

**AN INVESTIGATION INTO WHETHER THE PREMIER SOCCER LEAGUE TEAMS  
IN SOUTH AFRICA HAVE AN 'IDEAL' MEDICAL TEAM STRUCTURE**

by

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## **ABSTRACT**

### **Aim of the study**

To investigate whether the Premier Soccer League Teams (PSL), in South Africa, have an 'ideal' medical team structure

### **Objectives of the study**

Identification of medical professionals involved in the PSL and its leadership, the qualifications and experience of the medical professionals in PSL teams and whether the specialties of the medical professionals were clearly defined in order to avoid conflict within the team. Determination of the protocol that was followed when a player was injured and subsequent management and the influence on a player's rehabilitation and return to activity.

### **Setting**

The Premier Soccer League offices were contacted in order to conduct the research.

### **Design**

The research design for this study was a descriptive survey.

### **Methodology**

A purposeful sample of team managers and head coaches was chosen from 12 PSL teams. A self-constructed questionnaire was used to collect the data. A questionnaire was faxed to each participant and two follow-ups were made on the questionnaires that were not returned.

### **Results**

The response rate was 54%. The composition of the medical teams comprised mainly of physiotherapists (85%) followed by sports physicians (77%), massage therapists (62%), dieticians (31%), sports psychologists (15%) and no podiatrist. Eight out of 13 participants reported having a sports physician as the head of the medical team while 4 participants reported the team leader to be a physiotherapist. Four out of 13 participants reported that their medical professionals were not all qualified and experienced in sport. The specialties of the medical professionals were clearly defined and each team had its own protocol for when a player was injured. The medical team had a positive influence on the management of injuries.

### **Conclusion**

The PSL teams do not have an 'ideal' medical team structure.

### **Keywords**

PSL, Medical team, structure, soccer

## DECLARATION

I declare that the mini thesis “**An investigation into whether the Premier Soccer League teams in South Africa have an ‘ideal’ medical team structure**”, hereby submitted to the University of Limpopo (Medunsa campus), for the degree of Master of Science in Physiotherapy (Sports Medicine) has not previously been submitted by me for a degree at this or any other university; that it is my work in design and in execution, and that all material contained herein has been duly acknowledged.

---

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## DEDICATION

To my dad, **Mr Himatlal Haribhai** - I love you and miss you. You will always be loved and remembered and for you mum **Mrs Indira Haribhai**, who have always been there for me.

## **ABBREVIATIONS**

SAFA - South African Football Association

FIFA - Federation Internationale de Football Association

PSL - Premier Soccer League

Fax - Facsimile

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**AN INVESTIGATION INTO WHETHER THE PREMIER SOCCER LEAGUE TEAMS  
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**CHAPTER 1**

**1.1 Introduction and Background**

The ideal medical team is a multi-disciplinary team comprising a sports physician, sports physiotherapist, podiatrist and a dietician. It is also usual to involve a sports psychologist and a team coach/trainer (Janousek, Saifuddin and Wolman, 2003). Each medical professional has a role to play within the medical team for example, a sport physiotherapist assesses the fitness of the players and prescribes exercise programs; a sport physician manages drug related and medical problems that might occur while playing sport (Welch and Kelly, 2004); sports psychologist assists with mental preparation before a game (Pain and Harwood, 2007) and the dietician provides great help in detecting eating disorders (McNulty, Adams, Anderson and Affenito, 2001).

According to Waddington, Roderick and Naik (2001), half of the soccer clubs in the United Kingdom do not have a qualified (chartered) physiotherapist, despite documented evidence that physiotherapy aids in recovery following injury (Firer and Ferguson, 1998). According to Drawer and Fuller (2002), there is evidence of a culture within professional soccer in the United Kingdom that leads players to train and play while not fully fit and this exposes them to a high risk of re-injury. However, players are also under pressure to play for personal reasons or as a result of pressure from their club's management and/or medical team (Drawer and Fuller, 2002). Therefore players, coaches and the management of sports teams, are looking to sports medicine

personnel to provide medical coverage and services by an ideal medical team, so that sport can be played more effectively and at the same time, any injuries that may occur can be prevented (Brukner and Khan, 2003).

Since soccer is a high contact sport, players are predisposed to a lot of injuries (Welch and Kelly, 2004). These soccer injuries are so common resulting in players returning to competitive sport without full rehabilitation, thus being at a greater risk for further injury (Hagglund, Walden and Ekstrand, 2007). The risk of injury in professional soccer has been reported to be high as compared to other high risk industries (Drawer and Fuller, 2002). Hence the importance of an 'ideal' medical team structure where each medical professional has its own crucial role to play with regard to rehabilitation (Howe, 1991; Jordan, 2005).

The composition of the ideal medical team should include a sports physician, a sport physiotherapist, a sport psychologist, a massage therapist, a podiatrist and a dietician (Brukner and Khan, 2003). The role of the ideal medical team is to ensure that players are in perfect health (Rubin, 1998), and thus minimize and manage the risk of injury to acceptable levels (Fuller, 2007). According to Fuller (2007), risk management is a structured framework within which risks can be identified, evaluated and controlled through appropriate strategies and it is this relationship between the risk and the incidence and severity of injury that contributes to the understanding and control of risks in sport.

Many of the players of the Premier Soccer League (PSL) teams sustain recurrent injuries (Fuller, Smith, Junge and Dvorak (2004). The causes of these injuries are mainly due to tackles due to

the high impact nature of the sport Fuller et al. (2004). According to Fuller et al. (2004), tackles have the highest propensity for causing injury. Fuller et al. (2004); were also of the opinion that the laws of football related to tackling need to be reviewed in order to provide greater protection from injury by reducing overall risk and protecting players from tackles. Rehabilitation of players after injuries and their return to play is managed differently by different soccer associations. There are no uniform protocols for return to play. According to Piantanida, Oriscello, Pettrone and O'Connor (2004), there needs to be a structured decision making process regarding a return to play. There also needs to be an effective physical rest or recovery strategy which is crucial to a player's rehabilitation (Pain and Harwood, 2007). Hagglund et al. (2007) found that the rate of re-injury is reduced using a coach controlled rehabilitation program which might include so many factors. Doyle, Gleeson and Rees (1998), indicated that it is crucial in the treatment of injury that both the physical and the psychological aspects be taken into consideration so that a comprehensive rehabilitation program can be given to the player, making his rehabilitation complete.

There is no documented evidence on how re-injuries are prevented in the PSL teams in South Africa. In the PSL, a few clubs have a physiotherapist or a general practitioner. This is contradictory to Janousek, Saifuddin and Wolman (2003) who highlighted the need for a multi-disciplinary medical team to be involved in the rehabilitation of the patient, in order to minimize injury. In addition each medical professional must also be appropriately qualified and experienced in sport (Brukner and Khan, 2003).



## **1.2 Motivation for the study**

The roles played by the medical team members are not always clear and there is a dearth of information on this by the PSL teams in South Africa. Hence, investigation into the medical team structure of the PSL teams will clarify the roles of individual professionals in the provision of care to these players and enhance the services of the medical team with regard to the management and prevention of injuries. It is essential to have a full medical team complement wherever and whenever top-level competition takes place (Firer and Ferguson, 1998). A medical team is able to devise programs that impact positively on performance (Pain and Harwood, 2007). This is to prevent and treat injuries, the cost of which can be a great liability to the club (Jordan, 2005). Soccer performance is generally reduced to fitness statistics whereas it is actually a construct based on many different performance components that affect both the player and the team (Drust, Atkinson and Reilly, 2007). Hence the presence and active role of an ideal medical team is crucial to a player's recovery, participation and performance (Mellion, Walsh, Madden and Putukian, 2003).

## **1.3 Statement of the problem**

The researcher observed while working with one of the PSL team that the PSL team does not have a full medical team complement of a sports physician, sports physiotherapist, podiatrist, dietician, sports psychologist and a massage therapist. In the researcher's opinion, this situation impacts negatively on performance seeing that a multi-disciplinary medical team is better able to prevent and treat injuries. The researcher observed that some of the medical professionals working in the PSL do not possess post graduate qualifications in sport related disciplines. In the researcher's opinion, lack of qualifications and experience in sport also impacts on injury

management and performance since qualified medical professionals are better able to provide high quality medical care, prevent and manage injuries.

There are also no other published protocols for other leagues such as cricket and rugby leagues. This has led the researcher to ask the following questions: Who are the medical professionals involved in the PSL, and who leads the medical team? What are the qualifications of the medical professionals involved at this level? Is there good teamwork and communication between the medical professionals in the PSL medical team and are the specialties of the medical professionals clearly defined? Is there an established protocol that is followed when a player gets injured and the subsequent management? Is a player's rehabilitation and return to activity influenced by the medical team?

There is currently no information on the medical team structure in the South African PSL teams. It is important to have a medical team structure in place so that injured players receive the correct treatment, and they are guided back to play once it is confirmed that it is safe to do so. It was observed that there is a lack of existing policy from FIFA and SAFA regarding the need for an appropriately trained and experienced medical team and the "ideal" structure required of a medical team, yet this is crucial to the players' rehabilitation and prevention of injury. The researcher also observed that there is no established protocol within the PSL for when a player gets injured; neither are there protocols regarding the subsequent management, or adequate measures that can be taken to avoid re-injury and rehabilitation. Although FIFA has no policy for the structure of a medical team and the need for an appropriately trained and experienced medical team, it does view sports medicine as a key factor in the development and progress of

football at all levels (FIFA. com, 2005). FIFA also has a Medical and Research Centre (F-MARC), which plays an active role in sports medicine research, especially with regard to injury prevention and the fight against doping. FIFA also has the following goals - to reduce the number of injuries, to assess the risks that cause injuries and to develop prevention programmes to improve the standard of medical care (FIFA. com, 2005). Since injury prevention and management is one of FIFA's cardinal goals, it is important that more information is gathered on the PSL medical teams and the manner in which players are managed when they get injured, and subsequent management.

#### **1.4 Aim of the study**

The aim of this study was to investigate whether the Premier Soccer League teams, in South Africa, had an 'ideal' medical team structure.

#### **1.5 Objectives of the study**

The objectives of this study were to:

1.5.1 Identify medical professionals involved in the PSL, and to establish who leads the medical team.

1.5.2 To determine the qualifications of the medical professionals involved at this level.

1.5.3 To determine the level of teamwork and communication among the medical professionals in the PSL medical team.

1.5.4 Determine whether the specialties of the medical professionals were clearly defined.

1.5.5 Determine whether there was an established protocol that was followed when a player got injured and their subsequent management.

1.5.6 Determining the criteria for decision on return to play for injured players.

## **1.6 The significance of the study**

It is hoped that the study would be of benefit to the following stakeholders:

1.6.1 **The Premier Soccer League teams** in that it would highlight the importance of the ‘ideal’ medical team structure for effectively preventing and treating injury, rehabilitating a player as quick as possible and planning comprehensive treatment and training programmes which will aid the team to perform at its optimum.

1.6.2 **The medical professionals** in that information gained from the study will enhance their existing body of knowledge on the way injuries are managed and prevented

1.6.3 **The whole soccer fraternity** – they will become more aware of the role of medical professionals within the Premier Soccer League (PSL).

1.6.4 **The South African Football Association** in that it would highlight the need for an ‘ideal’ medical team structure in each Premier Soccer League team, in order for their players to receive

effective medical care and injury prevention strategies by professionals who are adequately experienced and qualified in sports medicine, thus improving a player's performance in a game and increasing the ability to get back onto the field as quickly as possible following an injury.

### **1.7 Scope of the study**

The study investigates the structure and function of the medical team within the PSL teams. This includes the manner in which injuries are managed. However the scope of the study does not extend to reviewing the injury types and the risk factors.

### **1.8 Operational definitions**

1. 'Ideal' medical team: the team should comprise of a sports physician, a sports physiotherapist, a sport psychologist, a massage therapist, a podiatrist and a dietician (Brukner and Khan, 2003).
2. Team Manager: the person in the team responsible for the overall management of the team.
3. Head Coach: the person in the team in charge of the coaching of the players and all decisions with regard to the training and coaching of the players.
4. Unqualified medical professionals: Those medical professionals that do not have a post graduate qualification in sport.

