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#### Abdul Kunhi K

Department of Physical Education, Director of Govt Frist Grade College for Women Puttur, Karnataka, India

#### Sharath N

Research Scholar, Department of Physical Education, Mangalore University, Karnataka, India

Corresponding Author: Abdul Kunhi K Department of Physical Education, Director of Govt Frist Grade College for Women Puttur, Karnataka, India

# A study on survey of common injuries occurrences in all India inter University Kabaddi championship for men 2023-24

### Abdul Kunhi K and Sharath N

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#### Abstract

The aim of the study was to find out the A Study on quantify the common injuries occurrences in kabaddi. The information on injuries were collected from 64 kabaddi players from various region of India, who were participating in all India inter university kabaddi championship for men 2023-2024 held at poornaprajna college udupi Karnataka. A total of 64 out of 168 players reported their injuries in one spot during the match and hole of the tournament. The age of the subjects ranged from 18 to 25 years. 58% of players were in range of 20-25 years lower limb injuries predominated, 42% of players were injured upper limbs, the ankle and knee being most common injured site of kabaddi players.

Keywords: Sports injuries, all India inter university, Mangalore University, Kabaddi

#### Introduction

Some sports and games make sports attractive to directly audience; kabaddi is also among such sports and most popular game in Managlore and Udupi district as well all over India. The kabaddi is a struggle game this game shows individual ability and strength. All India inter university kabaddi players are more stronger and they have own different skills capacity, most match experience and good team combination to play foe won the medal. The game is known by numerous names in different parts of South Asia, Kabaddi has been demonstrated to be among the most hazardous of semi contact team sports. High velocity trauma and direct contact between sportsmen have made of Kabaddi a kind of a combat sport, connecting both the consequences of chronic and acute injuries. Kabaddi requires a variety of physical and motor fitness with specific playing skills. It is non-expensive rural sport and easy to reach every people. In Kabaddi injury are traditionally divided into contact and non-contact mechanisms in which case contact refers to player to player contact. Some of the forces involved in a non-contact injury are transmitted from the playing surface to the injured body part. Not many studies have been made about survey in the area of injuries so the attempt has been made to conduct in this area.

Kabaddi is a traditional outdoor game played with minor variations in all regions of India – in fact, in most parts of Asia. It is an ancient backyard and home grown game. Kabaddi requires tremendous physical stamina, agility, individual proficiency, neuromuscular coordination, lung capacity, quick reflexes, intelligence and presence of mind on the part of both attackers and defenders.

Modern Kabaddi is a synthesis of the game played in various forms under different names. Kabaddi received international exposure during the 1936 Berlin Olympics. The game was introduced in the Indian Olympic Games at Calcutta in 1938. In 1950 the All India Kabaddi Federation came into existence and compiled standard rules. The Amateur Kabaddi Federation of India (AKFI) was founded in 1973. After formation of the Amateur Kabaddi Federation of India, the first men's nationals were held in Madras (Renamed Chennai), while the women's were in Calcutta in 1955. Kabaddi was introduced and popularized in Japan in 1979. Kabaddiis basically an outdoor and indoor team game, played in the tropical countries of Asia. The excitement and thrill provided by the game has made it very popular and Kabaddi is rightly called the 'Game of the masses', since spectators totally involve themselves and give the great deal of encouragement. The game requires no equipment whatsoever, and the rules of the game are very easy to comprehend.

This is the reason for the popularity of the game in rural areas, since rural youth in India can ill-afford the sophisticated equipment demanded by other sports.

Today all over the world physical Educators and Coaches are facing their greatest challenge in handling problems in scientific way i.e. to give their sportsmen proper and progressive guide-lines based on scientific approach which leads to desired results. Since, both physical and physiological have been recognized as one of the best means of underlying sportsman's performance and of helping in producing better performance. The physical educators, coaches and sportsmen an understanding of physical character and the physiology of exercise to becoming increasingly important, when everyone's understanding grows the trial error methods and application of guessing becomes less than adequate in preparing high level sportsman for competition.

Biomechanics is a tool to understand human movement that can be applied to enhance player performance and prevent injury. Sports biomechanics is a diverse interdisciplinary field, with branches in Physical Anthropology, Orthopaedics, Bioengineering and Human Performance. The general role of Sports Biomechanics is to understand the mechanical cause effect relationships that determine the motions of sportsmen in particular.

