



Knowledge, Attitudes and Behaviors of Religious Workers in Erzincan Province on Organ and Tissue Donation

Erzincan İlinde Görev Yapan Din Görevlilerinin Organ ve Doku Bağışı Konusunda Bilgi, Tutum ve Davranışları

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Abstract

Aim: To examine the level of knowledge of religious workers about organ and tissue donation and analyze their attitudes and behaviors on the issue.

Material and Method: This descriptive and cross-sectional study was conducted in the Erzincan of Turkey with religious workers (279 people) working in the province center. The research was conducted in June 2022. The data were collected using the questionnaire prepared by the researcher.

Results: Of the religious workers included in the study, 30.8% considered their knowledge about organ donation sufficient, 64.5% thought that organ donation is religiously appropriate, and 33.3% stated that they did not advise the public about organ donation. Only 1.4% of them had donated their organs and 25.8% were considering organ donation in the future. Of the participants, 32.6% stated that they would donate the organs of a relative in the event of their brain death if they had the right to make the decision, and 60.2% stated that they would donate organs to a relative. Religious workers who were over the age of 40, who had sufficient knowledge about organ donation, and who knew about the fatwa on organ donation significantly more commonly thought that organ donation is religiously appropriate ($p<0.05$). Participants who thought that organ donation is appropriate for followers of Islam and who had relatives waiting for organ transplantation were significantly more likely to consider organ donation in the future ($p<0.05$).

Conclusion: It was determined that the religious workers had low knowledge and training on organ donation. Although the majority of the religious workers thought that organ donation is religiously appropriate, knew about the fatwa of the Presidency of Religious Affairs on the subject, and thought that organ donation is necessary for humanity, both their rates of organ donation and wanting to donate organs in the future were low.

Keywords: Organ donation, religious workers, attitude

Öz

Amaç: Bu araştırmanın amacı din görevlilerinin organ ve doku bağışı konusunda bilgi düzeylerinin değerlendirilmesi, tutum ve davranışlarının belirlenmesidir.

Gereç ve Yöntem: Erzincan il merkezinde gerçekleştirilen tanımlayıcı ve kesitsel türdeki bu araştırma il merkezinde çalışan din görevlilerinde (279 kişi) yapılmıştır. Araştırma Haziran 2022'de yapılmıştır. Araştırmacı tarafından hazırlanan anket formu kullanılarak veriler toplanmıştır.

Bulgular: Din görevlilerinin organ bağışı hakkında bilgilerini yeterli görme oranı %30,5'dir. Din görevlilerinin %64,5'i organ bağışının dini açıdan uygun olduğunu düşünmektedir. Din görevlilerinin %33,3'ü organ bağışı hakkında halka tavsiyede bulunmadığını belirtmiştir. Din görevlilerinin sadece %1,4'ü organ bağışında bulunmuş olup %25,8'i gelecekte organ bağışı yapmayı düşünmektedir. Karar verme hakkının olduğu bir yakınının beyin ölümü gerçekleşmiş olduğunda %32,6'sı organlarını bağışlayacağını belirtirken bir yakını için organ bağışlayabileceğini belirtenlerin oranı %60,2'dir. Din görevlilerinin 40 yaşın üstünde olanlarda, organ bağışı konusunda bilgisini yeterli görenlerde ve organ bağışı konusunda fetvayı bilenlerde organ bağışının dinen uygun olduğunu düşünme oranı daha yüksek olup istatistiksel olarak fark anlamlıdır ($p<0,05$). Organ bağışının İslam dinine uygun olduğunu düşünen ve organ nakli bekleyen yakını olan din görevlilerinde ileride organ bağışı yapmayı düşünme oranı daha yüksektir ve fark istatistiksel anlamlıdır ($p<0,05$).

Sonuç: Yaptığımız çalışmada din görevlilerinin organ bağışı konusunda hem bilgi hem de eğitim alma oranlarının düşük olduğu tespit edilmiştir. Din görevlilerinin çoğunluğu organ bağışının dinen uygun olduğunu düşünmelerine, yüksek oranda konu hakkındaki Diyanet İşleri Başkanlığı'nın fetvasını bilmelerine ve yüksek oranda organ bağışının insanlık için gerekli olduğunu düşünmelerine rağmen hem organ bağışı oranları hem de ileride organ bağışında bulunmayı isteme oranları düşüktür.