## **1.9 Summary**

In summary, there is a lack of existing policy from the International Federation of Association Football (FIFA) and the South African Football Association regarding the need for an appropriately trained and experienced medical team and the 'ideal' structure required of a medical team yet this is crucial to the players' rehabilitation and prevention of injury. The next chapter, literature review, is an analysis or synthesis of studies that include literature on the medical team structure, composition and interaction within the medical team.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter provides a review of literature on the role of the medical team in team sports and soccer. Key words used were soccer, team, communication, conflict management, professional development, interaction, leadership, framework, and team composition. The search was narrowed down to English articles and those pertaining to soccer. Literature was reviewed according to the following sub headings: the composition of the sports medical team and its leadership in South Africa and globally. An attempt was first made to get a South African perspective regarding the dynamics and composition of a sports medical team and its leadership in South Africa and globally but no relevant South African articles was found. Three databases African Health online, Ebsco Host and Sports Discus Medline were searched. Articles from the year 1996 to the year 2010 were reviewed.

##### **2.2.1 Composition of medical team**

Mellion et al. (2003) did a study in the United Kingdom where they outlined the key members in a sports medicine team as the player, the team physician, the coach and the physiotherapist. Brukner and Khan (2003); Janousek et al. (2003) also did a study in the United Kingdom where this composition of the medical team was supported and added that the medical team should not just comprise the above members but also a podiatrist, a massage therapist, a dietician and a sport psychologist. Janousek et al. (2003) also felt that physiotherapists were the key members of the sports medical teams since physiotherapist had an appreciation of the normal biomechanics

involved in soccer. According to Firer and Ferguson (1998), one individual cannot acquire all the necessary knowledge and experience to be called a sports medicine specialist. The dedicated effort of a multi-disciplinary medical team is needed in order for the team's sportsmen to adequately benefit. According to Howe (1991), the provision of quality medical surveillance is critical to soccer performance and involves a complement of medical professionals representing the various professional disciplines.

### **2.2.2 Leadership of the medical team**

According to Pato (2006), leading a successful team involves not just setting a common goal, but understanding what motivates team members. The need to acknowledge weaknesses and either address them or obtain help in those areas was also highlighted Broquet (2006). According to Drawer et al (2001), the provision of injury prevention and socio-economic at professional soccer clubs is inadequate compared with the levels of acute and chronic injuries suffered by players. Drawer et al (2001); suggested that leadership within the soccer industry should develop a long term strategy for managing the needs of players who are forced to retire due to injury. What was highlighted was the message that without a strategy for providing long term assistance for players forced to retire through injury, the soccer industry remains vulnerable to the possibility of litigation from injured players seeking financial compensation for the loss of income. The study done by Drawer et al (2001), distributed 500 questionnaires but only 85 (37%) were returned. The response rate being less than 50% lowers the integrity of the results. Furthermore players who had retired through acute or chronic injury were more likely to agree their future earning potential whereas there could have been other reasons for their retirement. The response rate may have been low and some of the responses biased but what emaciated from



the study regarding relationship and the prevention of injury is useful and can be universally applied to the management of a medical team. Broquet (2006) expressed that leadership is the art of team building and managing responsibility without authority and it involves the skill of understanding and motivating others. McCrory (2003), agreed with Broquet and added that the clinical guidance not only requires better communication systems but also an organisational change and a paradigm shift on the part of clinicians towards a more open and impartial view of clinical care and outcome. However both Broquet (2006) and McCrory (2003) make no mention about the sample size and the response rate of the study, and hence the result of both these studies is questionable. Leadership requires co-ordination, and as such according to Madden, Walsh and Mellion (2003), the team leader who co-ordinates all the medical activities could either be a sports physiotherapist or a sports physician. On this there are divergent views on who should lead this team. According to Howe (1991), the team physician should be the head of the medical team; while according to Cricton (2000), the medical team should be headed by a physiotherapist. Cricton (2000); also introduced the concept of not just having one head for the medical team but instead having corporate leadership, each in charge of a different aspect of the medical team. It was suggested that there should also be an individual that will see to the administration of the medical team and one that will be in charge of medical equipment. The team leader has various responsibilities. According to Madden et al. (2003), the team leader must be able to set goals and monitor progress, supervise the various medical disciplines, make the “return-to-play” decisions and keep the coach informed at all times of activities regarding the medical team. Although leadership comprises many tasks, it may be that medical professionals are not adequately and experienced to take on these roles albeit being put in a position to do so. Waddington et al (2003), found that in almost all clubs, methods of appointment of doctors was

informal and reflected poor employment practice. Few medical professionals had prior experience and qualifications in sport medicine and very few had a written job description. Waddington et al (2001), found that these clinicians were unable to back their decisions with sound clinical knowledge and hence were easily influenced when it came to clinical decisions, putting them in a compromised position to leave the team. It was also suggested that all aspects of the processes of appointing and remunerating medical professionals be re-examined in order for there to be appropriate leadership of the medical team for service delivery and high quality medical care. Waddington et al (2001) should be complimented on highlighting the need to provide the best available care to football players. The paper is however biased because they provide no evidence that medical professionals non-qualified in sport are more vulnerable to the threats regarding their clinical knowledge, than any other qualified professionals. The authors also make no comparison by medical professionals both qualified and non-qualified in sport, and their outcomes.

Moreover, there is no evidence produced of the actual harm resulting from players being treated by medical professionals unqualified in sport. However an important point noted is that medical professionals should not be candidly and informally chosen, but should be chosen on the bases of their qualifications in sport, in order to deliver the best quality care to the players.

According to Babwah and Rogers (2008), at present there are no training programs for medical professionals in football fraternity, so it can be concluded that there is no ideal way of leading a medical team and also leadership within the football team is a field within itself that is still evolving.

### **2.2.3 Qualifications and training**

It is essential that all the medical professionals be qualified and experienced in sport. The knowledge of sport and associated injury patterns will enable medical professionals to effectively and promptly prevent and treat injuries (Heimer and Tonkovic, 2002). There are dangers associated with being treated by people who are not trained and qualified to do so. According to Madden et al (2003), it is also a player's right to be treated by medical professionals that are qualified and experienced in sport. It has been observed that most clubs do not employ qualified professionals. The reasons for this are numerous, most due to finances. Smith (1998), reports that many clubs are not prepared to pay for these medical services and are prepared to make do without a full complement of medical professionals. The implications of this could be hazardous. It was further stressed by Smith that football clubs need to realize that a full complement medical team is an absolute necessity and which should be paid for in order to achieve optimum medical care. According to Waddington et al (2001), methods of appointment of doctors and physiotherapists need to be reviewed. They are often informal and reflect poor employment practice in that posts were rarely advertised. Appointments are on the basis of personal contacts and without an interview. It is possible that professionals are not being formally appointed with a proper job description or they are not adequately remunerated in order to deliver quality medical care. Waddington et al (2001) found that few medical professionals were hired on the basis of experience or qualifications in sports medicine. It was found that these medical professionals are easily influenced by team managers when it came to clinical decisions because they could not back up their decisions with adequate knowledge and experience. A suggestion was therefore made for medical professionals to be qualified in sport and have the necessary experience to deal with medical issues that can arise within a team. Smith (1998), shared similar views and

expressed that medical practitioners contemplating taking on the responsibility of working for a team should be suitably qualified in Sports Medicine, reason being that it would improve the quality of medical cover at a sporting event. Macauley (1997), found that there was greater confidence in those who had undergone special training and passed post-graduate exams in sports. The perception is that these medical professionals will be more competent in managing injuries. According to Babwah and Rogers (2008), the coach has greater confidence in those medical professionals that have undergone special post graduate training and since they are competent in treating injuries and can reliably inform the coach of the estimated time that an injured player may be out of action before rejoining the team.

Medical professionals not being adequately qualified could also pose a problem in cases of litigation (Welch and Kelly, 2004), due to an inability to make sound clinical decisions and judgments based on a thorough knowledge on sport. It is therefore in our interest as medical professionals working with sportsmen to gain the necessary knowledge and experience of medical conditions related to sport so that we would be able to back our clinical decisions with adequate qualification and experience.

## **2.3 Roles of medical professionals**

### **2.3.1 Physiotherapist**

According to Welch and Kelly (2004), the management of injuries is a team effort and that everyone in the medical team has an individual area of expertise which can be of help to players. Among other responsibilities, a sports physiotherapist assesses the fitness of the player and

prescribes exercise programs, which will be aimed at overcoming weakness, preventing and treating injury and optimizing performance (Firer and Ferguson, 1998).

According to Mellion et al. (2003), the physiotherapist occupies a unique position at the centre of the athletic health care triangle. The physiotherapist is a counsellor for the athlete, advisor and friend to the coach, and an extra pair of eyes and ears for the team physician while the sport physician manages the drug related and medical problems that might occur while playing sport (Welch and Kelly, 2004). Among other responsibilities a sports physiotherapist assesses the fitness of the player and prescribes exercise programs, which will be aimed at overcoming weakness preventing and treating injury and optimising performance (Firer and Ferguson, 1998).

### 2.3.2 Team Physician

The concept of the team physician has become an integral part of the athletic culture (Dunn, George, Churchill and Spindler, 2007). The team physician's role within the medical team is vast in that it ranges from medical management through to education, administration and even ethical responsibilities (Mellion et al, 2003). According to Welch and Kelly (2004), these responsibilities are jointly shared, both by the physiotherapist and team physician. According to Babwah and Rogers (2008), most injuries (97%) seen involved soft tissue and so the team physician must be an expert in diagnosing and treating these injuries. It was stressed that training in orthopaedics and sports medicine allows this expertise in making accurate diagnoses, interpreting investigations and determining when a player could return to play after suffering a musculo-skeletal injury.

### 2.3.3 Massage therapist

A massage therapist reduces muscle soreness and stiffness (Firer and Ferguson, 1998). According to Galloway and Watt (2004), the demand for massage has been steady and this indicates a consistent use of massage therapist. It also confirms the efficacy of this treatment. Much of the physiotherapist's time is devoted to the delivery of massage treatment at events and hence consideration should be given to the use of specialized sports massage therapists at events.

### 2.3.4 Sport Psychologist

A sport psychologist assists with mental preparedness which is essential before a game. It is just as important to overall performance as physical abilities and provides the competitive edge necessary for winning (Ahern and Lohr, 1997). According to Pain and Harwood (2007), there are also other instances where a sports psychologist is valuable within a medical team such as when players with excessive competitiveness could end up channelling this into excessive aggression which can affect the game. According to Hemmings and Povey (2002), physiotherapists believed athletes were often psychologically affected by injury and often reported using psychological techniques when treating injured athletes.

### 2.3.5 Dietician

Other medical professionals such as a dietician also play an important role within the medical team structure. The dietician prescribes the necessary intake that is necessary to replace energy losses and hence to develop the right physiological status for peak performance (Firer and Ferguson, 1998). According to McNulty et al. (2001), a dietician can be of great help in the early

detection of eating disorders which can affect a player's performance if appropriate medical, nutritional and psychological intervention is not complemented.

#### 2.3.6 Roles common to all medical team members

All the medical professionals in the medical team are involved in screening and health surveillance (Batt, Jaques and Stone, 2004). This opinion is shared by Gissane, White, Kerr, and Jennings (2001), who add that screening and health surveillance involves a comprehensive pre-participation evaluation. According to Batt et al. (2004) and Gissane et al. (2001), pre-participation examination involves assessing the fitness level of the individual together with intrinsic risk factors such as postural and mechanical factors that can predispose a player to injury. Pre-participation examination may be restrictive as highlighted by Ljungqvist, Jenoure, Engebretsen, et al. 2009. It was suggested by them that periodic health evaluation rather than pre-participation screening be done at different intervals since regular physical activity reduces the risk of premature mortality, and aids in the prevention of injury. According to Madden et al. (2003), pre-participation evaluation involves extensive performance testing, routine radiograph screening and the use of computerized musculoskeletal testing techniques. According to Batt et al. (2004) and Gissane et al. (2001), it is essential to detect conditions that might be disabling, life-threatening or which might limit competition. According to Fuller (2007), the medical team should bear in mind that they are part of a group working towards a mutual goal. Rubin (1998) shares this opinion and adds that for players and coaches, the goal is winning but for the medical team, the main goal should be ensuring that their players are in perfect health and to keep the risks to the players at a minimum.

