

COMMON INJURIES ASSOCIATED WITH KHO KHO ATHLETES – A REVIEW

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ABSTRACT

Sports injuries are very common among Kho-Kho athletes. The present study examined injury patterns among 20 female Kho-Kho athletes studying in KGBV institutions in Telangana State, within the age group of 16 to 20 years. A questionnaire was used to collect information regarding the types of injuries experienced by the athletes. The reported findings indicate that bone injuries accounted for 41.32%, muscle injuries for 38.03%, ligament injuries for 14.08%, and tendon injuries for 6.57%. The prevalence of sprains and strains suggests the importance of joint stability, flexibility and neuromuscular control in Kho-Kho training. The findings also emphasize the importance of proprioceptive and balance activities as components of training. Safe falling techniques may be another useful preventive consideration because falls were reported as an important mechanism of injury in the source study. Overall, the findings indicate that although Kho-Kho promotes speed, agility and endurance, its physical intensity can expose athletes to injury, particularly when regular conditioning and preventive measures are insufficient. The study highlights the need for systematic conditioning, injury-prevention education, appropriate training practices and attention to safe movement techniques among young female Kho-Kho athletes. Evidence from sports-injury research supports neuromuscular and proprioceptive training as useful components of injury prevention and rehabilitation

Keywords: Kho-Kho, Sports Injuries, Bone Injuries, Muscle Injuries, Ligament Injuries, Tendon Injuries

1. INTRODUCTION

Kho-Kho is a traditional Indian team sport that requires speed, agility, endurance, quick reactions, coordination and rapid changes in body position. Players perform repeated chasing, dodging, acceleration, deceleration, turning and other high-intensity movements. These demands place considerable stress on the musculoskeletal system and may expose athletes to different types of injuries.

Injury prevention is therefore an important component of sports training. The uploaded study focuses specifically on female Kho-Kho athletes studying in KGBV institutions in Telangana State. The study reports that injuries were common among the athletes and identifies bone, muscle, ligament and tendon injuries as the principal injury categories. The findings further suggest the importance of joint stability, flexibility, neuromuscular control, proprioception, balance and safe falling techniques in

injury prevention. Similar evidence supports balance and neuromuscular training for reducing selected sports injuries.

The present article organizes and develops the original study information into a journal-style research article while retaining the sample and percentages reported in the source document.

2. OBJECTIVES OF THE STUDY

- To identify the major categories of injuries reported among female Kho-Kho athletes.
- To examine the reported proportion of bone, muscle, ligament and tendon injuries.
- To highlight the importance of conditioning and preventive training among Kho-Kho athletes.
- To identify practical injury-prevention considerations relevant to young female Kho-Kho athletes.

3. METHODOLOGY

3.1 Research Design

The study was conducted to examine injuries associated with female Kho-Kho athletes. The source document presents the work as a review and includes primary information collected from a group of athletes through a questionnaire.

3.2 Sample

The sample consisted of 20 female Kho-Kho athletes studying in KGBV institutions in Telangana State. The age group of the athletes was 16 to 20 years.

3.3 Research Tool

A questionnaire was used for collecting information related to injuries among the Kho-Kho athletes. The available source does not provide the complete questionnaire items or scoring procedure; therefore, these details are not added or assumed in this article.

3.4 Data Analysis

The source study reports the results in percentage form according to four injury categories: bone, muscle, ligament and tendon injuries. The percentages reported in the source are reproduced in the results section.

4. RESULTS

The reported distribution of injuries among the Kho-Kho athletes is presented below.

S. No.	Type of Injury	Reported Percentage
1	Bone Injuries	41.32%
2	Muscle Injuries	38.03%
3	Ligament Injuries	14.08%
4	Tendon Injuries	6.57%

Figure 1. Reported percentage distribution of injury categories

Bone Injuries	41.32%	
Muscle Injuries	38.03%	
Ligament Injuries	14.08%	
Tendon Injuries	6.57%	

5. DISCUSSION

The findings reported in the source study show that bone injuries constituted the largest reported category (41.32%), followed by muscle injuries (38.03%), ligament injuries (14.08%) and tendon injuries (6.57%). The results indicate that both skeletal and soft-tissue injuries are relevant considerations for the participating Kho-Kho athletes.

