

ASSESSMENT OF COMMON INJURIES AMONG THE SOFTBALL PLAYERS

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ABSTRACT

The present study was undertaken to determine the Awareness, knowledge and prevention of injuries of Softball players. This study has been conducted on 60 players (N=60) from Delhi State Softball Championship. For data collection self prepared questionnaire was prepared and analysed by computing percentile. Observation revealed that 1.67% players started playing Softball at the age of 10-19 yrs, 24% players got sprain and abrasion in soft tissue injuries. It is observed that 55% players got injuries in upper extremity.

Key Words: Softball championship, Injuries-Types, Causes and Prevention.

INTRODUCTION:

Softball is a game of ball and stick and injuries are common in this game. This game is played under high intensity. Players want their top performance in the Olympic game. In this game the players have to throw the ball at very high speed to get a base runner out and to stop the base runner to steal the base and also to stop a base runner to complete the run. The defensive team throw the ball with speed by using their muscles of shoulder. During this action they may get injuries in their shoulder joints. In the action of pitchers, sometimes he batted ball hit the fielders on their face and limbs causing injury.

Hence, study of common injuries is very important. Softball players participating at various levels and to provide information to physical education teachers coaches, professionals of sports medicine and athletics etc. for undertaking necessary preparatory, preventive and curative measures in general as well as specific.

PURPOSE OF THE STUDY:

- a) To study the nature and type of injuries among the Softball players.
- b) To calculate and analyze the percentage distribution of injuries in general.
- c) To find out the types of injuries.
- d) To find out the causes of injuries.
- e) To find out the prevention of injuries.

METHODOLOGY:

Sixty softball players were selected from the Delhi State Softball Championship held at Delhi during the session 2005-06 for the present study and they were administered through questionnaire. The data was collected and analysed by computing percentile.

The questionnaire was prepared with the help of expert guidance of the field supervisor and the panel of experts in physical education. All questions were objective in nature.

Questionnaire were subjected to appropriate, percentile method, which has then exhibited in the form of pie and column charts.

ANALYSIS AND INTERPRETATION OF DATA:

The result pertaining to softball injuries have been presented from table number 1 to 21 and pictorial representation is in the form of pie-diagram have been represented from figure number 1 to 21.

Table : 1 Age of Starting Playing Softball

S.No.	Age Group	Responses	Percentage
1	1-09	0	0%
2	10-19	1	1.67%
3	20-29	31	51.67%
4	Above 30	28	46.66%
Total	-	60	100%

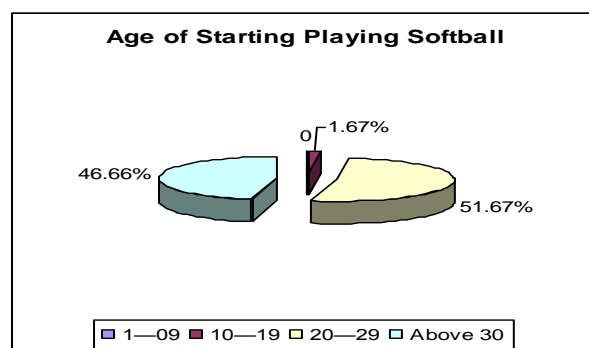


Table number 1 shows 1.67% of the players started softball between the age group of 10-19 years. 51.67% of the players started playing football softball between the age group of 20-29 years and 46.66% players started playing softball above the age of 15 years.

Maximum number of players started playing softball between the age group of 20-29 years.

Table : 2 Participated in First Softball Competition

S.No.	Competition Level	Responses	Percentage
1	Local Tournament	12	20%
2	District Level	18	30%
3	Inter-College	22	37%
4	State Level	8	13%
Total	-	60	100%

