



A Study on Nature of Sports Injuries among the Players of Different Age and Gender Groups in Kabaddi

Authors

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Abstract

Kabaddi Players had to perform different types of natural and unnatural movements. For the nature of competition, unnatural body movements, lack of knowledge about fitness and foul play, injuries occur at different levels, gender and age groups of Kabaddi players. The game is played and organized at low cost and not well prepared grounds with comparison to other sports. At least practical experiences across rural Bengal support this view. Even at International levels players are prone to injury for the games speedy character and aggressive nature. Keeping the aforesaid scenario in view it was decided to look into the kinds, intensity and probability of injuries of the game. The intension in selecting it for injury-research was also to help the economically backward players, in rural Bengal in particular, get over their injury. For injury-research the title was "a study on nature of sports injuries among the players of different age and gender groups in kabaddi". For the purpose of the study 154 Kabaddi players of repute was considered as the subject of the study. Each subject was provided with a questionnaire in connection with sports injuries genesis, history and frequency of injury suffered by the Kabaddi players from the analysis of the questionnaires. And from the study it was found that, in case of senior male and female Kabaddi players, as ankle ligament (sprain) injury was concern, male and female reported 25.93% and 14.29%; Knee ligament (sprain) injury 18.52 % and 25.71%; contusion or bruise were 12.96% and 5.71%; and laceration 5.56% and 17.14% respectively. Among under nineteen male and female Kabaddi players it was recorded that female reported higher ankle ligament (sprain) injury 23.81% and male 19.23%. But in knee ligament (sprain) injury Male-23.08% and female 19.05%. Contusion or bruise 19.23% and 19.05%, laceration 11.54% and 14.29% respectively. From the age group of under seventeen male Kabaddi players the injury percentage was recorded as ankle and knee ligament (sprain) was same as male 19.05% female 11.76% and 17.65%. Contusion or bruise and muscle or tendon (strain) injuries were 23.81% and 23.53% each. Laceration was 9.52% and 17.65% respectively. In case of under fourteen male and female Kabaddi players, knee ligament (sprain) injury 25% and 20%. And ankle ligament (sprain), contusion or bruise and muscle or tendon (strain) injury was 18.75% and in female it was 20%, 20% and 13.33% respectively. And finally it was concluded that Higher the age groups higher was the frequency and severity of injury.

Introduction

Kabaddi is a sport that has maximum body contact like wrestling and rugby. Besides these elements, it also has few tactics from football like kicking,

Stretching, twisting, and getting brought down heavily are regular man oeuvres a player has undergo in Kabaddi. Kabaddi which originated in India is so immensely popular that it has been

chosen the National game of the country. This almost low-cost-no-cost game has its root in every race and corner of the country. There are a few games in our country in which we have world-class success. Kabaddi is one of them and India is the defending champion in it. Today with the other criteria of games and sports, the word “power” has added and it has change into “power games” and “power sports”. Games and sports have lost its aesthetic value and became “combat” in nature. Sportsmen only strive for excellence. And with a great development of modern equipments, safety devices, improved fitness level, appropriate training, number of injuries occurred in various level, age and sex groups of competition are not decreasing. If there is any competition and sportsman intense to excel, there always remain possibility of injury. In the preset work the researchers want to highlight the types and nature of injuries that occurred during sports training and competitions among various athletic groups.

Williams and Sperryn (1976) had given a classical concept of sports medicine. They divided the area of sports medicine as: a) Man as a sportsman b) Sportsman and his environment c) Sportsman as a patient d) Sports as a therapy

Various authors listed several schemes for classification sports injuries. Athletics injuries may be classified by sports or anatomical location. Some physician and athletic trainer’s categories athletic injury according to the particular participant group, such as women, youth, children or older athletes. Still another classification scheme uses the terms “acute” and “chronic”. Another system to classify athletics injuries is by the type of tissue involved, such as- soft tissue and hard tissue (Morris, 1984).

