

## Emergency Aid and Disaster Management Students' Knowledge, Attitudes, and Awareness about Organ Donation

Acil Yardım ve Afet Yönetimi Öğrencilerinin Organ Bağışı Hakkında Bilgi, Tutum ve Farkındalıkları

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### ABSTRACT

Despite many developments in the field of surgery and medical technology today, the desired level has not yet been reached in the number of transplant patients for organ donation. This descriptive study aims to evaluate the knowledge, attitudes, and awareness of university students about organ donation. The universe of this cross-sectional study consists of 200 students studying in the Emergency Aid and Disaster Management and Social Work department of a state university. A questionnaire consisting of 32 questions was used, including the socio-demographic characteristics of the students and their awareness, knowledge, and willingness about organ donation. Pearson chi-square test was used to evaluate the data. Only 10.0% of students received information about organ donation. While no students donate organs, 57.5% want to donate their organs in the future. 73.0% of the students prefer to donate their organs to save the lives of others. 22.0% of the students know that there is legal regulation regarding organ donation. The willingness of female students to donate organs in the future (64.9%) is higher than male students (43.5%) ( $p < 0.05$ ). The state of knowing that someone who has brain death will come back to life is higher in female students (26.0) compared to male students (8.7) ( $p < 0.05$ ). These findings show that the subject of organ donation should be included in the education and training curriculum and seminars should be given in certain periods to increase the awareness, knowledge, and willingness of students about organ donation.

**Keywords:** Attitudes, Knowledge, Organ Donation, Students

### ÖZ

Günümüzde cerrahi alanda ve tıbbi teknolojiye yaşanan birçok gelişmeye rağmen organ bağışı konusunda, nakil yapılan hasta sayısında henüz istenilen düzeye ulaşamamıştır. Bu tanımlayıcı çalışma üniversite öğrencilerinin organ bağışı hakkında bilgi tutum ve farkındalıklarını değerlendirmeyi amaçlamaktadır. Kesitsel tipteki bu araştırmanın evrenini bir devlet üniversitesinin Acil Yardım ve Afet Yönetimi ve Sosyal Hizmet bölümünde okuyan 200 öğrenci oluşturmaktadır. Öğrencilerin sosyo-demografik özelliklerini ve organ bağışıyla ilgili farkındalık, bilgi ve istekliliklerini içeren 32 sorudan oluşan anket formu kullanılmıştır. Verilerin değerlendirilmesinde Pearson ki-kare testi kullanılmıştır. Öğrencilerin yalnızca %10,0'ı organ bağışıyla ilgili bilgi almıştır. Hiçbir öğrenci organ bağışlamazken, %57,5'i gelecekte organlarını bağışlamak istemektedir. Öğrencilerin %73,0'ı başkalarının hayatını kurtarmak için organlarını bağışlamayı tercih etmektedir. Öğrencilerin %22,0'ı organ bağışıyla ilgili yasal bir düzenlemenin olduğunu bilmektedir. Kız öğrencilerin gelecekte organ bağışlama istekliliği (%64,9) erkek öğrencilere (%43,5) göre yüksektir. Beyin ölümü gerçekleşmiş birinin tekrar hayata dönesi sorusunu bilme durumu erkek öğrencilere (8,7) kıyasla kız öğrencilerde (26,0) daha yüksektir. Bu bulgular öğrencilerin organ bağışıyla ilgili farkındalık bilgi ve istekliliğini artırmak için eğitim ve öğretim müfredatına organ bağışı konusunun dahil edilmesi ve belli dönemlerde seminerler verilmesi gerekliliğini göstermektedir.

