

Determination of Academic Staff' Attitudes Towards Organ Donation: Türkiye Sample

Akademisyenlerin Organ Bağışına İlişkin Tutumlarının Belirlenmesi: Türkiye Örneği

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ABSTRACT

Objective: The attitude of academicians to organ donation can be effective on the society. The aim of this study is to determine the attitudes of academicians towards organ donation.

Materials and Methods: The population of this descriptive research consists of academicians working at a university. Data were collected using the Organ Donation Attitude Scale (ODAS) between May-July 2018. Descriptive statistics (mean, standard deviation, and ratio), and independent t test analyses were used.

Results: The research was conducted with a total of 511 academicians. The average age of the academicians participating in the research is 37.75±10.29, 62.2% of them are male and 44% are research assistants. The humanity and moral conviction mean score 100.34±16.15, fears of medical neglect mean score 22.74±10.21, and fears of bodily mutilation mean score 25.84±10.61. In this study, a significant difference was found between sex, religious opinion, and some other variables and the mean scores of the ODAS subscales.

Conclusion: As a result of this study, the academicians' mean scores for humanity and moral conviction subscale were found to be high, fears of medical neglect, and fears of bodily mutilation subscales were found to be low. However, it was determined that the number of academicians who donated organs was very low.

Keywords: Organ Donation, Academicians, Attitudes

Öz

Amaç: Akademisyenlerin organ bağışına yönelik tutumu toplum üzerinde etkili olabilir. Bu çalışmanın amacı akademisyenlerin organ bağışına yönelik tutumlarını belirlemektir.

Yöntemler: Tanımlayıcı türdeki bu araştırmanın evrenini bir üniversitede çalışan akademisyenler oluşturdu. Veriler Mayıs-Temmuz 2018 tarihleri arasında Organ Bağışı Tutum Ölçeği (ODAS) kullanılarak toplandı. Tanımlayıcı istatistikler (ortalama, standart sapma ve oran) ve bağımsız t testi analizleri kullanıldı.

Bulgular: Araştırma toplam 511 akademisyen ile gerçekleştirildi. Araştırmaya katılan akademisyenlerin yaş ortalaması 37,75±10.29 olup, %62,2'si erkek, %44'ü araştırma görevlisidir. Yardım severlik ve ahlaki değerler/inançlar puan ortalaması 100,34±16,15, tıbbi olarak ihmal edilme korkusu puan ortalaması 22,74±10,21 ve bedensel yaralanma korkusu puan ortalaması 25,84±10,61 idi. Bu çalışmada cinsiyet, dini inanç ve diğer bazı değişkenler ile ODAS alt ölçek puan ortalamaları arasındaki fark anlamlı bulundu.

Sonuç: Araştırma sonucunda akademisyenlerin yardım severlik ve ahlaki değerler/inançlar alt ölçek puan ortalaması yüksek, tıbbi olarak ihmal edilme korkusu ve bedensel yaralanma korkusu alt ölçek puan ortalamaları düşük bulundu. Bununla birlikte organ bağışı yapan akademisyen sayısının oldukça az olduğu belirlendi.

Anahtar Kelimeler: Organ Bağışı, Akademisyenler, Tutum

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Introduction

Organ transplantation is the best treatment for patients with end-stage organ failure. Organ transplantation is successfully applied to thousands of people with organ failure every year. According to Global Observatory on Donation and Transplantation (GODT) data approximately 157.526 organ transplant procedures performed around the world in 2022 (GODT, 2022). A total of 5.231 liver and kidney transplantation were performed in 2022 in Türkiye. Approximately 10% of them were obtained from deceased donors and 90% were obtained from living donors (IRODaT, Database 2022). While the number of deceased donors is very high in other countries, in Türkiye the deceased donors is very low. Around the worldwide in 2022 the most organ transplants from living donors were performed in

Türkiye (IRODaT, Worldwide living organ donors 2022). The number of patients awaiting organ and tissue transplantation was 22.660 people (Turkish Transplant Foundation). Despite increasing the number of people in need of organ transplantation in Türkiye every year, organ donation is not at the desired level. This clearly shows that organ donation numbers are not desired level in Türkiye with a population of more than 80 million.

