



# Religious and Cultural Aspects of Organ Donation in the Turkish Population

Oktay Demirkiran, Suha Bozbay\*, Merve Elmaagac, and Melek Agkoç

Department of Anesthesiology and Reanimation, Cerrahpasa Medical Faculty, Istanbul University-Cerrahpasa

---

## ABSTRACT

**Objective.** Organ donation is becoming more important with increasing organ transplantation possibilities. We aimed to determine the knowledge, sociocultural view, and influences of religious belief regarding opinions on organ donation.

**Material and method.** This study was based on a self-administered survey questionnaire distributed via the Internet. The study sample was sent to Internet communication groups.

**Results.** Three hundred and seventeen participants completed the survey: 39.4% of respondents said that they would definitely donate their organs; 6.9% would only give via live donation; 51.4% were undetermined; and 2.2% absolutely refused to donate. Muslim respondents favored organ donation (36.5%) and linked it to religious reasons (6.3%). Only 4 (1.3%) of the 6 (1.9%) Muslim respondents who said they would definitely not donate did so because they felt that organ donation was religiously inappropriate. Of 22 Muslim participants (7.3%), 5 (1.6%) attributed the idea of living donation to religious reasons and 11 (3.6%) did not have enough information. The atheist respondents believed that the reason for organ donation was to do someone else a favor (88.8%). The deist and agnostic believers also ascribed to this view. In order to evaluate the effects of cultural causes, we examined regional responses and found that 85 of the 196 participants in the Marmara Region would definitely donate organs, 18 would do so only for live donations, and 5 would definitely not donate.

**Conclusion.** Religious and cultural factors affect people's decision to donate their organs. In the survey we conducted on Turkish responders, we saw that religious causes are particularly effective in organ donation.

---

**T**HE INCIDENCE of organ failure and the need for organ donation are increasing all over the world, and many patients die while waiting for donors [1]. Although the number of patients with organ failure and need for organ transplantation is increasing, organ donation is not doing so at the same rate.

Socioeconomic, educational, cultural, and religious factors affect the decision to donate. Religious beliefs have an important role in determining one's decision to donate an organ. Although religious values are known to influence attitudes toward organ donation, members of the same religion may have different opinions on the issue [2]. All religions in the world traditionally believe that saving life is more important than any other objections that may arise, and all main religions approve of organ donation [3]. Islam

allows for organ and tissue transplantation in order to save human life or vital organs [4]. Despite numerous rules in support of organ donation, there is a lack of consensus among Muslims regarding whether organ donation is compatible with Islam [5].

## MATERIALS AND METHOD

This study was based on a self-administered survey questionnaire distributed via the Internet. The study sample was

---

\*Address correspondence to Suha Bozbay, Department of Anesthesiology and Reanimation, Cerrahpasa, Istanbul, 34098  
E-mail: drshbzby@gmail.com

gathered from Internet communication groups. The questionnaire consisted of questions regarding education level, living area, religious beliefs, occupation, and attitude to organ donation.

RESULTS

Ultimately 317 participants completed the survey, of whom 242 (76.3%) of were female and 75 (23.7%) were male. Younger participants constituted the majority of the sample, with 255 (80.4%) between the ages of 18–25 years, 20 (6.3%) between 26–35 years, 23 (7.3%) between 36–45 years, 16 (5%) between 46–55 years, and 3 (0.9%) participants over the age of 56 years (Table 1).

When evaluated according to the level of education of the participants, 16 (5%) held a master’s degree, 19 (6%) had completed college, 232 (73.2%) were at university, 40 (12.6%) had completed high school, and 10 (3.2%) had a primary-school-level education (Table 1). According to their religious affiliation, 301 (95%) were Muslim, 9 (2.8%) were atheist, 4 (1.2%) were agnostic, and 3 (0.9%) were deist (Table 1). The participants were from different regions in Turkey, although the majority (62.1%) lived in the Marmara Region (Fig 1). Seven (2.2%) of the participants had previously donated organs, 32 (10.1%) were related to someone who had donated an organ, and 278 (87.7%) did not have any personal experience with organ donation. There were also 32 (10.1%) people whose relatives needed an organ transplant, but there were no participants who had needed an organ transplantation themselves at any stage of their life. Seventy-five (23.7%) of the participants reported that they had received information about organ transplantation via television, whereas 117 (36.9%) reported that they learned about it from doctors, nurses, or health workers (Fig 2).

