



INTEGRATIVE REVIEW

Analysis of the incident factors among the population towards the opposition to organ donation: a literature integrative review

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Findings:

Donation requires a holistic, informational, communicative and relational intervention geared toward increasing donation rates but still respectful and aware of different cultures.

ABSTRACT

BACKGROUND:

To date, institutional sources show a conspicuous number of objections to donation, slow growth in donor registry enrolment, and a gap between available donors and wait-listed recipients.

AIM:

To assess the factors that lead the national and international population to not consent to organ donation.

METHODS:

An integrative review was conducted during August 2022 in PubMed according to the methodology developed by Whittemore & Knafl. Articles were subsequently selected according to previously established inclusion and exclusion criteria.

RESULTS:

At the end of the selection process, 16 studies were included. The decision to consent to organ donation during the course of life or in case of the death of a family member is mediated by the influence of several factors, particularly the consent system, culture, religion, the activities of health professionals particularly the nurse, and the individual's knowledge of transplantation and donation.

CONCLUSION:

In order to gain consent toward organ donation, there should be a holistic intervention targeting both the general population and health professionals by planning educational interventions focused on the target audience considered.

KEYWORDS: *Tissue and Organ Procurement, Health Literacy, Attitude of Health Personnel, Nurses*

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Milano University Press



REVISIONE INTEGRATIVA

Analisi dei fattori incidenti sull'opposizione della popolazione alla donazione d'organo: una revisione integrativa della letteratura

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Riscontri:

La donazione richiede un intervento olistico, informativo, comunicativo e relazionale orientato ad aumentare i tassi di donazione, ma sempre rispettoso e consapevole delle diverse culture.

ABSTRACT

INTRODUZIONE:

Fonti istituzionali mostrano ad oggi un cospicuo numero di opposizioni alla donazione, una lenta crescita di iscrizioni al registro dei donatori e un gap tra donatori disponibili e riceventi in lista di attesa.

OBIETTIVI:

Valutare i fattori che portano la popolazione nazionale ed internazionale a non acconsentire alla donazione degli organi.

MATERIALI E METODI:

È stata condotta una revisione integrativa secondo la metodologia Whittemore & Knafl durante il mese di Agosto 2022 presso PubMed. Gli articoli sono stati successivamente selezionati secondo criteri di inclusione ed esclusione precedentemente stabiliti.

RISULTATI:

Al termine del processo di selezione sono stati inclusi 16 studi. Alla base della decisione di acconsentire alla donazione degli organi sia in vita sia in caso di morte di un familiare vi è l'influenza di diversi fattori, in particolare il sistema di consenso, la cultura, la religione, l'attività dei professionisti sanitari in particolare l'infermiere e la conoscenza del singolo in materia di trapianto e donazione.

CONCLUSIONI:

Per acquisire consenso nei confronti della donazione d'organo dovrebbe essere previsto un intervento olistico rivolto sia alla popolazione generale che ai professionisti sanitari, pianificando interventi educativi centrati sul target preso in considerazione.

KEYWORDS: *Approvvigionamento di tessuti e organi, Alfabetizzazione sanitaria, Attitudine del personale sanitario, Infermieri,*

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Milano University Press

Submission received: 30/05/2023

End of Peer Review process: 08/09/2023

Accepted: 08/09/2023



BACKGROUND

Organ donation is a complex issue, regulated by laws with the purpose of ensuring the safety of the donor and the future recipient, as well as manage roles and functions of all the health professionals involved. With respect to the latter, special attention should be paid to the nurse, who plays a role of high responsibility as claimed by the Code of Ethics 2019 (1): "The nurse promotes information about blood, tissue and organ donation as an act of solidarity; educates and supports those involved in donating and receiving blood, tissues and organs." Therefore, despite their importance, nurses to date do not receive sufficient preparation in this area from university training, and during their work, educational courses are offered at the national and regional levels, but these are limited in number (2,3,4,5,6). As a consequence, the previously mentioned elements, combined with the presence of personal, social and cultural factors that influence the opinion of the "lay" population in terms of health, affect donation rates. From the analysis of the network of donation and transplantation activities, institutional sources reported in 2022 a total of 3083 transplants performed(7), compared to the 8132 patients on the waiting list (8).