The source study also emphasizes the relationship between sprains and strains and factors such as joint stability, flexibility and neuromuscular control. These observations support the inclusion of balance and proprioceptive activities within regular training. Such exercises can be incorporated progressively according to the age, ability and training status of the athletes. Evidence from sports-injury research supports neuromuscular and proprioceptive training as useful components of injury prevention and rehabilitation.

Falls are another important consideration identified in the source material. The document notes that falls accounted for over half of the reported injuries and suggests that lack of instruction in safe falling techniques may contribute to this finding. Therefore, appropriate instruction in controlled falling and safe movement should be considered as part of a broader injury-prevention program. The source compares this concept with practices used in sports such as judo and wrestling.

The present findings should be interpreted within the limits of the available study information. The sample was limited to 20 female athletes from KGBV institutions in Telangana State, and the information was collected using a questionnaire. The source does not provide sufficient details to calculate injury incidence per athlete-exposure or to establish statistical associations between individual risk factors and injuries.

6. INJURY PREVENTION STRATEGIES

- Include a structured warm-up before training and competition.
- Develop lower-limb strength and conditioning appropriate to the athletes' age and training level.
- Include balance and proprioceptive exercises in regular training. Evidence from sports-injury research supports neuromuscular and proprioceptive training as useful components of injury prevention and rehabilitation .
- Develop neuromuscular control through coordinated movement and change-of-direction drills.
- Improve flexibility through appropriate mobility and stretching activities.
- Teach safe falling and landing techniques.
- Monitor training intensity and provide adequate recovery.
- Encourage athletes to report pain, swelling, instability or other symptoms early.

- Use progressive rehabilitation before returning an injured athlete to full participation.

7. ROLE OF PHYSICAL EDUCATION TEACHERS AND COACHES

Physical Education teachers and coaches can play a major role in reducing sports injuries among young athletes. They should ensure that training programs include adequate preparation, conditioning, technical instruction and recovery. Coaches should also observe movement quality, encourage safe participation and respond appropriately when an athlete reports an injury. Injury-prevention education should be continuous rather than limited to competition periods.

8. MAJOR FINDINGS

- Bone injuries were reported as 41.32% of the injury categories.
- Muscle injuries were reported as 38.03%.
- Ligament injuries were reported as 14.08%.
- Tendon injuries were reported as 6.57%.
- The source study emphasizes the importance of proprioception, balance, joint stability, flexibility and neuromuscular control.
- The source study identifies safe falling instruction as a potentially important preventive measure.

9. CONCLUSION

The study indicates that injury is an important concern among the female Kho-Kho athletes included in the sample. Bone injuries represented the largest reported category, followed by muscle, ligament and tendon injuries. The findings highlight the need for systematic conditioning and preventive measures in Kho-Kho training. Particular attention should be given to balance, proprioception, joint stability, flexibility, neuromuscular control and safe falling techniques. Physical Education teachers and coaches should incorporate these components into regular training and promote early recognition and appropriate management of injuries.

Because the study involved 20 female athletes from KGBV institutions in Telangana and used a questionnaire, the findings should not be generalized to all Kho-Kho athletes without further research. Larger studies using standardized injury definitions, clinical assessment and athlete-exposure data would help establish more reliable injury patterns.

10. RECOMMENDATIONS

- Conduct similar studies with larger samples of Kho-Kho athletes.
- Include both male and female athletes in future investigations.
- Use standardized injury-recording procedures and medical assessment where possible.
- Examine injury mechanisms and training exposure in greater detail.
- Introduce structured injury-prevention programs in school-level Kho-Kho training.



- Evaluate the effectiveness of balance, proprioception and neuromuscular training programs.
- Provide athletes with education on safe falling, landing and change-of-direction techniques.

11. LIMITATIONS

- The sample consisted of only 20 female Kho-Kho athletes.
- The participants were from KGBV institutions in Telangana State.
- Data were collected using a questionnaire.
- The source document does not provide detailed questionnaire items, clinical diagnostic procedures or athlete-exposure data.
- The reported percentages should therefore be interpreted as descriptive findings of the study sample.

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