Anahtar Kelimeler: Organ bağışı, din görevlileri, tutum



INTRODUCTION

Organ transplantation is the most effective treatment for irreversible organ diseases.^[1,2] Despite advances in organ transplantation treatment, a lack of donor resources remains a major problem. The lack of donated organs against the number of organ donations needed negatively affects the organ transplantation process. This leads patients with organ failure to experience worse clinical symptoms and increased mortality in patients on organ waiting lists.^[3]

In Turkey, organs are mostly donated by living donors and the shortage of cadaveric donors is an important problem.^[4,5] In 2021, Turkey had the highest percentage of living organ donors in the world.^[6] According to data from the Ministry of Health of Turkey, the number of patients waiting for organ transplantation in 2021 was 26,323. However, the number of organ transplants performed in 2021 was only 4952.^[7] Organ transplantation and donation practices in Turkey are carried out according to Law No. 2238 on "Harvesting, Storage, Grafting, and Transplantation of Organs and Tissues".^[8] The High Council of Religious Affairs, the highest fatwa board of the Presidency of Religious Affairs in Turkey, ruled that organ and tissue transplantation is permissible under certain conditions under a decision dated March 6th, 1980, and numbered 396/13.^[9] The Holy Quran, the holy book of Muslims, also states that "whoever gives life to a human being will be rewarded as if he had given life to all human beings".^[10]

Prior studies on the subject found that an individual's knowledge, education, and religious beliefs affect their decisions to donate organs.^[11,12] Therefore, religious elements should be emphasized to increase organ donation.^[13] In Turkey, where the majority of the population is Muslim, the clergy plays a major role in guiding people's behaviors.^[14] Religious workers having adequate knowledge about organ donation and conveying this knowledge to the community can affect people's views on organ donation.^[15]

Religious workers' knowledge and attitudes about organ donation and transplantation are important because of their influence on society. Thus, this study aimed to determine the views of religious workers on organ and tissue donation and examine their attitudes and behaviors on this issue.

MATERIAL AND METHOD

This descriptive and cross-sectional study was carried out in the Erzincan provincial center in June 2022. Religious workers of Turkey work under the Presidency of Religious Affairs, and the provinces have Provincial Mufti Offices under this presidency. The Erzincan provincial center has a total of 358 religious workers. Since the entirety of the defined population was included in the study, no sample selection methods were used. The Provincial Mufti's Office holds monthly training

meetings with religious workers. The questionnaires were administered to the participants under supervision after the researchers provided them with information at a meeting held on June 20. Due to reasons such as being on leave or not wanting to participate in the study, only 288 people out of the total population participated in the study. Written informed consent was obtained from the volunteering participants. Moreover, 9 questionnaires were not included in the study due to missing data. The study was completed with a total of 279 participants (78% of the total population).

The questionnaire used for data collection was developed by the researcher in accordance with the literature on the subject. The questionnaire consisted of a total of 31 questions. It included questions about descriptive data such as age, occupation, gender, marital status, and educational status, and about the participants' knowledge about which organs can be donated, organ donation and transplantation, sources of information, whether organ donation and transplantation is appropriate according to Islam, and whether they inform the public about organ donation. In addition, the participants were asked whether they had donated their organs, whether they would donate their relatives' organs, whether they would donate their own organs to their relatives, whether they accepted organ donation, their reasons for wanting or not wanting to donate, and their suggestions for increasing organ donation.

Ethical Approval

This study was approved by the Erzincan Binali Yıldırım University Faculty of Medicine Human Research Health and Sport Ethics Committee (Date: 29.04.2022, Protocol No: 04/11). In addition, written permission was obtained from the Provincial Mufti's Office for the study. The study was carried out in compliance with the principles of the Declaration of Helsinki.

Statistical Analyses

The data were analyzed using IBM SPSS Statistics for Windows 25.0 (IBM Corp., Armonk, NY, USA). Descriptive statistics were presented as the number, mean±standard deviation, and percentage (%). Nominal variables were statistically analyzed using the Pearson chi-square test or Fisher's exact test. Variables showing significant differences in univariate analyses were evaluated by binary logistic regression. Statistical significance was accepted as $p < 0.05$.