### 2.3.7 The role of the medical team with regard to ethical and medico-legal issues and return to play issues

According to Howe (1991), the medical team has many ethical and medico-legal responsibilities. The foremost responsibility is to acknowledge that it is a player's legal right to participate. Dunn et al (2007); share this opinion and added that the medical team must strive to understand the importance of participation in the player's life and unconditionally accept his desire to participate.

According to Madden et al (2003), in instances where a key player has to be removed from a game, the medical team must stay focused on the player's health and safety rather than on the outcome of the game. There is also the issue of professional liability. According to Howe (1991), it can be prevented by the provision of high quality and timely medical care. Madden et al. (2003), share this opinion and add that good quality medical care must also be backed up by accurate records. Mellion et al. (2003), further go on to say that if a player wishes to participate in a game against medical recommendations, it is imperative that he sign consent stating that he is fully aware of the risks of participation and that he assumes the risk nevertheless.

Return to play decisions and decisions regarding a player's ability to play is a particularly sensitive issue that may require confidentiality. According to Mellion et al. (2003), it is possible that a player may have a medical condition affecting his ability to play which he does not want to disclose to the rest of the team. In this case, the player's privacy should be respected as long as it is not conflicting with an agreement to provide medical information to the team. The medical team may find themselves serving as a link between the team and the rest of the world when medical matters are concerned. At such times, the medical team should take care to show loyalty



to the club and players and appropriate discretion in handling privileged information (Madden et al. 2003). Return to play decisions should be co-ordinated amongst the medical team professionals. According to Babwah and Rogers, (2008); the team physician should manage and be well versed in the management of soft tissue injuries, emergency medicine, and common conditions seen in family medicine, and the updated doping control regulations in order to prevent doping violations. A referral network of medical specialists should be established.

The team physician may need to refer some cases that are beyond his expertise to someone more qualified or trained in other medical specialities. Hence Babwah and Rogers, (2008); mainly considered the roles of the team physician and referral to other specialists if necessary. This differs from what was presented by Madden et al (2003), that the management of injuries was a team effort and that the return to play decisions should not only be made, mainly by the team physician but by the medical team involved with treating the injured player. An important point that was highlighted by Babwah and Rogers, (2008); was that the coach should be reliably informed of the estimated time that an injured player may be out of action before rejoining the team.

#### **2.4 Communication and interaction between members of the medical team**

According to Welch and Kelly (2004), teamwork and communication is essential especially when it is deciding whether a player is fit to play. In that case the player's wishes also need to be taken into account. According to Howe (1991), the player needs to be adequately informed and in agreement with Welch and Kelly (2004), needs to consider the risks and make his own decision. According to Howe (1991), communication within the team is an interactive

relationship between team members which should ideally be frank, honest and informative. There should be scheduled opportunities for discussion of mutual items of concern (Howe 1991). Macleod (1989), highlights the need for the team doctor to work with the players and coaches in an attempt to help them achieve and maintain maximum fitness. Madden et al. (2003), extends the work ethic of open communication and interaction to all medical professionals, in order to enhance the team's performance and optimally treat injuries. Players may be treated by more than one medical professional in the team and communication and sharing of expertise between these medical professionals will aid in the holistic management of players. Welch and Kelly (2004), also share this opinion and add that everyone has an individual area of expertise which can be of help to the players. Team members outside of the medical team can also effectively contribute to the management of injuries, for example the coach and the players themselves. Howe (1991) pointed out that the coach requires definite information with regard to an ill or injured player. Madden et al. (2003), shared this opinion and added that the information must include the exact diagnosis and realistic prognosis for the player's return to action and that the coach must be aware of limitations that may be required when the player is allowed to practice after recovery. Howe (1991); pointed out the importance of the coach also understanding the full rehabilitation plan so that practice sessions can support it. According to Drust et al. (2007), the medical team must also share insight and knowledge with each other and with the rest of the team. Players and coaches may not understand the psychology and principles behind training and preparing for completion but education on these issues will result in increased understanding and co-operation (Drust et al. (2007). Madden et al. (2003), also found communication to be important in eliminating outdated and possibly harmful techniques, the use of which could lead to medico-legal problems and potential liability for the club. Doyle et al. (1998), also stressed the

need for teamwork and communication to ensure that both the physical and psychological aspects of injury are taken into account. Communication and teamwork ensures that learning is never one sided. The coaches and players are informed of the effective management of injuries and how it enhances performance and at the same time, the medical team learns about motivation and how to focus on a goal from players and coaches.

## **2.5 Guidelines for sports injuries management**

According to Ireland (2007), the medical team should be readily available to the coach and players at all times. Injuries in sport seldom occur at convenient times, and besides it demonstrates a commitment on behalf of the medical team in trying to get the player back into action as quick as possible. According to Gissane et al. (2001), coaches and sports medicine practitioners should seek to prevent injury, since it is the most logical and least costly method of health care. The resources however for injury prevention may be inadequate as was found by Drawer and Fuller (2002). According to Gissane et al. (2001), injury prevention is important and involves pre-participation examination and screening should be done. The fitness levels of the individual and the intrinsic risk factors such as postural and mechanical factors that can predispose a player to injury need to be assessed. Howe (1991), agrees with this and suggests that the team needs to meet on a regular basis to prepare for potential injuries and to develop strategies for delivering medical care. Drust et al. (2007), highlights that in the evaluation of the physical capacities of players, the variability in soccer performance must not be reduced to fitness statistics because in reality soccer performance is a construct based on many different components.

According to Firer and Ferguson (1998), injured players that are advised to train and play are exposed to a high risk of re-injury. Fuller et al. (2004), highlighted that the laws should be reviewed to provide greater protection from injury by reducing the overall level of risk. According to Pain and Harwood (2007), contemporary practice continues to focus on the treatment of physical injury, yet one of the major factors negatively impacting on performance is anxiety. They hence suggested that it is important to take psychological factors of injury rehabilitation into account. According to Madden et al. (2003), the medical team must understand the demands of sport and the commitment to it. This understanding is crucial to a player's recovery, participation, performance and return to play decisions. According to Welch and Kelly (2004), this decision needs to be made by the team physician, the physiotherapist, the coaches and the player. Madden et al. (2003), shared a similar view but added that the medical team leader also needs to take into account the injury or illness, the player's readiness to return to sport and the inherent risk of the sport both to the individual and the potential risk to others.

According to Howe (1991), the team leader must be critical and seek out consultation when making these decisions. Welch and Kelly (2004) pointed out that players have to be treated as patients and not as superstars. If they are at risk of further injury, they should be advised against playing, even if the outcome of the game is affected. Mellion et al. (2003); pointed out the importance of taking a player's wishes into account. According to Welch and Kelly (2004), the player needs to consider the risks and make his own decisions. Perhaps he has trained for many years to participate in an event and might never have the opportunity to participate again. According to Madden et al. (2003), the club must also be protected from any liability. Mellion et al. (2003), agreed with this and suggested that it essential that accurate records are kept in the

event that return-to-play decisions are challenged. According to Gissane et al. (2001), treatment of injuries progresses through three stages; namely, primary, secondary and tertiary prevention. Primary prevention aims at preventing injuries from occurring in the first instance. These strategies include measures such as appropriate warm-up, adequate hydration, prophylactic taping, protective equipment and the coaching of proper techniques.

According to Gissane et al. (2001), secondary and tertiary prevention occurs during the rehabilitation process. The aim of secondary rehabilitation is to restore health when it is impaired. Tertiary prevention is treatment that prevents the injury from becoming chronic. The main principle is that early management of soft tissue injury promotes early recovery. Pain and Harwood (2007) agreed with the above but also added that tournament strategy, player understanding, strong team cohesion and an effective physical rest/recovery strategy aids in the management of injuries.

## **2.6 Summary**

The literature highlights that a full complement of medical professionals representing the various professional disciplines is needed for players to adequately benefit, namely a sports physician, sports physiotherapist, sport psychologist, biokineticist, podiatrist, dietician and massage therapist; with the key members in the medical team being the team physician, the sports physiotherapist, the player and the coach. It came out strongly in the literature was the necessity for medical activities to be co-ordinated by a team leader who could either be a sports physiotherapist or a sports physician. There is also a need for an adequately trained and experienced multi-disciplinary medical team in a sport such as soccer in order to effectively

prevent and treat injuries. According to many researchers, communication between the medical team, the coach and the player regarding a player's illness and the ability to participate is essential and will also aid in the management of injuries together with the insight and knowledge that should be shared between members of the medical team. Discussions on whether to return to play or not are crucial and must take into account the injury or illness, the player's readiness to return to sport and the inherent risks involved.

## **CHAPTER 3**

### **METHODOLOGY**

#### **3.1 Introduction**

The chapter deals with the methodology of the study. Also included is the research procedure, the data capture, the data analysis and the ethical considerations during the research.

#### **3.2 The research setting**

The Premier Soccer League (PSL) teams in South Africa were contacted in order to conduct the research. The South African Football Association (SAFA) was formed in 1991. SAFA is the PSL governing body. The questionnaires that were sent by facsimile (fax) went directly to the 12 PSL team offices, the researcher had no influence where or when the participants would complete the questionnaire.

#### **3.3 The study design**

The approach of this study was a quantitative approach while the design was a descriptive survey. According to Stead and Struwig (2003), descriptive studies are an attempt to provide a complete and accurate description of a situation. The quantitative approach according to Stead and Struwig (2003) is one where the researcher is as objective as possible. They also outlined quantitative research as being structured in that sampling, research design, questionnaires and statistical methods are largely determined prior to the participants completing questionnaires.

### **3.4 Population**

#### **3.4.1 Study Population**

Team managers and head coaches from the 16 PSL teams were invited to participate in the research.

#### **3.4.2 Target Population**

The team manager and head coach who directly work with the medical professionals were offered to participate in the study. Where there were difficulties for both the team manager and the head coach to complete the questionnaire either participant sufficed to generate the required data. Twelve out of the 16 PSL teams volunteered to participate and this constituted the target population being 24 participants in the study.

### **3.5 Sample**

The sampling procedure chosen for the research was purposive sampling. According to Stead and Struwig (2003), purposive sampling provides a sample of information rich participants, and the participants manifest or show certain characteristics that the researcher is interested in. According to Hart (2005), in purposive sampling; units are hand picked on the basis of how they represent a population or category to which they belong. The type of purposive sampling was critical case sampling. According to Stead and Struwig (2003), this strategy involves the selection of critical cases that are central to the issue being studied, and they provide the most information which is particularly useful if a small number of cases are sampled. All of the team managers and head coaches from the 12 PSL teams constituted the sample of the study. The sample size of this study was twenty four (12 head coaches and 12 team managers). Twenty-four



questionnaires were sent out, and only 13 were returned. This implied that only one person was delegated by some teams to participate in the study.

The following were inclusion criteria:

1. Must be either the team manager or head coach of the PSL team.
2. Partake in the decision to employ medical professionals.
3. Have a close working relationship with the medical team and therefore be able to answer questions regarding the medical team.

Anyone that was not a team manager or head coach was excluded from the study.

### **3.6 Research instrument**

A self-constructed questionnaire developed from the reviewed literature was used to collect data. The questionnaire contained both open and closed ended questions (**Appendix 4**). The questionnaire comprised three sections:

**Section A:** This section captured the socio-demographic data such as vocation, gender, qualifications and work experience of the participants. Qualification details such as the type of qualification, the place where it was obtained and the length of time since the respondent graduated was also documented.

**Section B:** This section dealt with the composition and function of the medical team.

### **3.7 Reliability of the instrument**

According to Stead and Struwig (2003), reliability is the extent to which responses are consistent and reflected by a reliability coefficient that varies from 0 – 1. They further added that the test is administered twice to the same individuals and if the scores from the two test sessions are similar, the scores are said to be reliable. In this research data from the team managers and head coaches from the two PSL teams that participated in the pilot study were collected on two different occasions. The time interval between the first test and the retest was 2 weeks. The comparison was based on repeated measurements using the same questionnaire. There was a good correlation between the first and the second test response when using the Spearman's correlation coefficient ( $R= 0.8$ ).