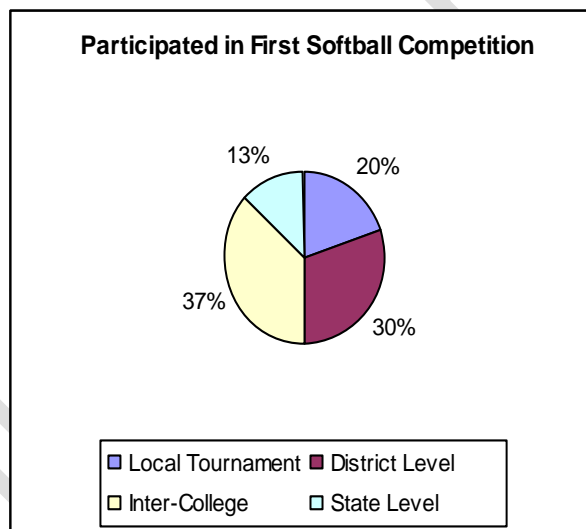
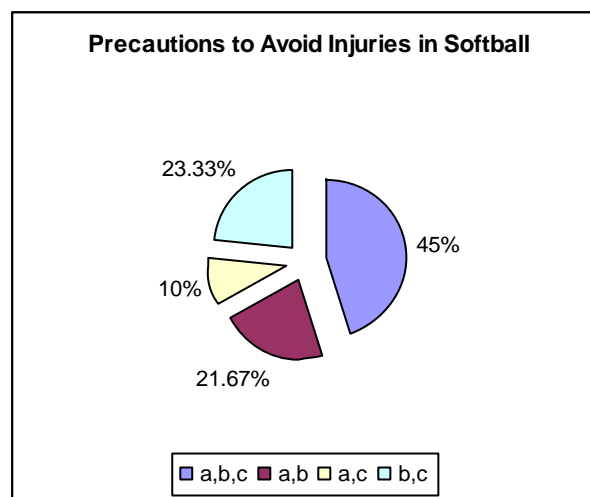


Table number 2 shows 20% players first time participated in a local tournament, 30% at district level, 37% at inter-college level and 13% players first competed at state-level tournaments.

Table : 3 Precautions to Avoid Injuries in Softball

- (a) Proper warm up and cool down
- (b) Learn good techniques and rules
- (c) Use proper playing and safety equipment

S.No.	Precautions	Responses	Percentage
1	a, b, c	27	45%
2	a, b	13	21.67%
3	a, c	6	10%



4	b, c	14	23.33%
Total	-	60	100%

Table number 3 clearly indicate that the 45% players used all the precautions, 21.67% players uses first two precautions, 10% players uses (a) and (c) precautions while 23.33% players uses, (b) and (c) precautions.

Table : 4 Common Injuries in Softball

S.No.	Injury	Responses	Percentage
1	Joint	25	41.67%
2	Bone	10	16.66%
3	Soft-tissue	25	41.67%
4	Any other	0	0%
Total	-	60	100%

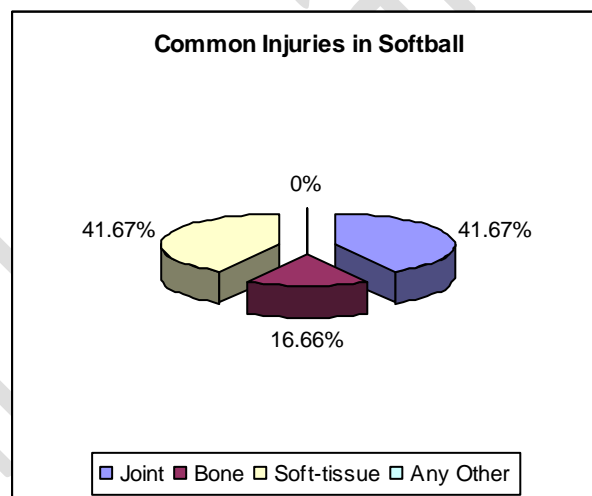
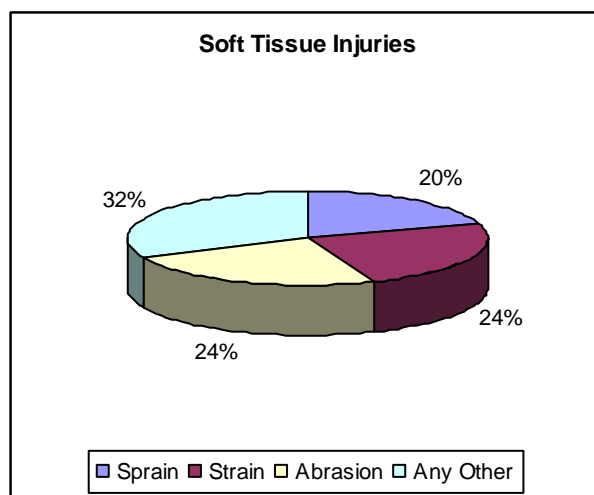


Table number 4 shows that 41.67% players got joint injuries. 16.66% of players got bone injuries and 41.67% of the players suffered soft-tissue injuries while playing softball.