In the literature, it has been determined that individuals have positive and negative attitudes towards organ donation. (Turhan Damar et al., 2019; Araujo and Siqueira, 2016; Quiroga-Garza et al., 2017; Ríos et al., 2018; Weiss et al., 2017; Gürler and Topal Hancer, 2020). Turhan Damar et al. (2019) found that nurses working in intensive care units had a high negative attitude towards organ donation. In a study examining the attitudes of healthcare professionals in Brazil towards organ donation, it was found that 84.6% of participants had a positive attitude towards organ donation (Araujo and Siqueira, 2016). Quiroga-Garza et al. (2017) found that 74.9% of anatomy professors felt positively about organ donation and 18.8% were undecided. Weiss et al. (2017) examined the attitudes of the Swedish people towards organ donation, and found that the majority of the participants (92%) had positive attitudes towards organ donation and 80% of them wanted to donate organs. In a systematic review in Türkiye that examined healthcare workers' attitudes towards organ donation, it was found that their attitudes were highly positive, but the number of healthcare professionals who donated organs remains low (Gürler and Topal Hancer, 2020).

Individuals' negative attitudes towards organ donation correspond with their education, socio-economic level, culture, and religion. In addition, the number of organ donations is low due to such reasons as family members not allowing postmortem organ donation, people not having enough information about organ donation procedures, and the influence of the opinions of others (Guzel et al., 2013, Ríos et al., 2018; Uskun and Ozturk, 2013; Turkyilmaz et al., 2013; Tay, 2016; Gürler and Topal Hancer, 2020).

Organ donation is a social responsibility. However, studies show that only close relatives, family, or friends of those awaiting transplantation are concerned about them, and even if general information about organ donation is disseminated in society, it is not perceived as a social responsibility (Akpınar Söylemez and Ordin, 2017). As in all stages of education and training, the aim of university education is to educate students to be aware of social responsibilities, in addition to providing students with basic information about their profession (Ergül and Kurtulmuş, 2014). In this context, a positive attitude and a commitment to donate organs on the part of the academicians who are responsible for the education and training of students would affect their students positively.

The studies examining the attitudes towards organ donation throughout the world and in our country were generally carried out by doctors, nurses, students working in the field of health, and religious officials (Guzel et al., 2013; Ríos et al., 2018; Uskun

and Ozturk, 2013; Fernandez-Alonso et al., 2021; Turkyilmaz et al., 2013; Tay, 2016; Turhan Damar et al., 2019; Araujo and Siqueira, 2016). However, there has been no study in Türkiye using valid and reliable measurement tools to determine the attitudes of academicians towards organ donation. For this reason, the aim of this study is to examine the attitudes and the factors influencing them towards organ donation of academicians responsible for the education and training of students.

Methods

Research design

This cross-sectional, descriptive study was conducted in the Atatürk University to determine the attitude towards organ donation of academicians.

Participants and settings

Data were collected from academicians who were working at the Atatürk University in Türkiye. There were 22 faculties and total of 2.600 academicians at this university. This study used data obtained between May-July 2018. 511 academicians answered the study questions who worked Faculty of Dentistry, Faculty of Health Sciences, Faculty of Nursing, Faculty of Medicine, Faculty of Pharmacy, Faculty of Veterinary Medicine, Faculty of Science, Faculty of Theology, Faculty of Tourism, Faculty of Education, Faculty of Letters, Faculty of Fine Arts, and Faculty of Economics and Administrative Sciences. The inclusion criteria were as follows: willing to answer the questions and work as a academician.

Data collection tools

Data were collecting using the Sociodemographic form and the Organ Donation Attitude Scale (ODAS). The researcher went to academic staff offices and met the participants. To minimize potential coercion, participants were able to complete the questionnaire in their own time (approximately one week) at their office. After one week the researcher went to their office and got the questionnaire form from the participants.

Sociodemographic form: In this form, there are questions about the sociodemographic characteristics of the participants, whether they and their family have chronic diseases, whether one of their relatives needs organ transplantation, and whether one of their relatives has had organ transplantation before.

The Organ Donation Attitude Scale (ODAS): ODAS was developed by Parisi and Katz in 1986, modified by Kent and Owens in 1995. The Turkish validity and reliability study of the scale was conducted by Yazıcı Sayın in 2015 (Yazıcı Sayın, 2015). The questionnaire consists of three parts. Part 1 questions focus on socio-demographic features of the participants. Part 2, the ODAS, includes 40 attitudinal statements about organ donation. Part 3 contains 15 questions about past experiences of the

