



A COMPARATIVE STUDY ON SELECTED INJURIES BETWEEN GRECO-ROMAN AND FREE-STYLE WRESTLERS

Mr. Madhu G R, Assistant Professor

Mr. Avinash S., Master Degree Student

Alva's College of Physical Education, Moodbidri, Karnataka

Abstract

This study aimed at compare the selected injuries between Greco-Roman and Free-style wrestlers, Sports injuries can affect significantly to the health and well-being of young wrestlers which can lead to indirect declination of their career progress. For the purpose of data collection questionnaire technique was used, total 50 wrestlers are randomly selected as subjects from both style of wrestling from Dakshina Kannada District. The obtained response would be tabulated and analyzed. To achieve meaningful conclusions the percentage was calculated and represented the data through suitable tables and charts.

Keywords: Sports injuries, wrestlers, Greco-Roman and Free-style.

Introduction

Wrestling is a popular ancient game in the World. It involves grappling techniques like holding, throwing, locking joints, pinning down the opponent on the mat etc. Wrestling is a physical competition between two wrestlers those who attempt to gain superior position over his/her opponent. Wrestling is an intermittent physical event. It requires greater physical strength and muscle power of both the lower and upper body, with adequate anaerobic energy release. The techniques of wrestling are also used in other martial arts. It is one of the oldest forms of combat sport. Early as 12th Century BC. As per the

International Federation of Associated Wrestling Styles, two main disciplines are there in wrestling. These are Greco-Roman and freestyle wrestling styles (Pallares et al., 2011). In Greco-Roman wrestling style, a wrestler is not allowed to hold the opponent below the belt and to actively use the extremities in execution of any action against his opponent. Greco-Roman wrestling style is predominantly for men. Where as in Free style wrestling style, both men and women can take part. This type allows the wrestlers to use the lowered extremities in offense and defense. A freestyle wrestling match today is composed of three 2-minute rounds with a 30 second break, while the Greco-Roman period duration is also 2 minutes but with 1 minute 30 seconds of ground wrestling. In both styles the winner is decided by either a fall or by a scoring system. While the wrestling sport attraction championship path, is one of the hardest in the league. In most of the countries people in-charge of Greco-Roman wrestling utilize scientific and empirical methods and identify features to seek talents and through the proposed model, provide talents discover field and develop them timely and accurate. However, assessment of the readiness of people cannot take place without the use of standard reference norms, because these norms provides every possible comparison and assessment from preparation of various sports point of view to understand the



strengths and weaknesses of the training program can be prepared. Wrestling and football are the two high school sports that have the highest risk of serious injury to athletes (Centre for Injury Research and Policy).

Methodology

For the purpose of data collection total 50 wrestlers are randomly selected as subjects from both style of wrestling from Dakshina Kannada District. This study began with a discussion available literature on the basic of subjects. Relevant abstracts and reference were recorded. In this study questionnaire technique was used for the collection of the data. The greatest use of questionnaire is made by the survey strategy. Questions are in few numbers, in such a way that questions are easily understood and readily answerable. Question can be answered by ticking on right options indicating the injuries name.

The questionnaire were prepared by consulted authors with the help of experts and physiotherapist. questionnaire include selection of the variables (Skin injuries, muscles injuries, bone injuries, joint injuries) and orientation of subject with adequate number of questions containing of personal details, playing experience, location and playing surface, use of supportive equipment. The investigator selected 50 subjects from various competitions and clubs such as Thulunada Kesari Kumar District level wrestling competition Dhakshina Kannada, District level Beach Utsav wrestling competition held at Panamboor, Surathkal Wrestling academy and Alva's wrestling team. The investigator has personally visited the subjects and took the data for particular wrestlers. The obtained response would be tabulated and analyzed. To achieve

meaningful conclusions the percentage was calculated and represented the data through suitable tables and charts.

Results and Finding

The collected data was coded and tabulated using statistical measures. The data has been analyzed and interpreted accordingly to the objective of the study. This analysis includes following tables and charts

TABLE 1
SHOWS THE SKIN INJURIES AMONG FREE STYLE AND GRECO ROMAN WRESTLERS

S. No	Body Part	Free Style	Greco Roman Style
1	Head	3.07%	1.28%
2	Face	10.23	3.2%
3	Neck	4.27%	-
4	Shoulder	4.80%	
5	Arm	-	-
6	Palm	-	-
7	Chest	2.50%	-
8	Upper back	-	
9	Abdominals	-	-
10	Lower back	-	
11	Hip	-	-
12	Thigh	-	-
13	Leg	7.15%	1.83%
14	Foot	5.23%	1.22%

Above table shows that out of 50 respondents total 37.25% and 7.53% of Free Style wrestlers and Greco Roman wrestlers had skin injuries respectively. It shows that Greco Roman wrestlers had more skin injuries compared to free style wrestlers and it also recorded that especially they got more skin injury to face.



