INVESTIGATION OF THE INDIVIDUAL HYGIENE ROUTINE AND SELF CARE METHODS OF SPORTSMEN

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SUMMARY

The aim of this research is to define the opinions of sportsmen, who are interested in wrestling and weight lifting, concerning the individual hygiene routine and self-care methods and the cleanness of the places in which they are practising.

The type of the research is descriptive and cross-sectional and the population of the research is composed of sportsmen who are interested in wrestling and weight lifting in 7 regions of Turkey. The sample group of the research is composed of 290 sportsmen (149 wrestler and 141 weight lifters) who are selected with random sampling method and who accepted to take part in the research. .The data of the research has been obtained by face-to-face questionnaire method. The questionnaire is composed of 24 questions 6 of which are to obtain individual information and 18 of which are to obtain information about their individual hygiene routine and self-care methods. The comprehensibility and content validity of the questionnaire has been tested. The Cronbach's reliability coefficient has been found out as 0,69

The data obtained were computerized and then put through statistic operation. As a statistical operation frequency (f) and percentage (%), Cross table (Croostab) and in order to test the differences X-square (X^2) were applied. After the operation the percentage dispersion of each question was evaluated on 95 % confidence interval and the value P< 0,05 has been accepted as meaningful.

When the data obtained was evaluated, it was defined that the sportsmen generally give importance to hygiene and self-care however, there is statistically a meaningful difference between the female and male sportsmen and that female sportsmen take more care of hygiene and self-care (P<0,05). It was also defined that in the sports clubs where the participants have training, generally hot water is available but their training environment is not hygienic enough.

As a result we can say that the sportsmen generally take care of individual hygiene and self-care however, their training environment is not hygienic enough for their health.

Key words: Sportsman, Individual hygiene, Self-care, Routine

SPORCULARIN KİŞİSEL HİJYEN ALIŞKANLIKLARININ VE ÖZBAKIM UYGULAMALARININ ARAŞTIRILMASI

ÖZET

Araştırma güreş ve halter sporu ile uğraşan sporcuların sağlıklarını korumalarına yönelik edindikleri, kişisel hijyen alışkanlıkları ile öz bakım uygulamalarını ve çalışma ortamlarının temizliğine ilişkin görüşlerini belirlemek amacıyla yapılmıştır.

Araştırma tanımlayıcı ve kesitsel tipte olup, evrenini Türkiye'nin yedi coğrafi bölgesinde bulunan güreş ve halter spor dallarıyla uğraşan sporcular oluşturmuştur. Araştırmanın örneklem grubunu ise rastgele (random) örneklem yöntemiyle seçilen ve araştırmaya katılmayı kabul eden 149 güreşçi ve 141 halterci olmak üzere toplam 290 sporcu oluşturmuştur. Veriler sporculardan yüz yüze anket yöntemiyle toplanmıştır. Anket kişisel bilgilere ait altı soru ile kişisel hijyen alışkanlıklarına ve özbakım uygulamalarına ait 18 soru olmak üzere toplam 24 sorudan oluşmaktadır. Anketin kapsam geçerliliği ve güvenirliği test edilmiştir. Cronbach's güvenirlik katsayısı 0,69 bulunmuştur.

Elde edilen veriler bilgisayar ortamında kodlandıktan sonra istatistik olarak frekans (f), yüzde (%), çapraz tablo (Croostab), farklılıkları test etmek içinde ki-kare (X^2) işlemleri uygulanmıştır. İşlem sonucunda her soru için (%) dağılımları ve görüşler arası farklılıkları tespit için % 95 güven aralığında değerlendirilip P< 0,05 değeri anlamlı kabul edilmiştir.

Elde edilen verilerin değerlendirilmesinde, sporcuların genel olarak hijyen ve öz bakımlarına önem verdikleri, ancak bayan sporcular ile erkek sporcular arasında istatistiksel olarak anlamlı bir farkın olduğu, bayan sporcuların erkeklere göre hijyen ve öz bakımlarına daha çok dikkat ettikleri tespit edilmiştir (P<0,05). Katılımcıların çalışma yaptıkları kulüplerde genel olarak her zaman sıcak suya ulaşıldığı, çalışma ortamlarının ise yeterince hijyenik olmadığı belirlenmiştir.

Sonuç olarak katılımcı sporcuların genelde kişisel hijyen ve öz bakımlarına dikkat ettikleri ancak çalışma ortamlarının sağlık açısından yeterince hijyenik olmadığını söyleyebiliriz.

Anahtar kelimeler: Sporcu, Kişisel hijyen, Özbakım, Alışkanlık

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INTRODUCTION

Hygiene is not only a requirement of life in society but also the basis of personal and social health (Ural, 1972). Today, hygiene shows the level of civilization. Body care and wearing clean clothes are also recognised as a civilization mentality. (Can et al.,2004).