Table1. Comparison of sociodemographic variable and subscales of ODAS

	Variables	n (%)	Humanity and moral conviction Mean±SD	Fears of medical neglect Mean±SD	Fears of bodily mutilation Mean±SD
Sex	Female	193 (37.8)	102.66±14.94	21.37±9.58	24.5±9.12
	Male	318 (62.2)	98.93±16.71	23.57±10.51	26.65±11.36
	p value		.011*	.018*	.026*
Academic Title	Professor	94 (18.4)	98.94±17.79	22.32±9.25	25.09±9.81
	Assoc Prof	62 (12.1)	101.61±14.14	22.43±10.74	24.79±11.74
	Assist Prof	130 (25.4)	101.65±15.09	23.86±10.97	25.93±10.2
	Dr Research Assist	225 (44)	99.81±16.56	22.34±10.01	26.39±10.87
	p value		.537	.548	.640
Types of Academic Fields	Field of Health Sciences**	181 (35.4)	99.79±15.83	20.70±10.15	25.2±10.06
	Field of the Other Sciences***	330 (64.6)	100.64±16.34	23.86±10.09	26.19±10.9
	p value		.568	.001*	.314
Chronic disease	Yes	65 (12.7)	103.52±15.12	22.32±10.91	25.01±10.89
	No	446 (87.3)	99.87±16.26	22.80±10.12	25.96±10.58
	p value		.089	.724	.501
Chronic illness in family members	Yes	140 (27.4)	101.27±15.87	21.35±9.42	24.82±11.53
	No	371 (72.6)	99.99±16.26	23.18±10.52	26.22±10.23
	p value		.425	.073	.185
Need for organ transplantation of the family members or friends	Yes	38 (7.4)	101.81±15.77	23.81±9.89	25.84±11.17
	No	473 (92.6)	100.22±16.19	22.65±10.24	25.84±10.58
	p value		.560	.501	.999
If it was necessary to survive, would you accept the organ transplant from another person?	Yes	381 (74.6)	103.86±13.82	21.22±9.75	23.75±10.16
	No	9 (1.8)	78.66±21.55	27.88±11.37	33.55±11.08
	Notral	121 (23.7)	90.85±17.55	27.14±10.25	31.84±9.44
	p value		.000*	.001*	.000*
If it was necessary to survive, would you accept the organ transplant belonging to an animal?	Yes	259 (50.7)	103.8±14.06	21.05±9.8	23.08±9.49
	No	81 (15.9)	93.24±18.73	25.08±11.15	29.4±10.18
	Notral	171 (33.5)	98.45±16.49	24.18±9.99	28.33±11.33
	p value		.000*	.001*	.000*
If it was necessary to survive, would you accept the organ transplant like a machine?	Yes	340 (66.5)	102.75±14.51	21.32±9.91	24.24±10.21
	No	22 (4.3)	93.22±20.04	26.81±10.93	28.9±11.93
	Notral	149 (29.2)	95.89±17.86	25.37±10.17	29.04±10.57
	p value		.000*	.000*	.000*
Giving organs for a fee	Yes	63 (12.3)	106.82±12.05	23.61±11.16	24.17±10.44
	No	372 (72.8)	98.62±16.75	22.54±9.99	25.82±10.51
	Notral	76 (14.9)	103.38±14.37	22.97±10.6	27.32±11.16
	p value		.000*	.727	.218
Is organ donation appropriate religiously?	Yes	81 (15.9)	102.17±14.78	20.95±9.25	23.93±9.89
	No	430 (84.1)	90.64±19.47	32.23±9.89	35.96±8.36
	p value		.000*	.000*	.000*

* $p < .05$

** Faculty of Dentistry, Faculty of Health Sciences, Faculty of Nursing, Faculty of Medicine, Faculty of Pharmacy, Faculty of Veterinary Medicine

*** Faculty of Science, Faculty of Theology, Faculty of Tourism, Faculty of Education, Faculty of Letters, Faculty of Fine Arts, Faculty of Economics and Administrative Sciences

Table1. Comparison of sociodemographic variable and subscales of ODAS (Continue)

Variables	n (%)	Humanity and moral conviction Mean±SD	Fears of medical neglect Mean±SD	Fears of bodily mutilation Mean±SD	
Do you know how organ donation system works in Türkiye?	Yes	84 (16.4)	100.51±14.8	19±8.61	24.17±9.21
	No	427 (83.6)	100.3±16.42	23.47±10.35	26.17±10.85
	p value		.230	.002*	.018*
Views on organ donation					
I don't want to donate any part of my body and I don't want to sign an organ donor card either	Yes	54(10.6)	84.66±22.42	28.18±11.81	34.20±11.17
I am undecided about signing an organ donor card; I do not think that I would want to donate my organs	Yes	82(16)	93.89±14.79	26.56±11.02	31.92±8.47
I am undecided about signing an organ donor card; but I think I would like to donate my organs.	Yes	241(47.2)	102.06±13.50	22.46±9.66	26.06±9.68
I would like to donate my organs and would like to sign an organ donor card.	Yes	95(18.6)	108.62±12.24	18.55±7.99	18.30±6.79
I've already signed an organ donor card.	Yes	39(7.6)	104.79±12.78	19.10±8.25	18.36±8.27
p value			.000*	.000*	.000*
Total Score		100.34±16.15	22.74±10.21	25.84±10.61	