This evidence shows a wide imbalance between availability and demand for organs and therefore the need to increase access to donation, still challenged by objections: in 2022, in fact, of the 2049661 donation declaration signed at the Municipalities 68.2% were consents and 31.8% oppositions; Local Health Authorities recorded 1222 declarations, with 48.3% oppositions, while the Italian Association for Organ, Tissue and Cell Donation (AIDO) collected a total of 12000 declarations (9). Moreover, the same trend was confirmed within hospital facilities, where the Marche Regional Transplant Center (10) reported that within resuscitations in 2022 the national average opposition rate was 29.6%, while within the Marche Region it was corresponding to 28%. For this reason, in light

of the extreme sensitivity of the topic and the variability of influencing factors, it has been conducted an analysis of the different factors involved in this decision.

Aim:

The primary objective of the research was to analyze the factors influencing whether or not people choose to become donors. The secondary objective was to evaluate the effectiveness of educational pathways incentivizing donation.

METHODS

The work was set up according to the integrative review model proposed by Whittemore & Knafl (11), in order to obtain an analysis of heterogeneous literature as rigorous as possible.



Identification of the problem

First, the research question was defined according to PICO methodology:

- P (population): international population;
- I (intervention): understanding the factors affecting donation;
- C (comparison): /
- O (goal): improving donation rates and decreasing objections.

Literature search process

(a) Definition of inclusion and exclusion criteria: were designated a priori so that bibliographic citations consistent with the topic under consideration could then be obtained. Therefore, studies published between January 1, 2002 and August 23, 2022, qualitative studies, and quantitative studies such as randomized controlled trials (RCTs), systematic

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reviews (SRs), meta-analyses, and observational studies were included within the review; on the other hand, studies involving subjects under the age of 18 years, studies involving tissue donation, and living donation were eliminated.

(b) Determination of the search string: the literature was searched through the MEDLINE database on PubMed, through terms that could entail the large population sample considered and the various factors involved (healthcare professionals/general population; technical aspects related to healthcare/cultural and personal aspects). The search string was defined as following:

(tissue and organ procurement [Mesh Major Topic]) AND (organ donation) AND (attitude).

The bibliographic citations obtained at this point were

2279, then reduced to 66 by applying the search filters corresponding to the previously defined inclusion criteria.

Literature screening

Final eligibility of the 66 studies was made by a single reviewer, based on compliance with the defined exclusion criteria and the relevance of each study to the objective of the review. The screening of the literature was carried out in two steps, with a first selection of the articles performed reading the title and abstract of each study, leading to the exclusion of 32 articles. It was then performed an analysis of the full text of each citation, resulting in the final selection of 16 articles. The entire process of searching and evaluating the literature considered was summarized in the PRISMA below (Fig.1) (12).

