



A case study on sports injuries of kabaddi players of Tripura, India

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Abstract

The main objectives of this study were to find out the common injuries, sites of Injuries and the causes of injuries in Kabaddi players of Tripura. A total of 25 male players having experience of injuries and have participated in national level tournaments in Tripura were purposively selected. A questionnaire was used for the collection of data and percentage analysis method of descriptive statistics was used for the analysis of the data collected. Based on the result of the study, a total of 43 cases of injuries were found from 25 injured players. The most common cases of injuries were dislocation (56%), sprain (52%) and strain (36%) followed by some fracture, bursitis, hematoma. Moreover, the wrist joint (56%), ankle joint (36%) and knee joint (28%) were found as the most common sites of injuries. With regard to the causes of injuries, the kabaddi players of Tripura expressed that their injuries were mainly due to the improper warming up (32%), inappropriate technique (28%) and inadequate use of equipment (24%). The finding of this study suggests that the kabaddi players, in order to avoid injuries, need more scientific support in their coaching practices, facilities and equipments, and in this matter the state government may have a major role to play, as the development of sports is a state subject.

Keywords: sports injuries, players of tripura, kabaddi

Introduction

In India there are many traditional physical activities and recreational games and kabaddi is one of those traditional games which have been practicing since ages. Kabaddi is a body contact game involving a lot of pushing, pulling, jumping and twisting actions that makes its players more prone to injuries (Pal S., Kalra S., Kumar S., Pawaria S. & Rishi P. 2021, pp.1-9) ^[1]. Injuries from contact mean player to player contact whereas non-contact means from the playing surface to the body parts. At different stages of the game, for example-when the defenders try to stop the raider by holding onto his ankle or leg, players get more prone to injuries (Singh, 2021) ^[5]. Despite being the prone to injuries game, kabaddi is quite popular in Tripura.

As the popularity of kabaddi across India and in television screen is increasing, so do sports injuries. Kabaddi is a Individual versus group type game wherein players get more prone to injuries such as; torn ligament also commonly called a sprain; strain which is caused by repetitive use of certain body parts; jumping is very common in national style Kabaddi resultant of which are dislocation, fracture and other injuries (Yallappa M, 2020) ^[7]. These are some of the examples of injuries prevalent in kabaddi.

Several authors such as Dhillon *et al.* (2017) ^[4], Prabhu and Kishore (2014) ^[3] and Mondal and Ghosh (2017) ^[2] have conducted a survey type research on the nature of injuries in kabaddi players, but case study type research considering the particular geographical region or state within India can hardly find in the research literatures. Moreover, sports injuries may affect future involvement in physical activity, their career and health of an athlete (Pal S., Kalra S., Kumar S., Pawaria S. & Rishi P. 2021, pp.1-9) ^[1]. Therefore, the present case study is an attempt to showcase the sports injuries and its related issues with regard to the kabaddi players of Tripura state within India. The findings of the present study may be helpful to the players of particular region for gaining some knowledge on injuries as well as for getting sufficient scientific support related to injuries, since the development of sports is a state subject in India.

Method Used

A total of 25 male players having experience of injuries and have participate in national level tournaments were purposively selected from Agartala town in west Sepahijala District of Tripura. The age of the subjects were ranged from 18 to 25 years. The data of this present study was collected through a questionnaire prepared and used by Digambar Singh in his research work for the fulfillment of the Doctor of Philosophy in Physical Education and it is available at (<http://hdl.handle.net/10603/315258>). The questionnaire contains the key area of research in sports injuries such as the types of common injuries, sites of injuries and causes of injuries. Percentage analysis method of descriptive statistics was used for the analysis of the data collected. Before the administration of the questionnaire the informed consents were taken from the participants. Although several survey type research on the nature of injuries in kabddi players have been conducted, but case study type research considering the particular geographical region or state within India can hardly find in the literatures.

Moreover, sports injuries may affect future involvement in physical activity, their career and health of athlete which may need regional support for its sustainable development (Pal S., Kalra S., Kumar S., Pawaria S. & Rishi P. 2021, pp.1-9) ^[1]. Therefore, using case study approach the present study is an attempt to showcase the sports injuries of kabaddi players of Tripura state within India.

The Findings and the Interpretation of Data

The interpretation or analysis of data in the present study were based on the three key area of sports injuries such as types of common injuries, sites of Injuries and the causes of injuries in Kabaddi players as mentioned in the objectives of the study. The findings or the result of the study have been presented and thereby discussed in the following paragraphs.

Table 1: Types of Common injuries Total number of cases: - 25

Sr. No.	Types of Injury	No. of Cases	Percentage
1.	Sprain	13	52
2.	Strain	9	36
3.	Fracture	2	8
4.	Dislocation	14	56
3.	Other: Bursitis, Hematoma,	5	20

Table-I shows the types of common injuries in kabaddi players of Tripura

The result shown in the above table-I indicates the percentage of sports injuries found in kabaddi players of Tripura. The major common types of injuries were sprain 52%, strain 36%, fracture 8%, dislocation 56% and other injuries such as bursitis, hematoma 20%. In other words, the most common types of injury were dislocation, sprain and strain followed by some fractures, bursitis and hematoma.

