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CLINICAL RESEARCH / KLİNİK ARAŞTIRMA

Exploring Health Literacy and Associated Factors Among Turkish Academics

Türk Akademisyenler Arasında Sağlık Okuryazarlığı ve İlişkili Faktörlerin Belirlenmesi

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Abstract

Background: Health literacy has become an important health policy and health promotion agenda item in recent years. In addition, it is thought that academicians have an important role in the development of health literacy in society. With this research, it was aimed to examine the level of health literacy and related factors in academicians.

Methods: This cross-sectional study was conducted in all faculties of a university in Turkey. Academicians were selected by stratified and simple random sampling (293). In the collection of data, it was prepared by the researchers by examining the literature; Personal Information Form and Health Literacy Scale were used.

Results: Mean score on the Health Literacy Scale was 108.49 ± 10.66. Higher scores were obtained by females, those who did not smoke or drink alcohol, those who always ate healthily, those who had had no difficulties in accessing health services, and those who perceived their quality of life and general health as very good, and the difference was found to be statistically significant.

Conclusion: As a result of the study, it was determined that the health literacy level of the academicians was between "I have a little difficulty" and "I have no difficulty". Academicians have an important position as role models in the development of society. For this reason, it is important to initiate projects to increase the health literacy levels of academicians.

Keywords: Health, Health Literacy, Academician

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Öz

Giriş: Sağlık okuryazarlığı son yıllarda önemli bir sağlık politikası ve sağlığı geliştirme gündemi unsuru haline gelmiştir. Ayrıca toplumda sağlık okuryazarlığının geliştirilmesinde akademisyenlerin önemli bir rolü olduğu düşünülmektedir.

Amaç: Bu araştırma ile akademisyenlerde sağlık okuryazarlığı düzeyi ve ilişkili faktörleri incelemek amaçlanmıştır.

Yöntem: Bu kesitsel çalışma Türkiye'deki bir üniversitenin tüm fakültelerinde yapılmıştır. Akademisyenler tabakalı ve basit tesadüfi örnekleme (293) ile seçilmiştir. Verilerin toplanmasında araştırmacılar tarafından literatür incelenerek hazırlanmış; Kişisel Bilgi Formu ve Sağlık Okuryazarlığı Ölçeği kullanılmıştır.

Bulgular: Sağlık Okuryazarlığı Ölçeği ortalama puanı 108.49 ± 10.66 olarak bulunmuştur. Kadınlarda, sigara ve alkol kullanmayanlarda, her zaman sağlıklı beslenenlerde, sağlık hizmetlerine erişimde zorluk yaşamayanlarda, yaşam kalitelerini ve genel sağlıklarını çok iyi algılayanlarda daha yüksek puanlar elde edilmiştir. Fark istatistiksel olarak anlamlı bulunmuştur.

Sonuç: Araştırma sonucunda akademisyenlerin sağlık okuryazarlık düzeylerinin "biraz zorlanıyorum" ile "hiç zorlanmıyorum" arasında olduğu belirlendi. Akademisyenler, toplumun gelişmesinde rol model olarak önemli bir konuma sahiptir. Bu nedenle akademisyenlerin sağlık okuryazarlık düzeylerini artırmaya yönelik projelerin başlatılması önemlidir.