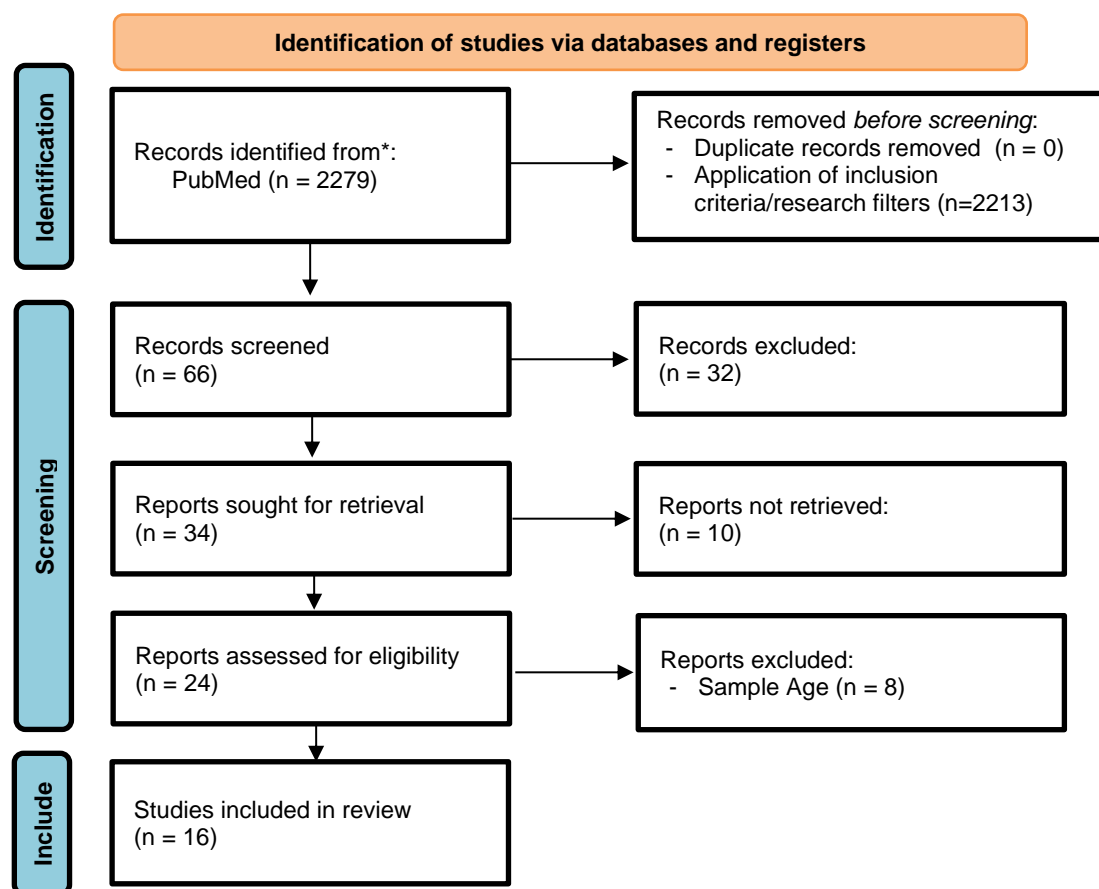


Figure 1: summary and flow-chart of the literature selection process using PRISMA.

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Data analysis process

(a) Data reduction: for each bibliographic reference title, author(s), objective, study design, sample type, main findings and conclusions were extracted, defining an initial classification of evidence according to the type of sample considered and then with respect to the "lay" population in health care and health care professionals.

(b) Data visualization: the extracted evidence was organized into different subgroups. In the case of the

population, the consent model, sociocultural aspects (opinion towards donation, family, religion and educational interventions) were included; in the case of health professionals, technical knowledge regarding donation, work setting and effectiveness of educational interventions were investigated.

(c) Data comparison: The data comparison process involved the identification of themes and relationships among different factors considered in the visualization phase. In fact, a concept map was developed for this purpose (Fig.2).