### **3.8 Validity of the instrument**

The questionnaire was checked for content validity by experts in research and sports administration (Peer review; Medunsa lecturers responsible for sport medicine teams, clinicians working and musculo-skeletal experts). It was also checked for content validity by enquiring whether the questions adequately addressed the topic of investigation and whether the questionnaire omitted any important issues. The validity of an instrument refers to the extent to which an instrument measures what it is intended to measure. According to Stead and Struwig (2003), content validity is determined by expert judgement and it is where the test items are compared with a detailed description of the construct being measured. Face validity refers to whether the items of the test appear to measure what the test claims to measure (Stead and Struwig, 2003).

### **3.9 Pilot study**

The pilot study enabled the researcher to check for face validity by enquiring whether the questions adequately addressed the topic of investigation and whether the questionnaire omitted any important issues. Two PSL teams were randomly chosen to participate in the pilot study (names drawn by a neutral person from a hat). Four questionnaires were sent out to both team managers and head coaches of the respective teams, and only two were returned. The PSL teams were chosen to constitute the pilot study rather than the second division teams since they were most likely to have opinions on the subject under investigation and they were able to provide new insights into the problems being researched. These two teams were excluded from the main study. The pilot study was done to ensure that there was no ambiguity and was also a means of assessing the clarity of the questionnaire and determining whether any important issues were omitted. The response to the pilot study showed that all questions were clearly understood and that no important issues were omitted from the questionnaire, hence no changes were made to the questionnaire.

### **3.10 Procedure for data collection**

A letter was sent to SAFA requesting permission to conduct the study. A letter was also sent to the team manager of each PSL team requesting permission to conduct the study. 12 out of the 16 teams volunteered to participate in the study. Questionnaires were then faxed to the offices of these teams and addressed to the team managers and head coaches. The researcher had no influence when or where the questionnaire was completed by the participants.

A consent form was attached to the questionnaire and each participant filling out the questionnaire had to sign consent. The consent form clearly stated that the aims and objectives of

the proposed study are clear and that they have not been pressurized to participate in any way. The consent form also stated that participation in the study is completely voluntary and that the participant could withdraw from it at any time and without supplying reasons. Also stated in the consent form was that the results of the study will be used for scientific purposes and may be published. The consent form assured the participant that privacy would be guaranteed.

Once the questionnaires were sent by facsimile (FAX), two telephonic follow-ups were done at weekly intervals on the questionnaires that were not returned. Questionnaires were faxed back to the researcher. Data collection was performed by the researcher and all data was collected within a period of a month.

### **3.11 Ethical considerations**

The research proposal was presented to the Higher Degree Committee of Medunsa in order to obtain approval. The Medunsa Research and Ethics Committee (MREC) of the National School of Public Health (NSPH) and the MEDUNSA Campus Research Ethics Committee (MREC) at Medunsa Campus approved the research project on the 28 June 2005, Project number MREC/PH/82/2008:PG.

Three basic principles were adhered to by the researcher when conducting the research. They were respect for persons, beneficence and justice.

#### **Principal of respect for persons**

- i) People are autonomous and hence their right to self- determination was respected.

ii) The South African Constitution includes peoples' right to dignity and all attempts were made to protect this right in the research.

iii) People have the right to decide voluntarily whether or not to participate in the research and this right of the participants was protected at all times by the researcher.

### **Principle of beneficence**

The researcher made an effort to protect participants from any form of harm including physical, psychological, social, spiritual or economic harm.

### **The principle of justice**

The participants had a right to privacy and this right was respected in that the participants could decide the extent to which private information could be shared or withheld from the researcher or other people. Private information included the questions that involved opinions.

### **Obtaining informed consent**

The following steps were taken to obtain informed consent and ensure freedom of participation.

- a) **Information:** The researcher provided the participants with information that was understandable regarding their participation in the research project. The information was provided in writing and written consent was presented to the participants for signing.
- b) **Understanding:** An attempt was made to ensure that the participants understood the information that was provided to them by giving instructions and explanations at a simple level of understanding.

- c) **Free choice:** Participants were not made to feel as if they were forced to participate. They could decide voluntarily whether they wanted to take part in the research project.

In conclusion, all attempts were made by the researcher to ensure respect for the participants, beneficence, non-maleficence and justice.

### **3.12 Data analysis**

The responses to the questionnaire were captured onto Microsoft Excel and then analyzed descriptively using the statistical package Statistica 4. Tables, pie charts and bar graphs and percentages were used to interpret the results. A rating scale designed by the researcher was also used to analyse the results in an attempt to determine whether the number of medical professionals in each PSL team comprised a full medical team complement consisting of a sports physician, a sports physiotherapist, a sports psychologist, a massage therapist, a podiatrist and a dietician (Brukner and Khan 2003). According to Stead and Struwig (2003), descriptive statistics provide statistical summaries of data. They added that the purpose of these statistics is to provide an overall, coherent and straightforward picture of a large amount of data.

### **3.13 Summary**

This chapter described the methodology used to carry out the study. It described the method selected for the study. It also described the instrument used to collect the data. Reliability and validity of the instrument and ethical considerations were also presented and discussed fully. The next chapter presents the results of the study.

## CHAPTER 4

### RESULTS

#### 4.1 Introduction

Twelve teams participated in the study. A total of 24 questionnaires were distributed. A questionnaire was distributed to the team manager and the head coach of each of these 12 teams.

#### 4.2 Socio- demographic characteristics of the participants

##### Response rate

A total of 24 questionnaires were provided to team managers and head coaches. 13 participants responded to the survey, resulting in a response of 54%. Nine (69%) of the respondents were team managers while 4 (31%) were head coaches.

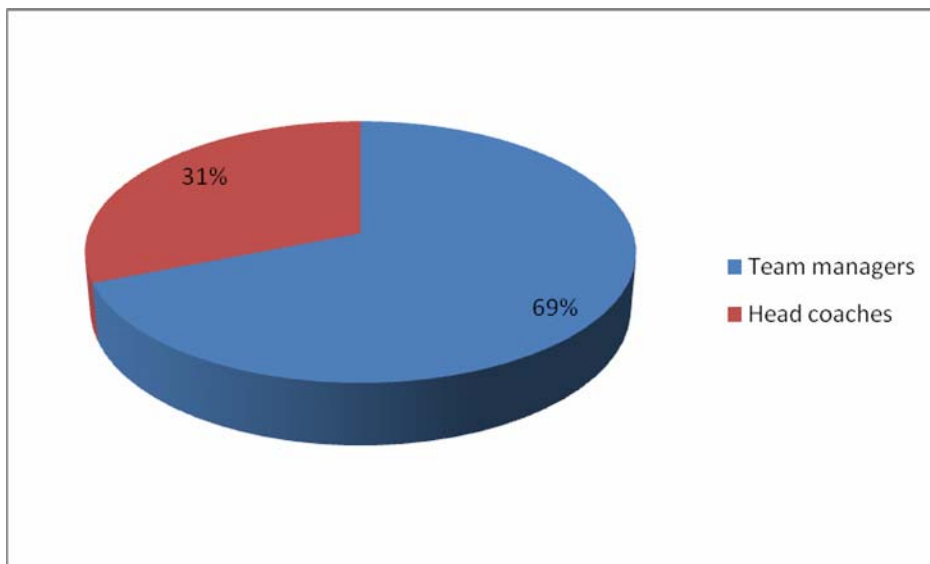


Figure 4.1: Socio-demographic characteristics of the participants

### 4.3 Education and qualification of respondents

The coaching qualifications ranged from level 1 and 2 SAFA coaching certificates to a UEFA (European Football Association) coaching certificate or a coaching diploma. The management qualifications were a Masters of Business Administration (MBA) and marketing and management.

Table 4.1: Level of education and qualification of respondents

	Total respondents n = 13	Team managers n = 9	Head coaches n = 4
Formal training and qualification	69% (n = 9)	38% (n = 5)	31% (n = 4)
No formal training and qualification	31% (n = 4)	31% (n = 4)	0% (n = 0)

Only 7 out of the 9 participants who had formal qualifications were educated during their studies on the importance of having a medical team as part of a sports team. Four participants (31%) did not have any qualifications and hence were not educated on the importance of having medical professionals employed for the team.



#### 4.4 Composition of the PSL medical teams

The study showed that 12 (92%) out of 13 participants reported having a medical team structure in place comprising various medical professionals (Figure 4.2).

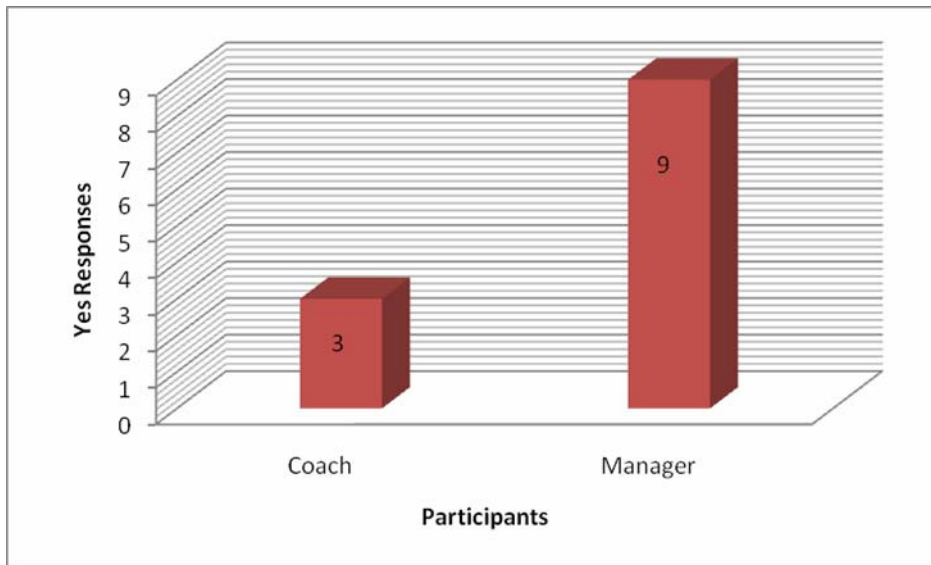


Figure 4.2: Existence of the Medical Team Structure

Eleven participants (85%) indicated that they had a physiotherapist, and only 2 (15%) had a sports psychologist. None of the participants reported having a podiatrist as part of the medical team.