Anahtar Kelimeler: Sağlık, Sağlık Okuryazarlığı, Akademisyen

INTRODUCTION

Health literacy (HL) is the cognitive and social skills relating to access to, understanding of and use of health information by individuals in maintaining and developing health (Aras & Bayık Temel, 2017). HL is an important competence which is effective in the ability to make health-related decisions and in determining health behaviors and it has gained importance in the whole world, particularly in the 21st century, with access to digital communication and health information when evaluating health knowledge in children, adolescents and adults (Doğanyiğit, 2015). HL is formed by the interaction of individuals' individual skills, health environment, the health and education system, and social and cultural factors in the family, at work and in the community. These factors affect health outcomes and costs (Akbulut, 2015). HL is important for people to make correct decisions concerning their own health and to correctly understand health messages. It has been found that people whose HL level is inadequate and limited have increased unnecessary hospital costs, longer stays in hospital, and higher rates of unnecessary tests as compared with those with adequate HL levels (Çopurlar & Kartal, 2016). Those with a low level of HL make less healthy choices, and show riskier behavior, worse health and self-management, and a greater need for hospital treatment. Weak HL uses up a large amount of the human and financial resources of health systems (Comparative report on health literacy in eight EU member states The European Health Literacy Project 2009–2012).

According to the 2009 report from the United Nations Educational, Scientific and Cultural Organization, 776 million people worldwide do

not possess essential HL (Nielsen-Bohlman et al., 2004). According to European HL research conducted in eight countries in the European region, 12% of those participating had an inadequate level of general HL, and 35% had a problematic level of HL (Comparative report on health literacy in eight EU member states The European Health Literacy Project 2009–2012). According to a study of HL in Turkey conducted between 2009 and 2012, the HL level was inadequate in 24% of people and limited in 40.1%. It was concluded in a study by et al. (2016) that 13.1% of people had inadequate HL levels, and those of 39.6% were problematic (Çopurlar & Kartal, 2016).

The strategic plan of the Ministry of Health (2013-2017) in cooperation with the Higher Education Council included creating awareness in students to improve health (TR. Ministry of Health 2013-2017). For these programs to run properly, it is expected that the level of HL of the academic personnel will be adequate. It has also been stated that academicians have an important role in cooperation between partners in improving HL in the community (Mitic & Rootman, 2012). It was found that at a university in Turkey, only 28.8% of academic staff in faculties other than health sciences had an adequate level of HL (Doğan & Çetinkaya, 2019). It was stated that in the US National Plan, that universities had a responsibility to carry out research, to plan and implement social services planning, and to allocate space in their curricula in order to raise the level of HL in the community (WHO, 2013).

With this research, we aimed to determine the HL levels and the factors affecting the HL level of academics, for whom there are very few studies both in our country and in the world.

Research Questions

What is the health literacy level of academicians?

What are the factors affecting the health literacy level of academicians?

METHOD

Research Type

This research was designed as cross-sectional study.

Research Place

This cross-sectional study was conducted in all faculties of a university in Turkey between January and May 2019.

Research Universe/Sample

All faculties on a university campus, except for faculties and colleges relating to health sciences, that is Arts, Education, Science, Communications, Engineering, Agriculture, Aquaculture, Sports Sciences, Economics and Administrative Sciences Faculties, and the teaching staff members of these institutions (N = 1341) formed the population of the research. With a known population size, the size of the sample can be calculated with the use of a formula, and 293 academicians from nine faculties were included in the sample. The sample was determined with a stratified and simple random sampling method. In selecting the participants in the research, stratified sampling was carried out at faculty level and according to academic level (researcher, teacher, doctorate teaching member, assistant professor and professor), after which participants were selected by a simple random sampling method. A list of the names of teaching staff in each faculty was obtained from the dean's office, and the number of participants was determined according to the strata weightings.

Data Collection Tools

The researchers collected data by face to face interviews with the academicians, using the Personal Information Form and the HL Scale.

The Personal Information Form

The Personal Information Form had a total of 12 questions on socio-demographic characteristics (gender, marital status, education level, place of longest residence and income status) and health status (weight, height, BMI, use of tobacco and alcohol, difficulty experienced in accessing health services, quality of life and perception of general health, healthy eating, regular physical activity, the presence of chronic illness, the use of medication, stays in hospital).

Health Literacy Scale Turkish Form

The HL Scale was developed by Sorensen et al. (2012) with 47 items, and later revised and reduced to 25 items by Toçi et al. (2013). Validity and reliability of the Turkish version of the scale were tested by Aras and Bayık Temel (2017).