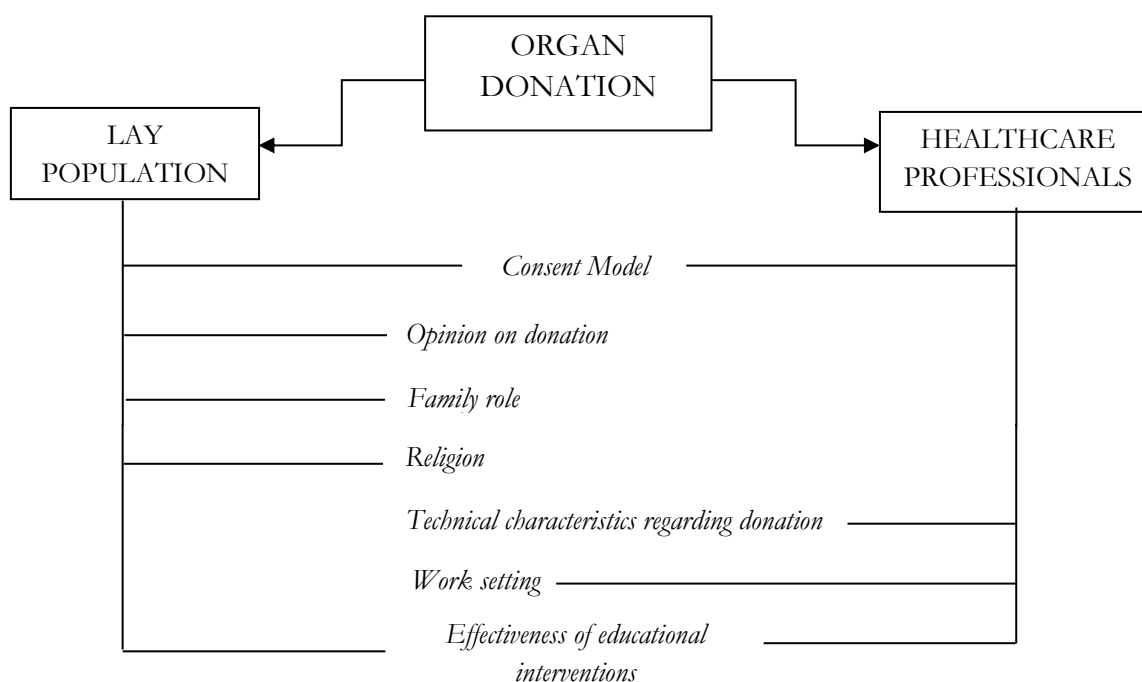


Figure 2: graphical representation of the data analysis process with definition of groups and subgroups following evidence extraction

RESULTS

The main information about each study included in the review is shown in the table below (Table 1).

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Authors, Journal, Year of Publication	Type of study and sample	Objective	Main results and critical points
Aykas et al. (2015), <i>Transplantation Proceedings</i> .	SR + metanalysis of studies, including 2154 subjects.	Assess the opinion regarding the donation of Turkey's Muslim religious officers and theology students.	Eighty-five percent of the sample analyzed consider organ donation appropriate but less than 1 percent demonstrate to have a donor card.
Bastami et al. (2013), <i>Critical Care Medicine</i> .	SR of 20 studies.	To assess the attitude of health care personnel and the general population regarding organ donation following death from cardiac causes.	There is evidence in the emergency department of greater donation in the case of deaths from neurological causes than in the case of death from cardiac causes, as well as less awareness of it.
Hirai et al. (2020), <i>Transplantation</i> .	RCT of 3244 subjects recruited from a motorization office in Japan, randomized into 6 groups.	Determine which, among different types of messages, is the most effective in promoting organ donation.	Reciprocity messages show a positive effect in increasing donor registry membership, while loss messages counteract refusal to register.
Irving et al. (2012), <i>Nephrology Dialysis Transplantation</i>	SR of 18 studies of qualitative nature.	Assess subjects' opinions about donation to consider appropriate communication strategies.	Opinion about donation is influenced by religion, culture, family opinion, body issue, trust in the health care system, and the individual's knowledge about donation.
Jawoniyi et al. (2018), <i>Journal of Clinical Nursing</i> .	SR of 13 publications of both qualitative and quantitative nature.	Assess the impact of the emergency departments toward the donation process, the factors that would make them more informed and proactive, highlight their role in donation and its promotion, and highlight interventions that would make them more proactive toward it.	EMERGENCY DEPARTMENT AS BARRIER: indifference or negative opinion of the individual leads to lack of knowledge and attitude to search for possible potential donors. Influence of various factors, such as professional status, years and context of clinical experience, negative emotions. FACTORS TO CONSIDER: the time factor, "conflict of interest," lack of knowledge of donation criteria.
Lin et al. (2014), <i>Transplantation Proceedings</i> .	RCT of intensive care nurses, divided into 73 in the experimental group and 65 in the control group.	To evaluate the effectiveness of an educational intervention in intensive care nurses conducted according to the Theory of Planned Behaviors on the propensity to promote organ donation.	Both immediately after and two months later, the experimental group showed a greater propensity to promote organ donation. The most influential factor was the educational intervention.
Lopez et al. (2011), <i>Clinical Transplantation</i> .	RCT of 1202 individuals.	Assess the opinion of the immigrant population in Spain about donation and attest to the different influencing factors.	Immigrants from Western Europe and Latin America show greater inclination to donate, as opposed to those from Africa and Asia. Socio-cultural factors play an important role in the decision to become a donor or not.
Molina Pérez et al. (2019), <i>Transplantation reviews</i> .	SR of qualitative and quantitative literature regarding 60 studies.	Evaluate the knowledge and opinion regarding different consent models in the population	There is evidence of greater knowledge of the consent system especially in countries with an opt - in consent system. Same trend (with the exception of Sweden) is confirmed when knowledge regarding the procedures for expressing consent is investigated. Among the different systems, the preferred one still turns out to be the opt - in system.