Hygiene is a personal issue. Routine of Hygiene changes person to person (Güler, 2004). Hygiene contributes to human health positively since it protects body from contaminants (Can et al, 2004).It is one of the most important applications to protect the body from diseases (Güler,1994,Güler,2004). Infectional diseases are still the most common and fatal diseases in the world. It is stated that if people acquire the right hygiene habits, rate of existance of these diseases will decrease in a considerable level (Can et al, 2004,Gülec et al,2001,Nenstiel et al,1997).

Hygiene concept is used in the meaning of "the science of health protection". Today, all the practices to protect the health are called "Hygiene". One of the most important hygiene practices is the personal hygiene practice (Helfand,1998,Onsuz and Hidiroglu,2008). Personal hygiene has a big importance to solve health problems and to prevent many diseases, especially infectious diseases (Yılmaz and Ozkan,2009).

Personal hygiene applications include handwashing, nail hygiene and care, face, eye and ear hygiene, hair care and hygiene, oral and dental health, foot hygiene and care, hygiene of genital area, regular bathing, and having personal towels, combs, clothes, toothbrushes and nail clippers (Aslan et al, 2006, Ay ,2008, Kaya ,2006 , Onsuz and Hidiroglu, 2008). Personal hygiene is acquired according to person's beliefs, values and habits. For that reason, personal hygiene practices are affected by not only cultural, social and familial factors but also person's education and needs for health and hygiene (Yavuz,2000). Sports activities are also one of the practices affecting hygiene habits. Sport activities supply oxygen and nutritions to the muscles, and they remove the affluents from the body. These affluents gather on the skin which gets dirty very quickly (Ay, 2008).

Body care and tightness change person to person and according to the sport activities they do. Besides, they are especially very important for sportsmen's health. Moreover, not only body hygiene but also the hygiene of the place where the sportsmen live or practice directly affect their health. Therefore, sportsmen should be careful about possible injuries, impairments and diseases happening as a result of mutual contact in sport activities, and they should take hygenic precautions (Konar and Imamoglu,1994). It is stated in the studies that sweat and other secretions on the mats or exercisers in sport centers cause diseases such as flu, cold, hepatitis A or blain (http://www.bodyforumtr.com/vbforum/spor-salonlar-ve-hijyen,2010).

Another concept "self care" can be defined as starting and practising the activities which are essential to protect individual's health, life and wellness at the right time (Bakoglu and Yetim, 2000, Unalan et al, 2007). After reviewing the related literature, it is seen that there is a close relationship between health and self-care (Parissopoulos ve Kotzabassaki,2004). Personal Hygiene includes "self-care" which the individuals practice to be healthy (Ay, 2008).

In Turkey, it is observed that neither sportsmen nor exercisers in gyms are clean enough to meet the requirements. The hygiene of the sportmen's foods and houses can not be controlled easily (Konar and İmamoglu,1994). As it can be understood from the explanations above, there are various problems about sportsmen's health. Teachers of Physical education, trainers, attendants and Health

care staff (doctors, physiotherapists, dieticians, nurses, psychiatrists) all have responsibilities to solve these problems.

This study is conducted to reveal the practices of sportsmen's acquired hygiene skills, their self care and their ideas and observations about the gyms they use for exercising.

MATERIAL AND METHOD

This study is conducted between January 2010- May 2010 to define practices of sportsmen's personal skills for hygiene and self care. With this aim, the questionnaire is prepared, and its understandibility, validity and reliability are checked. For reliability, Cronbach alpha coeffient of the questionnaire is found 0,69. According to the researchers, this value is valid.

The study is descriptive and cross sectional, and study group is formed by wrestlers and weight lifters from all seven regions of Turkey. 290 sportsmen, including 149 wrestlers and 141weight lifters, have been chosen for the study with random sampling method, and they form the samples of the study.

The data have been collected with face to face interviewing method. The questionaire consists of 24 questions, 6 of which are related to the personal hygiene habits of sportsmen, and 18 of which are related to self care.

The obtained data are coded by means of SPSS (Statistical Package For Social Sciences) program on the computer. Frequency (F) and percentage (%) distributions of the data are stated, and in order to define the differences, chi square (x^2) test is used. In the X^2 analysis of some items, since none of the options are selected, these items are evaluated according their percentage (%) distribution without considering their significance levels. The results are assessed in 95 % confidence interval, and $P<0,05$ value is considered meaningful.

