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# Information, Attitudes and Behaviors of the Hospitalized Patients About Organ Donation

# Hastanede Yatmakta olan Hastaların Organ Bağışına İlişkin Bilgi, Tutum ve Davranışları

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#### Abstract

Aim: The research was carried out to determine the knowledge, attitudes and behaviors of the patients who were hospitalized due to their chronic disease.

Material and Method: The descriptive study was completed with 47 patients hospitalized. The data were collected with a questionnaire and chi-square test was used.

**Results:** It was found that one fifth of the patients donated organs by applying to a health institution and four of them thought to donate organs. Three-fifths of patients who do not want to donate organs are determined to be contrary to their religious beliefs, half of them do not want to donate organs to a person whose religious belief is not the same. It was observed that married patients wanted to donate organs higher than singles.

**Conclusion:** It is thought that information about media support is needed in this regard, and information on family, aid and survival can be effective in changing the attitude towards organ donation.

Keywords: Organ donation, knowledge, attitude, behavior, chronic disease

#### Öz

Amaç: Araştırma, kronik hastalığı nedeniyle hastanede yatmakta olan hastaların organ bağışına ilişkin bilgi, tutum ve davranışlarını belirlemek amacıyla yapıldı.

Materyal ve Metot: Tanımlayıcı nitelikte olan araştırma, hastanede yatan 47 hasta ile tamamlandı. Veriler soru formu ile toplandı ve değerlendirmede ki-kare testi kullanıldı.

**Bulgular**: Hastaların beşte birinin bir sağlık kuruluşuna başvurarak organ bağışında bulunduğu, onda dördünün organ bağışlamayı düşündükleri bulundu. Organ bağışında bulunmayı istemeyen hastaların ise, beşte üçünün dini inançlarına ters olması, yarısının dini inancı kendisiyle aynı olmayan kişiye organ bağışlamak istememesi olarak belirlendi. Evli olan hastaların bekarlara göre daha yüksek oranda organ bağışında bulunmayı istedikleri görüldü.

**Sonuç:** Bu konuda medya desteği ile yapılacak bilgilendirmelere ihtiyaç duyulduğu, aile, yardım ve bir insanı hayatta tutma temalı bilgilendirmelerin organ bağış konusundaki tutumun değiştirilmesinde etkili olabileceği düşünülmektedir.

Anahtar Kelimeler : Organ bağışı, Bilgi, Tutum, Davranış, Kronik hastalık

# **INTRODUCTION**

Organ transplantation; it is defined as the treatment of damaged organs that are not medically possible by replacing them with a healthy organ (1). Organ transplantation includes operations made from a cadaver or living creature. Its aim is to increase the quality of life and survival of patients with end-stage organ failure, and to reduce the rate of mortality and morbidity by treating the disease (2-8). On the other hand, organ donation includes giving and documenting the tissues and organs for the treatment of other patients, after the person's medical life ends with their free will while alive (3).

The fact that there is not enough organ donation for people in need around the world forms the basis of organ

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transplantation problems (3,9). While approximately 75% of organ transplants in Turkey are performed with organs taken from healthy people, more than 80% of transplants in European countries are performed with organs taken from cadavers (10,11). According to international organ and tissue transplant records, organ donation from cadavers in 2007 was 34.3 per million in Spain, 28.1 in Belgium, 25.3 in France, 20.9 in Italy, and 3.0 in Turkey. Live donor rates are 24.5 per million in Spain, 29.7 in Belgium, 9.7 in France, 6.0 in Italy and 6.9 in Turkey (12). According to the data of the Ministry of Health, the organ donation rate of patients with brain death was 1,703 in 2013, and 20,561 living donors donated organs in the same year (13). As a result, tissue and organ transplantation cannot be performed in many patients with chronic insufficiency in Turkey (14). When the obstacles to organ donation are examined, it is seen that the primary reasons are legal,

Studies on organ donation have been carried out in Turkey with different sample groups that determine knowledge, attitudes and behaviors (11-12,14-19). No study has been found that determines the knowledge, attitude and behavior of organ donation in the hospital treatment process due to chronic disease. The research was carried out to determine the knowledge, attitudes and behaviors of individuals with a chronic disease regarding organ donation during treatment in the hospital.

religious, socioeconomic level, cultural and educational

# **MATERIAL AND METHOD**

factors (14-16).