* $p < .05$

** Faculty of Dentistry, Faculty of Health Sciences, Faculty of Nursing, Faculty of Medicine, Faculty of Pharmacy, Faculty of Veterinary Medicine

*** Faculty of Science, Faculty of Theology, Faculty of Tourism, Faculty of Education, Faculty of Letters, Faculty of Fine Arts, Faculty of Economics and Administrative Sciences

participants with organ donation. Part 2 (ODAS) consists of a Likert scale of six options. Responses range from 'strongly agree' to 'disagree strongly', with no neutral option.

Positive and negative dimensions of attitude about organ donation are measured through these statements. ODAS consists of three sub-dimensions: humanity and moral conviction, fears of medical neglect and fears of bodily mutilation. The average score that can be obtained from the humanity and moral conviction (HMC) sub-dimension (positive attitude) is 20-120; the fears of medical neglect (FMN) sub-dimension (negative attitude) is 10-60; the fears of bodily mutilation (FBM) sub-dimension (negative attitude) is 10-60. Total negative attitude score is between 20-120. High positive and low negative scores indicate strong voluntary attitudes towards organ donation. Cronbach's alpha for the HMC sub-dimension was 0.925, the FMN sub-dimension was 0.869, and the FBM sub-dimension was 0.883 (Yazıcı Sayın, 2015).

Data analysis

The data of the study were analyzed using Statistical Package for Social Sciences 23.0 (IBM, Armonk, NY, United States). Percentage, mean, t-test, one way anova and kruskal wallis tests

were used in the analysis of the data.

Ethical considerations

The Atatürk University Faculty of Health Sciences Ethics Committee approved the study with number 2017-3/18 date 17.04.2017 and permission was obtained from the management of the faculties. The study purpose, potential risks, and benefits of the study explained to the participants and their verbal consent was obtained.

Results

The research was conducted with a total of 511 academicians. The average age of the academicians was 37.75±10.29, 62.2% of them were male and 44% of them were research assistants. 100% of the academics participating in the study were Muslim. 87.3% of the academicians did not have any chronic diseases and 72.6% of the academicians did not have any chronic diseases in their family.

The comparison of the sociodemographic characteristics of the academicians with the scores of ODAS sub-dimension is given in Table 1. The mean scores for HMC, FMN, and FBM were

Table 2. Academicians' views on organ donation according to academic fields

	n(%)	Field of Health Sciences n=181 (35.4%) n (%)	Field of the Other Scier n=330 (64.6%) n (%)
Do you know how organ donation system works in Turkey?			
Yes	84(16.4)	60 (33.1)	22 (6.7)
No	429(83.6)	121 (66.9)	308 (93.3)
Views on organ donation			
I don't want to donate any part of my body and I don't want to sign an organ donor card either	54(10.6)	20 (11)	34 (10.3)
I am undecided about signing an organ donor card; I do not think that I would want to donate my organs	82(16)	26 (14.4)	56 (17)
I am undecided about signing an organ donor card; but I think I would like to donate my organs.	241(47.2)	85 (47)	156 (47.3)
I would like to donate my organs and would like to sign an organ donor card.	95(18.6)	24 (13.3)	71 (21.5)
I've already signed an organ donor card.	39(7.6)	26 (14.4)	13 (3.9)

100.34±16.15, 22.74±10.21, and 25.84±10.61, respectively.