**Anahtar Kelimeler:** Bilgi, Tutum, Organ Bağışı, Öğrenciler

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## INTRODUCTION

Organ transplantation is a successful treatment method against irreversible vital organ failures, provides a second chance to sick individuals, and also increases the quality of life of patients with end-stage organ failure.<sup>1</sup> Despite many developments in the field of surgery and medical technology today, the desired level has not been reached yet in the number of transplant patients in organ donation.<sup>2</sup> The problem of organ failure is increasing all over the world, and many people who are waiting for an organ transplant die in the process of waiting for an organ. According to the World Health Organization (WHO), 104.234 people are waiting for an organ transplant and every day 17 people die while waiting for an organ transplant.<sup>3</sup> The number of tissue-organ transplants performed in the United States in 2018 is 36,528. The number of tissue-organ transplants in Europe in 2018 was 34,221. The number of patients waiting for tissue-organ transplantation in Türkiye in 2019 is 31,764, but the number of tissue-organ transplants performed is 10,720.<sup>4</sup> Today, worldwide demand for organ transplants is increasing, with the number of people on the waiting list for transplants increasing.<sup>5</sup> Although there are many live donor transplants all over the world, cadaveric transplants are insufficient.<sup>6</sup> Eliminating the deficiency in organ donation is only possible by increasing the number of cadaveric donors. The annual cadaveric organ donation rate in Turkey is 4 per million. This rate is 28 per million in Belgium, 25 per million in France, and 35 per million in Spain, the world leader.<sup>7,8</sup> In Turkey, the number of cadaver donors per million in 2019 was determined as 7.54.<sup>9</sup> Although the number of organ donors in Türkiye increased from 1997 to 2019, it remained below the expected number or rate.<sup>9</sup> According to the Irodat database, the actual deceased organ donors rate in 2022 (pmp) was 44.50% in the USA, 10.42% in Israel, 10.34% in Germany, 6.60% in Greece, 21.08% in the UK, and 3.40% in Türkiye.<sup>10</sup> In Türkiye, it is difficult to meet the increasing need for organ transplantation

like other countries. According to the 2022 data of the Ministry of Health, 25.185 people are registered on the organ transplant waiting list (20.875 kidney transplants, 1716 liver transplants, 1.291 corneal transplants, 952 heart transplants, 283 pancreas transplants, and 68 lung transplants).<sup>11</sup> Every year, 6000-7000 patients are lost due to organ transplantation, and there is a serious imbalance between organ demand and organ supply.<sup>12</sup>

Organ donation is recorded in hospitals and various institutions by filling out special forms. The healthy donor is registered by filling out these forms and an organ donation card is given to the donor in return. The donor indicates which organ or organs he/she donated in this donation record. The donor can donate one or all of his organs. If the donor wants to give up the donation, he/she can cancel the organ donation by applying to the relevant institution.<sup>13,14</sup>

There is a lot of misinformation and beliefs about organ donation. Reasons for insufficient organ donation are: organ donation is not appropriate in terms of religion, the level of knowledge about organ donation is low, the desire not to interfere with body integrity, and the thought of disrespecting the funeral.<sup>15,16</sup> In particular, the use of religious, philosophical, negative thoughts or religious beliefs as an excuse for society is one of the undeniable problems of organ donation.<sup>17</sup> In Türkiye, the Presidency of Religious Affairs has defined organ donation as “the greatest help one can do to another”.<sup>18</sup> In addition, it is stated in the decision numbered 396 of the High Council of Religious Affairs that there is no objection to organ donation in terms of the religion of Islam.<sup>19</sup> First of all, determining the wrong attitudes of society about organ donation and then developing awareness programs for these wrong attitudes helps individuals to display positive attitudes toward organ donation.<sup>20,21</sup> To the best of our knowledge, no study has been found that evaluates the attitudes of the students of the Emergency

Aid and Disaster Management (EDM) department towards organ donation. University students, who will form the

society of the future, have an important role in increasing organ donation.

## MATERIAL AND METHODS

### Study Type and Purpose

This descriptive-cross-sectional study aims to determine the knowledge, attitudes, and behaviors of university students about organ donation.

### Participants

This study was carried out between 31.01.2023 and 28.02.2023 in the Department of Emergency Aid Disaster Management (EDM) and Social Work (SW) within a state university. 200 students who were accepted to the study were included in the study. Adequate sample size in the study was calculated with sample size calculator software.<sup>22</sup>

### Data Collection Tool

The data were obtained by using the questionnaire form used by Akbulut et al.<sup>23</sup> Permission to use the questionnaire form was obtained from Akbulut. The questionnaire form consists of 32 questions and two parts. In the first part, there are 12 questions about sociodemographic characteristics, and in the second part, there are 20 questions about organ donation awareness, knowledge, and attitude.

### Ethics committee approval

Approval was obtained from the Selcuk University Faculty of Medicine Local Ethics

Committee (09.12.2022/483) to conduct the study. Institutional permission was obtained by the school where the research conducted (E-92847320-300-573332, 15.12.2022). Students were informed about the purpose of the research by entering the classes on the days and hours determined by the School of Applied Sciences administration. Verbal consent was obtained from the students who agreed to participate in the study. A questionnaire form was distributed to the students who were in the classroom on the day and time of the research and who agreed to participate in the research. Students were asked to fill in the questionnaires at the same time, and the completed questionnaires were taken back from the students. It took an average of 5-10 minutes to fill out the questionnaires.