Table : 5 Soft Tissue Injuries

S.No.	Injury	Responses	Percentage
1	Sprain	5	20%
2	Strain	5	24%
3	Abrasion	6	24%
4	Any other	8	32%
Total	-	25	100%



The data from the table number 5 shows that 20% players got sprain, 24% got strain and abrasion injury each and 32% players got other type of soft tissue injuries while playing football. Most of the players got injuries like blisters, corns, contusion and incision etc.

Table : 6 Bone Injuries in Softball

S.No.	Injury	Responses	Percentage
1	Oblique fracture	1	10%
2	Transverse Fracture	1	10%
3	Comminuted Fracture	6	60%
4	Any other	2	20%
Total	-	10	100%

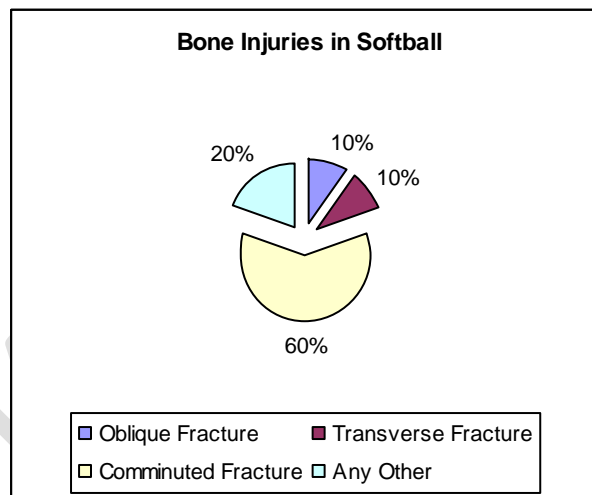


Table : 7 Joint Injuries in Softball

S.No.	Injury	Responses	Percentage
1	Luxsation	5	20%
2	Subluxsation	20	80%
3	Any other	0	0%
Total	-	25	100%

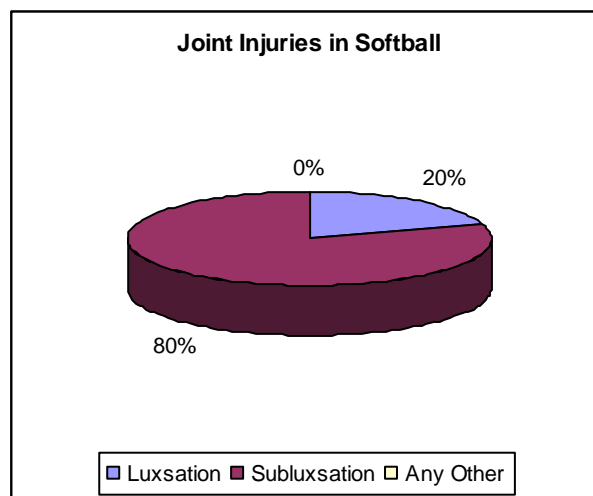


Table number 7 shows that the 20% players got luxsation joint injury while 80% players got subluxsation injuries while playing softball. It is clearly evident that most of the players got subluxsation joint injury because of diving and sliding while fielding and base running.

