THE HEALTH-EXERCISE/PHYSICAL ACTIVITY LEVELS OF THE ICE HOCKEY PLAYERS AND COACHES

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ABSTRACT

Objective: The purpose of this study was to determine the health-exercise/physical activity habits and consciousness level of ice hockey players and coaches.

Methods: For this purpose, an 82 item questionnaire (31 of these items were related with personal information and health-exercise/physical activity habits, 51 of them were related with exercise consciousness levels) developed researcher was given to the players and coaches.(n=66). Participants were ice hockey players (n=59) and coaches (n=7) who participated in World Championships under age of 18 in 2008. The obtained data was analyzed by using the statistical package in order to get descriptive statistics and also comparisons were made in terms of country.

Results: It was seen that players' exercise/physical activity consciousness levels were significantly different in terms of country [x2 (4)=28,23, p<0.5]. Among country, Armenia was followed by Iceland, Turkey, Serbia and Bulgaria.

Conclusion: Players are introduced to a healthier life style; they maintain the same lifestyle throughout their life. After giving up the professional sports, to ensure a healthy next generation, coaches be educated in this matter as well.

Key Words: Health; exercise/physical activity habit; ice hockey players, coaches

BUZ HOKEYİ OYUNCU VE ANTRENÖRLERİNİN SAĞLIK-EGZERSİZ / FİZİKSEL AKTİVİTE DÜZEYLERİNİN BELİRLENMESİ

ÖZET

Amaç: Bu çalışmanın amacı, buz hokeyi oyuncu ve antrenörlerinin sağlık-egzersiz/fiziksel aktivite alışkanlıkları ve bilinç düzeylerinin belirlenmesidir.

Yöntem: Bu amaç doğrultusunda, araştırıcılar tarafından geliştirilen 82 maddelik (31'i kişisel bilgilere, 51'i egzersiz bilinç düzeyine yönelik) bir anket ilgili antrenör ve sporculara (n= 66) uygulanmıştır. Katılımcılar 2008 yılı 18 yaş altı Dünya Buz Hokeyi Şampiyonasına katılan antrenör (n= 7) ve sporculardır (n= 59). Elde edilen veriler betimsel (tanımlayıcı) istatistikler ve ülkeler açısından yapılan karşılaştırmaları elde etmek için istatistik paket programı kullanılarak analiz edilmiştir.

Bulgular: Oyuncuların sağlık-egzersiz/fiziksel aktivite bilinç düzeylerinde ülkeler açısından önemli bir farklılık olduğu görülmüştür [x2 (4) = 28,23, p<0.5]. Ülkeler arasında Ermenistan'ı, sırasıyla İzlanda, Türkiye, Sırbistan ve Bulgaristan izlemektedir.

Sonuç: Oyuncular sağlıklı bir yaşam tarzıyla tanışmışlar ve bu yaşam tarzını sürdürmektedirler. Profesyonel sporu bıraktıktan sonra sağlıklı nesiller için antrenörlerin de bu konuda eğitilmeleri gerekmektedir.

Anahtar Kelimeler: Sağlık; egzersiz/fiziksel aktivite alışkanlığı; buz hokeyi, antrenör, oyuncu.

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INTRODUCTION

In 1940's, health was being described as not being ill. However, in 1947 this description was changed by World Health Organization: health is not only the absence of injury or decease but also psychological, physical and social well-being (1,2). Many studies have shown in different countries that life styles of the individuals are the determining fathers in health related deaths, for example, in the United States of America, 67% of the deaths which were caused by stroke, cancer, and heart decease were related to health consciousness levels and life style of individuals (3,4,5).

In Turkey, the mortality rates are related to heart diseases (42%) and cancer related diseases (11%). (6). Most studies have shown that healthy life style, including regular exercise, nutrition and stress management has a preventive role for these diseases while lack of healthy life style is related to increased rates of cardiovascular and psychosomatic diseases incidence (4,7,8,9,10,11). Performance sports environment where the youngsters are prepared to take social responsibilities in the future, are the places of anxiety and stress. For this reason, it is important to determine the performance sports athletes' health status and life styles.

Modern technology has decreased many daily work loads of physical activity such as, mowing the grass, going to work, cleaning the house and doing the dishes. Once, the effort necessary to do one hour work is performed nowadays by simply pushing a button in a few seconds. As a result, it seems like people have more time to do leisure activities. However, many of those leisure activities are the ones that do not require physical effort. (12,13,14,15,16,17) .