### Data analysis

Data analysis was done in IBM SPSS Statistics v26.0 (IBM Corp. Armonk United States of America). Frequency and percentage descriptive statistics were used to analyze the data. The quantitative variables were expressed as mean. Pearson chi-square test was used to compare qualitative variables, with  $p \leq 0.05$  considered statistically significant.<sup>24</sup>

## RESULTS AND DISCUSSION

The sample of this cross-sectional survey study consists of 131 (65.5%) girls and 69 (34.5%) boys, aged between 18-28 (mean: 21). The mean body mass index of male students was  $22.75 \pm 2.78$  and the body mass index of female students was  $21.81 \pm 3.20$  ( $p < 0.05$ ). More than half of the students ( $n=148$ , 74.0%) are Emergency Aid and Disaster Management students. While the fewest students are in the second education

level ( $n=14$ ), most are in the fourth education level ( $n=87$ ). 95.5% of students live in dormitories. 57.3% of the students stated that they chose the department voluntarily. When the residence places of the students' families are examined, 43.5% live in the city center. 29.5% of the students live in the Central Anatolia region and 6.5% live in the Marmara region. 73.0 of the students do not smoke and 92.5% do not use alcohol (Table 1).

While 48.5% (n=97) of the students received information about organ donation, 10.0% (n=20) did not. While the source of information obtained by 95.5% (n=191) of the students is unknown, 2.0% (n=4) from the internet, 1.5% (n=3) from school, and 1.0% (n=2) received information from the hospital. The students' knowledge of organs that can be donated legally are as follows: 136 students' kidney, 100 students' hearts, 102 students' liver, 68 students' lungs, 68 students' lungs, 38 students' eyes, 34 students' pancreas, 73 students' all organs. Unexpectedly, no student has ever donated an organ (2 students did not respond). However, more than half of the students (n=226, 57.5%) want to donate their organs in the future. 35.5% of the students are undecided about donating their organs in the future. While 12.0% of the students who refuse organ donation have no reason, 8.5% think that their bodily integrity will deteriorate. The reasons for refusal of organ donation are as follows: 12.0% have no reason, 8.5% think that body integrity will be impaired, 6.0% do not trust health institutions, and 5.0% are organs for commercial purposes. Because they think it can be used, 4.0% because of religious beliefs (Table 1).

The reasons for organ donation of the students are as follows: 73.0% of them are to save the lives of others, 39.5% because relatives need organ transplants, 39.5% of relatives need organ transplants, 32% of the organs will continue to live in others, 28.0% as social responsibility. According to the research, 50.5% of the students' views on organ donation cannot be influenced by religion or opinion leaders, while 24.0 of them are partially affected. The majority of students (68.5%) do not know that there is a law or regulation regarding organ donation in Türkiye. In addition, 9.0% think that there is no such law or regulation. 75.5% of the

students have no information about the institution to apply for organ donation. While 24.0% of the students know that the Presidency of Religious Affairs has a fatwa on organ donation, 72.0% do not. While 50.0% of the students think that organ donation is in accordance with Islamic rules, 45.5% do not know about it. While 22.5% of the students stated that they had no idea about the ideal method for organ donation, 28.5% stated that organ donation with living donors was the ideal method. While only 20.0% of the students stated that brain death is reversible, 13.5% stated that they were not sure about it and 66.5% stated that a person who had brain death would not come back to life. Relatives of 8.5% of the students are registered on the organ waiting list. When the organ donation status of a relative with brain death was examined, 37.0% of the students stated that they would approve organ donation, while 38.0% were undecided. If necessary, 62.5% of the students are ready to donate their organs to a relative. While more than half of the students were ready to donate organs to their relatives in an emergency, 38.0% accepted organ donation from their relatives. The student's views on increasing the number of organ donations are as follows: Giving financial aid to organ donors (72.5%), Providing some social opportunities to organ donors (69.5%), Organizing posters, information and campaigns about organ donation in both state and private institutions (59.5%), Sermons on organ donation in mosques and foundations (59.5%), Organizing conferences on organ donation at universities in certain periods (68.5%), Reduction of sentences in case of organ donation of prison inmates (34.0%), If a person donates an organ, granting citizenship to their relatives (21.0%). The knowledge, attitudes, and behaviors of the students about organ donation are summarized in Table 1.

