Research Paper

Medical science



Occurance of Sporting Injury Among Southern University Amateur Athletes – (Research Paper)

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Background: 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.

Case characteristics: 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 17 to 30 years. 62% of players were in the age range of 21 to 25 years.

Intervention: The amateur athletes were asked to recall injuries over the preceding six month period. Based on questionnaire. **Outcome:** A total of 427 out of 835 amateur athletes were injured. Lower limb injuries were found to be predominant; the Ankle being the most commonly injured anatomical location. Most common games giving rise to injuries (football61.38%, kabaddi59.55%, basketball 53.83%, volleyball 50.83% Hockey 48.21%, athletics 47.72%, badminton 47.50%, weight lifting 46.66%, tennis 44.44%, cricket 42.05%, kho-kho41.66%, handball 40.47%, netball 35.71%).

Message: The results of the research provide a useful insight into the location, games incidence and sites of injuries in amateur athletes.

KEYWORDS

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 which 1 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 system^{2,4,5}. 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

Materials and Methods:

Information on injuries was collected from amateur college going athlete physical education department Annamalai University, Tamil Nadu. A pretested questionnaire 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 835 amateur athletes.

Mean scores, standard deviation for sociodemographic data while 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 1000 questionnaires were administered and 835 were returned by the players after completion thus giving an overall response rate of 83.50%.

Results and Discussion

Mean, age, weight and height of the amateur athlete were 23.33 (SD \pm 2.44) years, 69.01 (SD \pm 2.20) kg and 172.1 (SD \pm 2.41) cm. respectively. A total of 427 out of 835(51.15%) amateur athletes reported of having sustained injure. A total of 222 out of 427(51.99%) injured athletes had ankle injury. The

results of amateur athlete with respect to their injury details are presented in figure 1 and 2 $\,$

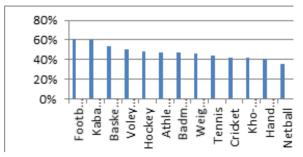


FIGURE- 1 The incidence rate among13 disciplines of games participated in the survey.

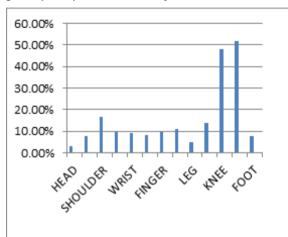


FIGURE- 2 The incidence rate among the different region of body.
Discussion:

This study reveals that 51.15% injuries occurred during past 6month during .out of which the maximum affected region & game among the injured was ankle 51.99%, football 61.38%, 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. Research also suggests that lower limb injuries were most common in sports³. A significant proportion of injuries occurred in the upper limb region of which shoulder injuries, predominated (16.62%), relatively high incidence of ankle injuries is due to fact that the early returns to the game, improper rehabilitation of the affected part, improper jumping technique. The most commonly affected game was found to be football. It may be due to overtraining, and low fitness level of football players. Thus knowledge of overall sports injury pattern help us to bring out the prevention strategies for the players and by doing so we can prevent the future injury.

Conclusion:

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

Study also commanded that

- 1. Most injuries were sustained to the football players.
- 2. Regarding the location of injury most commonly affected region was ankle.
- 3. Upper limb commonest injuries occurred in the shoulder region.

- 4. Maximum injures occur during competition.
- 5. Regarding treatment of injuries, physiotherapist and self care were the most common mode of treatment taken by the injuried players.

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

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