Even though the human body is designed for movements that require effort, exercise is not a typical part of life. If someone has not used his/her body properly or misused it, the human body can not stay healthy for long time and can not function at a high level. Thus, the absence of physical activity has caused hypo kinetic diseases such as, obesity, high blood pressure, cardio-vascular diseases and diabetes (14). The incidence of cardiovascular diseases is related to obesity by statistically and physiologically. For example, risk of death an obese person has is 2.5 times higher than someone who has an average or below average body weight. Obese individuals have a higher rate of developing diabetes and hypertension (18). This should also be pointed out that immobility and cigarette smoking which are pretty common in modern life, lead to the development of lung diseases (19).

The most effective way and defense against the development of hypo kinetic diseases is to work the muscles, bones, joints, heart and inner organs with a systematic exercise program (12,13). The role and the importance of exercise and sport in international area are being increased every day and because of its benefits, exercise and sport is gaining the function of important social phenomena. A good way to utilize the leisure times for the university students which are important parts of the society is sports activities and regular exercises. Those university students who exercise regularly and participate in sports will have well developed personality and will also develop the consciousness of taking social responsibilities and duties.

The basic purpose of exercise, physical education and sport activities is to help people to gain the habit of regular exercises lifelong. Regular exercise has an important role in creating healthy and dynamic societies. For this reason, regular exercise and sport is being evaluated scientifically by all the countries (7,9,10,11).

In the light of above explanation, the main goal of this study was to determine the health-exercise/physical

activity habits and consciousness level of ice hockey players and coaches.

MATERIAL AND METHODS
Subjects

Participants were 59 ice hockey players (16.91±0.28 years) and 7 coaches (34.85 ± 5.49 years) who participated in Men World Championships under age of 18 in 2008. Personal data about the participants are given at Table 1.

Table 1. Personal data about the subjects

Players			Coaches		
Country	**n**	**%**	**Country**	**n**	**%**
Iceland	18	30.5	Iceland	2	28.6
Serbia	11	18.6	Serbia	-	-
Armenia	17	26.8	Armenia	3	42.9
Turkey	4	6.8	Turkey	-	-
Bulgaria	9	15.3	Bulgaria	2	28.6
Total	59	100.00	Total	7	100.00
Training Age			Training Age		
0-5 Year	24	40.7	11-15 Year	4	57.1
6-10 Year	25	42.4	16-20 Year	1	14.3
11-15 Year	10	16.9	16 Year And Over	2	28.6
Total	59	100.00	Total	7	100.00

Collecting Data

In order to be able to form the questions took place in the "Health-Exercise/Physical Activity consciousness level" questionnaire related literature was searched and field experts thoughts was obtained. At the first stage, 90 items pool was formed. This form was given to the 5 field experts and the number of items was decreased to 51. Questionnaire was made up of total 82 items, 31 of them related to personal information and health-exercise/physical activity habits and 51 of them related to exercise consciousness level. Cronbach alfa internal consistency was used to calculate the reliability of the points of 51 items related to exercise consciousness levels and alpha values is .96. These items related to exercise consciousness levels were applied with the responses of "1: no idea, 2: heard of it, 3: I know very well". The questionnaire was administrated to the participants during the championships.

Analysis of Data

Obtained personal and health-exercise/physical activity habits data was taken as descriptive statistics while the data related to country variable was analyzed with Kruskal Wallis Test as the data was not normally distributed. Significance level was taken as 0.05.

RESULTS

In this part, data related to physical measurements, nutrition, drink, television ,computer and training habits, stress status and the comparison related to the country are given.

I. Data Related to Physical Measurements, Nutrition, Drink, Television, Computer And Training Habits, Stress Status of Players and Coaches

The results related to physical measurements of the players and coaches are given at Table 2.

Table 2. Results related to physical measurements of the players and coaches

Players	n	$\bar{x}$	Sd	Coaches	n	$\bar{x}$	Sd
Weight (kg)	59	73.52	8.90	Weight (kg)	7	82	10.06
Height (cm)	59	176	7.97	Height (cm)	7	174	7.2

As can be seen at Table 2, total 59 players who responded the questionnaire had an average body weight of 73.52 kg and average height of 176 cm., 7 coaches who responded the questionnaire had an average body weight of 82 kg and average height of 174 cm. The drink habits of the participants are given at Table 3.