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Milano University Press

Submission received: 30/05/2023

End of Peer Review process: 08/09/2023

Accepted: 08/09/2023



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Morgan et al. (2012), <i>Ethnicity & Health</i> .	SR of 14 quantitative and 12 qualitative studies of different immigrant populations in North America and UK.	Assess opinion about donation and intention to sign a donor card.	Opinion regarding donation tends to be influenced by: knowledge of the donation process and registration methods, family opinion, religious belief, body issue, and trust in the health care system.
Murakami et al. (2016), <i>Clinical Transplantation</i> .	RCT, with 101 nursing students in the control group and 102 in the experimental group.	Evaluate donor registration following two types of interventions and then promote it to family members.	Of the 102 in the experimental group, 7 provided consent for donation. In the control group, one of the participants provided consent. Of these eight, only the 4 subjects in the experimental group obtained consent from their family members. In the experimental group, 6 mothers, 2 parents, 2 fathers, an older brother and an older sister provided consent. In the control group, one mother and one father.
Padela et al. (2011), <i>Clinical Transplantation</i> .	Review of a questionnaire conducted in 2003 on a sample of 1016 Arab Americans.	Determine the factors that influence opinion with respect to organ donation.	Christian religion, female sex, college degree and high socio-economic conditions are factors that positively correlate with organ donation
Quinn et al. (2006), <i>Progress in Transplantation</i> .	RCT with 3 groups: a control group, a basic group and an advanced group.	To evaluate the effectiveness of an intervention carried out in the workplace to increase postmortem donation and family communication about it.	In the two experimental groups, there was an increase in the number of subjects who signed up for a donor card. Family discussion about donation increased in all three groups while the rate of family members' enrolment in the donor registry increased by 14% in the control group and 17% in the experimental group.
Ricetto et al. (2019), <i>Clinics</i> .	RCT, with 340 college students in the experimental group and 380 in the control group.	To evaluate the effectiveness of delivering informational materials regarding donation compared with the control group.	There are differences in terms of questionnaire response in the two groups regarding knowledge and opinion toward organ donation.
Rithalia et al. (2009), <i>BMJ</i> .	RS of 26 studies	Determine the impact of presumed consent with respect to donation rates and assess the population's opinion of this system.	The implementation of a presumed consent system is shown to be effective in raising donation rates, although these are also determined by other factors for which there is a difficult assessment of the impact. The latest studies conducted in the United Kingdom show support for presumed consent at 64 percent.
Thornton et al. (2019), <i>Clinical Transplantation</i> .	RCT conducted with college students, in two experimental groups of 755 and 753 participants and 753 in a control group.	The first objective was to assess the number of students who logged into the electronic donor registry to provide consent; the second was to assess the quality of the interventions.	The video with real testimonies was the one that led to the number of visits to the donor registry but was rated lower in quality than the other two interventions.
Vincent et al. (2022), <i>BMJ Open</i> .	SR of 89 studies.	To assess the propensity of individuals of Indian origin to donate.	Although there is a positive opinion about donation, few subjects declared their willingness to do so. The influencing factors are geographical location, family opinion, body issue, and religion.

Table 1: *synoptic table of included studies*

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Milano University Press

Submission received: 30/05/2023

End of Peer Review process: 08/09/2023

Accepted: 08/09/2023



DISCUSSION

Studying the underlying causes of refusal to consent to organ donation in the general population requires analyzing the actors involved in the entire process: the population, health professionals, and the medical-legal system regulating the entire process. For these reasons, as reported in the Materials section, the literature was discussed and divided according to four basic aspects: the different models of consent, socio-cultural factors, the role of health professionals, and the interventions implemented to promote donation.

