

**Research Article** 

# Knowledge, Attitude & Practice (KAP) for Injury Prevention Strategies Among Football Players in Meghalaya

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# A B S T R A C T

*Background:* Football is a popular sport played worldwide. Being a high-risk sport, it predisposes players to injuries.

*Aim:* The aim of this study is to analyse knowledge, attitude and practice for injury prevention amongst footballers in Meghalaya along with the analysis of the awareness of the usage of protective gear, diet, training programme and role of physiotherapy in football.

*Methods:* One hundred and seventy-one respondents participated in the KAP study. An online questionnaire was circulated among football players participating in the Shillong Premier League 2022–23 from May 2022 to June 2022. Questions were linked with demographic data, injury history, knowledge, attitudes and injury prevention practices.

*Results:* The normality of demographic data was calculated using the Kolmogorov–Smirnov test. The mean age of participants was 20 years. The results showed that footballers have good knowledge regarding injury prevention.

*Conclusion:* The study concludes that the majority of football players have good knowledge regarding sports injury prevention in terms of protective gear, diet, training programme and the role of physiotherapy in football.

**Keywords:** Football Players, Sports Injury, Prevention Strategies, Knowledge, Attitude

#### Introduction

To begin with, football is a popular sport across the globe. In addition, football is quite popular in Meghalaya as well. This sport is enjoyed by people of all ages both for recreation and as a competitive sport. Though it is played with great enthusiasm, incidences of injuries associated with the musculoskeletal system accompany it. Football is a risky sport in which injuries are very frequent among the players. It has been reported that lower levels of physical fitness and poor sports training techniques can cause injuries most often.<sup>1</sup>

It has already been well distinguished that absence/ inadequate warm-up together with stretching can lead to injuries. In all levels of football from senior to junior level, injuries are sustained. In the present world, for an all-round development, sport is considered as an important factor. A sport is associated with the image of the state and country. Humans acknowledge the necessity of sports to be a good

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source for a healthy body and mind. Altogether it is crucial to exercise both the mind and body.<sup>1</sup>

Most injuries in football are musculoskeletal and are mainly concentrated in the lower extremities like muscles, ligaments and tendons. During football, most of the injuries occur while tackling, running, being tackled, twisting, turning, jumping, and landing. The undue effect of the surface of the ground as well as any unevenness in the surface leads to more load in muscles and ligaments predisposing the player to a substantial risk of injury.<sup>2</sup>

Looking at previous literature, it can be seen that the lack of an athlete's knowledge is likely the reason behind the high rate of sports injury in football players.<sup>3</sup> Groups of exercises have been fabricated to aid the uninjured players to obviate injuries that incorporate dynamic warm-ups and principal stretching and strengthening exercises which mark the need of football players. Stretching and strengthening exercises before and after engaging in sports activities can reduce the possibility of sports injuries.<sup>4</sup> The importance of muscle balance and strength was reported as a preventive from sports injury in a study.<sup>5</sup>

Thus the present study was conducted to determine knowledge, attitude and practice for injury prevention strategies amongst footballers in Meghalaya.

## Methodology

This is a survey-based study where a validated questionnaire was sent to 200 football players in Meghalaya competing in Shillong Premier League 2022-23 from May 2022 to June 2022, of which, 171 participated in the survey. The questionnaire contained 32 questions with respect to the perception of strategies for injury prevention, warm-ups and cool-downs including nutrition or if they underwent any kind of strength and flexibility work. Demographic data was also calculated. The questionnaire was prepared and sent through Google Forms. The study was approved by the Research & Ethics Committee of the University and informed consent was obtained from the participants prior to the study. The study included participants of both genders residing in Meghalaya and belonging to the age group of 18–36 years. Participants who were uncooperative or those who had chronic medical, cardiovascular and respiratory conditions were excluded. The statistical tool used to analyse the data in this study was the Kolmogorov-Smirnov test.

#### Results

Out of 200 questionnaires, 171 (85.5%) were returned. Questions were asked regarding demographic data of players, dominance part, position in field and ground types. Of all participants, 91% were right-dominant and 8.3% were left-dominant. Natural grass was preferred by 71% of the subjects, while 12% preferred artificial grass, and 10.7% preferred mud. Among the respondents, 5.9% played as goalkeepers, 34.5% as defenders, 29.8% as midfielders, and 29.8% played in the forward position. It was found that the mean age of football players was 20 years.

Figure 1 shows the player's belief (what they have an idea about), attitude (what is their frame of mind) concerning how important injury prevention is and also the use of training time and motivation of coach. Questions 7, 8, 9, 10, 11, 12, and 13 were assessed on knowledge of injury prevention in Meghalaya (Figure 2), while questions 14, 15, 16, and 17 were to see injury prevention strategies among footballers (Figure 3).



