

YAŞLI BİREYLERİN SAĞLIK HİZMETİ KULLANIMININ BAZI DEĞİŞKENLER AÇISINDAN İNCELENMESİ: KESİTSEL BİR ARAŞTIRMA

AN INVESTIGATION ON THE HEALTHCARE USE OF ELDERLY INDIVIDUALS IN TERMS OF SOME VARIABLES: A CROSS-SECTIONAL RESEARCH

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ÖZ

AMAÇ: Bu çalışma, yaşlı bireylerin sağlık hizmeti kullanımını etkileyen faktörleri incelemek amacıyla yapılmıştır.

GEREÇ VE YÖNTEM: Bir aile sağlığı merkezine 01.02.2019 – 01.06.2019 tarihleri arasında başvuran 266 yaşlı hasta rastgele seçilerek, araştırmaya katılmayı kabul eden yaşlılara yüz-yüze görüşme tekniği ile anketler uygulandı. Yaş, medeni durum, eğitim düzeyi, iş durumu, cinsiyet, sağlık sigortası kapsamı, hane halkı geliri, kronik hastalık durumu gibi sosyodemografik özellikler sayı ve yüzde olarak verildi. Sağlık hizmeti kullanımı ile medeni durum ve aylık hanehalkı geliri arasındaki ilişkilerin analizinde, Fisher exact testi kullanıldı. Hangi faktörün sağlık hizmeti kullanımının önemli bir yordayıcısı olduğunu belirlemek için basit ikili lojistik regresyon analizi yapıldı.

BULGULAR: Cinsiyet, algılanan sağlık durumu ve kronik bir hastalığa sahip olmanın sağlık hizmeti kullanımı ile istatistiksel olarak anlamlı şekilde ilişkili olduğu, kadınların sağlık hizmetlerini kullanım sıklığının erkeklere oranla 2,23 kat, en az bir kronik hastalığa sahip olan yaşlıların ise olmayanlara göre 3,27 kat fazla olduğu saptandı.

SONUÇ: Çalışmamızdaki veriler sağlık politikaları yapanlar ve program yöneticileri tarafından yaşlılar için sağlık hizmetlerine erişimin artırılması amacıyla, özellikle sağlığın teşviki ve geliştirilmesi kampanyalarında kullanılabilir. Böylece kronik bir hastalık teşhisi konulduktan sonra, sağlık danışmanlarına başvurma olasılıklarının artması sağlanabilir ve oluşabilecek daha ciddi komplikasyonlar ve sakatlıklar önlenebilir.

ANAHTAR KELİMELEER: Yaşlı, Sağlık hizmeti, Sağlık sigortası, Kullanım, Planlama

ABSTRACT

OBJECTIVE: This study was carried out for the purpose of determining the factors that affect the usage of healthcare services by elderly individuals.

MATERIAL AND METHODS: 266 elderly patients who visited a family health center between the dates of 01.02.2019 – 01.06.2019 were randomly selected, and the questionnaires were applied to those who agreed to participate in the study with the method of face-to-face interviews. Sociodemographic characteristics as age, marital status, educational level, employment status, gender, scope of health insurance, household income and chronic disease status were given as frequencies and percentages. Fisher's exact test was used to analyze the relationships among usage of healthcare services and marital status and household income. Simple binary logistic regression analysis was used to determine which factor was a significant predictor of healthcare usage.

RESULTS: It was determined that gender, perceived health status and having a chronic disease were significantly related to usage of healthcare services, while usage of healthcare services among women was 2.23 times more than that in men, and it was 3.27 times more among those with at least one chronic disease than those without.

CONCLUSIONS: The data in our study may be used by healthcare policymakers and program administrators for the purpose of increasing the access to healthcare services among the elderly and especially for the sake of promotion and improvement of health campaigns. This way, it may be achieved to increase the probability of reaching healthcare counseling after being diagnosed with a chronic disease, and thus more severe complications and injuries that may occur may be prevented.

KEYWORDS: Elderly, Healthcare service, Health insurance, Planning, Usage

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INTRODUCTION

While regulating healthcare services, countries try not only to improve the general health level of the society by using the most up-to-date medical knowledge but also to achieve the most suitable planning in accessing healthcare services. They also try to minimize the differences and inequalities among social groups in a way that will achieve the goal of keeping the society healthy. This is because one of the most important objectives of healthcare systems and planning activities is to improve public health.

In line with this objective, issues as demands on healthcare services, factors that affect these demands and those who demand (use) services have become more prioritized in recent years (1). This has made healthcare service usage a topic that needs to be carefully investigated, researched, and analyzed as a result of which policies are developed. Since healthcare needs and expenditures usually increase as age increases, developing countries whose demographic characteristics are changing fast have less opportunities and time in terms of adaptation to the needs of an aging society (2).

In order to allow the elderly to receive healthcare services in a more sensitive, lower-cost and sustainable way, healthcare service providers and policymakers need to understand the factors that affect the usage of healthcare services by the elderly. In this study that was carried out within this context, it was aimed to determine the factors that affect the demand of elderly individuals on healthcare services and the behaviors that show in usage of these services.

