



Short Communication

Injury Spectrum of Amateur College Going Athletes in Southern India - A Survey

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Abstract

The primary objectives of the study is to quantify the injuries of amateur athletes and to determine the, location of injury, game affected the most. Information on injuries was collected through a questionnaire from Physical Education Department- Annamalai university Tamil nadu amateur athletes from 13 different discipline of game. The age range of the players was 18 to 25 years. 58% of players were in the age range of 22 to 25 years. The amateur athletes were asked to recall injuries over the preceding six month period. A total of 165 out of 230 amateur athletes were injured. Lower limb injuries were found to be predominant; the knee being the most commonly injured anatomical location. Most common games giving rise to injuries (Kabaddi 83.8%, football 80% , basketball 77.5%, volleyball 76.5% Handball 76%, Weight lifting 75%, badminton 64% , Athletic 64%, kho-kho 61%, cricket 60%, netball 60% ,hockey 60%). The results of the research provide a useful insight into the location, games incidence and sites of injuries in amateur athletes

Keywords: Sports injury, amateur college athletes, contact sports.

Introduction

Sports as we know is an activity involving physical exertion and skill in which an individual or team competes' against another. The main objectives of sports in terms of athlete participation are –Develop the personality, develop the fitness, Improvement of technique, to develop physical vigor and of desirable habit in health, sanitation and safety, To make real friendship with squad member, to provide opportunity to widen a circle of friends by acquaintance with member of opposing team and to visit and play in other communities, an opportunity to observe and exemplify good sportsmanship, to realize the athletic competition is privilege that carries definitive responsibility with it., Association with real gentleman and true sportsmen in the persons of athletic, coaches, contest official, team – mates and opponents., A chance to enjoy one of the greatest heritages of youth the right to play. A chance to learn that violation of a rule of the game bring a penalty and that this sequence follow in game of life.

A sports injuries survey was conducted among 1714 students of the Chinese University of Hong Kong. The common sports involved in injuries were Soccer (26%), basketball (18%), cycling (11%), track and field athletics (11%) and swimming (10%). The lower limb usually took the brunt of the injuries (67%) followed by the upper limb (28%) and spinal injuries were relatively uncommon (3%). The majority of the injuries were mild to moderate and the commonest ones were abrasion (37%), contusion (21%), cramp (20%), sprains (9%), and strains (7%). Of the injuries 80% recovered in less than 10 days and 50% of them were self-treated. However, a significant group of

more severe injuries was recorded: fracture, concussion and heat stroke which¹ demanded special medical attention and longer period for recovery. The pattern of treatment was also unique in that traditional Chinese methods of treatment were sought more frequently than special orthopedic advice. The preventive aspects of sports injuries was not well recognized with only 40% of the students regularly practicing warm-up exercises, 18% stretching exercises and 4% using protective aids. More educational programmes and studies were indicated. The set up of a sports injury clinic was recommended with the utilization of a sports injury reporting system²⁻⁴. The above given data is suggesting the various injury among college going athletes in Hong Kong, while such data are lacking in India, which would otherwise help in determining the causative factors causing the injury and thus aiding in preventing such injury and will determine the effective rehabilitation for early return to game. Thus such studies are required for betterment of budding athletes in India.

Material and Methods

Information on injuries was collected from amateur college going athlete physical education department Annamalai University, Tamil Nadu. A questionnaire prepared and modified by the investigator was given to the subjects for completion. The amateur athletes were asked to recall injuries over the preceding six month period. The study was conducted on 250 amateur athletes.

Mean scores, standard deviation and percentage were calculated and utilized to identify the location and games of injury in

amateur college going athletes. The investigator personally contacted with the physical education teachers and coaches coaches of the 13 disciplines and the purpose of the study was explained to them. Further instructions were given by the investigator to the players for the completion of the questionnaire, only player who has sustained injury during the game were told to fill the injury region questionnaire. A total of 250 questionnaires were administered and 230 were returned by the players after completion thus giving an overall response rate of 92%.