**Table 1. Socio-Demographic Characteristics of Students and Their Knowledge and Attitudes Towards Organ Donation**

Gender	Number	%
Male	69	34.5
Female	131	65.5

**Table 1. (Continued). Socio-Demographic Characteristics of Students and Their Knowledge and Attitudes Towards Organ Donation**

<u>Age</u>		
21-23	116	60.7
24-30	75	39.3
<u>Department</u>		
Emergency aid and disaster management	148	74.0
Social work	52	26.0
<u>Living place</u>		
Dormitory	191	95.5
Student house	4	2.0
Family house	5	2.5
<u>Class</u>		
First-year	43	21.5
Second-year	14	7.0
Third-year	56	28.0
Fourth-year	87	43.5
<u>Reason for registering to the department</u>		
Voluntarily	114	57.3
Both by themselves and their family's will	33.7	67
Family's will	9.0	18
<u>Residence places of the families</u>		
City center	43.5	87
Town center	35.0	70
Village	21.5	43
<u>Longest residence area</u>		
Central Anatolia	59	29.5
Mediterranean	35	17.5
Southeastern Anatolia	27	13.5
Eastern Anatolia	24	12.0
Black Sea	23	11.5
Aegean	19	9.5
Marmara	13	6.5
<u>Alcohol</u>		
Yes	15	7.5
No	184	92.5
<u>Smoke</u>		
Yes	54	27.0
No	146	73.0
<u>Have you ever received information about organ donation?</u>		
Yes	20	10.0
No	97	48.5
Moderately	83	41.5
<u>Source of information</u>		
Hospital	2	1.0
Internet	4	2.0
School	3	1.5
No information	191	95.5
<u>Which organs can be donated legally?</u>		
Kidney	136	36.5*
Heart	100	50.0*
Liver	102	51.0*
Lung	68	34.0*
Cornea	68	34.0*
Eye	38	19.0*
Pancreas	34	17.0*
All organs	73	36.5*
<u>Have you donated any of your organs?</u>		
Yes	0	0
No	198	100.0



**Table 1. (Continued). Socio-Demographic Characteristics of Students and Their Knowledge and Attitudes Towards Organ Donation**

<u>Are you considering donating your organs in the future?</u>		
Yes	115	57.5
No	14	7.0
Undecided	71	35.5
<u>Why do you refuse organ donation?</u>		
Religious beliefs	8	4.0
Deterioration of bodily integrity after death	17	8.5
Distrust of health institutions	12	6.0
Commercial use of organs	10	5.0
The idea that organs can be removed before brain death	8	4.0
No specific reason	24	12.0
<u>If you donate your organs. What are the most important reasons?</u>		
To save the lives of others	146	73.0*
Because relatives need an organ transplant	79	39.5*
Social responsibility	56	28.0*
Continuation of organs after death	64	32.0*
Being an example to other people	9	4.5*
Because it is in line with religious beliefs and worldview	29	14.5*
<u>Do the clergy's statements in society affect your thoughts about organ donation?</u>		
Yes	31	15.5
No	121	60.5
Moderately	48	24.0
<u>Is the issue of organ donation covered by law or regulation in Türkiye?</u>		
Yes	44	22.0
No	18	9.0
No idea	137	68.5
<u>Is there a fatwa about organ donation issued by the Directorate of Religious Affairs?</u>		
Yes	48	24.0
No	7	3.5
No idea	144	72.0
<u>Do you think that organ donation and transplantation are religiously objectionable?</u>		
Yes	100	50.0
No	9	4.5
No idea	91	45.5
<u>What is the ideal type of organ transplant?</u>		
Living donor	57	28.5
Dead person	98	49.0
No idea	45	22.5
<u>Do you have information about the institution to apply for organ donation in Türkiye?</u>		
Yes	49	24.5
No	151	75.5
<u>Do you believe that a patient with brain death can come back to life?</u>		
Yes	40	20.0
No	133	66.5
No idea	27	13.5
<u>Do you have a relative waiting for an organ transplant?</u>		
Yes	17	8.5
No	166	83.0
No idea	17	8.5
<u>Would you donate the organs of your relative who had brain death?</u>		
Yes	74	37.0
No	47	23.5
No idea	76	38.0
<u>In an emergency. Would you like to donate an organ to your relative?</u>		
Yes	125	62.5
No	14	7.0

