ORIGINAL ARTICLE

Frequency of Mutiılatıon of Wrestlers and Reasons

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ABSTRACT

In the study, it is aimed to investigate the frequency and reasons of sports mutilations in female and male wrestlers of different categories in Turkey. In the study, it is reported that the average age of the athletes (n_150) was 20.05 ± 3.33 years, their average height was 170.23 ± 8.82 cm, and their average weight was 70.82 ± 44.06 kg. Looking at the gender distribution, it was seen that the male participants was 40%(n60), and the female participants was 60%(n90). 54.7% (n82) of the participants study at universities and equivalent schools, 46% of them wrestle for 5 years or more. 75.3% of the participants were exposed to mutilation from the moment they started wrestling, 50.7% reported that the mutilation occurred during technical work, 68% during training and 70.7% during gym training. The proportion of those who think that they will not be able to return to sports is 18.7%, while 56% of the participants feel that they will be better during the treatment. The rate of those who receive support from their environment during the treatment is 81.3%. As a result, it is thought that the mutilations experienced can be a guide for taking necessary measures the implementation of the programs to prevent mutilations at the beginning of the preparatory period within the scope of the preparation period, taking into account the principle of increasing burden, by carrying out more comprehensive studies such as our research results.

Keywords: Wrestle, sports mutilations, categories

INTRODUCTION

Wrestling sport has many positive effects such as increasing muscle strength, endurance, developing speed, coordination and flexibility, as well as improving the psychological state, physical appearance, increasing self-confidence, living a disciplined life and learning to protect yourself (Ardıç,2014). In wrestlers, physical development and health should progress in direct proportion and correct studies should be planned, developed and applied in this direction. Wrestling may differ from individual to individual. Therefore, the individual first should be had a check-up and If there is any discomfort, it should be determined, and then wrestling training should be planned according to the situation. More attention should be paid to these situations in elite athletes and it seems appropriate to be feasible according to situation. (Turkey newspaper in 2006). Wrestling may differ according to individual differences, and of course, this situation also occurs in individuals with health problems. At the end of this, correct loading should be done in the company of conscious trainers. As well as the benefits of wrestling, the harms can occur. Such situations may arise from incorrect training loads and types. That's why we must always protect our health and take care of ourselves. Athletes in poor health should be identified and supported with the treatment process. As a result of all these processes, the wrestler is protected against any sports mutilation. Mental support should be provided to wrestlers in good health (medistate.com, 2020, Ilkım and Mergan,2021). In the first moment of a sports mutilation, an accurate first aid application should be made by experts in the field. Afterwards, the diagnosis and treatment method to be applied after tests, analyses and controls to be applied in a better equipped hospital environment should be directly transferred to the individual. Wrestling is also a branch that aims to improve and maximize the basic motor characteristics of individuals, their physical muscle and endurance features for performance-based development. Sports mutilations are common in wrestling. Because there is a force that individuals apply against each other and a resistance they use for defence. It is a sport with falls, hits, stretches or sudden reverse movements that may arise from excessive applied force. Starting from this known, it is aimed to investigate frequency of mutilation and its reasons of women and men wrestlers have in different categories in Turkey.

MATERIAL AND METHOD

The aim of the study is to investigate to determine the sports mutilations of male and female athletes who wrestling in Turkey during training or competition, in what circumstances the mutilation has occurred, in this process whether the athletes also received the correct first aid at the moment of mutilation and afterwards, whether any protective material is used or not, how the athlete felt psychologically and physically during this rehabilitation process, and in what kind of work areas and what kind of load she/he was exposed to, which factor is related to the moment of mutilation.

Research Design: The sample of the research, in the 2018-2019 preparatory season, consists of sport mutilations that male and female athletes competing in different categories in Turkey have had during other factors such as training or competitions and situations that causes. In this research, 5 teams, including 1 large women's national team, 1 women's national team, 2 wrestling team in Antalya, 1 wrestling team at Akdeniz University, were included. The study was carried out on a total of 150 wrestlers, 90 women and 60 men.

Population and Sample: The questionnaire was applied to female athletes in Turkey Championship and the athlete lists of two wrestling sports clubs in Antalya , athletes who were and were not in the national team, and their age, height, weight and sports mutilation by the researcher who

conducted the research and applied the questionnaire by interviewing the athletes face to face. 150 of the selected athletes voluntarily participated in the research.