### Composition of the Medical Teams

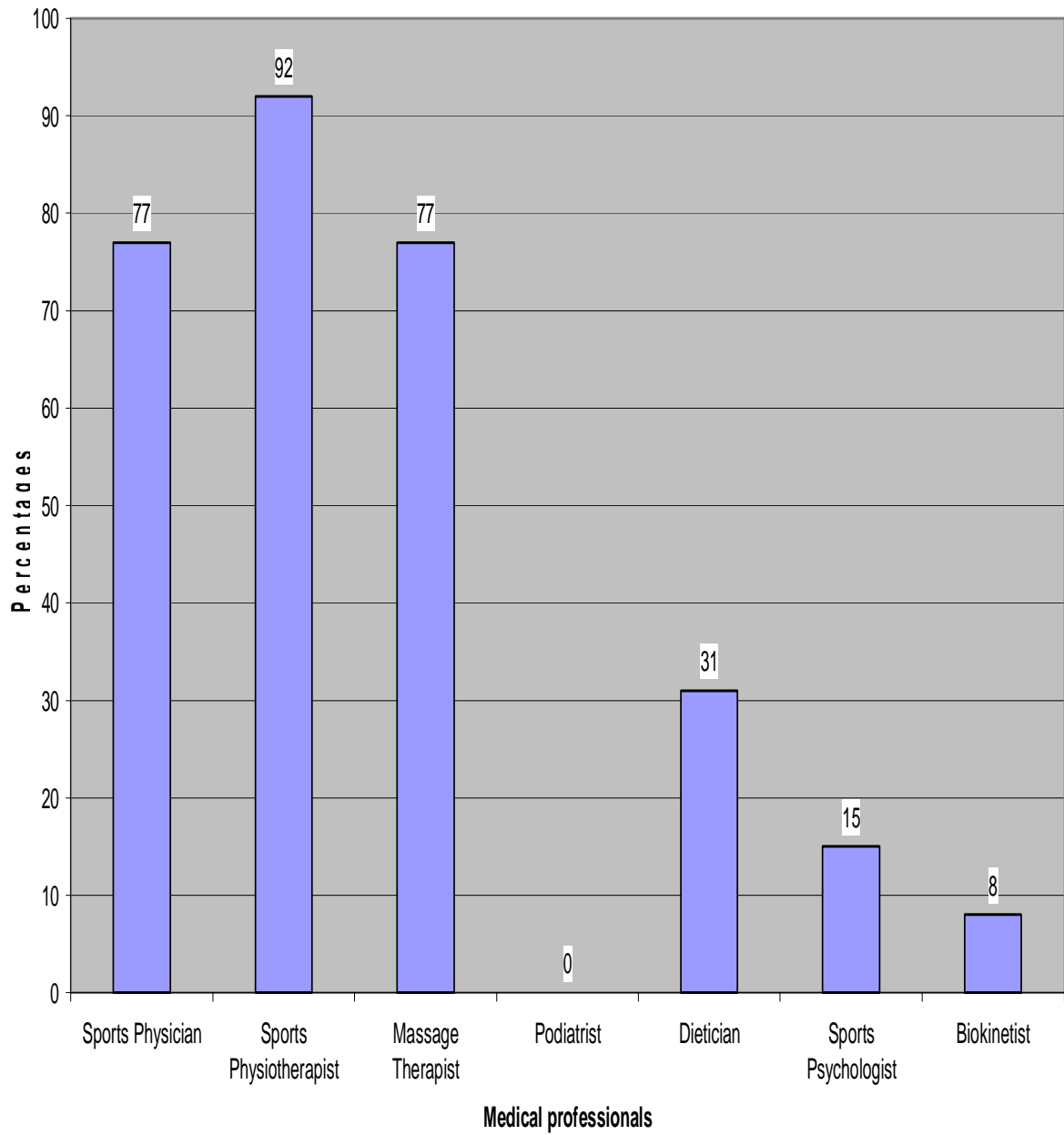


Figure 4.3: Composition of the medical teams

Physiotherapists constituted the greatest number of professionals that were employed by the medical teams.

#### 4.5 Medical professionals on each team

The results show that none of the medical teams had a full complement of 6 medical professionals as outlined in the ‘ideal’ medical team structure laid out by Brukner and Khan (2003), namely a sports physician, a sport physiotherapist, a sport psychologist, a massage therapist, a podiatrist, and a dietician. One team had 5 of these professionals (good complement) and hence came close to having an ‘ideal’ medical team structure. Five teams had a poor complement of medical professionals while 3 teams had a moderate complement of medical professionals.

Table 4.2: Number of medical professionals on each team

	Full complement(6) n (%)	Good Complement(4-5) n (%)	Moderate Complement(3) n (%)	Poor complement (< 3) n (%)
Number of teams (N=12)	0	3 (25)	4(33)	5(52)

#### 4.6 Leadership of the medical team

Eight out of 13 participants (62%) reported having a doctor as the head of the medical team while the remaining 4 (31%) reported having a physiotherapist as the head of the medical team. One team had no medical team structure and hence was not considered.

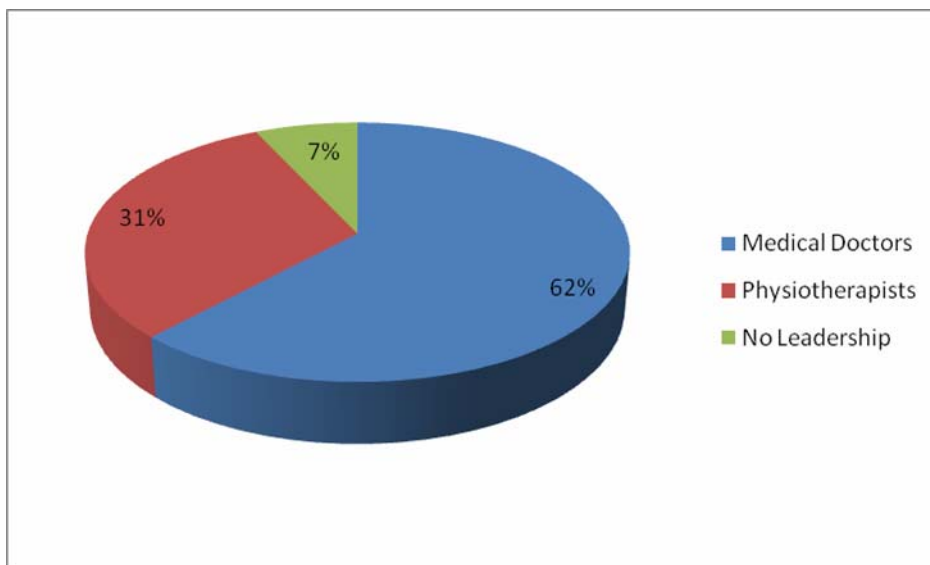


Figure 4.4: Leadership of the Medical Team

#### 4.7 Qualification and experience of the medical professionals

Four out of 13 participants (31%) reported that their medical professionals were not all qualified and experienced in sports. From the four, one participant reported that the physiotherapist and massage therapist were still studying towards a qualification in sports. The other 3 participants did not specify those professionals that were not qualified and experienced in sport.

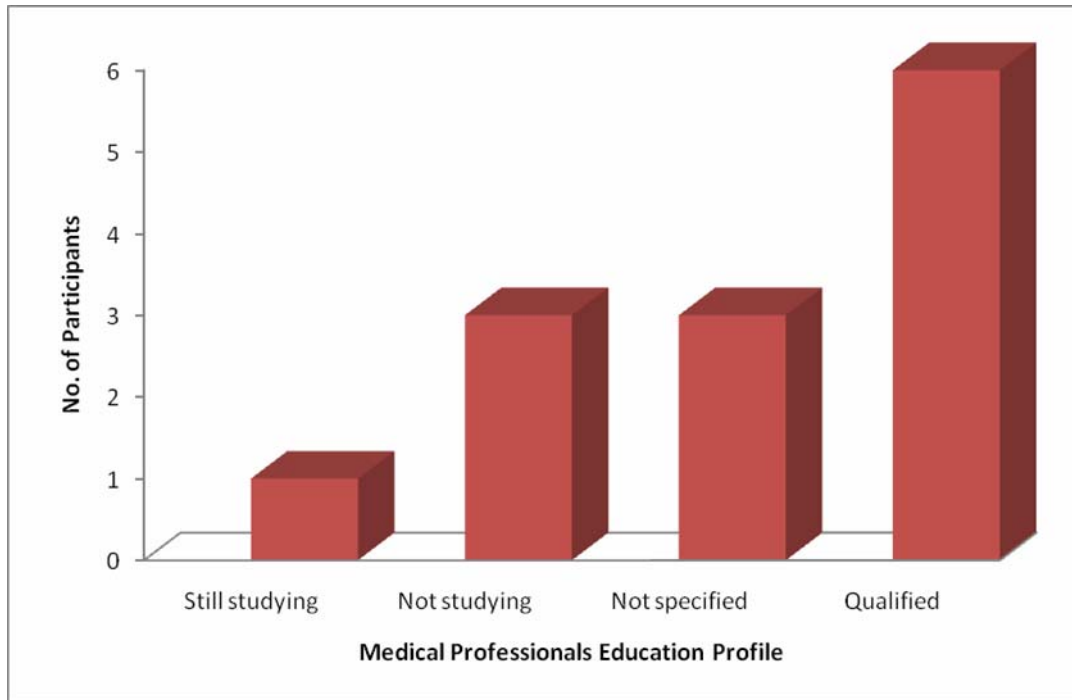


Figure 4.5: Qualification and Experience of the Medical Professionals in Sports

#### 4.8 The employment of medical professionals

Two out of 15 participants (15%) reported that gender was an issue when hiring medical professionals. The teams did not give a reason why gender was an issue.

#### 4.9 Inter and multi-disciplinary approach within the medical professionals at PSL

The response from participants regarding the professional development and interaction of the medical team was documented. Aspects such as regular workshops, teamwork and communication between members of the medical team were investigated together with other aspects such as the definition of medical roles within the medical team, conflict between team members and whether there was a protocol for injury and subsequent management.

Table 4.3: Response of participants regarding the professional development and interaction of the medical team

Professional development and interaction of the medical team	Response from participants		
	Yes N (%)	No N (%)	Not sure N (%)
Regular workshops	6(46%)	5(39%)	2(15%)
Good teamwork between members of the medical team	12(92%)	0	1(8%)
Good communication between members of the medical team	12(92%)	0	1(8%)
Clear definition of medical roles within the medical team	11(85%)	1(8%)	1(7%)
Conflict between team members	1(8%)	11(85%)	1(7%)
Protocol for injury and subsequent management	12 (92%)	0	1(8%)

Ninety two percent of participants reported that there was good teamwork and communication between members of the medical team, and a protocol for injury and subsequent management. Eighty five percent of participants reported the roles of medical professionals to be clearly defined. Less than half of the participants reported that regular workshops were being held to highlight the role and importance of the medical team while 8% of participants reported there to be conflict within the medical team.

#### **4.10 Criteria used to decide whether a player was ready to get back onto the field**

Participants' responses showed that the criteria mainly used to decide whether a player was ready to get back onto the field were fitness tests conducted by the physiotherapist. In one of the teams, the fitness tests were conducted by the fitness trainer and yet in another they were conducted by a masseur. Some of the participants reported that the doctor and/or the physiotherapist or fitness trainer would then decide whether players were ready to return to the field following rehabilitation. One of the participants also stated that the player would be consulted regarding the decision to return to play. One team reported that the physiotherapist would submit a report advising whether a player was ready to play.

In summary, 9 out of 13 participants reported using fitness tests to decide whether an injured player was ready to get back to playing, 2 participants reported that the physiotherapist will make the ultimate decision about playing and one participant reported that this decision would be made by their team physician. The other participants reported that the decision to play decision following injury was made jointly by the physiotherapist, team physician, fitness trainer and in one of the teams, also a masseur.

Six out of 13 participants reported criteria other than the medical team, to decide whether an injured player was ready to get back onto the field, namely the coach and the injured player whose input was also taken into consideration. One of the teams got the injured player to participate in a practice session to see if he could manage before making the decision to return to play.

