

The Social and Cultural Factors Influencing Organ Donation in Iran: A Systematic Review of the Literature



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ABSTRACT

Background: Although numerous studies have investigated organ donation in Iran, the evidence remains fragmented due to variations in study populations, methodologies, and research contexts. Synthesizing these findings is essential to develop a comprehensive understanding of the socio-cultural determinants associated with organ donation.

Objective: This systematic review aimed to characterize the existing evidence on organ donation research in Iran and synthesize socio-cultural factors associated with organ donation.

Methods: This research was conducted using a systematic review methodology. The research domain is articles published between 2004 and 2022 that have investigated organ donation in Iran. A total of 44 articles meeting the inclusion criteria were included and analyzed. The data collection tool was a checklist created by the researcher in the form of a table with 21 variables.

Results: Most articles in this field employed quantitative methods. Less than 15% of the research focused on organ donation decision-makers. The study's progression showed an upward trend until 2019. Recurring factors that impede organ donation include: Families' disbelief in death, Lack of trust in medical staff, Concerns about regret, Certain personal beliefs, Hope for a miracle, Hope for the patient's recovery, Religious interpretations inconsistent with organ donation, and Normative pressure from close relatives. Despite high public awareness of brain death, there's less inclination towards organ donation in practice.

Conclusion: Overall, the systematic review of the examined articles indicates that while organ donation is a medical topic, it's intricately linked with socio-cultural variables. Addressing socio-cultural barriers may contribute to improving organ donation rates in Iran.

KEYWORDS: Organ donation; socio-cultural determinants; Iran

INTRODUCTION

The acquisition and transplantation of organs as a novel therapeutic method holds a prominent position in treating patients in need. Organ transplants worldwide have restored the health of many indi-

viduals and relieved their families from worry and hardship. Organ transplantation involves removing a non-functional organ from a person's body and replacing it with a similar organ taken from a living or deceased donor, through surgical implantation. Organ transplantation can be performed using organs from both living and deceased donors. Today, cadaveric transplantation is considered one of the sources for organ procurement. The rationale behind this preference is based on the principle that the recipient's need is met using

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organs that would otherwise perish. This form of transplantation is, in essence, a gift of life [1]. This practice, however, is accompanied by numerous challenges for both society and the medical community, due to its ethical, moral, and social complexities [2]. One of the significant issues in this area is organ shortage, which highlights the gap between the number of brain-dead patients and the list of individuals waiting for organs. Organ donation, measured by the number of donors per million population (PMP), varies across different countries. For example, among fifty countries studied in 2010, Japan had the highest donation rate from living donors, while Spain had the highest rate among deceased donors.

Additionally, the growth rate of organ donation in Portugal has been remarkably high [3]. According to the European Committee on Organ Transplantation, between 89 studied countries, Organ transplantation activities increased globally by 9% in 2023, an increase driven by an expansion of both deceased and living organ donation over 2022 [4]. In the same year, Spain had the highest PMP with 49.38, the United States with 48.04, and Portugal with 36.93, respectively [5].

Although different countries have varying rates of organ donation from brain-dead patients, the shortage of organ donations for patients in need is a global problem. Each year, as many viable organs are buried, many patients in need lose their lives due to the Lack of available organs. According to existing reports, the primary reason for this situation is the Lack of consent from families [6-8]. This issue is not unique to Iran and is observed in other countries as well [9, 10]. For instance, in 2023, according to the European Committee on Organ Transplantation, 56032 new patients were added to waiting lists for transplantation, or about six new patients added every hour. In total, 7054 people died while on a waiting list last year, or an average of 19 patients every day [4]. Research conducted in the field of organ donation and non-donation indicates that, on one hand, some families who have considered organ donation but did not proceed have expressed regret and stated they