Health Literacy Scale Turkish Form Data Collection-Validity and Reliability Information

The scale consists of a total of 25 items and four sub-scales. *Access to Information* has five items, *Understanding Information* seven, *Appraisal/ Evaluation* eight, and *Implementation/Use* five items. The minimum score on the scale as a whole is 25, and the maximum is 125. The minimum and maximum scores of the sub-scales are as follows: Access to Information 5 and 25, Understanding Information 7 and 35, Appraisal/ Evaluation 8 and 40, and Implementation/ Use 5 and 25. The scale items are answered by participants in Likert form as follows. 5: I have no difficulty; 4: I have little difficulty; 3: I have some difficulty; 2: I have a lot of difficulty; 1: I can't do that/I have no capability/Impossible. All items are of positive structure, and none are scored in reverse. The standard deviation of the original scale was 0.95, and the Cronbach alpha values of the sub-scales varied between 0.90 and 0.94. The Cronbach alpha value of the Turkish form was 0.92, and the Cronbach alpha values of the sub-scales varied between 0.62 and 0.79. A high score on the scale indicates a high level of HL. Low scores show that HL is inadequate, problematic or weak, while a high score shows that it is adequate or very good (Toçi, 2013). In this study, the Cronbach alpha value of the scale was 0.90, and the Cronbach alpha values of the sub-scales varied between 0.72 and 0.84.

Data Collection

The participants were contacted by telephone to make an appointment for an interview. The researcher explained the aim of the study and obtained written voluntary approval, and then the academicians who agreed to take part in the study were given the questionnaire forms. During the data collection process, notes were left for participants who were not in the institution or who could not be contacted, and visits were repeated at weekly intervals. If an academician could not be contacted after three visits, another was selected from a backup list and interviewed in their place. Each data collection interview took approximately 15-20 minutes.

Data Analysis

The program package SPSS 20.0 (SPSS, Inc., Chicago IL, USA) was used in the evaluation of data. Normalcy analysis, descriptive statistics (numerical values, percentages, means and standard deviations), t test in independent groups, the one-way ANOVA test and post-hoc analysis in advanced analyses were used in the analysis of data. The level of statistical significance was take as $p < .05$.

Variables of the Research

Independent variables of the research; gender, age, marital status, academic status, Years Working as academician, health behavior characteristics (smoking, drinking alcohol, healthy eating,

regular physical activity, difficulty in accessing health services, perception of quality of life, perception of general health, BMI) state of health (chronic illness, regular use of medication, health institution first visited, visits to health institution in the last six months). Dependent variables of the study; HL scale scores.

Ethical Considerations

This research was carried out in accordance with the principles stated in the Declaration of Helsinki and the principles of research and publication ethics were followed. Before commencing the study, written approval was obtained from the Scientific Research and Publication Ethics Committee of University (Meeting/Decision No. 03/11, Protocol No. 88-2018, Date. 28 March 2018), and written permission was obtained from the administrations of all faculties where data was collected. Also, written permission to use the scale was obtained by email from Bayık Temel. Written approval was obtained from the academicians who participated in the research. Questionnaire forms were completed anonymously. In the data collection process, care was taken not to interfere with the academicians' research and teaching activities.

RESULTS

The Academicians' Socio-Demographic Characteristics

It was found that the mean age of the academicians participating in the study was 44.57 ± 10.02 (minimum 25, maximum 67) years; 50.5% were male and 49.5% were female, and 72.7% were married. It was determined that 94.5% of the participants were educated to doctorate level, and that 28.3% were professors. 44.0% of the participants had been working as academicians for 21 years or more. 53.2% of the academicians stated that they ate healthily, 35.5% that they sometimes took exercise, and 66.9% that they had no chronic illnesses. 56.3% of the academicians perceived their quality of life as being at a "good" level and 63.8% assessed their health as generally "good". 28.2% of the academicians stated that the first health institution which they went to in case of a health problem was the university hospital, 21.8% said that they took medication regularly, 22.5% that they smoked, and 52.9% that they drank alcohol.