Consensus models

The systems most widely adopted by different countries to regulate consent to organ donation can be distinguished into two groups: the presumed (opt-out) one, currently applied in France and Spain, where the individual is considered a donor from birth and must sign a statement opposing donation, and the explicit (opt-in) one, practiced, for example, in Italy, where, on the contrary, individuals must instead sign a statement attesting to their willingness to become one (13). From these definitions, it is interesting to analyze the population and especially the repercussions of the different systems towards donation rates. Despite the fact, therefore, that opt-out proves to be the most effective in increasing donation rates there emerges the low level of support for it, towards which most people in European countries are opposed with the exception of Belgium (13) and Scotland (16). The rejection toward implicit consent lies in the perception that it is not in line with ethical principles of respect for human life and also creates the false perception that health professionals do not implement all available life-saving interventions; the opt-in system, on the other hand, is considered more adequate within several European countries because it is associated with a greater knowledge of the donation and transplantation system: supporting the latter figure is, for example,

France (a country with an opt-out system) where only 39% of the population showed themselves informed about the process (17). However, the knowledge rate is not only influenced by the adoption of either model but by the countries' own promotion of information campaigns: in Sweden, a country with an assumed consensus system for example, between 2001 and 2005 after the implementation of two educational interventions, the population's knowledge increased from 18% to 40% (19).

Influence of socio-cultural and religious aspects

Socio-cultural aspects are factors that guide lifestyles of each individual and therefore it was deemed appropriate to conduct a thorough search of the literature also regarding the influence of these elements with respect to donation. The results showed that 20% of Arabs believe that donation is never justifiable, 35% always justifiable, and 46% are in the middle between the two opinions, while 67.2% of subjects from Western Europe, 59.8% from Eastern Europe, 40.2% from North Africa, 64.6% from Latin America, and 25% from Asia show positive opinion (20). The analysis of the link between belief and donation shows that Arabs of Christian religion are more in favor of donation than those of Muslim religion (20, 21). In spite of this, other studies have defined religion as one of the factors influencing to a lesser extent the choice or not to become a donor, leading to the absence of data that can define an actual correlation between the two elements (22, 23, 24, 25, 26). Specifically, we considered in particular the Muslim and Sikh religions: in the former case, there is a strong religious faith in some areas of the United Kingdom, with identification of religious leaders as true points of reference (although in objective terms Islam has not pronounced itself unanimously regarding donation) (27, 28); in the latter case, on the other hand, there is strong support for donation as a gesture of extreme altruism although, particularly in the elderly, there is a belief that organ





removal interferes with reincarnation and goes against divine will (29, 30). The same consensus is confirmed in Spain, where 36.8 percent of Islamists, 50 percent of Jews and 30 percent of Buddhists define themselves as in favor of donation (20). The analysis of the opinion of Turkish religious officers and Muslim religious theology students shows that 85% of the sample agree that the Islamic religion considers donation appropriate but none of the students and only 19 of the officers say they hold a donor card (31). Another concept that deserves attention is alteration of bodily integrity: some evidence suggests that this is not an unfavorable factor for donation (22, 23, 32, 33, 34, 35), others report that some individuals particularly of Indian origin, in order not to alter the bodily integrity necessary for funeral rites declare themselves in favor only of corneal explantation (23, 32, 36, 37,38). On the other hand, looking at the population's knowledge regarding the process of donation and transplantation (21), generalities with respect to donation are fairly well known, while the concepts of brain death, how to register on the donor registry, and how to acquire a donor card are lacking: in African Americans in particular, knowledge regarding organ donation is higher when there is a need for transplantation in a member of the community (39, 40), and in different immigrant cultures in the United Kingdom and the United States, awareness regarding the process is lower than in the Caucasian population, as organ donation is considered a matter for "whites" (41). Failure to convey adequate information can lead within the population to the creation of false myths and distorted information (41), which also fall on the ability and good performance of health professionals, for example, in what concerns the non-implementation of all life-saving treatments in the case of a patient with a donor card (42, 43): mistrust of the health care system and the use of explanted organs for inappropriate purposes is greater in Africans and Caribbeans at parity of socio-cultural