Figure 1.Belief and Attitude Graph



Figure 2. Knowledge of Participants



Figure 3.Participants' Injury Prevention Strategies

#### Discussion

There are 260 million football club members worldwide and they can be divided into different categories such as professional football, elite salaried amateur football, and leisure football. Football injuries regularly occur, mostly to the lower extremity. Due to injured players' prolonged absence from the game, injuries not only have an impact on a player's character and physical performance but also on the success of teams and clubs. Sports-specific injury prevention plans should incorporate a variety of elements and varied tactics.<sup>6</sup> Football injuries may be influenced by a significant number of people.<sup>7</sup> The biggest influences on injury occurrence and prevention, besides football officials, the sports industry, football associations and medical teams with effective injury care, are team coaches and players themselves.<sup>8</sup>

Players and coaches have multiple beginning points for improving prevention now that they are aware that injuries are influenced by extrinsic and intrinsic causes; nonetheless, active injury prevention through training and warm-up exercises is well-recognised in the literature.<sup>9</sup> In recreational and junior football, team coaches have a wide range of responsibilities including instruction, preventive and also fundamental medical issues.<sup>10</sup> Through their training programme, team coaches are heavily involved in injury prevention techniques.<sup>11</sup> It is currently unclear how these injury prevention techniques and other injury knowledge are used in the regular practices of top football. When it comes to primary prevention measures, as well as secondary and tertiary preventative measures like return to play decisions, the team coaches and players have a crucial responsibility. According to reports, the effectiveness of injury prevention measures depends on their uptake by players and coaches, which is positively correlated with their ability to avoid injuries.<sup>12</sup>

Short et al. scrutinised the connection between the history of personal injury and preventative attitudes among college football players. They revealed that female players with injury histories reported higher risk perceptions than their counterparts who had not experienced injuries. On the other hand, people who had never been hurt before showed great assurance in their capacity to avoid harm.<sup>8</sup> Our findings suggest that history of injury and reporting of an injury had no relationship with risk beliefs. It may be the result of age-related variations in risk perceptions or preventative self-efficacy. It might as well be the consequence of social norms between the teams when risk assessments are more influenced by attitudes held by peers or coaches than by an individual's personal experiences. Further research should be done on both of these hypotheses in order to find potentially modifiable elements that may be targeted with particular interventions.

Although in our study we recognised "insufficient warmup" as a risk component, relatively few recommended warming up as a tactic for lowering injuries. There exists no difference in the section of coaches or players that believed warm-up was a preventive strategy postseason, but considerably more than coaches, believed bad warmingup is a risk component. This discrepancy's cause is unknown, but it emphasises the need for greater comprehension of the football community. It also shows that although offering preventative programmes may be the most practical way to reach a sizeable number of community-based athletes, more work has to be done to guarantee that coaches can effectively interpret information beyond simply the topic.<sup>13</sup>

We also observed that there was less consistency between on-field daily routine practice and awareness of injury prevention measures. In particular, the decision to continue to play after injuries in this study demonstrates that a majority of the players want to decide for themselves and regularly return to sports after injuries against the medical recommendation. This fact demonstrates, on the one hand, a certain suspicion of medical professionals' judgments, but on the other hand, it can be concluded that great football players have the false illusion of making their own medical decisions. The recently made assertion that the choice of when to return to play after an injury should be made by the team members.

Rehabilitation of sports injuries has become a specialised area, and it has brought orthopaedics, sports medicine specialists, and sports physical therapists together to treat sports injuries. It has been observed there is a lack of sportsrelated injury rehabilitation provisions in various parts of India.14 Frequently, common athletes are left on their own, whilst elite athletes possess some kind of protection. Contemporary rehabilitation strategies are used under the right surveillance is a crucial component of effective sports injury rehabilitation protocols.15 Since extended immobility can have negative consequences on muscle tone, strength, and structure, rehabilitation is established with an active rehabilitation strategy.<sup>16</sup> Instead of being time-based, the advancement through the stages of rehabilitation must be postulated on functional criteria, accompanied by sportspecific functional testing deciding succession facing the following stage. The most significant component, though, is tissue repair, and it's crucial to remember this when designing a programme. As the reconstruction stage spans for more than a year, it's advisable to keep an eye on players, and then continue their power and conditioning regimen till their fitness objectives are not achieved.<sup>17</sup>

Creighton et al. presented a continuance which could see the player returning to participation, return to sport and competition in order to ensure a graduated development of the physical needs in the sport. Before making a final decision, the team of rehabilitation must be fully informed of the requirements of the sport, any specific hazards, and the time commitment required for participation.<sup>13</sup> The athlete should ideally train alongside the squad to incorporate specific sports training into the continuing recovery before returning to play. At this point, load monitoring is essential to minimise abrupt hikes in the acute training load, prevent reinjury, and hence prevent any potential new injuries. An incomplete return to the sport is advised following an incident-free training session for the athlete, which can involve skipping an entire game.<sup>14</sup>

For complete recovery after a sports injury, one has to spend time away from sports, prevent re-injury, and undergo rehabilitation. Traditional treatment guidelines have been supplanted by advanced rehabilitation techniques, that are set up on an active rehabilitation framework which will need uniform engagement in distinction between the player and the total rehabilitation team. While efforts are made to ensure the earliest possible return to sport, it is very important to keep in mind that the player eventually owns the last word. A sports doctor is in charge of ensuring a cautious transformation back to competition. Following any injury, the key work is done by the rehabilitation team.<sup>15</sup>

The limitations of the study were the inability to connect with people from remote areas and response bias, i.e., most of the time, people tend to respond in a certain way due to the fear of being judged and because of social and personality differences.