HL Level of the Academicians

The mean total HL Scale score of the academicians participating in the research was 108.49 ± 10.66, and the mean scores for the sub-scales were 22.47 ± 2.50 for Access to Information, 30.24 ± 3.89 for Understanding Information, 35.01 ± 4.02 for Appraisal/Evaluation, and 20.76 ± 3.06 for Implementation/Use Table 1).

Table 1. Distribution of Academicians' Mean Scores on the HL Scale and its Sub-Dimensions

Scale Sub-Dimensions	n	Min-Max score obtained	Min-Max score to be obtained	Mean	SD
Access to Information	293	14-25	5-25	22.47	2.50
Understanding Information	293	19-35	7-35	30.24	3.89
Appraisal/Evaluation	293	20-40	8-40	35.01	4.02
Implementation/Use	293	12-25	5-25	20.76	3.06
Total score	293	71-125	5-125	108.49	10.66

Academicians' Mean HL Scores According to Certain Socio-Demographic Characteristics

It was found in the study that the mean HL scores of female academicians were higher than those of males, and that the difference was statistically significant (p = .003). No significant differences were found in the HL scale mean score according to age (p = .252), marital status (p = .318), academic status (p = .178) or years of work (p = .724) (Table 2).

Table 2. Distribution of Academicians' Mean HL Scores According to Certain Socio-Demographic Characteristics

Socio-Demographic Characteristics	n	X̄±SD	Significance test, p
Gender			
Female	145	110.34±10.19	***t*=-2.975, p=.003**
Male	148	106.68±10.82	
Age			
25-34	50	105.70±10.96	
35-44	103	109.04±11.11	*F*=1.349, p=.252
45-54	82	109.17±9.11	
55-64	53	108.49±10.83	
65 and over	5	114.00±17.64	
Marital Status			
Married	213	108.87±10.65	*t*=1.001, p=.318
Single	80	107.48±10.67	
Academic Status			
Researcher	88	106.68±11.26	
Teacher	16	110.19±10.38	*F*=1.587, p=.178
Doctorate teacher	36	107.11±9.55	
Asst. Professor	70	108.81±10.61	
Professor	83	110.41±10.39	
Years Working as academician			
0-5	28	106.82±12.15	*F*=.516, p=.724
6-10	36	108.36±10.85	
11-15	34	107.00±12.79	
16-20	66	109.55±9.13	
21 years or more	129	108.74±10.46	

Academicians' HL Level According to Their Health Behaviors and Perception of Health and Quality of Life

It was found in the study that the mean HL scores of those who did not smoke were higher than the scores of those who did (t = -3.496, p = .001), as were the scores of those who drank alcohol compared with those who did not (t = -1.754, p = .080), and that the differences were significant. A significant difference was also found between the academicians' mean HL scores and taking regular physical exercise and their BMI (p < .050). Examining the academicians' HL according to the frequency of healthy eating, it was found that the difference was statistically significant (F = 4.919, p = .001). It was found with further analysis that the HL scores of academicians who thought that they never ate healthily were lower than those of other groups. When mean HL scores were examined according to the level of perception of quality of life, a statistically significant difference was found (F = 7.688, p = .000). In further analysis, it was determined that the mean HL Scale score of academicians whose quality of life was very good was higher than that of other groups, and that the difference derived from this group. Examining the academicians' mean HL scores according to their perception of general health, a statistically significant difference was found (F = 2.659, p = .049). Further analysis showed that the difference derived from the group who responded that their perception of general health was at a medium level, and the HL scores of academicians who responded that their perception of general health was very good or good were found to be higher than those of academicians who responded that they were medium. A statistically significant difference was found when the academicians' mean HL scores were examined according to their difficulty in accessing health services (F = 14.856, p = .000). It was determined in further analysis that the difference derived from the groups who experienced little or no difficulty in accessing health services (Table 3).

