injury prevention, a better understanding of injury risk factors will help us to optimize current injury prevention strategies, such as exercise programs, subsequently resulting in fewer injuries, a higher lifelong activity, and lower costs for the public health system (Surjani C *et al.*, 2014). Three strategies that have proved to be successful in preventing football injuries are: (1) using equipment designed to reduce injury risk, (2) adapting the rules of play, and (3) specific exercise programs developed to reduce injury risk. Effective football injury prevention requires successful implementation of efficacious interventions. This, in turn, requires knowledge about the implementation context including how people, their attitudes, and safety (or risk) behaviors interact with these interventions. In other words, true injury prevention can only be achieved if some form of behavioral change can be invoked in all individuals involved in a football player's safety and health, including coach, referee, and the player him or herself. A number of the acute injuries observed may be prevented if players participate in sports within the limits of their personal qualifications, physical prevention, avoid risky situations. Therefore, one of the major goals should be to establish injury prevention habits early in life (Surjani C *et al.*, 2014).

Assessing the best prevention strategies for a sports injury requires a full understanding of the factors that contribute to both the occurrence of the injuries and the uptake of, or compliance with, potential prevention strategies. One of the challenges in current injury prevention is the gap that exists between what is known about these factors and the use of that information in developing and evaluating prevention strategies and/or policies. Prevention strategies can take the form of education and awareness raising activities (e.g., skill building sessions, public awareness campaigns), engineering modifications (e.g., new equipment design) or the setting and enforcement of policy (e.g., rules of competition). They can be targeted at participants,

parents, coaches or the community at large. (Andria S. & Morag M., 2001) Injury theory and common sense suggest that the majority of sport-related injuries can be prevented by:

1. Ensuring the design, development, and maintenance of sports equipment and facilities to meet safety standards;
2. Promoting the wearing of protective equipment in both informal and organized sports.
3. Adapting playing rules to the participants with respect to age, etc.

Wolaitta Dicha Sport Club is an Ethiopian football club based in Wolayta Soddo and established in 2009 G.C by the Welayta Development Association. Currently the team plays at the Wolaitta Soddo Stadium. The team also has a Nickname “**Bees of Tona** .They are the champions of the 2017 Ethiopian Cup.” The team has got its name from two words in the Wolaytta language (“Wolaitta” = the name of the ethnic group and "Dicha" = development. Literally meaning, development of Wolaitta or the team runs the development of Wolaitta.(WolaittaDichaS.C.,2018) **Hawassa City S.C** also an Ethiopian football club based in Hawassa, Ethiopia and established in 1978G.C (1970 E.C.). Hawassa lifted the trophy in the 2003–04 season beating Lideta Nyala SC, and picked up the Ethiopian cup in the following season. The team also has a Nickname “**The Likers**”. Their home stadium is Hawassa Stadium(Hawassa_City_S.C., 2018).

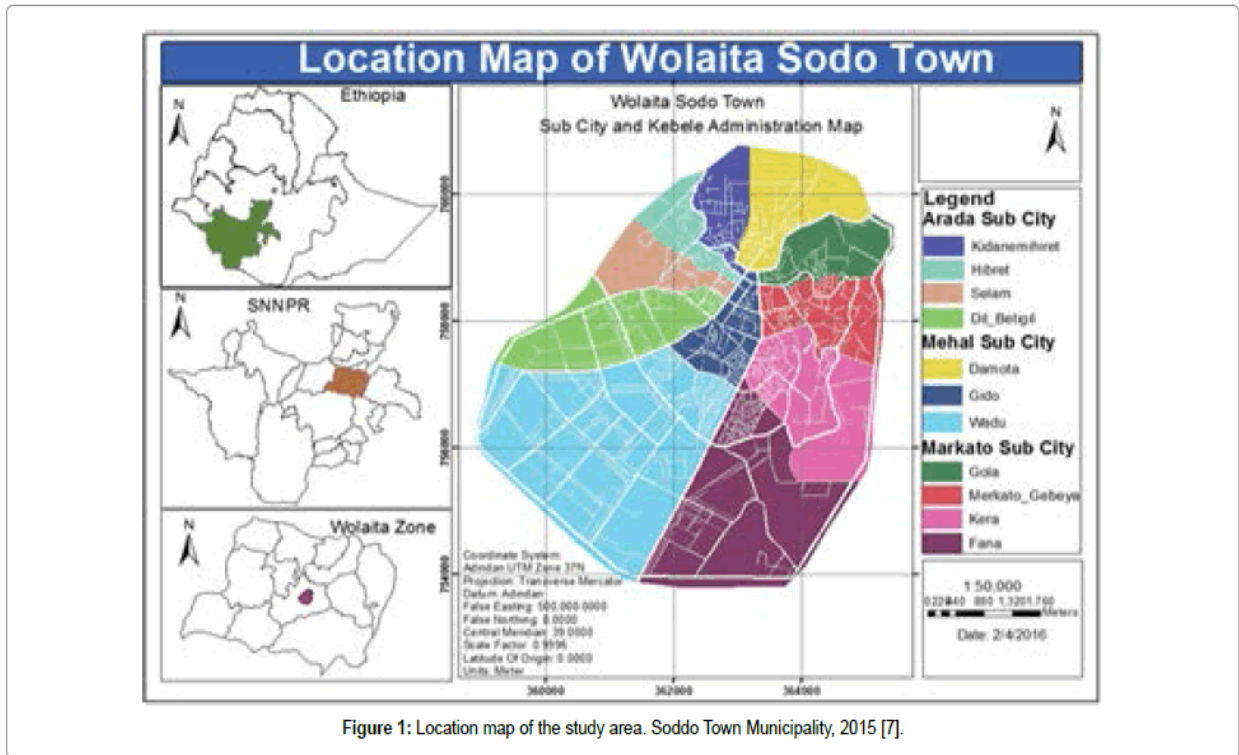


Figure 1: Location map of the study area. Soddo Town Municipality, 2015 [7].

Fig 1: Location map of study area Wolaita Sodo town

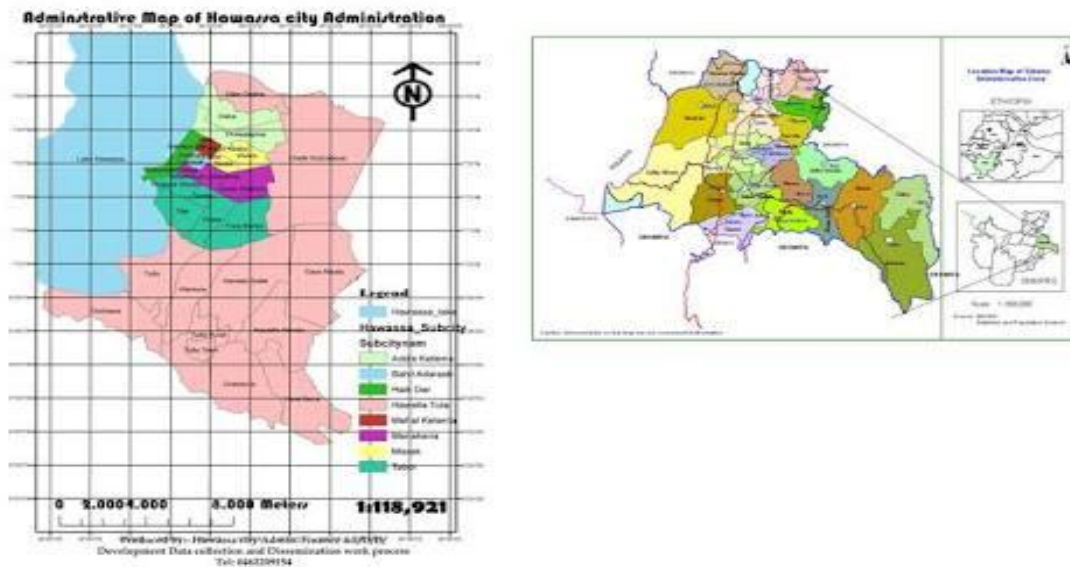


Fig 2: Location map of study area Hawassa town

1.2.Statement of the problem

It is the convection of the researcher the benefits of sport for children and youth are numerous, including physical fitness, motor skill acquisition, improved self-esteem and the development of teamwork and leadership skills. Participation in sport activities does carry some risks however, particularly the danger of suffering an injury. Team sports accounted for two-thirds of the injuries, football injuries being the most frequent.

The core problem on which the researcher wants to focus is the implementation of football injury prevention strategies in the case of some selected Southern Nations Nationalities and Peoples Ethiopian premier league football clubs. With this regard, scientific literature has shown that properly planned and implemented prevention programs are able to reduce the incidence of injuries in football (Mohammedi, 2007; Soligard *et al.*, 2008; Petersen *et al.*, 2011; Hides & Stanton, 2014; Silverset *et al.*, 2015). However, typical injuries sustained by football players, such as hamstring strains Ekstrand *et al.*, 2016) and anterior cruciate ligament (ACL) ruptures (Waldén *et al.*, 2016), have not declined since the beginning of this century in elite football. Therefore, it is essential to examine the extent these injury prevention strategies are applied in the selected Southern Nations Nationalities and Peoples premier league Football clubs.

However, as far as the knowledge of the researcher is concerned there is no research result that shows the level of implementation of injury prevention strategies specifically in reference to the Southern Nations Nationalities and Peoples premier league football clubs. Hence, to fill this gap the researcher tried to investigate the level of implementation of Football injury prevention strategies. Further, the researcher believes that this factor is overlooked as a major cause which significantly affects success in football. Thus, in this study, an intelligent attempt was made to answer the following basic questions.

1.3.Research questions

1. Does football Injury prevention strategies are implemented in the clubs?
2. How much is the incidence rate of injury in the clubs?
3. Does players and coaching staffs are adequately informed about injury prevention strategies?

1.4.Objectives of the Study

1.4.1 General Objective

The general objective of this study was to assess the implementation of football injury prevention strategies in some selected Southern Nations Nationalities and Peoples Ethiopian primer league Football clubs. Namely, Wolaita Dicha Football club and Hawassa Kenema Football clubs.

1.4.2 Specific Objectives

The specific objective of the study is to:

1. Critically evaluate the implementation of injury assessment strategies in the clubs.
2. Find out the incidence rate of injury in the clubs.
3. Assess whether players and coaching staffs are adequately informed about injury prevention strategies?

1.5.Significance of the Study

The study would support and enrich the assessment of the implementation of football injury prevention strategies. To this end, the significance of the study is to:

- 1 Create awareness for the football coaches, players and team medical staffs about the importance of injury prevention strategies.
- 2 Gives information for the football clubs administrative bodies to fulfill necessary materials for injury prevention.
- 3 Serve as a good indicator for further researches relating to issues of implementation of football injury prevention strategies.

1.6.Delimitation of the Study

This study is aimed at providing highlight on the implementation of football injury prevention strategies in some selected Southern Nations Nationalities and Peoples primer league clubs. For this purpose, this study assessed the extent of implementation of the different injury prevention strategies. This study was delimited only by physical injuries that exist in football players before, during, and after training and match. The study is geographically delimited to

Southern Nations Nationalities and Peoples Ethiopian premier league football clubs only. So, that the researcher delimits the scope of the study on Wolaita Dicha Football Club and Hawasa Kenema football clubs in order to make the study more easy and manageable.

1.7.Limitation of the Study

The most serious limitation of the study was the shortage of resources and limited past research work in the area and time constraints in particular. Due to these factors, the study is confined to some selected Southern Nations Nationalities and Peoples Ethiopian premier league clubs football players. The researcher found these delimitations to be important so as to make the study manageable in terms of time and resource. Moreover, the far apart geographic location of the training centers of the clubs which demands much transport and material cost was not within the capacity of the researcher

1.8.Organization of the Study

The content of the study is organized into five chapters. Chapter one deals with the background of the study, statement of the problem, objective of the study, the significance of the study, delimitation, and limitation of the study, and some important definitions of terms used in the study. Chapter two deals with the review of related literature. Chapter three deals with research methodology of the study(research design, the source of data, sample, sample size, sampling technique, and data collection instruments and data analysis). While the fourth chapter deals with major research results and discussions, the five chapter concerns with summary, conclusions and recommendation. References, questionnaire, glossary and other related materials are part of the document.

1.9.Operational Definition of Terms

In order to avoid ambiguity and to have a clear and consistent meaning understanding throughout the study, the following operational definitions of terms are given as they are used throughout the entire research.

Assessment: Is a systematic process of gathering information from many sources to make an appropriate educational decision.

Below the standard: the playing fields are not artificialness.

Club: An organization formed for the pursuit of sport.

Coach: Someone whose job is to train and organize a sports team.

Coaching: the art and practice of guiding a person or group from where they are towards the greater competence and fulfillment that they desire.

Football: UK a game in which 2 teams 11 players tries to kick or head a ground ball into the goal defended by the opposing team.

Injury: Is Damage or a wound caused to a person's body.

League: Is an alliance of teams that organizes the sporting competition.

Player: someone taking part in a sport or game.

Prevention: The action of stopping something from happening or arising.

Playing surface: the field that clubs make their training and computation

Rehabilitation exercises: gentle exercise designed to maintain flexibility and overall fitness while recovering from an injury.

Sports injury: Injury that occurs during a sporting activity or exercise.

Strategies: Is a high-level plan to achieve one or more goals under conditions of uncertainty.

Training: The action of undertaking a course of exercise and diet in preparation for a sporting event.

Training methods: parameters that we can apply to our exercise in order to achieve some sort of physiological outcome.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 The Concept of Sport Injury

Defining what constitutes an injury is not as easy as it may seem at first glance, and there have been many different approaches to injury definition in the past. A consensus statement was issued in 2006 in the sport of football (football) stating that the broadest definition of injury would be any event occurring as a result of participation in sport (Fuller et al., 2006). Injury was then further classified into medical attention injuries; those that required assessment or treatment by a medical practitioner. A further sub-division was time loss injuries; those causing a player to miss one or more practices or games or sessions. The important point in any research regarding injury surveillance is that one must know in advance exactly what will be counted, and this must be consistent across all people and all groups recording injury. This is important to ensure consistency both within a given period of surveillance and over time between different periods of surveillance.

A 'sports injury' can be defined as an injury that occurs during sporting activities or exercise. This can be broadened to include injuries affecting participation in sports and exercise and affecting athletes of all ages and all levels of performance. Patients who seek medical attention at sports injury clinics represent the spectrum from top professional to recreational athletes. Even though we can identify the mechanism of an injury and its path anatomical correlate or diagnosis, its consequences may be very different for different athletes. If you are a professional player, there may be loss of earnings and the risk of losing your contract and even your career. If you are a club manager, it may mean losing an important player, perhaps at a crucial time, and the financial costs of a replacement player. If you are the team doctor, physiotherapist, fitness trainer or coach, you will want to know how the injury will affect your plans for the players' ongoing dietary and physical training programmes. If you are the medic in charge, it will mean having to convince not only the player but also the club's other staff that you have the situation under control. The stakes are high. If a player goes back too early, they risk relapse or further injury but if they are held back, they might ask for a second opinion (Christer R., 2007).

For younger athletes trying to establish themselves in their sport, an injury can result in major family-related conflicts. Over-ambitious or over-protective parents and pressure from coaches and team-mates can put stresses on to a young athlete not able to participate in their sport. For recreational athletes, injuries may mean loss of regular physical and social activities and problems with general health, such as blood pressure, insulin control or secondary problems to the lower back from limping. A shoulder injury from squash may cause difficulties for a builder or plumber with their own business or raise concerns about the safety of a police officer or firefighter (Ibid, 2007).

The importance of sport and exercise and the consequences of an injury must be emphasized by whoever provides treatment and advice. They must appreciate and understand but provide evidence-based advice. To tell a keen recreational tennis or golf player that they have to stop playing because of an injury must be thoroughly considered advice. There are very often a number of options for consideration during recovery from even a very serious injury. Complete rest is seldom motivating and may be ill-advised because of the detrimental effect rest has on tensile tissue strength and general fitness, and such rest's potentially fatal consequences for some patients. An 80-year-old keen, regular golfer, suffering from a painful knee due to a meniscus tear, could die from the inactivity caused by the injury. With arthroscopy, that knee could be operated on and fixed within fifteen minutes, allowing him to play golf a week or two later; it would be a shame and very wrong to tell him to stop playing golf (Ibid., 2007). For doctors, the keys to success are: consulting evidence-based criteria for the definition and diagnosis of an injury; using reliable examination techniques; considering the background and fitness level of the patient; and being prepared to admit to a lack of knowledge and to refer the patient to someone who may know more. They must recognize the changes and developments that are occurring in sports medicine and the cultural differences that exist in the management of these injuries. Doctors should not take the view that sports injuries are self-inflicted and tell their patients to 'stop doing these silly things'. In societies threatened by obesity, osteoporosis and a general decline in fitness due to inactivity, exercise and sport are potent means of keeping the population fit and healthy (2007).

Most sports injuries are specific to the sport and the level of participation: for example, 70 percent of keen runners will be affected by a lower limb injury during their career, usually

through over-use; football players have a high risk of the traumatic ankle or knee injuries from tackles. The incidence of injury in football is between 15 and 20 injuries per thousand activity hours, with the highest risk during games. Between 20 and 40 injuries per thousand activity hours and with higher risks of upper limb injuries, in particular, those of the shoulder joint. Golf is a low-risk sport but a knee or shoulder injury can affect performance and the ability to walk a five-kilometer course. Within any particular sport, different positions and roles carry different risks. For example, in cricket a fast bowler may struggle to perform with a minor knee injury to his stance leg or a fielder may be hampered by a minor shoulder injury, while a batsman can perform well with both these injuries. Must all, athletes, administrators and medical personnel alike, educate ourselves about the principles of exercise on prescription and different training methods and improve our understanding of the demands and impact inflicted by different sports. Thus, injured athletes can have an individualized recovery program, based on current concepts and based on evidence (Ibid, 2007).

2.2 The Most Common Sports Injuries

(Matthew Hoffman, 2008), usually, common sports injuries are mild or moderate there's some damage, but everything is still in place. You can treat them at home using the PRICE therapy method described later in this article. But you should expect that some common sports injuries may take months to heal, even with good treatment. If a sprain or strain is severe, however, the entire muscle, tendon, or ligament is torn away, and surgery may be needed.

Here are some specific tips for treating each of the most common sports injuries:

Ankle Sprain

Most athletes have experienced a sprained ankle, which typically occurs when the foot turns inward. This turning stretches or tears the ligaments on the outside of the ankle, which is relatively weak. With an ankle sprain, it's important to exercise to prevent loss of flexibility and strength and re-injury. You can ask your doctor or physical therapist to help you know what kinds of exercise you should do.

It's important to note where the sprain has occurred. "A 'high ankle sprain' is slower to heal and should probably be seen by a doctor to make sure the bones in the lower leg did not separate," says R. Marvin Royster, MD. Royster is assistant team physician for the Atlanta

Braves and an orthopedic surgeon with Peachtree Orthopedic Clinic in Atlanta. One way to recognize a high ankle sprain is that this sprain usually causes tenderness above the ankle.

Groin pull

Pushing off in a side-to-side motion causes strain of the inner thigh muscles, or groin. “Hockey, football, football, and baseball are common sports with groin injuries,” says Royster. Compression, ice, and rest will heal most groin injuries. Returning to full activity too quickly can aggravate a groin pull or turn it into a long-term problem. “Any groin pull that has significant swelling should be seen early by a physician,” Royster says.

Hamstring strain

Three muscles in the back of the thigh form the hamstring. The hamstring can be overstretched by movements such as hurdling kicking the leg out sharply when running. Falling forward while waterskiing is another common cause of hamstring strains. “Hamstring injuries are slow to heal because of the constant stress applied to the injured tissue from walking,” says Royster. “Complete healing can take six to 12 months.” Re-injuries are common because it's hard for many guys to stay inactive for that long.

Shin splints

Pains down the front of the lower legs are commonly called “shin splints.” They are most often brought on by running especially when starting a more strenuous training program like long runs on paved roads. Rest, ice, and over-the-counter pain medicine are the mainstays of treatment. The pain of shin splints is rarely an actual stress fracture a small break in the shin bone. But you should see your doctor if the pain persists, even with rest. Stress fractures require prolonged rest, commonly a month or more to heal.

Knee injury: ACL tear

The anterior cruciate ligament (ACL) holds the leg bone to the knee. Sudden “cuts” or stops or getting hit from the side can strain or tear the ACL. A complete tear can make the dreaded “pop” sound. Always, if you suspect an ACL injury. ACL tears are potentially the most severe of the common sports injuries. “A completely torn ACL will usually require surgery in

individuals who wish to remain physically active,” says Royster.

Knee injury: Patellofemoral syndrome

Patellofemoral syndrome can result from the repetitive movement of your kneecap (patella) against your thigh bone (femur), which can damage the tissue under the kneecap. Running, volleyball, and basketball commonly set it off. One knee or both can be affected. Patience is key. Patellofemoral pain can take up to six weeks to clear up. It's important to continue low-impact exercise during this time. Working out the quadriceps can also relieve pain.

Tennis elbow (epicondylitis)

Repetitive use of the elbow for example, during golf or tennis swings can irritate or make tiny tears in the elbow's tendons. Epicondylitis is most common in 30- to 60-year-olds and usually involves the outside of the elbow.

2.3 The important injury prevention

First, is injury prevention important? Epidemiological studies show that of injuries seen by a physician, in Scandinavia, every sixth is sustained during sporting activity (Bahr et al., 2002). Among children, every third hospital-treated injury is the result of sports participation (Bahr et al., 2002). During 1997 and 1998, in the United States, annually there were an estimated 3.7 million sports- and recreation-related emergency department visits annually in the United States, representing approximately 11% of all injury-related emergency department visits; 2.6 million visits were among persons aged 5–24 years. The medical charges for these visits were estimated at 500 million US\$ annually.

The risk of injury clearly differs between sports, as documented by a study initiated by the IOC. Medical Commission in team sports during the 2004 Olympic Games in Athens (Junge et al., 2006). While a football and handball player suffered one injury every 10th match he or she plays, a volleyball player at the elite level only had an injury every 100th match on the average. Not all of these injuries are serious; in fact, only about half of all the injuries recorded were expected to cause the player not to continue with subsequent training or match time. Nevertheless, when taking injury severity into account, a research group within the English Football Association found that the overall risk to professional athletes is unacceptably high

approximately 1000 times higher among professional football players than for high-risk industrial occupations (Drawer & Fuller, 2002). Although football and handball rank highest in injury rates of the team sports included in the Olympic summer program, there are actually other sports where the injury rate is considerably higher, for example, ice hockey and the other football codes: American football, rugby, and Australian Rules football.

Some injury types, such as serious head and knee injuries, are a particular cause of concern. Head injuries are known to have a high incidence among alpine skiers and snowboarders, especially among snowboarders, and the frequency increases year by year in this group. Head injury is the most frequent reason for hospital admission and most common cause of death among skiers and snowboarders with an 8% mortality rate among those admitted to hospital with head injuries. Among injuries related to football, 4–22% is head injuries. The reported incidence of matches 1.7 injuries per 1000 player hours incorporates all types of head injuries including facial fractures, contusions, lacerations, and eye injuries (Andersen et al., 2004). The estimated incidence of concussion 0.5 injuries per 1000 match hours probably represents a minimum estimate due to the problem of defining and grading concussions (Andersen et al., 2004). Although most athletes with head injuries recover uneventfully following a single concussive episode, repetitive mild head trauma may be implicated in the development of cumulative cognitive deterioration. Based on paper and pencil tests, cumulative effects of repeated concussions have been found to cause deterioration in neuropsychological function among athletes in other sports such as American football and boxing, as well as in non-athletes.