Morris (1984), have classified sports injuries as –

- i. By sports – Football, Track and Field, Volleyball etc.
- ii. By participant group – Women, Men, Youth, Children etc.
- iii. By nature of injury – Chronic and acute.

- iv. By type of tissue involved – Soft tissue and hard tissue.
- v. By anatomical location – Shoulder, Knee, Wrist, Ankle etc.

According to nature of game – Team game, individual game etc.

There are another classification of sports injury those were-

a) Acute Traumatic Injury and b) Overuse or Chronic Injury

a) Acute Traumatic Injury may also divided into;-
i) Strain ii) Sprain iii) Bruise or contusions iv) Fractures v) Dislocations vi) Laceration vii) Achilles tendon

b) Overuse or Chronic Injury also may divided into:- i) Shin Splints ii) Tennis Elbow iii) Stress Fracture iv) Tendonitis v) Bursitis

purposes of the study

The purpose of the study was as follows:-

1. To study the common sports injuries among the kabaddi players of different age groups.
2. To find out the various nature of sports injuries among the kabaddi players of different age groups.
3. To observe gender wise incidence of sports injuries among kabaddi players.
4. To compare types of injuries that occurs among different age and gender groups of kabaddi players.

Methodology

This was a survey type of study in which the investigator was trying to find out the nature of the sports injuries at various age groups and gender groups of kabaddi players with the help of a questionnaire.

Subjects

In case of male age between 12 to 31 and for female 12 to 26 and at list district level of participation was considered as subjects.

N=154(85 Male 69 Female) total number of data according to nature of injuries were 205, among them number of injuries in male were 117 and female were 144.

- a) Senior. (Male and female).{n=40+27 }
no. of injuries [54+35]
- b) Under nineteen. (Male and female).
{n=15+15} “ [26+21]
- c) Under seventeen. (Male and female).
{n=15+12} “ [21+17]
- d) Under fourteen. (Male and female){
n=15+15} “ [16+15]

was 25.93%. Knee ligament (sprain) injury was 18.52%. After that 12.96% was contusion or bruise; 7.41% was bone fracture; 5.56% injuries were muscle or tendon (strain); shoulder dislocation, elbow dislocation, each laceration. Other injuries rate were less than 3.70%.
On the other hand in female where ankle ligament (sprain) injury was 14.29%; knee ligament (sprain) injury was 25.71%. After that laceration was 17.14%. 11.43% were bone fracture, muscle or tendon (strain) injury, 5.71% was contusion or bruise. Other injuries were less than 3%.

Result

It was appeared that in case of senior male Kabaddi players, ankle ligament (sprain) injury

