Analysis of typical injuries among Male **Basketball Players of West Zone Inter-**University.

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Abstract - Basketball, a dynamic team sport known for its fast-paced nature, has become widely popular, captivating players and spectators alike. This research explores the prevalence of injuries among male basketball players in the West Zone Inter-University competition. The sport's unique demands, including high-speed ball movement, agility, and teamwork, make it essential to understand and address injuries, particularly those related to the vulnerable bony growth plates in young athletes. The study, conducted through a survey methodology, involved a carefully designed questionnaire administered by a knowledgeable researcher. The findings reveal that 100% of West Zone Inter-University basketball players experienced injuries during their playing careers. Notably, 10% of these injuries were attributed to opponents. Analysis of the injured body parts indicates that ankles (25%) were the most commonly affected, followed by wrists (18%), and shoulders/knees (15%). This insight provides valuable information for healthcare professionals, coaches, and athletes in developing strategies to prevent and manage injuries in the context of university-level basketball competitions. Understanding the specific injury patterns can contribute to more effective injury prevention and treatment protocols, ensuring the longterm health and performance of basketball players.

Keywords- Basketball, Injuries, Growth Plate, Team Sport, Youth Sports Medicine, Powerful Shots, Physis (Bony Growth Plate), Apophyses, Acromioclavicular Joint.

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INTRODUCTION

Basketball is an exceptional all-round team sport and has gained widespread acceptance as a highly competitive game. It has evolved from a slow-moving game into a fast-paced one, becoming a source of great interest and joy for both players and spectators. Notably, the speed of a powerfully shot basketball can reach about 45 meters per second, surpassing the movement of the ball in many other sports. The game provides ample opportunities for the development of strength, speed, endurance, agility, neuro-muscular skills, and coordination of all parts of the body through actions like running, jumping, bending, stretching, and other dynamic movements. Teamwork is essential, instilling in every player a sense of personal and group responsibility through individual performance and the ability to collaborate with the rest of the team. Injuries involving the bony growth plate warrant special attention in any discussion of youth sports medicine. While a detailed analysis of the diagnosis and management of these issues is more appropriate for orthopedic texts, a general understanding of some basic issues is crucial for any physician treating young basketball athletes. In growing athletes, the bony growth plate, or physis, is notably weaker than the surrounding ligamentous tissue. This strength difference is most pronounced at puberty, the time of peak bone growth. An injury that might result in a torn ligament in a post-pubertal athlete is more likely to cause a disruption of the growth plate in a prepubertal or pubertal competitor. Awareness of this phenomenon prompts physicians to often obtain stress X-rays of joints that seem "sprained" but have actually sustained growth plate fractures. Growth cartilage also exists in bony prominences where major muscle tendons insert. These sites, known as apophyses, are susceptible to two types of injury: avulsion and traction. While an older athlete might experience a muscle "pull," the peri-pubertal athlete is vulnerable to the avulsion of the tendinous insertion. common contact One injury involves the acromioclavicular joint, usually resulting from direct force on the shoulder's point, causing a sprain and sometimes a fracture of the distal clavicle.

METHODOLOGY

The research employed a survey methodology to investigate the prevalent injuries among male basketball players participating in the West Zone Inter-University competition. Essential data were gathered using a meticulously crafted questionnaire, personally administered to the athletes by a

knowledgeable researcher. The questionnaire was developed in collaboration with experts and a guide, ensuring its careful preparation to encompass a broad spectrum of the study area. This approach aimed to elicit meaningful responses and achieve comprehensive coverage in understanding the typical injuries experienced by male basketball players in the West Zone Inter-University context.

Table no.1: Question –"Did you suffer from any type of injury?"

S.No.	Total subjects	Response	Frequency	Percentage
1	100	Yes	100	100%
1	100	No	0	0%

Table no. 1 shows that 100% of west zone universities basketball players got injuries.

Table no.2: Question –"Under what situation did you suffer injury?"

S.No.	Total subjects	Response	Frequency	Percentage
1	100	During competition	62	62%
2		During normal regular practice	12	12%
3		During training	9	9%
4		Default of equipment	7	7%
5		Caused by opponent	10	10%

From table no.2 it is evident that 62% players injured during competition, 12% players injured during normal regular practice,9% players injured during training,7% players injured by the fault of equipment, and 10% players injured caused by opponent.

Table no.3: Question –"Mention the body part which suffered most injury ?"

