

Short Communication

Importance of Athlete Injury Management focusing on Evidence-based Approaches in Indian Physiotherapy Standards

Alagappan Thiyagarajan

Faculty/ Senior Sports Physiotherapist, Department of Sports Medicine, Chettinad Academy of Research and Education, Chettinad Hospital and Research Institute, Chennai, Tamil Nadu, India.

DOI: <https://doi.org/10.24321/2278.2044.202220>

I N F O

E-mail Id:

alagappanpt@gmail.com

Orcid Id:

<https://orcid.org/0000-0002-5359-3052>

How to cite this article:

Thiyagarajan A. Importance of Athlete Injury Management focusing on Evidence-based Approaches in Indian Physiotherapy Standards. Chettinad Health City Med J. 2022;11(2):78-80.

Date of Submission: 2022-05-13

Date of Acceptance: 2022-06-28

A B S T R A C T

Injuries are common among athletes at any point in their sports career. Physiotherapy management plays a vital role in the rehabilitation of athlete injury. Numerous pieces of evidence suggest that quick fix approaches, lack of clinical reasoning skills in injury healing science, and current Indian medical system practising guidelines are the reason for poor quality treatment in India, and it is difficult to provide the best quality treatment as per the athletes' requirements. A multidisciplinary team along with prompt evidence-based treatment is important in injury management. This article describes the current scenario in Indian physiotherapy as well as the suggestions and recommendations to implement evidence-based strategies for proper injury management among athletes.

Keywords: Evidence-Based Sports Rehabilitation, Athlete Injury Management, Indian Physiotherapy Standards

Introduction

Sports physiotherapy practice plays an important role in athlete injury management with respect to acute and chronic sports injuries.¹ During the phase of injury, the treatment aspects have not been attained to the fullest as per the athlete's requirement.¹ The treatment methods are focused on quick recovery and placebos and there is a big gap between patient education and exercise programme design strategies. It is claimed that lack of clinical reasoning skills, status of current medical system practice in India with respect to teamwork, less practical based academic activities during the bachelor course duration, and looking for temporary fix treatments lead to poor management of injuries among athletes.² Athletes' workload monitoring and injury management education provided to athletes are also not sufficient in India.

A push for evidence-based practice has permeated athlete injury management. This article focuses on the importance of implementing evidence-based physiotherapy practice in athlete injury management with suggestions and solutions for its implementation.^{2,3} Evidence-based practice is mainly focused on 3 main domains - 1. best research evidence, 2. clinical expertise, and 3. patient values. With respect to evidence-based practice, this article covers a few suggestions to overcome the current scenario.

Methodology

A thorough literature search revealed that multiple articles favoured implementing exercise therapy based on rehabilitation protocol format, utilising electrotherapy, manual therapy, and adjunct therapy for injury healing and pain management, and considered providing patient

education sessions to athletes as the best evidence-based value.

A survey of 22 relevant articles showed that Indian physiotherapy standards focused on quick-fix approaches that favour athletes in the initial phase of treatment.³ Athletes prefer quick, short recovery treatments due to their anxiety levels to return to play despite a poor understanding of their injury. During the phase of injury management, there is a lot of pressure from coaches to parents and this leads to psychological distress for the athlete. Due to this pressure, it becomes essential for an athlete to return to sports at the earliest. From the athletes' perspective, the only prime focus is to return to sport without getting adequate knowledge of their injury. It is estimated that around 82% of athletes lack an understanding of the recovery protocol and physiotherapists are also unable to provide proper patient education strategies due to time constraints.^{4,5}

A few studies also stated that the lack of multi-disciplinary sports medicine and sports science-based approaches is also a prime factor for improper athlete injury management.⁵ Load monitoring plays a key role in the rehabilitation process and a flawed understanding of corresponding professionals with aspects of strength and conditioning and game-specific coaching leads to a poor rehabilitation phase. There is inadequate awareness regarding sports medicine blended with sports science and it needs to be worked on.