RESULTS

Of the participants, 52% were imams and 28% were Quran instructors. The mean age of the participants was 40.51 ± 8.94 years and 82.4% were university graduates, while 16.5% were high school graduates. It was determined that 5.4% had a relative who had received an organ transplant and 6.8% had a relative who was waiting for an organ transplant. Among the participants with chronic diseases, most had respiratory diseases (6.1%) (**Table 1**).

Table 1. Demographic Characteristics of the Religious Workers

Variables	Number	%
Age	Mean±standard deviation (SD)	
Female	37.13±6.94	
Male	41.75±9.28	
Gender		
Female	75	26.9
Male	204	73.1
Marital status		
Married	250	89.6
Single	26	9.3
Widowed/divorced	3	1.1
Educational status		
Primary school	1	0.4
Secondary school	2	0.7
High school	46	16.5
University	230	82.4
Occupation		
Imam	145	52.0
Muezzin	52	18.6
Preacher	3	1.1
Quran instructor	79	28.3
Chronic diseases		
Cardiovascular diseases	10	3.6
Diabetes	11	3.9
Respiratory system diseases	17	6.1
Kidney diseases	1	3.2
Musculoskeletal system diseases	9	0.4
Other (MS, epilepsy, FMF, Ht, migraine, hearing defect)	12	4.3
Having a relative with a history of organ transplant		
Yes	15	5.4
No	264	94.6
Having a relative waiting for an organ transplant		
Yes	19	6.8
No	260	93.2
Total	279	100.0

Of the religious workers, 30.8% considered their knowledge about organ donation sufficient. The main sources of information about organ donation were television-radio (52.7%) and the Internet (39.1%). Only 12.2% of the religious workers stated that they received training on the subject. While 48.4% of the respondents knew that there is a law on organ donation in Turkey, 90% were aware of the fatwa issued by the Presidency of Religious Affairs on the religious appropriateness of organ donation. When asked about which organs can be transplanted, the participants most commonly answered kidneys (86.7%), heart (63.1%), bone marrow (62%), and liver (61.3%). When asked if organ donation is religiously appropriate, 64.5% of the participants thought that it is. Additionally, 52% of the participants believed that religious workers should promote organ donation. The rate of participants who were asked for guidance on organ donation by the public frequently was 5.7%, while the rate of those who were never asked for guidance on the issue was 36.6%. Moreover, 33.3% of the religious workers stated that they did not advise the public about organ donation (Table 2). The rate of males who considered their knowledge about organ donation adequate was significantly higher than those who considered their knowledge partially adequate or inadequate ($X^2=14.717$, $p<0.001$). Those over 40 years of age and who considered their knowledge about organ donation sufficient were significantly more likely to have received training on organ donation ($X^2=8.673$, $p=0.003$ and $X^2=20.845$, $p<0.001$, respectively).

Table 2. Knowledge of Religious Workers About Organ Donation

Knowledge about organ donation	Number	%
Self-assessment of knowledge about organ donation		
Adequate	86	30.8
Partially Adequate	147	52.7
Inadequate	46	16.5
Assessment of knowledge about organ donation of other religious workers		
Adequate	74	26.5
Partially Adequate	153	54.8
Inadequate	52	18.6
Received education about organ donation		
Yes	34	12.2
No	245	87.8
Assessment of the organ donation rate in Turkey		
Adequate	21	7.5
Inadequate	172	61.6
Undecided	86	30.8
Knowing that there is a law on organ donation in Turkey		
Yes	135	48.4
No	95	34.1
Undecided	49	17.6
Knowing about the fatwa of the Presidency of Religious Affairs on organ donation		
Yes	251	90.0
No	18	6.5
Undecided	10	3.6
Believing that organ donation is appropriate according to Islam		
Yes	180	64.5
No	20	7.2
Undecided	79	28.3
Believing that religious workers should promote organ donation		
Yes	145	52.0
No	32	11.5
Undecided	102	36.6
Frequency of being asked for guidance by the public about organ donation		
Often	16	5.7
Rarely	161	57.7
Never	102	36.6
Frequency of providing guidance to the public about organ donation		
Never	93	33.3
Sometimes	78	28.0
Often	22	7.9
When asked	86	30.8
Source of information about organ donation*		
TV or radio	147	52.7
Internet	109	39.1
Social circle or friends	86	30.8
Medical staff	85	30.5
Books or magazines	57	20.4
School	29	10.4
Tissues and organs the participant thinks can be transplanted*		
Kidneys	242	86.7
Heart	176	63.1
Liver	171	61.3
Bone marrow	173	62.0
Face or scalp	107	38.4
Cornea	105	37.6
Heart valve	93	33.3
Lung	81	29.0
Skin	72	25.8
Arm or leg	62	22.2
Muscle tissue	32	11.5
Uterus	28	10.0
Pancreas	28	10.0
Bone	25	9.0
Cartilage	19	6.8
Total	279	100.0