The highest incidence of anterior cruciate ligament (ACL) injuries is seen in 15- to 25-year-old athletes in pivoting sports such as football, basketball, and handball. This incidence is three to five times higher among women than men (Griffin et al., 2006). In 1970, Kennedy stated that “the anterior cruciate ligament is the most common cause of the athlete.”

In other words, the treatment offered at the time did not permit athletes to go back to the sport. This is no longer the case, at least in the short term, thanks to the advances in sports medicine research, with major improvements in surgical techniques and rehabilitation programs. Today, most elite athletes are initially able to resume their sports career, should they wish to do so.

And although the retirement rate may be higher among athletes with a previous ACL injury compared with healthy athletes, the main concern is the dramatically increased risk of long-term sequelae like abnormal joint dynamics and early onset of degenerative joint disease. Importantly, we still lack evidence to suggest that reconstructive surgery of either menisci or cruciate ligaments decrease the rate of post-traumatic osteoarthritis (OA). After 10 years, approximately half of the patients display signs of OA, and it appears that the majority of the patients will have osteoarthritis after 15–20 years (Myklebust & Bahr, 2005). Thus, whereas developing improved treatment methods for injuries, in general, and ACL injuries, in particular, remains an important goal, it may be even more important to prevent injuries.

2.4 Principles of injury prevention

The sports medicine professional is concerned with the well-being of the athlete and generally assumes the responsibility for overseeing the total health care for the athlete. Participation in sports places the athlete in a situation in which injury is likely to occur. Fortunately, most injuries are not serious and lend themselves to rapid rehabilitation, but the sports medicine professional must be capable of dealing with any type of trauma or catastrophic injury (Prentice, & W. Arnheim's 2005).

A. Physical Conditioning

(IAAF) Physical conditioning is a key principle of injury prevention. Appropriate conditioning programs decrease the risk of injury, decrease the severity of an injury should it occur, and can help prevent re-injury. Maximizing the chance for safe athletic performance requires adequate muscular strength and balance, power, endurance, neuromuscular coordination, joint flexibility, cardiovascular endurance, and good body composition for sport. (Pease, D. et al, 1996).

Improving specific components of fitness and conditioning reduces the risk of injuries. For example, strengthening the muscles of a joint helps reduce injuries to the area; regular exercise can significantly increase the strength of the ligaments surrounding the knee and prevent knee injuries; development provides increased strength that helps to stabilize joints, and improved movement skill is important in avoiding injury. The variables are discussed as follows.

1. Strength

Muscular strength is the maximal force that can be applied against a resistance. To improve muscle strength, stress must be progressive and gradually challenged or placed under additional loading. A conditioning program's effects are specific to the type of stress applied. The SAID principle (Specific Adaptation to Imposed Demands) state that as the body is placed under stress of varying intensities and durations, it attempts to overcome the stress by adapting specifically to the imposed demands. For example, muscles around a joint can be developed and conditioned to provide optimal stabilization of the joint. Likewise, when a muscle primarily produces motion of a joint, proper conditioning can prevent the muscle from undergoing an unwanted movement. The demands of a specific athletic event must be a progressive stress applied in that athlete's training.

Other components of strength conditioning that contribute to injury prevention are the ability of the muscle to contract or exert force at an accelerated speed, and muscular endurance, which allows the athlete to maintain an appropriate strength level over a period of time.

2. Balance

Balance is the ability to maintain equilibrium when stationary or moving. (Irrgang, J et al, 1994) Proprioceptive or kinesthetic sense through balance training enhances motor control, which is needed to decrease the risk of injury or re-injury during practice or competition. When an injury to a joint or musculotendinous structure occurs, somatosensory information is altered, adversely affecting motor control. Hence, rehabilitation should emphasize restoring the athlete's balance strategies. This will also decrease the risk of recurrent injury. The balance training tasks must be specific to the type of balance strategies required by the athlete's event.

3. Flexibility

Flexibility is the measure of free movement in a person's joint. efficient performance requires a full range of motion, and adequate joint flexibility also decreases an athlete's susceptibility to injury. Normal muscular length-tension and adequate extensibility upon stretch aid in protecting the body from injury. The athlete's entire body is able to work more efficiently and

safely after a period of warm-up, stretching, and skill-drills that are related to the athlete's event.

The warm-up period before practice or competition increases the body's tissue temperature prior to subjecting the musculotendinous structures to repeated stretch and contraction. Connective tissue has visco-elastic properties, which allow elongation of the tissue. Temperature has a significant influence on the mechanical behavior of connective tissue under tensile stretch. Higher temperatures at low loads produce the greatest elongation with the least damage to connective tissue.

Increased connective tissue temperature also increases extensibility. Optimal stretching occurs only when voluntary and reflex muscle resistance is eliminated. Ballistic stretching is not a favorable method because as the muscles stretch rapidly, the intrafusal muscle spindles may be activated, causing a reflex protective muscle contraction. Forceful ballistic stretching can also cause microtrauma of muscle fibers.

4. Endurance

Endurance is the measure of person's ability to repeatedly apply maximal forces. Components of endurance training are Aerobic endurance, anaerobic endurance, speed endurance and strength endurance. Aerobic endurance means 'with oxygen'. During aerobic work, the body is working at a level that the demands for oxygen and fuel can be met by the body's intake. Anaerobic endurance means 'without oxygen'. During anaerobic work, involving maximum effort, the body is working so hard that the demands for oxygen and fuel exceed the rate of supply and the muscles have to rely on the stored reserves of fuel. Speed endurance is used to develop the coordination of muscle contraction in the climate of endurance. Strength endurance is used to develop the athlete's capacity to maintain the quality of their muscle's contractile force in a climate of endurance. Cardiovascular endurance is also a factor in injury prevention. The cardiovascular and respiratory systems must be adequately conditioned to delay the onset of fatigue. A fatigued athlete becomes vulnerable to injury when the nervous and muscular systems are unable to respond adequately to an injury-producing situation.

B. Appropriate Training Methods

Ensuring proper, efficient mechanics requires practice and effective coaching, including a systematic series of specific, repetitive, and progressive exercises and drills. Faulty mechanics must be corrected and good fundamentals ingrained. Exercises should include strength, relaxation, and flexibility specifically geared to the demands made on the body.

C. Rest and Recovery

Adequate sleep is important for general good mental and physical health and becomes critical for recovery after intensive workouts. Chronic overexertion and fatigue can make the athlete susceptible to injury.

D. Muscle Soreness

Muscular over-exertion may present as muscle soreness, muscle stiffness, and muscle spasm. According to the *muscle spasm hypothesis* of muscle soreness, ischemia to the muscles releases pain substances from the muscle fibers and stimulates the pain receptors, resulting in reflex spastic contractions and a continued cycle of ischemia and pain. Stretching the muscles helps to reduce the spasms and associated pain. According to the *tissue damage hypothesis*, micro-tears occur and pain/soreness results from the nerve-endings being stimulated by muscle tissue swelling. Proper massage may aid in reducing tissue edema and decreasing accompanying muscle spasm. Ice applications or other forms of cryotherapy, and pool training may facilitate the body's healing response. Appropriate rest will allow microscopic damage of the tissue to heal.

E. Appropriate Equipment

Shoes are the most critical piece of a track and field athlete's equipment and should be individually and carefully selected. Proper fitting shoes can mean the difference between a low and a high risk of injury for a track and field competitor.

Training in improperly fitted shoes can result in chronic abnormal pressures to the foot and cause stress injuries or structural deformities. Minor skin irritations such as calluses and

blisters can prove to be major hindrances to a runner. Improperly fitted or worn-out shoes can lead to mechanical disturbances and postural, muscular, and joint dysfunctions.

The recent revolution in shoe research, design, and production has created a plethora of shoes from which to choose. However, the athlete's shoes must meet the biomechanical requirements and adapt to the demands of the individual's event.

Shoe surveys can be useful in analyzing the specific qualities of shock absorbency, foot control, and flexibility, but athletes and coaches must be aware that new shoe models have produced new injury syndromes.

Field event implements must meet use and safety specifications. Every member of the sports team (coach, official, sports medicine personnel, and athlete) must be aware of any hazardous field situation where the field event practices and competitions take place and take action to assure the highest level of safety.

F. Psychological Factors

(Lamb, D. R. 1978), Athletes need to be psychologically prepared for practices and competition in order to reduce the risk of injury. Research has demonstrated a positive relationship between stressful life situations, especially those with high negative stress, and injury occurrence. In understanding the stress-injury relationship, (Nideffer, 1983) points out that muscle tension increases in response to stress. Increased tension in the antagonist and agonist muscle groups results in reduced flexibility and loss of motor coordination. Increased muscular tension also slows reaction time, which reduces the athlete's ability to Mental as well as physical fatigue can contribute to injury occurrence. The attention factor—the ability to maintain a high level of concentration—requires a large amount of energy; when combined with rigorous training programs, reduced attention can result. This may lead to slowed reaction times and loss of neuromuscular coordination, thus increasing the potential for injury.

Athletes who have sustained an injury realize that they have to be mentally ready for a return to the sport to avoid risking re-injury. The role of attentional focus and muscular tension can be a major problem. Fear and/or worry about a second injury can cause stress and increased muscular tension. Preliminary studies have addressed hardiness (commitment, control, and

challenge) of the athlete as a moderating factor in the stress-injury relationship. Athletes who exhibit greater qualities of this trait may be better able to control the intentional processing of information and in turn, reduce the potential for the occurrence of a second injury.

G. Training in Extreme Conditions

Athletes and coaches should take into account the temperature and humidity during training, and the need to acclimate after travel to a different, extreme climate or altitude. Extreme heat and humidity, cold, and altitude can adversely affect performance in many athletic events. To avoid dehydration and the fatigue that can occur from inadequate fluid replenishment, athletes must drink extra water, juices, and other fluids. Athletes should learn to drink before they feel thirsty by the time an individual is aware of thirst, they've lost 1% of their body weight; by 2% dehydration and the athlete may have reduced his or her work capacity by 10–15%. Assuring adequate water, and juices or sports drinks helps keep the participant energized, focused, and better able to concentrate.

The health and safety of the athlete must be the number one priority in any practice or competitive situation. If unsafe climatic conditions occur, training should be curtailed, and practice or competition times re-scheduled to allow the safest environment for all participants respond.

2.5 Different levels of sports injury prevention

2.5.1 Primary Level

The objective of the Primary Level of prevention is to avoid injury before it happens. It consists of a general preventive intervention taking into account the general factors and mechanisms characteristic of a given person and their effect on a sportsperson with an injury risk. This level implies a change in beliefs, attitude, habits and behavior towards prevention, and their training by both coaches and sportspeople. The main measures are of an indirect type: they will control the type, quality and state of the training grounds and competition surfaces; the type of footwear that respects cushioning, traction and rotation upon the field; the use of protective elements; the organization of travel; sleeping and eating habits; the use of taping as a possible factor in reducing ligamentous affectations; or hydration, controlling

the number and quantity of liquid intake and the combination with other sports drinks (Luis Casáis and Miguel Martínez, 2012).

2.5.2 Secondary Level

The Secondary Level of prevention constitutes an early level of detection in which intervention takes place in the stages immediately previous to injury or when it has already happened. At this level, one must be in contact with the sportsperson in risk of injury with the objective of diagnosing and detecting the injury once it has occurred by means of the appearance of signs and symptoms. Through the analysis and the discovery of the different risk indicators, there is the possibility of intervening by organizing programs of intervention at an individual or group level (Muir & Fowler, 1990). The tendency nowadays entails identifying risk values by means of an exhaustive process of evaluating and monitoring of the sportsperson. Clinical, physical and motor tests will be used to obtain risk indicators, as well as registering and analyzing the clinical history of said sportsperson and his/her injuries in previous seasons. Age, competition experience, fatigue and overtraining will be taken into account with regard to exposure to training and competition, as well as psychological factors, reducing or controlling those situations which are potentially stressing for the sportsperson (Luis Casáis and Miguel Martínez, 2012).

2.5.3 Tertiary Level

The Tertiary Level of prevention is the prediction and treatment of possible complications during the post-injury phase. This constitutes an individual level of prevention that involves reducing the grade of injury incidence by eliminating all those contents and work means that could worsen the injury or its consequences and executing programs directed towards developing the elements of protection from a specific injury. The elements of intervention at this level should be directed towards regulating and reducing mechanical, muscular, articular, ligament or tendon imbalance that a sportsperson may be exposed to after a specific injury (Ibid, 2012).

2.6 Most common football injuries

Dislocations & ACJ Tears in the Shoulder Many players throw their weight into their opponent when tackling. The point of contact is often the shoulder. Like an ACL injury in the knee, the shoulder may also have a torn ligament from the impact. In the shoulder, this is called an ACJ injury or Acromioclavicular Joint injury. If this area injured and not fixed this may cause ligaments to weaken. Overtime this may also cause the joint to dislocate. A dislocation is when the ball joint separates from the socket (Dr. Timothy Petsche, n.d.).

Heat Injuries: Intense physical activity can result in excessive sweating that depletes the body of salt and water. A problem that many football players overlook is dehydration.

Back Injuries: The wear and tear from playing football may also lead to a range of back injuries such as pulled muscles, or disc herniation.

ACL Tear in the Knee: Common sports injuries that you may hear about often are ACL injuries. The ACL, or Anterior Cruciate Ligament, is one of the most common locations for football trauma. Even low impact injuries to the knee joint can cause a partial tear or damage to the ACL.

Sprains: sprains are also an injury seen in football players due to the quick motion of running and shifting direction while wearing cleats. Proper treatment can get players back on the field 50% faster.

2.7 Tips to prevent football injuries

Pre-Season Physical & Baseline Concussion Test

All players should have a pre-season physical with their primary doctor to determine their readiness to play. It is an important step to uncover any condition that may limit participation (Ibid,n.d.).

Pre-Workout Warm Up

Always take time to warm up your body before exercise or sports. It is especially important to warm up your hips, knees, thighs, and calves. Research studies have shown that cold muscles

are more prone to injury. Warm up with jumping jacks, running, or walking in place for 3 to 5 minutes (Ibid,n.d.).

Staying Fit & Preventing Overuse

Many players overuse their bodies by playing sports year round without a break. This is very dangerous and will lead to a very short athletic career. Be sure you are in good physical condition at the start of football season. During the off-season, stick to a balanced fitness program that incorporates aerobic exercise, strength training, and flexibility. Gradually increase your activity level and slowly build back up to a higher fitness level as football season approaches (Ibidn.d.).

Hydration

Keeping properly hydrated is one of the most important steps all athletes need to take. When working out or playing, athletes should only drink when thirsty. Don't replace water with sugary sports drinks such as Gatorade; focus on drinking water when needed. (Ibid,n.d.).

Rest & Rehabilitation

One of the most important things that a healthy, uninjured athlete needs rest. Prior to practice or a game day, it is imperative to have the recommended amount of sleep the night before.

Post-injury rest becomes even more important. Athletes often avoid sitting out of a game or practice at all costs. Unfortunately, this can cause long-term damage and escalated injury rates. Resting and rehabbing the body is important to the long-term success and career of any athlete. Know when to rest and do not participate in practice or game day until an injury or suspected injury is fully rehabbed or healed. (Ibid, n.d.).

2.8 How big is the injury problem in elite football?

The injury risk in elite football is substantial. A study group in the English Football Association reported that professional English players had a more than 1000-fold increased injury rate compared to other occupations that are normally considered as high-risk (construction, industrial, service occupations) when an injury was defined as leading to absence from work (2). The injury rate in elite football is somewhere between 6-9

injuries/1000 hours of play, being much higher in match play (24-30 injuries/1000 match hours) than in training (3-5 injuries/1000 training hours). To put it in other words, a team with 25 players can expect approximately (Martin & Markus, 2016).

50 injuries leading to time loss from play in one season. Half of these injuries will be mild in nature, causing lay-off from training and match play up to one week, but about 15% will be severe injuries, with lay-off more than four weeks. So, is it more dangerous to play elite football today than say 20 or 30 years ago? The game of football has certainly developed immensely over the last decades, with increasing mental and physical demands being put on, particularly, elite level players. It is a common belief that this development has been accompanied by an increase in injury rates. However, data from all Allsvenskan show that this does not seem to be the case, where injury rates and injury severity did not differ significantly between the early 1980's compared to the early and mid-2000's (7-9). Similar data is found in the UEFA Champions League injury study with stable injury rates in top-level European clubs over the last decade (Ibid, 2016).

2.9 The Footballer's Diet: Considerations for Injury Prevention

The energy cost of football is approximately 1,300-1,500 kcal for a 90-min game, depending upon playing position, tactics and body composition of the player. In our experience, the amount of energy required should be adjusted to reflect the lean body mass in kg of the individual player. Global positioning satellite technology can be used as a tool to approximate the energy cost of training sessions. An insufficient energy intake does not cover energy required for match performance, training, and daily living activities. It has been reported that energy intakes below 30-35 kcal/kg lean body mass (excluding exercise) accentuate fatigue, immune-suppression and the predisposition to injury (Loucks et al., 2011) Furthermore, low-energy diets in which calories are not consumed via a variety of foods typically have low nutritional quality. Insufficient energy intakes combined with poor dietary choices increase the risk of players being deficient in nutrients such as vitamins B or C; minerals like iron, calcium, magnesium, zinc, and selenium. Interestingly, inadequate plasma vitamin D concentrations have been observed during the winter months in top-level players (<30ng/ml) (Morton et al., 2012). Low vitamin D may affect bone metabolism and has been associated with alterations in strength and muscle components (Morton et al., 2012). Therefore, vitamin D status may be a

consideration in injury prevention. Unfavorable lipid profiles (pro-inflammatory) due to excesses in the diet of trans-fat, saturated fat and excessive omega 6 fat from vegetable oils should be avoided. Instead, players are encouraged to regularly eat foods such as oily fish for a source of omega-3 (Simopoulos, 2007)

Generally, deferent literature indicated that implementing injury prevention strategies are important and there are also deferent researches which don in deferent countries by deferent person but when we came to in Ethiopia there is no any research work regarding to the implementation of injury prevention strategies so the researcher wants to fill this gap by searching or assessing either injury prevention strategies are implemented in Ethiopian football primer league clubs.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

This section deals with the research design and methodology, which consists of the research design, subjects, and sampling technique, sources of data and instruments, data collection procedures and methods of data analysis.

3.1 Research Design

A comparative study approach was used in carrying out this research. A comparative study was used because it is particularly useful to compare the situation and understand detail information regarding the implementation of football injury prevention strategies in the selected football clubs. Thus, a comparative study approach is best suited to be employed in this research.

In relation to the research methods indicated above, this research study followed a quantitative and qualitative research approach. The reasons for these are the researcher was employing quantitative measurement and statistical analysis of the data. In addition to the above reasons the data obtained through structured questionnaires, interview and observation can be quantified in this case.

3.2 Population and Sampling Procedures

The scope of this research study includes Southern Nations Nationalities and Peoples Ethiopian Premier League Football club players and coaching staffs. However, since it is too difficult to consider all clubs of the region because of time and budget constraints, and the difficulty to include all the players of the SNNP region football clubs, the target populations focused on some selected Southern Nations Nationalities and Peoples Ethiopian premier league football clubs. According to the statistical data obtained from Ethiopian Football Federation, there are four (4) premier league clubs in this region namely: Wolaita Dicha Football Club, Arbamnchi Kenema Football Club, Hawassa Kenema Football Club and Sidama Buna Football Club. From these clubs, two (2) was randomly selected. To select the sample clubs simple random sampling techniques of lottery method was employed. The study used simple random sampling technique for the selection of the sample football clubs because of the great potential

of the technique to fairly represent and integrate the different characteristics of the population in the sample and the easiest way to draw a generalization. Hence Wolaita Dicha and Hawassa Kenema Football clubs were selected.

3.3 Sampling size determination

After selecting the two premier league clubs of the region, namely Wolaita Dicha and Hawassa Kenema Football clubs the players within those clubs were purposively selected as sample subjects using the purposive sampling technique. As it is possible to clearly identify the exact number of players who play within the selected clubs, using purposive sampling technique looks appropriate. There are 28 Wolaita Dicha football club players and 7 coaching staffs (one head coach, one assistant coach, one goalkeeper coach, one technical director, one general manager, and two medical staffs), and 28 Hawassa Kenema football club players and 5 coaching staffs (one head coach, one assistance coach, one goalkeeper coach, one technical director, and one medical staff). The total population was 68. From them the researcher selects all players from each club as sample size by using purposive/total population sample technique- therefore, there are 56 sample football players included in the investigation.

In addition to the players, the study also included coaching staffs (Head coaches, assistant coaches, goalkeeper coaches, and medical staffs). Interview was conducted to collect information from the coaches and coaching staffs (one from each respective club) were taken by the availability sampling technique. From both football clubs three coaching staffs (Head coaches, assistant coaches, and medical assistance) of them were interviewed whereas the others are not interested to answer the questions.

3.4 Sources of Data and Instruments

The sources of data were Primary sources. And the instruments used were Questionnaire, unstructured interview, and observation to gather and collect the data from the sample respondents.

3.4.1 Questionnaire

A questionnaire was prepared and administered to the sample players to collect data regarding the implementation of injury prevention strategies in their respective clubs. The questionnaire

was having two parts. The first part was a focus on personal information of respondents and the second part was on the extent of implementation of injury prevention strategies.

With regards to its procedure of implementation, before using it for the main study, a draft questionnaire was developed and administered by the researcher. The purpose of this pre-test was to find out some ambiguous and unclear statements in instruments that may pose problems in responding to the items. Accordingly, based on the responses of the respondents to the items regarding the actual situations of the implementation of injury prevention strategies, some minor modifications were made on the questionnaire. These modifications are expected to eliminate redundant questions and changed the direction of the statements used for ordering of some possible factors and were found very important to the construction of the questionnaire for the main study. To the sample clubs, Wolaita Dicha and Hawassa Kenema football clubs players 28 questioners were distributed to each club, but the questioners which are valid for analysis were 24 from Wolaita Dicha football club and 16 from Hawassa Kenema football club respectively.

The researcher selected questionnaire as data gathering tool because of its convenience for the investigation. That is its suitability for survey research. Using questionnaire makes the research less expensive and in addition, it increases the likelihood of obtaining accurate information. But, by its nature questionnaire suffers from weakness such as lack of opportunities to clarify issues and responses cannot be supplemented with other information.

3.4.2 Interview

The study used the unstructured interview to collect data from the selected coaching staffs. The Amharic language was used for this purpose so as to facilitate communication between the interviewer and the interviewees. For this purpose, a tape recorder was used after getting the consent of the interviewees. The responses were first translated to the English version and then it was checked by language expert.

3.4.3 Observation

The observation was used in the study source of data collecting instrument. It was being carried out two (2) times on each clubs during their training sessions by considering all ethical issues.

3.5 Data Collection Procedures

Data relevant to the study were obtained from two groups of sample respondents; the players and coaching staff. For this purpose the first two data collection instruments (questionnaire and interview guidelines) was prepared and then a pilot study was made to check the validity of one of the instruments, that is, the questionnaire. After checking its validity the questionnaire was administered by the researcher to 56 some selected Southern Nations Nationalities and Peoples premier league clubs football players. In parallel with administering the questionnaire, the unstructured interview was held to coaching staffs by the researcher. The other data collection method, the observation was made in parallel with administering the questionnaire and conducting the unstructured interview.

3.6 Methods of Data Analysis

Since the design of the study was both quantitative and qualitative, the method of the study was comparative cross-sectional study; the methods of data analysis depend on different statistical tools based upon the natures of the data. After the questionnaires were collected, the data obtained from players and coaches in the two clubs about their characteristics and the responses of the main questionnaire was first tailed in SPSS software version 25 and proper analysis were followed. Based upon the natures of the data type, both descriptive and inferential statistics was used to analyze the data in detail. To test the significance between two groups of the football clubs p-value is adjusted to 0.05, and then tabulated in tables. In doing so, the unprocessed data was first coded, edited, sequenced, interpreted and reported qualitatively.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION

To gather different information the researcher uses different methods, among this questioner, interview, and observation are included and was analyzed as follows:

4.1 Analysis of background information of players

Table 1: Characteristics of the respondent (height, weight, no of the year in the club).