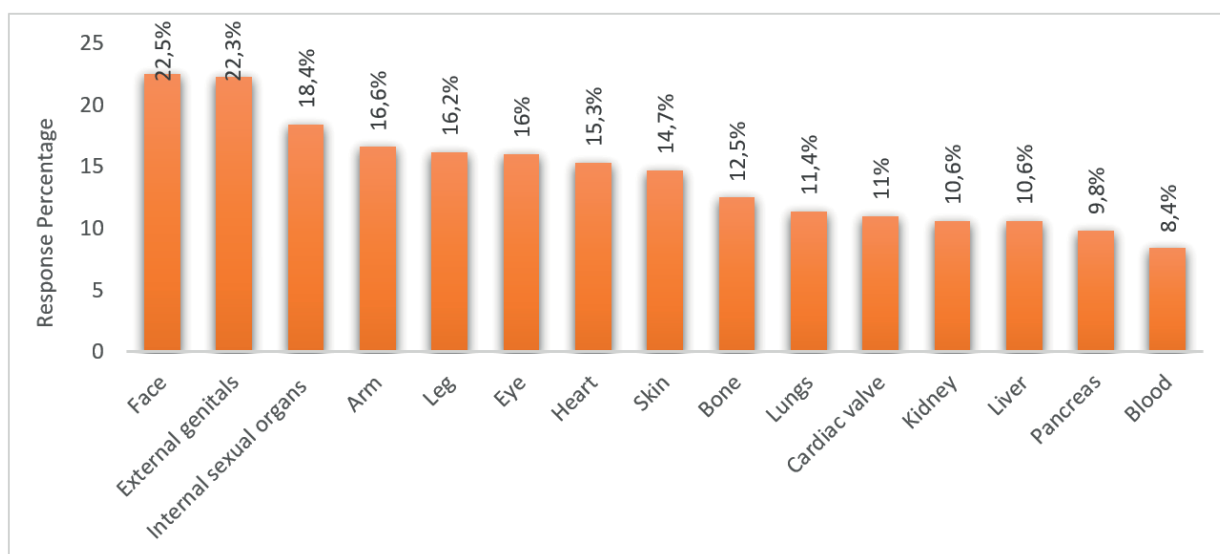
No significant difference was found between the academicians' or their family members with chronic disease and HMC, FMN, and FBM scores. There was also no significant difference between the need for organ transplantation of the family members or friends of the academicians and HMC, FMN, and FBM scores ($p>0.05$) (Table 1).

HMC score was significantly higher, FMN and FBM scores were significantly lower of the female academicians ($p=.011$, $p=.018$, $p=.026$, respectively). FMN score of academicians working in the field of health sciences was found to be significantly lower than those working in other fields ($p=.001$) (Table 1).

74.6% of the academicians stated that they would accept

organ transplantation from another, 50.7% of the academicians from an animal. 66.5% of academicians stated that they would accept the transplantation of an artificial organ. Academicians who accept transplantation from another person, an animal, or an artificial organ had a significantly higher HMC score and significantly lower FMN and FBM scores ($p<.005$). 72.8% of the academicians stated that they do not intend to donate organs to someone else for money. HMC score of the academicians who do not intend to donate organs for money was found to be significantly higher ($p=.000$) (Table 1).

It was determined that 84.1% of the academicians did not find organ donation religiously appropriate. While HMC score of the academicians who approve of organ donation religiously was significantly higher, FMN and FBM scores were found to be significantly lower ($p=.000$) (Table 1).

**Figure 1.** Organs and tissues that academicians unwilling to donate

Only 16.4% of the academicians knew how the organ donation system worked. FMN and FBM scores were significantly lower of the academicians who knew how the organ donation system worked ($p=.002$, $p=.018$, respectively) (Table 1).

Although 47.2% of the academicians are undecided about signing the organ donor card, they stated that they want to donate their organs. HMC score of the academicians considering both organ donation and signing an organ donation card were found to be significantly higher than the others, and their FBM and FMN scores were significantly lower ($p=.000$) (Table 1).

Most of the academicians working in health sciences and other fields stated that they were hesitant to sign the organ donor card, but they wanted to donate their organs (47%, 47.3%, respectively). The majority of academicians working in the field of health sciences (66.9%), and the vast majority of academicians working in other fields (93.3%) stated that they didn't know how the organ donation system works in Türkiye (Table 2).

It was determined that 32.3% of the academicians never wanted to donate some of their organs. Figure 1 shows organs and tissues that academicians never thought to donate. It was determined that the academicians did not want to donate at most face (22.5%), external genitals (22.3%) and internal genitals (18.4%).

Discussion

Many patients are currently waiting for organ transplants in Türkiye. One of the most important reasons for the current insufficiency is the lack of studies investigating the motives. Academicians have an important role in the education of individuals and in informing society on various issues, and their attitudes towards organ donation could impact society's perceptions. Using a valid and reliable scale, this study examined the attitudes of academicians towards organ donation.

According to the study's findings, the HMC score of the academicians was high, while FMN and FBM scores were low. In the literature, it has been observed that individuals generally have a positive attitude towards organ donation (Bharambe et al., 2018; Köse et al., 2015; Araujo and Siqueira, 2016; Quiroga-Garza et al., 2017; Ríos et al., 2018; Ünver et al., 2019; Akpınar Söylemez and Ordin, 2017; Fernandez-Alonso et al., 2021).