#### Common injuries in Kabaddi

Kabaddi is, quite visibly, a sport with very high chances of injury. It is a contact sport in every sense of the term, where one team member has to raid the enemy's territory, and the defenders have try to stop the raider from getting back to the midline by any means necessary – often involving physical violence. When it comes to injuries, there are certain parts of the body that are more susceptible than others, and demand extra care. Here are those injury-prone areas: Kabaddi is a high impact sport with highly fit players to take on the extremely physical nature. It has its fair share of injuries, due to the constant contact of the players and the rough playing mat.

## Upper limbs injuries

#### The shoulder

The shoulder is the third most injury-prone joint in kabaddi. Shoulder injuries are very commonly seen in the sport, and are generally caused if a player suffers a heavy fall. There are 3 major injuries that can affect the shoulder:

- Broken collarbone
- Dislocated shoulder
- Rotator cuff injury

In kabaddi, fractures are often caused when a player falls on his hand; the pressure then rises up the arm and impacts the collarbone. In some severe cases the bone may protrude through the skin. To avoid a shoulder injury, players should be trained to roll over while falling down as that may reduce the impact on the joint. An even playing surface would also work wonders in preventing shoulder injuries to the kabaddi players.

#### The wrist

The defender can only hold on to the limbs of the onrushing raider while attempting a tackle, which can easily result in an injury to the wrist. The wrist is one of the most fragile parts of the body and can be fractured by any awkward movement. Sometimes the defenders step on to the raider's wrist intentionally in order to prevent them from going any further, and that is an obvious recipe for disaster. An injury to the wrist is usually treated with ice and medication or a pain relief spray to control the pain and reduce the swelling.

#### The head / face

The most painful of all injuries that can happen in the sport of kabaddi are the facial and head injuries. A lot of times the raiders make audacious attempts to tag a defender, through maneuvers such as the back kick or high kick. These moves can have a direct impact on the face of a defender, which can easily result in a cut or a broken nose. The raiders also face a high risk while coming back into their own half. They can easily fall on the surface under a challenge from the defenders and injure their face or get a concussion in the process. To prevent injuries to the head and face, the players need to be cautious with their movements and be aware of their surroundings. Regulations can also be put in place to prohibit players from using too much force when in contact with the head region.

#### Knee injuries

The knee joint is the most commonly injured body party in kabaddi; an injury to the knee can occur at almost every stage as the events unfold in the game. The knee joint is fragile and is vulnerable to damage too; the raider can easily injure it while twisting around a defender or when the defender holds him by his knees in a tackling bid the different kinds of knee injuries that happen in the sport of kabaddi are: Dislocation

- Ligament sprainsCartilage tears
- Cartilage tears

The best way to avoid a knee injury is to ensure that the playing surface is not too hard. Flexibility exercises for the knee should also be undertaken regularly to mitigate the risks.

#### The ankle

The Ankle is one of the most injury prone joints in kabaddi. The ankle is one of the most injury prone joints in all sports, and kabaddi is no different. The joint is extremely compact with a number of ligaments and bones in a small area, and is highly vulnerable. In order to stop the raider, the defender often holds on to the raider's ankle with some force in his bid to stop him from going in his own half. The ankle hold is an important weapon for the defenders, and it puts the raiders at incredible threat of injury. Generally there are two types of ankle injuries that can happen to the players:

#### Ankle sprain/Ankle fracture

The possibility of suffering an ankle injury can be significantly reduced by avoiding uneven surfaces and wearing supportive footwear. Another precaution is maintaining a healthy and stable weight to reduce pressure on the ankle joint.

#### Upper limb injuries

#### **ACL** Tear

The sudden movement like stopping, bending, twisting etc., brings out the chances for ACL tear leading to excruciating knee pain with swelling and tenderness.

#### **Ankle Sprains**

Ligament injury surrounding the ankle occurs from an awkward landing or stepping on an uneven ground with overstretching of the ligaments causing them to be partially or completely torn.

#### **Ankle Fractures**

Ankles are prone to fracture because of lots of ankle twisting, ankle hold, and constant jumping where the entire bodyweight is concentrated on the ankle.

#### Strains

Being a contact sport with lots of pushing, pulling, jumping and twisting actions and repetitive actions brings strains on body parts. The symptoms include, muscle spasms, swelling and cramping.

#### **Calf Muscle Injuries**

The calf muscle when overstretched tears the muscle tissue. This is called Calf strain and they are classified as degrees depending on the severity of the strain. First degree is damage to a few muscle fibers. Degree is damage to more number of muscle fibers.

#### Objective of the study

The purpose of the study is to find out the a study on survey of common injuries occurrences in all India inter university kabaddi championship for men 2023-24.