*More than one option was selected

Only 1.4% of the participants had donated their organs and 25.8% were considering organ donation in the future. Of the participants, 32.6% stated that they would donate the organs of a relative in the event of their brain death if they had the right to make the decision, and 60.2% stated that they would donate organs to a relative. While 89.2% of the religious workers thought that organ donation is necessary for humanity, 71.3% stated that they would accept organ donation if they needed a transplant. The most prominent reasons for not wanting to donate organs were not wanting to intervene with one's body/corpse (35.4%) and not considering the issue of organ donation before (33.8%). The leading reasons for wanting to donate organs was the thought of saving lives (84.2%) and that it is a good deed (56.6%) (Table 3).

Table 3. Attitudes of Religious Workers About Organ Donation and their Reasons

Attitudes about organ donation and reasons	Number	%
Having donated organs before		
Yes	4	1.4
No	275	98.6
Desiring to donate organs in the future		
Yes	76	27.2
No	65	23.3
Undecided	138	49.5
Having donated blood before		
Yes	163	58.4
No	116	41.6
Would donate the organs of a relative if they are brain dead		
Yes	91	32.6
No	54	19.4
Undecided	134	48.0
Would donate own organs to a relative if needed		
Yes	168	60.2
No	31	11.1
Undecided	80	28.7
Has an organ donor in their family		
Yes	16	5.7
No	263	94.3
Believing organ donation is necessary for humanity		
Yes	249	89.2
No	27	9.7
Undecided	3	1.1
Would accept organ donations for self if needed		
Yes	199	71.3
No	22	7.9
Undecided	58	20.8
Reasons for not wanting to donate organs* (n=65)		
I don't want one's body/corpse to be interfered with	23	35.4
I did not consider the issue of organ donation before	22	33.8
I think organ donation is religiously inappropriate	17	26.2
I am afraid of getting my tissues and organs removed before death	10	15.4
I am afraid my tissues and organs could be given to people I do not want	7	10.8
I am afraid my tissues and organs could be used commercially	9	13.8
I am afraid my own life may be at risk	7	10.8
I am not eligible due to illness	8	12.8
I don't trust doctors	6	9.2
Reasons for wanting to donate organs* (n=76)		
The thought of saving lives	64	84.2
The thought that it is a good deed	43	56.6
The thought that I may need organ transplants in the future	39	51.3
Having someone in one's life waiting for an organ transplant	20	26.3
Total	279	100.0

*More than one option was selected

The effects of some characteristics of the participants on their religious approval of organ donation are presented in Table 4. Religious workers who were over the age of 40, who had sufficient knowledge about organ donation, and who knew about the fatwa on organ donation were significantly more likely to think that organ donation is religiously appropriate (p<0.05) (Table 4). Independent variables affecting the religious appropriateness of organ donation were analyzed by binary logistic regression. As a result of the analysis, being over 40 years of age and knowing the fatwa on organ donation were determined as factors affecting the religious appropriateness of organ donation (Table 5)

Those who thought that organ donation is appropriate according to Islam and those who had relatives waiting for organ transplantation were significantly more likely to want to donate their organs in the future (X²=13.284, p<0.001 and X²=4.168, p=0.041, respectively). Independent variables affecting future organ donation were analyzed by binary logistic regression. As a result of the analysis, the effect of thinking that organ donation is religiously appropriate and having a relative waiting for organ transplantation were not found to be significant (Table 6)