No statistically significant difference was found between the mean HL scores of the academicians participating in the research and whether they had a chronic illness (t = .469, p = .639), their use of medication (t = 1.443, p = .150), or the type of institution which they visited first for a health problem (F = .41, p = .842). A significant difference was found in the statistical analysis between mean HL scores according to the frequency of visits to health institutions in

Table 3. Distribution of Academicians' Mean HL Scale Scores According to Certain Health Behavior Characteristics and Perceptions of Health and Quality of Life

Health Behavior Characteristics	n	X̄±SD	Significance test, p
Smoking			
Yes	66	104.53±11.22	***t*=-3.496, p=.001**
No	227	109.64±10.23	
Drinking alcohol			
Yes	155	107.46±11.23	***t*=-1.754, p=.08**
No	138	109.64±9.89	
Healthy eating			
Always	34	112.23±10.25	***F*=4.919, p=.001**
Often	156	109.54±10.07	
Sometimes	83	105.83±10.19	
Rarely	18	106.89±12.73	
Never	2	88.00±24.04	
Regular physical activity			
Always	35	111.71±8.44	*F*=1.808, p=.127
Often	57	107.81±10.73	
Sometimes	104	108.41±11.10	
Rarely	73	108.95±9.70	
Never	24	104.38±13.19	
Difficulty in accessing health services			
Very much	18	102.06±13.98	***F*=14.856, p=.000**
Medium	132	105.80±9.74	
Little	89	109.56±9.75	
None	54	115.46±9.34	
Perception of quality of life			
Very good	11	116.91±5.49	***F*=7.688, p=.000**
Good	165	110.15±10.31	
Medium	105	105.62±10.31	
Poor	12	103.08±13.28	
Perception of general health			
Very good	16	112.69±8.03	***F*=2.659, p=.049**
Good	187	109.26±9.97	
Medium	85	106.11±11.74	
Poor	5	106.80±17.70	
BMI			
Underweight	4	106.00±9.59	***F*=.575, p=.632**
Normal	162	109.20±10.17	
Overweight	96	107.55±11.46	
Obese	31	108.03±10.92	

the previous six months (F = 4.073, p = .003). In further analysis it was determined that the difference derived from those who had not visited a health institution in the previous six months, and it was found that the HL scores of academicians who had not visited a health institution in the previous six months were lower (Table 4).

Table 4. *Distribution of Academicians' Mean HL Scale Scores According to Chronic Illness, Use of Medication and Visits to Health Institutions*

State of Health	n	X̄±SD	Significance test, p
Chronic illness			
Yes	97	108.91±10.89	*t*=.469, p=.639
No	196	108.29±10.56	
Regular use of medication			
Yes	64	110.19±11.07	*t*=1.443, p=.150
No	229	108.02±10.51	
Health institution first visited			
Family Health Center	49	107.35±9.75	*F*=.41, p=.842
State hospital	20	106.85±10.76	
University hospital	81	109.43±11.85	
Private hospital	63	109.21±10.01	
Private (clinic)	18	108.11±9.77	
Medico (University Medical Center)	62	108.08±10.79	
Visits to health institution in the last six months			
None	2	81.00±5.66	***F*=4.073, p=.003**
One	151	107.93±9.69	
Two	82	108.80±11.42	
Three	34	110.06±11.09	
Four or more	23	110.87±10.92	