Data Collection Tools: In order to obtain data, the questionnaire prepared by S. Augustsson and published in Scandinavian Journal Medicine and Science in Sports (act. Javadifard,2015, Ankara) was translated into Turkish to be applied in Turkey. The first part of the questionnaire form consists of the first twelve questions to determine the training information of the participants, and the second part consists of eight questions to determine the mutilation information's for a season and a total of 20 questions. The first twelve questions include how long the athlete has been wrestling, Whether he/she has been mutilated since he started wrestling, in what kind of activity he/she was mutilated, the most frequently mutilated sports ground, what the mutilations depend on, what are the conditions that prepare the environment for the mutilation, how many weeks he/she trained in the 2018-2019 season, how many times a day he/she trained in the preparation period. In the remaining 8 questions, the areas of previous mutilation and what type of mutilation were experienced, whether or not they received first aid in the last year, and which emotional changes they felt physically and psychologically in this process are asked. An information form is attached to each survey. The Helsinki Declaration was read to the participants and a voluntary participation form was given. SPSS 19.0 for Windows package program was used to analyze the data obtained from the experiments. The data were compared with the independent sample t-test and frequency percentage distribution and a percentage distribution table was created. The descriptive information for sports mutilations is based on the information obtained in the questionnaire.

Findings:

Table 1. Physical Characteristics and Distribution of Education Level

Varıables	average	ss
Age	20,05	3,33
Heıght	170,23	8,82
Kılo	70,82	44,06
Gender	N	F
Male	60	40
Female	90	60
Educatıon level		
Prımary educatıon	12	8
Hıghschool and equıvalents	56	37,3
Unıversıty and equıvalents	82	54,7
Sports age		
1-3 years	46	30,7
2-4 years	35	23,3
5 years and over	69	46

When examined, the distribution of (n150) physical characteristics and education levels of the individuals participating in the study is given.

Table 2. 2.a. Questionnaire Questions

		N	F
Have you been mutilationed since you started wrestling?	Yes	113	75,3
	No	37	24,7
What kind of work were you doing when the first mutilation occurred?	Weight	28	18,7
	Jumping	1	0,7
	Running	8	5,3
	Technical study	76	50,7
	Other	37	24,7
In what kind of activity did you often suffer from mutilation?	During training	102	68
	Competition	17	11,3
	Other	31	20,7
Which sports floor is the most frequently you mutilationed?	Saloon	106	70,7
	Concrete	4	2,7
	Soil	12	8
	Other	28	18,7
How do you get mutilationed?	Hitting	5	3,3
	Falling	76	50,7
	Crashing	36	24
	Other	33	22
In your opinion, what are the reasons that prepare the environment for mutilation?	Preparation	17	11,3
	Overload	85	56,7
	Ground	20	13,3
	Fight the opponent	28	18,7
How many weeks did you train during the preparation period for the 2018/2019 season?	2-5 weeks	11	7,3
	6-8 weeks	28	18,7
	9 weeks and over	111	74
How many times a day did you train during the season preparation period?	Once a day	89	59,3
	Twice a day	59	39,3
	Three times a day	2	1,3
Have you been given first aid for your mutilations in the last year?			
	Yes	92	61,3
	No	58	38,7
What is the most common type of mutilation?	Sprain	32	21,3
	Tearing	17	11,3
	Crush	39	26
	Rupture	25	16,7
	Cracked,,broken	11	7,3
	Other	26	17,3
What is your area of mutilation?	Achilles-Patella (tendon) mutilation	45	30
	Hip and thigh mutilation	4	2,7

	Waist and back mutilations	14	9,3
	Hand and Forearm	27	18
	Neck and head	3	2
	Elbow and shoulder	19	12,7
	Other	38	25,3
Do you use knee braces, bandages, creams, etc. for preventing or treating mutilation?	Yes	105	70
	No	45	30
How did you feel during the mutilation and injury process??	Good	41	27,3
	Bad	109	72,7
Did you have the idea that you cannot return to your wrestling branch when you mutilationed or injured?	Yes	28	18,7
	No	122	81,3
What feelings did you have while being treated during your mutilation?	Tired	21	14
	Despair	24	16
	Unsuccessful	10	6,7
	I felt that I would be better	84	56
	Other	11	7,3
Did people around you give the right help during your treatment or during your mutilation?	Yes	122	81,3
	No	28	18,7

* In Table 2, the frequencies of the answers given to the questionnaire applied to the athletes participating in the research are given.