Variables	Name of the club							
	Wolaita Wolaita Dicha				Hawassa Kenema			
	No	M \pm SD	Max.	Min.	No	M \pm SD	Max.	Min.
Height	24	1.76 \pm .08	1.87	1.60	16	1.73 \pm .065	1.85	1.58
Weight	24	70.46 \pm 7.37	85.00	55.00	16	64.5 \pm 6.87	82.00	57.00
No of year in the club	24	2.21 \pm 1.59	7.00	1.00	16	2.6 \pm 2.16	8.00	.08

Table 1, shows the mean height of Wolaita Dicha Football players is 1.76 with standard deviation of 0.08 and the maximum and minimum height is 1.87 and 1.60 meters respectively while the mean height of Hawassa Kenema football players is 1.73 \pm 0.065 (mean and standard deviation) with maximum and minimum height of 1.85 and 1.58 meters respectively. Table 1 also shows the mean weight Wolaita Dicha Football Club players is 70.46 with standard deviation of \pm 7.37 and the maximum weight is 85 kilograms and minimum weight is 55 kilograms respectively, and the mean weight Hawassa Kenema Football Club players is 64.5 with standard deviation of \pm 6.87 and the maximum weight is 82 kilograms and minimum weight is 57 kilograms respectively. Table 1 also shows the number of years in which players spent in the club and accordingly the mean and standard deviation of the number of years in which players spent in Wolaita Dicha Football Club is 2.21 \pm 1.59 with maximum year of 7 and minimum year of 1 while Hawassa Kenema Football Club players have spent 2.60 \pm 2.16 (mean and standard deviation) and the maximum and minimum year is 8 and 0.08 (1 month) respectively.

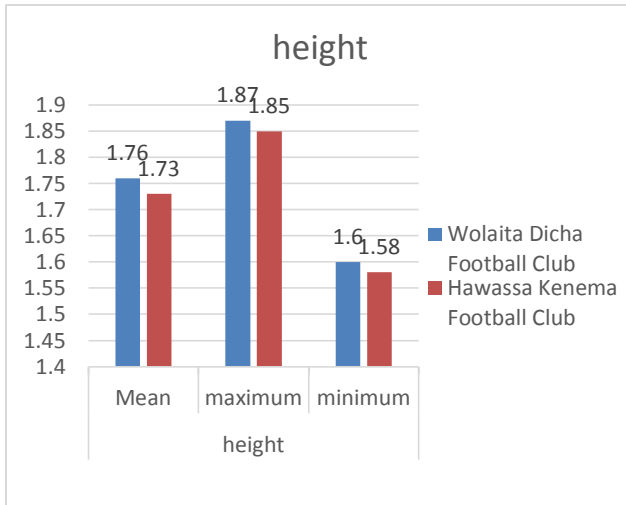


Fig 4.3 Height

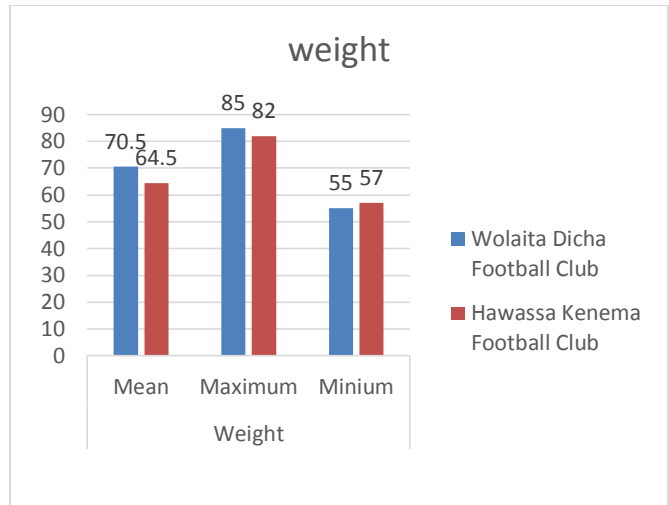


Fig 4.4 Weight

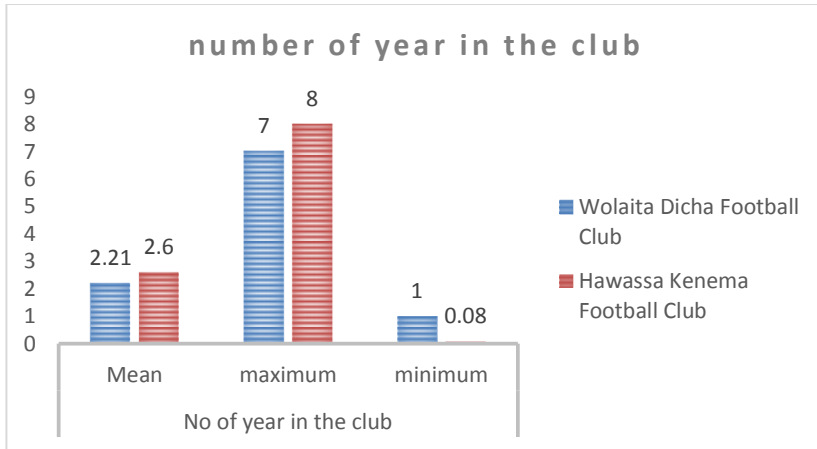


Fig 4.5 No of the year in the club

Table 2: Characteristics of the respondent (age, playing the position)

Name of the club		Age					Playing position				
		20-25	26-30	31-35	>35	T	Gk.	Def.	MidF.	Att.	T
WDFC	N	18	5	1	-	24	3	8	8	5	24
	%	75	21	4	-	100	13	33	33	21	100
HKFC	N	9	7	-	-	16	1	6	6	3	16
	%	56	44	-	-	100	6	37.5	37.5	19	100

Key: Gk. – Goalkeeper; **Def.**– Defender; **Midf.** - Midfielders; **Att.**–Attackers.

As depicted in table 2, the age composition of Wolaita Dicha Football Club players are 18(75%) between 20-25 years, 5(21%) of them are between 26-30 years and the remaining 1(4%) of the respondents are between 31-35 years while in Hawassa Kenema Football Club 9 (56%) of them are between 20-25 years, 7(44 %) of them are between 26-30 years. This shows that – more than half of the players in both clubs are between the ages of 20-25.

Regarding Playing position, in Wolaita Dicha Football Club there are 3(13%) goalkeepers, 8(33%) defenders, 8(33%) midfielders and 5 (21%) are attackers whereas in Hawass Kenema Football Club there are 1(6%) goalkeeper, 6(37.5%) defenders, 6(37.5%) midfielders and 3(19)% attackers.

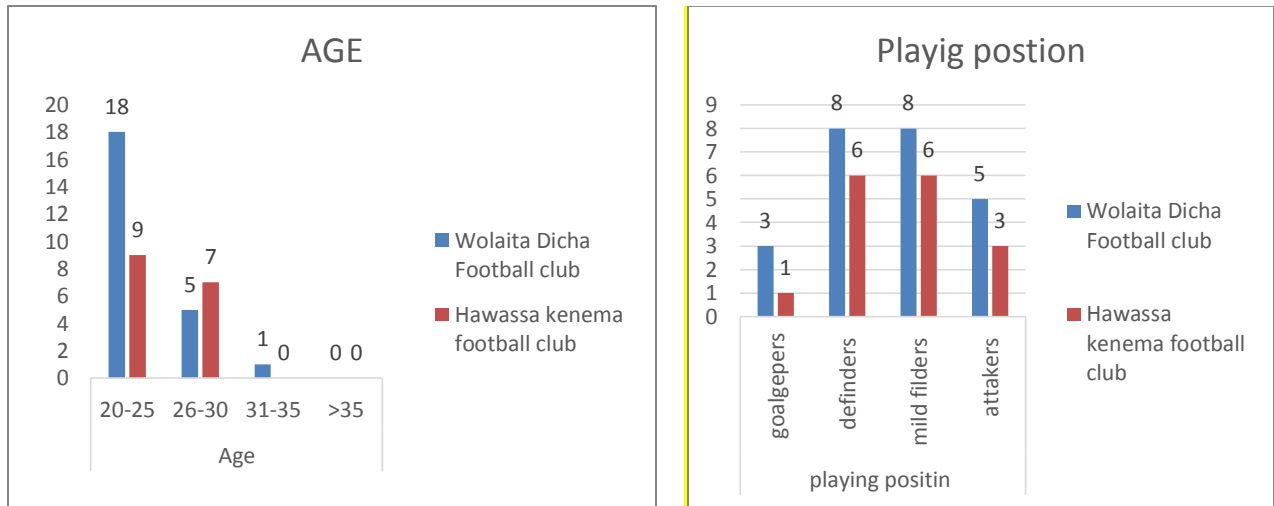


Fig 4.6Age**Fig 4.7**Playing position

Table 3: Number of injuries received in training and match

Name of the club		No of Injury									
		Match					Training				
		0	1-2	3-4	≥5	T	0	1-2	3-4	≥5	T
WDFC	N	2	11	6	5	24	1	15	5	3	24
	%	8	46	25	21	100	4	62.5	21	12.5	100
HCFC	N	3	7	6	0	16	2	8	6	0	16
	%	18.8	43.7	37.5	0	100	12.5	50	37.5	0	100

The above table3 indicates the number of injuries received in match and training. As the table indicates in Wolaita Dicha Football Club 2(8%) and 1(4%) of the players responded as they do not have any injury, 11(46%) and 15(62.5%) of them have got 1-2 injuries, 6(25%) and 5(21%) of them received 3-4 injuries while 5(21%) and 3(12.5%) of them have received above 5 injuries during match and training respectively. Whereas in Hawass Kenema Football Club 3(18.8%) and 2(12.5%) of the players do not have any injury incidence, 7(43.7%) and 8(50%) of the players got 1-2 injuries while the rest 6(37.5%) of the players in both occasions have 3-4 injuries in match and training respectively. This indicated that in Bothe clubs there is an occurrence of injury in match and training and even the occurrence of injury in training is higher than in a match. But the researcher believes that the occurrence of injure in match is higher than training so the response of the respondent is contradict with this idea.

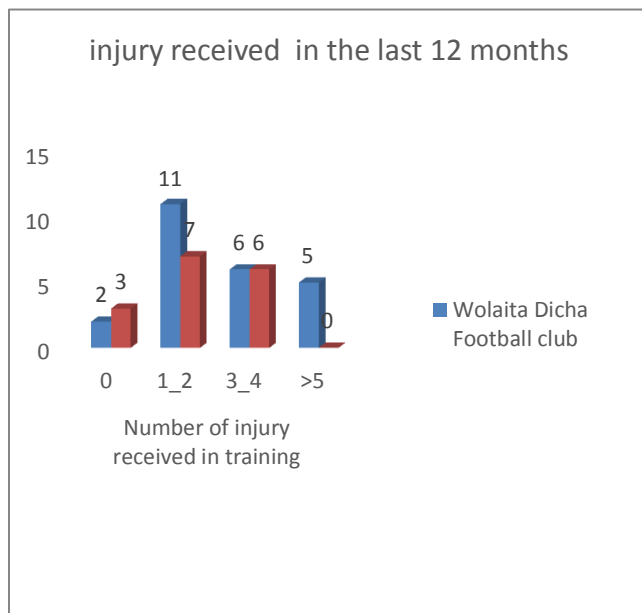


Fig 4.8Number of injury received in training

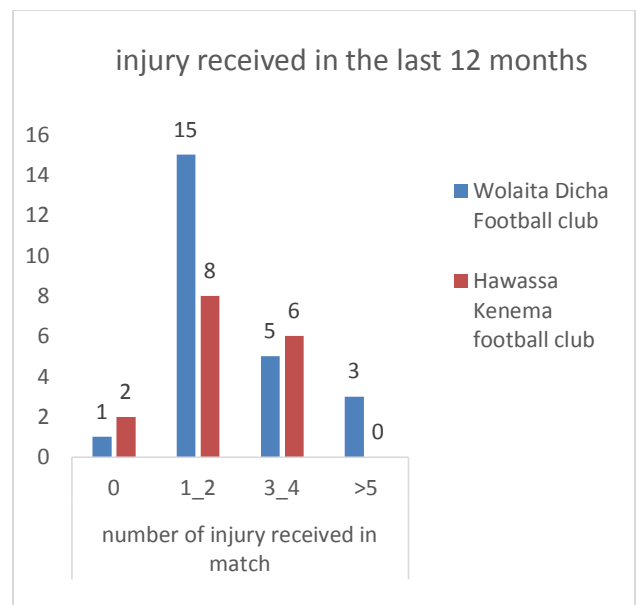


Fig 4.9Number of injury received in the match

4.2 Presentation of Data from the player's Questionnaires'

Table 4: Questions related to appropriate and fit sportswear

Name of the club	Do you wear appropriate and fit sportswear to protect yourself from injury?		Response					Total
			Always	very often	Often	Sometimes	Never	
WDFC	Training	No (%)	18(75%)	4(17%)	2(8%)	-	-	24(100%)
	Matches	No (%)	17(71%)	5(21%)	-	2(8%)	-	24(100%)
HKFC	Training	No (%)	5(31.3%)	5(31.3%)	5(31%)	1(6%)	-	16(100%)
	Matches	No (%)	6(37%)	3(19%)	7(44%)	-	-	16(100%)

Table 4 shows the habit of players in wearing appropriate and fit sportswear to protect themselves from injury during match and training time. Accordingly, 18(75%), 4(16%), 2(8%) of Wolaita Dicha Football Club players responded as they always, very often and often wear appropriate sportswear during training time. During match 17(71%), 5(21%) of the respondents responded as they always and very often wear appropriate sportswear while the rest 2(8%) of them said as they wear it sometimes. In Hawassa Kenema Football Club 5(31.3%), 5(31.3%), 5(31.3%) players responded as they always, very often and often wear appropriate sportswear during training respectively and only 1(6%) player says as he did it sometimes. Similarly, during match 6(37%), 3(19%), 7(44%) of the respondents responded as they always, very often and often wear sportswear appropriately respectively. From both clubs more than half (58%) of respondents responded “always” in both match and training, so this indicates that in both club the player wears appropriate and fit sportswear to protect themselves from injury.

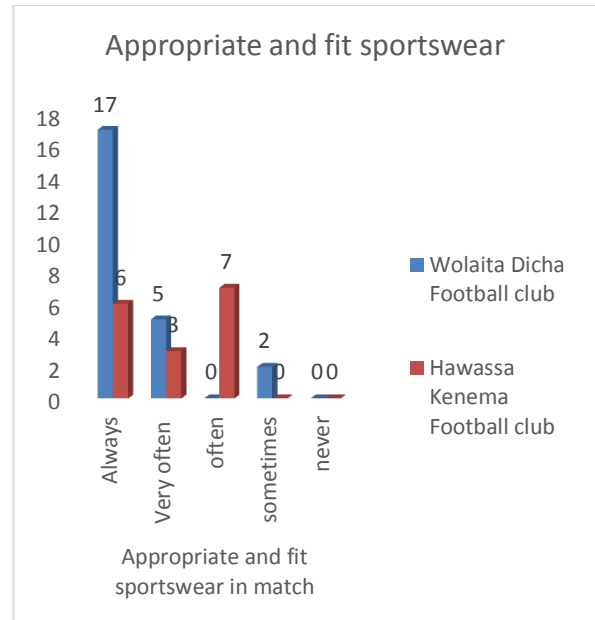
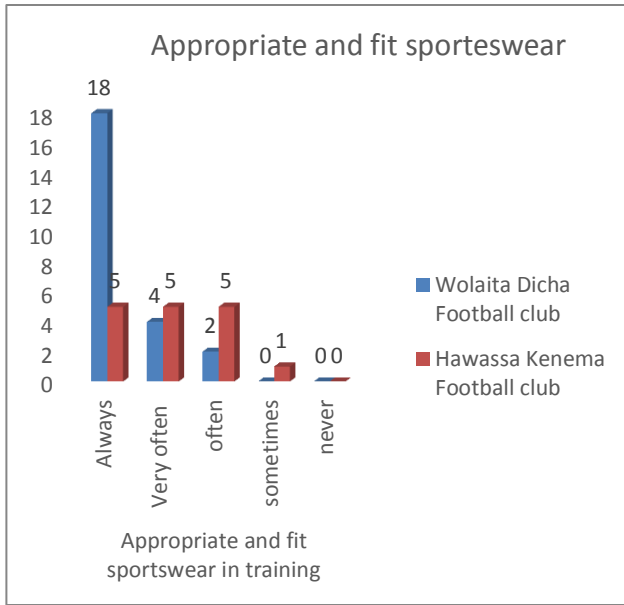


Fig 4.10 appropriate and fit sportswear in training **Fig 4.11** appropriate and fit sportswear in the match

Table 5: Questions related consumption of carbohydrates

Name of the club	Do you consciously consume carbohydrates in the following situation?		Response					Total
			Always	very often	Often	Sometimes	Never	
WDFC	PRT	No (%)	10(42%)	-	1(4%)	5(21%)	8(33%)	24(100%)
	POST	No (%)	10(42%)	-	2(8%)	5(21%)	7(29%)	24(100%)
	PRM	No (%)	11(46%)	-	4(17%)	3(13%)	6(25%)	24(100%)
	POSM	No (%)	10(42%)	-	3(13%)	4(17%)	7(29%)	24(100%)
HKFC	PRT	No (%)	1(6%)	1(6%)	2(13%)	3(19%)	9(56%)	16(100%)
	POST	No (%)	1(6%)	1(6%)	2(13%)	3(19%)	9(56%)	16(100%)
	PRM	No (%)	1(6%)	1(6%)	2(13%)	3(19%)	9(56%)	16(100%)
	POSM	No (%)	1(6%)	1(6%)	2(13%)	3(19%)	9(56%)	16(100%)

Table 5 shows the consumption of carbohydrates by players during pre or post training and match. Accordingly, 10(42%) and 1(4%) of Wolaita Dicha Football Club players responded they always and often consume carbohydrate before training, while 5(21%) and 8(33%) of them responded they sometimes and never consume carbohydrate respectively. Before match 11(46%) and 4(17%) of them responded they always and often consume carbohydrate, while 3(13%) and 6(25%) of them responded they sometimes and never consumed carbohydrate respectively. After training 10(42%) and 2(8%) of players responded they always and often consume carbohydrate while 5(21%) and 7(29%) players responded they sometimes and never consume carbohydrate. After match 10(42%) and 3(13%) of players responded they always and often consume carbohydrate, while 4(17%) and 7(29%) of them sometimes and never consumed carbohydrate after match respectively. In Hawassa Kenema Football Club players 1(6%), 1(6%) and 2(13%) responded they always, very often and often consume carbohydrate before training, while 3(19%) and 9(56%) of them responded they sometimes and never consume carbohydrate respectively. Before match 1(6%), 1(6%) and 2(13%) players responded they always, very often and often consume carbohydrate, while 3(19%) and 9(56%) of players responded they sometimes and never consume carbohydrate respectively. After training 1(6%), 1(6%) and 2(13%) of players responded they always, very often and often consume carbohydrate, while 3(19%) and 9(56%) players responded they sometimes and never consume carbohydrate. After match 1(6%), 1(6%) and 2(13%) of players responded they always, very often and often consume carbohydrate, while 3(19%) and 9(56%) of them sometimes and never consume carbohydrate respectively.

The finding of this study was similar to an investigation conducted by, Gretchen (1994) as injury can be Prevented by taking appropriate carbohydrate. Muscle glycogen stores are derived almost entirely from carbohydrate intake. Because there is a limited capacity to store muscle glycogen, and because muscle glycogen is the predominant fuel in the exercise of moderate to severe intensity, the nutritional focus should be on carbohydrate consumption. Easy-to-follow nutritional strategies should be employed that will maximize muscle glycogen stores and delay the onset of fatigue. The information gathered from player's shows that most of the players in both clubs do not take appropriate carbohydrate intake so they are at the risk of injury.