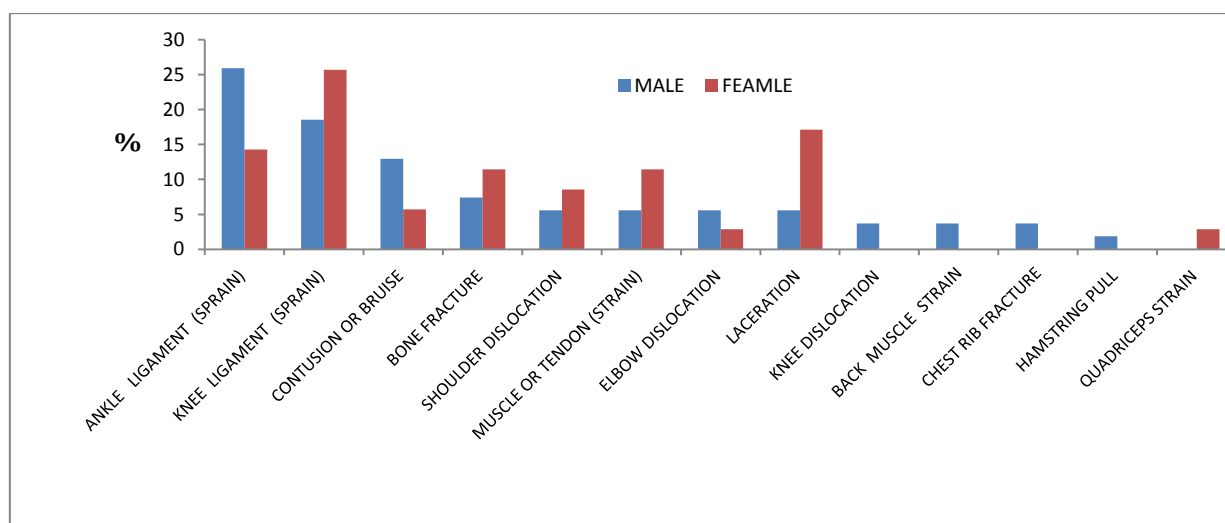


Fig. 1 Graphical presentation of % of injuries of senior male and female Kabaddi players.

In case of under nineteen male Kabaddi players 19.23% of all injured players were suffered by ankle ligament injury. Among all types of Kabaddi injuries 23.08% injuries were knee ligament (sprain) injury. After that 19.23% was contusion or bruise. Laceration was 11.54%. Muscle or tendon (strain) injury was 7.69%.

In case of under nineteen female Kabaddi players it was found that 23.81% injury among all injuries were ankle ligament (sprain) injury; 19.05% among all injuries were knee ligament (sprain) injury; contusion or bruise was same 19.05%. Laceration was 14.29% muscle or tendon (strain) injury was 9.52%, Other injuries were 4.76%.

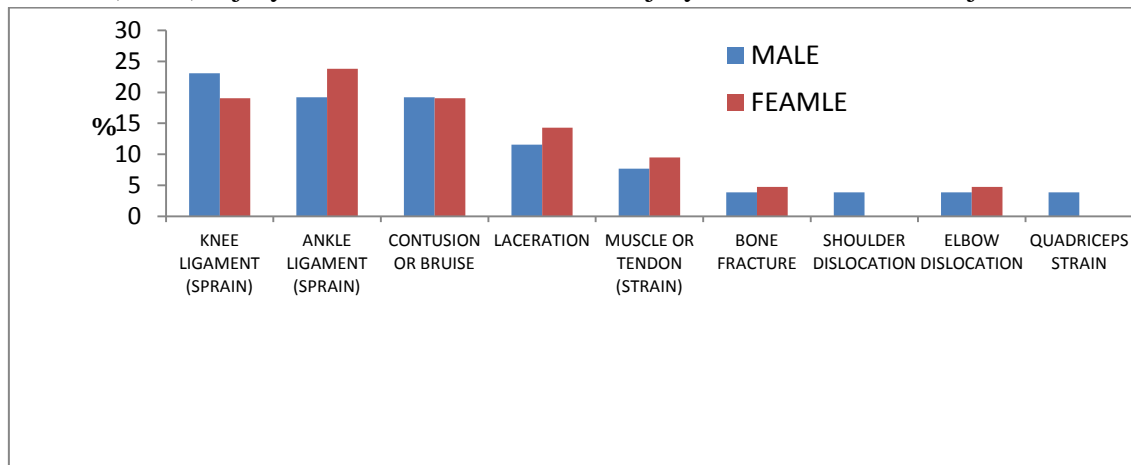


Fig.2 Graphical presentation of % of injuries of under nineteen Kabaddi players.

For the age group of under seventeen male Kabaddi players the injury percentage was seen as, ankle and knee ligament (sprain) injury was same as 19.05%. Contusion or bruise and muscle or tendon (strain) injuries were 23.81%, laceration injuries were 9.52%.

In the age group of under seventeen female Kabaddi players 11.76% was ankle ligament (sprain) injury; 17.65% was knee ligament (sprain) injury; muscle or tendon (strain) injury and contusion or bruise were 23.53% each. And laceration was 17.65%. Cartilage tear was 5.88%.