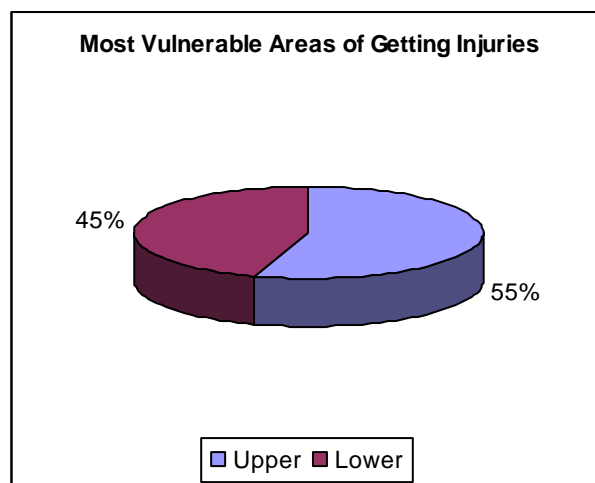
Table : 8 Ranking of Common Injuries in Softball

S.No.	Injury	Responses	Percentage
1	Sprain	5	6
2	Strain	6	3
3	Abrasion	6	3
4	Contusion, Blister etc.	8	2
5.	Oblique fracture	1	9
6.	Transverse fracture	1	9
7.	Comminuted fracture	6	3
8.	Stress, greenstick etc.	2	8
9.	Luxsation	5	6
10.	Subluxsation	20	1

It can observe from the table number 8 that the subluxation is the most common injuries among the softball players due to repeated overhand throw, diving, fielding and base running. After subluxation contusion, blisters are the most common injuries in softball. Followed by abrasion, strain, comminuted fracture.

Table : 9 Most Vulnerable Areas of Getting Injuries

S.No.	Extremity	Responses	Percentage
1	Upper	33	55%
2	Lower	27	45%



Total	-	60	100%
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Table number 9 shows that the 55% players got injuries in upper extremity and 45% players got injuries in the lower extremity. Majority of the players reported that the most vulnerable areas of getting injuries are the upper extremity.

Table : 10 Injuries in Upper Extremity

S.No.	Body Parts	Responses	Percentage
1	Head and Face	5	8.33%
2	Shoulder	27	45%
3	Elbow	17	28.34%
4	Wrist and Fingers	11	18.63
Total	-	60	100%

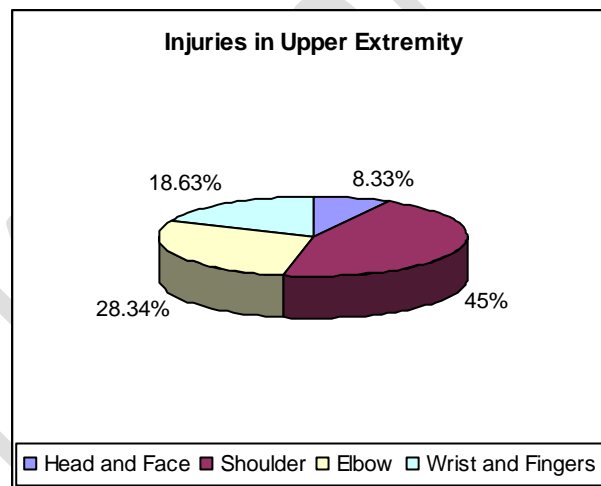
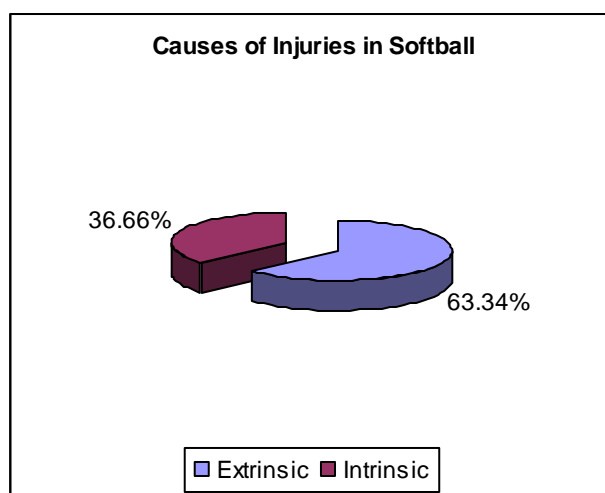


Table number 10 shows that the analysis reveals that 8.33% players got injuries on head and face, 45% players got injuries in shoulder, 28.34% got injuries in elbow and 18.33% players got injuries in wrist and fingers while playing Softball. As it clearly evident from the table maximum number of players got injury in their shoulders.