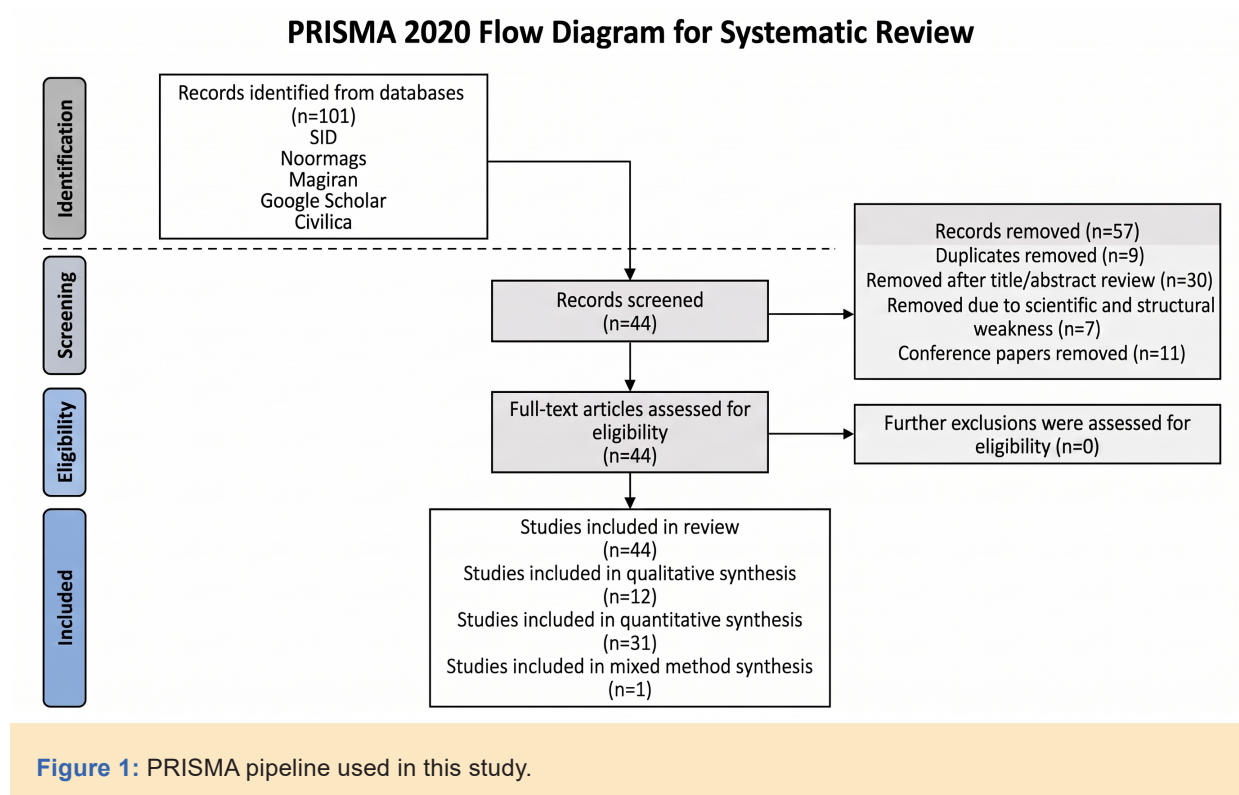
would not make a similar decision again [11]. On the other hand, some individuals still do not have a desire to donate organs. This situation is observed in Iran as well.

Regarding the reasons for this reluctance, Iranian families and decision-makers have cited various factors that closely align with those in other countries. For instance, various interpretations surrounding coma and brain death diagnosis are influenced by religious beliefs [12]. Different religions have distinct perspectives on death and the afterlife [13-15]. Additionally, cultural norms and values play a significant role in shaping respect for the deceased body and the conduct of death-related ceremonies [2, 7, 16].

Furthermore, trust in individuals, healthcare systems, and specifically organ transplant teams is crucial [13, 15-17]. Lastly, belief in the integrity of the deceased body is also a significant factor [13]. Several studies have been conducted in Iran to investigate the reasons behind this situation. These studies, given their scientific nature, have only explored a handful of this phenomenon. Furthermore, each of these studies has been conducted in different disciplines and among different population groups or research fields. Such diversification has led to scattered results that, although accurate and credible, do not provide a comprehensive and holistic view of the topic under investigation, which can be a significant weakness.

The main objective of this research is to systematically summarize, combine, and compare the separate findings of studies conducted in the field of organ donation. The aim is to derive a cohesive conclusion from the scattered results of these studies, thereby gaining a comprehensive understanding of the social and cultural factors that hinder organ donation. Overall, this research seeks to answer the following research questions:

1. How many studies related to organ donation have been conducted in Iran?



2. What is the timeframe for writing these articles?
3. Which population groups are targeted in the studies?
4. What are the methodological characteristics of the studies under review?
5. What are the general findings and outcomes of the articles and studies reviewed?

MATERIALS AND METHODS

This research was conducted using a systematic review method. The scope of this investigation included all accessible scientific research articles published in English and Persian from 2004 to 2022, specifically addressing organ donation in Iran. The initial search for relevant literature utilized keywords such as “attitude,” “brain death,” “organ donation,” “social factors,” and “cultural factors,” along with their English equivalents: “Organ donation,” “deceased brain-dead,” “Iran,” “attitude,” “social factors,” and “cultural factors.” These

searches were conducted across various databases, including SID, Noor Mags, Magiran, and Google Scholar. Furthermore, the references of the articles obtained were scrutinized to identify additional pertinent studies that met the inclusion criteria but were not captured in the initial search. The second author initially searched for articles. Subsequently, the first and third authors reviewed and approved the articles. The inclusion criteria for articles were as follows: studies targeting Iranian organ donors and decision-makers published between 2004 and 2022, availability of the full-text article in Persian and English, and indexing in reputable scientific databases.

The search and selection process involved specific restrictions concerning the types and quality of studies considered. Initially, a total of 101 articles were identified through database searches. After reviewing the titles and abstracts, 30 articles were excluded, primarily because they were either technical or purely medical in nature, failed to address socio-cultural factors, or targeted populations outside Iran. Additionally, nine articles were removed as duplicates, having been indexed in multiple

Table 1: Distribution of articles based on publication year.