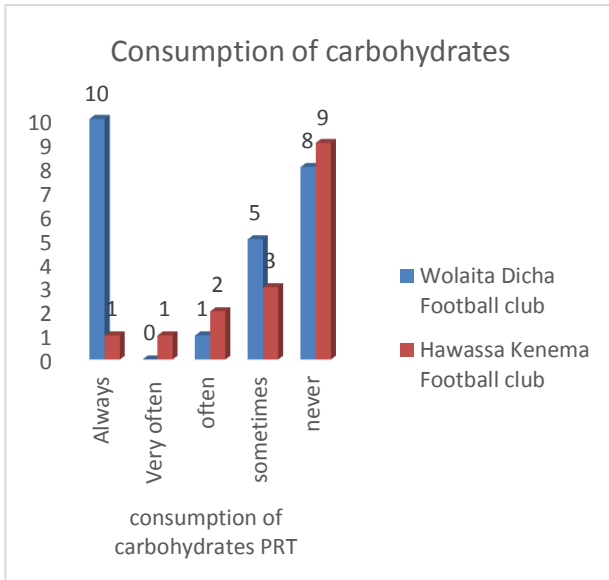


Fig 4.12 Consumption of CHO PRT

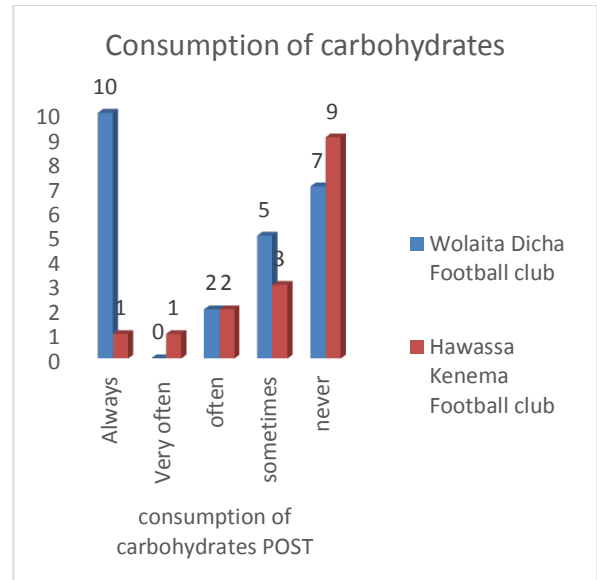


Fig 4.13 Consumption of CHO POST

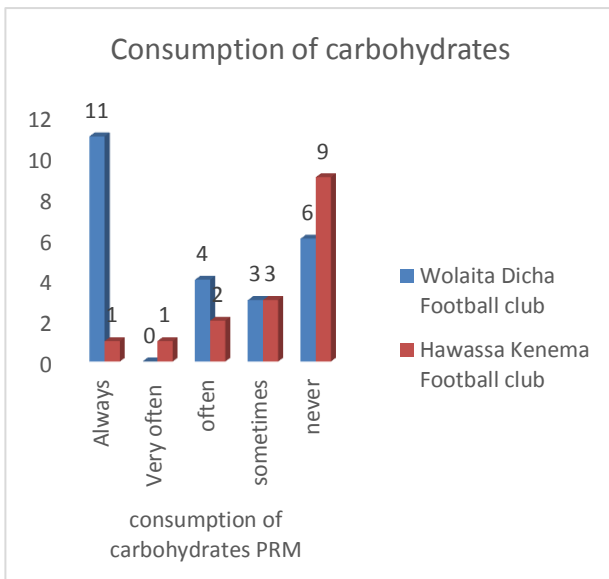


Fig 4.14 Consumption of CHO PRM

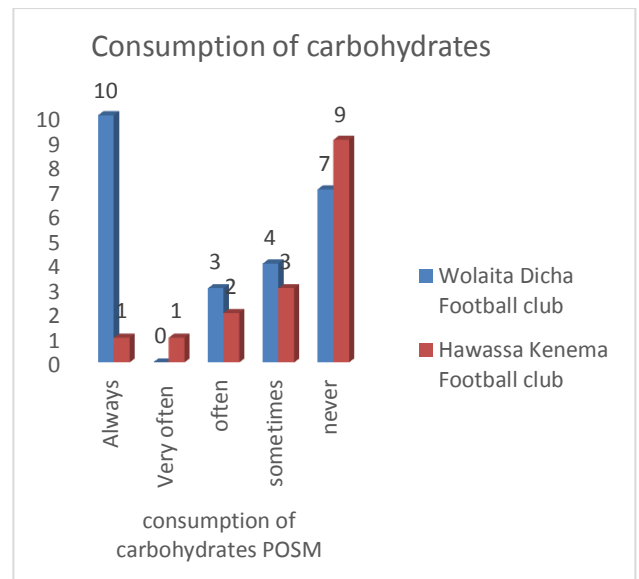


Fig 4.15 Consumption of CHO POSM

Key: CHO PRT - Carbohydrates Per training

CHO POST - Carbohydrates Post training

CHO PRM - Carbohydrates Per match

CHO POSM - Carbohydrates Post-match

Table 6: Questions related to nutritional advice

Name of the club	Are you given any nutritional advice on what to eat?		Response					Total
			Always	very often	Often	Sometime	Never	
WDF C	Before training	No (%)	6(25)	2(8)	5(21)	5(21)	6(25)	24(100)
	After training	No (%)	7(29)	1(4)	5(21)	5(21)	6(25)	24(100)
	Before match	No (%)	6(25)	1(4)	4(17)	6(25)	7(29)	24(100)
	After match	No (%)	7(29)	1(4)	5(21)	4(17)	7(29)	24(100)
HKFC	Before training	No (%)	3(19)	-	1(6)	11(69)	1(6)	16(100)
	After training	No (%)	3(19)	-	1(6)	11(69)	1(6)	16(100)
	Before match	No (%)	3(19)	-	1(6)	11(69)	1(6)	16(100)
	After match	No (%)	3(19)	-	1(6)	11(69)	1(6)	16(100)

As depicted in table 6 above, players were asked whether they are given any nutritional advice on what to eat before and after training and match. In Wolaita Dicha Football Club, 6(25%), 2(8%) and 5(20%) of players responded as they always, very often and often get nutritional advice on what to eat before training, while 5(20%) and 6(25%) of them responded sometimes and never get nutritional advice on what to eat respectively whereas after training 7(29%), 1(4%) and 5(20%) of players responded as they always, very often and often get nutritional advice on what to eat, while 5(20%) and 6(25%) of them responded sometimes and never get nutritional advice on what to eat respectively. Before match 6(25%), 1(4%) and 4(17%) of players responded as they always, very often and often get nutritional advice on what to eat, while 6(25%) and 7(29%) of them responded sometimes and never get nutritional advice on what to eat respectively, whereas after match 7(29%), 1(4%) and 5(20%) of players responded as they always, very often and often get nutritional advice on what to eat, while 4(17%) and 7(29%) of them responded sometimes and never get nutritional advice on what to eat respectively. In Hawassa Kenema Football Club 3(19%) and 1(6%) of players responded always and often get nutritional advice on what to eat before training, while 11(69%) and 1(6%) of them responded sometimes and never get nutritional advice on what to eat respectively, whereas after training 3(19%) and 1(6%) of players

responded as they always and often get nutritional advice on what to eat, while 11(69%) and 1(6%) of them responded sometimes and never get nutritional advice on what to eat respectively. In addition Before match 3(19%) and 1(6%) of players responded as they always sand often get nutritional advice on what to eat, while 11(69%) and 1(6%) of them said sometimes and never get nutritional advice on what to eat respectively, whereas after match 3(19%) and 1(6%) of players responded as they always and often get nutritional advice on what to eat, while 11(69%) and 1(6%) of them responded sometimes and never get nutritional advice on what to eat respectively. From the above data, the researcher concludes that most of the players are given nutritional advice sometimes from their coaches and some of them didn't get nutritional advice as a whole.

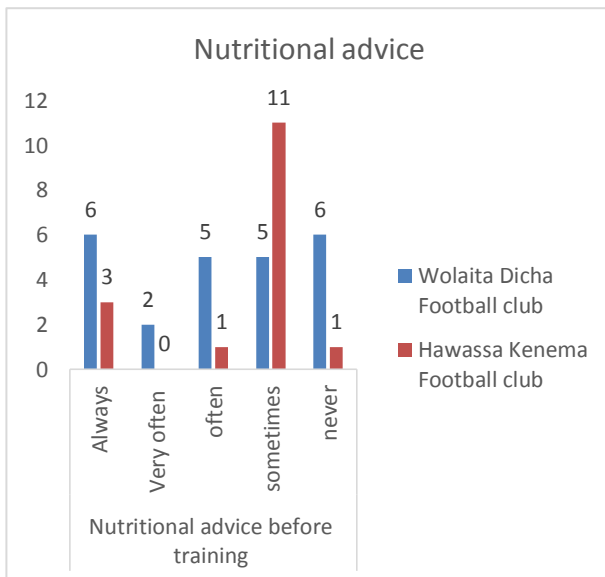


Fig 4.16 Nutritional advice before training

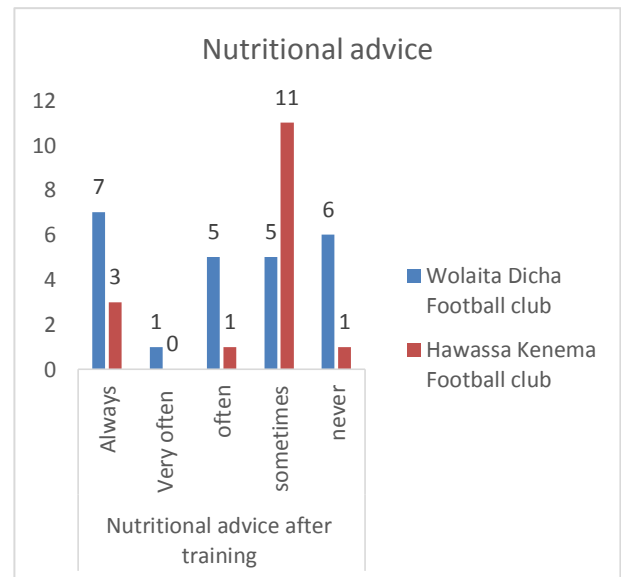


Fig 4.17 Nutritional advice after training

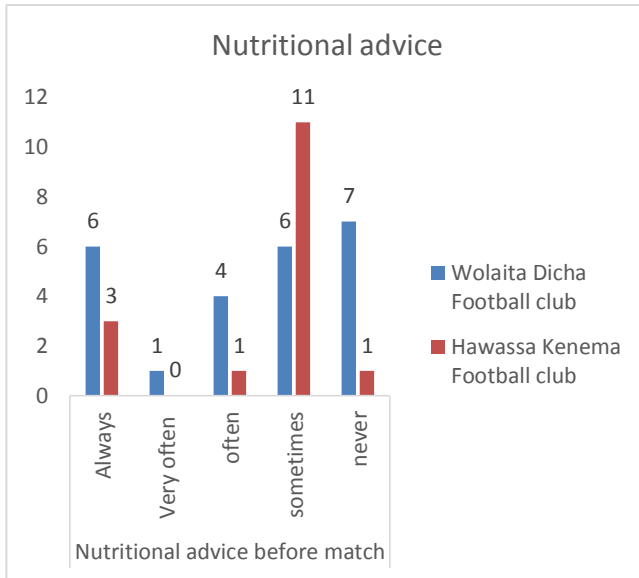


Fig 4.18 Nutritional advice before match

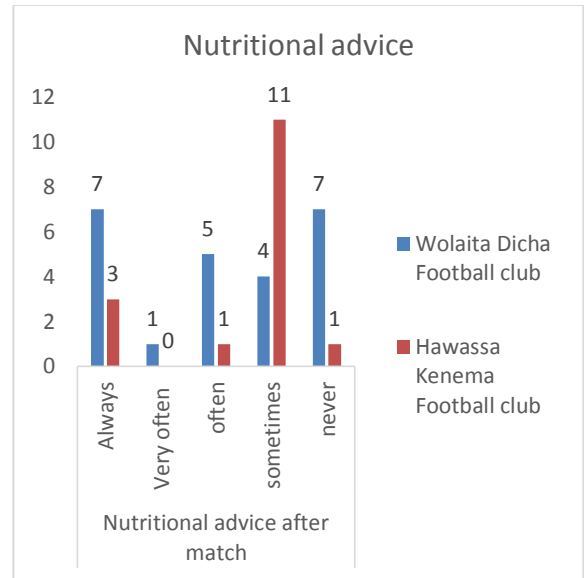


Fig 4.19 Nutritional advice after the match

Table 7: Questions related to warming up and a cooling down period

Name of the club		Do you have a warm-up period and a cool-down period		Response					Total
				Always	very often	Often	Sometime	Never	
WDFC	warm-up period	Training	No (%)	21(88)	2(8)	1(4)	-	-	24(100)
		Match	No (%)	21(88)	2(8)	1(4)	-	-	24(100)
	cool-down period	Training	No (%)	21(87.5)	-	3(12.5)	-	-	24(100)
		Match	No (%)	11(46)	-	-	-	13(54)	24(100)
HKFC	warm-up period	Training	No (%)	8(50)	1(6)	7(44)	-	-	16(100)
		Match	No (%)	8(50)	1(6)	7(44)	-	-	16(100)
	cool-down period	Training	No (%)	8(50)	3(19)	-	5(31)	-	16(100)
		Match	No (%)	3(19)	1(6)	2(12.5)	2(12.5)	8(50)	16(100)

As shown in the above table 7, players were asked if they have a warm-up and a cool-down period during training and match. Accordingly, 21(88%), 2(8%) and 1(4%) of Wolaita Dicha

Football Club players responded as they always, very often and often have a warm-up period during training. During match 21(88%), 2(8%) and 1(4%) of the respondents responded as they always, very often and often have a warm-up period respectively. And also 21(88%) and 3(12.5%) of Wolaita Dicha Football Club players responded as they always and often have a cool- down period during training. During match 11(46%) of the respondents responded as they always have a cool-down period, while 13(54%) of player responded that they never cool down after the match. In Hawassa Kenema Football Club 8(50%), 1(6%) and 7(44%) of players responded as they always, very often and often have a warm-up period during training respectively. Similarly during match 8(50%), 1(6%) and 7(44%) of the respondents responded as they always, very often and often have a warm-up period respectively. In addition during training 8 (50%) and 3(19%) of players responded as they always and very often have a cool-down period, while 5(31(%) of them said they sometimes cool down respectively. During match 3(19%), 1(6%) and 2(12.5%) of the respondents responded as they always, very often and often have a cool –down period, whereas 2(12.5%) and 8(50%) of them responded as they sometimes and never cool down respectively. From the above data the researcher conclude that most of the players in both clubs have a warm-up period during training and match session, and also they have a cool-down period during a training session but they don't have cooling down period during the match.

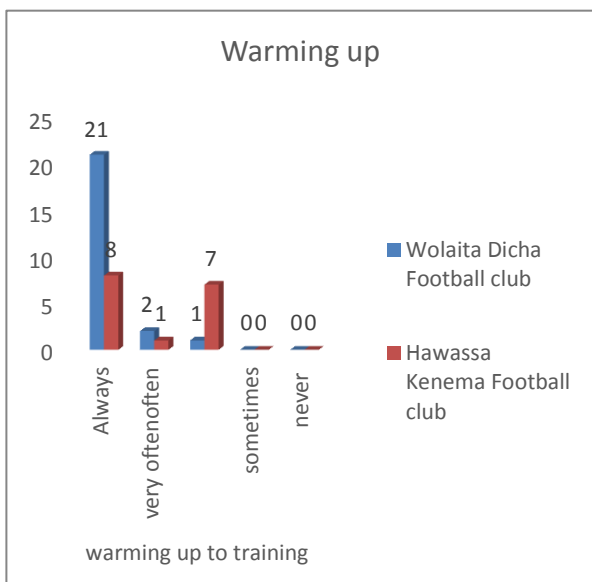


Fig 4.20 Warming up to training

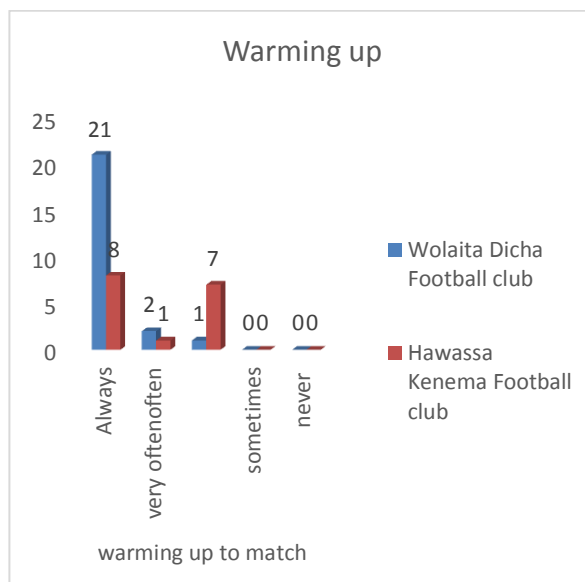


Fig 4.21 Warming up to match

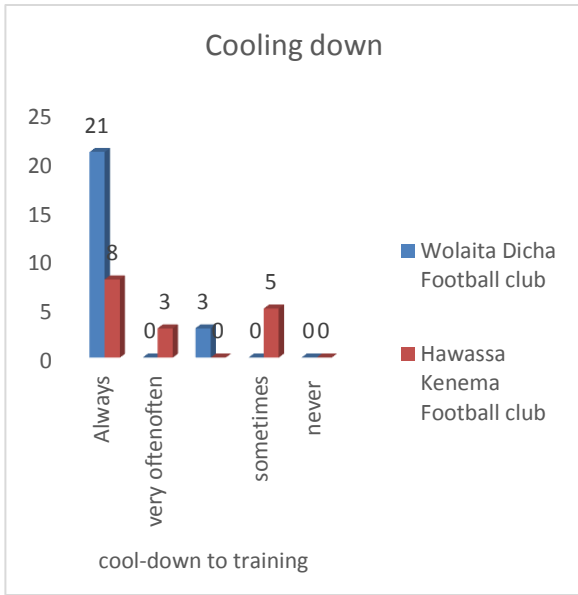


Fig 4.22 cool-down to training

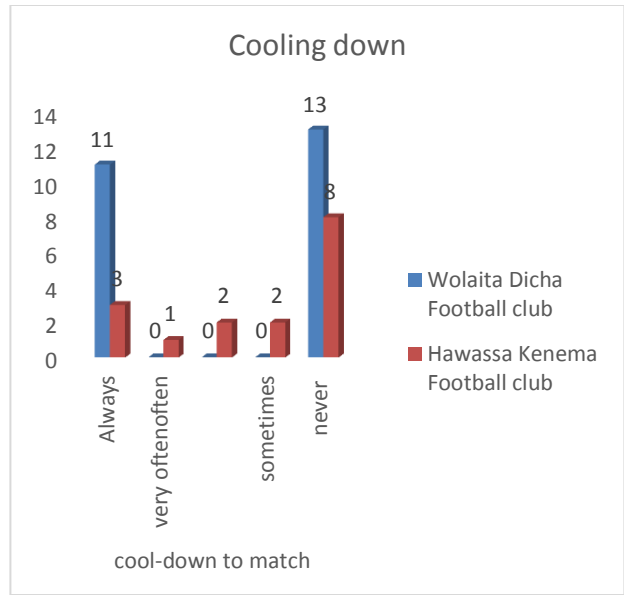


Fig 4.23 Cool-down to match

Table 8: Questions related to stretching of major muscles during warming up and cool down

Name of the club	Do you stretch the major leg muscles in the following situation?		Response					Total
			Always	very often	Often	Sometimes	Never	
WDFC	Warming-up period to training:	No (%)	20(84%)	2(8%)	2(8%)	-	-	24(100%)
	Warming-up period to match:	No (%)	18(75%)	2(8%)	3(13%)	-	1(4%)	24(100%)
	Cooling-down after training:	No (%)	19(79%)	3(13%)	2(8%)	-	-	24(100%)
	Cooling-down after match:	No (%)	9(38%)	2(8%)	-	2(8)	11(46%)	24(100%)
HKFC	Warming-up period to training:	No (%)	7(44%)	4(25%)	5(31%)	-	-	16(100%)
	Warming-up period to match:	No (%)	7(44%)	4(25%)	5(31%)	-	-	16(100%)
	Cooling-down after training:	No (%)	7(44%)	4(25%)	5(31%)	-	-	16(100%)
	cooling-down after match:	No (%)	6(38%)	4(25%)	5(31%)	-	1(6%)	16(100%)

As shown in table 8, players were asked if they have stretched the major muscles during a warming-up period of training and match and cooling- down after training and match. Accordingly, 20(84%), 2(8%) and 2(8%) of Wolaita Dicha Football Club players responded as they always, very often and often stretching the major leg muscles in warming-up period to training while 1(4%) of them replied as they never stretch the major leg muscles in warming-up period to training. During warming up period to match 18(75%), 2(8%) and 3(13%) of the respondents responded as they always, very often and often stretch the major leg muscles respectively. In the case of cooling down 19(79%), 3(13%) and 2(8%) of the players

responded as they always, very often and often stretch the major leg muscles after training. On the other hand, 9(38%) and 2(8%) of players responded as they always and very often stretch the major leg muscles after match while the rest 2(8%) and 11(41%) of them said they sometimes and never stretch the major leg muscles after match respectively. In Hawassa Kenema Football Club 7(44%), 4(25%) and 5(31%) of players responded as they always, very often and often stretch the major leg muscles in the warming-up period to training respectively. During match 7(44%), 4(25%) and 5(31%) of the respondents responded as they always, very often and often stretch the major leg muscles in warming-up period respectively. In the case of cooling down 7(44%), 4(25%) and 5(31%) of the respondents responded as they always, very often and often stretch the major leg muscles after training. After match 6(38%) and 4(25%) of players responded as they always, very often have stretched the major leg muscles while 1(6%) of them never stretch the major leg muscles respectively. Based on the above table the researcher concludes that most players stretch the major leg muscle during warming up period to training and match and also during cooling down period to training. But during cooling down, period after match most players especially in Wolaita Dicha Football club did not stretch the major muscles.