Results and Discussion

Mean, age, weight and height of the amateur athlete were 22.33 (SD± 2.66) years, 63.01 (SD± 9.12) kg and 179.54 (SD± 12.77) cm. respectively. A total of 165 out of 230 amateur athletes reported of having sustained injure. A total of 70 out of 165 injured athletes had knee injury. The results of amateur athlete with respect to their injury details are presented in figure 1 and 2

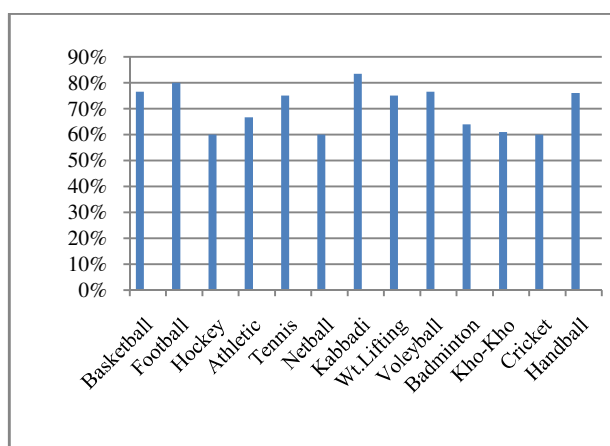


Figure-1

The incidence rate among 13 disciplines of games participated in the survey

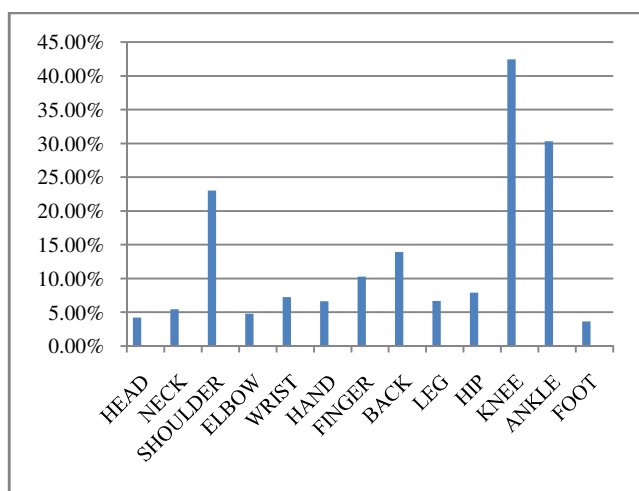


Figure-2

The incidence rate among the different region of body

Discussion: This study reveals that 71.73% injuries occurred during past six month .out of which the maximum affected region and game among the injured were knee 42.42% and Kabaddi 83.8%, the relatively high incidence of injuries during competition was probably due to bad technique, low fitness, and large amount of over training and competitive temperament by the amateur athlete. The athletes skipping warm up and cool down session are most likely to be injured. In this study, most injuries were acquired in the lower limb. Watson³ also suggests that lower limb injuries were most common in sports. A significant proportion of injuries occurred in the upper limb region of which shoulder injuries, predominated (11.79%), relatively high incidence of knee injuries is due to fact that the muscle imbalance between hamstring : quadriceps, reduced flexibility, improper jumping technique. The most commonly affected game is Kabaddi, It may be due to bad technique, and low fitness level of Kabaddi players. Finally it is found that injuries are more prone among amateur athletes not following the proper pre and post training protocol and overtraining.

Conclusion

Most of injuries of amateur athletes are sustained in lower limb, knee injuries are the most commonly occurring injuries among college going amateur athletes while kabaddi is the most injured prone game among this group.

Study also commanded that: i. Most injuries were sustained to the kabaddi players. ii. Regarding the location of injury most commonly affected region was knee. iii. Upper limb injuries occurred in the shoulder and finger region. iv. Maximum injures occur during competition. v. Regarding treatment of injuries, coach and self care is the most common mode of treatment provider.

This research provides a platform for further research in the field of physical medicine and rehabilitation, sports medicine and physical education and sports science.

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