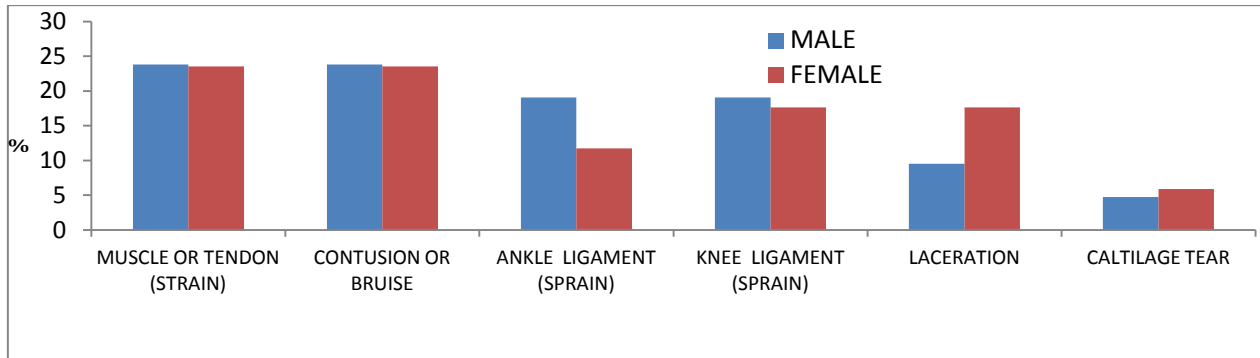


Fig. 3 Graphical presentation of % of injuries of under seventeen Kabaddi players.

In the age group of under fourteen male Kabaddi players; knee ligament (sprain) injury was 25% ankle ligament (sprain) injury; muscle or tendon (strain); contusion were 18.75% each. And laceration was 12.50%. Cartilage tear was 6.25%.

In case of under fourteen female Kabaddi players it was found that 20.00% was ankle and knee ligament (sprain) injury and contusion injury; 13.33 % were muscle or tendon (strain), laceration and cartilage tear injury.

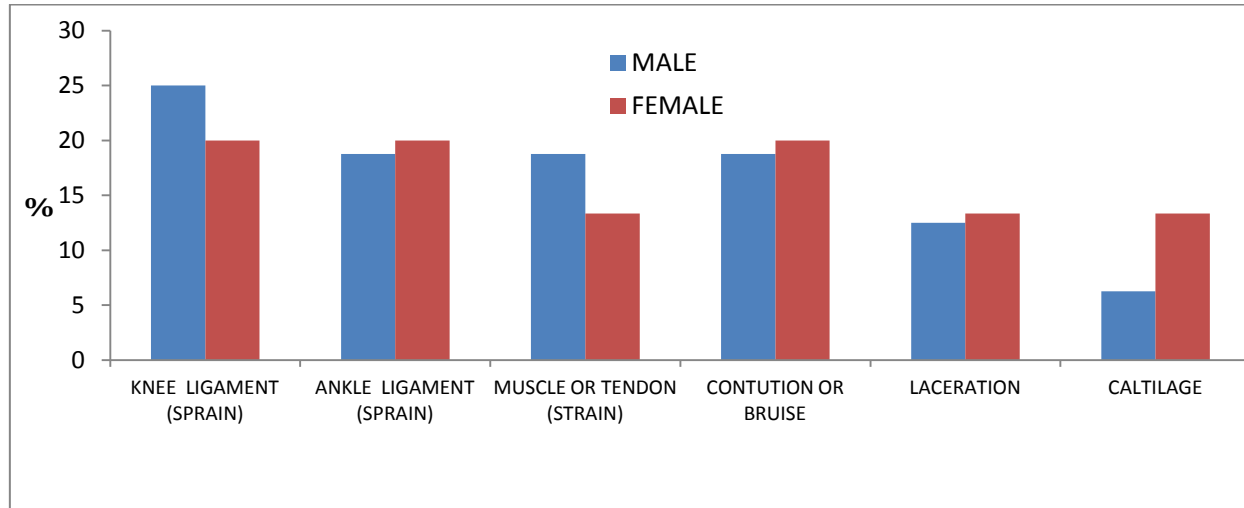


Fig. 4 Graphical presentation of % of injuries of under fourteen Kabaddi players.