Table : 11 Causes of Injuries in Softball

S.No.	Cause	Responses	Percentage
1	Extrinsic	38	63.34%
2	Intrinsic	22	36.66%



Total	-	60	100%
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Table number 11 reveals that the 63.34% players got injuries due to extrinsic cause while 36.66% players got the injuries due to the intrinsic cause. It is clearly evident that most of the players got injured due to the extrinsic cases.

Table : 12 Intrinsic Injuries in Softball

S.No.	Type	Responses	Percentage
1	Incidental	1	4.55%
2	Overuse	4	18.18%
3	Overuse Chronic	10	45.55%
4	Secondary	7	31.82%
Total	-	22	100%

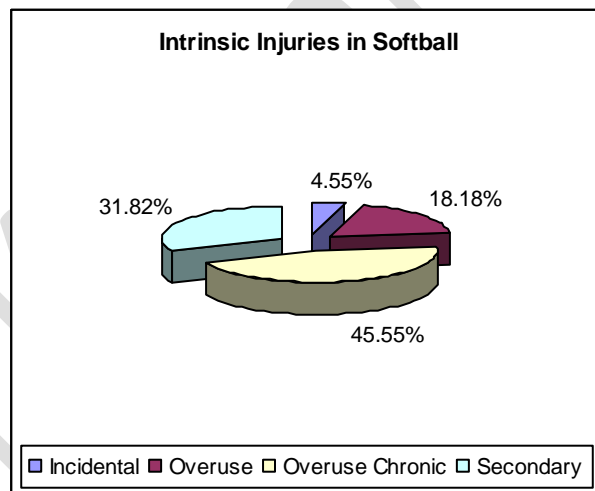
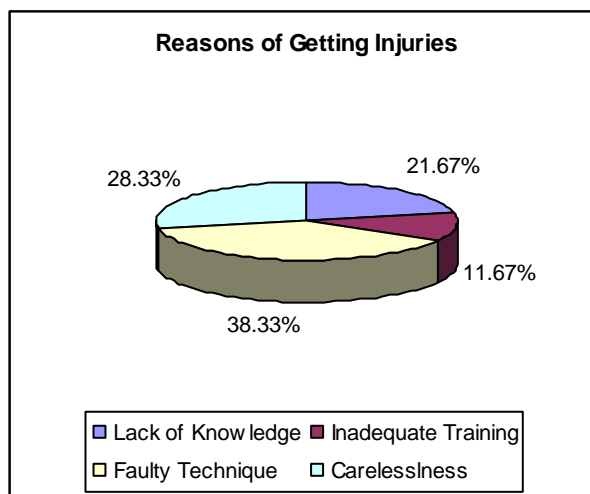


Table number 12 shows that the 4.55% players got incidental injuries, 18.18% players got over-use acute injuries. 45.55% got overuse chronic injuries and 31.82% got secondary injuries. Maximum numbers of players got overuse chronic injuries.

Table : 13 Reason s of Getting Injuries

S.No.	Age Group	Responses	Percentage
1	Lack of Knowledge	13	21.67%
2	Inadequate Training	7	11.67%
3	Faulty Technique	23	38.33%
4	Carelessness	17	28.33%



Total	-	60	100%
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It can observe the table number 13 that 21.67% players got injuries due to lack of knowledge, 11.57% players got injuries due to inadequate training, 38.33% players got injuries due to faulty techniques and 28.33% players got injuries due to carelessness. Maximum number of players got injuries due to faulty techniques while playing softball.