factors with Caucasian Americans (38): "I'm sorry to say this, but we think it's for white people and not for us, because whenever pictures of people receiving transplants are shown on TV, they are always white" (41). One constant directly implicated in the donation process is the family, both as a factor conditioning the individual's choices during his or her lifetime and as a figure expressing the individual's wishes once he or she is deceased. Indians living in their home country report the family's contrary opinion as one of the main hindering factors (45, 46), while those living in other countries such as the United Kingdom tend to be more open to expressing their wishes with the family, as they present a greater awareness of the process (37, 46, 47); in general, moreover, the Caribbean, African, and South Asian cultures are less likely to accept family discussion of donation than the Caucasian population. The reasons that limit family discussion regarding the topic of donation are superstition towards death and the fact that parents do not want to talk about the possible death of their children: this is especially the case in older members of families and that the younger ones, although they have a positive opinion towards donation, tend to follow the former's lead (30): "I personally have no objection but my father does, so I'm still not sure" (48).

Role of health professionals

Health care teams play a fundamental role throughout the donation and transplantation process, having the task of identifying potential donors, initiating communication with family members in order to acquire consent to proceed with the explantation, and also representing the "method of connection" between donor and recipient (49,50). Within the process, therefore, each professional plays an essential role and must possess specific skills related to both the technical aspect of transplantation and donation and an emotional component that allows effective communication while being respectful of the delicate





moment. Evidence shows that 99% of professionals are in favour and show a positive attitude toward donation (51,52,53), although there is little willingness on their part to consent to it (54). There is discordance regarding preference and consent: nurses, for example, are 46% in favour of donating organs following death from cardiac accidents and 78% are in favour of donating following death from neurological causes (55%), the reasons for this lack of support lies in the nurses' belief that they are directly responsible for the patient's death (56). In the moment in which the patient becomes a potential donor, the ambivalence of health professionals comes into play, feeling crossed between being the personnel who implements all the possible interventions to save the patient's life and be the ones who instead must implement all the necessary procedures to allow organ preservation once death has been declared (57). The conflict of interest may cause psychological distress in health care professionals who generally take care and do no harm to the patient, but it is also generated by a lack of knowledge regarding the different types of donation and distrust of the certainty of the diagnosis of death (58, 59). For these reasons, there is the need to separate professionals between those who provide life saving care and those who instead take care of the communication with family members to acquire consent for donation (55). However, in general, the lack of support from health professionals results in a lack of proactive attitude toward donation, failure to adequately inform the general population and failure to implement effective communication with the family members of the donors, resulting in low donation rates (3, 60, 61, 62, 63, 64, 65). One of the factors that causes this is the lack of adequate education and training of nurses and all healthcare personnel involved (2,3), due primarily to inadequate training within universities (4,5) and later during the professional career. The evidence suggests as possible strategy the increase in knowledge with respect to the different modalities of donation, the regulatory

framework and more targeted training to the environments in which one's clinical activity takes place, dependent on the type of healthcare figure, period and setting of work experience (49, 66, 67, 68, 69). To increase knowledge and, consequently, make healthcare professionals more inclined to donation, the National Transplant Center offers several training events, which are carried out both within the entire Italian territory and at the regional level (7). From this evidence, considering also the limited number of professionals accepted, the modalities in which they are carried out, and the presence in any case of a lack of knowledge on the part of health care professionals, it is noted that there is a need to investigate additional training models that might be more effective and more impactful. Several educational strategies have thus been tested: studies confirm that an educational intervention in ICU nurses, based on the Theory of Planned Behavior, is effective in increasing the propensity of professionals to promote donation, as it provides both technical training regarding the process and at the same time makes them aware of the importance of the gesture through real-life testimonials, as opposed to simple information through brochures (71). Other studies, however, confirm that regardless of the type of training any intervention on health care professionals is shown to be effective in increasing their knowledge and readiness to promote donation and especially the proper use of organs (72). In other studies, the educational intervention is analyzed according to the Trans - theoretical model (73, 74, 75), which predicts that change towards a given action occurs according to a phase of precontemplation, contemplation, preparation, action and maintenance: they therefore applied an experimental intervention, where nursing students were subjected to a testimonial reading, a class discussion and given brochures, proving, however, to be no more effective than the simple delivery of informational materials. While, therefore, the intervention in this case may not be effective in





increasing consent and adherence to donation, opposite result emerged in another study (54), which again used the previously described model to design an experimental intervention based on a two-hour theoretical training on transplantation and donation and a group discussion with transplant coordinators, donor and recipient family members, proving effective in terms of knowledge and positive opinion regarding donation while not resulting in behavioral change in the subjects.