The rate of accepting organ donation if needed was significantly higher among those who thought that organ donation is religiously appropriate (84.4%) compared to those who thought that it is not religiously appropriate or were undecided (47.5%) (X²=42.684, p< 0.001). The rate of accepting organ donation in the case of need was also significantly higher among those who were considering organ donation in the future (93.4%) compared to those who were not considering organ donation in the future or were undecided (63.1%) (X²=24.933, p< 0.001). Independent variables affecting the acceptance of organ donation in case of need were analyzed by binary logistic regression. As a result of the analysis, it was found that thinking that organ donation is religiously appropriate is an effective factor (Table 7). It was found that 41.5% of those who did not want to donate their organs and 16.7% of those who did not consider organ donation religiously appropriate stated that they would accept organ donation if they needed it.

When asked about how organ donation can be promoted, 174 participants (62.4%) answered that education should be provided in schools, while others stated that the media, health workers, and religious workers should pay more attention to the issue (147, 52.7%; 132, 47.3%; and 120, 43%, respectively).

Table 4. Effects of Some Characteristics of the Participants on their Thoughts about the Religious Appropriateness of Organ Donation

Some Characteristics and Attitudes of the Participants	Considers organ donation religiously appropriate n (%)	Does not consider organ donation religiously appropriate Undecided n (%)	Total (n)	χ^2	p value
Gender					
Female	48 (64.0)	27 (36.0)	75	0.012	0.913
Male	132 (64.7)	72 (35.3)	204		
Age					
Under 40 years	69 (56.1)	54 (43.9)	123	6.810	0.009
40 years and older	111 (71.2)	45 (28.8)	156		
Marital status					
Married	163 (65.2)	87 (34.8)	250	0.491	0.483
Single/widowed	17 (58.6)	12 (41.4)	29		
Chronic diseases					
Yes	37 (62.7)	22 (37.3)	59	0.106	0.744
No	143 (65.0)	77 (35.0)	220		
Educational status					
University	31(63.3)	18(36.7)	49	0.041	0.840
High school and under	149(25.7)	81(35.2)	230		
Received education about organ donation					
Yes	22 (64.7)	12 (35.3)	34	0.001	0.980
No	158 (64.5)	87 (35.5)	245		
Self-assessment of knowledge about organ donation					
Adequate	64 (74.4)	22 (25.6)	86	5.325	0.021
Partially adequate/inadequate	116 (60.1)	77 (39.9)	193		
Knowing about the fatwa on organ donation					
Yes	169 (67.3)	82 (32.7)	251	8.654	0.003
No/undecided	11 (39.3)	17 (60.7)	28		
Knowing that there is a law about organ donation in Turkey					
Yes	94 (70.1)	40 (29.9)	134	3.574	0.059
No/undecided	86 (59.3)	59 (40.7)	145		
Having a relative with a history of organ transplant					
Yes	9 (64.3)	5 (35.7)	14		
No	171 (64.5)	94 (35.5)	265		1.000*
Having a relative waiting for an organ transplant					
Yes	15 (78.9)	4 (21.1)	19	1.855	0.173
No	165 (63.5)	95 (36.5)	260		
Having donated blood before					
Yes	111 (68.1)	52 (31.9)	163	2.197	0.138
No	69 (59.5)	47(40.5)	116		
Total	180(64.5)	99(35.5)	279		

* Fisher's exact test

Table 5. Logistic Regression Analysis of Variables Related to Thinking Organ Donation is Religiously Appropriate

Independent Variables Included in the Model	OR	95% CI	p
40 years and older	1.83	1.10-3.05	0.019
Who had sufficient knowledge about organ donation	1.69	0.95-3.02	0.074
Who knew about the fatwa on organ donation were	2.76	1.22-6.27	0.015

Nagelkerke $R^2=0.084$, Hosmer and Lemeshow test: $\chi^2(3)= 1.311$ $p=0.727$, OR: Odds ratio, CI: confidence interval

Table 6. Logistic Regression Analysis of Variables Related to Desiring to donate organs in the future