FINDINGS

As it can be seen in Table-1, socio-demographic characteristics of the sportsmen are described. According to it, %51,4 of the sportsmen are active in wrestling while 48,6 % of them are active in weight lifting. Besides, 81 % of the sportsmen are male, and 19 % of them are female. When we look at their education levels, we see that 4,5 % of them are graduates of primary school, 48,6 % of them are graduates of high school or equivalents. 41,4 % of them are graduates of university and 5,5 % of them have the award of MA or Phd. When the education levels of their mothers are checked, it is found that 12,8 % of their mothers are illiterate. 39,7 % of them are graduates of primary schools, 21 % of them are graduates of secondary schools. Besides, 16,2 % of them are graduates of high schools, 7,9 % of them are graduates of university, and 2,4 % of them have the awards of MA or Phd. When we look at the education levels of their fathers, we find that 7,9 % of their fathers are illiterate, and 31 % of them are graduates of primary schools. 24,1 % of them are graduates of secondary schools, 22,8 % of them are graduates of high school or equivalents, 8,3 % of them are graduates of university. Lastly, 5,9 % of them have the awards of MA and Phd (Table 1).

Table 1. Socio-Demographic characteristics of the Sportsmen

Variables		N (Distribution)	Percentage Distribution
Sports Branch	Wrestling	149	51.4
	Weight Lifting	141	48.6
	Total	**290**	**100**
Gender	Male	235	81
	Female	55	19
	Total	**290**	**100**
Education Level	Primary School	13	4.5
	High Schools and their equivalents	141	48.6
	University	120	41.4
	Master of Arts and Phd	16	5.5
	Total	**290**	**100**
Mother's Education Level	Illiterate	37	12.8
	Primary School	115	39.7
	Secondary School	61	21
	High Schools and their equivalents	47	16.2
	University	23	7.9
	MA and Phd	7	2.4
	Total	**290**	**100**
Father's Education Level	Illiterate	23	7.9
	Primary School	90	31
	Secondary School	70	24.1
	High Schools and their equivalents	66	22.8
	University	24	8.3
	MA and Phd	17	5.9
	Total	**290**	**100**

Table 2. Hand washing habits of the Sportsmen

		Always		Sometimes		Never		Total	
Variables		N	%	N	%	N	%	N	%
Handwashing directly after waking up	Male	217	92,3	15	6.4	3	1.3	235	100
	Female	51	92.7	3	5.5	1	1.8	55	100
	Toplam	268	92.4	18	6.2	4	1.4	290	100
Handwashing before meals	Male	177	75.3	50	21.3	8	3.4	235	100
	Female	39	70.9	15	27.3	1	1.8	55	100
	Total	216	74.5	65	22.4	9	3.1	290	100
Handwashing after meals	Male	174	74	57	24.3	4	1.7	235	100
	Female	46	83.6	9	16.4	-	-	55	100
	Total	220	75.9	66	22.8	4	1.4	290	100
Handwashing after urination	Male	200	85.1	34	14.5	1	4	235	100
	Female	53	96.4	2	3.6	-	-	55	100
	Total	253	87.2	36	12.4	1	0.3	290	100
Handwashing after defecation	Male	207	88.1	20	8.5	8	3.4	235	100
	Female	52	94.5	3	5.5	-	-	55	100
	Total	259	89.3	23	7.9	8	2.8	290	100
Handwashing upon arriving home	Male	130	55.3	90	38.3	15	6.4	235	100
	Female	37	67.3	17	30.9	1	1.8	55	100
	Total	167	57.6	107	36.9	16	5.5	290	100

In table-2. handwashing habits of the sportsmen attending to the study are inquired. According to the table-2, 92,4 % of the sportsmen say they "always" wash their hands after waking up, 1.4 % of them say they "never" wash their hands in the morning. 74.5 % of the samples claim that they "always" wash their hands before meals. However, 3.1 % of them claim they "never" wash their hands before meals. Moreover, 75.9 % of the sportsmen "always" wash their hands after meals while 1.4 of them "never" wash their hands then. In addition to this, 87.2 % of the sportsmen "always" wash their hands after urination while 0.3 % of them "never" do it. Lastly, it is found that 57.6 % of the sportsmen "always" wash their hands upon arriving home, but 5.5 % of them "never" wash their hands then. (Table-2)

Table 3. Distribution of the Sportsmen Hand Hygiene's Products**

Variables		Yes		No		Total		X^2*/p
		N	%	N	%	N	%	
Handwashing with only water	Male	186	93	14	7	200	100	-
	Female	50	98	1	2	51	100	
	Total	236	94	15	6	251	100	-
Water and a bar of soap	Male	184	89.3	22	10.7	206	100	-
	Female	49	96.1	2	3.9	51	100	
	Total	233	90.7	24	9.3	257	100	-
Water and liquid soap	Male	213	93.8	14	6.2	227	100	-
	Female	50	94.3	3	5.7	53	100	
	Total	263	93.9	17	6.1	280	100	-
Antibacterial gel	Male	102	54.8	84	45.2	186	100	17.862
	Female	46	86.8	7	13.2	53	100	
	Total	148	61.9	91	38.1	239	100	0.000
Others	Male	54	42.5	73	57.5	127	100	1.809
	Female	14	31.1	31	68.9	45	100	
	Total	68	39.5	104	60.5	172	100	0.179

*chi-square test
**Attendees choose either more than one option or none of the options.