Years	2002-2003	2003-2004	2005-2006	2007-2008	2009-2010	2011-2012	2013-2014	2015-2016	2017-2018	2019-2020	Total
Frequency	2	1	3	1	6	4	4	10	10	3	44
Percent	4.54	2.27	6.82	2.27	13.63	9.09	9.09	22.72	22.72	6.82	100.00

databases. Following a comprehensive full-text assessment, seven articles were excluded due to methodological and structural deficiencies or their limited relevance to the study's primary focus.

Furthermore, eleven conference proceedings were eliminated as they did not meet the necessary quality criteria for inclusion in the final analysis. Based on the established criteria applied during the article screening process, it can be concluded that the final selection comprised articles exclusively published in reputable, peer-reviewed journals recognized by the Ministry of Science. These articles underwent evaluation by at least two referees, ensuring they met the requisite quality standards for inclusion in the study. Ultimately, 44 articles were selected for review and analysis. The complete PRISMA guidelines utilized in this study are detailed in Fig. 1.

To gather information from the articles, a researcher-made checklist consisting of 21 variables was utilized and compiled into a table format. This checklist was developed based on the overall framework and structure of the articles, divided into four main sections: General information with six sub-sections, Theoretical section with four sub-sections, Methodological section with nine sub-sections, and finally, Findings and Results section with two sub-sections. To ensure the validity of the research instrument (checklist), we employed content validity and face validity. This was done in the first step by reviewing the articles generally and extracting the items investigated within them; based on this, the compiled checklist attempted to cover as many of the items addressed in the articles as possible. In the next stage, the mentioned checklist was placed at

the disposal of three experts in the field of systematic review. With their confirmation, the face validity of the instrument was also confirmed. For estimating the reliability of the instrument, we first sourced several checklists used in other systematic review studies (within the sociological domain). Our effort focused on developing and utilizing the present study's checklist based on these existing models. Following these steps, the structure of the resulting checklist is as follows: in the General Information section, details such as the year of publication, main research topic, primary research questions, and objectives were examined. The Theoretical section focused on information such as the research background, explanatory theories, and theorists of interest. The Methodological section extracted information related to the research method, statistical methods, research tools, validity and reliability, population and research field, sample size, sampling method, and independent and dependent variables. Finally, in the Findings and Results section, the findings, results, and key recommendations were reviewed.

RESULTS

The systematic review of the selected articles revealed the main findings, which are summarized in Table 1.

As evident, the closer we get to recent years, the topic of organ donation has garnered more attention from the scientific community, resulting in more articles published in this field. According to the data in Table 2, the subject of organ donation has received less attention from non-medical journals, with 77% of articles being in sociology journals, followed by

Table 2: Distribution of articles on organ donation across various academic disciplines.

Classification of magazine topics	Sociology	Nursing and Medicine	Law and Jurisprudence	Psychology	Communication Sciences	Media	Total
Frequency	4	34	3	1	1	1	44
Percent	9.09	77.27	6.82	2.27	2.27	2.27	100.00

only 9.09% of the published articles, indicating their lowest frequency. However, many studies have clearly shown that organ donation, alongside its medical context, is significantly influenced by human and social factors.

In the reviewed articles, only 59% clearly specified their research questions, and in the field of research objectives, this amount reaches 41%. Although a theory should guide research, the authors of the articles, according to the custom of their field, sometimes have a theory or theories in mind or have conducted their research without considering a specific theory (Table 3).

In sociological articles, theories related to social trust by Giddens, Bourdieu, and Parsons, as well as theories of symbolic interaction attributed to Blumer, Mead, and Weber, have been used. In the field of media and communication, the theories of consent, planting and spreading, and innovation have been used.

The authors have indeed equated the overall research methodology with specific techniques and strategies utilized in their studies. The methods cited include a variety of approaches such as quantitative, survey, descriptive, cross-sectional, qualitative, content analysis, document analysis, and mixed methods. To provide a clearer understanding of how frequently these methodologies are employed, Table 4 was constructed to report the frequency distribution of these research methods based on the authors' explicit designations within their articles. Table 5 categorizes the methodologies and indicates how many times each method was referenced across the analyzed literature.

However, based on the established categorization of research methods (as shown in Table 4), the following distribution is observed: 31 studies (70.45%) employed quantitative methods, 12 studies (27.27%) utilized qualitative methods, and one study (2.27%) was conducted using a mixed-methods approach. Furthermore, the primary tool for data collection in over half of the investigations was the questionnaire. The data for the remaining studies were gathered through interviews, a combination of interviews and questionnaires, and the analysis of texts and documents (Fig. 2).