**Table 1. (Continued). Socio-Demographic Characteristics of Students and Their Knowledge and Attitudes Towards Organ Donation**

No idea	57	28.5
<u>If necessary, would you agree to have a relative become a living donor candidate for you?</u>		
Yes	76	38.0
No	42	21.0
No idea	79	39.5
<u>Factors that increase organ donation?</u>		
Giving financial aid to organ donors	145	72.5*
Providing some social opportunities to organ donors	139	69.5*
Organizing posters, information and campaigns about organ donation in both state and private institutions	119	59.5*
Giving a sermon about organ donation in mosques and foundations	119	59.5*
Organizing conferences on organ donation at universities in certain periods	137	68.5*
Reduction of sentences in case of organ donation of prison inmates	68	34.0*
If a person donates an organ, granting citizenship to their relatives	42	21.0*

\*Percentages calculated based on n=200.

A statistically significant difference was found between gender and thinking that organ donation is a sin ( $p=0.05$ ), donating organs in the future ( $p<0.01$ ), and resurrection of a brain-dead person ( $p<0.01$ ). Male students' thinking that organ donation is a sin is higher (7.2%) than female students (1.5%) ( $p<0.05$ ). Female students (64.9%) are more likely to donate their organs in the future than male students (43.5%) ( $p<0.00$ ). Knowing whether a brain-dead person will come back to life is higher in female students (26.0%) compared to male students (8.7%) ( $p<0,05$ ) (Table 2). On the contrary, no

statistical significance was found between groups in terms of getting information about organ donation ( $p=0.381$ ), being influenced by the opinions of religion and opinion leaders about organ donation ( $p=0.15$ ), knowing whether there is a legal regulation regarding organ donation ( $p=0.88$ ), knowing whether there is a fatwa about organ donation ( $p=0.44$ ), thinking that organ donation is compatible with religious beliefs ( $p=0.77$ ), ideal organ transplant type ( $p=0.74$ ), knowing where to apply for organ transplantation ( $p=0.57$ ).

**Table 2. Comparison of Information on Organ Donation by Gender**

Questions	Gender		X <sup>2</sup>	p
	Female	Male		
<u>Do you think organ donation is a sin? (n=200)</u>				
Yes	2 (1.5)	5 (7.2)	5.74	0.05
No	113 (86.3)	52 (75.4)		
Undecided	16 (12.2)	12 (17.4)		
<u>Would you like to donate your organs in the future? (n=199)</u>				
Yes	85 (64.9)	30 (43.5)	10.98	0.00
No	4 (3.8)	9 (13.0)		
Undecided	41 (31.3)	30 (43.5)		
<u>Do you believe that a patient with brain death can come back to life? (n=200)</u>				
Yes	34 (26.0)	6 (8.7)	8.93	0.01
No	79 (60.3)	54 (78.3)		
Undecided	18 (13.7)	9 (13.0)		

When the students are examined according to their education level levels. 43 students are in the first education level, 14

students are in the second education level, 56 students are in the third education level and 96 students are in the fourth education level.

Students' knowledge, attitudes, and awareness about organ donation are higher in the third and fourth education levels compared to the first and second education levels in terms of some variables (Table 3). A statistically significant difference was found between the education level and the state's support for organ donors ( $p < 0.01$ ) and knowing whether a person with brain death would come back to life ( $p < 0.05$ ) (Table 3).

On the contrary, no statistical significance was found between groups in terms of desire to donate organs in the future ( $p = 0.22$ ), being

influenced by the views of religion or opinion leaders ( $p = 0.56$ ), thinking that organ donation is a sin ( $p = 0.69$ ), knowing whether organ donation is covered by law or regulation in Türkiye ( $p = 0.51$ ), knowing whether there is a fatwa about organ donation ( $p = 0.29$ ), knowing whether organ donation is compatible with religious beliefs ( $p = 0.16$ ), knowing the ideal organ transplant type ( $p = 0.53$ ), knowing where to apply for organ transplantation ( $p = 0.37$ ) to provide some social opportunities to organ donors ( $p = 0.08$ ).