In table-3, the distribution of answers to the questions about sportsmen hand hygiene products is given. 94 % of the sportsmen wash their hands only with water while 90.7 % of them wash hands with water and a bar of soap. Besides, 93.9 % of them wash their hands with water and liquid soap. 61.9 % of the sportsmen wash hands with antibacterial gels while 39.5 % of them wash hands with other kind of cleaners. After the statistical analysis of the questions, It is found that there is a significant difference only between the numbers of males' washing hands with antibacterial gels and Females' washing hands with them. ($P<0.05$), (Table-3).

Table-4. Frequency Distribution of Answers to the Questions about Hygiene Habits and Self-Care Applications of the Sportsmen **

Personal Hygiene Habits and Self-Care Applications	Male						Female						X^2*/p
	Always		Sometimes		Never		Always		Sometimes		Never		
Face Washing Frequency	N	%	N	%	N	%	N	%	N	%	N	%	
Face washing after waking up	210	89.4	24	10.2	1	0.4	44	80	9	16.4	2	3.6	-
Face washing upon arriving home	81	36.3	116	52	26	11.7	30	54.5	20	36.4	5	9.1	6.140 0.046
Face washing before sleeping	92	41.3	89	39.9	42	18.8	31	56.4	24	43.6	-	-	12.785 0.002
Dental Care Frequency													
Brushing the teeth in the mornings	97	41.3	119	50.6	19	8.1	29	52.7	26	47.3	-	-	-
Brushing the teeth after meals	79	33.6	135	57.4	21	8.9	33	60	22	40	-	-	15.453 0.000
Brushing the teeth before sleeping	122	51.9	99	42.1	14	6	38	69.1	17	30.9	-	-	-
Flossing	61	26	61	26	113	48.1	22	40	20	36.4	13	23.6	10.930 0.004

*Chi-Square test P<0,05
** Attendees choose either more than one option or none of the options.

Frequencies of male and female sportsmen's hygiene habits and self care practices are given in Table-4. According to the table, 52 % of the male sportsmen "sometimes" wash their faces upon arriving home while 41.3 % of them "always" wash their faces before sleeping. On the other hand, 36.4 % of the female sportsmen "sometimes wash their faces upon arriving home while 56.4 % of them "always" wash their faces before sleeping. Moreover, 8.9 % of male sportsmen "never" brush their teeth after meals while 48.1 % of them "never" use dental floss. On the other hand, 60 % of the female sportsmen stated that they "always" brush their teeth after meals while 40 % of them "always" use dental floss. As a result of the statistical analysis of the items, a statistically significant difference is found between male and female sportsmen in face washing, teeth brushing and flossing habits upon arriving home and before sleeping (P<0.05), (Table 4).

Tablo 5. Frequency Distribution of Toothbrush replacement of Sportsmen

Variables	Male		Female	
	N	%	N	%
Once a year	48	20.4	2	3.6
Once in six months	110	46.8	41	74.5
Once in three months	52	22.1	9	16.4
Once a month	25	10.6	3	5.5
Total	**235**	**100**	**55**	**100**

In the table-5. replacement frequency of Sportsmen's toothbrush is given. According to the table, 46.8 % of the male sportsmen and 74.5 % of the female sportsmen stated that they replace their toothbrush once in six months (Table-5).

Table 6. Distribution of answers to the questions related to frequency of Sportsmen's personal hygiene practices

Variables	Male				Female				X^2*/p
	Everyday		Twice a week		Everyday		Twice a week		
	N	%	N	%	N	%	N	%	
Frequency of changing underwear	207	**88.1**	28	**11.9**	52	**94.5**	3	**5.5**	-
Frequency of bathing in winters	199	**84.7**	36	**15.3**	44	**80**	11	**20**	0.719 0.396
Frequency of bathing in summers	205	**87.2**	30	**12.8**	54	**98.2**	1	**1.8**	-
Frequency of washing feet	207	**88.1**	28	**11.9**	44	**80**	11	**20**	6.919 0.031
Frequency of changing socks	187	**79.6**	48	**20.4**	41	**74.5**	14	**25.2**	2.475 0.290
Armpit care	93	**39.6**	142	**60.4**	41	**74.5**	14	**25.5**	24.122 0.000
Frequency of nail cut	49	**20.9**	186	**79.1**	21	**38.2**	34	**61.8**	11.694 0.003
Hair Care	74	**31.5**	161	**68.5**	20	**36.4**	35	**63.7**	4.982 0.083
Beard Care	74	**31.5**	161	**68.5**	-	**-**	-	**-**	-
TOTAL	**235**		**100**		**55**		**100**		-

*Chi-square test $p<0.05$

Frequency distribution of answers to the questions related to the personal hygiene practices of the sportsmen is given in Table-6. According to the answers, it is concluded that 88.1 % of the male sportsmen change their underwear