#### **Participants and Data Samples**

The sample of the descriptive study consisted of 47 patients who were hospitalized under the Ministry of Health in a province of the Eastern Black Sea Region. This patient group was preferred in order to evaluate the perspective of individuals with a chronic disease on organ donation. At the time of collecting the research data from the hospital records, the information of 74 patients who were hospitalized was obtained. After giving information about the research, an appointment was made for the application of the questionnaire from the patients. In the study, it was tried to reach all of the patients who were hospitalized due to chronic diseases without making a sample selection. In the calculation for the number of samples made in the Openepi program, it was found to be 80 with a confidence interval of 90%.

The sample of the study; patient who is older than 18 years of age, conscious, with a history of chronic disease for at least one year and a hospital stay of more than three days were included. The study was completed with 47 patients by excluding 3 patients who could not be contacted and 24 patients who did not volunteer.

# **Data collection**

The information about the patients was collected by faceto-face interview method using a questionnaire created by the researchers (3-5). This form was arranged by the researchers in a way to consist of three parts. In the first part; 17 questions including the introductory characteristics of the patients, their status of organ donation and the definition of organ donation, 25 questions questioning the information of the patients about their attitudes towards organ donation in the second part, and in the third part, 21 questioning the information about their organ donation status and the reasons for not wanting to donate organs.

#### Data analysis

The data obtained from the research were analyzed using the SPSS (Statistical Package for Social Sciences) 21.0 program. In the analysis of the tests, the significance level was taken as p<0.05, and number, percentage, mean and chi-square tests were used in the analysis of the data.

#### **Ethical issues**

Verbal consent was obtained from the face-to-face interviews with the patients in the study. While obtaining written permission from the relevant hospital, data collection forms and the names of the researchers were sent to the hospital.

# RESULTS

In this study, information on the knowledge, attitudes and behaviors of patients hospitalized for chronic illness regarding organ donation, and the reasons for wanting or not wanting to donate were presented. 63.8% of the patients participating in the study were female and the mean age was 46.3±16.5 (min:18, max:84). The education level of 49% of the patients is primary school or lower, 70.2% of them are married and 72.3% of them have a medium income. 49% of the patients had hypertension, 25.5% had asthma, 19.2% had Chronic Obstructive Pulmonary Disease (COPD), and 6.3% had chronic kidney failure (CKD). It was determined that 2.1% of the patients applied to a health institution to donate their organs, and 40.4% of them were considering donating their organs. Reasons of patients who want to donate organs; It was found that they explained that being a relative of a patient waiting for an organ (94.7%), donating is a beneficial behavior (47.3%) and thinking that there may be a need for organs in the future (36.8%). It was observed that the rate of those who did not want to donate organs was 34%. The reasons of patients who do not want to donate organs are; It was observed that organ donation was contrary to his/ her religious belief (56.2%), thinking his family would be upset if he donated his organs (43.7%), and not wanting to be touched after death (37.5%) (Table 1).

72.3% of the patients stated that the blood groups of the recipient and the donor should be the same, 53.2% of the patients stated that organs should not be taken from people who use alcohol, and 48.9% of them stated that verbal expression of organ donation was sufficient. 57.4% of the patients stated that they did not find the information about organ donation sufficient. 95.7% of the patients stated that they would like to donate organs to a family member, 72.3% stated that organs should be donated

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while the person was alive, and 70.2% stated that they would not donate organs to a person who used alcohol (Table 2).