DISCUSSION

According to the findings of this study, conducted with the aim of determining academicians' HL levels and related factors, their mean score on the HL Scale was 108.49 ± 10.66. When it is considered that the minimum score on the scale is 25 and the maximum is 125, it is seen that according to this value, the academicians' HL level was between the levels of "I have little difficulty" and "I have no difficulty", and that it was at an adequate level. The academicians' sub-scale scores also showed them to be at an adequate level with regard to access to information, understanding information, appraisal/evaluation and implementation/use. Reported that both in developed and developing countries, HL levels were low in the whole world. No studies or results were found in the literature on determining the HL levels of academicians. It was seen in the results of a study with primary and middle school teachers that their HL was at a limited and problematic level (Aras & Bayık Temel; Sorenson et al., 2012; Toçi et al., 2013; Vamos et al., 2020; Bakan & Yıldız, 2020; Khoshravesh et al., 2018; Haun et al., 2015; Nakayama et al., 2015). According to research by Doğan and Çetinkaya (2019), only 28.8% of teachers had an adequate level of HL, while Yılmazel and Çetinkaya (2015) found an adequate level of HL in only 26.2% of teachers. Güner et al. (2020) found that 52% of classroom teachers in a district of Istanbul had a problematic, limited or inadequate level of HL. As for the results of studies with teachers in other countries, Denuwara and Gunawardena (2017) in Sri Lanka found a limited rate of HL in 32.5% of teachers, and in Germany, Dadaczynsk et al. (2020) reported that 29.3% of school headmasters had limited HL. In a study conducted in Iran, the level of HL in classroom teachers was found to be problematic or inadequate (Ahmadi & Montazeri, 2019). Also in Iran, Rahimi and Tavassoli (2019) reported in a similar study that HL was at a limited level in primary school teachers. It is difficult to compare results because of the use of different measurement instruments in different studies and because there was no cutoff point in the scale used in this study, but the results of our study show that the HL levels of academicians are considerably higher than those of school teachers.

Discussion of Academicians' Mean HL Scale Scores According to Certain Socio-Demographic Characteristics

It was determined that the HL levels of female academicians were considerably higher than those of male academicians, and that this difference was statistically significant ($p = .003$) (Table 1). In some studies, no difference was seen between HL levels and gender, but in others, females were found to have higher HL levels, as in the present study (Nakayama et al., 2015). When the mean HL scores of the academicians were compared according to age groups, no significant difference was found ($p > .050$). In a study by Özcan and Özkaraman (2021) conducted with DM patients, it was found that HL level fell as age increased. It has been found in some studies conducted in Turkey with healthy individuals that HL was high in the young age group, but that as age increased, HL fell (Yakar et al., 2019; Esen et al., 2019). However, it is thought that the education level of the study group was much higher than that of participants in other studies, and the researcher characteristics needed by the profession of the academicians had an effect here.

No significant difference was found in HL levels according to academic status ($p > .050$) (Table 1). Nakayama et al. found that HL increased with age in their web-based study with volunteers in the 20-69 age group (Nakayama et al., 2015). It was

found that the socio-demographic characteristics of marital status and years of work had no effect on HL level (p > .050) (Table 1).

Discussion of Academicians' Means HL Scores According to the Characteristics of Health Behaviors, Health and Perception of Quality of Life

HL is an important factor in the prevention of chronic illnesses with variable behavior characteristics such as inadequate physical activity, unhealthy eating habits, smoking, and the use of alcohol (Doğan & Çetinkaya, 2019). In a study entitled Europe HL, smoking, the use of alcohol, physical activity and weight were shown to be risk factors related to inadequate HL level (WHO, 2013).

In this study, it was found that the HL level of academicians who did not smoke was higher, and that this difference was significant (p < .050). Considering only HL in connection with individuals' lifestyles and improving it with health education are no longer sufficient. In order for individuals and communities to act in relation to social, political and economic indicators, they must be strengthened (Çınarlı, 2014). Increasing the sensitivity of society on health-related topics and spreading the most basic health information can be achieved by using a correct health communication strategy. Campaigns run on quitting smoking should aim not to create a wave of fear but to create sensitivity in society against smoking (Hablemitoğlu, 2015). This may at the same time help important public health targets including critical HL concerning support for effective social and political action (Vamos et al., 2020).