"everyday". 87.2 % of them take a bath "everyday" in summers, 39.6 % of them clean their armpits "everyday", 79.1 % of them cut their nails "twice a week". Lastly 88.1 % of them wash their feet "everyday". On the other hand, 94.5 % of the female sportsmen change their underwears "everyday", 98.2 % of them take a bath "everyday" in summers. Besides, 74.5 % of them clean their armpits "everyday", 61.8 % of them cut their nails "twice a week", and lastly 80 % of them wash their feet "everyday"(Table 6). As a result of the statistical analysis of the items, it is found that there is a meaningful difference between application frequency of males' and females' habits which are washing the feet, cleaning the armpit and nail cut (P<0.05), (Table 6).

Table 7. Usage Distribution of Sportsmen's Personal Care Products

Variables	Male						Female						X^2*/p
Personal Care Products	Yes		No		Total		Yes		No		Total		
	N	%	N	%	N	%	N	%	N	%	N	%	
Personal comb and brush	202	86	33	14	**235**	**100**	55	100	-	-	**55**	**100**	8.715 0.003
Personal hand towel	184	78.3	51	21.7	**235**	100	42	76.4	13	23.6	**55**	**100**	0.097 0.756
Personal bath towel	222	94.5	13	5.5	**235**	**100**	52	94.5	3	5.5	**55**	**100**	-
Personal toothbrush	230	97.9	5	2.1	**235**	**100**	55	100	**-**	**-**	**55**	**100**	- **-**
Personal nail clippers	164	69.8	71	30.2	**235**	**100**	40	72.7	15	27.3	**55**	**100**	0.185 0.667

*Chi-Square test p<0.05

In table 7, it is inquired whether the products the sportsmen use are their own products or not. The results show that 86 % of the male sportsmen use their own combs and brushes, 78.6 % of them use their own hand towels, 94,5 % of them use their own toothbrushes, and 69,8 % of them use their own nail clippers. On the other hand, 100 % of the women use their own combs and brushes, 76.4 % of them use their own hand towels, 94.5 % of them use their own shower towels, 100 % of them use their own toothbrushes and 72.7 % of them use their own nail clippers. As a result of a statistical analysis, it is revealed that there is a statistically meaningful difference of males and females in comb and brush use (P<0.05),(Table 7).

Tablo 8. Distribution of Answers of the Sportsmen to the Situation of Access to Hot

Variables	**Yes**		**No**		**Total**		X^2*/p
	N	**%**	**N**	**%**	**N**	**%**	
Male	191	81.3	44	18.7	**235**	**100**	2.945 0.086
Female	50	90.9	5	9.1	**55**	**100**	
Total	**241**	**83.1**	**49**	**16.9**	**290**	**100**	

Water in Sports Centers

Chi-square test p<0.05

In the Table 8, the situation of finding hot water in sports centers is given. According to the results, 81.3 % of the male sportsmen and 90.9 % of the female sportsmen stated that they can easily use hot waters in sports centers. After the statistical analysis of the items, it is found that there is not a statistically significant difference between males and females in

finding hot waters in sports centers ($p<0.05$), (Table 8).

Table 9. Distribution of Sportsmen's Answers to the questions related to frequency of the cleaning of the Sports Centers

Variables	Male		Female	
	N	%	N	%
Before and after each training	42	17.9	7	12.7
Once a day	41	17.4	3	5.5
Once in two days	101	43	29	52.7
Once a week	51	21.7	16	29.1
Total	235	100	55	100

In Table 9, the distribution of the sportsmen's answers to the questions about the frequency of cleaning of the sports centers is given. 43 % of the male sportsmen state that sports centers are cleaned once in two days while 21.7 % of them state that they are cleaned once a week. 52,7 % of the female sportsmen say that sports centers are cleaned once in two days while 29.1 % of them says that they are cleaned once a week (Table 9).

Table 10. The Distribution of Sportsmen's Answers about the Appropriateness of Sports Centers to Hygiene Requirements

Variables	Male		Female	
	N	%	N	%
Yes	46	19.6	2	3.6
Partially	134	57	29	52.7
No	55	23.4	24	43.6
Total	235	100	55	100

The distribution of the sportsmen's answers to the appropriateness of the sports centers to hygiene requirements is given in Table 10. According to this, 57 % of the male sportsmen find hygiene of the sports centers appropriate while 23.4 % of them find is insufficient. On the other hand, 52.7 % of the female sportsmen think that the sports centers are partially hygienic while 43.6 % of them think they are not hygienic enough (Table 10).