Discussion

As the nature of injuries concerned, senior male and female Kabaddi players recorded that, ankle ligament (sprain) injury male 25.93%, and female 14.29%. Knee ligament (sprain) injury was male-18.52% and female-25.71%. After that contusion or bruise male- 12.96%, female-17.14%,

Comparison between under nineteen male and female Kabaddi players it was found that female Kabaddi players reported higher ankle ligament (sprain) injury female 23.81% and male 19.23%. Male-23.08% and female-19.05% injuries were knee ligament (sprain) injury. For both male and female contusion and bruise was nearly identical male-19.23%, female-19.05%.

Comparing study on the age group of under seventeen Kabaddi players it was found that, contusion or bruise and muscle or tendon (strain) injury was identical, male-23.81%, female-23.53%. Female and male suffered by fetal laceration female 17.65%, male 9.52%. Ankle and knee ligament (sprain) injury was male-19.05% female 11.76% and male-19.05%, female 17.65% respectively.

Comparing with the under fourteen male and female it was found that male should higher knee, head finger of hand injury, male 25% and 20%; 12.50% and 6.67%; 12.50% and 0.00% respectively.

Prabhu and Kishore (2014) Reported that majority of the injury were occurred on lower body parts (67%) than the upper body parts (33%). Abrasion (61%) /laceration (17%) of skin was very common on leg, thigh, hip, shoulders, and palms among Kabaddi players. Calf and hamstring muscles strain/contusion were found common nature of injury among Kabaddi players. The injury trend was similar findings with the previous researcher. Sen. J. conducted a study to measure the injuries sustained by female Indian kabaddi players during the 2001-2002 seasons. Among all body parts, knees (19%) were more injury-prone followed by ankles (14%). According to www.mykabaddi.com. Result showed that 40% injuries are to the knees and 29% of all injuries are to the ankle. According to Morris (1984), it has shown that knee joints are more secure with strong muscles related to knee joint.

Conclusion

- a) Higher the age groups higher was the frequency and severity of injury.
- b) Most injuries in under nineteen female kabaddi players, knee ligament (sprain) was 25.71%. And for male it was 25.93%.
- c) In case of senior male kabaddi players, ankle ligament (sprain) injury was 25.93%.
- d) In case of senior female kabaddi players laceration was higher 17.14%.

References

1. Moeini SM, Hojat S, Aghaei R. (2011) The epidemiology of some common injuries in elite male kabaddi player. Sport sciences quarterly. 2011;2(6):11-30.
2. Prabhu A, Kishore K. (2014) Common injuries among kabaddi and kho-kho players-an empirical study. Int J Engg Res Sports Sci. 2014;1(7):1-4.
3. Sen, J., (2004). Injury profile of Indian female Kabaddi players. International Journal of Applied Sports Sciences. Vol.16, No.1, 23-28.
4. Singh D.M, John R., Sharma S., Prabhakar S., Behera P., Saxena S., Singh H. and Chouhan D. (2016) Epidemiology of Knee Injuries in Indian Kabaddi Players. Asian Journal of Sports Medicine. In Press(In Press): e31670 , DOI: 10.5812/asjasm.31670.
5. Sudhakar HH, Majumdar P, Umesh V, Panda K.(2014) Second to fourth digit ratio is a predictor of sporting ability in elite Indian male kabaddi players. Asian J Sports Med. 2014;5(3):ee23073 [DOI] [PubMed]