Table 1. Characteristics of the Responders

Characteristics	%
Age (y)	80.4
18–25	80.4
26–35	6.3
36–45	7.3
46–55	5
>56	.9
Sex	
Female	76.3
Male	23.7
Education Level	
Master’s degree	5
University	73.2
College	6
High school	12.6
Primary school	3.2
Religious Affiliation	
Muslim	95
Atheist	2.8
Agnostic	1.2
Deist	.9

When asked what they thought about organ donation, 125 participants (39.4%) said they would definitely donate their organs; 22 (6.9%) were only interested in live donations; 163 (51.4%) were undetermined; and 7 (2.2%) said they would definitely not donate under any circumstances. Of those who wanted to donate, 84.8% said yes because they would be doing a favor and 15.2% cited religious purposes. Eighty-eight (27.7%) of those who refused organ donation or were undetermined about organ donation stated that they do not have enough information.

The following data were used to assess the impact of participants’ beliefs on their responses. Of the 301 Muslim participants, 110 (36.5%) favored organ donation, 19 (6.3%) of whom linked it to religious reasons. Of the 6 (1.9%) Muslim participants who said they would definitely not donate, 4 (1.3%) refused on religious grounds. This indicates that the idea of living donation is acceptable to Muslim people. Of the 22 remaining Muslim participants (7.3%), 5 (1.6%) attributed the idea of living donation to religious reasons and 11 (3.6%) did not have enough information.

There were 9 atheist participants: 8 (88.8%) believed that the reason for organ donation was to do someone a favor, whereas 1 (11.2%) supported it because of infection. The remaining 7 participants were either deist or agnostic, and all of them defined organ donation as doing someone a favor.

In order to evaluate the effects of cultural causes, we examined regional responses and found that 85 (43.3%) of the 196 participants in the Marmara Region would definitely donate an organ, 18 (9.1%) would do so only for live donations, and 5 would definitely not donate (Table 2).

DISCUSSION

Organ transplantation is a life-saving procedure for a patient in end-stage organ failure. Organ donation is a great opportunity for these patients, but organ shortages remain a major problem, and thousands of patients die while on waiting lists [6]. There are 3 sources of organs for transplantation: living donors, cadavers, and brain-dead donors. The benefit of cadaveric transplantation is that no harm comes to the living in donating the organ and multiple organs can be harvested in 1 session, helping many people [7]. Public education and religious beliefs are very important factors for organ donation. In this study we evaluated the education level, cultural effects depending on living area, and religious affiliation on the decision to donate organs.

Family refusal of potential organ donors is 40% to 50% [8]. In a Swedish Survey, 62% of people wish to donate their organs, and 39% are willing to donate the organs of family members [9]. In a Turkish study, the refusal to donate organs for religious reasons has diminished over the past 12 years (16.1% vs 26.2%) [10]. In Turkey the rate of families giving consent for transplantation on behalf brain-dead potential donors was 25% [11].

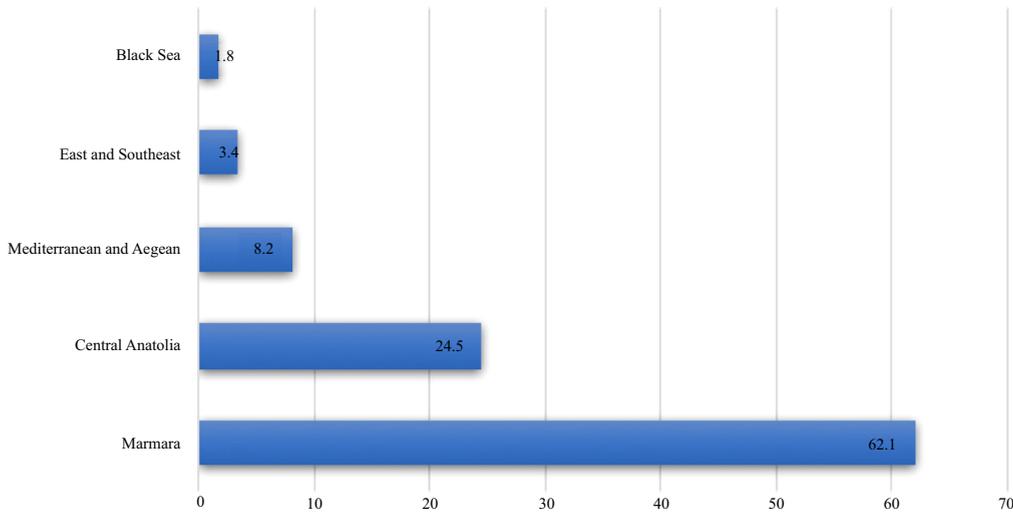


Fig 1. The regions of the responders.