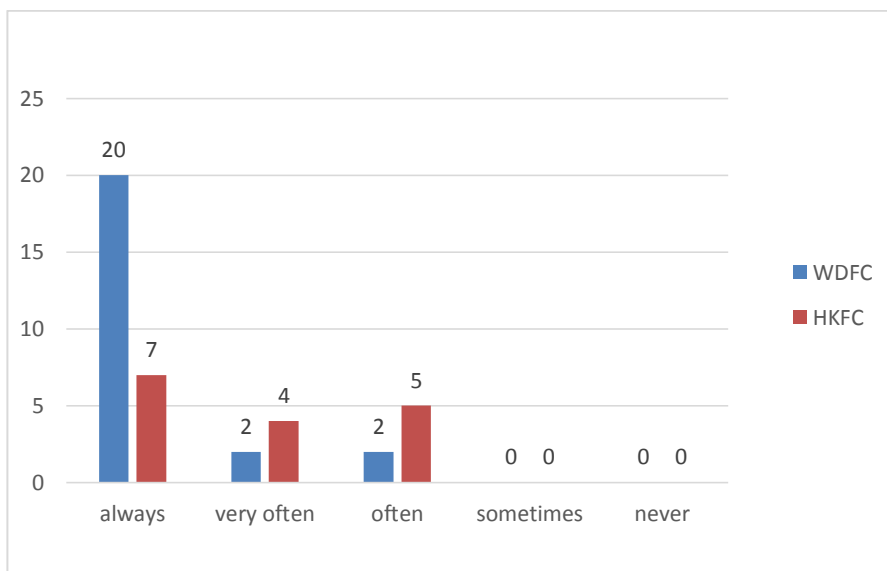


Fig 4.24 Stretching major leg muscles Warming up period to training

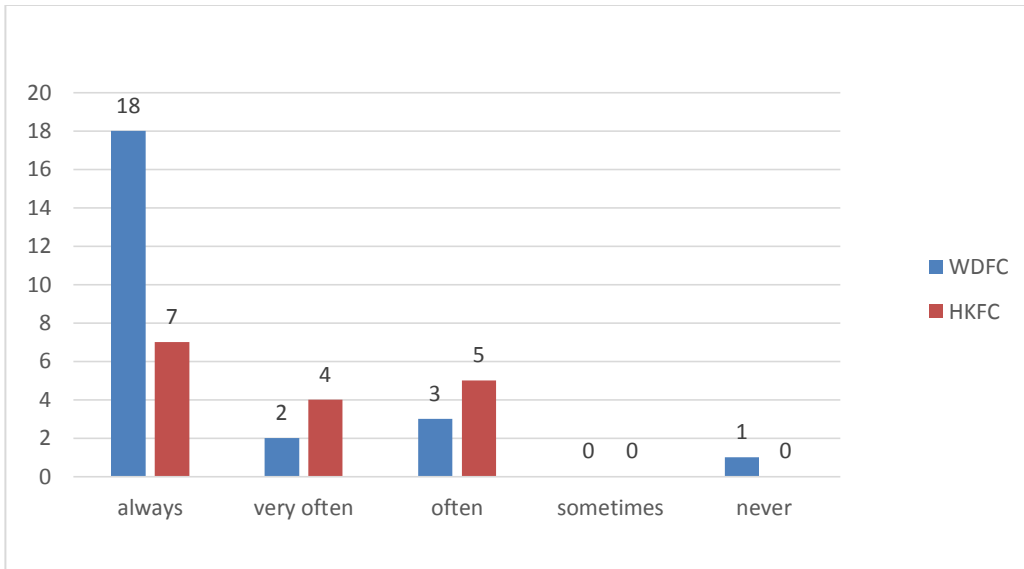


Fig 4.25 Stretching major leg muscles Warming up period to match

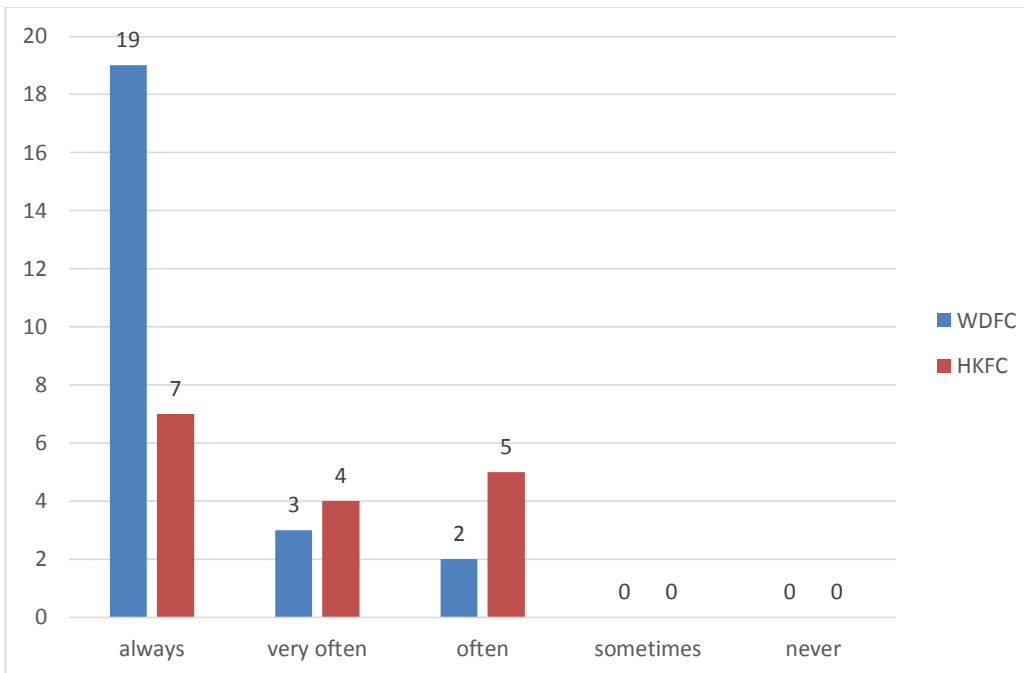


Fig 4.26 Stretching major leg muscles at cooling down after training

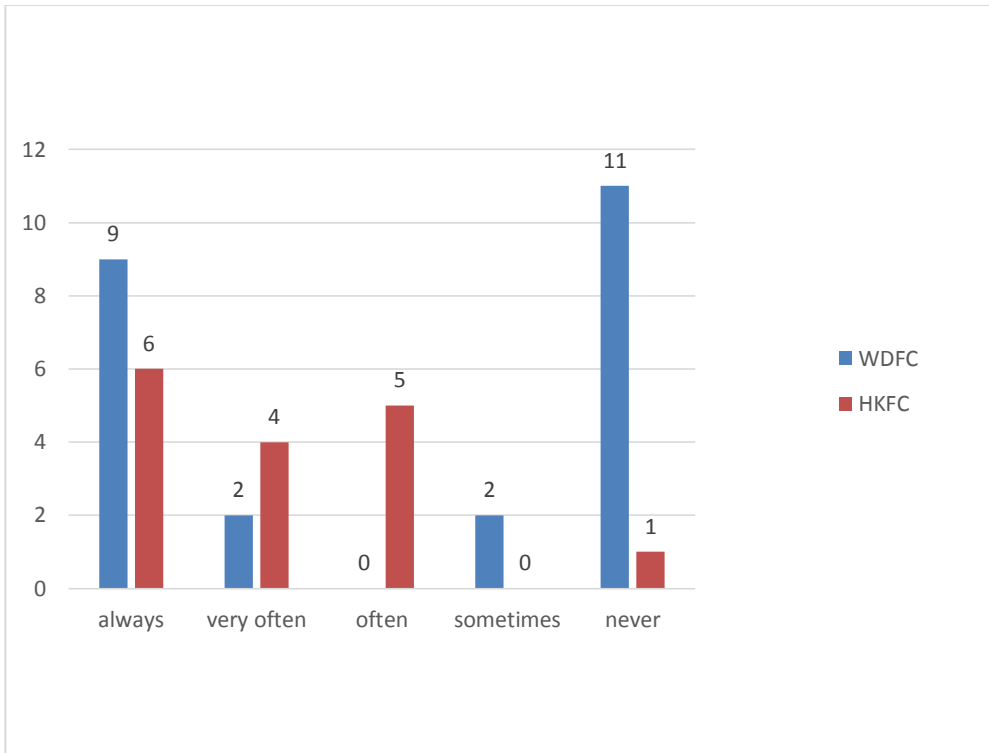


Fig 4.27 Stretching major leg muscles at cooling down after the match

Table 9: Questions related to extra flexibility training

Name of the club	Do you undertake flexibility training (not included as part of a warm-up or cool-down)?		Response					Total
			Always	very often	Often	Sometimes	Never	
WDFC	As team session	No	13	2	4	4	1	24
		%	54%	8%	17%	17%	4%	100%
	As extra individual work	No	11	-	2	9	2	24
		%	46%		8%	38%	8%	100%
HKFC	As team session	No	3	4	6	3	-	16
		%	19%	25%	38%	19%	-	100%
	As extra individual work	No	3	3	5	3	2	16
		%	19%	19%	31%	19%	13%	100%

As shown in table 9, In Wolaita Dicha Football Club 13(54%), 2(8%) and 4(17%) of players responded as they always, very often and often undertake flexibility training as team session

while 4(17%) and 1(4%) of them replied as they sometimes and often undertake flexibility training as team session respectively. As extra individual work 11(46%) and 2(8%) of the players responded as they always and often undertake flexibility training while 9(38%) and 2(8%) of them said they sometimes and never undertake flexibility training respectively. In Hawassa Kenema Football Club 3(19%), 4(25%) and 6(38%) of the players responded as they always, very often and often undertake flexibility training as team session respectively while 3(19%) of them sometimes undertake flexibility training as team session. As extra individual work 3(19%), 3(19%) and 5(31%) of players responded as they always, very often and often undertake flexibility training while 3(19%) and 2(13%) of them sometimes and never undertake flexibility training respectively. Based on this the researcher conclude that most of the players are always, very often and often participate in flexibility training as team session and individual work but there are still some players who didn't undertake flexibility training as part of team session and or individual work which may lead them to injury.

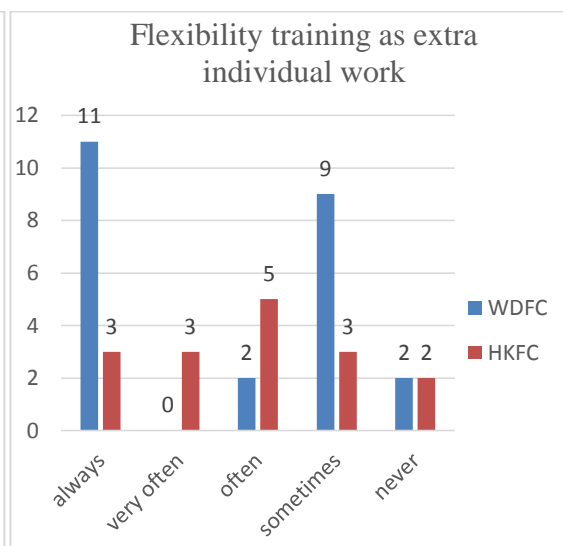
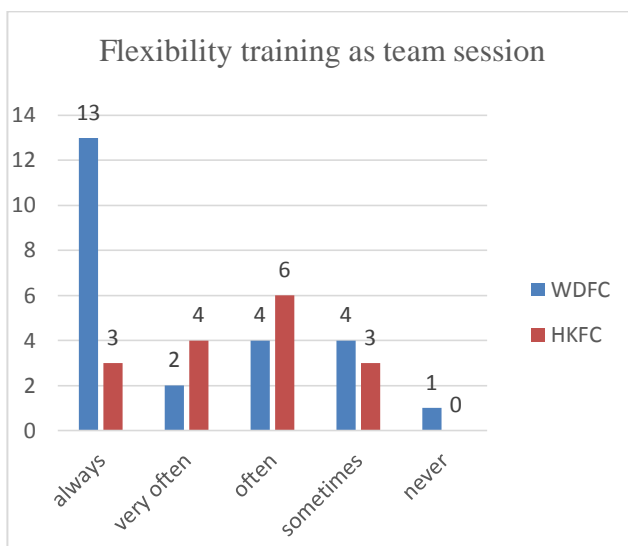


Fig 4.28 Flexibility training as team session **Fig 4.29** Flexibility training as individual work

Table 10: Questions related to extra strength training

Name of the club	Do you undertake strength training in the gym?		Response					Total
			Always	very often	Often	Sometimes	Never	
WDFC	As team session	No	2	1	2	10	9	24
		(%)	(8%)	(4%)	(8%)	(42%)	(38%)	(100%)
	As extra individual work	No	4	2	3	12	3	24
		(%)	(17%)	(8%)	(12.5%)	(50%)	(12.5%)	(100%)
HKFC	As team session	No	3	2	2	8	1	16
		(%)	(19%)	(13%)	(13%)	(50%)	(6%)	(100%)
	As extra individual work	No	3	-	-	12	1	16
		(%)	(19%)			(75%)	(6.3%)	(100%)

As clearly seen from the above table 10, from Wolaita Dicha Football Club players 2(8%), 1(4%) and 2(8%) of them responded as they always, very often and often undertake strength training as team session, while 10(42%), 9(38%) of them sometimes and never undertake strength training as team session respectively. And as extra individual work 4(17%), 2(8%) and 3(12.5%) of players responded always, very often and often undertake strength training, while 12(50%) and 3(12.5%) of them sometimes and never undertake strength training respectively. In Hawassa Kenema Football Club 3(19%), 2(13%) and 2(13%) of players responded as they always, very often and often undertake strength training as team session, while 8(50%) and 1(6%) of them sometimes and never undertake strength training as team session respectively. And as extra individual work 3(19%) of the players responded always undertake in strength training while 12(75%) and 1(6%) of them said they sometimes and never undertake strength training respectively. Based on this the researcher conclude that the majority of players sometimes participate in strength training as a team session and extra individual work. In addition, some of the players did not undertake strength training as a team or individually which may lead them to exposure to frequent injury.

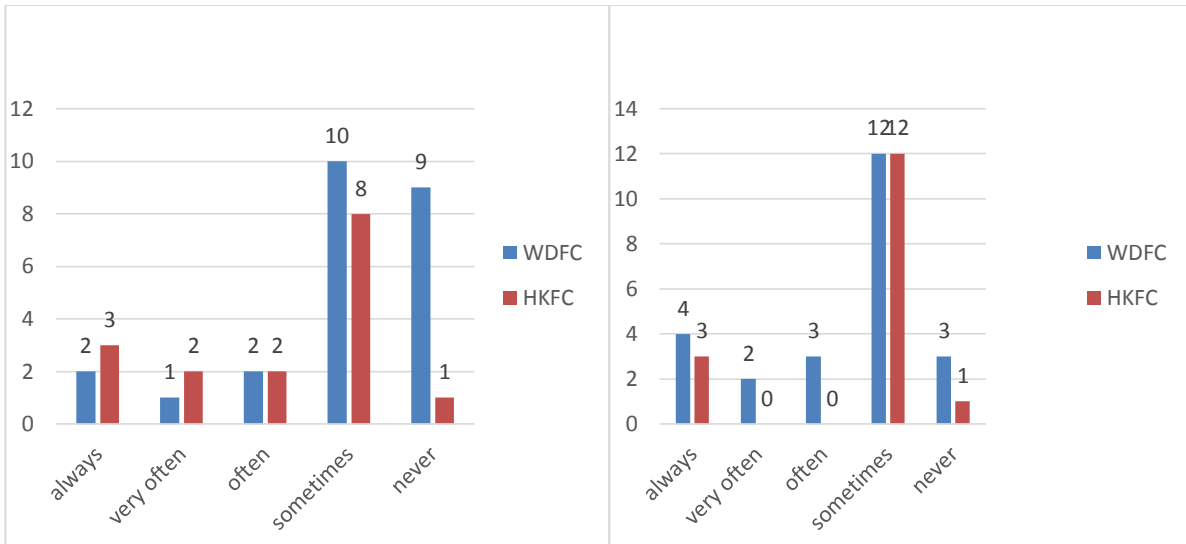


Fig 4.30 Strength training as team session

Fig 4.31 Strength training as team session

Table 11: Questions related to the chance of sustaining an injury during training and match

Name of the club	There is a chance of sustaining an injury that prevents you from being available for selection	Response					Total
		SD	D	NAND	A	SA	
WDFC	During training: No (%)	2(8%)	-	-	6(25%)	16(67%)	24(100%)
	During match: No (%)	1(4%)	-	-	6(25%)	17(71%)	24(100%)
HKFC	During training: No (%)	-	4(25%)	1(6%)	7(44%)	4(25%)	16(100%)
	During match: No (%)	-	4(25%)	1(6%)	7(44%)	4(25%)	16(100%)

Key: SD=strongly disagree, D=disagree, NAND=neither agree nor disagree, A=agree, SA=strongly agree.

In the above table 11, players were asked whether they sustain an injury during training and match that prevents them from being selected and accordingly 2 (8%) of Wolaita Dicha Football Club players strongly disagree while the rest 22(92%) of them strongly agree or agree that they will sustain an injury during training. At the same time during the match only 1(4%) player strongly disagrees that he will not sustain an injury while the rest 23(96%) of them strongly agree or agree on the possibility of sustaining injury.

In Hawassa Kenema Football Club the same number of players in both training and match disagree, neutral and strongly agree or agree concerning the chance of sustaining injury that prevents them from being available for selection and accordingly 4(25%) of the players disagree, 1(6%) of the player is neutral while the rest 11(69%) of them strongly agree or agree that they will sustain injury. From the observed data, it is possible to conclude that the majority of the participant players strongly agree or agree that there is a chance of sustaining an injury during training and match that prevents them from being available for selection.

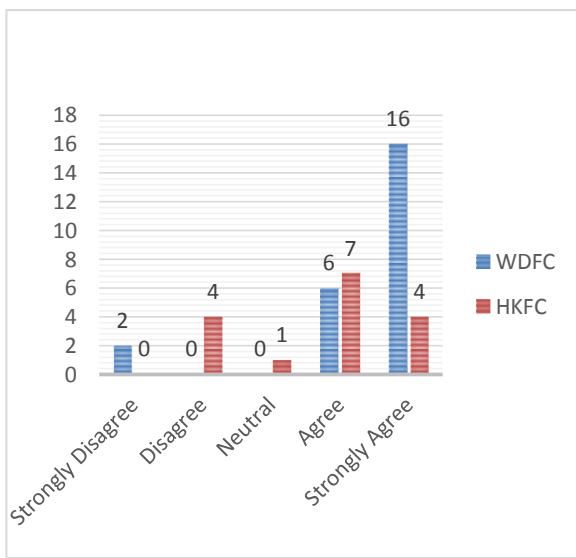


Fig 4.32: Chance of injury during training

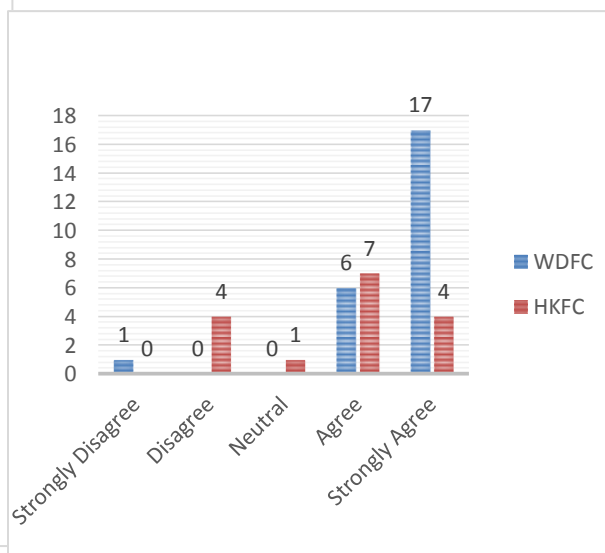


Fig 4.33: Chance of injury during Match

Table 12: Question-related to the chance of sustaining an injury

Name of the clubs	There is a greater chance of sustaining an injury during a competitive match than during training.	Response					Total
		strongly disagree	Disagree	Neutral	Agree	strongly agree	
WDFC	No	-	1	2	9	12	24
	%	-	4%	8%	38%	50%	100%
HKFC	No	-	4	2	8	2	16
	%	-	25%	12.5%	50%	12.5%	100%

As the above table 12 shows, players were asked whether there is a greater chance of sustaining an injury during a competitive match than during training and accordingly in Wolaita Dicha Football Club only 1(4%) player disagree and 2(8%) of them neutral while the rest 21(88%) of them strongly agree or agree that the chance of sustaining an injury during match is greater than training. In Hawassa Kenema Football Club 4(25%) players disagree and 2(12.5%) of them neutral while the rest 10(62.5%) of them strongly agree or agree that the chance of sustaining an injury during a match is greater than training. Based on this the researcher concludes that majority of the participant players strongly agree or agree that there is a greater chance of sustaining an injury during a competitive match than during training.

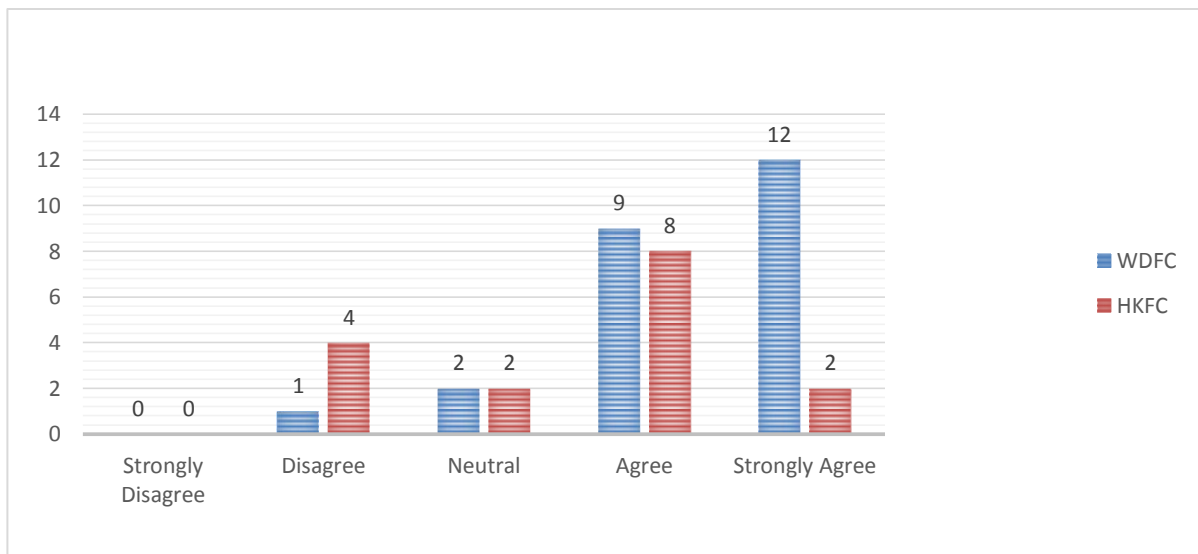


Fig 4.34: Chance of injury is greater in the competitive match than in training

Table 13: Question about the cause of Injures

Name of the club	Injuries are a consequence of the action of other players	Response					Total
		strongly disagree	Disagree	Neutral	Agree	strongly agree	
WDFC	No	-	6	6	4	8	24
	%	-	25%	25%	17%	33%	100%
HKFC	No	-	3	3	9	1	16
	%	-	19%	19%	56%	6%	100%

The above table 13 shows that 6(25%) of Wolaita Dicha Football Club players disagree on the idea that Injures are a consequence of the action of other players and 6(25%) of them are neutral while the rest 12(50%) of them strongly agree or agree that injuries are a consequence of the action of other players. At the same time 3(19%) of Hawassa Kenema Football Club players disagree that injuries are not a consequence of the action of other players and 3(19%) of them neutral while the rest 10(62%) strongly agree or agree that injuries are a consequence of the action of other players. Based on this the researcher concludes that majority of the players agree that injuries are a consequence of the action of other players.

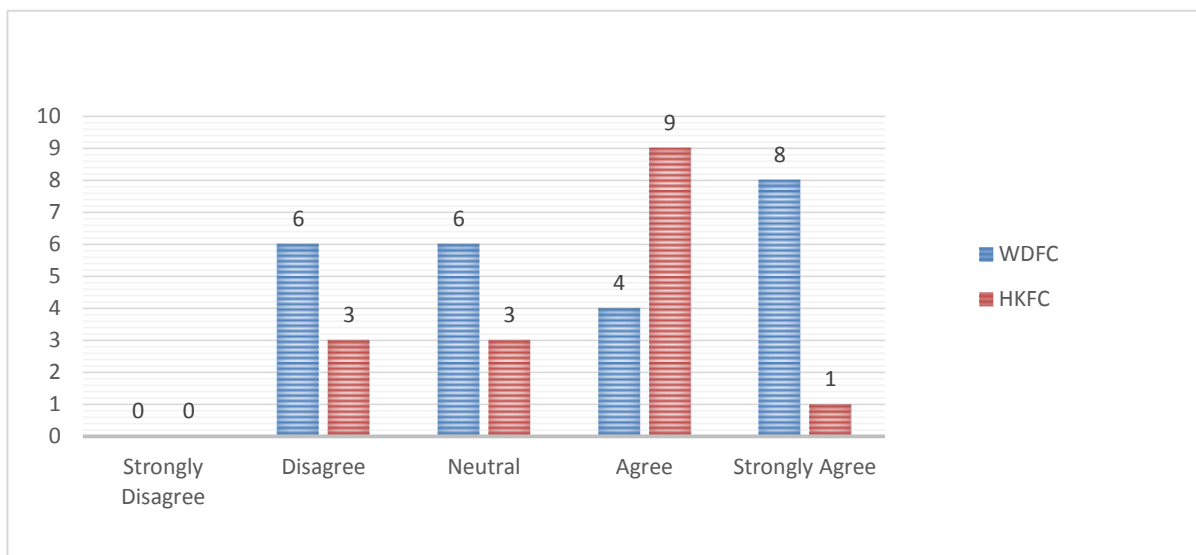


Fig 4.35: Cause of injuries is the action of other players

Table 14: Question-related to the risk of injuries in training and appropriate sportswear

Name of the club	The risk of injuries in training is reduced when you wear appropriate sportswear	Response					Total
		strongly disagree	Disagree	Neutral	Agree	strongly agree	
WDFC	No	2	1	1	9	11	24
	%	8%	4%	4%	38%	46%	100%
HKFC	No	-	-	1	11	4	16
	%	-	-	6%	69%	25%	100%

As depicted in the above table 14, 3(12%) of Wolaita Dicha Football Club players strongly disagree or disagree and 1(4%) of them is neutral while the rest 20(84%) of them strongly agree or agree that the risk of injuries in training is reduced when they wear appropriate sportswear. In Hawassa Kenema Football Club only 1(6%) player is neutral whereas the rest 15 (94%) of them strongly agree or agree that the risk of injuries in training is reduced when they wear appropriate sportswear. This indicated that the majority of players strongly agree and agree with the idea that the risk of injury can be reduced by wearing appropriate sportswear. According to this source, the risk of injury can be reduced by wearing appropriate sportswear.