In most articles, the method of estimating the validity and reliability of the data collection tool and research findings has not been specified. Regarding the statistical population and research field, as the findings show, 16% of the articles do not specify their population or research field. The same amount of research has been done among the medical staff, including nurses and students. One-fifth of the research has been conducted among the citizenships, nearly 7% among students and teachers, about 11% among volunteers, and about 14% among families and organ donation decision makers. Fig. 3 shows the above information in more detail.

The geographical distribution of the conducted research shows that nearly 16% of the research was conducted in Tehran. In the next stage, Hamadan province, with 9% of the articles, has the most research. The remaining provinces are placed in the next stages, with frequencies of one and finally two cases. 41% of the articles did not specify the location of their research. Regarding the sampling methods, 57% of the researchers used non-probability

Table 3: Distribution of theoretical frameworks utilized in selected articles.

Theory	Have not	Sociological	Media and Communication	Legal	Jurisprudence	Biological	Total
Number	25	7	3	4	4	1	44
Percent	56.82	15.91	6.82	9.09	9.09	2.27	100.00

sampling methods due to the use of qualitative research methods.

In addition to background variables—such as gender, age, education, and social base—which have been commonly investigated across studies, several other significant variables have been identified. This extracted variables reported across the included studies showed considerable diversity. Because individual studies frequently examined multiple variables, percentages were calculated based on the total number of extracted variable occurrences ($n=75$), rather than the number of included studies. Among these, variables related to medicine and health are particularly noteworthy. These typically pertain to issues surrounding the diagnosis of brain death, the diagnostic capabilities of medical practitioners and equipment, and the classification of the patient's death. Detailed information regarding these variables can be found in Table 5.

Moreover, psychological variables play a crucial role in understanding the research findings. This category encompasses factors related to individuals' characteristics, mentalities, beliefs, and attitudes toward brain death and organ donation. Table 6 illustrates these psychological variables along with their distribution across the articles.

Lastly, social variables examine the factors that arise from interpersonal relationships. This includes a range of both objective and subjective interactions, covering aspects such as trust in others, social ethics, altruism, media influence, social judgments, and normative pressures. A more detailed overview of these socially oriented variables is presented

in Table 7.

Of course, other variables have been investigated in some articles, which were not reported in the current study tables due to their small number, such as the variable of legal gaps, which was investigated in only one article. The findings of the conducted research show something beyond the variables investigated in the research. The reason for this difference is that the variables explained in the previous part of the questionnaire were extracted from research objectives or hypotheses, while the findings obtained in the articles were sometimes beyond the mentioned items. Among the total of 129 findings that have been presented in all articles, some of the extracted findings are as follows:

Most research has shown that accidents have the biggest contribution in causing brain-dead patients (3 cases). In 13 of the articles, it was reported that the respondents had a positive attitude towards organ donation, but in most of the reviewed articles (4 cases), the respondents did not have an organ donation volunteer card, or they personally declared that they were not willing to donate (1 case). In 7 articles, it has been determined that the more positive the attitude towards organ donation is, the more the desire to donate will increase. Regarding the relationship between background variables and attitudes or willingness to donate organs, most articles indicate a negative correlation between age and the attitude towards organ donation. Specifically, this suggests that as age increases, attitudes toward organ donation tend to become more negative. This situation is also repeated with people's health conditions, so that the healthier people

Table 4: Overview of research methodologies employed in organ donation studies.

Research Methodology	Quantitative Methods				Qualitative Methods				Total
	Quantitative	Survey	Descriptive	Cross Sectional	Qualitative	Content Analysis	Document Analysis	Mixed Method	
Frequency	13	9	7	2	6	2	4	1	44
Percent	29.54	20.45	15.91	4.54	13.63	4.54	9.09	2.27	100.00

feel, the more negative attitude they have towards organ donation (6 cases). On the contrary, education (1) and socio-economic status (3 cases) have a positive relationship with the attitude towards organ donation. Awareness is reported frequently in the research; in 4 of the studies, respondents' level of awareness about brain death and the organ donation process was estimated at a higher level than average, and, more importantly, it was reported in 11 of the studies. It has been found that having awareness in this field has a positive relationship with organ donation. In 3 studies, respondents stated a lack of belief and acceptance of death as the reason for not donating. After attitude and awareness, the most frequently examined variable is religiosity and religious beliefs. In 12 articles, it has been reported that religiosity and religious beliefs have a negative relationship with the desire to donate organs. However, belief in the afterlife reward has shown a positive relationship with the desire to donate (1 case). At the same time, altruistic beliefs (6 items) and belief in moral values (4 items) have a positive relationship with the desire to donate organs. Trust is another social variable that has been investigated in several articles. The investigation of this variable has focused on its institutional dimension, specifically trust in the medical and health system. This includes trust in doctors and nurses, as well as in the groups responsible for encouraging families to consider organ donation (5 cases). Also, in this section, the trust in doctors in correctly diagnosing brain death, the ability of persuasion groups to persuade families and decision makers, or the concern of

selling organs instead of donation (2 cases) by these groups have been issues that have been examined in some research.