Lack of knowledge, religious uncertainties, doubts and misinformation, hostility to new ideas, and distrust of medicine are the major causes of resistance to organ donation [12]. Significant relationships have been found between public opinion and previous knowledge and between an individual's acceptance of organ donation and level of education, sex, occupation, and knowledge of the subject [13]. In our study the responders were mostly female

(76.3%), the education level was mostly university (73.2%), and primary school responders comprised only 3.2% of the sample.

It is very important to promote awareness of and give out information about organ donation. The media, especially television and newspapers, and recently the Internet, are the public's major sources of information about organ donation. Medical and nursing students from Saudi Arabia and Pakistan have mentioned the mass media as their primary source of information about the subject [14]. Healthcare professionals play a very important role in providing information about organ donation to the public. It was mentioned that media campaigns increase support for organ donation [15]. In our study, the primary sources of knowledge about organ donation were the media, television, and the Internet (49%); the secondary source was healthcare professionals.

Studies have found a significant relationship between acceptance of organ donation and level of education, sex, occupation, and knowledge of the subject [13]. Oluyombo and et al [16] showed that an individual's level of knowledge is significantly associated with his or her faculty of study, but not with age, sex, ethnicity, or religion. This finding is in contrast with other studies.

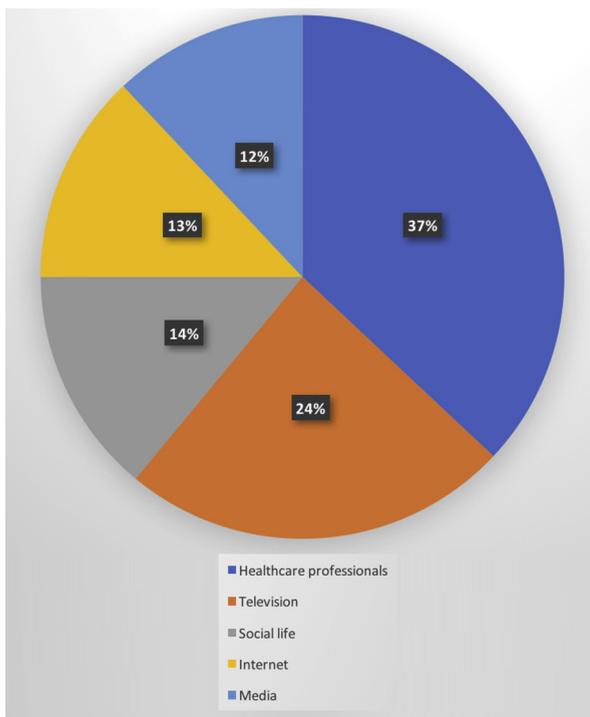


Figure 2. Sources of knowledge.

Table 2. The Geographical Regions of the Responders and Organ Donation Decisions

Region	Definetly Yes	Definetly No	Only for Living Donation
Marmara	85	5	8
Central Anatolia	26	1	3
Mediterranean and Aegean	8	-	1
East and Southeast Anatolia	3	-	-
Black Sea	3	1	-

Religious institutions play a very important role in decisions regarding organ donation [17]. Islam has a great concern and respect for human life and promotes its preservation and prolongation. In this respect, organ donation has become acceptable to most jurists and is practiced in many Muslim countries [7]. The preservation of human life is one of the ultimate goals of Islamic legislation. The majority of Shiite and Sunnite jurists consider organ transplantation to be permissible based on the principle that the needs of the living outweigh those of the dead. Saving a life is of paramount value in Islam, as the following verse from the Quran illustrates: "Whoever saved a life would have saved the lives of all people" [18].

Most Turkish people believe in Islam [19,20]. The Directorate of Religious Affairs has stated that organ donation is appropriate in Islam and that Islam encourages it. According to Islam, human life has a great importance, and life is more precious than death. Therefore, all legally accepted treatments and all life-saving methods are approved by Islam [7,20]. However, despite the fact that the majority of Islamic religious officials believe organ donation to be desirable in Islamic culture, only half of Muslims would donate organs after their death and only 1 in 3 would consent to donate the organs of their relatives after death. Religious leaders are frequently consulted for advice on organ donation; more than half of those who responded in one study reported being asked for input regarding organ donation as family members [21].

The majority of Muslim-American physicians believe organ donation to be permissible according to Islamic bioethics and law. This high degree of perceived support stands in contrast to data from the general community, which reports a greater degree of uncertainty about Islamic views and lower rates of believing it to be permitted under Islamic law [22]. A survey of over 800 Malaysians found that 30% of the sample was unsure whether Islam permitted organ donation, whereas 18% of our physician group were uncertain [23]. In addition, a transnational survey of 891 Muslims found that only 39% perceived it to be compatible with Islamic doctrine, whereas 70% of our sample held this view [5].