Independent Variables Included in the Model	OR	95% CI	p
Thinking that organ donation is religiously appropriate	1.37	0.84-2.24	0.213
Having a relative waiting for an organ transplant	1.04	0.41-2.66	0.931

Nagelkerke $R^2=0.008$, Hosmer and Lemeshow test: $\chi^2(2)= 0.986$ $p=0.611$, OR: Odds ratio, CI: confidence interval

Table 7. Logistic Regression Analysis of Variables Related to Acceptance of Organ Donation in case of need

Independent Variables Included in the Model	OR	95% CI	P
Thinking that organ donation is religiously appropriate	6.27	3.54-11.10	<0.001
Wanting to be an organ donor in the future	0.69	0.39-1.22	0.202

Nagelkerke R²=0.206, Hosmer and Lemeshow test: X²(2)= 3.267 p=0.195, OR: Odds ratio, CI: confidence interval

DISCUSSION

This study evaluated the knowledge, attitudes, and behaviors of religious workers in Erzincan Province about organ donation. The study included 279 people participants. Only 30.8% of the religious workers considered their level of knowledge about organ donation and transplantation sufficient, and 26.5% considered their colleagues' level of knowledge about organ donation and transplantation sufficient. In a study conducted with religious workers in İstanbul, 22.5% of the participants thought their level of knowledge on the issue was adequate, while only 10% thought their colleagues had adequate knowledge.^[16] It is an important problem that religious workers, who guide society, consider their level of knowledge on organ donation insufficient.

Most of the participants stated that their primary sources of information on organ donation were television-radio (52.7%) or the Internet (39.1%). Similarly, other studies on the issue found that television-radio and the Internet were the primary sources of information on organ donation for religious workers and the general public.^[17,18] Since television and the Internet are popular sources of information, it is necessary to use them more effectively to deliver accurate information to individuals. In our study, the rate of religious workers who received training on organ donation was low (12.2%). The proportion of religious workers who stated that they gained information on the issue during their schooling was also quite low (10.4%). In a meta-analysis of studies conducted with religious workers and students of theology faculties in Turkey, it was determined that only 20% of the participants indicated that they gained information on organ donation from school and there was no separate course on organ transplantation and donation in the education programs of these faculties.^[19] Institutional training for religious workers may help overcome the lack of knowledge about organ donation and transplantation. In addition, including these topics in the programs of theology faculties can ensure that future religious workers have more knowledge on the issue.

The most common answers to the question of which organs and tissues can be transplanted were kidneys (86.7%), heart (63.1%), bone marrow (62%), and liver (61.3%). In a study conducted by Khalife et al. in Saudi Arabia, most participants answered a similar question with kidneys, liver, and heart.^[20] The study of Doğan et al., conducted with university students, also had similar results.^[21] These results are thought to be

due to the kidneys, liver, and heart being the most frequently transplanted organs and receiving more media coverage.

Most of the participants were rarely (57.7%) or never (36.6%) asked to provide guidance regarding organ donation. Moreover, 33.3% of the religious workers stated that they did not advise the public about it. In a study conducted by Tarhan et al. with religious workers, 70% of the participants stated that they were asked to provide guidance regarding organ donation and 42.5% stated that they never spoke to the public about its.^[16] Of the participants in the current study, 52% thought that religious workers should promote organ donation. This rate is lower than the results of a study conducted in Kayseri with religious workers (77.6%).^[22] In order to increase organ donation, it is important to sensitize both society and religious workers about organ transplantation.

Of our participants, 90% knew about the fatwa of the Presidency of Religious Affairs that organ donation and transplantation is appropriate according to Islam. This rate is much higher than the results of the study conducted by Özsaydı et al. in Kayseri with religious workers (51.5%).^[22] One study conducted with mosque imams in Kahramanmaraş reached a similar result to that herein (85.4%).^[23]