Table : 14 Reasons of Extrinsic Injuries

S.No.	Reasons	Responses	Percentage
1	Sports Equipment	12	32%
2	Collusion	10	26%
3	Surface	10	26%
4	Any Other	6	16%
Total	-	38	100%

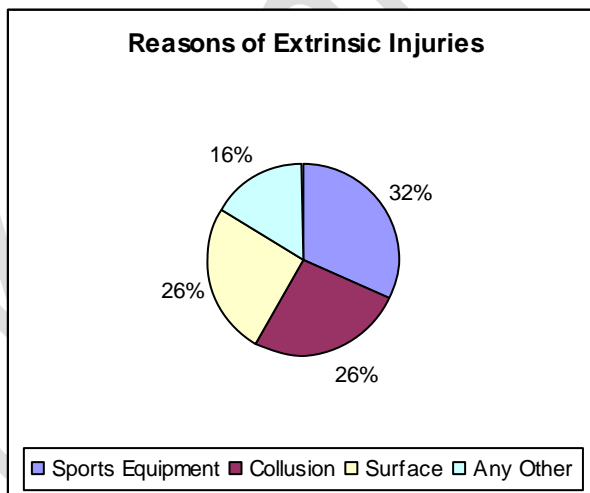
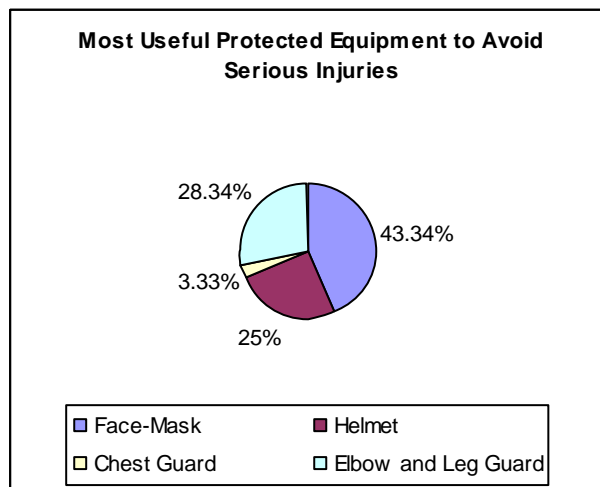


Table number 14 shows that 32% players got extrinsic injuries due to sports equipment, 26% players got injuries due to collusion, 26% players got injuries due to surface and 16% players got injuries due to some other reasons. It is clearly evident that most of the players got injuries due to sub-standard sports equipment.

Table : 15 Most Useful Protected Equipment to Avoid Serious Injuries

S.No.	Equipment	Responses	Percentage
1	Face-mask	26	43.34%
2	Helmet	15	25%
3	Chest Guard	2	3.33%



4	Elbow and Leg Guard	17	28.34%
Total	-	60	100%

Table number 15 shows the analysis of data from table show that 43.34% players considered face-mask as the most protective gear, 25% considered helmet, 3.33% considered chest guard and 28.34% considered elbow and leg guard as the most useful protective equipment to avoid serious injuries in Softball. The maximum number of players i.e. 43.34% considered facemask as the most useful protective gear while playing softball.

Table : 16 Treatment After Getting Injury in Softball

S.No.	Treatment	Responses	Percentage
1	First Aid	20	33.34%
2	Cryotherapy	15	25%
3	Spray	16	26.67%
4	Application of Ointment	9	15%
Total	-	60	100%

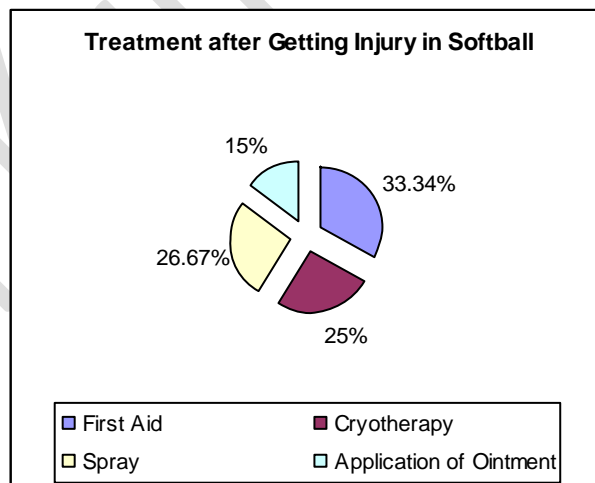
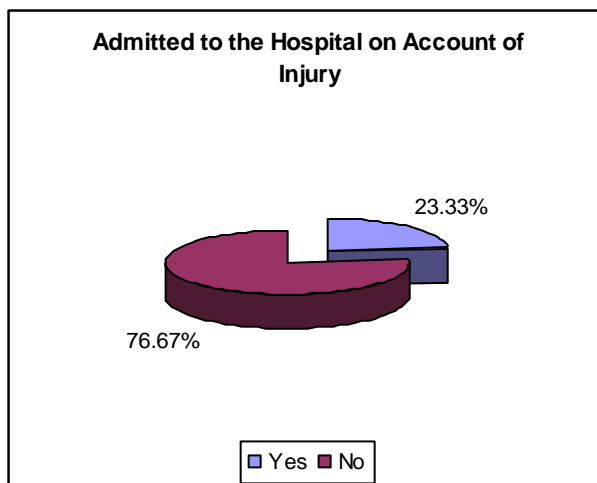