Table 3. Data related to drink habits of players and coaches

players		Drink Habits	coaches	
n	%		n	%
		Do you drink alcohol?		
17	28.8	Yes	5	71.4
52	71.2	No	2	28.6
59	100	Total	7	100
		Do you smoke cigarettes?		
-		Yes	3	42.9
59	100	No	4	57.1
59	100	Total	7	100
		Do you drink coffee?		
18	30.5	Yes	4	57.1
41	69.5	No	3	42.9
59	100	Total	7	100
		Do you drink tea?		
34	57.6	Yes	6	85.7
25	42.4	No	1	14.3
59	100	Total	7	100
		Do you drink cola?		
50	84.7	Yes	4	57.1
9	15.3	No	3	42.9
59	100	Total	7	100
$\bar{x}$	Sd	Glass of water drunk everyday	$\bar{x}$	Sd
9.01	4.17	(n=59)	8.14	3.97

As can be understood from Table 3, 28.8% of the players and 71.4% of coaches drink alcohol, 30.5% of players and 57.1% of coaches drink coffee, 57.6% of players and 85.7% of coaches drink tea, 84.7% of players and 57.1% of coaches drink cola. Although 42.9% of coaches smoke cigarettes, none of the players smoke. Nutrition habits of the players and coaches are given at Table 4.

Table 4. Data related to nutritional habits of the students

players		Nutritional Habits	coaches	
n	%		n	%
		Do you have breakfast regularly?		
53	89.8	Yes	5	71.4
6	10.2	No	2	28.6
59	100	Total	7	100
		Do you have fast food at least one time in a week?		
48	81.4	Yes	3	42.9
11	18.6	No	4	57.1
59	100	Total	7	100
		Do you have fish at least on time in a week?		
39	66.1	Yes	6	85.7
20	33.9	No	1	14.3
59	100	Total	7	100
		Do you consume red meat?		
44	74.6	Yes	4	57.1
15	25.4	No	3	42.9
59	100	Total	7	100
		Do you think you are overweight?		
4	*6.8*	Yes	2	28.6
55	*93.2*	No	5	74.6
59	*100*	Total	7	100

According to Table 4, 89.8% of the players and 71.4% of coaches have regular breakfast, 81.4 % of players and 42.9% coaches eat fast food type of meal at least one time in a week, 66.1% players and 85.7 coaches eat fish at least on time in a week, 74.6% of players and 57.1 coaches eat red meat. Overwhelming majority of players (93.2%) and coaches (74.6%) stated that they are not overweight The results related to the habits of the students related to their television and computer habits are given at Table 5.

Table 5. Data related to television and computer habits of the students

Players	$\overline{x}$	Sd	Coaches	$\overline{x}$	Sd
watched television hours a day	2.27	1.71	watched television hours a day	2.42	1.81
used computer hours a day	2.77	1.85	used computer hours a day	3	2.6
(n=59)			(n=59)		

As it is seen Table 5, players watch television about two hours and 30 minutes every day and use computer almost three hours in a day. Similarly, coaches watch television and use computer almost three hours every day. The exercise habits of the players are given at Table 6.

Table 6. Results related to training habits of the players

	$\bar{x}$	Sd	Min.	Max
Number of training times every week (n=59)	**6.69**	**1.91**	**4**	**2.**
Hours in each training (n=59)	1.91	0.74	1	5

Training type except ice hockey	n	%
No other training	26	44.1
Weight lifting	14	23.7
Gymnastic	8	13.6
Running	6	10.2
Off ice	5	8.4
Total	59	100

According to the Table 6, players train nearly seven times every week and each training takes about two hours.. However most of the players (44.1%) stated that they do not any other kind of training except ice hockey, 23.7% of players stated that they do weight lifting training. On the other hand, coaches stated that they do not regular exercise. The results related to stress status and stress management methods of the players and coaches are given at Table 7.