In this study, female academicians' HMC scores were significantly higher, FMN and FBM scores were significantly lower. Studies by López-Falcony et al. (2016) and Georgiadou et al. (2012) found more positive attitudes among women towards organ donation than among men. Dibaba et al. (2020) found that male medical students have higher positive attitudes. However, other studies have not found a significant relationship between gender and attitudes to organ donation (Ünver et al., 2019; Turhan Damar et al., 2019; Beyazıt Üçgün et al., 2017, Xie et al., 2017). In this study, we surmised that the higher HMC score of female academicians and lower FMN and FBM scores can be attributed to women's more sensitive personality structure and

tendency to exhibit more sensitive behaviour towards social problems.

In this study, HMC scores of the academicians who would accept transplantation of an organ from another human (yes 74.6%), an animal (yes 50.7%) or an artificial organ (yes 66.5%) were found to be significantly higher and their FMN and FBM mean scores were significantly lower. Beyazıt Üçgün et al. (2017) found similar results in their study.

It was determined that the majority of the academicians (72.8%) would not consider donating their organs for money and HMC score of these academicians was significantly higher. Beyazıt Üçgün et al. (2017) found that participants who refused to donate organs for money had lower HMC and FMN scores.

The Presidency of Religious Affairs declared that organ transplantation is permissible; organ donation was defined as the greatest aid that one person can give to another (Religious Affairs High Committee). Nevertheless, in this study, most of the academicians (84.1%) stated that they do not consider organ donation religiously appropriate. In another study in Türkiye, 85.1% of participants stated that organ donation was religiously appropriate (Şıpkın et al., 2010). In this study, the HMC score of academicians who considered organ donation religiously appropriate was significantly higher, and their FMN and FBM scores were significantly lower. A positive relationship was found between religious beliefs and attitude to organ donation in a study by Arisal and Atalar (2020). Weiss et al. (2017) also found that individuals in Sweden who are very religious had lower positive attitudes towards organ donation than those who are less religious or atheist. By contrast, Ahmed et al. (2018) found no relationship between religious beliefs and attitude towards organ donation.

In Türkiye, for organs and tissues to be taken from anyone over 18 years of age and able to donate, the donor must be approved by a physician in the presence of at least two witnesses, in writing and in privileged or verbal declaration, and signed before at least two witnesses. After the organ donation form is filled out, the donor is given an organ donation card. Information that the person is a donor is entered in the Ministry of Health's Organ and Tissue Donation Information. In this study, it was determined that the majority of the academicians (83.6%) did not know how this registration system works. Furthermore, especially academicians working in non-medical fields did not know how the organ donation registration system works and their rate was even higher (93.3%). However, the FMN and FBM scores of academicians who did know how the organ registration system works were found to be significantly lower. Akpınar Söylemez and Ordin (2017) stated that 51.3% of nursing students did not know how the system works; Şıpkın et al. (2010) found that 58.5% of the participants did not know where to donate an organ, and Arisal and Atalar (2020) stated that only 55.1% of individuals with higher education had knowledge about organ donation. Obviously, individuals who do not know how the organ donation system works cannot be expected to donate organs. Consequently, training academics on organ donation and

informing them how the system works is of great importance.

In this study, it was determined that 32.3% of the academicians had never thought about donating organs. With regard to specific organs, it was determined that participants were most unwilling to donate face (22.5%), external genitals (22.3%), and internal genitals (18.4%). Akpınar Söylemez and Ordin (2017) reported that nursing students were most unwilling to donate the face (60.3%) and their genital organs (42.5%), similar to our study.

In the findings of this study, it was determined that 47.2% of the academicians were undecided about signing an organ donor card, but wanted to donate their organs and very few (7.6%) had organ donation cards. Akpınar Söylemez and Ordin (2017) found that 4.2% of nursing students had signed an organ donation card, and an additional 25.4% wanted to donate organs and sign an organ donation card. Turhan Damar et al. (2019) found that nearly half of the healthcare professionals surveyed were hesitant to donate their organs and only 17.7% had an organ donation card. Beyazıt Üçgün et al. (2017) found that only 5.2% of adult individuals donated organs. Xie et al. (2017) found that 33.4% of nurses were willing to donate organs, 39.9% were undecided, and 26.7% were not considering donating organs. In the study, that examined the attitudes of the Swedish people towards organ donation, it was determined that 49% of the participants had organ donation cards (Weiss et al., 2017). As seen, the number of individuals who donate their organs in Türkiye is very low among healthcare professionals, academicians and others in society and they are hesitant to commit to donating. We suggest that the reason for the low rate of organ donation card holders in this study and the fact that nearly half of the academicians were hesitant about signing an organ donation card was that the majority of the academicians (83.6%) did not know how the organ donation system works.

