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A Comparative Study on the Sites of Sports Injuries among Athletes of Different Age and Gender Groups in Football Players

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ABSTRACT: Today with the other criteria of games and sports, the word "power" has added and it has change into "power games" and "power sports". Games and sports have lost its aesthetic value and became "combat" in nature. Sportsmen only strive for excellence. If there is any competition and sportsman intense to excel, there always remain possibility of injury. In the preset work the researchers want to highlight the types and nature of injuries that occurred during sports training and competitions among various athletic groups.For injury-research the tile was "a study on the nature of sports injuries among athletes of different age and gender groups in football" For the purpose of the study 285 football players of repute was considered as the subject of the study. Each subject was provided with a questionnaire in connection with sports injuries genesis, history and frequency of injury suffered by the football players. From the analysis of the questionnaires. Sen2005 concluded that most injury making game was noted to be football (49.2%) followed by basketball l(27.9%) and (22.8% volleyball). Lower extremities, particularly knee 28% and ankle (21%) were accounted for most injuries. Sprain (39%) was the prime nature of injury, followed by distortion (19%). Jean William Johnson and other 2007, Established that most of the injuries were seen in the 11 to 20 age group and the majority of the admission were soccer related injuries. Kerr ZY, Collins, Pommering, Fields, Comstock 2009reported that dislocations/separations represented 3.6%, shoulder (54.9%), wrist/hand (16.5%), and knee (16.0%); Junge A, Dvorak J 2010 founded that most injuries affected the lower extremity (70%), followed by head and neck (13%), upper extremity (10%) and trunk (7%). The most frequent diagnoses were contusion of the lower leg (11%), ankle sprain (10%) and groin strain (8%). Norwegian School of Sport Sciences 2011 Studies from adult female and male football have reported a similar pattern of injuries, where acute injuries constitute 65-94% and 69-85% of all injuries. Junge A. and Dvorak J. 2015 conclude that the overall injury rate decreased from the 2002 to the 2014 FIFA World Cup by 37%. While the incidence of non-contact injuries did not change significantly, a significant reduction in the rate of contact injuries and of injuries caused by foul play was observed from the 2002 to the 2014 FIFA World Cup. This may not only be a result of strict refereeing but also the improved approach of the players towards fair play. Thigh and head were the most frequently injured body parts in the 2014 FIFA World Cup. Interventions to prevent non-contact injuries of the lower extremity should be part of the training routine. Incase of senior male the researcher found 82.50% and female 80.39% of injury in lower extremity. Where 43.75% and 35.29% were knee injuries, 18.75% and 23.53% ankle injuries, 16.25% and 17.65% leg injury respectively. Shoulder injury found in male is of 7.5% and in female is of 3.29%.

In case of *under nineteen* male and female football players, male reported higher knee injury 35.29% female 33.33%, but female stated higher ankle injury 25.64% male 19.64%. Male football players suffered by higher leg injury 17.86% female 10.26%.

In *under seventeen* male and female football players male found higher knee injury 36% female 34.29%, but female reported higher ankle injury 25.71% male 20%. Leg injury was nearly identical male 14% female 14.28%.



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In case of *under fourteen* male and female football players injuries were scattered in nature, In male and female knee 28.57% and 31.58%, ankle 17.14% and 15.79%, wrist 14.29% and 15.79%, and face 8.57% and 5.26% respectively. And finally it was concluded that higher the age groups higher was the frequency and severity of injury.

KEYWORDS:- Sports injuries ,football players, Sports Medicine, sports injury.

I. INTRODUCTION

"Sports Medicine" as the use and practice of medicine and science in the field of exercise, sports and health. Accepting this broad definition, we can swiftly accept that the wider aim of sports medicine is concerned with the improvement of health through the medicine of exercise, recreation and sport. Sports Medicine' may be defined as a science of human body in motion. When in motion, different systems of the body are in states of greater activity than normal. It involves greater turnover of energy (Banerjee, 1987).

Sports medicine today is not a specialty but a super specialty combining multi-disciplinary subjects which includes physical education and body fitness involving in the question of promotion of positive health, preventive medication and lastly appropriate medicine and rehabilitation following injuries during games (Ghosh, 1987).

Williams and Sperryn (1976) had given a classical concept of sports medicine. They divided the area of sports medicine as:

a) Man as a sportsman b) Sportsman and his environment c) Sportsman as a patient d) Sports as a therapy

Various authors listed several schemes for classification sports injuries. Athletics injuries may be classified by sports or anatomical location. Some physician and athletic trainer's categories athletic injury according to the particular participant group, such as women, youth, children or older athletes. Still another classification scheme uses the terms "acute" and "chronic". Another system to classify athletics injuries is by the type of tissue involved, such as- soft tissue and hard tissue(Morris, 1984).