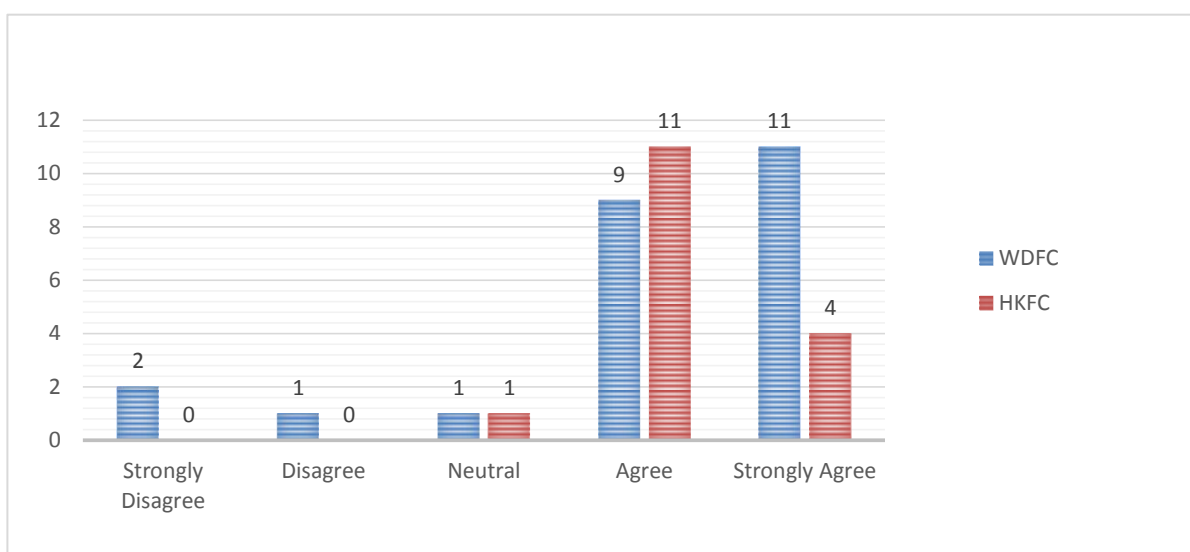


Fig 4.36: Risk of injury in training can be reduced by appropriate sportswear

Table 15: Question-related to the occurrence of injury

Name of the club	The injury is most likely occurring towards the end of the match.	Response					Total
		strongly disagree	Disagree	Neutral	Agree	strongly agree	
WDFC	No	2	8	6	3	5	24
	%	8%	33%	25%	13%	21%	100%
HKFC	No	1	9	1	5	-	16
	%	6.25%	56.25%	6.25%	31.25%	-	100%

As it can be seen from the above table 15, 10(41%) of Wolaita Dicha Football Club players strongly disagree or disagree that injury is not likely occurring towards the end of the match, and 6(25%) of them are neutral while the rest 8(34%) of them strongly agree or agree that injury is most likely occurring towards the end of the match. In Hawassa Kenema Football Club 10(62.5%) of players strongly disagree or disagree that injury is not likely occurring towards the end of the match, only 1(6.25%) of them is neutral while the rest 5(31.25%) of them strongly agree that Injury is most likely occurring towards the end of the match. From this, the researcher concludes that most of the player strongly disagree or disagree with the idea that injuries are likely occurring at the end of the match.

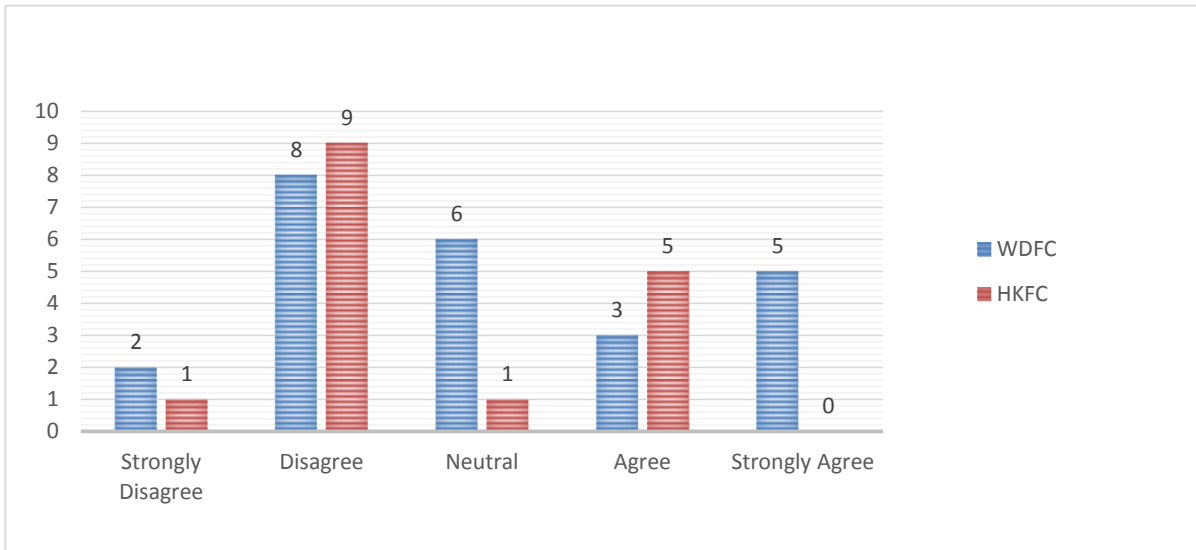


Fig 4.37Injury is most likely occurring towards the end of the match.

Table 16: Questions related to the reduction of injury through warming up, cool down and stretching

Name of the club	The risk of injury is reduced by thoroughly warming up and stretching prior to		Response					
			SD	D	NAND	A	SA	Total
WDFC	Training:	No (%)	-	3(12.5%)	-	6(25%)	15(62.5%)	24(100%)
	Match:	No (%)	1(4%)	3(12.5%)	-	5(21%)	15(62.5%)	24(100%)
HKFC	Training:	No (%)	-	1(6%)	-	12(75%)	3(19%)	16(100%)
	Match:	No (%)	-	1(6%)	-	12(75%)	3(19%)	16(100%)
	The risk of injury is reduced by thoroughly cooling down and stretching after							
WDFC	Training:	No (%)	1(4%)	-	-	5(21%)	18(75%)	24(100%)
	Match:	No (%)	1(4%)	-	1(4%)	5(21%)	17(71%)	24(100%)
HKFC	Training:	No (%)	-	-	-	13(81%)	3(19%)	16(100%)
	Match:	No (%)	-	-	-	13(81%)	3(19%)	16(100%)

Key: SD=strongly disagree, D=disagree, NAND=neither agree nor disagree, A=agree, SA=strongly agree.

As it can be seen from the above table 16, 3(12.5%) of Wolaita Dicha Football Club players disagree that the risk of injury is not reduced by thoroughly warming up and stretching prior to training and the rest 21(87.5%) of them strongly agree or agree as it can be reduced, whereas 4(17%) of the players strongly disagree and disagree that the risk of injury is not reduced by thoroughly warming up and stretching prior to match the rest 20(83.5%) of them strongly agree or agree as it can be reduced. At the same time in Hawassa Kenema Football Club only 1(6%) player disagree that the risk of injury is not reduced by thoroughly warming up and stretching prior to training and match while the rest 15(94%) of them strongly agree or agree that the risk of injury can be reduced by thoroughly warming up and stretching prior to training and match respectively.

The above table 16 also shows whether risk of injury can be reduced through cooling down and stretching after training and match accordingly only 1(4%) of Wolaita Dicha Football

Club player strongly disagree that the risk of injury is not reduced by thoroughly cooling down and stretching prior to training and the rest 23(96%) of them strongly agree or agree as it can be reduced. In the same club 1(4%) player strongly disagree that the risk of injury is not reduced by thoroughly cooling down and stretching after match, and only 1(4%) player is neutral, while the rest 22(92%) of them strongly agree and agree that the risk of injury is reduced by thoroughly cooling down and stretching after match. At the same time in Hawassa Kenema Football Club in both training and match, 16(100%) of the players strongly agree and agree that the risk of injury is reduced by thoroughly cooling down and stretching after training and match respectively. The above information shows that the majority of respondents believe that the risk of injury is reduced by doing warming up and stretching and cooling down and stretching prior to and after training and match respectively. By considering this the researcher concludes that doing warming up and stretching as well as cooling down and stretching prior to and after training and match can help the players to reduce the risk of injury.

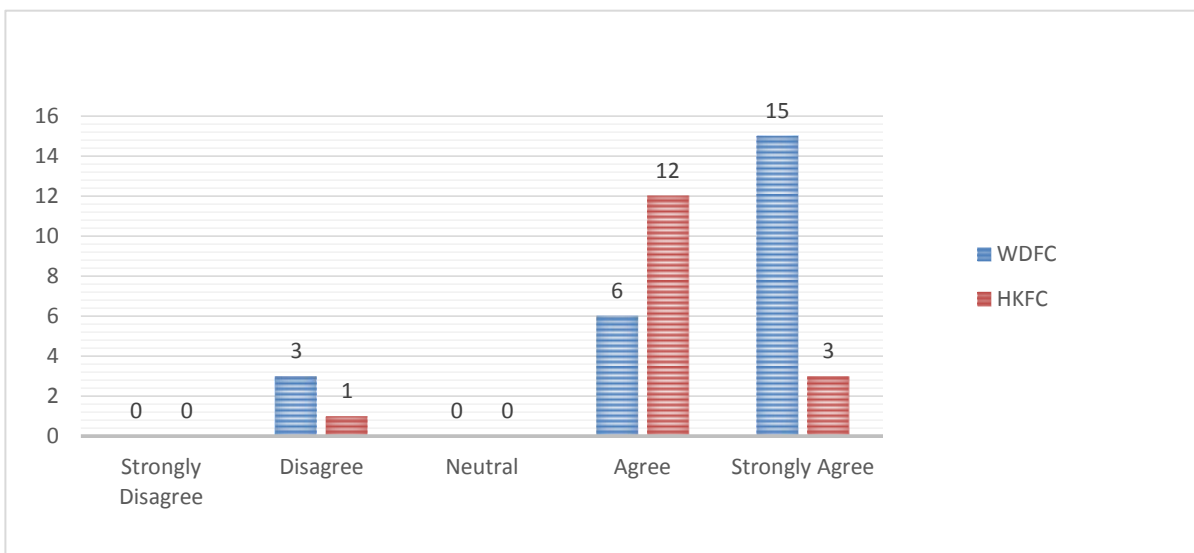


Fig 4.38Reduction of injury through warming up and stretching prior to training

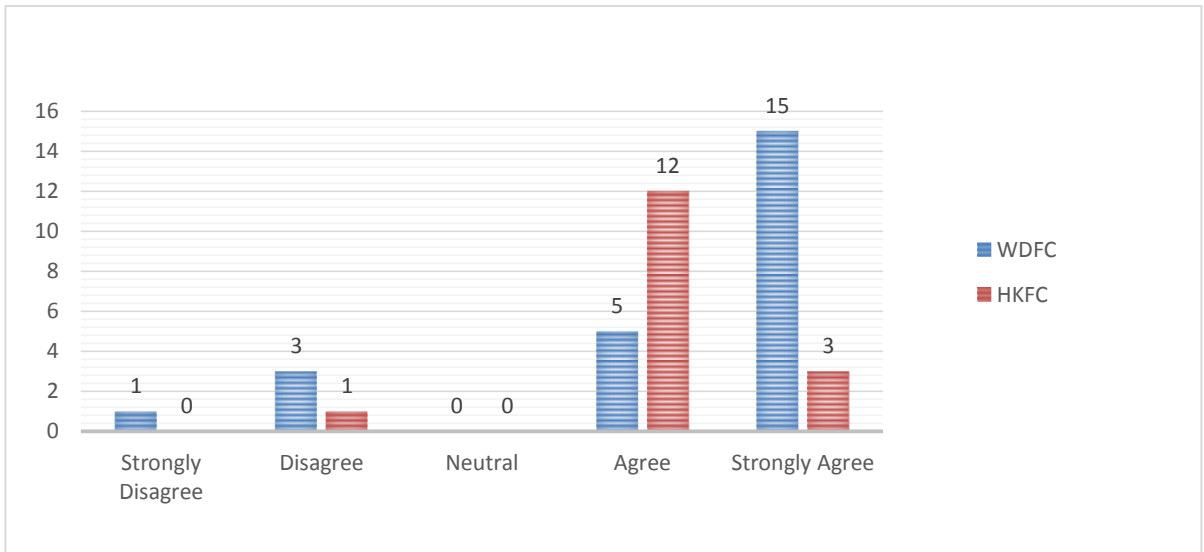


Fig 4.39 Reduction of injury through warming up and stretching prior to the match

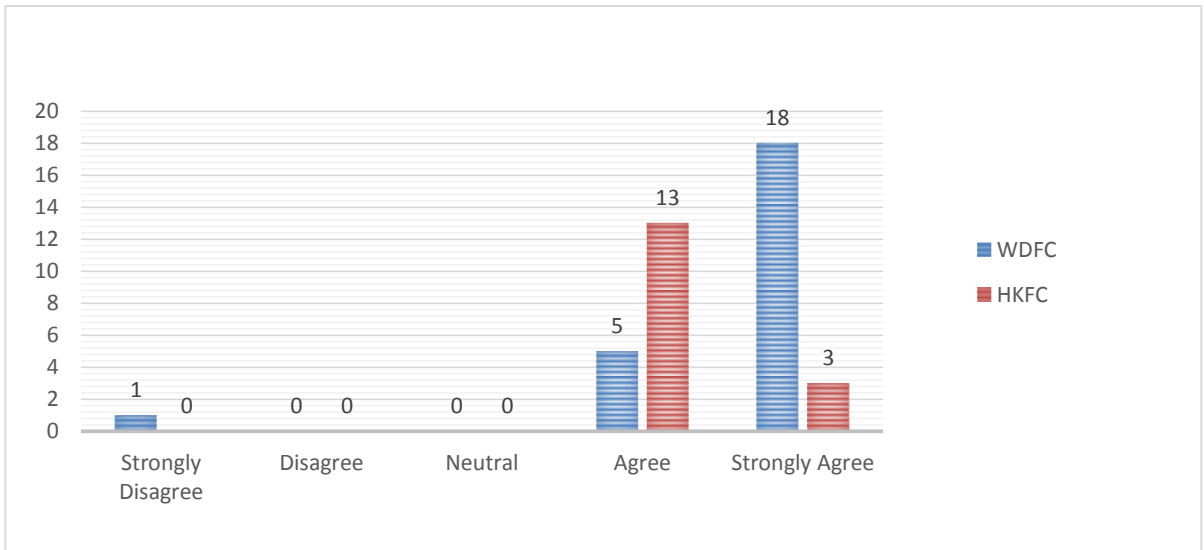


Fig 4.40 Reduction of injury through cooling down and stretching after training

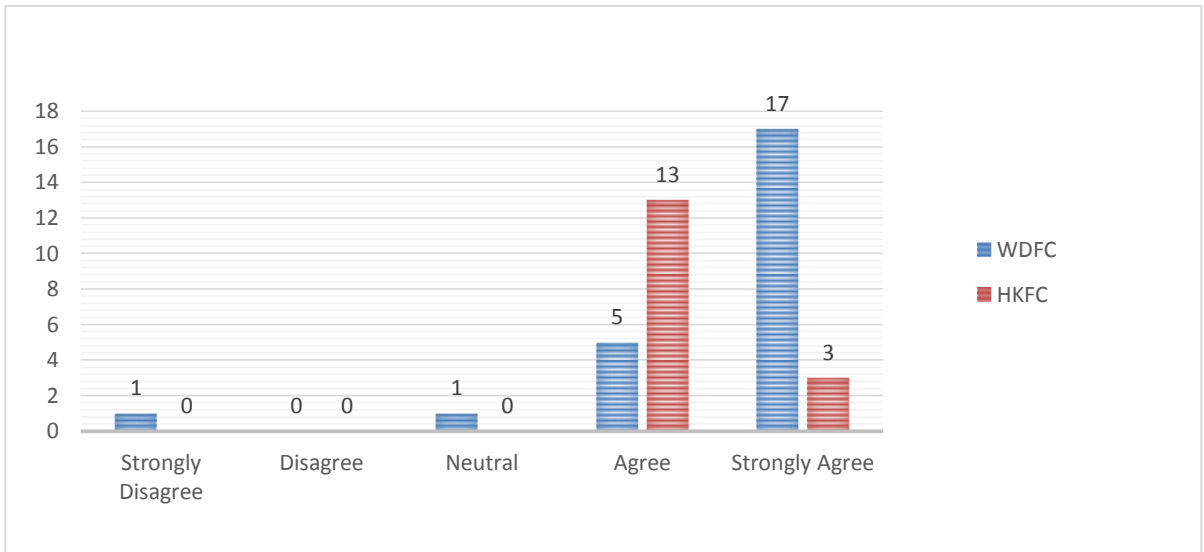


Fig 4.41Reduction of injury through cooling down and stretching after the match

Table 17: Question-related to Players flexibility and occurrence of injury

Name of the clubs	Players with poor flexibility are more likely to get injured than those with good flexibility	Response					Total
		strongly disagree	Disagree	,Neutral	Agree	strongly agree	
WDFC	No	1	1	3	6	13	24
	%	4%	4%	13%	25%	54%	100%
HKFC	No	1	1	1	11	2	16
	%	6%	6%	6%	69%	13%	100%

Table 17 explains that, 2(8%) of Wolaita Dicha Football Club players as well as 2(12%) of Hawassa Kenema Football Club players strongly disagree or disagree that Players with poor flexibility are not likely to get injured than those with good flexibility and 3(13%) of Wolaita Dicha Football club players, 1(6%) of Hawassa Kenema Football club players are neutral while the rest 19(79%) from Wolaita Dicha, 13(82%) from Hawassa kenema strongly agree or agree that Players with poor flexibility are more likely to get injured than those with good flexibility. From the above table, the researcher concludes that majority of players strongly

agree or agree that players with good flexibility have a lower chance of injury risk than players with poor flexibility.

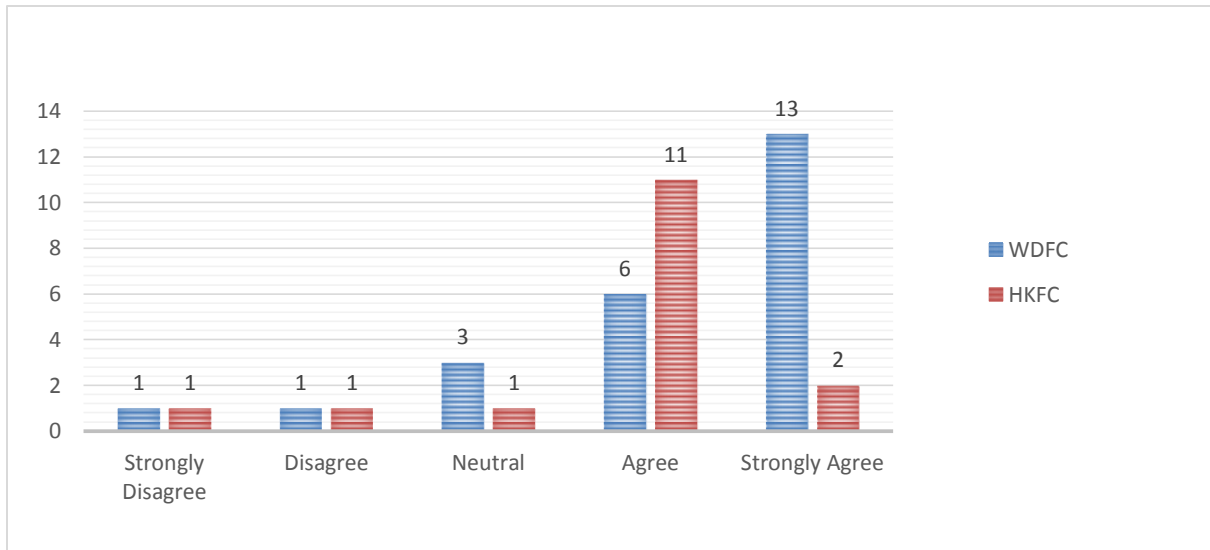


Fig 4.42 Players with poor flexibility are more prone to injury than with good flexibility

Table 18: Question-related to the importance of muscles against injury

Name of the club	Strong muscles are important in the protection against injury.	Response					Total
		strongly disagree	Disagree	Neutral	agree	strongly agree	
WDFC	No	1	2	1	7	13	24
	%	4%	8%	4%	29%	54%	100%
HKFC	No	-	3	1	9	3	16
	%	-	19%	6%	56%	19%	100%

According to the data obtained in Table 18, in Wolaita Dicha Football Club 3(12%) and in Hawassa Kenema Football Club 3(19%) of the players strongly disagree or disagree that strong muscles are not important in the protection against injury, only 1(4%) player from Wolaita Dicha and 1(6%) player from Hawassa kenema are neutral, while the rest 20(83%) from Wolaita Dicha and 12(75%) from Hawassa kenema strongly agree or agree that strong muscles are important in the protection against injury. From this, we can say that strong muscles are important for the protection against injury.

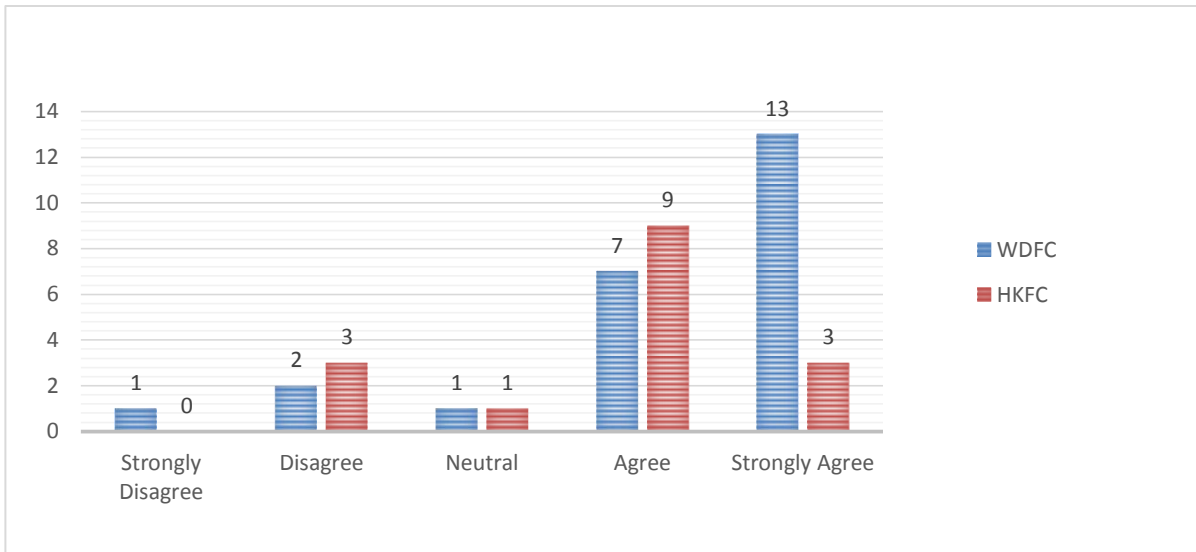


Fig 4.43 Strong muscles are important for the protection of injury

Table 19: Questions related to Injury Mechanism and Injury Location

Independent Samples Test						
Variables	Team	No	Mean+ SD	T	Df	T-test for Equality of Means
						Sig. (2-tailed)
Injury mechanism likelihood	Wolaita Dicha	24	33.08±7.73	-0.71	38	0.48
	Hawassa Kenema	16	34.81±7.32			
Injury mechanism severity	Wolaita Dicha	24	34.5±4.09	-3.9	38	0.00
	Hawassa Kenema	16	39.31±3.36			
Injury location likelihood	Wolaita Dicha	24	33.37±8.18	2.27	38	0.03
	Hawassa Kenema	16	27.44±8.00			
Injury location severity	Wolaita Dicha	24	35.25±7.52	3.77	38	0.001
	Hawassa Kenema	16	26.94±5.63			

An independent sample t-test was conducted to compare the likelihood of injury mechanism between the two teams and accordingly no significant difference was found between the

teams Wolaita Dicha Football Club players mean score (33.08 ± 7.73 , $N=24$); Hawassa Kanama Football Club players mean score (34.81 ± 7.32 , $N=16$), $t(38) = -0.71$, $p=0.49$.

To compare the severity of injury mechanism between the two teams and accordingly Hawassa Kanama Football Club players has a higher mean score (39.31 ± 3.36 , $N=16$) than Wolaita Dicha Football Club players mean score (34.5 ± 4.09 , $N=24$), $t(38) = -3.9$, $p=0.01$.

An independent sample t-test was also conducted to compare the likelihood of injury occurrence by body parts involved between the two teams and Wolaita Dicha Football Club players have a higher mean score (33.37 ± 8.18 , $N=24$) than Hawassa Kanama Football Club players (27.44 ± 8.00 , $N=16$), $t(38) = 2.27$, $p=0.029$.

To compare the severity of injury occurrence involved between the two teams and accordingly Wolaita Dicha Football Club players has a higher mean score (35.25 ± 7.52 , $N=24$) than Hawassa Kanama Football Club players (26.94 ± 5.63 , $N=16$), $t(38) = 3.77$, $p=0.001$.