No significant difference was found either between HL level and another important health behavior, the use of alcohol (p > .050). National and international studies have shown a high rate of alcohol use in people with inadequate HL levels (Tokuda, 2009).

In this study, HL level was compared with the academicians' health behavior of healthy eating. The HL levels of academicians who stated that they always ate healthily was higher (112.23 ± 10.25), but declined progressively with those who stated that they ate healthily often (109.54 ± 10.07), sometimes (105.83 ± 10.19), rarely (106.89 ± 12.73), and never (88.00 ± 24.04). It was determined that this difference was significant (p = .001). In further analysis, it was determined that the HL scores of academicians who thought that they never ate healthily were lower than the scores of the other groups. Nutrition, which is an important component of HL, is not seen in measurement instruments used in the assessment of HL. Also, no instrument has been developed in Turkey to assess nutrition literacy. In order to preserve and improve health, it is necessary first of all to measure the extent to which health messages are understood. For this reason, it is important to develop instruments to measure HL and nutrition literacy which are specific to Turkey (Madalı et al., 2017).

In this study, the academicians' HD level was compared with the health behavior of perception of quality of life, and a significant difference was found between them (p = .000). The highest HL level was found in academicians who stated that their quality of life was very good (116.91 ± 5.49), followed by those who stated that it was good (110.15 ± 10.31) and medium (105.62 ± 10.31). The HL level of academicians who stated that their quality of life was poor (103.08 ± 13.28) was lower, and this difference was determined to be significant (p = .000). In further analysis, it was found that the mean HL Scale scores of academicians whose quality of life was good were higher than those of other

groups, and that the difference derived from this group. Examining the mean HL scores of the academicians according to their perception of their general health, a statistically significant difference was found (F = 2.659, p = .049). The HL scores of academicians who stated that their perception of general health was very good (112.69 ± 8.03) was found to be highest. In further analysis, the difference was found to derive from the group which had responded that their perception of general health was medium, and the HL scores of the academicians who had responded that their perception of general health was very good or good were higher than the scores of those who had responded that it was medium.

The academicians' mean HL scores were examined according to their experience of difficulty in accessing health services, and a statistically significant difference was found (F = 14.856, p = .000). It was found as a result of further analysis that the difference derived from the groups which experienced little or no difficulty in accessing health services (Table 3). The academicians' HD scores were also compared with their BMI in this study. However, no significant difference was found between them.

Discussion of Academicians' Mean HL Scale Scores According to Their Status of Chronic Illness, Use of Medication and Visits to Health Institutions

No difference was found between the academicians' HL level and certain of the health conditions (chronic illness, regular use of medication, first visited health institution) which it was thought could affect it (p > .050) (Table 3). However, a difference was shown between HL levels and the number of visits to a health institution in the previous six months (p < .050). It was found that as the number of visits increased, the HL level also increased (Table 3).

Limitations

Research data is limited to the units of a university in a province of Turkey. For this reason, generalization of the results obtained from the study to all academicians is limited.

IMPLICATION FOR PRACTICE

The conclusions of this study showed that the academicians had the capacity to take in and understand health information, and to act on this information to make suitable decisions on health. It was determined that age, smoking, healthy eating, difficulty accessing health services, quality of life and the level of perceived general health and the frequency of visits to a health institution in the previous six months had an effect on the HL score.

University academicians have an important position as a role model in developing society and informing students on the topic of HL. Evidence based studies can be conducted to determine attitudes, experiences and help with regard to the health problems of university academicians. Determination of health related needs and periodic health education programs can be planned. It would be of benefit to provide health services and to start university projects to improve the health of academic workers in universities and to raise the level of HL.

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and publication ethics were followed, Before commencing the study, written approval was obtained from the Scientific Research and Publication Ethics Committee of University (Meeting/Decision No. 03/11, Protocol No. 88-2018, Date. 28 March 2018), and written permission was obtained from the administrations of all faculties where data was collected. The authors thank to the academics who participated in this study and saved their time.

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