DISCUSSION

This study is conducted for the aim of revealing acquired personal hygiene habits and self-care practices of the sportsmen who are interested in wrestling and weight lifting. It also aims to define their views and observations about their practice environments. 290 sportsmen attended to the study. 51.4 % of them are interested in wrestling while 48.6 % of them are interested in weight lifting. 81 % of the samples are males and 19 % of them are females. 4.5 % of the sportsmen are graduates of primary schools, 48.6 % of them are graduates of high schools or equivalents. 41.4 % of them are graduates of university, and 5.5 % of them have the award of Master of Arts or Phd. When we look at their mothers' education levels, we see that 12.8 % of the Sportsmen's mothers are illiterate, 39.7 % of them are graduates of primary schools. Besides, 21 % of them are graduates of secondary schools. 16.2 % of them are graduates of high schools or equivalents, and lastly 7.9 % of them have the degree of MA or Phd. On the other hand, 7.9 % of their fathers are illiterate, 31 % of them are graduates of primary schools, 24.1

% of them are graduates of secondary schools. Moreover, 22.8 % of them are graduates of High schools or equivalents, 8.3 % of them are graduates of universities, and lastly 5.9 % of them have the degree of MA or Phd (Table-1 1). According to these data, we can say that the number of the male sportsmen attending the study is more than the number of females. Besides, most of the sportsmen are graduates of high schools or equivalents. Lastly, the most of their mothers and fathers are graduates of primary schools.

92.4 % of the sportsmen always wash their hands after waking up, 74.5 % of them always wash hands before meals, 75.9 % of them always do it after meals, 87.2 % of them always wash hands after the urination. Lastly, 57.6 % of them always wash hands upon arriving home. (Table-2) In a study which is conducted with 9th and 10th grade high school students in Ankara, it is founded that 91.9 % of the students always wash their hands after waking up, 81 % of them always wash hands before meals. Besides, 79.5 % of the students wash hands after meals, 95.3 % of them always wash hands after urination, and lastly 82.6 % of them do it upon arriving home (Kaya et al, 2006).

In a study of Can et al (2004), personal hygiene habits of primary school students living in two different regions are compared. As a result of this study, 89.7 % of the students state that they have the habit of washing hands before meals, 95.5 % of the students stated they do it after meals, and lastly, 98.7 % of them do it after using rest rooms.

In our daily lives, it is known that we have to wash our hands with clean water and soap when we wake up, after using restrooms, before and after meals, after touching the genital or anal regions, and contacting with animals, dirty surfaces and dirty materials. All gastroenteric pathogens, especially rotavirus, are transmitted by the fecal-oral route. The main sources of these pathogens are contamined dirty hands. For that reason, handwashing is the initial condition to avoif from these pathogens. Besides, handwashing is seen as the most important and effective way of the infection control (Onsuz and Hıdıroglu, 2008). It is revealed that the rates of handwashing habits in these studies are higher than the rates in our study. In the literature, it is stated that gender and cultural and social factors affect the hygiene practices (Yavuz, 2000). In our study, it is obtained that the rates of handwashing habits of female sportsmen are higher than those of males. This difference between the rates of handwashing habits may emerge because of the following two reasons. First, the number of female samples in our study are lower than that in these studies (53.8 % and 58.3 % in order), and second the females are more conscious in personal hygiene, so they behave more consciously in their daily lives.

Most of the samples (93.9) state that they wash their hands with water and soap. There is a meaningful difference between males and females only in the use of antibacterial gel in handwashing ($P<0.05$) (Table 3). In a study on soldiers in a military garrison, Gulec et al (2001) found that 84.5 % of the soldiers wash their hands with water and soap. This rate is low compared to our study. However, in the study of Kaya et al (2006), it is found that almost all of the students (98.2 %) wash their hands with water and a bar of soap. The result of this study is similar to the result of ours. %90–100 of the bacteria residing on the permanent flora of the skin is taken away by washing hands with water and soaps or detergents (Yetkin and Yigitbas, 2008). Using soaps during the washing process facilitates the burning of the the fats on hand, and dirts go away with the burned fats. (Onsuz and Hıdıroglu, 2008). For that reason, using soaps in handwashing process is very important. Using soaps in handwashing process is a desired habit to maintain the hand hygiene. The reason of the meaningful difference between males and females in using antibacterial gels to wash hands may be that female sportsmen are more sensitive in personal hygiene. In a similar study of Yetkin and Yigitbas on Vocational health high school students, it is

revealed that female students use antimicrobial detergents more frequently than boys to wash their hands (Yetkin and Yigitbas, 2008).