## Conclusion

Based on this study, we concluded that the majority of players had knowledge regarding sports injury prevention in terms of protective gear, diet, training programme, and the role of physiotherapy in football.

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# References

- Silvers-Granelli HJ, Bizzini M, Arundale A, Mandelbaum BR, Snyder-Mackler L. Does the FIFA 11+ injury prevention program reduce the incidence of ACL injury in male soccer players? Clin Orthop Relat Res. 2017;475(10):2447-55. [PubMed] [Google Scholar]
- Alentorn-Geli E, Myer GD, Silvers HJ, Samitier G, Romero D, Lazaro-Haro C, Cugat R. Prevention of noncontact anterior cruciate ligament injuries in soccer players. Part 1: mechanism of injury and underlying risk factors. Knee Surg Sports Traumatol Arthrosc. 2009;17(7):705-29. [PubMed] [Google Scholar]
- Klügl M, Shrier I, McBain K, Shultz R, Meeuwisse WH, Garza D, Matheson GO. The prevention of sport injury: an analysis of 12,000 published manuscripts. Clin J Sport Med. 2010;20(6):407-12. [PubMed] [Google Scholar]
- 4. Soligard T, Nilstad A, Steffen K, Myklebust G, Holme

I, Dvorak J, Bahr R, Andersen TE. Compliance with a comprehensive warm-up programme to prevent injuries in youth football. Br J Sports Med. 2010;44(11):787-93. [PubMed] [Google Scholar]

- Krutsch W, Voss A, Gerling S, Grechenig S, Nerlich M, Angele P. First aid on field management in youth football. Arch Orthop Trauma Surg. 2014;134(9):1301-9. [PubMed] [Google Scholar]
- Dvorak J, Graf-Baumann T, Peterson L, Junge A. Football, or soccer, as it is called in North America, is the most popular sport worldwide. Am J Sports Med. 2000;28:S1-2. [PubMed] [Google Scholar]
- Chung KC, Lark ME, Cederna PS. Treating the football athlete: coaches' perspective from the University of Michigan. Hand Clin. 2017;33(1):1-8. [PubMed] [Google Scholar]
- Short SE, Reuter J, Brandt J, Short MW, Kontos AP. The relationships among three components of perceived risk of injury, previous injuries and gender in contact sport athletes. Athl Insight. 2004;6(3):38-46. [Google Scholar]
- Carter AF, Muller R. A survey of injury knowledge and technical needs of junior Rugby Union coaches in Townsville (North Queensland). J Sci Med Sport. 2008;11(2):167-73. [PubMed] [Google Scholar]
- Fullagar HH, McCunn R, Murray A. Updated review of the applied physiology of American college football: physical demands, strength and conditioning, nutrition and injury characteristics of America's favourite game. Int J Sports Physiol Perform. 2017;12(10):1396-403. [PubMed] [Google Scholar]
- Hootman JM, Dick R, Agel J. Epidemiology of collegiate injuries for 15 sports: summary and recommendations for injury prevention initiatives. J Athl Train. 2007;42(2):311-9. [PubMed] [Google Scholar]
- 12. Booth FW. Physiologic and biochemical effects of immobilization on muscle. Clin Orthop Relat Res. 1987;(219):15-20. [PubMed] [Google Scholar]
- Creighton DW, Shrier I, Shultz R, Meeuwisse WH, Matheson GO. Return-to-play in sport: a decisionbased model. Clin J Sport Med. 2010;20(5):379-85. [PubMed] [Google Scholar]
- Soomro N, Sanders R, Hackett D, Hubka T, Ebrahimi S, Freeston J, Cobley S. The efficacy of injury prevention programs in adolescent team sports: a meta-analysis. Am J Sports Med. 2016;44(9):2415-24. [PubMed] [Google Scholar]
- 15. Thorborg K, Krommes KK, Esteve E, Clausen MB, Bartels

EM, Rathleff MS. Effect of specific exercise-based football injury prevention programmes on the overall injury rate in football: a systematic review and metaanalysis of the FIFA 11 and 11+ programmes. Br J Sports Med. 2017;51(7):562-71. [PubMed] [Google Scholar]

- Beidler E, Bretzin AC, Hanock C, Covassin T. Sportrelated concussion: knowledge and reporting behaviours among collegiate club-sport athletes. J Athl Train. 2018;53(9):866-72. [PubMed] [Google Scholar]
- Yu H, Randhawa K, Côté P, Collaboration O. The effectiveness of physical agents for lower-limb soft tissue injuries: a systematic review. J Orthop Sports Phys Ther. 2016;46(7):523-54. [PubMed] [Google Scholar]