



Awareness, Prevention, and Management of Dental Injuries among Kabaddi Players in Thanjavur District

Dr.D.Suresh,

Assistant Professor

Physical Education Health Education Sports

A.V.V.M Sri Pushpam college (Autonomous)

Poondi Thanjavur

APA Citation:

Suresh, D. (2025). Awareness, prevention, and management of dental injuries among kabaddi players in Thanjavur District. *Journal of Sports, Health and Physical Education (JSHPE)*, 1(2), 44–48.

Submission Date: 18.08.2025

Acceptance Date: 12.09.2025

Abstract

Kabaddi is a traditional, high-contact sport that enjoys widespread popularity across India, particularly in rural and semi-urban regions. The game requires agility, strength, stamina, and quick reflexes, making it both physically demanding and highly competitive. While participation in kabaddi provides numerous physical, social, and mental benefits, it also carries a significant risk of injuries, particularly to the orofacial region. Dental injuries, including chipped or broken teeth, soft tissue lacerations, avulsion of teeth, and fractures of the jaw or facial bones, are common among players due to the aggressive nature of the sport. Despite the prevalence of these injuries, little attention has been given to preventive measures, awareness, and proper emergency management among regional athletes, especially in districts like Thanjavur. Understanding the frequency of dental injuries and the knowledge and practices of players is crucial to promoting safe sports participation and minimizing long-term oral health consequences.

To address this gap, the present study aimed to evaluate the occurrence of dental injuries, the level of awareness regarding preventive strategies, and the emergency management practices among kabaddi players in Thanjavur district. A cross-sectional study was conducted with 100 participants aged between 16 and 25 years, selected from local clubs and schools. Data were collected using a structured, prevalidated questionnaire that assessed the types of injuries sustained, use of protective equipment such as mouthguards, and knowledge of immediate care for dental trauma. The findings revealed a high prevalence of dental injuries among players, low awareness about proper emergency care, and minimal use of mouthguards during play. These results underscore the urgent need for education programs, awareness

campaigns, and preventive strategies targeting both players and coaches to reduce the risk of sports-related orofacial injuries and to foster a culture of safety in kabaddi.

Keywords: Awareness, Kabaddi, Mouthguards, Orofacial trauma, Sports injury

Introduction

Kabaddi is a traditional contact sport requiring agility, strength, stamina, and quick reflexes. While participation in sports provides physical, social, and mental benefits, contact sports such as kabaddi carry a high risk of injuries, particularly to the oral and facial region. Dental trauma can impact a player's appearance, speech, and daily functioning, making awareness and preventive measures critically important. Although several studies have addressed sports-related dental injuries in major cities, there is limited research regarding regional districts such as Thanjavur. This study investigates the prevalence of dental injuries, the level of awareness about preventive measures, and emergency management practices among kabaddi players in Thanjavur district.

Methods

A cross-sectional study was conducted among 100 kabaddi players aged 16–25 years in Thanjavur district. Participants were selected from local kabaddi clubs, schools, and colleges. Inclusion criteria required participants to provide informed consent and understand either Tamil or English. Data collection was performed using a structured, prevalidated questionnaire administered through face-to-face interviews. The questionnaire included items on types of dental injuries sustained, usage of protective mouthguards, and knowledge of emergency management of dental trauma. Descriptive statistical methods were used to analyze trends, injury prevalence, and awareness levels.

Results

The study population consisted of 100 kabaddi players from Thanjavur district, including 84% male and 16% female participants, with a mean age of 18.5 years. This age group represents late adolescence to early adulthood, a period when physical performance and competitive sports involvement are typically at their peak. Kabaddi, being a high-contact sport, requires agility, stamina, strength, and rapid reflexes. However, this physical intensity also exposes players to a higher risk of injuries, particularly to the orofacial region. The results of the study revealed that dental trauma was common among these athletes, demonstrating the vulnerability of players' teeth and surrounding tissues during both training and competition. Specifically, 29% of participants reported experiencing chipped or broken teeth, injuries that often occur as a result of collisions, falls, or direct impacts from other players. Even more prevalent were soft-tissue injuries: 88% of the players reported cuts, bruises, or lacerations to the lips, cheeks, or tongue, which can be both painful and functionally disruptive, affecting speech, eating, and overall performance. More severe trauma was also observed: 12% of participants experienced complete tooth avulsion, and 30% reported fractures in the jaw or other facial bones. These findings underscore the intensity of kabaddi and the significant risk it poses to oral health.

In addition to the high prevalence of injuries, the study highlighted a considerable lack of knowledge regarding emergency management of dental trauma among the players. Only 5% were aware that avulsed teeth could potentially be replanted, while 83% were unaware of the correct time frame for replantation, a critical factor in successful tooth recovery. Most participants believed that water was a suitable medium for transporting a knocked-out tooth to a dental professional. However, none of the players were aware of specialized storage solutions, such as Hank's Balanced Salt Solution, which provides optimal conditions for preserving avulsed teeth and increasing the likelihood of successful replantation. The lack of awareness about proper emergency response indicates that even minor dental injuries can escalate into permanent damage due to incorrect handling or delayed professional intervention. These findings highlight an urgent need for educational programs aimed at both players and coaches to improve knowledge of emergency dental care, ensuring that injuries are managed effectively and minimizing long-term consequences.