Table number 16 indicate that the 33.34% players got first aid after getting injury, 25% players got cryotherapy, 26.67% players uses spray and 15 % players used ointment after getting injury while playing softball. First aid is the most common treatment which most of the players got after getting injured.

Table : 17 Admitted to the Hospital on Account of Injury

S.No.	Admitted	Responses	Percentage
1	Yes	14	23.33%
2	No	46	76.67%
Total	-	60	100%



The analysis of data from table number 17 reveals that 23.33% were admitted in the hospital after getting injured whereas 76.67% of the players never got admitted in hospital on account of injury while playing softball. The table depicts that 76.67% players were not hospitalized on account of injury.

Table : 18 Type of Injury of those Admitted to Hospital

S.No.	Type of Injury	Responses	Percentage
1	Overuse	1	7.14%
2	Traumatic	0	0%
3	Severe	6	42.86%
4	Acute	7	50%
Total	-	14	100%

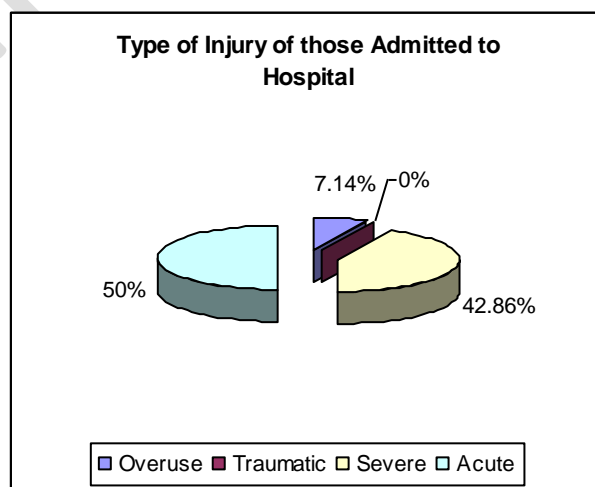


Table number 18 shows that 7.14% players were hospitalized due to overuse injury, 0% due to traumatic, 42.86% due to severe injury and 50% players were hospitalized due to acute injury while playing softball. Maximum 50% of players got acute injury when they were hospitalized on account of injury.

Table : 19 Rehabilitation after Treatment of the Injury

S.No.	Gone for Rehabilitation	Responses	Percentage
1	Yes	25	41.67%
2	No	35	58.33%
Total	-	60	100%

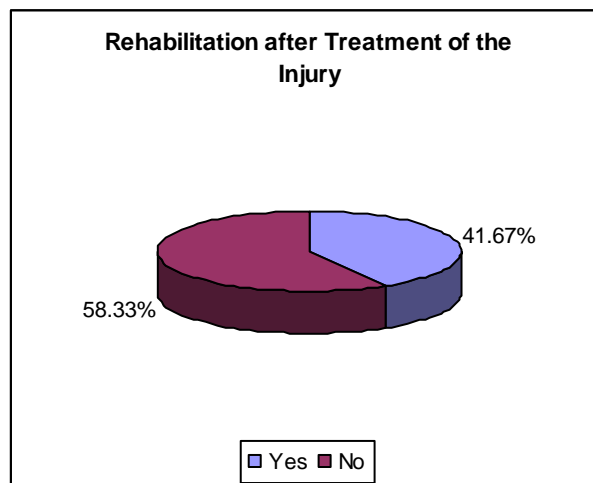


Table number 19 indicate that the 41.67% players have gone for rehabilitation and 58.33% players have not gone for rehabilitation after treatment of injury. Rehabilitation was not required in 58.33% of the players.