Conclusion and Recommendations

As a result of this study, mean scores for humanity and moral conviction subscale were found to be high, fears of medical neglect, and fears of bodily mutilation subscales were found to be low. However, it was determined that the number of academicians who donated organs was very low. Future studies should be conducted to determine the factors affecting academicians' attitudes towards organ donation.

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References

- Ahmed, M., Kubilis, P., & Padela, A. (2018). American Muslim physician attitudes toward organ donation. *Journal of Religion and Health* 57(5): 1717-1730. <https://doi.org/10.1007/s10943-018-0683-2>
- Araujo, C., & Siqueira, M. (2016). Brazilian healthcare professionals: a study of attitudes toward organ donation. *Transplantation Proceedings* 48(10): 3241-3244. <https://doi.org/10.1016/j.transproceed.2016.09.044>
- Arisal, I., & Atalar, T. (2020). Influence of knowledge, bodily integrity, religion and media on attitudes toward organ donation on the university campus. *International Journal of Nonprofit and Voluntary Sector Marketing* 25(1): 1647. <https://doi.org/10.1002/nvsm.1647>
- Bharambe, V.K., Arole, V.U., Puranam, V., Kulkarni, P.P., & Kulkarni, P.B. (2018). Knowledge and attitude toward organ donation among people in Lanja: A rural town in India. *Saudi Journal of Kidney Diseases and Transplantation* 29(1): 160-166. <https://doi.org/10.4103/1319-2442.225209>
- Damar, H.T., Ordin, Y.S., & Top, F.Ü. (2019). Factors Affecting Attitudes Toward Organ Donation in Health Care Professionals. *Transplantation Proceedings* 51(7): 2167-2170. <https://doi.org/10.1016/j.transproceed.2019.01.183>
- Dibaba, F.K., Goro, K.K., Wolide, A.D., Fufa, F.G., Garedow, A.W., Tufa, B.E., et al. (2020). Knowledge, attitude and willingness to donate organ among medical students of Jimma University, Jimma Ethiopia: cross-sectional study. *BMC Public Health* 20(1): 1-7. <https://doi.org/10.1186/s12889-020-08931-y>
- Ergül, H.F., & Kurtulmuş, M. (2014). Views of academic staff about community service applications course in improving of social responsibility understanding. *Electronic Journal of Social Sciences* 13(49): 221-232. <https://doi.org/10.17755/esosder.72162>
- Fernández-Alonso, V., Moro-Tejedor, M.N., Palacio-Ceña, D., Paredes-Garza, F., Gil-Carrasco, M.D., De La Matta Cantò, M., et al. (2020). Attitudes towards multi-organ donation among intensive care unit nurses in transplant hospitals. *International Nursing Review* 68(3): 308-317. <https://doi.org/10.1111/inr.12639>
- Georgiadou, E., Sounidakis, N., Mouloudi, E., Giaglis, P., Giasnetsova, T., Marmanidou, K., et al. (2012). Attitudes and behavior toward organ donation in Greece. *Transplantation Proceedings* 44(9): 2698-2701. <https://doi.org/10.1016/j.transproceed.2012.09.017>
- GODT (Global Observatory on Donation and Transplantation). (2023, October 20). Data, Summary by Country 2022. <https://www.transplant-observatory.org/summary/>