Therefore, Hawassa Kanama football players have a higher severest prevalence of football-related injury than Wolaita Dicha football club players. Nevertheless, Wolaita Dicha football club players' injury pattern and incidence in relation to body parts injured and the severity of injury by body parts involved is substantially higher than the Hawassa Kanama football clubs players.

Table 20: Questions related to Strength training and flexibility training

Name of the club	Did you practice Strength training and flexibility training at least 2-3 days per week?		Response		
			Yes	No	Total
WDFC	Strength training:	No (%)	18(75%)	6(25%)	24(100%)
	Flexibility training:	No (%)	17(71%)	7(29%)	24(100%)
HKFC	Strength training:	No (%)	14(87.5%)	2(12.5%)	16(100%)
	Flexibility training:	No (%)	14(87.5%)	2(12.5%)	16(100%)

As can be seen in table 20, from the total 24 Wolaita Dicha Football club players, 18(75%) and 17(71%) of them said that they practice strength training and flexibility at least 2-3 days per week respectively whereas the rest 6(25%) and 7(29%) of them responded that they practice neither strength nor flexibility training at least 2-3 days per week. At the same time from the total 16 Hawassa Kenema football club players, 14(87.5%)of them said that they practice strength and flexibility training at least 2-3 days per week, whereas 2(12.5%) of respondents responded that they do not practice strength and flexibility training at least 2-3 days per week. Based on this the researcher concluded that the majority of players in both clubs practice strength and flexibility training at least 2-3 days per week.

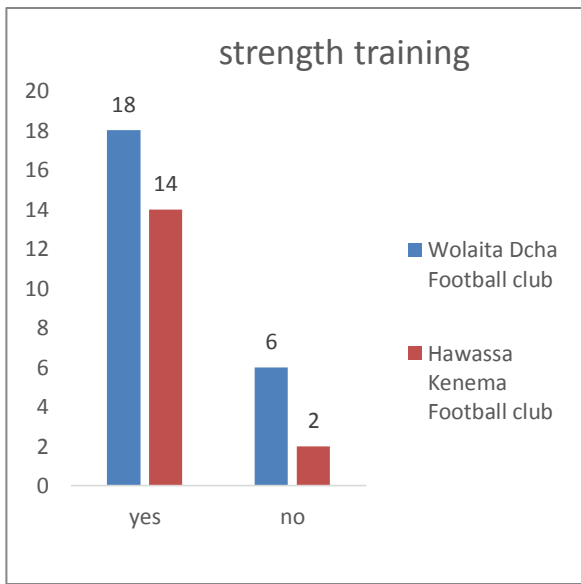


Fig 4.44strength training

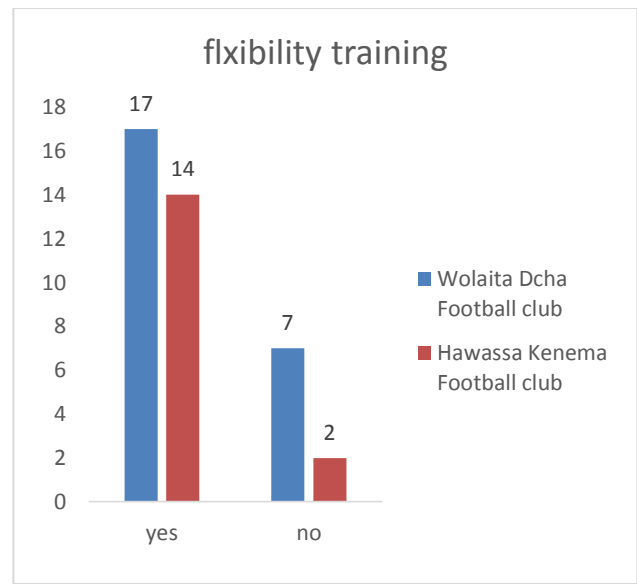


Fig 4.45flexibility training

Table 21: Players reason for not participating in strength and flexibility training

Name of the club			Response					Total
			There is not enough time	Too tired after training or match	Not told to do it	No advice is given on techniques	I don't believe it is necessary	
WDFC	Strength training:	No (%)	3(50%)	3(50%)	-	-	-	6(100%)
	Flexibility training:	No (%)	3(43%)	2(28.5%)	-	-	2(29%)	7(100%)
HKFC	Strength training:	No (%)	-	1(50%)	-	-	1(50%)	2(100%)
	Flexibility Training:	No (%)	-	1(50%)	-	-	1(50%)	2(100%)

As it can be seen from table 21 above, 6 and 7 players from Wolaita Dicha Football club and 2 and 2 players from Hawassa Kenema Football club said that they didn't do strength and flexibility training respectively and when they are asked to forward their reason 3(50%), 3(43%) of them in Wolaita Dicha football club said that they don't have enough time to do it. The rest 3(50%), 2(29) players from Wolaita Dicha Football club and 1(50%) in each situation from Hawassa Kenema Football club said they don't do it because they are tired after training or match. Only 1(50%) player in each situation from Hawassa Football club said he is not doing it because he doesn't believe it is necessary.

Table 22: Questions related to the availability of medical assistance and equipment in the clubs

Name of the club	Did you have medical assistance in your club?	Response		
		Yes	No	Total
WDFC	No (%)	23 (96%)	1(4%)	24(100%)
HKFC	No (%)	16(100%)	-	16(100%)
	Is there enough medical equipment in your club?	Yes	No	Total
WDFC	No (%)	11(46%)	13(54%)	24(100%the)
HKFC	No (%)	2(12.5%)	14(87.5%)	16(100%)

Table 22 shows that 23(96%) of Wolaita Dicha Football club players responded that they have medical assistance in their club. Only 1(4%) respondent said that they do not have medical assistance, whereas all 16(100%) Hawassa Kenema football club players replied that they have medical assistance in their club. Concerning the availability of medical equipment, 11(46%) Wolaita Dicha Football club players said that there is enough medical equipment in their club, while 13(54%) of them replied as there is not enough medical equipment in their club. Similarly, 2(12.5%) of Hawassa Kenema Football club players pointed out there is enough medical equipment in their club, while the remaining 14(87.5%) responded that there is not enough medical equipment in their club. Based on this the researcher conclude that there is not enough medical equipment in both clubs even though the availability of medical assistance are sufficient.

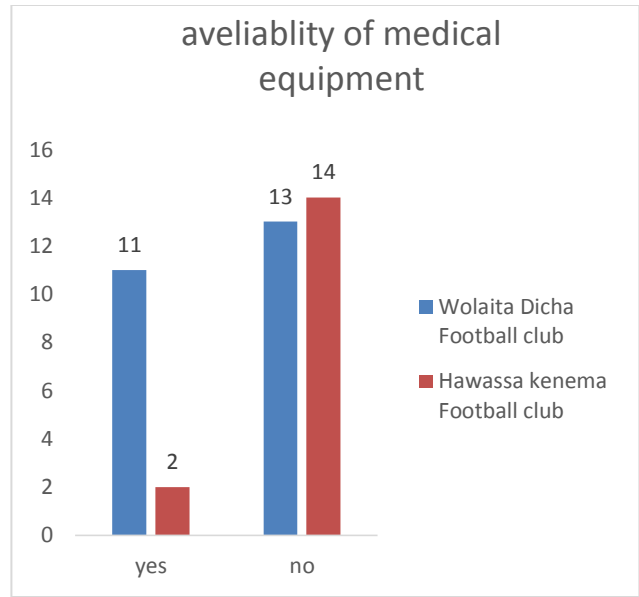
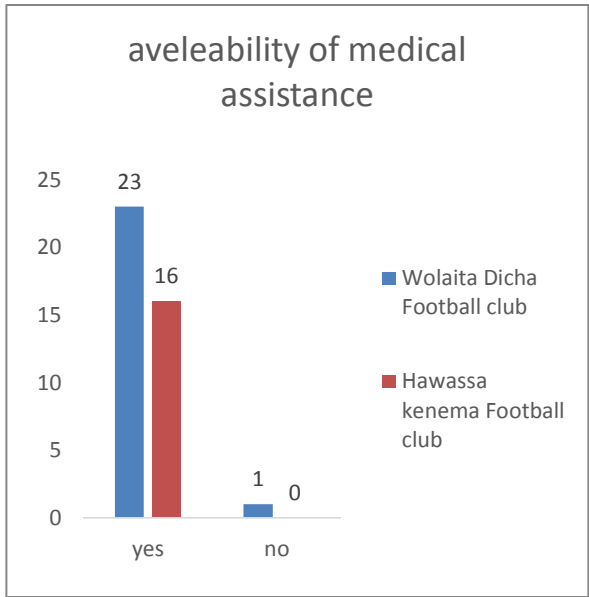


Fig 4.46availability of medical assistance **Fig 4.47**availability of medical equipment

Table 23: Questions related to rest and recovery time

Name of the club	Do you take enough rest after training or match	Response		
		Yes	No	Total
WDFC	No (%)	22(92%)	2(8%)	24(100%)
HKFC	No (%)	14(87.5%)	2(12.5%)	16(100%)
	Do you have enough recovery time between training times?	Yes	No	Total
WDFC	No (%)	21(87.5%)	3(12.5%)	24(100%)
HKFC	No (%)	13(81%)	3(19%)	16(100%)

As can be seen in the above table 23, 22(92%) of Wolaita Dicha Football club players responded that they take enough rest after training or match and the rest 2(8%) of them said they don't take enough rest after training or match. Similarly in Hawassa Kenema football club 14(87.5%) of the respondents said that they take enough rest after training or match and the rest 2(12.5%) of them replied that they don't take enough rest after training or match.

In addition in the above table players were also asked if they have enough recovery time between times and accordingly 21(87.5%) of respondents in Wolaita Dicha Football club responded *that they* have enough recovery time between training times *while the rest 3(12.5%) of them replied that they don't* have enough recovery time between training times. *At the same time* in Hawassa Kenema football club, 13(81%) of the respondents said *that they* have enough recovery time between training times and the remaining 3(19%) of them *responded that they don't* have enough recovery time. Based on this the researcher conclude that the majority of the players in both clubs take enough rest after training or match and have enough recovery time between training times.

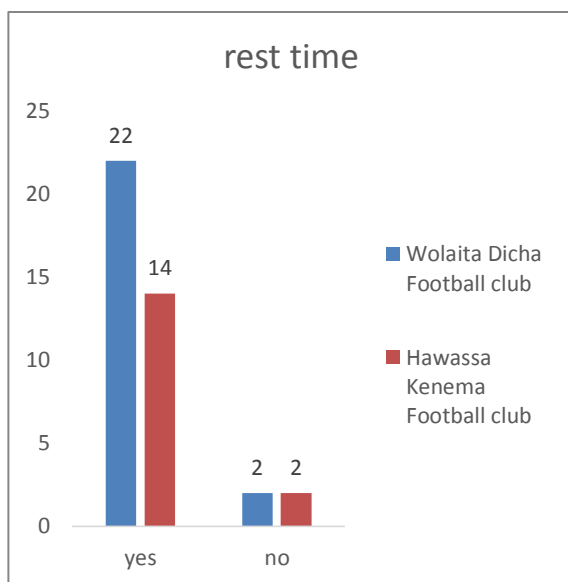


Fig 4.48 rest time

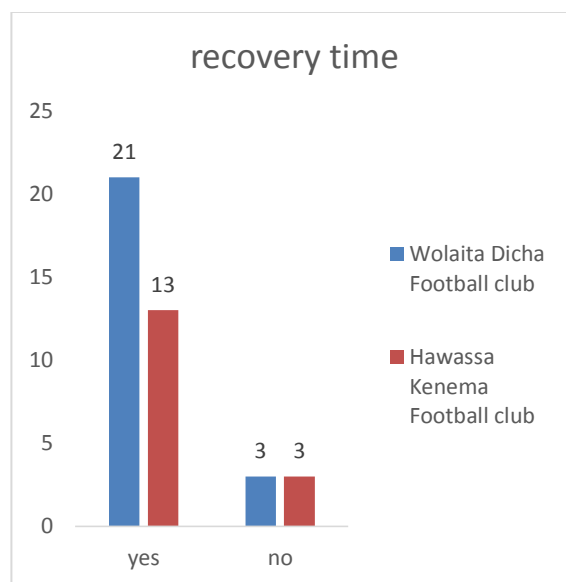


Fig 4.49recovery time

Table 24: Questions related to consumption of enough fluid

Name of the club	Do you take enough fluid before, during, after training and match	Response		
		Yes	No	Total
WDFC	No	23	1	24
	%	96%	4%	100%
HKFC	No	16	-	16
	%	100%	-	100%

As indicated in Table 24 indicated that 23(96%) of Wolaita Dicha Football club players replied that they take enough fluid before, during and after training and match while 1(4%) of respondents responded that they don't take enough fluid before, during and after training and match. In addition, all 16(100%) Hawassa Kenema football club players said that they take enough fluid before, during and after training and match. Based on this the researcher conclude that almost all players of both clubs consume enough fluid before, during and after training and match.

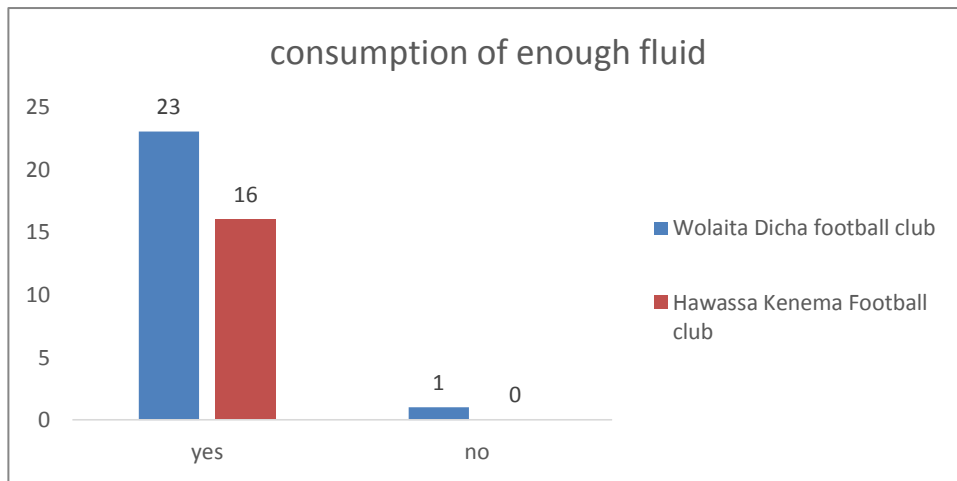


Fig 4.50consumption of enough fluid

4.3 Analysis and interpretation of player's response to open-ended questions

Two open-ended questions were prepared for players.

For question number 15 and 16 players were asked about their experience about the cause of injury in training and match time almost all players of both clubs respond that the causes of injuries are the following:

- Lack of or inappropriate warming ups, cooling down and stretching exercises.
- Unsuitable playing surface.
- Lack of materials for training and computation.
- Not following appropriate training principles like training load and progression.
- Lack of or inappropriate consumption of fluid, carbohydrate foods, and rest.
- Crashing with other players especially during match time. From this we can understand that most injuries are caused by the above causes.

4.4 Analysis and Interpretation of Data Obtained From Coaching Staffs Interview

Table 25: Background information of coaches

Name of the club		Gender		Education level				Experience			
		Male	Female	Diploma	Degree	2 nd degree	Third degree	1-5	6-10	11-15	>16
WDFC	No	3	-	2	-	-	1	2	-	1	-
	%	100%	0%	67%	-	-	33%	67%	0%	33%	-
HKFC	No	3	0	1	2	-	-	1	1	1	-
	%	100%	0%	33%	67%	-	-	33.3%	33.3%	33.3%	-

As indicated table 30, indicated that all the respondents are males. And there education level of Wolaita Dicha football club players 2(67%) of respondents are having diploma, and 1(33%) of respondent have third degree, whereas Hawassa Kenema football club players, 2(67%) of respondents have degree, and 1(33%) of respondent have the third diploma. there work experience of Wolaita Dicha football club players 2(67%) of respondents have 1-5, and 1(33%) of respondent have 11-15 years of experience, whereas Hawassa Kenema football club 1(33.3%) of respondent have 1-5,1(33.3%)of respondent have 6-10, 1(33.3%) of the respondent have 11-15 years of experience.

Information and data were collected from coaching staffs by using interview question. The interview was given for tow club Wolaita Dicha and Hawassa Kenema football clubs coaching staffs. The researcher interviewed the coaching staffs and the results are summarized as follows.

- ❖ For the question “do you follow the principle of training?” All the coaches in both clubs give the similar answer they follow the principle of coaching.
- ❖ For the question “do you believe the medical assistance in the club is professional?, From Wolaita Dicha and Hawassa Kenema football clubs tow coaches from each club response they do not believe that the medical staffs are not professionals, whereas one

coach from each club believe that the medical staffs are professionals. From this, the researcher concludes that the medical staffs in both clubs are not professionals.

- ❖ For the question “do you have enough training materials? All the coaching staffs in both clubs give the same response there is no enough training material for training in both clubs. From the above data, the researcher concludes that in both clubs there are no enough training materials.
- ❖ The fourth question is about are they following injury prevention strategies. Three of them replied they follow injury prevention strategies, whereas three of them replied they do not follow injury prevention strategies because of there is lack of materials and knowledge about injury prevention strategies.
- ❖ For question number 5, which asked “do you prepare training plan by including injury prevention strategies?” all of them response they don’t include injury prevention strategies when they prepare training plan, because of the following problems:
 - Shortage of materials and equipment
 - Limitation of information about injury prevention strategies.
 - There is no anybody who supervise or assess the training plan and who prepare formats of injury prevention strategies.

Therefore from the above response, the researcher concludes that the coaches in both club when they prepare training plan they don’t include injury prevention strategies because of

- Shortage of materials;
- Lack of knowledge; and
- There is nobody who follows the training plan how injury prevention strategies are implemented.

Question number 6, that was asked “do you advise your players to take enough rest and fluids intake?” the respondents response they advise their players to take enough rest and fluids. From this, the researcher concludes that the coaches advice their players to take rest and fluids.

For question 7, what are the most common football injuries that occur in your players? All coaching staffs in both clubs give the similar responses the most common football injuries are:

- Upper extremity injury
- Hamstring injury
- Knee injury
- Ankle injury
- Sprain injury

The final question that was asked the coaching staffs what are the causes of those injuries and how can you prevent them? They responded that the causes are

- Lack of material during training and match.
- Unsuitable playing surface or field.
- Lack of physical fitness.
- Lack of warming ups and cooling down.
- Fatigue (lack of fluids and rest).
- Crashing with other players.

They response that injuries can be prevented by:

- Fulfilling deferent materials for training and match.
- Making appropriate playing surface.
- Following the principle of training.
- Doing appropriate warming up and cooling down training.
- Take appropriate fluid intake and rest.

4.5 Analysis and interpretation of field observation

The field observation was made at Wolaita Sodo stadium and Hawassa Ketema artificial filed stadium during training and match session. The researcher observed the implementation of injury prevention strategies in Wolaita Dicha and Hawassa Kenema football clubs. During practical and completion session the researcher observed the following points:

- The availability of suitable playing surface in Wolaita Dicha football club is below the standard, whereas Hawassa Kenema training filed is better in quality.
- There is lack of training materials for training and match in both clubs.
- As the researcher observed the player get a shower after training and match.
- Almost all coaches following training principles, but the training load is too high for some players.
- In both club training session, there is a warming up, main part, and cooling down period.
- In both club, match session, they do warming ups before the match, but they don't cool down.
- The researcher also observes the medical staffs in both clubs are not qualified they work by experience.

CHAPTER FIVE

SUMMARY CONCLUSION AND RECOMMENDATION

This final chapter deals with the summary of major findings of the study, conclusion drawn from major findings and recommendations in which the researcher assumed to be operational to prevent injuries that happened in football players.

5.1 Summary

The major purpose of this study was to assess the implementation of injury prevention strategies in some selected Southern Nations Nationalities and Peoples Ethiopian Primer League Football Clubs. In order to achieve the objective two clubs namely Wolaita Dicha and Hawassa Kenema football clubs were selected by simple random sampling techniques of lottery method. Fifty-six Players and six coaches participated in the study. The required data were gathered through a questionnaire, interview, and field observation. In the analysis of the data, both quantitative and qualitative methods were employed and the collected data were analyzed using SPSS version 25 statistical software. Specifically different descriptive statistical tools such as mean, standard deviation, frequency distribution; percentage and Independent Samples Test were used to analyze the collected data. Accordingly, the result of the study shows the following findings;

- Regarding appropriate and fit sportswear in both clubs, the players wear appropriate and fit sportswear to protect themselves from injury. Related to this majority of players in both clubs replied “strongly agree” and “agree” on the idea that the risk of injury can be reduced by wearing appropriate sportswear.
- Information gathered from player’s show that most of the players in both clubs do not take appropriate carbohydrate intake and most of the players are given nutritional advice sometimes from their coaches and some of them didn’t get nutritional advice as a whole.
- Regarding warming up and a cooling down periods most of the players in both clubs have a warming-up period during training and match session, and also they have a cooling-down period during a training session but they don’t have cooling down period during the match. Majority of respondents believe that the risk of injury is reduced by doing warming

up and stretching and cooling down and stretching prior to and after training and match respectively.

- Concerning stretching of major muscles during warming up and cool down most players stretch the major leg muscles during warming up period to training and match and also during cooling down period to training. But during cooling down, period after match most players especially in Wolaita Dicha Football club did not stretch the major leg muscles.
- Regarding extra flexibility training most of the players always, very often and often participate in flexibility training as team session and individual work but there are still some players who didn't undertake flexibility training as part of team session and or individual work which may lead them to injury. And the majority of players "strongly agree" or "agree" that players with good flexibility have a lower chance of injury risk than players with poor flexibility.
- Majority of players in both clubs sometimes participate in strength training as a team session and extra individual work. In addition, some of the players did not undertake strength training as a team or individually which may lead them to exposure of frequent injury.
- The Majority of the participants from both clubs are "strongly agree" or "agree" that there is a chance of sustaining an injury during training and match that prevents them from being available for selection. And also the majority of the participant players "strongly agree" or "agree" that there is a greater chance of sustaining an injury during a competitive match than during training.
- Majority of the players from both clubs "agree" and "strongly agree" that injuries are a consequence of the action of other players. And most of the player strongly disagree or disagree with the idea that injuries are likely occurring at the end of the match.
- Regarding importance of muscles in injury protection majority of players "agree" that strong muscles are important in the protection against injury.
- Regarding likelihood of injury mechanism in both clubs the result of p -value indicates 0.49, this shows that it is statistically insignificant
- Regarding severity injury mechanism in both football clubs, the result of p -value is 0.01; this indicates that the data is statistically significant that mince the severity of the

occurrence of the injury is by different mechanism is very high. From those mechanisms, the most frequent and the most common are Tackling Tackled, Overuse Jumping, Landing, and Collision.

- An independent sample t-test was also conducted to compare the likelihood of injury occurrence by body parts involved between the two teams the result of p-value scores 0.029, so it is significant that mince injury can occur in deferent body parts. From the location or body parts which most of injurieshappen from those body parts Head, Hamstrings, Knee, Calf, Ankle, Foot, and Upper extremity are common.
- Concerning to severity of injury occurrence, the result of p-value score 0.001, this mince the data is significant so the severity of occurrence in the different body part is very high as the data obtained from respondents indicate majority of them beloved that injuries are frequently occurs in the head and lower extremities.
- Regarding Strength training and flexibility training majority of players in both clubs practice strength and flexibility training at least 2-3 days per week.
- Concerning availability of medical assistance and equipment in the clubs, there is not enough medical equipment in both clubs even though medical assistance is available.
- Regarding rest and recovery time, the majority of the players in both clubs take enough rest after training or match and have enough recovery time between training times. And almost all players of both clubs consume enough fluid before, during and after training and match.
- About the cause of injury in training and match time almost all players of both clubs and coaches respond that the causes of injuries are the following:
 - Lack of or inappropriate warming ups, cooling downs, and stretching exercises.
 - Unsuitable playing surface or filed.
 - Lack of quality materials for training and competition.
 - Not following appropriate training principles like training load and progression.
 - Lack of or inappropriate consumption of fluid, carbohydrate foods, and rest.
 - Colliding with other players especially during match time.
 - Lack of physical fitness.