Ozer et al [19] asked their participants who had not volunteered to donate why they would not do so: 51.5% stated that it never occurred to them because the subject had never been brought up; 17.8% did not want to answer; and 14.9% stated they did not have confidence in health institutions.

In the study by Nacar et al [24], the respondents were students of theology, and they stated that organ donation was not appropriate for the following reasons: according to their religion (16.5%), disapproval of the impairment of body integrity (13.3%); and fear that their organs or tissues would be taken before they died (11.7%).

Keçeioğlu et al [25] found that religious people were very sensitive about the subject of organ donation. Overall, although 84% of the respondents said that organ donation

was in accord with Islamic belief and 77% were in favor of organ donation and transplantation, 86% still said they would not donate.

In our study, of those who approved of organ donation, 84.8% said yes because they would be doing a favor and 15.2% for religious purposes. Of those who thought negatively about organ donation or were undetermined, 45.8% stated that they did not have enough information. These problems can be overcome by education.

In a study from Pakistan, 32.8% of the respondents stated that their religion allowed organ donation, 31.5% stated that it did not allow organ donation, and 35.6% stated that they did not know the position of the religion [26]. In Iran, 70% of intensive care nurses stated they had no religious objection to organ donation [27]. In a study from Turkey, 5.5% of physicians did not believe that organ donation was appropriate according to their religion [28]. In another study from Turkey, Ozer et al [19] found that 95.2% of the participants stated that organ donation is necessary for humanity. Although 76.4% stated they would donate a relative's organs, 91.8% stated they would accept organ transplantation if it were necessary for their own health, and 89.2% stated they would donate if a family member needed an organ [19].

In the present study, 2.2% of the responders had previously donated organs, 10.1% people were familiar with the matter because a relative had experienced it, and 87.7% had no personal experience with organ donation. A further 10.1% respondents reported having a relative who needed an organ transplantation, but there are no participants who had ever needed an organ transplantation themselves. Regarding the impact of participants' beliefs on responses, of the 301 Muslim participants, 36.5% favored organ donation and 6.3% linked it to religious reasons. The participants who said that they would definitely not donate thought that organ donation is inappropriate in their religion.

The atheists-agnostics generally had a more positive view of organ donation. Rios et al [29] found that 49.2% of atheist-agnostic respondents were in favor of organ donation. In our study there was a very low percentage of atheist-agnostics among our respondents, but most of them (88.8%) approved of organ donation on the grounds that it was doing someone else a favor. Only one of these respondents (11.2%) was opposed to donating organ because of the risk of infection. The remaining 7 participants were deist or agnostic, and all of them defined organ donation as doing a favor.

Cultural effects are important for organ donation acceptance. Turkey is divided into 7 regions, and each has different cultural practices. Istanbul is the most crowded city in Turkey, and it is in Marmara Region. In our study most of the responders were from Marmara Region, and they have different culture; because of this, their opinion about organ donation is slightly different than that of respondents from other regions.

## CONCLUSION

It is known that religious and cultural factors in Turkey influence organ donation, as it does around the world. In this survey we conducted in a section of society, we have seen that religious causes are particularly effective, and fewer respondents approved of organ donation than we expected.

Despite the fact that the Residency of Religious Affairs has given a favorable fatwa regarding organ donation, religious reasons, especially among Muslims, has a strong influence on organ donation in our country. We also observed that Turkey does not have sufficient information about organ transplantation because the main source of such knowledge was television, the media, and the Internet. It is clear that public awareness will reduce the effects of all these causes on the idea of donation and enhance objective approaches.