In a similar type of study elsewhere, Digamber sing (2016) ^[6] in his study on sports injuries of national players of Kabaddi reported the injuries rate of sprain 24.5%, strain 9%, fracture 16.5%, dislocation 21%. The sprain injury was reported as the most common type of injury. However, in the present study it was found that the dislocation was the most common type of injury followed by sprain and strain. Such differences between the two studies may be due to individual differences and game tempo.

Table 2: Joint-wise distribution of Injuries Total number of cases - 25

Sr. No.	Sites of Injury	No. of Cases	Percentage
1	Wrist Joint	14	56
2	Ankle Joint	9	36
3	Knee Joint	7	28
4	Hip Joint	6	24
5	Elbow Joint	6	24
6	Shoulder Joint	6	24

Table-II shows joint-wise distribution of Injuries in percentage

The result shown in the above table-II indicated the percentage of joint-wise distribution of injuries wherein wrist joint was found 56%, ankle joint 36% and knee joint 28%. In other words, wrist joint and ankle joint were found as the most common type of injury followed by knee joint.

Prabhu and Kishore (2014) ^[3] in their survey on 30 Indian Kabaddi players reported that the ankle joint was the most common site of injury than the knee joint. Similarly, Mondal and Ghosh (2017) ^[2] in their study on 154 kabaddi players reported that the Knee and ankle injuries were the most common injuries in Kabaddi players (as cited in Pal S., Kalra S., Kumar S., Pawaria s. & Rishi P. 2021, p.5) ^[1]. However, in the present study the wrist joint and ankle joint were found more prevalent among the kabaddi players of Tripura.

Table 3: Causes of overall injuries Total number of cases -25

Cause of Injury	Number of Players	Percentage
Due to inappropriate technique	7	28
Due to improper warming up	8	32
Due to accident	1	4
Due to other reasons	3	12
Due to inadequate use of equipment	6	24

Table-III shows the causes of injuries in percentage

The result of the study shown in the above table-III indicated the percentage of common causes of injuries experienced by kabaddi players. Based on the result, the major common causes of injury were due to

inappropriate technique (28%), due to improper warm up (32%), due to inadequate use of equipment (24%), due to accident or contacts (4%) and due to other reasons (12%).

Several authors such as Dhillon, Moeini, Mohamadi and Rajabi players (as cited in Pal S., Kalra S., Kumar S., Pawaria s. & Rishi P.2021, p.5) ^[1], have reported that the main cause of injuries were contact mechanism, contact with the opponent, falling and contact with uneven ground. However, in the present study it was found that the major causes of injuries were due to inappropriate technique, improper warm up, inadequate use of equipment and due to accident or contacts.

Conclusion

Based on the result of the present study, a total of 43 cases of injuries were found from 25 players who have suffered from injuries in kabaddi. The most common cases of injuries were dislocation, sprain and strain followed by some fracture, bursitis, and hematoma. Moreover, the wrist joint, ankle joint and knee joint were the most common sites of injuries. With regard to the causes of injuries, the kabaddi players of Tripura expressed that their injuries were mainly due to improper warming up, inappropriate technique and inadequate use of equipment. The findings of this study suggest that the kabaddi players, in order to avoid injuries, need more scientific support in their coaching practices, facilities and equipments. Moreover, based on the review of literature, sports injuries may affect future involvement in physical activity, their career and health of an athlete. Therefore, it is important to take into account the injuries related issues of players and coaches, and in this matter the state government may have a major role to play, as the development of sports is a state subject.

References

1. Pal s, Kalra S, Kumar S, Pawaria s, Rishi P. A Literature Review on Common Injuries and Their Prevention in Kabaddi. *European Journal of Sports & Exercise Science*,2021:9(1):01-09.
2. Mondal, Ghosh MC. A Study on Nature of Sports Injuries among the Players of Different Age and Gender Groups in Kabaddi. *J Med Sci Clin Res*,2017:5(7):24539-43.
3. Prabhu A, Kishore K. Common injuries among kabaddi and kho-kho players-an empirical study. *Int J Engg Res Sports Sci*,2014:1(7):1-4.
4. Dhillon Me. Epidemiology of knee injuries in Indian Kabaddi players. *As J Sports Med*, 2017, 8(1).
5. Singh AD. The Nature of Injuries Occurrences in Kabaddi: A Survey Study. *International Advanced Research Journal in Science, Engineering and Technology*,2021:8(1):8-12.
6. Singh D. An Analytical Study of Sports Injuries of National Players of Kabaddi. Thesis, Gondwana University, Physical Education, GADCHIROLI, 2016.
7. Yallappa M. A study on common injuries of Kabaddi players. *International Journal of Physical Education, Sports and Health*,2020:7(3):37-43.