Such studies will allow planning on the future provision of healthcare services, determination of the health levels and behaviors of the society and establishment of effectiveness and efficiency in the provision of healthcare services.

MATERIALS AND METHODS

This cross-sectional study was carried out with 266 elderly individuals who visited a family health center in the province of Burdur between the dates of 01.02.2019 – 01.06.2019 and voluntarily agreed to participate in the study after being informed about the process. In the

25-item questionnaire lasting 10 minutes that was developed by us, the variables related to usage of healthcare services were divided into preparatory, effective and need variables. The statistical calculations were made in SPSS 20 (Statistical Package for the Social Sciences ver. 20). Variables as age, marital status, educational level, employment status, gender, scope of health insurance, household income and chronic disease status were presented as frequencies and percentages.

Chi-squared test was used to determine the relationship between the dependent variable (usage of healthcare services) and the independent variables (age, educational level, employment status, gender, health insurance, chronic disease status and perceived health). Fisher's exact test was used to analyze the relationships among usage of healthcare services and marital status and income status.

Kruskal Wallis analysis was used for the data that did not show a normal distribution. Simple binary logistic regression analysis was used to determine which factor was a significant predictor of usage of healthcare services, and the value of $p \leq 0.050$ was accepted as statistically significant.

ETHICAL COMMITTEE

The ethical approval for the study was obtained from the Noninterventional Clinical Research Ethics Board of Mehmet Akif Ersoy University (No: 208/2018).

RESULTS

Among the participants, 58.2% were female, 67.6% were married, 51.1% had education on a primary school level, 62.7% were not employed, 58.6% had equal income and expenditure, all had a regular monthly income; 96.6% had social security, 86.8% had at least one chronic disease and were on medication for this, most had a good level of perceived health, 75.5% received healthcare services from state-based healthcare institutions, and the sources of funding for healthcare services of 91.3% was their health insurance (**Table 1**). The mean age of the participants was calculated as 72.6 ± 3.1 ($n=266$).

Table 1: Some sociodemographic characteristics of the participants (n=266)

Variables	Frequency (n)	Percentage (%)
Age		
65-74	151	56.7
75-84	95	35.7
85 or older	20	7.6
Gender		
Female	155	58.2
Male	111	41.8
Marital status		
Married	180	67.6
Widowed	76	28.4
Single	4	1.6
Divorced	6	2.4
Educational level		
Primary education or below	136	51.1
Secondary school and high school	96	36.1
Undergraduate or above	34	12.8
Employment status		
Not employed	167	62.7
Employed	99	37.3
Income status		
Income less than expenditure	69	25.9
Income and expenditure equal	156	58.6
Income more than expenditure	41	15.5
Has health insurance		
Yes	257	96.6
No	9	3.4
Chronic disease status		
At least one chronic disease	231	86.8
No chronic disease	35	13.2
Perceived health status		
I am very healthy	22	8.2
I am healthier than average	36	13.5
I am moderately healthy	95	35.7
My health is a bit poor	86	32.3
I am unhealthy	27	10.3
Type of facilities of receiving healthcare services		
Public (or state) facility	201	75.5
Private facility	50	18.8
Alternative medicine or traditional health facilities and others	15	5.7
Time of accessing healthcare institution / provider		
0-15 minutes	192	72.2
16-30 minutes	50	18.8
> 30 minutes	24	9
Service provider		
Doctors	184	69.2
Nurses, midwives and other healthcare professionals	67	25.2
Alternative or traditional healthcare practitioners	15	5.6
Main source of funds for healthcare services		
Relatives	4	1.6
Private health insurance	14	5.3
Income or saving	2	0.7
Health insurance (Pension)	243	91.3
Others (loans, donations, assistance or aid)	3	1.1

Gender, perceived health status and having a chronic disease were found to be significantly related to usage of healthcare services (**Tables 2 and 3**).

Table 2: Factors related to the participants' usage of healthcare services

Preparatory variables	Test of association, P-value
Age**	0.150
Gender**	0.050*
Marital status***	0.101
Education level**	0.708
Employment status**	0.332
Effective variables	
Income status***	0.612
Health insurance**	0.715
Need variables	
Chronic disease status**	0.012*
Perceived health status**	0.042*

Table 3: Simple binary logistic regression analysis of predictors of health service utilization of respondents

Usage of healthcare services in the last 1 year		
	Odds ratio	p-value
a. Preparatory variables		
Age		
65-74	1.00	
75-84	1.68	0.610
85 or older	2.86	0.100
Gender		
Male	1.00	
Female	2.54	0.050
Marital status		
Married	1.00	
Widowed	2.01	0.100
Single	1.81	0.111
Divorced	1.98	0.212
Educational level		
Primary education or lower	1.00	
Secondary and high school	0.93	0.714
Undergraduate or higher	0.93	0.788
Employment status		
Not employed	1.00	
Employed	0.62	0.316
b. Effective variables		
Income status		
Income less than expenditure	1.00	
Income and expenditure equal	1.02	0.661
Income more than expenditure	1.14	0.653
Has health insurance		
Yes	1.00	
No	0.85	0.717
c. Need variables		
Status of chronic disease		
No chronic disease	1.00	
At least one chronic disease	3.95	0.010
Perceived health status		
I am very healthy	1.00	
I am healthier than average	1.25	0.187
I am moderately healthy	1.60	0.052
My health is a bit poor	2.55	0.043
I am unhealthy	3.65	0.024

Usage of healthcare services among women was 2.23 times more than that in men, and it was 3.27 times more among those with at least

one chronic disease than those without (**Table 4**).