Morris (1984), have classified sports injuries as -

- i. By sports Football, Track and Field, Volleyball etc.
- ii. By participant group Women, Men, Youth, Children etc.
- iii. By nature of injury Chronic and acute.
- iv. By type of tissue involved Soft tissue and hard tissue.
- v. By anatomical location Shoulder, Knee, Wrist, Ankle etc.
- vi. According to nature of game Team game, individual game etc.

There are another classification of sports injury those were-

a] Acute Traumatic Injury andb] Overuse or Chronic Injury

a] Acute Traumatic Injury may also divided into;- i) Strain ii) Sprain iii) Bruise or contusions iv) Fractures v) Dislocations vi) Laceration vii)Achilles tendon

b] Overuse or Chronic Injury also may divided into:-i) Shin Splints ii) Tennis Elbow iii) Stress Fracture iv) Tendonitis v) Bursitis

1.1 purposes of the study

The purpose of the study was as follows:-

- **1.** To study the common sports injuries among the athlete of different age groups.
- 2. To look for various nature of sports injuries among the athlete of different age groups.
- 3. To observe gender wise classification of sports injuries.
- 4. To compare types of injuries that occurs among different age and gender groups.

II. METHODOLOGY AND MATERIALS

This was a survey type of study in which the investigator was trying to find out the nature of the sports injuries at various age groups and gender groups of football players.



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2.1 Subjects:-

In case of male age between12 to 31 and for female 12 to 26 and at list district level of participation was considered as subjects.N=285(276 Mal 109 Female) total number of data according to nature of injuries were 365, among them number of injuries in male were 221 and female were 144.

This is a survey type of study in which the researcher was trying to find out the nature of the sports injuries through the validand reliable questionnaire were used for collecting data from the athletes at various age groups and gender groups and data was found as:

- a. Senior. (Male and female). ${n=65+42}$ [80+51]
- b. Under nineteen. (Male and female). $\{n=45+30\}$ [56+39]
- c. Under seventeen. (Male and female). $\{n=38+25\}$ [50+35]
- d. Under fourteen. (Male and female) {n=28+12}[35+19]
- e.

2.2 Formula for Analyzing Data:-

Descriptive Method and Percentile Score of the data werepresented.

III. RESULT AND DISCUSSION

TABLE 1

PERCENTAGE OF SITESOF INJURIES OF FOOTBALL PLAYRES

| SITES | GROUPS | | | | | | | |
|--------------------------|--------|--------|----------------|--------|-----------------|--------|----------------|--------|
| | SENIOR | | UNDER NINETEEN | | UNDER SEVENTEEN | | UNDER FOURTEEN | |
| | MALE | FEMALE | MALE | FEMALE | MALE | FEMALE | MALE | FEMALE |
| Head | 0 | 0 | 1.79 | 2.56 | 4 | 2.86 | 2.86 | 5.26 |
| Face | 2.5 | 5.88 | 3.57 | 2.56 | 4 | 2.86 | 8.57 | 5.26 |
| Shoulder | 7.5 | 3.92 | 3.57 | 7.69 | 4 | 2.86 | 8.57 | 5.26 |
| Chest | 1.25 | 0 | 3.57 | 2.56 | 2 | 2.86 | 0 | 0 |
| Wrist | 2.5 | 3.92 | 1.79 | 5.13 | 6 | 5.71 | 14.29 | 15.79 |
| Finger of hand | 2.5 | 1.96 | 1.79 | 5.13 | 4 | 2.86 | 5.71 | 5.26 |
| Hip | 0 | 0 | 3.57 | 0 | 2 | 0 | 5.71 | 10.53 |
| Groin | 1.25 | 0 | 3.57 | 0 | 2 | 2.86 | 0 | 0 |
| Leg | 16.25 | 17.65 | 17.86 | 12.82 | 14 | 14.28 | 0 | 0 |
| Knee | 43.75 | 35.29 | 35.71 | 33.33 | 36 | 34.29 | 28.57 | 31.58 |
| Ankle | 18.75 | 23.53 | 19.64 | 25.64 | 20 | 25.71 | 17.14 | 15.79 |
| Foot | 2.5 | 3.92 | 3.57 | 2.56 | 2 | 2.86 | 8.57 | 5.26 |
| Total no. of injuries | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |



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Fig-1 Graphical presentation of % of injuries of male and female football players.

IV. DISCUSSION ON SITES OF INJURIES OF FOOTBALL PLAYERS

In the present study in case of *senior* male the researcher found 82.50% and female 80.39% of injury in lower extremity. Where 43.75% and 35.29% were knee injuries, 18.75% and 23.53% ankle injuries, 16.25% and 17.65% leg injury respectively. Shoulder injury found inmale is of 7.5% and in female is of 3.29%.

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That was more or less similar results with the previous researcher.

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