S.No.	Total subjects	Response	Frequency	Percentage
1	100	Neck Injury	4	4%
2		Shoulder Injury	15	15%
3		Elbow Injury	6	<mark>6%</mark>
4		Wrist Injury	18	18%
5		Finger Injury	3	3%

6	Back Injury	7	7%
7	Thigh Injury	6	6%
8	Knee Injury	15	15%
9	Ankle Injury	25	25%
10	Other Injury	1	1%

Table no.3 shows that 4% players suffered from neck injury, 15% players got shoulder injury,6% players got elbow injury ,18% players got wrist injury ,3% players got finger injury, 7% players got back injury, 6% players got thigh injury, 15% players got knee injury, 25% players got ankle injury, 1% players got other injury.

Table no.4: Question –"what was the reason of injury?"

S.No.	Total subjects	Response	Frequency	Percentage
1	100	Faulty moves	35	35%
2		Attitude	30	30%
3		Lack of protective gears	10	10%
4		Overload of training	25	25%

Table no.4 showed that 35% players got injury because of faulty moves, 30% players got injury because of attitude, 10% players got injury because of lack of protective gears, 25% players got injury because overload of training.

Table no.5: Question –"what kinds of injuries you suffered most?"

S.No.	Total subjects	Response	Frequency	Percentage
1	100	Muscular	25	25%
2		Bone related	15	15%
3		Joint related	40	40%
4		Ligament	20	20%

Table no.5 shows that in 25% players suffered by muscular injuries, 15% players suffered by bone related injuries, 40% players suffered by joint related injuries, 20% players suffered by ligament injuries.

Table no.6: Question –"Did you suffer injuries of following nature?"

S.No.	Total subjects	Response	Frequency	Percentage
1	100	Dislocation	15	15%
2		Fracture	10	10%
3		Sprain	35	35%
4		Strain	30	30%
5		Contusion	10	10%

Table no.6 shows that 15% basketball players suffered by dislocation, 10% basketball players suffered by fracture, 35% basketball players suffered by sprain, 30% basketball players suffered by strain, 10% basketball players suffered by contusion.

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Table no.7: Question –" How many days of practice session did you lose because of injury?"

S.No.	Total subjects	Response	Frequency	Percentage
1	100	Less than one week	28	28%
2		Two weeks	36	36%
3		Three weeks	18	18%
4		Four weeks	11	11%
5		More than one month	7	7%

Table no.7 shows that 28% basketball player's loss the practice session for less than one week because of injury,36% players for two weeks,18% player for three weeks,11% players for four weeks and 7% players for more than one month loosed the practice session.

Table no.8: Question –"what was your state of mind when injured?"

S.No.	Total subjects	Response	Frequency	Percentage
1	100	Depressed	29	29
2		Excited	8	8
3		Confined	12	12
4		Relaxed	11	11
5		Fearful	10	10
6		Nervous	30	30

Table no.8 shows that 29% players state of mind was depressed,8% players was excited,12% players was confident,11% players was relaxed,10% players was fearful and 30% players was nervous.

Table no.9: Question –"After injury whom have you consulted?"

S.No.	Total subjects	Response	Frequency	Percentage
1	100	General doctor	25	25%
2		Physiotherapist	41	41%
3		Sport medicine expert	21	21%
4		Traditional healing	8	8%
5		No one consulted	5	5%

Table no.9 reflects that 25% players consulted the general doctor, 41% players consulted the physiotherapist, 21% players consulted the sport medicine expert, 8% players consulted the traditional healers, 5% players did not consult any one.

Table no.10: Question –"For injury how long did you take treatment?"

S.No.	Total subjects	Response	Frequency	Percentage
1	100	One day	25	25%
2		One week	60	60%
3		One month	15	15%

Table no.10 reflects that 25% players take treatment for one day, 60% players take treatment for one week, 15% players take treatment for one month.

Table no.11: Question –"Do you undertake physiotherapy treatment and rehabilitation?"

S.No.	Total subjects	Response	Frequency	Percentage
1	100	Yes	80	80%
2		No	20	20%

Table no.11 shows that 80% injured players took the physiotherapy treatment and 20% players were not taken the physiotherapy treatment.

Table no.12: Question –"Are you satisfied with the treatment you received from the consulted expert?"

S.No.	Total subjects	Response	Frequency	Percentage
1	100	Yes	75	75%
2		No	25	25%

Table no.12 shows that 75% players satisfied with the treatment and 25% players were not satisfied with the treatment.

CONCLUSIONS

On the basis of the findings of the present study the following conclusions are drawn:

- 100% basketball players belonging to west zone inter-university were found to have injury during their playing career.
- 2. That 10% of the injuries were suffered by the players were caused by opponent.
- 3. The most commonly injured body parts were Ankle (25%), followed wrist (18%) and shoulder & knee (15%).

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