**Table 3. Comparison of Organ Donation Information by Education Level**

Questions	Educational level				X <sup>2</sup>	p
	1. n (%)	2. n (%)	3. n (%)	4. n (%)		
<u>Do you believe that a patient with brain death can come back to life?</u>						
Yes	2 (5.0)	3 (7.5)	6 (15.0)	29 (72.5)	26.87	<b>0.00</b>
No	39 (29.3)	9 (6.8)	42 (31.6)	43 (32.3)		
No idea	2 (7.4)	2 (7.4)	8 (29.6)	15 (55.6)		
<u>Factors that increase organ donation?</u>						
<u>Giving financial aid to organ donors</u>						
Yes	26 (17.9)	12 (8.3)	37 (25.5)	70 (48.3)	8.98	<b>0.02</b>
No	17 (31.5)	2 (3.7)	19 (35.2)	16 (2.96)		
<u>Providing some social opportunities to organ donors</u>						
Yes	26 (18.7)	7 (5.0)	44 (31.7)	62 (44.6)	6.6	0.08
No	17 (28.3)	7 (11.7)	12 (20.0)	24 (40.0)		
<u>Organizing posters, information, and campaigns about organ donation in both state and private institutions</u>						
Yes	23 (19.3)	7 (5.9)	39 (32.8)	50 (42.0)	3.6	0.08
No	20 (25.0)	7 (8.8)	17 (21.3)	36 (45.0)		
<u>Giving a sermon about organ donation in mosques and foundations</u>						
Yes	20 (16.8)	9 (7.6)	40 (33.6)	50 (42.0)	6.52	0.08
No	23 (28.8)	5 (6.3)	16 (20.0)	36 (45.0)		
<u>Organizing conferences on organ donation at universities in certain periods</u>						
Yes	28 (20.2)	8 (5.7)	45 (32.6)	57 (41.3)	5.19	0.15
No	15 (24.2)	6 (9.7)	11 (17.7)	30 (48.4)		
<u>Reduction of sentences in case of organ donation of prison inmates</u>						
Yes	12 (17.6)	6 (8.8)	18 (26.5)	32 (47.1)	1.61	0.65
No	31 (23.8)	8 (6.2)	37 (28.5)	54 (41.5)		
<u>If a person donates an organ. Granting citizenship to their relatives</u>						
Yes	9 (21.4)	3 (7.1)	13 (31.0)	17 (40.5)	0.24	0.97
No	34 (21.7)	11 (7.0)	43 (27.4)	69 (43.9)		

## CONCLUSION AND RECOMMENDATIONS

Diseases that can be treated with organ and tissue transplantation are one of the

important health problems of our country as well as the rest of the world. Organ donation



insufficiency is also a common problem for the whole world.<sup>25</sup> In the study. 48.5% of the students did not receive information about organ donation. This finding is lower than the finding of a study conducted in the nursing department of a university in Izmir and reported as 76.2%.<sup>26</sup> The differences in the findings may be due to the differences in the study sections. On the other hand in the study conducted by Hamed et al. with biology and medical faculty students, it was determined that 36% of the students had good knowledge about organ transplantation.<sup>27</sup> The findings of the studies in the literature may be higher or lower than the findings of this study. This may be because these studies are conducted among students from different departments such as social work and EDM.

Regarding the willingness to donate their organs this study revealed that approximately 57.5% of the students are willing to donate their organs in the future. These findings are consistent with the studies in literature. Yiğitbas and Bulut revealed that 42% of nursing and midwifery students are willing to donate organs in the future.<sup>28</sup> Contrary to this study, there are studies with a higher willingness to donate organs in the future. In the University of Nuevo Leon in Mexico the willingness to donate organs in the future was 94.7% among technical assistants and 73.9% among students.<sup>29</sup> The difference may be due to the different socio-demographic characteristics of the participants and the higher awareness level of organ donation in

the study conducted in the anatomy department.

In this study 28.5% of the students preferred organ transplantation from a living person and 49.0% from a cadaver. In a study conducted with doctors, nurses, and administrative staff in a hospital in China, 60.1% of the participants approved of organ donation from a cadaver, while only 48.5% approved of organ donation from a living person.<sup>30</sup> Both studies show that deceased donation is preferred to living donation.

It was observed that most of the EDM students had insufficient knowledge about organ donation. More than half of the students do not know where to apply for organ donation. In addition, very few of the students know that there is legal regulation regarding organ donation. For this reason, seminars can be given to students during certain periods or added to the course curriculum to increase knowledge, awareness, and willingness about organ donation.

The research has some limitations. First of all, since this study was conducted in the EDM and SW department of a state university, knowledge, attitude and willingness cannot be generalized to all students. Secondly, since this study is a descriptive-cross-sectional study a cause-effect relationship could not be established between explanatory variables and outcome variables.

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