AN INVESTIGATION OF PREVALENT INJURIES AMONG INDIAN KABADDI ATHLETES

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Abstract

Objective. Using a systematic review approach, this study sought to examine kabaddi players' sports injuries.

Materials and methods.

An injury report questionnaire including anthropometric variables like weight, height, and body mass index (BMI) was used in this investigation, which was based on a study by Fuller et al. (2006), and BMI, as well as questions about the type and origin of the injury. The results and interpretations of this study were based on numerical data related to the participants' situations, as is typical of quantitative descriptive research designs.

Conclusions. This study shows that male Kabaddi players in India are more likely to have lower-body injuries, including knee and ankle problems, whereas female Kabaddi players are more likely to have upper-body injuries, like clavicle and shoulder problems. Consequently, we advise Kabaddi coaches in India to focus more on training programs and devise measures to mitigate potential injuries.

Keywords: kabaddi, injuries

INTRODUCTION

Kabaddi is a game with deep Indian roots. Because of the extensive usage of pushing, tugging, jumping, and twisting movements in kabaddi, it is classified as a body contact sport (Subba, 2022). Johnson et al. (2023) found that there is a substantial risk of injury in body contact sports. Injuries are common in kabaddi practice and competition (Harry & George, 2021). Athletes' ability to perform is compromised in kabaddi due to the high incidence of injuries sustained in the game (Gupta, et al., 2020). Adolescent athletes, female futsal players, gymnasts, and those with spinal cord injuries (SCIs) are particularly vulnerable to the devastating effects of sports injuries. According to Asperti et al. (2017) and Sun (2023),

magnetic resonance imaging (MRI) is a reliable method for diagnosing pars injuries, which frequently cause low back discomfort in adolescent athletes.

Statement of the problem

Kabaddi players from every Indian province made up the study's population. The study used a purposive sample technique, with the following inclusion and exclusion criteria: (a) Kabaddi athletes with injury histories and (b) Kabaddi athletes with active injuries; and (c) inactive Kabaddi athletes.

Materials

This study followed an injury report questionnaire developed and published by Fuller et al. (2006). The questionnaire asked participants about their height, weight, and body mass index (BMI), in addition to questions regarding the nature and cause of the injury.

Methodology

A total of forty-one athletes (n = 41) were included in the sample based on the criteria established for the study both male and female. Thanks to Google Forms, the survey could be easily shared. In order to draw conclusions from the survey results, a matrix was constructed using Microsoft Excel.

Questions regarding the Kabaddi players' injury reports (Table 1)

	N	Min	Max	Mean	St.Dev
Age	41	13	34	21.69	±4.02
Height	41	1.2	1.82	1.70	±11.48
Weight	41	46	85	70.11	±8.74
BMI	41	20.08	31.94	24.58	±2.45

Table 1

details the stats of Kabaddi players, both male and female. The distribution of anthropometric data for male Kabaddi athletes shows that the youngest participant was 13 years old and the

oldest was 34 years old, with a standard deviation of 4.02 from 21.69. A normal body mass index (BMI) of 24.58 ± 2.45 was found among male Kabaddi athletes, according to the results. The female Kabaddi athletes' anthropometric data showed a normal range of body mass index (BMI) values (22.67 ± 2.13), with the youngest participant being 18 years old and the oldest being 32 years old (22.89 ± 4.08).

Table 2. Anthropometric and age-based group distribution

	N	Min	Max	Mean	St.Dev
Age	41	18	32	22.89	±4.08
Height	41	1.56	1.7	1.62	±5.52
Weight	41	48	72	59.85	±6.85
BMI	41	19.83	25.71	22.67	±2.13

Table 3. Classification of types of injuries

	Raider	Defender	Injuries		
			Upper Limb	Lower Limb	Other Body
Male	17	11	10	15	3
Female	5	8	8	5	0

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Table 4. Categorization of Injured Anatomical Regions

Parts of Injury	Male (%)	Female (%)
Upper Limb		
Neck/Spine	1 (3.57%)	0 (0%)
Sternum/Ribs/Back	0 (0%)	1 (7.69%)
Stomach	0 (0%)	1 (7.69%)
Pelvis	1 (3.57%)	0 (0%)
Shoulder/Clavicle	2 (7.14%)	4 (30.77%)
Upper arm	2 (7.14%)	1 (7.69%)
Wrist	4 (14.29%)	1 (7.69%)
Hand/Fingers/Thumbs	1 (3.57%)	0 (0%)
Lower Limb		
Thigh	1 (3.57%)	1 (7.69%)
Knee	6 (21.43%)	1 (7.69%)
Ankle	5 (17.86%)	2 (15.38%)
Feet/Toes	2 (7.14%)	1 (7.69%)
Other Body Parts		
Head (Face, Nose, Mouth)	3 (10.71%)	0 (0%)

Kabaddi players can experience injuries to several parts of their bodies, including the upper and lower extremities. The most common upper body injuries among male Kabaddi competitors, according to Table 4, are wrist injuries (14.29%) and injuries to the shoulder/clavicle and upper arm (7.14%). The knees and ankles were the most common places for lower extremity injuries, accounting for 21.43 and 17.86% of cases, respectively. The head (including the nose, mouth, and face) was the most common site of injury at 10.71%, compared to other parts of the body. When it came to female Kabaddi players, the most common upper body injuries were to the shoulder and clavicle (30.77%), whereas the ankle (15.38%) was the most common lower body injury.

Conclusions. This study shows that male Kabaddi players in India are more likely to have lower-body injuries, including knee and ankle problems, whereas female Kabaddi players are

more likely to have upper-body injuries, like clavicle and shoulder problems. As a result, we think it's crucial for Kabaddi coaches in India to put more effort into training programs and find ways to reduce the risk of injuries.

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