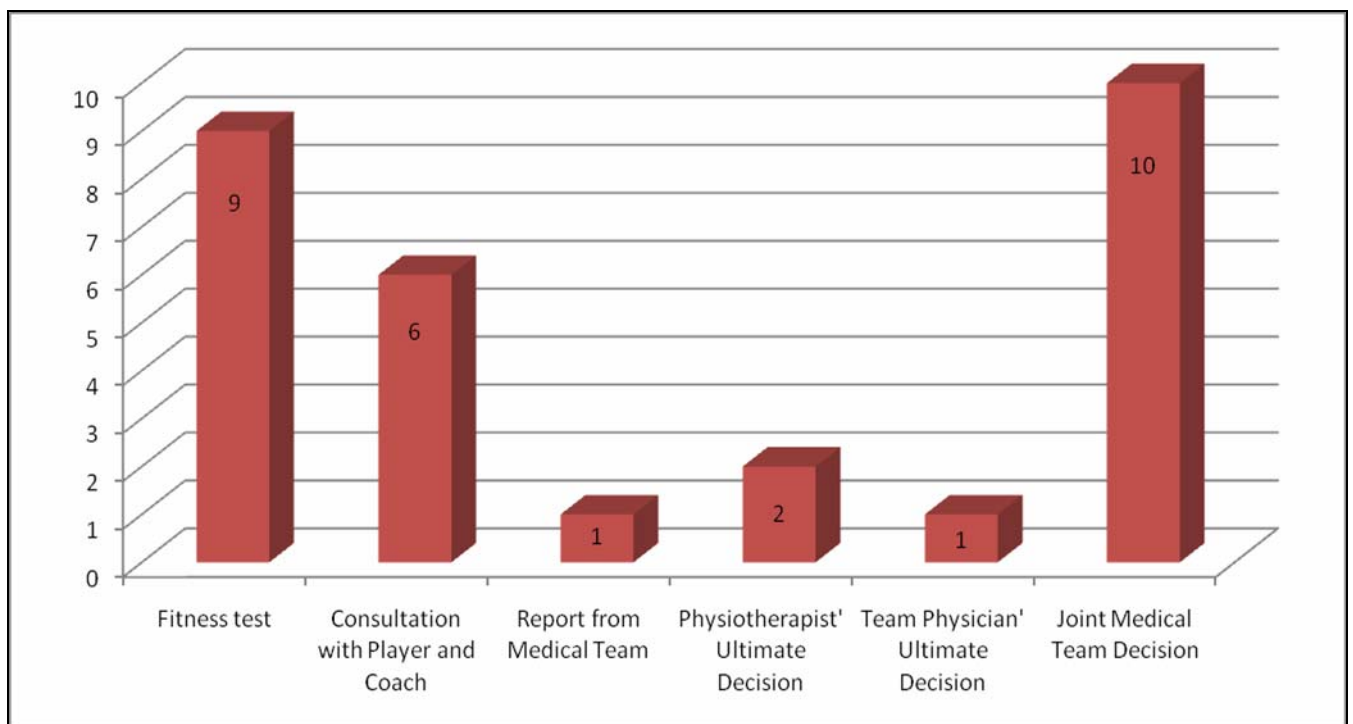


Figure 4.6 Criteria used to decide whether a player is ready to get back onto the field

#### 4.11 Significance of the medical team

The response from the open ended questions highlighted the significance of the medical team being of great help to the PSL teams, especially with regard to the prevention and management of injuries. They also enabled players to recover quickly and were on hand to advise and manage injuries as well as to educate the team on medical issues.



#### **4.12 The team that did not have a medical team structure in place**

One team did not have a medical team structure in place that was employed for the team.

This team reported that it would have benefitted the team if they had a medical team structure in place since the medical team would have been able to better manage injuries on a daily basis.

They did however have a protocol to follow when a player sustained an injury and this was to take player to the doctor who would then decide if it was necessary to go to a physiotherapist.

The reasons given for not having a medical team structure in place was that there is a high demand for physiotherapists in the country and that most of the physiotherapists are employed at government hospitals or go into private practice instead of working for sport clubs. The criteria used to decide whether a player is ready to get back onto the field was advice given by a physiotherapist who treats the players but was in private practice.

#### **4.13 Summary of results**

The response rate was 54%. All except one of the medical teams had a medical team structure in place that was employed for the team. None of the medical teams however, had an 'ideal' medical team structure comprising the six medical professionals, namely, a sports physician, a sports physiotherapist, a massage therapist, a podiatrist, a dietician and a sport psychologist.

Thirty one percent of the teams reported that their medical professionals although qualified, were not all qualified and experienced in managing sport related injuries. The inter and multi-disciplinary approach within the medical professionals at PSL showed that there was good teamwork and communication between members of the medical team and the roles between

medical team members were clearly defined. However 39% of the participants showed that there were no regular workshops to highlight the role and the importance of the medical team.

## CHAPTER 5

### DISCUSSION

This chapter discusses the main findings of the study. It includes further interpretation of the results presented in Chapter 4 and how they might relate to other studies. There is discussion of the demographic factors, composition of the PSL medical teams, professional development and interaction of the medical team, protocol for injury and subsequent management, the significance of the medical team, and the conclusion.

#### 5.1. Demographic Factors

**5.1.1 Gender of Participants** All the participants in this study were males and this finding is consistent with other published studies (Fasting and Pfister, 2000; Waddington et al, 2001; Cushion and Jones, 2001; Sportscotland, 2008) were males predominate this positions. Women should become more knowledgeable and involved in leadership positions. Women are becoming increasingly involved in these professions in other parts of the world (Fasting and Pfister, 2000; Sportscotland, 2008). Further stated by Fasting and Pfister (2000) and supported by Sportscotland (2008) is that women coaches are often influential and that they have different styles of coaching elaborated as feminine or masculine. The distinction is that the feminine style is characterised by empathy, communicative competence and the willingness to cooperate. The masculine style is characterised by aggressiveness, demonstration of power and superiority, and an authoritarian leadership style. (Fasting and Pfister, 2000; Cushion and Jones, 2001). South African soccer is male dominated; the coach and the team manager tend to be authoritarian and

may decide on who get to be part of the medical team this may also influence gender selection of the preferred professionals to work for the team.

### **5.1.2 Level of Participation in this study**

Evidence demonstrate that the questionnaire length and the response rate are related (Jepson, Asch, Hershey and Ubel, 2005; Harrison and Cock, 2004) whilst Appel, Petkunas and Russell (1995) and Shannon and Arbet (1994) experienced success with the fax technology. In this study, the response rate was 54% in a sample of 24 team managers and head coaches. The fax was the method of choice (Shannon and Arbet, 1994) and was successful in eliciting return of questionnaires from all the selected teams. Nine of the respondents were team managers compared to the 4 head coaches. This difference can be explained by the fact that some of the head coaches were unavailable due to game commitments at the time of data collection, and consequently, more team managers were available to participate in the research. All the PSL teams that were intended to participate in the study were all represented. The low response rate was mainly due to the team deciding whether only the coach or team manager would give their time to participate in the study, only one team had a team manager and coach participating. This was acceptable to the researcher since the required data was elicited. Literature also emphasizes that there is no gold standard for acceptable response rate (Cummings, Savitz and Konrad, 2001) but if the response rate is above 40% this is considered acceptable as in this study.

### **5.1.3 Education background of the participant**

Most of the 13 participants (69%) had formal training or a qualification. Reilly (2003) highlighted that coaching or managing a soccer team has become complex and requires the managers and coaches to operate effectively in different roles in support of their players. This includes sourcing needful resources such as the medical team. It is also essential that the training of team managers and coaches encompass the importance of having a multi-disciplinary medical team which according to Howe (1991), and Janousek et al. (2003), is needed for the provision of quality medical care. There is paucity of literature on the educational background of team managers and coaches, what is highlighted in the literature are the personal traits, leadership styles, behaviour analysis and the coaching science need for success in creating winning teams (Voight and Callagan, 2001; Cushion and Jones, 2001).

### **5.2 Composition of the PSL medical teams**

Twelve out of 13 participants (92%) reported having a medical team structure in place that was employed for the team. Most participants reported having a sports physiotherapist (85%) as part of their medical team. This was followed by a sports physician (77%). Massage therapist were third most common in the PSL teams (62%), followed by dieticians (31%) and sports psychologist (15%). There were no podiatrists in any of the PSL medical teams. According to Brandon (1992), the role of the podiatrist in sports medicine has been to prescribe corrective orthotics, which is the inserts for athletes' shoes. This helps control the motion of the foot. He further added that research into the effectiveness of orthotic devices suggests that they can help solve problems with a success rate of 70 – 80%. Radovic (2009) agrees with this and adds that keeping the lower extremities healthy is so important to an athlete that most professional soccer

teams have a team podiatrist who treats minor problems like corns, calluses, and blisters to major injuries like fractures and dislocations. According to Radovic (2009), conditions treated by podiatrists are common and inevitable in contact sports, and those podiatrists not only treat injuries and get athletes back into competition as soon as possible, but they also help athletes to get into a condition that minimizes the risk of injury to the foot and ankle.

Four out of 13 participants (31%) reported having other medical professionals such as a masseuse and a fitness trainer in their medical team. A masseuse whilst also performing massage differs from a massage therapist who is trained in manipulation of the soft tissues of the body by rubbing, stroking, kneading for therapeutic or healing purposes. According to Firer and Ferguson (1998); and Brukner and Khan (2003), masseurs can be of great help in heavy training sessions to reduce muscle soreness and stiffness and to prevent muscle trauma, which according to Guillodo and Saraux (2009), mainly results from sporting activities and accounts for 10 – 55% of sports injuries. According to Galloway and Watt (2004), a significant proportion of a physiotherapist's time goes into the delivery of massage at sporting events. They recommend that given the popularity of massage among athletes, consideration should be given to the use of massage therapists at sporting events. A fitness trainer according to Madden et al. (2003) occupies a unique position central to athlete health care in that he is a therapist, counsellor and confidant for the athlete, an advisor to the coach, and an assistant to the team physician. They further add that an athletic trainer provides screening, supervisors conditioning care, and rehabilitation, and provides continuous evaluation of the athlete.

According to Howe (1991), the team physician and the fitness trainer are the medical professionals most intimately involved with the athlete; in that they are the first to arrive at practice or competition and the last to leave. The fitness trainer, according to Howe (1991), has the opportunity for closer daily contact with the athlete and the coach and he takes the instructions from the team physician and converts it into a meaningful rehabilitation program for the athlete while keeping the coach informed on a daily basis and reporting to the team physician on the athlete's progress. Most of the participants reported having a sports physiotherapist (85%) and a sports physician (77%). They were found to be the key members in the PSL medical teams. The key members in a sports medicine team are the players, the team physician, the coach and the physiotherapist. This is concurring with results from other studies by Macleod (1989), and Mellion et al. (2003). Macleod (1989), found the team physician to be an integral member of the team in that he works closely with the players and at the same time with the coaches, which agrees with the opinion of Mellion et al. (2003). According to them the key players in the sports medicine team are the player, the team physician, the coach and the physiotherapist.

Less than half of the participants (31%) reported having a dietician as part of their medical team structure, even though according to Firer and Ferguson (1998) a dietician is able to practice the intake necessary to replace energy losses as well as develop the physiological status needed for peak performance. According to Glazer (2008), eating disorders are on the rise worldwide and may affect players at rates much greater than the normal population, and once present can be challenging to treat. They suggested a team approach to the treatment for eating disorders, including regular interaction with a dietician, a psychologist and a team physician.

There were very few psychologists in the South African PSL medical teams (15%). Although they play a crucial role in stress management, mentally preparing a player for competition and preventing mental breakdown which can often occur during competition (Ahern and Lohr, 1997; Firer and Ferguson, 1998; Hemmings and Povey, 2002; Pain and Harwood, 2007). Perhaps there is a lack of focus on the psycho-social aspects of injury rehabilitation or it could be inadequate knowledge regarding the role and importance of a psychologist in the medical team.

### **5.3 The PSL medical teams compared to the ‘ideal’ medical team structure**

The ideal medical team according to Bergfeld (1999) and Bolzonello (1999) are medical professionals who understand the needs of professional sports people as a unit, and their skills should cover both general practice and specialist sports medicine. Moreover, it is understood that no one person in the team has all the answers and that the medical professionals should confer on decision making for the benefit of the players (Bolzonello, 1999). Only one team came close however to having the ‘ideal’ medical team structure comprising a sports physician, a sport physiotherapist, a sport psychologist, a massage therapist, a dietician and a podiatrist as defined by Brukner and Khan (2003). According to Janousek et al. (2003), a multi-disciplinary medical team will enhance the performance of the team by seeing that injuries are prevented and effectively managed. It is important that there is a team structure; nevertheless every member of the team has his own expertise that is acquired from training, and which can assist in the delivery of quality medical care.