Table 7. The results related to stress status and stress management methods of the players and coaches

Players		Stress status and stress management methods	Coaches	
n	%		n	%
		Do you often feel yourself tense and stressful?		
11	18.6	Yes	3	42.9
48	81.4	No	4	57.1
59	100	Total	7	100
		Do you have regular sleep?		
40	67.8	Yes	7	100
19	32.2	No	-	-
59	100	Total	7	100
		Do you often feel yourself tired?		
20	33.9	Yes	-	-
39	66.1	No	7	100
59	100	Total	7	100
		Do you have a stress management technique?		
7	11.9	Yes	2	28.6
5	8.5	Doing exercise	-	-
2	3.4	Other (music, book, trip, shopping, sleep)	2	28.6
52	88.1	No	5	71.4
59	100	Total	7	100

Most of the players (81.4%) and coaches (57.1%) stated that they do not feel themselves tense/stressful and tired (66.1% of players and 100% of coaches) while 66.1 of players and 100% of coaches fell themselves sleepy. On the other hand, 88.1% of players and 71.4% of coaches stated that they have no stress management strategy,

II. Health-Exercise/Physical Activity Habits And Consciousness Levels Of The Students' Descriptive Statistics And Variables Comparisons

The students' health-exercise/physical activity habits and

consciousness level descriptive statistics   are stated at Table 8.

Table 8. Health-Exercise/Physical activity consciousness level of mean values of the players

Regular Exercise/Physical Activity	$\overline{X}$	Sd
1. Helps to reduce body weight, especially body fat.	2.47	.69
2. Develops balance and coordination.	2.42	.62
3. Helps you to relax.	2.37	.66
4. Helps to have new friends and to socialize.	2.37	.74
5. Helps you to recover from extreme fatique.	2.30	.70
6. Develops group thought, interpersonal relationships, and the concept of mutual respect.	2.30	.70
7. Contributes to lean body tissue.	2.30	.65
8. Helps heart, respiratory, circulatory and digestive systems work regularly and more productive.	2.25	.73
9. Helps and improves your resistance against drug abuse **.**	2.25	.68
10. Helps you to get rid of depression.	2.25	,70
11. Increases your chances of staying alive if you have a heart attack (myocardial enfarctus).	2.25	.70
12. Helps to organism to utilize fats as energy sources during physical activity.	2.22	.72
13. Improves your self confidence.	2.20	.71
14. Eases adaptation to the conditions of cold and hot weather.	2.20	.84
15. Helps you to have a life style on your own without depending on others.	2.18	.70
16. Develops body posture (stance) and physical appearance.	2.16	.72
17. Helps to develop general health consciousness.	2.16	.64
18. Generally affects your psychology positively.	2.16	.74
19. Helps you to manage stress more effectively.	2.16	.67
20. Improves the quality of life significantly (environmental sensitivity, being happy, etc.)	2.15	.80
21. Helps us to get a better, easy and good quality sleep.	2.15	.71
22. Develops sexual desire (lipido), performance, and satisfaction.	2.15	.82
23. Helps to prevent back ache and stomach fat and when they develop, helps to get rid of them.	2.13	.70
24. Helps you for your muscle balance .	2.13	.75
25. Decreases heart beats (pulse) at the maximal levels.	2.13	79
26. Decreases the level of anxiety.	2.13	.70
27. Helps to ease light headaches.	2.13	.79
28. Increases good cholesterol (HDL).	2.11	.81
29. Helps you to exercise more intensely and longer without getting tired (without collecting lactic acid) by increasing the anaerobic threshold.	2.10	.73
30. Decreases the risk of osteoporosis.	2.10	.86
31. Improves your resistance to injuries.	2.08	.67
32. Increases your productivity at work and decreases absence from job.	2.08	.56
33. Reduces the risk of heart disease.	2.06	.76
34. Improves the work of your immune system.	2.06	.79
35. Develops glucose (sugar) tolerance.	2.06	.82
36. Develops coroner arteries which feed the heart muscle.	2.05	.79
37. Decreases the risk of hypertension (high blood pressure).	2.05	.81
38. Contributes the decrease of resting heart rate.	2.05	.83
39. In type I (insulin dependent) diabetes helps to lowering insulin by controlling blood sugar level.	2.05	.77
40. Increases the effectiveness of intelligence by increasing the oxygen flow to brain.	2.03	.82
41. Increases maximal oxygen uptake (the best measure of body work capacity).	2.03	.78
42. Eliminates the negative effects on bone health and improves bone density.	2.01	.81
43. Contributes to the decreased incidence of heart dysrhyms.	2.00	.80
44. Helps the healing of general disorders during pregnancy (for example	1.98	.81