Discussion

The best results with evidence-based practice in athletes can be obtained from initial consultation sessions with proper patient education strategies, planning time, goal-based treatment strategies, implementation of periodisation plans, working on effective pain management techniques, and proper exercise therapy-based approaches.^{5,6}

It is necessary to cross-refer the athletes to the appropriate sports medicine and science professionals based on their injury healing requirements and to fulfill biopsychosocial treatment plans. Professionals like psychologists, nutritionists, sports physicians, orthotists, and strength and conditioning specialists are key professionals in a rehabilitation team. It is recommended that all the professionals should work together, without any ego, and should focus on one treatment plan which should be changed if it doesn't help in the athlete's recovery process.³ During the phase of treatment, the coach should know the treatment process because he is the primary contact person for the athlete.

A holistic and multidisciplinary approach is the key factor. Research has brought to light the fact that various factors/

agents may have a role in the circumstances of injury or reinjury. Moreover, the reasons/ causes of injuries vary among athletes and hence their responses to them vary too. Therefore, more sports injury research should be conducted with a combined approach of clinical and academic sports physiotherapists to give knowledge as well as evidence in the fields of sports medicine and sports science.⁶

Conclusion

The incorporation of evidence-based practice in the field of sports physical therapy might lead to a decrease in medical mistakes, enhancement in the quality of healthcare, better analysis of the gains and risks, and better inclusion of the choices of athletes in decision making. It is also believed that implementing proper evidence-based approaches provides a meaningful process for athlete injury management. This analysis was aimed at educating the people about such practices, and the methods that are utilised to seek evidence in the day-to-day clinical practice of sports physical therapy.^{6,7} The researchers should provide the best evidence-based support where the clinical physiotherapist should provide good quality athlete injury management care.

Acknowledgement

I thank Dr Senthil, Dean, Chettinad School of Physiotherapy, for providing his assistance and expertise to complete this manuscript.

Conflict of Interest: None

References

1. Manske RC, Lehecka BJ. Evidence - based medicine/ practice in sports physical therapy. *Int J Sports Phys Ther.* 2012;7(5):461-73. [PubMed] [Google Scholar]
2. Lauersen JB, Bertelsen DM, Andersen LB. The effectiveness of exercise interventions to prevent sports injuries: a systematic review and meta-analysis of randomised controlled trials. *Br J Sports Med.* 2014 Jun;48(11):871-7. [PubMed] [Google Scholar]
3. Edouard P, Ford KR. Great challenges toward sports injury prevention and rehabilitation. *Front Sports Act Living.* 2020;2:80. [PubMed] [Google Scholar]
4. Kerkhoffs GM, van den Bekerom, M, Elders LA, van Beek PA, Hullegie WA, Bloemers GM, de Heus EM, Loogman MC, Rosenbrand KC, Kuipers T, Hoogstraten JW, Dekker R, Duis HJ, van Dijk CN, van Tulder MW, van der Wees PJ, de Bie RA. Diagnosis, treatment and prevention of ankle sprains: an evidence-based clinical guideline. *Br J Sports Med.* 2012;46(12):854-60. [PubMed] [Google Scholar]
5. Kumar S, Sharma VP, Shukla R, Dev R, Aggarwal A. Role of physiotherapist in the management of on-field

- sport injuries - a case study of field hockey. *Indian J Physiother Occup Ther.* 2011;5:32-5. [Google Scholar]
6. Physiotimes [Internet]. Sports physiotherapy in India: what it takes to be a sports physio; [cited 2022 Jun 15]. Available from: <https://www.physiotimes.com/article/feature-article-sports-physiotherapy-in-india-what-it-takes-to-be-a-sports-physio---tamara-zweck/>
 7. Straus SE, Glasziou P, Richardson WS, Haynes RB. Evidence-based medicine: how to practice and teach it. 4th ed. Elsevier Churchill Livingstone; 2011.