TABLE 2
SHOWS THE MUSCLE INJURIES AMONG FREE STYLE AND
GRECO ROMAN WRESTLERS

S. No.	Muscle	Free style	Greco Roman
1	Deltoid	10.08%	7.37%
2	Biceps Brachial	2.47%	1.02%
5	Trapezes	2.84%	1.45%
6	Latissimus Dorsi	1.63%	0.93%
7	Pectorals Major	4.47%	1.43%
8	Rectus Abdomens	1.32%	2.15%
9	Gluteus	2.02%	2.97%
10	Hamstrings	3.23%	3.96%
11	Quadriiceps	8.44%	4.47%
12	Calf	2.82%	2.96%

Above table shows that 40.32 % and 28.71% of Free Style wrestlers and Greco Roman wrestlers of Dakshina Kannada District had muscle injuries respectively. In wrestlers more muscle injury appears to be on deltoid muscle compare to other muscle group. Since more pressure will be applied on the Deltoid muscle while falling on the playing surface.

TABLE 3
SHOWS THE BONE INJURIES AMONG FREE STYLE AND
GRECO ROMAN WRESTLERS

S. No	Bone	Free Style	Greco Roman
1	Cranial	-	-
2	Facial	-	-
3	Clavicle	10.45%	9.02%
4	Ribcage	1.49%	-
5	Vertebral Column	-	-
6	Shoulder Griddle	4.97%	3.81%
7	Upper Extremities	13.7%	8.9%
8	Pelvic Griddle	-	-
9	Lower Extremities	12.52%	6.34%

The bone injuries reported by the wrestlers shown in above table.43.10% Free Style and 28.07% Greco Roman wrestlers had bone injury .It shows that more bone injuries occurred in Free Style wrestling compare to

Greco Roman style and also clavicle bone injury is more followed by upper extremities, lower extremities, shoulder Girdle and Ribcage.

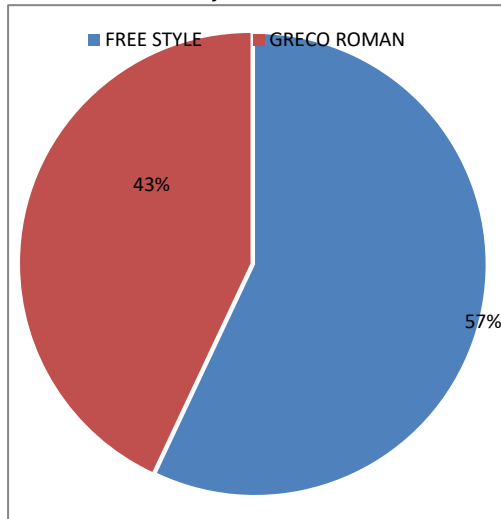
TABLE 4
SHOWS THE JOINT INJURIES AMONG FREE STYLE AND
GRECO ROMAN WRESTLERS

S. No.	Body Part	Free Style	Greco Roman
1	Neck	4.05%	2.25%
2	Shoulder	14.27%	6.95%
3	Elbow	3.64%	1.4%
4	Wrist	2.89%	0.55%
5	Finger of Hand	16.48%	5.18%
6	Hip	0.73%	0.22%
7	Knee	9.52%	6.18%
8	Ankle	6.64%	2.53%
9	Finger of Foot	3.85%	1.65%

The percentage of joint injuries among Free Style and Greco Roman style wrestlers had shown in table no 4.This study records that shoulder joint is most injured joint in wrestlers followed by fingers, ankle, elbow, neck, wrist and Hip joint that is because shoulder joint has most complicated structure. Total 60.61% and 27.91% of Joint injuries recorded in Free Style and Greco Roman Wrestlers respectively. Chart showing Compared to the Injuries in Free Style and Greco Roman Wrestlers.



Fig no 1: Comparison of Free Style and Greco Roman Wrestlers injuries



The above graph clearly shows that more injuries will be for Free Style wrestlers compared to Greco Roman wrestlers, in this study investigator find out 57% of free style wrestlers had injury where Greco Roman wrestlers had 43%.it was found that there is no significance differences between common injuries among both style of wrestler

Wrestling is an aggressive contact sport, and will never be free from potential injury situations. However, by examining how injuries occur, we can gain insight into their prevention. Having adequate practice space for the wrestlers can lead to the avoidance of many injuries. Snook recommends providing at least 100 square feet per wrestling pair whenever possible. Larger practice areas prevent pairs of wrestlers rolling into each other or other objects like walls.