Educational interventions towards the general population

The nurse and all health care professionals, in addition to the technical aspect of donation, play the fundamental role of educating and informing the population, which must be supported by the Health System (76). The Ministry of Health, through the National Transplant Center, annually launches the Communication Campaign for the promotion of organ, tissue and cell donation, which for the current year coincided with the 26th National Day for Organ and Tissue Donation and Transplantation on April 16, 2023. The campaign, titled "Donating is a Natural Choice," aims to inform the population about the options for expressing consent regarding donation, is mainly aimed at the 18- to 35-year-olds and the over-60s, who are the ones who show the least support for donation itself, and is carried out both through the website www.sceglididonare.it and through social media, with digital content creation by the NTC throughout the year 2023. Despite this, several authors have posed different hypotheses to incentivize organ donation within the population. In an initial study with a sample of university students (77), the administration of videos with real testimonials and more focused on the emotional aspect was found to be more effective, albeit found to be qualitatively inferior, than one focused on the technical aspect of donation and information provided by the Centers for Disease Control and

Prevention (CDC). An intervention therefore based on the emotional aspect and the need to dispel false beliefs associated with donation would tend to be more favorable toward donation (78) and also, by being broadcast through the Internet, would allow for a large-scale promotional intervention while keeping costs low. Nevertheless, the intervention, in order to be effective in terms of increasing donation rates, must be carefully calibrated to the age group and population cluster, as in another study conducted on a sample recruited by Amazon Mechanical Turk, the video focused on the emotional aspect, although the most preferred one, in fact did not lead to an increase in donor registry visits (79). Also with regard to university students, the administration of informational material used in previous communication campaigns, among others, proved to be full of "flaws," in that it led the subjects to less truthful responses, to greater perplexity regarding donation especially with regard to the consent model, safety of treatment, and for the lack of attention with respect to the emotional aspect of the material provided. On the other hand, it was possible to attest that the subjects were more knowledgeable about the technical aspect of donation and that the age of the subjects influenced the preferred communication system (younger people tended to prefer technology while older people preferred books and television) (80). Other evidence, however, points to the effectiveness of administering informational materials (81). Therefore, in addition to the content of the material provided, the proper communication technique should also be planned when setting up the campaign: in this regard, another study (82) tested the greater effectiveness in terms of increasing the propensity to donate between a message of parity ("Many people have already consented to donate"), a message of gain ("Your intention could save six people") of loss ("Five people die every week because there are not enough donors"), of reciprocity ("You may someday need organs from a donor"), of



reciprocity and parity combined used by the Japanese Organ Transplantation Network ("Many people have already expressed their intention to become donors. It may be necessary for you to receive organs.") and finally a sixth type of message called control, containing general information about organ donation. Among the different types, therefore, the most effective message in encouraging subjects to express a decision about consenting or not consenting to donation was the reciprocity message, while the loss messages limited the number of subjects who did not intend to express an opinion about it.

CONCLUSIONS

The literature review has made it possible to analyze all those factors that, with both positive and negative meanings, affect the decision to become an organ donor. The problem at the term noted lies essentially in the gap between the positive perception of donation and the signing of a statement in favour: studies and papers cited previously in fact reported that in most cases there is a positive opinion towards donation but then there are factors that hinder this decision such as the consent system, the social and cultural aspects of the individual and the figure of health professionals, particularly that of nurses. From this evidence, it can be concluded that donation requires a holistic, informational, communicative and relational intervention geared toward increasing donation rates but still respectful and aware of different cultures.

Two main limitations were highlighted in this review:

- the use of only one database by the researcher;
- it is also not possible to generalize the results obtained to the Italian model, as the results collected from national data were found to be small.

Nonetheless, although extremely heterogeneous literature in content and structure was used in the conduct of this review, attention was paid to the topic of donation for future study.

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Submission received: 30/05/2023

End of Peer Review process: 08/09/2023

Accepted: 08/09/2023





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Milano University Press

Submission received: 30/05/2023

End of Peer Review process: 08/09/2023

Accepted: 08/09/2023





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