It was found that the state of considering organ donation of the patients did not show a significant difference according to age and gender (p>0.005). Educational status, income level and marital status were found to be statistically significant in terms of considering organ donation (p<0.005). It was determined that as the education level increased, the thought of organ donation increased and the married people were more likely to think about organ donation than the single ones (Table 3). It was found that patients who expressed their income level as 'moderate' thought about organ donation more than others (p<0.0001). It was determined that patients with chronic renal failure were more positive in considering organ donation compared to other diseases and the difference was significant (p<0.0001).

	Number	%*
Requesting	19	40.4
"There are many patients waiting for organ donation"	18	94.7
"It is better to donate my organs than to rot"	9	47.3
"I may need an organ in the future"	7	36.8
"Helping patients gives me peace"	5	26.3
"Donating organs is a reward"	4	21.0
Not requesting	16	34.0
"Contrary to my religious belief"	9	56.2
"I think my family will be upset"	7	43.7
"I don't want your body to be touched after my death"	6	37.5
"I don't want the integrity of my body to be broken"	4	25.0
"My organs can be taken before my death"	3	18.7
"I don't know about the application centers for organ donation"	3	18.7
"I am afraid that I may feel pain during organ donation"	1	6.2
'I think I am not suitable for organ donation"	1	6.2**
Unstable	12	25.5
*One person gave more than one answer		

**\*\*Hepatitis B patient** 

Table 2. Patients' knowledge, attitudes and behaviors regarding organ donation, N=47	7)						
	Patients' thoughts						
Knowledge		Yes		No		Not opinion	
	n	%*	Ν	%*	Ν	%*	
Donor and recipient blood groups must be the same	34	72.3	4	8.5	9	19.1	
Organs should not be taken from a person who uses alcohol.	25	53.2	16	34.0	6	12.8	
Oral expression of organ donation is sufficient.	23	48.9	17	36.2	7	14.9	
Organ taken from cadaver gives pain to cadaver	15	31.9	30	63.8	2	4.3	
Anyone can receive organs from anyone	13	27.7	29	61.7	5	10.6	
Organs can be given to someone else for money	9	19.1	33	70.2	5	10.6	
Patients receiving chemotherapy can donate organs	8	17.0	32	68.1	7	14.9	
Attitudes and Behaviors	Yes		No		Unstable		
	n	%*	Ν	%*	Ν	%*	
"I do not donate organs to a person who uses alcohol"	33	70.2	12	25.5	2	4.3	
"I do not donate organs to a person whose religious belief is not the same as mine"	22	46.8	24	51.1	1	2.1	
"I do not take an organ from a person whose religious belief is not the same as mine"	20	42.6	26	55.3	1	2.1	
"I am against organ donation because of my religious belief"	13	27.7	33	70.2	1	2.1	
*One person gave more than one answer							

\*One person gave more than one answer

			Consid	leration o	f Organ Do	nation				
Sociodemographic Characteristics		Thinking		Not thinking		Unstable		Total		р
	n	%	n	%	n	%	n	%		
Age										
	18-41	9	47.4	2	12.5	3	25.0	14	29.8	
	42-58	7	36.8	6	37.5	6	50.0	19	40.4	0.58
_	59-84	3	15.8	8	50.0	3	25.0	14	29.8	
Sex										
	Female	8	57.9	14	87.5	8	33.3	30	63.8	0.05
	Male	11	42.1	2	12.5	4	66.7	17	36.2	0.00
Educatio										
	Illiterate	-	-	8	50.0	-	-	8	17.0	
	Primary school	10	52.6	1	6.3	5	41.7	15	34.1	0.02
	Middle school and above	9	47.4	7	43.8	7	58.3	23	48.9	
Income	Level (own statements)									
	Good	5	26.3	-	-	2	16.7	7	14.9	
	Middle	11	57.9	14	87.5	9	75.0	34	72.3	<0.000
	Bad	3	15.8	2	12.5	1	8.3	6	12.8	
Marital s	status									
	Married	11	57.9	12	75.0	10	83.3	33	70.2	
	Single	8	42.1	4	25.0	2	16.7	14	29.8	0.006
Chronic	Disease									
	Hypertension	1	5.2	4	25.0	2	16.7	7	14.9	
	Asthma	3	15.8	-	-	-	-	3	6.4	0.000
	COPD*	4	21.1	9	56.2	3	25.0	16	34.0	<0.0001
	CRF**	11	57.9	3	18.8	7	58.3	21	44.7	