Individual factors such as fears and hopes are among the categories that strongly influence willingness to donate organs in the research conducted. Expecting a miracle, hoping for a wrong diagnosis by doctors, hoping to return (3 cases) and fearing and worrying about the patient's survival (2 cases), worrying about regrets (3 cases) and unconscious beliefs (1 case), believing in a bad shape, being sick (1 case), inability to make a decision (1 case), as well as expected regrets (1 case) were among the factors preventing donation and had a negative effect on the willingness to donate. In addition, registering as a donor or having a voluntary organ donation card had a positive relationship with the willingness to donate organs (1 case). The use of media and the content of media programs around this issue are other variables that have been considered in some research. It is worth mentioning that this variable has been proposed as a basis for raising awareness in the field of organ donation. National television has been a source of information for people in 3 cases, and in 5 articles it was mentioned that the use of television (2 cases) and mass media (4 cases) had a positive effect on encouraging people to donate organs. Among other social factors investigated in the articles is how to influence people to donate organs. The variables examined in this section, such as social learning (1 case), the use of influential people (1 case), and the presence of needy people in the surrounding area and among close ones (1 case), have a positive effect on willingness

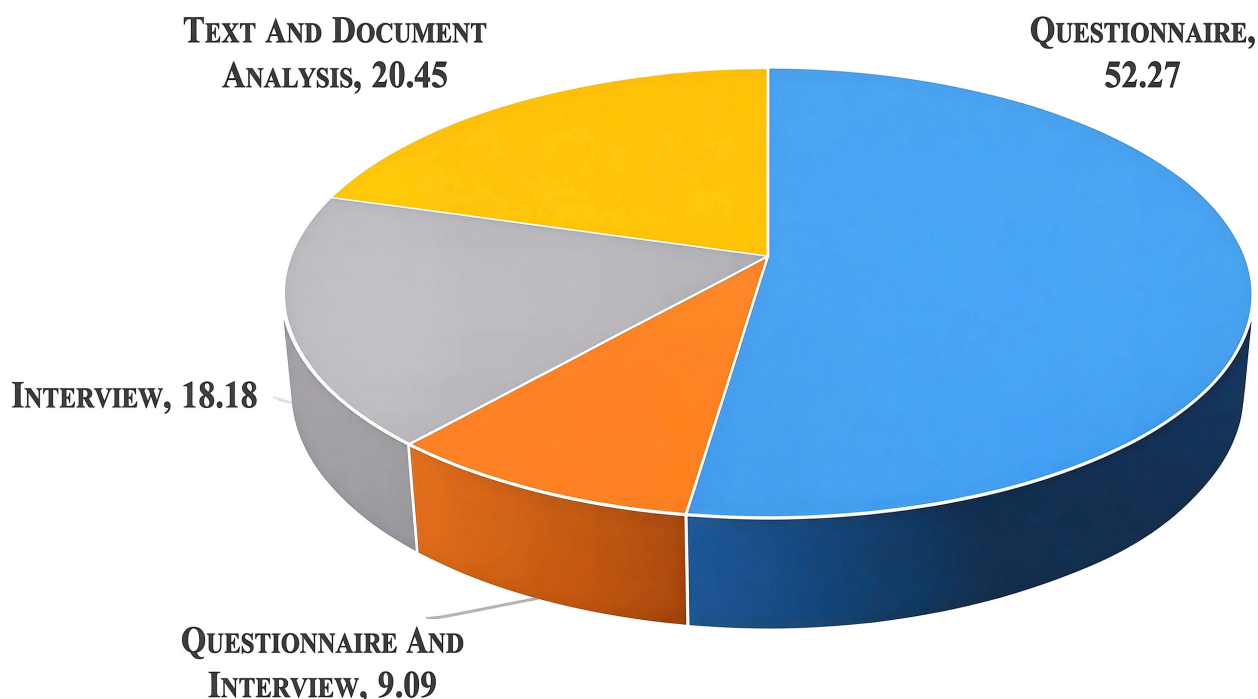


Figure 2: Distribution of data gathering instruments in organ donation studies.

to donate and attention. Subjective norms and normative pressure imposed on people (3 cases), medical consultations outside the hospital, and uninformed opinions of acquaintances (1 case) have had a negative effect on the willingness to donate. Articles written from a legal or jurisprudential point of view, using documentary methods, discuss how legislation should be structured to lead to donations (3 cases). Some authors have proposed the criterion of placing a voluntary organ donation card instead of parental consent (1 case), and some have proposed the possibility of replacing retribution with organ donation (1 case). In two articles, legal factors have been introduced as an obstacle to organ donation.