headache, stomach burn, constipation,)		
45. Increases stroke volume (the amount of blood pumped at each beat of the heart muscles).	1.98	.79
46. Develops your muscles to receive oxygen from the blood and to utilize it.	1.96	.80
47. Helps skin nutrition by improving the blood flow to it.	1,96	.778
48. Increases the resistance of organism against upper respiratory problems.	1.94	.77
49. Improves oxygen diffusion from lungs to blood.	1.93	.82
50. Decreases the risk of constipation and colon cancer.	1.89	.82
51. Prevents developing arteriosclerosis by diminishing the levels of lipids, cholesterols and low density lipoproteins.	1.86	.77

n = 59

Except the items 44,45,46,47,48,49,50 and 51, all items' means are above average. This means that the players were aware of the benefits of exercise/physical activity. As a matter of fact, the consciousness levels of the students related to the benefits of exercise/physical activity are high. Besides this, general mean of exercise/physical activity consciousness level of coaches is $\bar{x}$= 2.70 in other words coaches stated that they know benefits of health-exercise/physical activity very well.

To analyze differences among country in terms of health-exercise/physical activity consciousness levels Kruskall Wallis test was used as the data was not distributed normally. It was seen that players' exercise/physical activity consciousness levels were significantly different in terms of country [x2 (4)=28.23, p<0.5]. Among country, Armenia was followed by Iceland, Turkey, Serbia and Bulgaria in terms of health-exercise/physical activity consciousness level. Kruskall Wallis test results in terms of country are given at Table 9.

Table 9. Kruskal Wallis Test In Terms of Country.

Country	n	Maen Rank	df	X2	p
ARMENIA	17	43.56	4	28.23	*.000
ICELAND	18	30.36			
TURKEY	4	29.13			
SERBIA	11	28.36			
BULGARIA	9	6.06			
Total	59				

*p< 0.05

CONCLUSION AND RECOMMENDATIONS

This study was carried out to determine the health, exercise and physical activity and consciousness levels of players and coaches who participated in Men World Championships under age of 18 in 2008. It was concluded that , 28.8% of the players and 71.4% of coaches drink alcohol, 30.5% of players and 57.1% of coaches drink coffee, 57.6% of players and 85.7% of coaches drink tea, 84.7% of players and 57.1% of coaches drink cola. Although 42.9% of coaches smoke cigarettes, none of the players smoke. 89.8% of the players and 71.4% of coaches have regular breakfast, 81.4 % of players and 42.9% coaches eat fast food type of meal at least one time in a week, 66.1% players and 85.7 coaches eat fish at least on time in a week, 74.6% of players and 57.1 coaches eat red meat. Overwhelming majority of players (93.2%) and coaches (74.6%) stated that they are not overweight. players watch television about two hours and 30 minutes every day and use computer almost three hours in a day. Similarly,

coaches watch television and use computer almost three hours every day.

Players train nearly seven times every week and each training takes about two hours. However most of the players (44.1%) stated that they do not any other kind of training except ice hockey, 23.7% of players stated that they do weight lifting training.

When the stress status of the students were examined, it was seen that most of the players (81.4%) and coaches (57.1%) stated that they do not feel themselves tense/stressful and tired (66.1% of players and 100% of coaches) while 66.1 of players and 100% of coaches fell themselves sleepy. On the other hand, 88.1% of players and 71.4% of coaches stated that they have no stress management strategy, The consciousness levels of both players and coaches related to the benefits of exercise/physical activity are high. In fact both groups stated that they know benefits of health-exercise/physical activity very well. Besides this, health-exercise/physical activity consciousness levels of players were significantly

different in terms of country that is among country, Armenia was followed by Iceland, Turkey, Serbia and Bulgari.

According to the findings of the present study, it is interesting that most coaches who were players when they were young drink alcohol, eat fast foot, smoke cigarette and they do not exercise regularly which means that they do not display a consistent behavior about health and nutrition because they may not take any education, such as, low alcohol and cigarette consumption, healthy nutrition and high level regular exercise when they were player. Therefore, when players are active in sports gaining habit of health, exercise and physical activity is very important: coaches should encourage players to do regular physical activity and professional support should be provided regarding nutrition. To sum up, players are introduced to a healthier life style; they maintain the same lifestyle throughout their life. After giving up the professional sports, to ensure a healthy next generation, coaches be educated in this matter as well.

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