Injuries due to direct blows, forces or falls will likely never be completely eliminated given the physical nature of the sport, but certain

measures are helpful in decreasing injuries. High quality mats of proper material and thickness are crucial to the overall safety of the wrestlers. It is important to replace or recondition wrestling mats when they become worn. In addition, proper padding should be placed over any hard objects around the mat such as hard wood or concrete floors, walls or scoring tables. Wearing properly fitted headgear for practice and competition is also recommended. Although wearing headgear is mandatory for most competitions, it is not a required piece of equipment for practice. Even though most coaches believe headgear to be effective in preventing serious auricular injury, many do not mandate its use for practices. It is recommended that headgear have a sufficient number of straps to fix the headgear firmly on the head and with deep enough earpieces so that there is no contact between the ear itself and the headgear.

The researcher work has been taken up with the purpose of identifying a study of comparative study on common injuries between the Greco Roman and Free Style Wrestling. At the very outset investigator know that the problems are much uncomplicated. Free styles are got more number of injuries compare to Greco roman wrestling. The majority were occurred on lower body part rather than upper body.

The injury rate for college wrestlers is 9.6 injuries per 1,000 athlete exposures. Of these injuries, the majority occur during competition, particularly during take-downs (The National Collegiate Athletic Association).



Conclusion

In this conclusion the result of this study indicates that the incidence of injury in Greco roman and free style wrestlers. The implication of the finding the players should be made more aware of the importance of protective equipment in helping to preventing injuries. The overall of the study of survey was to assess the common injuries in both wrestling .With many injuries both players have face deadlines to get will and resume participation. These deadlines often conflict with the time required for adequate healing and rehabilitation. In this study players got injuries almost all part of their body. It is found that shoulder and knee sprains and dislocation were main injuries in wrestling.

- Majority of the Free Style wrestlers having joint injuries.
- The most majority of Free Style having joint injuries.
- Majority of the Free Style wrestlers had more muscle injuries almost 39% of overall injuries.
- In that result if we compared the both the style (Greco Roman and Free Style) hear we got most of injuries of Free Style and less injuries of Greco Roman.
- That is because usually free style wrestling involved quick movement and attack on major part of the body. Upper and lower part of the body .wears in the Greco Roman wrestling only the upper body above the waist is most of involve.
- Most of the Free Style wrestlers had Joint injuries.

References

- Anne L. (1985) "Impartial status of injuries in body contact game" Prentice-Hall, Inc., Englewood Cliffs.
- Beachy G, Akan CK, Martinson M, Olderr TF.(1988 to 1996) High school sports injuries. Mumbai. India
- Berson BL. (1997). Surgical repair of pectorals major rupture in an athlete. Case report of an unusual injury in a wrestler. India. Pune.
- Bowden BP, (2017, Nov). Stresses' of the muscle injury. 20th December 2017 from <http://whyfiles.Org/137lighting/index.html>.
- Bowden BP, Lin W, Young M, (2002) Mueller FO Catastrophic injuries in wrestlers. Am J Sports. Shanghai Town. Chin
- Brindle TJ, Cone M. (1917) Scapular avulsion fracture of a high school wrestler. 20th December from www.mydr.com.au/sports-fitness/sports-injury-prevention.
- Caine C, Manfully N. (2018) Incidence and distribution of pediatric sport related injuries.
- Chan KM, Yuan Y, Li CK, Chien P, Ysang G. (1993). Sports causing most injuries in Hong Kong. Psychological association.
- Chatterjee P.(2005) Sport related injuries during one academic year in school age Indian children. Kolkata India
- Gues GH. (1992) Etiology of handball injuries: a case-control study stresses' of the muscle injury. New York: Metronal Hoes.
- Hardayal sing. (2001, Jun 15) Essential of physical education and sports injuries prevention. Punjab. India. Vol.3
- Mechal. T (2013) Incidence of popular ball game injuries in Indian pre and post-adolescent boys. Sang Hai Town-China
- Saglam S. (1990) Wrestling causing paraplegia. Paraplegia Research design and statistic for physical education. Vol.26.Pp. 150-155.
- Sal JA. (1991) Common American Football Injuries. Washington D C American Physiological association.
- Sujan M. (2003)'American Sports Data and Inc. The super study of sports participation. Journal org comparative Injuries 55.893-896.