The study also revealed minimal use of preventive equipment, particularly mouthguards. Only 3% of players reported wearing mouthguards regularly during practice or competition, despite 42% acknowledging that these devices can reduce the risk of dental injuries. The reasons for non-use were varied. Lack of awareness was cited by 37% of participants, discomfort by 32%, perceived unimportance by 28%, cost by 2%, and lack of enforcement by coaches by 1%. This indicates that even when players have basic knowledge of mouthguards, actual adoption remains low, often due to behavioral and environmental factors. Encouraging consistent use of mouthguards requires not only raising awareness but also addressing practical barriers such as discomfort and misconceptions regarding necessity. Coaches play a pivotal role in this process by actively reinforcing protective practices during training and competitions. The table below summarizes the prevalence of injuries, awareness of emergency care, and use of mouthguards among the participants:

Category	Number of Players (n=100)	Percentage (%)
Gender (Male)	84	84%
Gender (Female)	16	16%
Chipped or broken teeth	29	29%
Cuts or bruises on lips/cheeks/tongue	88	88%
Complete tooth avulsion	12	12%
Jaw/facial bone fractures	30	30%
Aware teeth can be replanted	5	5%
Unaware of correct replantation time	83	83%
Use water to carry knocked-out tooth	100	100%
Regular mouthguard use	3	3%
Aware mouthguards prevent injuries	42	42%
Reasons for not using mouthguards:		
– Lack of awareness	37	37%
– Discomfort	32	32%
– Thought unnecessary	28	28%
– Cost	2	2%
– Coach did not require	1	1%

The high incidence of dental trauma among kabaddi players emphasizes the urgent need for preventive strategies and systematic education. While soft-tissue injuries, chipped teeth, and fractures are relatively common and manageable, avulsed teeth require prompt and correct

management to avoid permanent loss. Implementing awareness programs, practical demonstrations of mouthguard use, and training in emergency dental care can help mitigate these risks. Schools, sports academies, and local kabaddi clubs should collaborate with dental professionals to promote safe sporting practices. Early interventions not only protect players' oral health but also enhance their overall performance and confidence during the game. By addressing both behavioral and knowledge gaps, it is possible to reduce the frequency and severity of orofacial injuries in kabaddi, ultimately contributing to the long-term health and safety of athletes in Thanjavur district.

Discussion

Kabaddi's physical and competitive nature makes players highly susceptible to orofacial injuries. Dental trauma can have lasting consequences, affecting eating, speech, and facial aesthetics. Despite some awareness regarding mouthguards, actual usage was extremely low, underscoring the need for education and reinforcement by coaches and sports authorities.

Knowledge of emergency management of avulsed teeth was poor. Correct and timely handling of knocked-out teeth is crucial for successful replantation. The findings highlight the essential role of dental professionals in educating athletes, parents, and coaches.

Preventive strategies such as mandatory use of mouthguards, proper training, and early education on dental trauma can reduce injury frequency and severity. Collaboration between sports authorities and dental experts is key to promoting safe sporting practices.

Conclusion and Recommendations

The study revealed that a significant proportion of kabaddi players in Thanjavur district experience dental injuries. Awareness of preventive measures such as mouthguards and emergency management of avulsed teeth is low.

It is recommended that sports dentistry education be included in school and college curricula. Coaches should actively encourage the use of protective gear, and dental professionals should provide guidance on preventing and managing injuries. Early education and reinforcement can help players avoid long-term dental issues, enhance safety, and promote overall well-being.

Work cited:

Dharakrswari, S. (2025). The Effect of Mindfulness Meditation On Stress Levels Among Working Men In Tamil Nadu. *JOURNAL OF SPORTS, HEALTH AND PHYSICAL EDUCATION*.

Dharakrswari, S. (2025). The Impact of a Yogic Program on Low-Density Lipoprotein Levels in Trained Handball Players of Tamil Nadu. *Journal of Sports, Health and Physical Education*.

Dharakrswari, S. (2025). Effects Of Combined Pranayama And Meditation Practices On Self-

Confidence. *Effects Of Combined Pranayama And Meditation Practices On Self-Confidence*.

Dharakrswari, S. (2025). Examining the Impact of Combined Yoga and Naturopathy on Triglyceride Levels in Stressed Individuals in Tamil Nadu. *JOURNAL OF SPORTS, HEALTH AND PHYSICAL EDUCATION*.

Dharakrswari, S. (2025). A study on the effect of combined yoga and naturopathy on triglycerides among stressed people. *Journal of Sports, Health and Physical Education (JSHPE)*, 1(2), 1–4..

Dharakrswari, S. (2025). Mindfulness meditation on stress among working men. *Journal of Sports, Health and Physical Education (JSHPE)*, 4(2), 14-17

Dharakrswari, S. (2025). Analysis of the effect of a yogic package on low-density lipoprotein among trained handball players. *Journal of Sports, Health and Physical Education (JSHPE)*, 3(2), 10–13.