## **5.4 Professional development and interaction of the medical team**

### 5.4.1 Interaction of team members

Twelve out of 13 participants (92%) reported good communication and teamwork between members of the medical team. Communication is the art of sharing meaningful information with people by means of an interchange of experience and knowledge. The coach through effective communication skills is able to motivate the players and provide them with information that will allow them to train effectively and improve performance. Improved communication skills will also enable both the player and the coach to gain much more from the coaching relationship (Rhind and Jowett, 2010) Many researchers agree with this and add that good communication skills in sports are among the most important factors contributing to team performance (Macleod, 1989; Howe, 1991; Jobe and Pink, 1993; Russ, 1998; and Madden et al, 2003). Coaches should develop their verbal and non-verbal communication skills and ensure that they provide positive feedback during coaching sessions and give all players equal attention. Coaches should also ensure that they not only talk to their players but that they also listen to their players. According to Madden et al. (2003), discussion that is focused on the management of injuries would not only enhance the relationship between player and coach but it will also positively enhance the working relationship between medical professionals and the coach. Madden et al. (2003) further added that communication between the coach and medical professionals should also include the guidelines for participation, evaluation of the player's fitness and the co-ordination of the activities of the medical personnel. Howe (1991) emphasized that the coach needs certain definite information, including the exact diagnosis and a realistic prognosis for the player's return to action. According to Howe (1991), unrealistic restrictions by the medical team of an obviously improving player may cause the coach to doubt the physician's interest in returning

the player to participation and unduly good prognosis may also breed mistrust. It is hence important, according to Madden et al (2003), for the team physician to take input from the rest of the medical team and including the coach, in order to prevent any conflict that may arise from the team physician's decision. Howe (1991) agrees with this but adds that during actual competition, it is crucial that all parties involved recognize that the team physician's decision regarding whether a player should play or not is final for that contest.

Conflict between team members in the research was reported by 8% of the participants and this was due to the coach, player and medical professionals not being clear on how injuries are managed. According to Mellion et al (2003), there may be such instances of conflict within the team where the team does not have a set protocol for how injuries are managed and good communication is an effective means of not only resolving the conflict, but also enhancing co-operation when conflicting issues between team members arise. Madden et al (2003), shares the same opinion but stress certain relationships as requiring extra communication, namely that between the player – coach, player – medical professionals, and coach – medical professionals. According to Mellion et al. (2003) and Madden et al. (2003) tactful and skilful communication can be a healing influence in these relationships, should conflict arise. One participant also reported conflict with regard to availability of medical supplies. According to Gibson and King (1992), this can be avoided by the team meeting on a regular basis to clarify medical issues, check their medical supplies and review their individual responsibilities.

In the research, less than half of the participants (n=6) reported that regular workshops were being held to educate the team on the avoidance and management of injuries. Mellion et al.

(2003) highlighted that there is another side to communication which is education. They pointed out that the team physician should be prepared to educate players, coaches, athletic trainers, administrators, and medical personnel. Howe (1991) agrees with this and adds that education also serves as the best defence against food fads or harmful interventions such as the use of anabolic steroids. Madden et al. (2003), are of the same opinion and further add that even through misconceptions have a way of persisting even in sports and increase the risk of harm to players, the team physician is able to dispel them by means of communication and education of players.

#### 5.4.2 Professional Development

Drawer and Fuller (2002) determined that the players' perceptions and level of satisfaction were lower with regard to the adequacy of support services such as sport science and education/welfare support. McCrory (2003) emphasized the importance of clinical governance as means to professional development for players, team managers and healthcare professionals. Clinical governance include the processes of clinical audit, risk management, professional development and player participation In the research however it was found that education of players, coaches and medical team members by means of workshops was not done in all PSL teams and was only reported to have taken place by 6 out of 13 participants. According to Dodds (1989) research has shown that a lack of education poses a serious problem to sports clubs. To illustrate this Dodds (1989), expressed that players do not understand the physiology and the principles behind training and preparing for competition physically or mentally and that advise on training, taking adequate rest and diet is important as prevention of illness or injury is better than cure. Howe (1991) adds that players are anxious to learn about sports medicine and that if players know how

to recognize a significant injury and provide immediate self – care, they will be less likely to complicate the problem by continued activity, and more likely to seek prompt professional attention when they are injured. Madden et al. (2003) are of the same opinion, but also add that the team physician should provide continuing education to the coaching staff in order to eliminate outdated and harmful techniques, which can be a liability to the club, and to ensure that the coach and the medical team are up to date with improvements that are made in medical and preventative care. Howe (1991) also points out the value of epidemiologic studies of sports injuries. According to Howe (1991), such studies often lead to rule modifications, equipment improvements and changes in training and conditioning techniques that will not only improve safety but also performance.

The results also showed that the roles of the medical professionals in terms of how injuries are managed were clearly defined. One participant was not sure and one participant reported there to be a poor definition of medical roles within the team. According to Howe (1991), it is important that the limits of each role be understood and adhered to. He further added that communication is an essential and that there should be scheduled opportunities for the medical professionals to meet for general discussions regarding the treatment of players and to resolve their differences.

### **5.5 Protocol for injury and subsequent management**

All participants reported having their own protocol for injury and subsequent management in the sense that there was a system in which injuries were managed that was unique to the team. The importance of having a protocol in place for injury management was emphasized by Gibson and King (1992) who suggested that the medical team develop strategies for delivering medical care

in an attempt to be able to compare whether injury management guidelines are being met. He also highlighted that appropriate records of pre – participation, evaluations, treatments, consultations, rehabilitation efforts, and all medical decisions made concerning team members must be efficiently maintained. In the research 4 out of 13 participants (31%) stated that their players would be assessed by a physiotherapist, who would then decide on further treatment and whether a specialist is needed to intervene. According to Madden et al. (2003); and Howe (1991), the coach also needs to be told what steps are being taken in treating the player's problem and be given specific instructions as to how the coaching staff can help. He further added that when the player is allowed back to practice after recovery, the coach must know any limitations that may be required and should understand the full rehabilitation plan so practice experience can support it. Twenty three percent of participants mentioned in the research that the coach will also be involved in the rehabilitation. It was also highlighted by Madden et al. (2003), that if a player wishes to participate against medical recommendations, it may be a good idea to have the player sign a waiver stating that they are fully aware of the risks of participation and that they assume the risk. According to Welch and Kelly (2004), a player might never have the opportunity ever again, and after training for so long and giving so much, if they are prepared to take the risk, then it is ultimately up to them.

## **5.6 Leadership of the medical team**

Eight out of 13 participants reported having a physician as the head of the medical team whilst 4 of the participants reported having a physiotherapist as the head of the medical team. According to Madden et al (2003), the team leader is responsible for supervising on – field injuries, designating responsibilities, implementing protocols, pre – arranging a network of referrals and

emergency care, and for ultimately directing the treatment of all serious injuries. They added that this person could either be a team physician or a senior physiotherapist, but in many situations with limited resources, it may also be the coach. Howe (1991) disagreed with this and said that although a team will have managers or trainers to help with the daily operations; the team physician has the responsibility for all aspects of medical care and safety for the team. Crane (1990) found that a physiotherapist is able to co-ordinate the activities of the various medical disciplines and make medical decisions, such as the decision to return to play. However Mellion et al (2003) expressed that the team physician is responsible for treating and co-ordinating the medical care of players.

### **5.7 Qualification, experience and employment of medical professionals**

Four out of 13 (31%) reported that although their medical professionals were qualified in their respective professions, not all their medical professionals were qualified and experienced in sport. According to Waddington et al. (2001), this was also the case with half of the physiotherapists in the English soccer clubs. Due to the physiotherapist being inappropriately qualified, they were in a weak position to resist any attempts that tried to influence their clinical decisions. According to Madden et al. (2003) knowledge of specific sports and their associated injury patterns, and familiarity with the physical environment enables team physicians to anticipate potential problems, and avoid the player from injury, re – injury and permanent disability. Howe (1991) agrees with this and adds that the medical professionals should keep abreast of advances due to the discipline of sports medicine which is continuously evolving. According to Mellion et al. (2003), return to play decisions is constantly being challenged, and being appropriately qualified in sport will enable medical professionals to back their clinical

decisions with appropriate qualifications and knowledge of the sport and associated injuries, which can protect the club from future liability.

Madden et al. (2003) also agreed that being adequately qualified and experienced in sport will enable medical professionals to back their clinical decisions and added that continuing education of the coach and the athletic training staff is also important to eliminate outdated and possibly harmful techniques. With regard to the hiring of medical professionals, two participants reported gender to be an issue. Sport clubs need to avoid bias against females, since more females are becoming educated in sports medicine and are just as capable of delivering high quality medical care as males. From all the literature reviewed, no mention has been made of gender but what has strongly emerged is that a detailed knowledge not only of the musculo – skeletal system but also of the process of growth and development, cardio – respiratory function, neurology as well as exercise physiology, biomechanics and the specific demands of sport (Howe 1991; Madden et al. 2003; Mellion et al. 2003; Welch and Kelly, 2004).

### **5.8 Significance of the medical team**

All the participants felt that the medical team was of great help, especially with regard to the prevention and management of injuries. This was in keeping with other researchers who reported a multi-disciplinary medical team to be very capable of effectively screening, preventing and treating players' injuries and enhancing team performance (Brukner and Khan 2003; Madden et al. 2003; Janousek et al. 2003; Russ 1998; Ahern and Lohr 1997).

## **5.9 Conclusion**

Studies show that an ideal medical team structure in terms of a full multi-disciplinary medical team can benefit a premier soccer league team by lowering the cost of injuries. (Fuller 2007; Brukner and Khan 2003; Madden et al. 2003; Russ 1998; Ahern and Lohr 1997). A multi-disciplinary medical team is also useful in dealing with ethical issues and cases of litigation. The enormous costs of litigation can perhaps be avoided if medical professionals employed by the team are used to make decisions regarding players, such as decisions to return to play and when a player should be out of the game due to injury (Waddington et al. 2001, Dunn et al. 2007).



## **CHAPTER 6**

### **SUMMARY, CONCLUSION, LIMITATIONS, AND RECOMMENDATIONS**

#### **6.1 Introduction**

In this final chapter, a concise summary of the study is provided. Details of the major issues in the study are given in the conclusion, and thereafter some recommendations are proposed at the end of this chapter.

#### **6.2 Summary**

The aim of this study was to investigate whether the Premier Soccer League teams in South Africa had an 'ideal' medical team structure. The study specifically identified whether each of the PSL teams had a medical team structure in place. It then went on to identify the composition of the medical team.

The study explored the professional development and interaction of the medical team with regard to teamwork and communication between members of the medical team, conflict between team members, regular workshops, a clear definition of medical roles within the medical team and a protocol for injury and subsequent management. The research also addressed whether the medical professionals were all qualified and experienced in sport and whether gender was an issue when hiring medical professionals.

The study identified what was done in each PSL team when a player sustained an injury and the criteria that the PSL team used to decide whether the player was ready to get back onto the field. The research also identified whether the medical team was of any benefit to the team.

The findings of this study revealed that none of the PSL teams had an 'ideal' medical team structure comprising a sports physician, a sports physiotherapist, a massage therapist, a dietician, a sports psychologist and a podiatrist. One of the PSL teams came close and had 5 of these medical professionals on the medical team. There was one team that had none of these medical professionals employed for the team.

The study revealed that communication and teamwork was excellent in the PSL teams with 12 out of 13 participants reporting there to be good teamwork and communication between members of the medical team. The research showed that there was also a clear definition of medical roles within the medical team. Six out of 13 participants reported that regular workshops were being held in the PSL team in order to educate team members and highlight the role and importance of the medical team to the rest of the team.

The study also revealed that all of the PSL teams had their own protocol in place in terms of a system for injury management, from the moment a player sustained an injury up until he / she returned to the game / sport / field. The teams that had a medical team employed for the team had their injured players assessed by the team physiotherapist or physician who would then decide on further treatment and whether a specialist was needed.

The PSL team that did not have a medical team employed for the team referred their injured players to medical professionals outside of the team for medical treatment. This participant reported that it would have benefitted the team if they had a medical team structure in place because injuries would have been better managed in the sense that the medical team would have been able to manage injuries on a daily basis.

The study also revealed that although the medical professionals in the PSL medical teams were qualified and experienced in their respective professions, they were not all qualified and experienced in sport. The medical team was found to be of great help to the team, especially with regard to the prevention and management of injuries.

### **6.3 Limitations of the study**

6.3.1 The Premier Soccer League games had commenced at the time of the study. This resulted in two teams not being able to participate in the study due to other responsibilities at the time. The commencement of the games also made it very difficult to get hold of all of the team managers and head coaches due to their busy schedules.

6.3.2 The questionnaire to the team manager and head coaches did not assess whether pre-participation examination and screening was conducted in the PSL teams and how it was done. It also did not question what each medical professional's role was within the medical team with regard to the management of injuries. This would have enabled the researcher to better investigate professional development and interaction of the medical team.