- Gurler, H., & Hancer, A.T. (2020). Attitudes of Turkish Health Care Professionals toward Organ Donation and Factors Affecting Organ Donation: A Systematic Review. *International Journal of Caring Sciences* 13(1): 93-102.
- Güzel, H., Oskay, K., Cetin, D., Beyazyıldız, E., Kahveci, K., & Güvence, N. (2013). Attitude and approach of people who live in Southeastern Anatolia region on tissue and organ transplantation. *Transplantation Proceedings* 45(3): 869-871. <https://doi.org/10.1016/j.transproceed.2013.02.093>
- IRODaT. (2023, October 19). Worldwide living organ donors 2022. https://www.irodat.org/img/database/pdf/IRODaT_Newsletter_2022_preliminary_july.pdf
- IRODaT. (2023, October 19). Database 2022. <https://www.irodat.org/?p=database&c=TR#data>
- Kent, B., & Owens, R.G. (1995). Conflicting attitudes to corneal and organ donation: a study of nurses' attitudes to organ donation. *International Journal of Nursing Studies* 32(5): 484-492. [https://doi.org/10.1016/0020-7489\(95\)00009-m](https://doi.org/10.1016/0020-7489(95)00009-m)
- Kose, O.O., Onsuz, M.F., & Topuzoglu, A. (2015). Knowledge levels of and attitudes to organ donation and transplantation among university students. *Northern Clinics of Istanbul* 2(1): 19-25. <https://doi.org/10.14744/nci.2015.58070>
- López-Falcony, R., Ramírez-Orozco, R., Ortiz-Aldana, F.I., Rodríguez-Jamaica, J., Ramírez-Orozco, A., & Camarena-Reynoso, H. (2016). Attitudes toward organ donation and transplantation in Guanajuato, Mexico. *Transplantation Proceedings* 48(2): 556-558. <https://doi.org/10.1016/j.transproceed.2016.02.028>
- Medicalpark. (2022, October 17). What is organ donation? How is organ donation done? <https://www.medicalpark.com.tr/organ-bagisi/hg-2201#4>
- Quiroga-Garza, A., Reyes-Hernández, C.G., Zarate-Garza, P.P., Esparza-Hernández, C.N., Gutierrez-de la, O.J., & de la Fuente-Villarreal, D. (2017). Willingness toward organ and body donation among anatomy professors and students in Mexico. *Anatomical Sciences Education* 10(6): 589-597. <https://doi.org/10.1002/ase.1705>
- Parisi, N., & Katz, I. (1986). Attitudes toward posthumous organ donation and commitment to donate. *Health Psychology* 5(6): 565-580. <https://doi.org/10.1037//0278-6133.5.6.565>
- Religious Affairs High Committee. (2023, October 17). Religious Provision of Organ Transplantation. <https://kurul.diyaret.gov.tr/Karar-Mutalaa-Cevap/9669/organ-naklinin-dini-hukmu>
- Ríos, A., López-Navas, A.I., Flores-Medina, J., Sánchez, A., Ayala, M.A., & Garrido, G. (2018). Psychosocial factors affecting attitude toward organ donation in Santiago, Cuba. *Transplantation Proceedings* 50(8): 2268-2271. <https://doi.org/10.1016/j.transproceed.2018.04.012>
- Şipkin, S., Şen, B., Akan, S., & Tuna Malak, A. (2010). Organ donation and transplantation in Onsekiz Mart Faculty of Medicine, Fine Arts and Theology: Academic staff's awareness and opinions. *Meandros Medical and Dental Journal* 11(1): 19-25.
- Söylemez, B.A., & Ordin, Y.S. (2017). Attitudes of the third-year nursing students toward organ donation: cross-sectional study. *Transplantation Proceedings* 49(8): 1698-1701. <https://doi.org/10.1016/j.transproceed.2017.04.024>
- Tay, M. (2016). The importance of tissue and organ transplantation in Turkey. *Health Care Acad J* 3(3): 106-110.
- Turkish Transplant Foundation. (2023, October 16). Waiting Lists 2021. <https://www.tonv.org/en/>
- Türkyılmaz, S., Topbaş, M., Ulusoy, S., Kalyoncu, M., Kilic, E., & Can, G. (2013). Attitudes and behavior regarding organ donation and transplantation on the part of religious officials in the eastern black sea region of Turkey. *Transplantation Proceedings* 45(3): 864-868. <https://doi.org/10.1016/j.transproceed.2013.02.095>
- Uskun, E., & Ozturk, M. (2013). Attitudes of Islamic religious officials toward organ transplant and donation. *Clinical Transplantation* 27(1): 37-41. <https://doi.org/10.1111/ctr.12058>
- Ünver, S. (2019) Attitudes of Patients' Relatives towards Organ Donation. *Journal of Human Rhythm* 5(1): 23-33.
- Xie, J.F., Wang, C.Y., He, G.P., Ming, Y.Z., Wan, Q.Q., & Liu J. et al. (2017). Attitude and impact factors toward organ transplantation and donation among transplantation nurses in China. *Transplantation Proceedings* 49(6):1226-1231. <https://doi.org/10.1016/j.transproceed.2017.02.060>
- Weiss, J., Shaw, D., Schober, R., Abati, V., & Immer, F.F. (2017). Attitudes towards organ donation and relation to wish to donate posthumously. *Swiss Medical Weekly* 147(14401): 1-8. <https://doi.org/10.4414/smw.2017.14401>
- Yazici Sayin, Y. (2016). Turkish validity and reliability of organ donation attitude scale. *Journal of Clinical Nursing* 25: 642-655. <https://doi.org/10.1111/jocn.12943>