\* Chronic obstructive pulmonary disease, \*\* Chronic renal failure

# DISCUSSION

It is seen that there is not enough organ donation in Turkey and cadaveric transplants are not at the desired level compared to European countries. It is seen that information meetings on organ donation are held and events are organized throughout the country during the organ donation week. Despite all these practices, it is known that not enough donations can be made and the level of knowledge about organ donation in the society is not desired. In this context, the research determines the knowledge, attitudes and behaviors of patients who are hospitalized with chronic diseases regarding organ donation.

In the study, it was determined that one fifth of the patients applied to a health institution and donated organs. In the study Topbas et al., conducted with a sample of health professionals in Trabzon, the rate of having an organ donation card was 2.2% (16), while in the study conducted by Okka and Demireli in Konya it was 3.6% (16), Göz et al. it was found to be 3.1% in the study (11). In a study Efil et al., conducted in Afyon, 3.3% of the people who had an organ donation card (5), in Baykan et al. study, it was found to be 2.9% (6). All studies conducted in different sample groups and regions of our country, it is seen that the rates of organ donation are similar.

In the study, it was determined that four out of ten patients were considering organ donation. In the study Topbas et al., with health professionals, 62.8% (17), Özer et al. study, 64.2% (16) of the students, it was determined that 60.9% of the nurses were found by Göz et al. study, wanted to donate organs (11). In the study Özmen et al, found that 36.1% of the students wanted to donate organs (15). In Baykan et al. study, conducted in Kayseri (6), 34.0% of the students preferred to donate their organs, Yaşar et al. (10) found that 34.9% of the students wanted to donate their organs. When the results of the research were evaluated, it was determined that the rate of considering organ donation was low in studies conducted with young samples, but in studies conducted with other sample groups, they thought of organ donation at a similar rate as our study.

In the study, it was determined that nine out of ten patients considering organ donation were effective because there were many patients waiting for organ donation. Ozer et al. were found that 43.4% of the students' reasons for wanting to donate organs were to restore health to sick individuals and save the lives of others (16). In the study Göz et al., it was determined that 46.1% of nurses wanted to help patients, 28.2% of them had a large number of patients who needed organ donation, and 23.1% of them wanted to donate organs because they thought they might need an organ (11). In the study Özmen et al., it was determined that 82.2% of the students wanted organ donation for 'service to humanity' and 57.9% for the reasons of 'making the organs that will decay and work' (15). Efil et al. found that 85.2% of the participants had the idea of "saving and improving life" (5). When the results of the research are evaluated, it is seen that there is a desire to donate on the grounds of helping individuals and restoring their health.