Table 4: Full-model binary logistic regression analysis of predictors of health service utilization of respondents

Usage of healthcare services in the last 1 year		
	Odds ratio	p-value
Gender		
Male	1.00	
Female	2.23	0.025
Chronic disease status		
No chronic disease	1.00	
At least one chronic disease	3.27	0.001

DISCUSSION

Effective production and provision of healthcare services is among the main foundations of social development regarding the health of individuals and societies as well as the achievement of the continuation of this status. In developing countries, the increase in population density and increased lifespans have led to a rapid growth in the elderly population, and this has brought about a rise in healthcare expenditures. This is because the nature of aging, the increased number of chronic diseases caused by physical capacity, disruptions in the functions of organs and aging-related physiological changes had caused the elderly to need healthcare services more in comparison to other age groups. Previous studies have also demonstrated that old age has an increasing impact on the demand for healthcare services (1, 3).

The results of our study showed that women and elderly people with at least one chronic disease utilize healthcare services to a significantly greater extent than the others (Table 2). There are different findings in the literature regarding gender. While some studies did not find a demand-increasing impact of gender (4, 5), many others, as in our study, found it to be a demand-increasing variable (6-10). Higher utilization of healthcare services by women may be associated with high morbidity load in women, their negative perceptions about their health status, or the conditions of the women? as in the case of traditional societies like Turkish society, where the burden of care is on women, and the rate of social isolation in women increases with aging (9). Moreover, as in our study, other studies in the literature have shown that having a chronic disease is certainly a demand-increasing variable regarding utilization of healthcare services (4-10). This situation may be caused by more frequent visitations at healthcare institu-

tions by individuals with chronic diseases to get their prescribed medication. Especially poor management of chronic disease at old age may lead to injuries in addition to several complications. For this reason, it would be useful to implement screening programs to be able to make the necessary determinations early.

Our study determined that the income status and health insurance variables did not affect the demand ($p > 0.050$; Table 2). This may be related to the fact that the vast majority of our participants (96.6%) had health insurance. The finding that the main source of funding healthcare services was pension (91.3%) or private health insurance (5.3%) supported this result.

Cotingting (2019) also found that the variable of health insurance does not have an effect on the demand, while some studies determined that increased income status is a significant variable that increases the demand (1, 2, 11-18).

In a study that was conducted in Greece by Geitona et al. (2007), it was found that moderate or low levels of perceived health are factors that increase the demand (3). In our study, it was seen that the demand decreased as perceived health level increased, it increased on moderate and low perceived health levels and this relationship was statistically significant ($p = 0.042$, Table 2).

We found in our study that having health insurance increased utilization of healthcare services, but it was not significantly effective. With this aspect, our study was in agreement with other studies that were carried out in Turkey (1, 2, 19). We may state that this could have been caused by state policies such as elderly care salaries for those who do not have pensions or private health insurance, free health and care assistance for the elderly, or that the elderly may also receive healthcare services by making payments without receiving any healthcare insurance or assistance. However, as our study was conducted only in one province, and healthcare service utilization and opportunities may change from one province to another, the results may not be generalized to the entire country.

Consequently, we determined that most elderly participants who were included in the study

utilized healthcare services with a mean frequency of 4.7 times per year. They visited physicians the most to receive healthcare services.

The mean of reaching healthcare facility duration was found as 13 minutes. Being female and having a chronic disease were found to be significantly related to utilization of healthcare services. Age, marital status, education level, employment status, scope of health insurance and income level were not related to utilization of healthcare services. These results may be used by healthcare policymakers and program administrators for the purpose of increasing the access of the healthcare services among the elderly and especially for the sake of promotion and improvement of health campaigns. This way, it may be achieved to increase the probability of reaching healthcare counseling after being diagnosed with a chronic disease, and more severe complications and injuries to occur may be prevented.

In our study, while we determined some factors were effective on utilization of healthcare services by elderly individuals, we did not study to what extent utilization of healthcare services was affected by other health problems frequently encountered at old age such as physical dependence, presence or severity of cognitive degradation, hearing problems and factors such as having experienced a loss recently, retirement, changes in living conditions and loss of social status. Future studies may investigate the effects of variables such as the environment, healthcare financing, personal beliefs and local culture on utilization of healthcare services.

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