6.3.3 The questionnaire did not address whether the medical team was being provided with equipment and adequate treatment areas for the treatment of injuries. This would have enabled the researcher to get a greater insight into the management of injuries.

6.3.4 Question 3 in section A of the questionnaire could have been clearer and should have rather stated “How long have you been a team manager or coach for the current team?”

## **6.4 Recommendations**

Based on the findings of the study, the following recommendations are suggested:

6.4.1 Further research into reasons why the PSL teams in South Africa do not have an ‘ideal’ medical team structure.

6.4.2 Future studies that address pre-participation examination and screening in the PSL teams.

6.4.3 Studies that address whether the PSL medical teams are being provided with equipment and adequate treatment areas for the treatment of injury.

6.4.4 Medical professionals must be volunteers for promoting the importance of having an ideal multi-disciplinary medical team preventing and managing injuries in the PSL teams.

6.4.5 The management and coaches of the PSL teams must ensure that hired medical professionals are adequately trained and experienced in sport and must not let gender influence their decisions.

6.4.6 The South African governing bodies of each of the PSL teams (PSL AND SAFA) must facilitate the implementation of an ideal medical team structure into each of the PSL teams in order to increase the effectiveness of injury prevention and management.

6.4.7 To determine the needs analysis of soccer team managers and coaches for continued professional development in South African soccer.

## **6.5 Conclusion**

Twelve out of 16 PSL teams partook in this study. This comprises 75% of PSL teams in South Africa. The conclusions drawn from the results of the study show that these premier soccer league teams in South Africa do not have an “ideal” medical team structure since none of the medical teams are multi-disciplinary to the extent that they have a sports physician, sports physiotherapist, a sport psychologist, a dietician, a massage therapist and a podiatrist, and neither are the medical professionals all qualified and experienced in sport.

It is a general consensus from all of the PSL teams that an ideal medical team structure would show greater efficiency in the management and prevention of injuries. The hiring of medical professionals in the PSL teams should therefore be reviewed. Medical professionals from all of the above disciplines should be hired and they qualified and experienced in sport. Gender should not be an issue when hiring medical professionals since there are many females who are appropriately trained and experienced in sport and who are professional enough not to distract the attention of the players.

What is still lacking in some medical teams is teamwork and the clear definition of each medical professional's responsibilities. This causes conflict within the team and negatively impacts on the management of injuries. However this can be remedied by organizing more workshops, discussions and also social events between team members, to highlight the role and importance of the medical team in the prompt and efficient management of injuries. This increased interaction will not only educate team members on the importance of the medical team but will also enable the medical team to learn more about the sport from the coach's and the player's perspective, all of which will positively enhance the management of injuries and ultimately the performance of the team.

It is essential that players be treated by medical professionals hired specifically for the team. They should not have to go to medical professionals outside of the team for medical treatment. Players treated in their own environment respond better to treatment and medical professionals employed for the team are better able to concentrate on the players. Injuries can also be treated on a daily basis as reported by one of the participants.

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## **APPENDIX 1: LETTER TO SAFA REQUESTING PERMISSION TO CONDUCT**

### **THE STUDY**

The Chairperson

SAFA

Dear Sir / Madam

### **Requesting permission to conduct a study on the Premier Soccer League teams.**

I am a post-graduate student at the University of Limpopo- Medunsa campus. As part of my Master's degree program, I am conducting a study to investigate whether the PSL teams have an ideal medical team structure. The PSL teams have been strategically chosen in the hope that this research can contribute toward a possible victory for South Africa in the 2010 Soccer World Cup.

There is no existing SAFA and government policy in place regarding the need for an appropriately trained medical team and its ideal structure yet this is crucial to the players' rehabilitation and prevention of injury.

Hence, the choice of research, that it will empower the soccer management and the government to incorporate a policy that insists on the PSL teams having an ideal medical team structure, and hopefully they will even finance it.

The study will benefit all those that are involved in soccer (the players, coaches, medical professionals, soccer management and the public) for the following reasons:

An ideal medical team structure will be better able to prevent and treat injury, rehabilitate a player back into sport as quick as possible and, plan comprehensive treatment and training programmes with continuous re-assessment.

With your permission, questionnaires will be sent by electronic means to the teams for either their team manager or the coach to fill out. Their participation will be voluntary. The results will be published for scientific purposes but privacy will be guaranteed.

Thanking you

Yours sincerely

Ms. Asha Haribhai

312A Riverside Place, Centurion, 0125



**APPENDIX 2: LETTER TO TEAM MANAGER REQUESTING PERMISSION TO CONDUCT THE STUDY**

The Team Manager

Name of the team

Dear Sir / Madam

**Requesting permission to conduct a study on your team**

I am a post-graduate student at the University of Limpopo- Medunsa campus. As part of my Master's degree program, I am conducting a study to investigate whether the PSL teams have an ideal medical team structure. The PSL teams have been strategically chosen in the hope that this research can contribute toward a possible victory for South Africa in the 2010 Soccer World Cup.

There is no existing SAFA and government policy in place regarding the need for an appropriately trained medical team and its ideal structure yet this is crucial to the players' rehabilitation and prevention of injury.

Hence, the choice of research, that it will empower the soccer management and the government to incorporate a policy that insists on the PSL teams having an ideal medical team structure, and hopefully they will even finance it.

The study will benefit all those that are involved in soccer (the players, coaches, medical professionals, soccer management and the public) for the following reasons:

An ideal medical team structure will be better able to prevent and treat injury, rehabilitate a player back into sport as quick as possible and, plan comprehensive treatment and training programmes with continuous re-assessment.

With your permission, a questionnaire will be sent by electronic means to the team. It can be filled out by either yourself or the coach. Participation will be voluntary. The results will be published for scientific purposes but privacy will be guaranteed.

Thanking you

Yours sincerely

Ms. Asha Haribhai

312A Riverside Place, Centurion, 0125

**APPENDIX 3: CONSENT FORM**

**UNIVERSITY OF LIMPOPO (Medunsa Campus) CONSENT FORM**

**Statement concerning participation in a Research Project**

Name of Study

.....  
.....

I have read the information on/heard the aims and objectives of the proposed study and was provided the opportunity to ask questions and given adequate time to rethink the issue. The aim and objectives of the study are sufficiently clear to me. I have not been pressurized to participate in any way.

I understand that participation in this study is completely voluntary and that I may withdraw from it at any time and without supplying reasons.

I know that this study has been approved by the Research, Ethics and Publications Committee of Faculty of Medicine, University of Limpopo (Medunsa Campus). I am fully aware that the results of this study will be used for scientific purposes and may be published. I agree to this, provided my privacy is guaranteed.

I hereby give consent to participate in this study

.....

Name of participant

Signature of participant

.....

Place.

Date.

Witness

---

**Statement by the Researcher**

I provided verbal and/or written information regarding this study. I agree to answer any future questions concerning the study as best as I am able.

I will adhere to the approved protocol.

.....

Name of Researcher

Signature

Date

Place

**APPENDIX 4: QUESTIONNAIRE**

**SECTION A**

M	F
---	---

1. Gender

2. Team manager/Coach

Team Manager	Coach
--------------	-------

3. Working experience \_\_\_\_\_

4. Qualification/Training

Yes	No
-----	----

a) Do you have a qualification or any formal training?

b) What is it? \_\_\_\_\_

c) Where was it obtained? \_\_\_\_\_

d) For how long have you had this qualification? \_\_\_\_\_

e) Was the importance of a medical team Covered in your training?

Yes	No
-----	----

5. Do you have a medical team structure in place, that is Employed for the team

Yes	No
-----	----

- If yes, please answer **section B**
- If no, please answer **section C**

**SECTION B**

6. Kindly indicate the members of your medical team structure

Sports Physician	<input type="text"/>
Sports Physiotherapist	<input type="text"/>
Massage Therapist	<input type="text"/>
Podiatrist	<input type="text"/>
Dietician	<input type="text"/>
Sports psychologist	<input type="text"/>
Other	<input type="text"/>
If other, please specify _____	<input type="text"/>

---

---

7. Who is the head of the medical team? \_\_\_\_\_  
Reason \_\_\_\_\_

8. Are the medical team professionals all qualified and experienced in sports? Specify those who are not

Yes	No	Not sure
-----	----	----------

---

---

9. Is gender an issue when hiring medical professionals?

Yes	No	Not sure
-----	----	----------

Reason \_\_\_\_\_

---

---

10. Are there regular workshops that are being held to highlight the importance and role of the medical team?

Yes	No	Not sure
-----	----	----------

11. Does the medical team work closely together?

Yes	No	Not sure
-----	----	----------

12. Does the medical team communicate well with other members of the team?

Yes	No	Not sure
-----	----	----------

13. Has the medical team been of any help to the team?

Yes	No	Not sure
-----	----	----------

If yes, please specify \_\_\_\_\_

\_\_\_\_\_

14. Is each medical professional's specialty within the team clearly defined?

Yes	No	Not sure
-----	----	----------

15. Have there been any instances of conflict, in terms of communication with the medical team?

Yes	No	Not sure
-----	----	----------

If yes, please specify \_\_\_\_\_

\_\_\_\_\_

16. Is there an established protocol that is followed when a player gets injured and subsequent management?

Yes	No	Not sure
-----	----	----------

Specify \_\_\_\_\_

\_\_\_\_\_

17. If you don't have a protocol in place, kindly specify

what will be done when an athlete gets injured and subsequent management?

---

---

---

18. When a player is injured, what criteria does the medical team use to decide that the player is ready to get back onto the field?

---

---

19. Are there any other criteria other than that from the medical team to decide that the player is ready to get back onto the field?

---

---

**SECTION C**

20. Would it have benefited the team if you had a medical team structure in place?

Yes	No	Not sure
-----	----	----------

If yes, please specify how it would have benefited the team

---

---

---

21. Is there an established protocol that is followed when an athlete gets injured and subsequent management?

Yes	No	Not sure
-----	----	----------

If yes, please specify

---

---

---

22. If you don't have a protocol in place, kindly specify what will be done when an athlete gets injured and subsequent management.

---

---

---

23. Kindly specify the possible reasons why there is no medical team structure in place

---

---

24. When a player is injured, what criteria is used to decide that the player is ready to get back onto the field?

---

---



## PILOT STUDY

1. Have you understood all of the questions?

Yes	No
-----	----

If no, kindly specify

---

---

---

2. Have all of the questions adequately addressed the topic?

Yes	No
-----	----

If no, kindly specify

---

---

---

3. Has the questionnaire omitted any important issues?

Yes	No
-----	----

If yes, kindly specify

---

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**APPENDIX 5: RESEARCH, ETHICS AND PUBLICATIONS COMMITTEE**

**CLEARANCE CERTIFICATE**

07-12-10;01:35PM;

# 1/ 1

**UNIVERSITY OF LIMPOPO**

Medunsa Campus



**RESEARCH, ETHICS & PUBLICATIONS COMMITTEE**

**FACULTY OF MEDICINE**

**CLEARANCE CERTIFICATE**

P O Medunsa  
Medunsa  
0204  
SOUTH AFRICA

Tel: 012 - 521 4000  
Fax: 012 - 560 0086

**MEETING:** 05/2005

**PROJECT NUMBER:** MP 97/2005

**PROJECT Title:** An investigation into whether Premier Soccer League Teams in South Africa have an ideal Medical Team Structure  
**Researcher:** Ms A Haribhai  
**Supervisor:** Mrs BF Mtshali  
**Department:** Physiotherapy  
**Degree:** MSc (Physiotherapy)

**DATE CONSIDERED:** June 09, 2005

**DECISION OF COMMITTEE:**

REPC approved the project.

**DATE:** June 28, 2005



**PROF GA OGUNBANJO**  
**CHAIRMAN (RESEARCH) REPC OF FBM**

- Note:** i) Should any departure be contemplated from the research procedure as approved, the researcher(s) must re-submit the protocol to the committee.  
ii) The budget for the research will be considered separately from the protocol. PLEASE QUOTE THE PROTOCOL NUMBER IN ALL ENQUIRIES.

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