#### The delimitations of the study

- 1. The study was delimited to only kabaddi men players.
- 2. The age group of the subjects ranged between18 to 25 years.
- 3. The study was total strength of the subjects 64 all India inter university male Kabaddi players.
- 4. Only injured players are selected as a subject.

#### The limitations of the study

- 1. The activity and nutritional habits were not considered
- 2. Difference in genetic factors among the subjects were limitation of the study.
- 3. Injuries are restricted by upper and lower limbs selected injuries only.
- 4. The all sports injuries were Not considered

#### Hypotheses

- 1. Lower limb body injures have higher than upper limb body injures.
- 2. In injures of lower limbs knee injuries have higher than other lower limb injures.

#### **Materials and Methods**

The purpose of the study is to measure a study on survey of common injuries occurrences in all India inter university Kabaddi championship for men 2023-24.

#### **Subjects**

The sample for the present study was total strength of the subjects 64 all India inter university men Kabaddi players.

#### Variables selected for the study

- Upper limb injuries of all India inter university kabaddi players
- Lower limb injuries of all India inter university kabaddi players

#### **Data collection**

Subjects injures data was collected observation during the match of kabaddi players with the help of qualified physiotherapy students of NITTE university and self-prepared questionnaires. The scores were in numerical form

#### The analysis s of the data

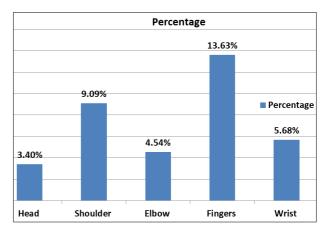
The data were collected prior to the competition by using selfprepared primary standard questionnaire by using the statically percentages mode.

#### Results

Table 1: Percentage of upper limb Injuries of Kabaddi Players
with respect of site all India inter university kabaddi players.

	Injures site of upper limb	Percentage
1	Head	3.40%
2	Shoulder	9.09%
3	Elbow	4.54%
4	Fingers	13.63%
5	Wrist	5.68%

The table above shows the most commonly occurrence of injuries reported by all India inter university kabaddi players are injured at percentages of various respect site, kabaddi players had head injuries at 3.40%, shoulder injuries at 9.09%, elbow injuries at 5.54%, finger injuries13.63% and wrist injuries at 5.68%.this result shows that injuries to the fingers and shoulders are more common among upper extremity injuries compared to other upper extremity injuries.



**Fig 1:** Shows the Percentage of Injuries of Kabaddi Players with respect of Location Percentage of Injuries of all India inter university Kabaddi Players presented graphically through figure -2

Above the figure represent the percentage of the upper limbs injuries, shoulder, elbow, fingers, wrist All India inter university kabaddi players.

 Table 2: Percentage of lower limb Injuries of Kabaddi Players

 with respect of site all India inter university kabaddi players

Sl. No	Injures site of lower limb	Percentage
1	Knee	22%
2	Ankle	20.45%
3	Hamstring	9.09%
4	Calf	6.81%
5	others	4.54%

The table above shows the most commonly occurrence of injuries reported by all India inter university Kabaddi players are injured at percentages of various respect site, Kabaddi players had knee injuries at 22%, ankle injuries at 20.45%, hamstrings injuries at 9.09%, calf injuries 6.81% and wrist injuries at 4.54%.this result shows that injuries to the fingers and shoulders are more common among upper extremity injuries compared to other upper extremity injuries.

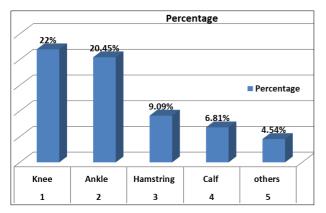


Fig 2: Shows the Percentage of Injuries of Kabaddi Players with respect of Location Percentage of Injuries of all India inter

university Kabaddi Players presented graphically through figure -2

Above the figure represent the percentage of the lower limbs injuries. Knee, ankle, hamstrings, calf, others All India inter university kabaddi players.

#### Conclusions

- The results of the study knee injuries most common and higher than upper limb injuries in all India inter university kabaddi championship men 2023-24.
- The result of the study ankle injuries little higher injures occurring comparing other lower limb injuries.
- The results of the study fingers and shoulder injuries little higher than injuries comparatively other upper limb injuries.

#### Recommendation

The following recommendations may be suggested on the basis of the result of this study for further research.

- This type of injuries related research may be conducted on National-International level of different games like wrestling, football, Volleyball, kho-kho, Judo, Boxing etc.
- The similar study may be conducted on female Kabaddi players on different level of competition.
- The research may helpful for the similar study on subjunior, junior, senior national and international level Kabaddi players.

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