- Fatigue (lack of fluids and rest).
- Respondents believed that injuries can be prevented by:
 - Fulfilling quality materials for training and match.
 - Making appropriate playing surface.
 - Following the principle of training.
 - Doing appropriate warming up and cooling down training before training and match.
 - Take appropriate fluid intake and rest.

5.2 Conclusion

Based on the findings of the study, the following conclusions can be drawn;

- In training and competitive matches, players wear appropriate and fit sportswear to protect themselves from injury. The risk of injury can be reduced by wearing appropriate sportswear.
- The football players in both of the clubs do not consume appropriate carbohydrate. As a whole, the nutritional advice given to the players are unsatisfactory so they are at the risk of injury.
- The players in both clubs have a warming-up period during training and match session, and also they have a cool-down period during a training session but they don't have cooling down period during the match and stretch the major leg muscle during warming up period to training and match and also during cooling down period to training. During cooling down period after match players, especially in Wolaita Dicha Football club, did not stretch the major muscles. But doing warming up and stretching as well as cooling down and stretching prior to and after training and match can help the players to reduce the risk of injury.
- Players are participating in flexibility training as team session and individual work, but there are still football players who didn't undertake flexibility training as part of team session and or individual work which may lead them to injury. Regarding extra strength training majority of players participate in strength training as a team session and extra individual work. In addition, some of the players did not undertake strength training as a team or individually which may lead them to exposure to frequent injury.

- Regarding likelihood of injury mechanism in both clubs the result of p-value indicates 0.49, this shows that it is statistically insignificant
- Injury can occur in deferent mechanism and in different body parts and the mechanisms of injury occurrence in football are many but from those, the most frequent and siver are Tackling, Tackled, Overuse Jumping, Landing, and Collision. And also there is body parts which football injuries are frequently occurred those locations wear to head and lower extremities and injury that happened in that location is more siver.
- There is medical assistance in the clubs, but they are not professionals and also there is not enough medical equipment in both clubs to be used by that available medical assistance.
- The availability of suitable playing surface in Wolaita Dicha football club is below the standard, whereas Hawassa Kenema training filed is better in quality. And also there is lack of quality training materials for training and match in both clubs.
- There is Limitation of information about injury prevention strategies. And also there is no concerned body who supervise or assess the training plan and who prepare formats of injury prevention strategies.

5.3 Recommendations

In the light of the problems identified and data gathered from this study, the following objective recommendations are forwarded:

- Implementing injury prevention strategies is very important to reduce the risk of injury that will possibly happen to football players. Therefore, coaches and players must know those injury prevention strategies and implement them in their training and match session.
- In order to protect players from injury appropriate and quality materials and equipment are needed. Therefore, clubs should fulfill those materials and equipment to reduce the risk of injury.

- Coaches should prepare their training plan by including injury prevention strategies as well as they must follow the principle of training to eradicate the occurrence of injury in their clubs.
- Coaches must encourage players to wear appropriate and fit sportswear, to take rest and to consume carbohydrates and fluid before, during, and after training and match. Players must follow this to protect themselves from injury.
- Injury can occur in deferent mechanism and in different body parts so to prevent those injuries the players must do appropriate warming ups and cooling downs activities and participate in flexibility and strength trading to develop strength for their boy pares especially in lower extremities to protect themselves from injury.
- Qualified medical staffs are necessary for injury prevention. Therefore the clubs should employ qualified medical persons and also fulfill medical equipment's for them.
- The concerned body should provide good facilities and equipment, suitable playing field, formulate a proposal to the concerned donor to get funds, and mobilize, promote and advertise the importance of sport to the government in order to get an annual budget.

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Appendix's

Appendix I

ADDIS ABABA UNIVERSITY
COLLEGE OF NATURAL AND COMPUTATIONAL SCIENCES
DEPARTMENT OF SPORT SCIENCE

Questionnaire to be filled by Football players

Dear Football players, the main purpose of this questionnaire is to gather data on the implementation of football injury prevention strategies in some selected southern region Ethiopian Premier League Football Clubs. Your honest and sincere cooperation is essential for the success of this study. Therefore, you are kindly requested to give your response for each of the following questions. Bear in mind that all information collected is used only for academic or research purpose and will be kept confidential.

Thanks in advance for your cooperation!!!

General Direction

- Be sure that your response is safely protected
- No need of writing your name

Part one: Personal information

Indicate your response by putting a tick (✓) mark on the space provided where appropriate. For close-ended questions circle the option of your choice.

1. Age A.20-25 B. 26-30 C. 31-35 D. Above 35
2. Height _____
3. Weight _____
4. Name of the club _____
5. Number of year in the club _____
6. Playing position
A. Goalkeeper B. Defender C. Midfielder D. Forward
7. How many injuries have you received over the last 12 months during training or competitive match

Competitive match injury A. 0 B. 1-2 C. 3-4 D.5 and above
 Training session injury A. 0 B. 1-2 C. 3-4 D.5 and above

Part two: Main Questions

I. The following questions are related to some of the factors that may lead to the occurrence of injury to players if they are not done appropriately. Please indicate the extent to which you apply in your training sessions a team and individually by putting a tick (√) mark in the box given across each statement.

No		Always 100%	Very often 75%	Often 50%	Sometimes 25%	Never 0%
1	Do you wear appropriate and fit sportswear in training?					
2	In competitive matches do you wear appropriate sportswear to protect yourself from injury?					
3	Do you consciously consume carbohydrates in the following situation					
	I. Pre-training					
	II. Post training					
	III. Pre-match					
	IV. Post-match					
4	Are you given any nutritional advice on what to eat?					
	I. Before training					
	II. After training					
	III. Before match					
	IV. After match					
5	Do you have a warm- up period for:					
	I. Training					
	II. Match					
6	Do you have a cool- down period at the completion of					
	I. Training					
	II. Match					

7	Do you stretch the major leg muscles in the following situation?					
	I. warming-up period to training					
	II. warming-up period to match					
	III. cooling- down after training					
	IV. cooling- down after the match					
8	Do you undertake flexibility training (not included as part of a warm-up or cool-down)?					
	I. Times per week as part of the team session					
	II. Times per week as extra individual work					
9	Do you undertake strength training in the gym?					
	I. Times per week as part of the team session					
	II. Times per week as extra individual work					

II. For the following questions please tick(√) on the description which most closely matches your opinion of the statement.

No		Strongly agree	agree	Nether agree nor disagree	disagree	Strongly disagree
1	There is a chance of sustaining an injury during training that prevents you from being available for selection.					
2	There is a chance of sustaining an injury during the competitive match that prevents you from being available for selection.					
3	There is a greater chance of sustaining an injury during a competitive match than during training.					
4	Injuries are a consequence of the action of other players.					
5	The risk of injuries in training is reduced when you wear appropriate sportswear.					
6	The injury is most likely occurring towards the end of the match.					
7	The risk of injury is reduced by thoroughly warming up and stretching prior to					
	I. Training					
	II. Match					
8	The risk of injury is reduced by thoroughly cooling down and stretching after					
	I. Training					
	II. Match					
9	Players with poor flexibility are more likely to get injured than those with good flexibility.					
10	Strong muscles are important in the protection against injury.					

III. Rank the following injury mechanisms 1-10 and injury locations from 1-11 for both the likelihood of receiving of an injury and severity of injury separately, 1 being the most likelihood and the most severe; 2=most frequently occur and more severe; 3=often occur and severe; 4=occurs sometimes and less severe; 5=never occur and not severe.

Pleas in the number you choose by making tick(v) give your answer.

No	Injury Mechanism	Likelihood					severity				
		1	2	3	4	5	1	2	3	4	5
1	Tackling										
2	Tackled										
3	Running										
4	Shooting										
5	Jumping										
6	Landing										
7	Heading										
8	Turning										
9	Collision										
10	Overuse										
	Injury Location										
1	Head										
2	Upper extremity										
3	Trunk										
4	Groin										
5	Quadriceps										
6	Hamstrings										
7	Knee										
8	Shin										
9	Calf										
10	Ankle										
11	Foot										

- B. Too tired after training or match
- C. Not told to do it
- D. No advice is given on techniques
- E. I don't believe it is necessary

9. Are you encouraged to wear appropriate sportswear?

- A. Yes
- B. No

10. Did you have medical assistance in your club?

- A. Yes
- B. No

11. Is there enough medical equipment in your club?

- A. Yes
- B. No

12. Do you take enough rest after training or match?

- A. Yes
- B. No

13. Do you take enough fluid before, during and after training and match?

- A. Yes
- B. No

14. Do you have enough recovery time between training times?

- A. Yes
- B. No

15. What is your experience about the causes of injury during training time? List the causes.

16. What is your experience about the causes of injury during match time? List the causes.

Appendix II
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Interview questions for Coaches

Dear Coaches, the purpose of this interview is to gather information about implementation of football injury prevention strategies in some selected southern region Ethiopian primer league Football clubs. So you are kindly requested to provide your opinion, experience and view freely concerning the topic under discussion

Thank you in advance!!!

General Information

Date _____ Time _____ Place _____

Gender _____

Coach's qualification _____

Years of experience in coaching _____

1. Do you follow the principle of training? If not why?
A. Yes B. No
2. Do you believe the medical assistance in the club are professional?
3. Do you have enough training materials for training?
4. Do you follow injury prevention strategies? If not why?
A. Yes B. No
5. What are the challenges that you face to follow the injury prevention strategies?
6. Do you prepare training plan by including injury prevention strategies? If not why?
A. Yes B. No
7. Do you advise your players to take enough rest and fluid intake? If not why?
A. Yes B. No
8. What are the most common sports injuries that occur in your players?
9. What are the causes of those injuries and how can you prevent them?

Appendix III
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Observation checklist

General information

1. Date of Visit _____

2. Name of the club _____

3. Number of athletes _____

No	Variables to be observed	Yes	No
1	Availability of suitable playing field. <ul style="list-style-type: none"> ➤ International standard ➤ Local standard 		
2	Availability of equipment for training		
3	Availability of shower for athletes after practical session		
4	Availability of dressing room for athletes before and after practical sessions		
5	The progress of training system <ul style="list-style-type: none"> ➤ Based on techniques 		
6	Training session <ul style="list-style-type: none"> ➤ Warming up ➤ Main part ➤ Cooling down 		
7	Computation <ul style="list-style-type: none"> ➤ Warming up ➤ Match ➤ Cooling down 		

ሀ) ግብ ጠባቂ ለ) ተከላካይ ሐ) የመሐል ሜዳ ተጫዋች መ) አጥቂ

7. ባለፉት 12 ወራት ውስጥ በትሬኒንግ ወይም በጫወታ ላይ ምን ያህል ጉዳቶች አስተናግደዋል።

በጨዋታ ላይ የደረሰጉዳት ሀ) 0 ለ) 1-2 ሐ) 3-4 መ) 5 እና ከዚያ በላይ

በልምምሉ ወቅት የደረሰ ጉዳት ሀ) 0 ለ) 1-2 ሐ) 3-4 መ) 5 እና ከዚያ በላይ

ክፍያ 2:- ዋና ጥያቄዎች

1. ከዚህ በታች የተዘረዘሩ ጥያቄዎች በአግባቡ ተግባራዊ ሳይደረጉ በሚቀርቡት ጊዜ በተጫዋቾች ላይ ጉዳት ሊያደርሱ ከሚችሉ ምክንያቶች ጋር የተያያዙ ናቸው። በግል እና በቡድን በልምምድ ወቅት እስከ ምን ድረስ ተግባራዊ እንደሚያደርጉ በሳጥኑ ውስጥ የ(✓) ምልክት በማድረግ እባክዎን ምላሽዎን ይስጡ።

ተ.ቁ		ዘወትር	በጣምበተደጋጋሚ ጊዜ	አብዛኛውን ጊዜ	አልፎ አልፎ	በጭራሽ
1	በልምምድ ወቅት አግባብነት ያለውን እና ትክክለኛ የእስፖርት ትጥቅ ያደርጋሉን?					
2	እራስዎን ከጉዳት ለመከላከል በኳስ ግጥሚያ ወይም በውድድር ወቅት አግባብነት ያለውን እና ትክክለኛ የእስፖርት ትጥቅ ያደርጋሉን?					
3	በሚከተሉት ሁኔታዎች ላይ ሆን ብለው ኃይል ሰጪ (ካርቦህይድሬት) ነገር ይወስዳሉን?					
	I. ከስልጠና በፊት					
	II. ከስልጠና በኋላ					
	III. ከግጥሚያ በፊት					
4	በሚከተለውን በተመለከተ ምን መመገብ እንዳለብዎ የአመጋገብ ዘዴን በተመለከተ ምክር ተሰጥትዎት ያውቃልን?					
	I. ከስልጠና በፊት					
	II. ከስልጠና በኋላ					
	III. ከግጥሚያ በፊት					
5	IV. ከግጥሚያ በኋላ					
	የማሟሟቂያ ጊዜ አለዎትን?					
6	I. በስልጠና ወቅት					
	II. በግጥሚያ ወቅት					

7.	በሚከተሉት ሁኔታዎች ውስጥ ዋና የእግር ጡንቻዎችን የማፍታታት (ስትሬጅ) ተግባር ያደርጋሉን?					
	I. በስልጠና ወቅት ማሟሟቅ					
	II. ለግጥሚያ ማሟሟቅ					
	III. ከስልጠና በኋላ ማቀዝቀዝ					
8.	የመተጣጠፍ እና የመዘርጋት ሥልጠና ይሰራሉን (በማሟሟቅ ወቅት ወይም በማረጋገጥ ውስጥ የማይካተት)?					
	I. በቡድን ልምምድ ወቅት በየሳምንቱ					
9	በጂምናዝየም ውስጥ የጥንካሬ ልምምድ ያደርጋሉን?					
	I. በቡድን ልምምድ ወቅት በየሳምንቱ					
	II. በግል ልምምድ ወቅት በየሳምንቱ					

II. የሚከተሉት ጥያቄዎች ከእርስዎ ሐሳብ ጋር የበለጠ የሚቀራረቡ መግለጫ ላይ የ(✓) ምልክት በማድረግ እባክዎን ምላሽዎን ይስጡ፡

ተ.ቁ		በጣምአስማ ማለሁ	እስማማሁ	ተአቅቦ	አልስማማም	በጣምአልስማ ማም
1	በልምምድ ወቅት እርስዎ በምርጫ ውስጥ እንዳይካተቱ ሊያግድዎ የሚችል ጉዳት ሊያጋጥም ይችላል።					
2	በግጥሚያ ወቅት እርስዎ በምርጫ ውስጥ እንዳይካተቱ ሊያግድዎ የሚችል ጉዳት ሊያጋጥም ይችላል።					
3	ከልምምድ ወቅት ይልቅ በግጥሚያ ወቅት ጉዳት የማጋጠም ሁኔታው ከፍተኛ ነው።					
4	ጉዳቶች ተጨባጭ በሚፈፀሟቸው ድርጊቶች					

	ምክንያት የሚከሰቱ ናቸው።					
5	አግባብነት ያላቸው የእስፖርት ትጥቆች በሚለብሱበት ጊዜ በሥልጠና ወቅት ጉዳት የመፈጠር ሁኔታ ይቀንሳል።					
6	አብዛኛውን ጊዜ ጉዳቶች የሚከሰቱት በግጥሚያው መጠናቀቂያ ላይ ነው።					
7	ከሚከተሉት በፊት የማሟሟቅ እና የማፍታታት ተግባር ካከናወኑ የጉዳት የስጋት ሁኔታ ይቀንሳል።					
	I. በሥልጠና ወቅት					
	II. በግጥሚያ ወቅት					
8	ከሚከተሉት ተግባራት በኋላ የማቀዝቀዝ እና የማፍታታት ስራ ማከናወን የጉዳት የስጋት ሁኔታ ይቀንሳል።					
	I. በሥልጠና ወቅት					
	II. በግጥሚያ ወቅት					
9	የመተጣጠፍ እና የመዘርጋት አቅም የሌላቸው ተጫዋቾች ይህ አቅም ካላቸው ተጫዋቾች የበለጠ ለጉዳት የተጋለጡ ናቸው።					
10	ጉዳትን ለመከላከል ጠንካራ ጡንቻዎች አስፈላጊ ናቸው።					

III. ከ1-10 ለተዘረዘሩት የጉዳት ምክንያቶች እና ከ1-11 የተዘረዘሩት ጉዳት የሚያጋጥሟቸው ቦታዎች እና የጉዳቱ አስከፊነት ሊፈጠር የሚችለውን እና የበለጠ አስከፊ የሆነውን ደረጃ ይስጡ።

ምላሽዎ :- (1=ሁሉ የሚከሰት እና በጣም አስከፊ ፤ 2= በተደጋጋሚ የሚከሰት እና ብዙ-አስከፊ፤ 3=አብዛኛው ጊዜ የሚከሰት እና አስከፊ፤ 4=አልፎ አልፎ የሚከሰት እና ብዙ አስከፊ ያልሆነ፤ 5=በጭራሽ የማይከሰት ና አስከፊ ያልሆነ)።

የመረጡት ቁጥር ላይየ(v) ምልክት በማድረግ እባክዎን ምላሽዎን ይስጡ።

ተ.ቁ	የጉዳት ምክንያት	የመከሰት ሁኔታ					አስከፊነት				
		1	2	3	4	5	1	2	3	4	5
1	ሽርታቴ (ታክል) በምገባበት ጊዜ										
2	ሽርታቴ (ታክል) በሚገባብኝ ጊዜ										
3	በሩጫ ወቅት										
4	ኪስን ከርቀት አክርሮ በመምታት ወቅት										
5	አየር ላይ በምዘልበት ጊዜ										
6	ከዘለልኩ በኋላ መሬት ላይ በማርፍበት ጊዜ										
7	ኪስ በጭንቅላት በምገጭበት ጊዜ										
8	በድንገት አቅጣጫ በምቀይርበት ወይም በምዞርበት ጊዜ										
9	ከሌላ ተጫዋች ጋር በምጋጭበት ጊዜ										
10	ከአግባብ በላይ ኃይል መጠቀም										
	ጉዳቱ የሚደርስበት የአካል ክፍል										
1	ጭንቅላት ላይ										
2	ትኩሻ እና እጆች ላይ										
3	ወገብ ላይ										
4	ብሽሽት ላይ										
5	የጭን ትልቁ ጡንቻ										
6	የጅምት መሳሳብ										
7	ጉልበት										
8	ቅልጥም										
9	ባት										
10	ቁርጭም ጭሚት										
11	እግር										

IV. ከዚህ በታች ለተዘረዘሩት ጥያቄዎች እባክዎን ትክክለኛውን አማራጭ ይምረጡ እንዲሁም ፊደልላላቸው ጥያቄዎች በማክበብ መልስዎን ይስጡ፤ ክፍት ቦታ ለስፈረባቸው ጥያቄዎች አጭር የዕሉፍ ምላሽ ይስጡ

1. ቢያንስ በሳምንት ከ2-3 ቀናት የጥንካሬ ልምምድ ያደርጋሉን?

- ሀ) አዎን
- ለ) አይደለም

2. ለጥያቄ ቁ. “25” ምላሽዎ አይደለም ከሆነ ለምን?

- ሀ) በቂ ጊዜ የለም
- ለ) ከሥልጠና ወይም ከግጥሚያ በኋላ በጣም ስለሚደክመኝ
- ሐ) ይህንን እንዳደርግ ስላልተነገረኝ
- መ) ቴክኒኮቼን በሚመለከት ምክር ስላልተሰጠኝ
- ሠ) አስፈላጊ ነው ብዬ ስለማላምን

3. ቢያንስ በሳምንት ከ2-3 ቀናት የመተጣጠፍ እና የመዘርጋት ልምምድ ያደርጋሉን?

- ሀ) አዎን
- ለ) አይደለም

4. ለጥያቄ ቁ. “27” ምላሽዎ አይደለም ከሆነ ለምን?

- ሀ) በቂ ጊዜ የለም
- ለ) ከሥልጠና ወይም ከግጥሚያ በኋላ በጣም ስለሚደክመኝ
- ሐ) ይህንን እንዳደርግ ስላልተነገረኝ
- መ) ቴክኒኮቼን በሚመለከት ምክር ስላልተሰጠኝ
- ሠ) አስፈላጊ ነው ብዬ ስለማላምን

5. ከስልጠና እና ከግጥሚያ በፊት ዘወትር የማሟሟቅ ልምምድ ያደርጋሉን?

- ሀ) አዎን
- ለ) አይደለም

6. ለጥያቄ ቁ. “29” ምላሽዎ አይደለም ከሆነ ለምን?

- ሀ) በቂ ጊዜ የለም
- ለ) ከሥልጠና ወይም ከግጥሚያ በኋላ በጣም ስለሚደክመኝ
- ሐ) ይህንን እንዳደርግ ስላልተነገረኝ
- መ) ቴክኒኮቼን በሚመለከት ምክር ስላልተሰጠኝ
- ሠ) አስፈላጊ ነው ብዬ ስለማላምን

7. ከሥልጠና እና ከግጥሚያ በኋላ ዘወትር የማቀዝቀዝ ልምምድ ይሰራሉን?

- ሀ) አዎን
- ለ) አይደለም

8. ለጥያቄ ቁ. “31” ምላሽዎ አይደለም ከሆነ ለምን?

- ሀ) በቂ ጊዜ የለም
- ለ) ከሥልጠና ወይም ከግጥሚያ በኋላ በጣም ስለሚደክመኝ

- ሐ) ይህንን እንዳደርግ ስላልተነገረኝ
- መ) ቴክኒኮቹን በሚመለከት ምክር ስላልተሰጠኝ
- ሠ) አስፈላጊ ነው ብዬ ስለማላምን

9. አግባብነት ያላቸውን የስፖርት ትጥቆች እንዲያደርጉ ማበረታቻ ይደረግልዎታልን?

- ሀ) አዎን
- ለ) አይደለም

10. በክለብዎ ውስጥ የሕክምና ድጋፍ ይደረግልዎታልን?

- ሀ) አዎን
- ለ) አይደለም

11. በክለብዎ ውስጥ በቂ የሕክምና መሣሪያ አለን?

- ሀ) አዎን
- ለ) አይደለም

12. ከሥልጠና ወይም ከግጥሚያ በኋላ በቂ እረፍት ይወስዳሉን?

- ሀ) አለ
- ለ) የለም

13. ከሥልጠና/ከግጥሚያ በፊት፣ በሥልጠና እና በግጥሚያ ወቅት ወይም ከሥልጠና እና ከግጥሚያ በኋላ በቂ ፈሳሽ ይወስዳሉን?

- ሀ) አዎን
- ለ) አይደለም

14. በሥልጠና ወቅት በቂ የማገገሚያ ጊዜ ያገኛሉን?

- ሀ) አዎን
- ለ) አይደለም

15. በሥልጠና ወቅት የጉዳት ምክንያትን በሚመለከት ተሞክሮዎ ምንድ ነው? ምክንያቶቹን በዝርዝር ያስፍሩ።

16. በግጥሚያ ወቅት የጉዳት ምክንያትን በሚመለከት ተሞክሮዎ ምንድ ነው? ምክንያቶቹን በዝርዝር ያስፍሩ።