Face washing is an important application in personal hygiene in order to get rid of parasites, dirts and other microorganisms gathered on skin surface. Moreover, it is emphasized that mouth hygiene is most important and simplest way to avoid from periodontal diseases (Onsuz and Hıdıroglu, 2008). 41.3 % of the male sportsmen and 56.4 % of the female sportsmen stated that they always wash their faces before going bed. Besides, 33.6 % of the male sportsmen and 60 % of the female sportsmen always brush their teeth after meals. Lastly, 26 % of the male sportsmen and 40 % of the female sportsmen always use dental floss for dental hygiene. As a result of statistical analysis, a significant difference is found between males and females in the habits of facewashing upon arriving home and before going bed, brushing teeth after meals, and using dental floss ($P<0.05$) (Table 4). The reason of this difference is that personal hygiene application rates of female sportsmen are higher than those of males. As a result of a similar study (Kaya et al, 2006), it is found that 29.4 % of the male students and 50 % of the female students wash their faces before going to bed. Besides, 43.9 % of the male students and 67.5 % of the female students brush their teeth before the meals, and lastly, 8.3 % of the boys and 9.4 % of the girls use dental floss for personal hygiene. The rate of results in our study is higher than the rate in this study. 46.8 % of the male sportsmen and 74.5 % of the female sportsmen stated that they replace their toothbrushes once in six months (Table 5). The first step of brushing teeth is to choose the right toothbrush. The toothbrushes should be replaced in every three-four months, latest every six months (Onsuz ve Hıdıroglu, 2008). In the study of Yetkin and Yigitbas (2008), it is observed that 84.5 % of the female students and 47 % of the male students replace their toothbrushes once in six months (18). The reason of this higher rate may be that the samples of Yetkin and Yigitbas have taken Oral hygiene instruction courses in Vocational Health High Schools, and these courses may affect their attitudes and behaviors for health

88.1 % of the male sportsmen change their underwears everyday, 87.2 % of them have a shower everyday in summers, 39.6 % of them clean their armpits everyday, 79.1 % of them cut their nails twice a week, and lastly 88.1 % of them wash their feet everyday. On the other hand, 94.5 % of the female sportsmen change their underwears everyday, 98.2 % of them have a shower everyday in summers, 74.5 % of them clean their armpits everyday. Besides, 61.8 % of them cut their nails twice a week, and lastly, 80 % of them wash their feet everyday. As a result of the statistical analysis of the questions, a meaningful difference is discovered between males and females in the frequency rates of washing the feet, cleaning the armpit, cutting the nails ($P<0,05$) (Table 6). People should take a bath in order to get rid of dirts and other microorganisms on the skin, dermal pores and surface cells rashs (Onsuz and Hıdıroglu, 2008). Excessive amount of sweat which occurs as a result of physical exercises will be emitted by the clothes, and these results in the accumulation of various organisms on clothes (Konar and Imamoglu, 1994). Bathing is important not only for hygiene but also for psychological states of the people. It makes people happier and fresher (Onsuz and Hıdıroglu, 2008). In this study, the desired situation is that the samples of our study have positive attitudes and behaviors towards personal hygiene applications. In the study of Kaya et al. (2006), it is concluded that 50.5 % of the male students and 58.7 % of the female students take a shower everyday in summer. 70.6 % of the male students and 83.5 % of the female students change their underwears everyday. Besides, 60.6 % of the male students and 66.1 % of the female students wash their feet everyday. Lastly, 34.9 % of the male students and 58.2 % of the female students clean their armpits

everyday. In their study, Yetkin and Yigitbas (2008) stated that 2.9 % of male students studying at vocational health high school and 12.5 % of the female students studying at the same school take a shower everyday. The rate of hygiene practices in our study is higher than the rates of these studies.

According to the study, 86 % of the male sportsmen and 100 % of the female sportsmen use their own combs and brushes. Besides, 94.5 % of males and 94.5 % of the females use their own bath towels. Lastly, 97.9 % of the males and 100 % of the females stated that they use their own toothbrushes. As a result of statistical analysis of the items, a significant difference is found between males and females in using their own combs and brushes ($P<0.05$) (Table 7). Using personal staff is a desired practice and requirement of hygiene because it prevents transmission of infections person to person as a result of using the same materials. In their study, Kaya et al (2006) asserted that 68.8 % of the males students have their own combs and brushes. Besides, 84.4 % of them also have their own bath towels. On the other hand, 85 % of the female students have their own combs and brushes, and 91.3 % of them have their own bath towels. Similarly, in the study of Onsuz and Hıdıroglu (2008), it is revealed that 53.7 % of primary school students have their personal bath towels, and 96.9 % of them have use their personal toothbrushes. Moreover, In the study of Yetkin and Yigitbas (2008), it is emphasized that 85.3 % of the male students and 83.7 % of female students studying at the Vocational Health high school use only their own combs. In conclusion, it is observed that the rates obtained in these studies are lower than the rates in our study.