In our study, 64.5% of the participants thought that organ donation is religiously appropriate. Similar studies conducted in Turkey reported that 60.5% to 92.5% of religious workers think that organ donation is religiously appropriate.^[16,24-27] The rate of religious officials finding organ donation appropriate according to Islam is 1.83 times higher among those over the age of 40 and 2.76 times higher among those who know that there is a fatwa on the appropriateness of organ donation. In studies conducted among religious officials in Kayseri and university students, it was observed that age was not effective in the acceptance of organ donation according to Islam.^[22,28] In a study conducted with medical students in Iran, it was found that students who knew about the fatwa on organ donation were more likely to donate organs than students who were not.^[29] Another study conducted with university students in Saudi Arabia determined that knowing that Islam allows organ donation increased their willingness to donate their organs.^[30] These findings suggest that institutions responsible for religious affairs and training informing religious workers about the religious appropriateness of organ donation can make a significant contribution to increasing organ donation.

Although 89.2% of our participants thought that organ donation was necessary for humanity, the rate of organ donors among the participants was quite low (1.4%). Studies conducted with religious workers in Yozgat (2.9%) and Kahramanmaraş (1.4%) found similar low donation rates.^[17,27] A study conducted with the general population of Burdur Province had a higher organ donation rate among its participants (14.8%).^[31] The fact that the majority of religious workers think that organ donation is necessary for humanity and know of the fatwa that organ donation is appropriate according to Islam while the rate of organ donor among them

is low shows that their attitudes regarding organ donation are not reflected in their behavior. Identifying and eliminating the reasons for this discrepancy between attitudes and behavior may contribute to an increase in organ donation. A high organ donation rate among religious workers can lead to higher organ donation rates among other segments of society.

Only 25.8% of our participants stated that they would like to donate their organs in the future. This rate was higher (51.5%) in a study conducted in Isparta and lower (14.1%) in a study conducted in Kahramanmaraş.^[25,27] In a study conducted by Dağcıoğlu et al. with family physicians, 36.9% of the participants considered donating their organs in the future.^[32] Although not found as effective factors in the logistic regression analysis, those who think that organ donation is in accordance with their religious beliefs and those who have relatives waiting for organ transplantation have a higher rate of wanting to donate organs in the future. Similarly, in a study conducted by Akbuğa and Sürme with university students, those with relatives waiting for organ transplantation were more likely to consider donating their organs in the future.^[33] Since those who think that organ donation is appropriate according to Islam are more likely to donate their organs in the future, it is necessary to eliminate the hesitations of religious workers on this issue. The results showed that having a relative in need of an organ transplant helps people notice the hardships of people needing organ transplants and contributes to raising awareness. Thus, sharing the stories of patients waiting for or receiving organ transplants through the media will contribute to raising awareness.

In the present study, 32.6% of the participants said that they would donate the organs of a relative in the event of their brain death if they had the right to make the decision, and 60.2% stated that they would donate organs to a relative. Similarly, in a nationwide study conducted in Turkey with religious workers, 52.9% of the participants stated that they would donate the organs of a relative after their death, while 81.6% stated that they would donate organs to a relative.^[24] The finding that participants did not want to donate their relatives' organs while they are willing to donate their own organs to their relatives explains the high number of donations from living donors in Turkey.

Of our participants, 71.3% stated that they would accept organ donation if they needed an organ transplant. Acceptance of organ donation is 6.27 times higher among those who think that organ donation is in accordance with their religious beliefs. This shows us the importance of thinking that organ donation is religiously appropriate for acceptance. This positive effect will be enhanced by having accurate and sufficient religious knowledge on the subject. In a similar study conducted in Yozgat with religious workers, the rate of participants who would accept organ donation for themselves was slightly higher, at 85%.^[17] A notable finding of the current study was that 41.5% of the participants who were reluctant to donate their organs and 16.7% of those who did not consider

organ donation religiously appropriate stated that they would accept organ donation if they needed a transplant. There is a need for further studies examining the reasons underlying this result.

The foremost reasons for not wanting to donate organs among our participants were not wanting to intervene with one's body/corpse (35.4%), not considering the issue of organ donation before (33.8%), and thinking that organ donation is not religiously appropriate (26.2%). Similarly, in a study conducted in Isparta with religious workers, not considering the issue of organ donation before and not wanting to intervene with one's body/corpse were the prominent reasons for not wanting to donate organs.^[25] A study conducted by Tarzi et al. with Syrian university students reported that the fear of dismemberment of their bodies was a major obstacle to organ donation among the participants.^[34] This suggests that concerns about intervention with one's body/corpse lead to reluctance about being a cadaveric donor. It is also noteworthy that the second most prominent reason for not considering to be an organ donor was a lack of coverage of the issue. More work should be done to inform and sensitize both the public and clergy about organ donation.