It was determined that three-fifths of the patients who did not want to donate organs did not want to donate on the grounds that they were against their religious beliefs, half of them would not donate organs to a person whose religious belief was not the same as theirs, two-fifths would not receive organs from a person whose religious belief was not the same as theirs, and one-fourth of them did not want to have their body integrity deteriorated. In study with health professionals, 21.6% of them were due to their religious beliefs (17), Özer et al. 16.1% of the students did not want to donate organs because they did not want their body to be destroyed, were afraid, and did not feel ready (16). In the study Eye et al., it was found that 71.5% of the nurses did not want to upset their families, 21.4% were afraid that their organs would be removed before they died, and 7.1% did not want to donate their organs due to their religious beliefs (11). In the study Ozmen et al., it was found that 41.2% of the students who did not want to donate organs were 'not comfortable with their conscience' and 38.2% did not think of donating because they did not want their body integrity to be impaired. In the same study, 51.7% of the students thought that organ donation was religiously appropriate (15). In the study Efil et al., it was determined that 20.9% of the participants thought that their religious belief prevented organ donation, and 36.1% of them did not want to donate organs because they did not want to have their bodies intervened after their death (5). In the study Baykan et al., the primary reservations of the students who do not want to donate organs are that they do not want their body integrity to be damaged (5.8%), fear of having their organs removed before they die completely (5.8%), and thinking that it is not appropriate in terms of religion (5.8%). In the study Yasar et al., it was found that 30.2% of the students did not want their body integrity to be damaged, and 16.3% did not want to donate organs for fear of having

their organs removed before they died (10). In the study conducted by Aktaş and Karabulut in Giresun, it was found that 4.7% of the students stated that their religious belief was against organ donation (19). When the results of the research are evaluated, it is seen that religious belief is the most decisive reason affecting the attitude towards organ donation, and the lack of knowledge on this subject affects the behavior.

In order for organ donation to take place, the organ donor must have given prior written consent. In some European countries (Austria, Belgium, Portugal, France) laws accept as a donor candidate anyone who has not documented otherwise while alive, except for judicial cases. In this system, permission is not required from the family or relatives of the donor candidate (20). How to obtain permission in the Law No. 2238 in Turkey 'In order to obtain organs and tissues from a person who is over 18 years of age, the donor's written and signed pre-given in the presence of at least two witnesses, consciously and without influence, or verbally given before at least two witnesses. written and signed or verbally declared and signed in front of at least two witnesses must be approved by a physician. According to the law, even if the person has donated organs (although they do not have the legal right to object), organs and tissues can be obtained with the permission of one of their first-degree relatives who are with them at the time of death (21). Even if the deceased did not donate organs while alive, a positive opinion on this matter may facilitate the family's permission for organ donation (8). It was determined that four-fifths of the patients in the study stated that "the person should donate their organs while alive", and two-fifths of them said "verbal expression of organ donation is sufficient". Kara et al. in his study, this rate was found to be 45.1% (8).

More than four-fifths of the patients in the study could donate an organ to a family member if necessary. In the study Ozer et al., it was found that 96.2% of the students stated that they could donate an organ to a family member if necessary (14). In the study conducted by Baykan et al., it was determined that 81.2% of the students would donate to one of their families or close relatives if organ-tissue transplantation was necessary (6). When the results of the research are evaluated, it is seen that the rates are similar and it is an effective variable in considering organ donation if the family needs it.

#### CONCLUSION

As a result, it is seen that the knowledge levels of the group with chronic disease participating in other studies conducted in Turkey are similar to those of organ donation, and the rate of willingness to donate organs is low. The lack of information on organ donation makes us think that it is necessary to inform especially about religious issues. It can be said that there is a need for information to be made with the support of the media on this subject, and that information on family, aid and keeping people alive can be effective in attitudes and behaviors about donation. Since it has been determined that the greatest resistance to organ donation is experienced in religious belief, it is anticipated that information on this subject may cause desired changes in donation. It can be recommended to carry out studies based on accurate information on religious issues related to organ donation.

#### Limitation

This research is limited to chronic patients who were hospitalized in a state hospital in a province during the study period. More general information on organ donation of chronic patients in Turkey can be obtained by conducting similar studies in different provinces. It is thought that awareness of organ donation can be increased by conducting similar studies on this subject.

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**Conflict of Interest:** The authors declare that they have no competing interest.

**Ethical approval:** The research was completed with the permission of the institution from the hospital. Details regarding the patient profile to be reached when obtaining this permission, the days of going to the hospital and the research forms of the researchers were shared with the hospital.

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