## REFERENCES

- [1] Krupic F, Sayed-Noor AS, Fatahi N. The impact of knowledge and religion on organ donation as seen by immigrants in Sweden. *Scand J Caring Sci* 2017;31:687-94.
- [2] Messina E. Beyond the officially sacred, donor and believer: religion and organ transplantation. *Transplant Proc* 2015;47:2092-6.
- [3] Bruzzone P. Religious aspects of organ transplantation. *Transplant Proc* 2008;40:1064-7.
- [4] Düzenli Y. Organ transplantation on basis of Islamic resources. *Türkiye Klinikleri J Med Ethics* 2005;13:125-30.
- [5] Sharif A, Jawad H, Nightingale P, et al. A quantitative survey of Western Muslim attitudes to solid organ donation. *Transplantation* 2011;92:1108-14.
- [6] First W. Keynote address. *Transplant Proc* 1997;29:3191-4.
- [7] Golmakani MM, Nikham MH, Hedayat KM. Transplantation ethics from the Islamic point of view. *Med Sci Monit* 2005;11:RA105-2109.
- [8] Harper AM, Rosendale JD. The UNOS OPTN waiting list and donor registry. In: Cecka JM, Terasaki PI, editors. *Clinical transplants*. Los Angeles. UCLA Tissue Typing Laboratory; 1997. p. 61-79.
- [9] Sanner M. A comparison of public attitudes toward autopsy, organ donation, anatomic dissection: a Swedish survey. *JAMA* 1994;271:284-8. Keiding S, Jensen SL, Vitstrup H. Attitude of the population to organ transplantation. *Ugeskr Laeger* 1994;156:2869-72.
- [10] Bilgel H, Sadikoglu G, Goktas O, Bilgel N. A survey of the public attitudes towards organ donation in a Turkish community and of the changes that have taken place in the last 12 years. *Transpl Int* 2004;17:126-30.
- [11] Law 2238: on the harvesting; storage, grafting, and transplantation of organs and tissue. R.G. Date 03.06.1979. RG. No. 16655.
- [12] Mannier G, Evans RW. Public attitudes and behaviour regarding organ donation. *JAMA* 1985;253:311-5.
- [13] Hai TB, Eastlund T, Chien LA, et al. Willingness to donate organs and tissues in Vietnam. *J Transpl Coord* 1999;9:57-63.
- [14] Ali NF, Qureshi A, Jilani BN, Zehra N. Knowledge and ethical perception regarding organ donation among medical students. *BMC Med Ethics* 2013;14:38.
- [15] Schulz KH, Gold S, von Dem Knesebeck M, Koch U. Willingness to donate organs: strategies to influence attitudes. *Psychosom Med Psychol* 2002;52:24-31.
- [16] Oluyombo R, Fawale M, Ojewola R, et al. Knowledge regarding organ donation and willingness to donate among health workers in South-West Nigeria. *Int J Organ Transplant Med* 2016;7:19-26.
- [17] May WF. Religious justifications for donation body parts. *Hasting Cent Rep* 1985;15:38-42.
- [18] Shair MH. *al-Quran al-hakim [The holy Quran]*. Elmhurst, NY: Tahrike Tarsile Quran; 1983.
- [19] Ozer A, Ekerbicer HC, Celik M, Nacar M. Knowledge, attitudes, and behaviours of officials of religion about organ donation in Kahramanmaraş, an eastern Mediterranean city of Turkey. *Transplant Proc* 2010;42:3363-7.
- [20] Rady MY, Verheijde JL. Islam and end-of life organ donation: asking the right questions. *Saudi Med J* 2009;30:882-6.
- [21] Sharif A. Organ donation and Islam: challenges and opportunities. *Transplantation* 2012;94:442-6.
- [22] Ahmed M, Kubilis P, Padela A. American Muslim physician attitudes toward organ donation. *J Relig Health* 2018;57:1717-30.
- [23] Tumin M, Noh A, Satar NM, et al. Muslims views on the permissibility of organ donation: the case of Malaysia. *Int J Sci Med Ed* 2016;10:41-8.
- [24] Naçar M, Cetinkaya F, Baykan Z, Poyrazoğlu S. Attitudes and behaviours of students from the faculty of theology regarding organ donation: a study from Turkey. *Transplant Proc* 2009;41:4057-61.
- [25] Keçecioglu N, Tuncer M, Yücecin L, Akaydin M, Yakupoğlu G. Attitudes of religious people in Turkey regarding organ donation and transplantation. *Transplant Proc* 2000;32:629-30.
- [26] Saleem T, Ishaque S, Habib N, et al. Knowledge, attitudes and practices survey on organ donation among a selected adult population of Pakistan. *BMC Med Ethics* 2009;15:5.
- [27] Nasrollahzadeh D, Siavosh H, Ghods AJ. Intensive care unit nurses' attitudes and knowledge toward brain death and cadaveric renal transplantation in Iran. *Transplant Proc* 2003;35:2545.
- [28] Erdoğan O, Yücecin L, Tuncer M, et al. Attitudes and knowledge of Turkish physicians about organ donation and transplantation. *Transplant Proc* 2002;34:2007-8.
- [29] Rios A, Lopez-Nava A, Iniesta A, et al. Involvement of religious factors on the attitude toward organs donation among the Ecuadorian population resident in Spain. *Transplant Proc* 2015;47:2600-2.