The analysis of the solutions presented in the articles showed that in some articles, the solutions are not mentioned at all, and the article ended without providing a solution (5). However, among the total of 49 solutions implemented in all articles to increase the amount, these results were observed. Using the method of education and culture building (12 cases) has been the most repeated solution presented

in the articles. Increasing awareness through radio and television (7 cases), creating culture through religious institutions (2 cases), creating culture through virtual networks (1 case), increasing the sense of sympathy and altruism in society (2 cases), changing beliefs cultural (2 cases), paying attention to cultural and social factors (5 cases), creating a public program for issuing donation cards (1 case), trusting the brain death detection system (1 case), creating appropriate laws (1 case), increasing beliefs Religious and ethical (2 cases), correction of misconceptions about brain death (2 cases), and correction of regulations regarding the centrality of the organ donation card (2 cases). As can be seen, the similarity of these solutions is nothing but vague, imprecise, and sometimes unenforceable generalizations, in which neither their content nor the implementing agent nor the process of implementing them is clear. But regarding solutions that are a little more specific and can be implemented, the following can be mentioned; Raising awareness about organ donation through textbooks (2 cases), training and empowering doctors to communicate with the families of brain dead patients

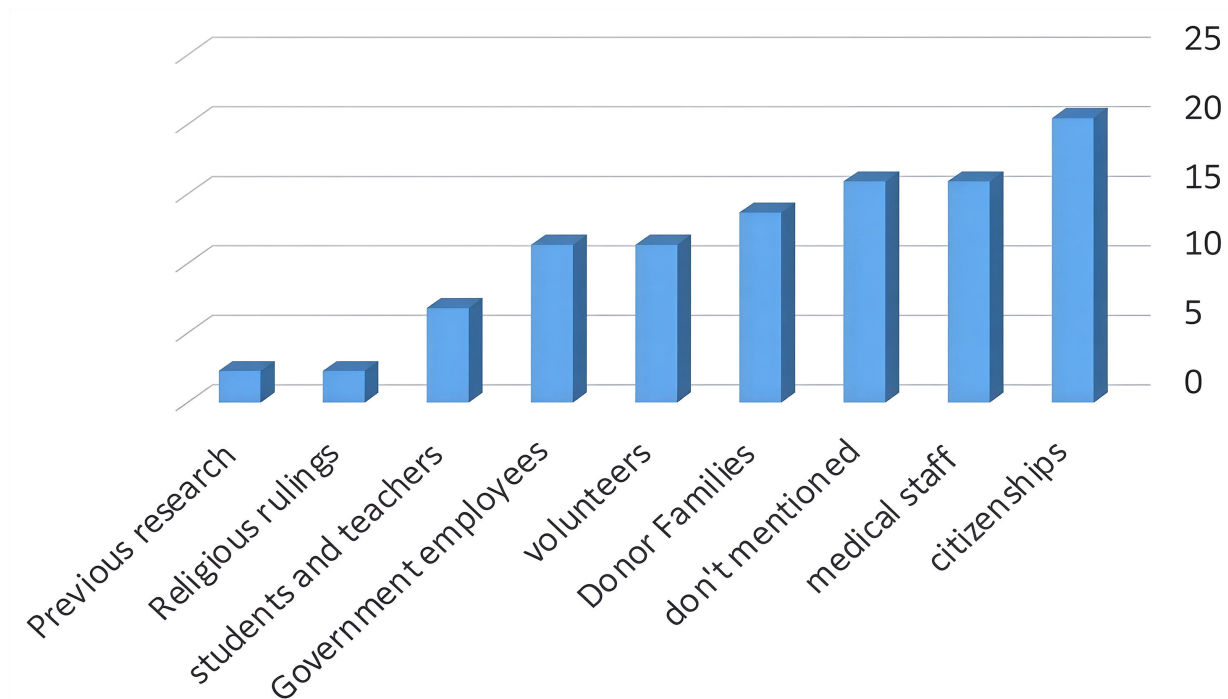


Figure 3: Distribution of the research population.

(1 case), training specialist staff to prepare patients' families and communicate effectively with them (6 cases), gratitude to organ donor families (1 case), accurate diagnosis of brain death and then applying for organ donation (1 case) and finally bringing the option of agreeing to organ donation when issuing a driver's license (1 case).

DISCUSSION

In the current study, a statistical report based on a systematic review of research on organ donation in Iran was presented. As the statistics indicated, attention to the topic of organ donation in academic research has been increasing over the past decade, but this trend has declined since 2019. One possible reason for this decline could be the global COVID-19 pandemic, which has impacted many phenomena. Among academic disciplines, the fields of medicine, nursing, and health have paid the most attention to this subject. Given the nature of these fields, this seems entirely natural.

Additionally, in the nursing field, more articles have attempted to study the social and cultur-

al dimensions of organ donation. Subsequently, sociology articles have focused the most on the social and cultural issues affecting organ donation. Most articles written in this field have used quantitative research methods (70% of articles), with the remainder using qualitative methods, where the use of interviews and donor experiences is minimal. Indeed, one of the weaknesses of the research can be found in this area, as decision-making regarding organ donation is very complex, and quantitative or documentary methods are inherently unable to discern these complexities. Most research has been conducted in Tehran. This situation can be related to the higher concentration and number of universities in this city. The statistical population and field of study have consisted of citizens, including the general public, teachers, students, and employees. Interestingly, less than 15% of the research has been conducted among decision-makers for organ donation, which seems an acceptable figure given the difficulty of this task.