DISCUSSION AND CONCLUSION

In this research, identification of sport mutilations of male and female athletes wrestling in Turkey during competition or training, determining the situations in which the mutilations occurred and whether the athletes received the correct first aid at the moment of the mutilation and afterwards, whether any protective equipment was used or not, how the athlete felt herself psychologically and physically during this rehabilitation process, what kind of work areas, what kind of workloads were exposed to and which factor the moment of mutilation was related to were investigated. The number of athletes participating in the study was determined to be 150 people in total, 60% (n=90) women and 40% (n=60) men. Yünceviz et al. (1997) found that the risk of mutilation is quite high in free and Greco-Roman wrestlers due to the distribution of sports mutilations according to their body parts and due to both personal and environmental factors involved in wrestling sport. Another point of view stated is that wrestling sport is considered to be among the first group sports in terms of sports mutilations. However, in addition to the findings in the research, it is thought that the issue that the athlete is not sufficiently specific and general warming up before training or competition is a topic that should be discussed about the occurrence of mutilations. There are not many studies on the causes and frequencies of mutilations on wrestlers. Most of the research has focused on male wrestlers. In this respect, it is important to investigate the causes and frequencies of mutilations in male and female wrestlers in our study. In the study conducted by Bavlı and Kozanoğlu (2008) titled “Types and Causes of Mutilations in Adolescent Basketball Players According to Position”, 58 out of 82 athletes had previously suffered from sports mutilations. It has been found that prominent forwards suffer more mutilations (43%) than other individuals. It was determined that the foot area was the most mutilated area (72.4%) and sprained was the most common mutilation type (67.2%) It was determined that the mutilations occurred most during the competition (62.1%) and the mutilations were mostly caused by the foul of the opponent (55.6%). When the descriptive characteristics of the athletes participating in the study are compared according to their positions, there is a significant height difference and weight value. However, the main detail is that the pivots are taller and heavier than the guards and forwards. Of the 150 people participating in the study, 75.3% (n=113) were exposed to sports mutilations. When the two studies were compared, it was reported that there was a 5% difference with a higher mutilation rate in this study. At the same time, the research was applied to men and women of different wrestling styles. It was determined that Achilles or Patella (tendon) mutilations (30.0%) and crush were the most common mutilations (26.0%). It was determined that the mutilations mostly occurred during training (68,0%) mostly occurred as a result of the technical work (50,7%) performed in pairs during training. When the descriptive characteristics of male and female athletes were compared, it was found that the mean age was 20.05 years, the arithmetic mean was 170.23 cm and the weight arithmetic mean was 70.82 kg. In the study conducted by Yünceviz et al. (1997) , the distribution of sports mutilations by body parts was examined within the group consisting of Turkish wrestlers who shared the first three degrees in the European, World and Olympic championships between 1984-1994 in Free and Greco-Roman wrestlers. In the research, it was examined in which body part the freestyle and Greco-Roman female and male wrestlers most of whom were national team athletes, were exposed to the most injuries. In the study conducted on the distribution of sports injuries in freestyle and Greco-Roman wrestlers, we can say that the most affected area of all athletes is the knee area and the least affected area is the head and neck area. The area where wrestlers are most severely exposed to sports mutilations has been identified as Achilles or Patella (tendon) mutilations and the least affected area as the neck-head area. As in the study by Yünceviz et al. (1997), we can see that the regions with mutilation have common features. However, sports mutilations with Achilles tendon injuries other than the knee area should also be considered in the study. In the distribution of sports mutilations in freestyle and Greco-Roman wrestlers, it has been determined that in terms of mutilation risk, chest area injuries are more in the adult category than young people, and among styles, elbow, forearm and chest injuries are significantly more common in Greco-Roman wrestling than in freestyle wrestlers.