Since the heavy exercises cause long training hours and excessive sweat , essential requirements for body and clothes hygiene is an inevitable necessity. For that reason, the best is the shower which prevents the water accumulation. In addition to this, temparature of the water is also important. After heavy exercises, having shower with cold water will destroy the heat regulation of the body (Konar and Imamoglu, 1994). 81,3 % of the male samples of the study and 90,9 % of the female sportsmen expressed that they can find hot water in their sports centers (Table 8). Easy Access to hot water and having shower with it is a necessary sitution in order to get away from the microorganisms which gather on body as a result of sweating after heavy exercises. In a study of Konar ve İmamoğlu (1994) which is done to determine the hygienic status of Wrestling Training Centers and Wrestling Centers, and to define the hygienic habits of wrestlers practicing in these centers, it is found that there are 1-2 showers in 1.24 % of the training halls, there are 3-4 showers in 24.84 % of the training halls. Besides, there are 5-6 showers in the 27.95 % of the training halls, there are 7-8 showers in 36.65 % of them and lastly, there are more than 8 showers in 8.07 % of the sports centers. The results of this study show that most of the wrestlers have the opportunities to have showers, and these results are very similar to the results of our study.

In the study, 17.4 % of the male sportsmen claim that the training halls are cleaned everyday while 43 % of them claim they are cleaned once in two days. On the other hand, 5.5 % of the female sportsmen claim that the training halls are cleaned everyday while 52.7 % of them claim they are cleaned once in two days (Table 9). Moreover, 23.4 % of the male sportsmen and 43.6 % of the female sportsmen think that the hygienic status of the training centers are not good enough (Table 10). For Hygiene, the whole hall should be swept, washed and cleaned. Not only body hygiene, but also the cleanness of the practice environment directly affect the sportsmen's health (Konar ve İmamoğlu, 1994). The samples of our study think that frequency of the cleaning the halls is not enough to maintain the hygiene, so the hygiene status of the sports centers is not satisfactory for them. However, it is declared in many studies that because of the sweat and other viruses which gather on mats or other exercisers cause infectious diseases

such as flu, cold, hepatitis A or cold sores (http://www.bodyforumtr.com/vbforum/spor-salonlar-ve-hijyen,2010).

In the study of Konar and Imamoglu (2004), it is found that 42.24 % of the wrestlers always find the training rooms clean before they start exercising. 10.56 % of the wrestlers sometimes find them clean when they enter the rooms. However, 3.73 % of them never find the training halls clean. Besides, 25.47 % of the wrestlers think ventilation is insufficient, and 43.79 % of them think the cleaning mats are not clean. In conclusion, it is seen that the wrestlers in that study think the frequency of the cleaning of the sport centers and the hygiene in there is not enough to maintain health.

RESULTS AND RECOMMENDATIONS

This study is conducted with the sportsmen who are interested in wrestling and weight lifting. As a result of this study which aims not only to determine the personal hygiene habits and self-care applications of sportsmen which are to protect their health, but also to define their observations about the hygiene of the gyms, the following results are found;

- 92.4 % of the sportsmen always wash their hands after waking up, 74.5 % of them always wash their hands before meals and 75.9 % of them always wash their hands after meals.
- 93.9 % of the sportsmen wash their hands with water and liquid soap. However, there is a significant difference between males and females only in the habit of washing hands with antibacterial gels.
- 41.3 % of the male sportsmen and 56.4 % of the female sportsmen always wash their faces before sleeping. Besides, 33.6 % of the male sportsmen and 60 % of the female sportsmen always brush their teeth after meals.
- 26 % of the male sportsmen and 40 % of the female sportsmen always use tooth floss.
- There is a statistically significant difference between males and females in face washing upon arriving home and before sleeping, tooth brushing after meals, and using tooth floss.
- 39.6 % of the male sportsmen clean their armpits everyday, 79.1 % of them cut their nails twice a week, and 88.1 % of them wash their feet everyday.
- 74.5 % of the female sportsmen clean their armpit everyday, 61.8 % of them cut their nails twice a week, and 80 % of them wash their feet everyday.
- There is a meaningful difference between males and females in the application frequencies of the washing feet, cleaning armpits, cutting nails habits.
- 86 % of the male sportsmen use their own combs and brushes while 100 % of the female sportsmen use their own combs and brushes. As a result, there is a statistically significant difference between males and females in using their own combs and brushes.
- 81.3 % of the male sportsmen and 90.9 % of the female sportsmen can access easily to hot water in their clubs.
- 23.4 % of the male sportsmen and 43.6 % of the female sportsmen think their practice gyms are insanitary.

According to the results obtained from the study, the followings are advised;

- Health care staff should make health education training programmes on “Personal Hygiene and Self-care Applications”, and they should inform the sportsmen about this issue.
- In media (televisions, radio, newspapers, etc.), programmes training the sportsmen about the right hygiene applications should be issued.
- The sports centers in Turkey should be inspected, and the necessary precautions should be taken to make the conditions better.
- Respective poeple such as pyhsical education teachers, trainers, health care staff and attendants should attend the health service programmes.
- Similar studies should be made with larger numbers of samples. Besides, the factors affecting personal hygiene and self-care applications of the sportsmen should be revealed in further studies.

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