Regarding the variables and factors examined in these studies, there is considerable diversity. Still, they can be broadly categorized into several groups: contextual factors, medical

Table 5: Summary of variables explored in the field of medicine.

Variables related to medicine	Hope for medical advances	Complete diagnosis of brain death	Hospitalization interval until death announcement	Time of brain death	The manner/ type of brain death	Inadequate consultation of doctors outside the hospital	Total extracted variables
Frequency	1	3	1	1	1	2	75
Percent	1.33	4.00	1.33	1.33	1.33	2.66	100.00

and health factors, psychological factors, social and cultural factors, and religious factors. Most articles have shown that age has a negative correlation and education a positive correlation with the willingness to donate organs. This suggests a positive trend in organ donation, as younger individuals, characterized by their lower age and higher educational attainment, along with a distinct perspective on religious matters, demonstrate a greater inclination towards organ donation. In the medical and health field, the main barriers to organ donation are issues related to the family's uncertainty and disbelief in the patient's death. Family doubts about the patient's death, inadequate consultation from medical staff both inside and outside the hospital, Lack of empathy from those declaring the patient's death, and inappropriate timing and location for requesting organ donation have been frequently mentioned in medical and health research. In this regard, it seems necessary to eliminate any ambiguity and doubt for decision-makers before requesting organ donation. This request should be made with utmost empathy for the families and in appropriate time and place conditions. As indicated by various studies, this can be effectively implemented by training and educating specialized teams within hospitals to approach organ donation discussions with empathy. Some variables examined in the research are psychological and relate to the characteristics of decision-makers. Among the barriers to organ donation in this field are features such as family inability to decide, fear of regret if they donate, anticipated remorse, the level of control decision-makers feel they have over events and conditions, subconscious beliefs and personal convictions, disbelief in

the loved one's death, denial of death, hope for a miracle, and hope for the patient's recovery. Addressing these barriers requires the help of consultants and psychologists or trained personnel capable of persuading families. Other variables examined in the articles primarily have social and cultural aspects. Given the generality of these variables, they will be explained further:

From the perspective of social psychologists, any human action/behavior is a function of their attitude towards the target phenomenon. According to these researchers, attitudes have three components: cognitive, emotional, and behavioral [18-20]. Based on this general view, for families and decision-makers to be willing and encouraged to donate organs, they need to be informed about what organ donation is, the difference between brain death and coma, and its positive outcomes for individuals and society.

Most research is based on this principle, and especially in the recommendations section, constant references are made to information dissemination, raising awareness, and cultural promotion by the media, social networks, and education systems. Although the effect of awareness on the willingness to donate cannot be ignored, it should also be noted that in the reviewed research, the general level of public awareness about organ donation is high, and they generally have a positive view of it. However, when it comes to actual behavior, very few hold a voluntary organ donation card, or in some studies, respondents expressed a positive view of organ donation but stated they would not be willing to do so for themselves or their relatives. This clearly shows the gap

Table 6: Summary of psychological variables examined.

Total extracted variables			75		100.00
Desire to donate or having a donation card			3		4.00%
Belief in the integrity of the body			2		2.66%
Intention			1		1.33%
Coping with denial			1		1.33%
Unconscious beliefs			1		1.33%
Expected regrets			1		1.33%
Disbelief in death			1		1.33%
Waiting for a miracle			1		1.33%
Unanticipated regret			3		4.00%
Perceived control			4		5.33%
Attitude to death			1		1.33%
Attitude towards organ donation			10		13.33%
Consciousness			6		8.00%
Personality type			2		2.66%
Psychological Variables	Frequency				
	Percent				

Table 7: Summary of social variables examined.

Total extracted variables			75		100.00
Gender beliefs			1		1.33%
Opinions of relatives			2		2.66%
Trusting others			1		1.33%
Opinions of family members			3		4.00%
Use of media			5		6.66%
Mental norms and judgments			6		8.00%
Altruism			3		4.00%
Lack of empathy in the intensive care unit			1		1.33%
Belief in global and moral values			2		2.66%
Trust in the medical profession and treatment staff			5		6.66%
Social Variables	Frequency				
	Percent				

between cognition, emotion, and behavior, indicating the inefficacy of policies solely based on information dissemination and awareness-raising.

In addition to the views of early social psychologists mentioned above, contemporary social psychologists have a different perspective. They believe that while the components of attitude (cognition, emotions, and behavior) are interdependent, behaviors can shape cognitions and emotions [19]. The articles reviewed in this research also confirm this view. For example, in some studies, it was found that those who have an organ donation card not only have a better attitude towards organ donation but are also willing to donate their own or their relatives' organs in practice. This discussion indicates that by operationalizing and actualizing the willingness to donate organs, the conditions for spreading the culture of organ donation can be facilitated. For example, considering the high incidence of brain death resulting from accidents in Iran, it would be beneficial to inquire whether license applicants are willing to consent to organ donation in the event of brain death.