In the study, we can state that the most mutilated parts are the upper extremity regions in the Greco-Roman period, and the lower extremity regions are more intense in the free style. In Greco-Roman style wrestling, it was determined that the chest area was more mutilated as a result of hitting, falling and crushing, due to the wrestlers trying to make a technique by mutually pressing tempo, pushing and pulling, lowering the opponent's defence. In freestyle wrestling, it was determined as a result of research and interviews that when an adverse situation occurs as a result of the movements made to use the whole body area in two athletes and to get points from the opponent, Achilles or patella (tendon) mutilations and waist mutilations usually occur. Strauss and Lanese (1982) observed in their study on a total of 1908 wrestlers that knee and ankle mutilations were quite common. Wroble (1986) identified 136 mutilations, 64 of which were knee mutilations in 51 wrestlers. However, Lorish et al. (1992), in a study they conducted on 1742 wrestlers between the ages of 6 and 16, stated that the mutilations were mostly in the upper extremities, neck and back regions. In the study conducted by Kabak et al. (2017) named Comparison of sports injuries seen in Wrestling and Judo branches , it was found that Sprains and contusion-laceration mutilations were the most common mutilations in judo athletes, while wrestlers had fractures and contusion-laceration mutilations. In both branches, it was found that injuries were more common in the foot-ankle- hand-wrist and shoulder regions. However, chest and waist injuries are more common in wrestling, while knee injuries are more common in judo. They stated in the discussion part that as a result of the comparison of sports injuries seen in Wrestling and Judo branches, it was determined that knee injuries were seen more in the judo branch. However, when looking at the findings part of the study, It was stated that there is a contusion-laceration level (23,8%) in knee injury in judo branch, and the level of contusion-laceration (29,7%) in individuals who practice wrestling. As a result, they reported that the rate of knee injuries (%) was higher after examining the contusion-laceration rates of the individuals who practice wrestling. Sports injury of 30.9% (n=189) of all athletes during training is sprains. The place of injury of 35.7% (n=218) of all athletes during training was seen in the foot-ankle. In judo athletes during training, the most common, 32.7% (n= 101) were sprains, 22.7% (n=70) were contusion-lacerations, 12.6% (n =39) were fractures and dislocation was seen at the same rate. In our study, it was found that individuals who practice wrestling have more Achilles or patella (tendon) injuries (30.0%) and lower back and back injuries (9.3%). The least injured area was the head and neck regions (2.0%), followed by hip and thigh injuries (2.7%). In the findings section, the result we obtained a correct ratio (%) in the section of the determination of the data analysis table is in Table 2. In the distribution of the question “Which of the Following are the Places on Your Body of Previous Mutilations”, it was stated that Achilles or patella (tendon) injuries were 30.0% (n=45). In the study we conducted, it was stated that 68.0% (n=102) of all athletes had crushing 26.0% (n=39) of the sports injuries they had during training. 30.0% (n=45) of all athletes have seen the place of injury during training in the Achilles or patella (tendon) region. In wrestling athletes, the most frequent during training, 26.0% (n=39) crushed, 21.3% (n=32) sprained, 16.7% rupture and 11.3% laceration was observed (Table.2). In the study of Tetik et al. (2002), named sports mutilations in winter sports, it was stated that mutilations due to overuse are the most common sports mutilations. Quadriceps femoris, gastrosoleus and paravertebral muscles were found to be the most common regions. 87% of ski injuries occur as a result of falls and mostly occurs in the lower extremities (Johnson, 1974). It has been observed that first intervention and mutilation types are very good in these common mutilations. According to the frequency, the most common regions are It has been reported thumb, leg contusion, shoulder-shoulder dislocations, ankle, tibia fractures, knee contusions and lacerations in the knee, face, and head. In addition to all these, it has been found that there are sports mutilations due to overuse in ligaments, muscles, and tendons. During the winter, 3 people per 1000 athletes are exposed to mutilations that require immediate assistance and treatment. The actual number of mutilations is unknown because 40% of mutilations are not reported to a medical institution or person. In our study, it was stated that 50.7% (n=76) of the athletes (n=150) engaged in the wrestling branch had sports mutilations due to falling. However, on the other hand, it was revealed that 70.7% (n=106) of the falling area was caused by the floor of the hall. As a result of the research; It was determined that the most mutilations occurred in the Achilles or patella (tendon) region, the least mutilation occurred in the neck-head region, the most mutilations occurred during training, and athletes were mostly mutilated during technical work.

In the light of these results, the following suggestions can be made: In order to protect the health of the athlete, the special and general warming of the athletes before training and competition helps to reduce the risk of mutilation. The sports ground, where the athletes experience falling incidents a lot can be rearranged and the necessary measures can be increased. If the implementation of preventive programs is carried out before the season, the risk ratio of the preventive forces that may occur can be reduced.

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