The most common reasons for not wanting to donate one's organs were found to be the thought of saving lives (84.2%), the thought that it is a good deed (56.6%), and the thought that one may need an organ transplant in the future themselves (51.3%). Similarly, other studies conducted with religious workers and the general population found that the thought of saving lives is the foremost reason for considering organ donation.^[22,35]

In our study, religious reasons were shown as the motivation for organ donation by 43 (56.6%) of the religious workers who were considering organ donation. In a similar study conducted in Kayseri, a lower rate (13%) of participants had religious reasons to want to donate their organs than in our study.^[22] The finding of our study that religious beliefs have both a negative effect and a motivating effect on organ donation is noteworthy. In a qualitative study on the effect of religion on organ donation, it was suggested that although negative effects related to religion were observed in the organ donation process, these seemed to be caused not by religion, but by inexperience in organ donation and transplantation and a lack of religious knowledge on this subject.^[36] These findings suggest that religious workers having sufficient and accurate religious and medical information may lead to them viewing organ donation more positively.

When asked about how organ donation can be promoted, 174 participants (62.4%) answered that education should be provided in schools, while others stated that the media, health workers, and religious workers should pay more attention to the issue (147, 52.7%; 132, 47.3%; and 120, 43%, respectively). In a study conducted by Kaymak and Aksoy with religious workers in Bolu, similar recommendations were made to increase organ donation.^[37]

CONCLUSION

In this study, it was determined that religious workers had low knowledge and training on organ donation. Training on organ donation and transplantation should be provided to religious workers to alleviate their lack of both religious and medical knowledge.

Although the majority of the religious workers thought that organ donation is religiously appropriate, knew about the fatwa of the Presidency of Religious Affairs on the subject, and thought that organ donation is necessary for humanity, both their rates of organ donation and wanting to donate organs in the future were low. This study has shown that although religious workers have a positive attitude towards organ donation, they are unable to transform this attitude into action. Further research is needed to determine why religious workers do not donate organs despite their positive attitudes.

In our study, the main reasons for the negative attitudes towards organ donation were found to be the impairment of bodily integrity, the lack of coverage of the issue, and the belief that it was not religiously appropriate. Training should be planned by considering the reasons for the negative attitudes of religious workers. Religious beliefs were also found to have a motivating effect on the religious workers who were considering organ donation. Studies on the reasons for these attitudes can contribute to changing the negative attitudes of religious workers toward organ donation. Furthermore, qualitative research involving extensive interviews with religious workers can provide more detailed information about the reasons for these attitudes.

In this study, it was observed that the religious workers were rarely asked questions by the public about organ donation and they rarely informed the public on this issue. In order to increase the motivation of both religious workers and the public regarding organ and tissue donation, the Ministry of Health and the Presidency of Religious Affairs should address the issue more frequently and ensure that it is on the agenda of both the public and religious workers.

It was found that the religious workers who believed that organ donation is appropriate according to Islam and who had a relative waiting for an organ transplant were more likely to want to donate their organs in the future. The Directorate of Religious Affairs should ensure that the public is informed by religious workers that organ donation and transplantation are appropriate according to Islam. Efforts should be made to promote empathy with organ recipients, such as sharing the experiences of those who have gone through the organ transplantation process.

Limitations

Since the study included a small portion of religious workers, the results cannot be generalized to all religious workers. In the study, a structured questionnaire was used to question the level of knowledge and perspectives of the religious workers regarding organ donation. Since the data on their knowledge was self-reported, it may not reflect their actual knowledge levels.

ETHICAL DECLARATIONS

Ethics Committee Approval: The study was carried out with the permission of Ethics Committee of Istanbul Okan University (Date: 24.08.2022, Decision No:157/23)

Informed Consent: Written permission was obtained from the Provincial Mufti's Office for the study.

Referee Evaluation Process: Externally peer-reviewed.

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