Additionally, implementing educational programs in various locations could facilitate the distribution of voluntary donation forms to interested individuals. Regarding social and cultural barriers, which are the most examined factors in the reviewed research, several specific variables and their effects need to be addressed. In this context, the most frequently mentioned variable is religiosity, which has a negative correlation with the willingness to donate organs. Concerning religiosity and why it negatively affects organ donation, several points must be mentioned. By addressing these, religiosity could potentially be turned into a variable with a positive impact. From the study of articles, it emerges that it is not religion or religiosity per se that negatively correlates with organ donation, but rather the interpretation or understanding of religious leaders and people about religion, especially religious topics related to death, the afterlife, resurrection, etc. If religious leaders emphasize the ethical dimensions of faith, along with

the values of altruism and sacrifice found in religious texts, individuals with strong religious convictions may develop a more favorable attitude towards organ donation. In essence, through appropriate religious interpretation, a foundation can be established to enhance the positive impact of religion on organ donation.

Another frequently mentioned variable is trust, a phenomenon that makes the social world predictable and has shown a positive correlation with the willingness to donate organs. Although this variable has various dimensions in sociological literature, most studies have examined its institutional aspect, namely trust in the medical and health system. Trust in doctors' diagnoses, nurses' recommendations, and hospital staff's commitment to the non-commercial use of donated organs are the main issues discussed in this regard. Studies have shown that the higher this trust, the greater the willingness to donate organs. By leveraging the capabilities of e-government, systems can be established to enhance the transparency of all phases of organ donation. This initiative would effectively eliminate opportunities for misuse and simultaneously reduce distrust in medical professionals. In other words, implementing e-government solutions can create a framework that ensures accountability and openness throughout the organ donation process. Such measures are essential for fostering public confidence and trust in the healthcare system, ultimately leading to increased participation in organ donation programs.

Another significant factor in the decision not to donate organs is the normative pressure from close ones. The fear of negative judgment from friends and acquaintances is a key factor mentioned in some articles. By sharing families' stories and the positive outcomes of their altruistic actions, we can create a supportive environment that normalizes such behaviors. Utilizing the strengths of local communities can significantly enhance this effort. Additionally, leveraging both virtual and real social networks can be highly effective in fostering a culture of giving and altruism. In essence, engaging community members and utilizing

social networks can help spread awareness and encourage participation in altruistic activities, ultimately leading to a more generous society.

Legal and jurisprudential issues, especially legal gaps and differences in jurisprudential rulings regarding donation, are other relatively frequently mentioned factors in some articles. In this regard, legislators need to identify and resolve existing gaps and contradictions that are obstacles to organ donation. Implementing a system where consent for organ donation is established during the deceased's lifetime, without requiring the approval of heirs, could significantly enhance the effectiveness of organ donation processes. This approach aligns with models of presumed consent, where individuals are considered organ donors unless they have explicitly opted out. Such a framework could streamline the donation process and potentially increase the number of available organs for transplantation.

Additionally, introducing incentive policies grounded in legal frameworks could further encourage organ donation. These incentives might include financial benefits, tax deductions, or other forms of recognition for donors and their families, which could help to foster a culture of donation and alleviate some of the societal hesitations surrounding the topic. By combining these strategies, it is possible to create a more robust organ donation system that addresses both ethical considerations and practical needs.

In conclusion, this systematic review of the articles examined highlights that organ donation, while fundamentally a medical issue, is influenced by a complex interplay of factors. These include individual decision-making at the micro level, social group dynamics, societal structures, value systems, and institutional mechanisms. A notable finding is the negative correlation between religiosity and the willingness to donate organs, which appears to stem from traditional interpretations of religious beliefs rather than religiosity itself. This suggests that a reinterpretation of religious values, focusing on ethical principles, could potentially encourage organ donation. More-

over, institutional trust in the medical system serves as a crucial intermediary variable. This trust can be bolstered through legal transparency, targeted information dissemination, and the professional conduct of medical staff, ultimately increasing the likelihood of individuals choosing to donate their organs. The review also emphasizes the importance of leveraging the capacities of various non-governmental organizations (NGOs) and utilizing e-government mechanisms to mitigate potential misuse in organ transplantation. This approach can foster a more trustworthy environment for both donors and recipients. Furthermore, engaging both virtual and real social networks can help alleviate negative societal pressures surrounding organ donation, transforming them into positive normative influences. Enhancing organ donation culture is not merely a matter of disseminating information; it requires simultaneous reform of cultural, institutional, and psychological components. To achieve this, a dynamic mechanism must be established where individual attitudes, social awareness, religious interpretations, trust, social networks, and legal frameworks interact continuously. This holistic approach is essential for fostering a supportive environment for organ donation.

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