Table : 20

Modalities used for Rehabilitation

S.No.	Modalities	Responses	Percentage
1	Range of Motion	2	8%
2	Strengthening	18	72%
3	Balancing	2	8%
4	Co-ordinative	3	12%
Total	-	25	100%

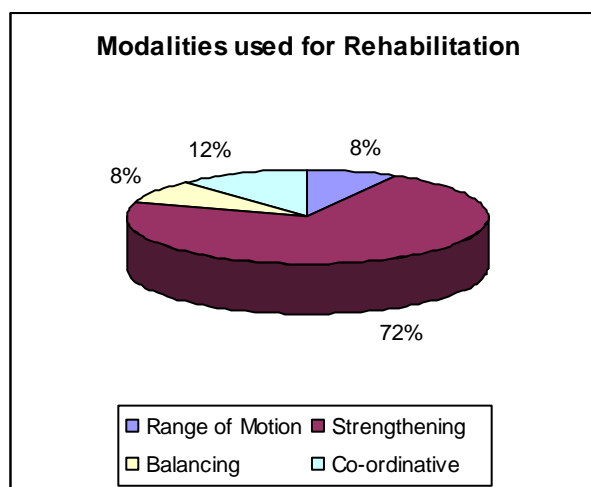
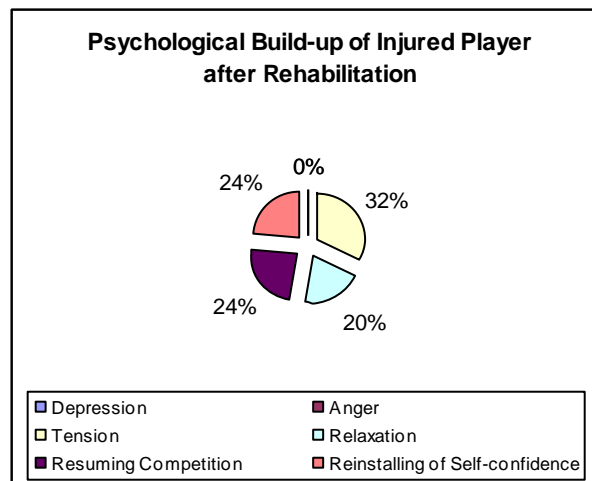


Table number 20 shows that the 8% players used range of motion modalities, 72% players used strengthening exercise, 8% players used balancing modalities and 12% players used co-ordination exercise for rehabilitation. The data shows that maximum 72% players used strengthening modalities for rehabilitation.

Table : 21 Psychological Build-up of Injured Player after Rehabilitation

S.No.	Psychological	Responses	Percentage
1	Depression	0	0%
2	Anger	0	0%
3	Tension	8	32%
4	Relaxation	5	20%
5.	Resuming Competition	6	24%
6.	Reinstalling of Self-confidence	6	24%
Total	-	25	100%



The analysis of table number 21 shows that 32% players were in tension, 20% players were relaxed, 24% players resumed competition and 24% players got self-confidence after recovery. As the above-mentioned depicts maximum 32% player were in the state of tension after rehabilitation.

CONCLUSION:

With in the limitation of the study some of the finding below mentioned :

1. It is observed from the table number 21 shows that the total Softball players surveyed out of which only 1.67% players started playing Softball at the age of 10-19 years.
2. Finding shows that most of the players do not have proper playing and safety equipment to avoid injuries.
3. It is also observed from the table that most players got soft tissue and joint injury.
4. Finding from the table shows that 24% players got sprain and abrasion in soft tissues injuries.
5. In bone injuries most players subluxation due to faulty technique. It is also found that 55% players got injuries in the upper extremity and in upper extremity most of the players got injury in the shoulders region.
6. Finding shows that 23.33% got serious injuries when they were hospitalized.

7. Study shows that 58.33% players needed rehabilitation after treatment of injury. Most of the players used strengthening exercises for rehabilitation.
8. We observed from the table that 32% players were in the depression after the rehabilitation.

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