



Do Religious Factors Influence the Attitude Toward Organ Donation Among Medical Students? A Spanish Multicenter Study

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ABSTRACT

Introduction. Religious factors have conditioned the attitude toward organ donation and transplantation (ODT) since the beginning of transplantation, despite the fact that most religions are in favor of transplantation.

Objective. To assess the impact of religious beliefs of medical students on their attitude toward ODT.

Method. Population under study: Medical students in Spanish universities. Study sample: Stratified by geographical area and academic course. Assessment instrument: Attitude ODT questionnaire PCID-DTO-Ríos, anonymous and self-administered.

Results. Of all students, 42% (n = 3907) declare themselves atheists or agnostics. The remaining 58% (n = 5368) declare themselves to be religious, the majority being Catholic (55%, n = 5102). Of the rest, 0.2% are Muslims (n = 8), 0.1% Protestants (n = 1), and the remaining 2.7% (n = 257) indicate other religious doctrines but do not want to specify it. Regarding their attitude toward ODT, those who consider themselves atheists or agnostics have a more favorable attitude than those who consider themselves religious (84% versus 76%; $P < .001$). Among those who follow some kind of religion, Catholics are more in favor of ODT than non-Catholics (77% vs 64%, $P < .001$). Note that among the religious,

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only 57% (n = 3050) know which religion is in favor of transplantation, while 22% (n = 1,152) consider that it has not been pronounced on the matter, 13% (n = 723) think the religion is against donation, and the remaining 8% (n = 443) do not know.

Conclusion. The religion professed by medical students conditions their attitude toward donation, with the atheists and agnostics being more in favor of donation.

THE ATTITUDE toward organ donation (ODT) is modulated by different psycho-social factors [1–4], among which religious beliefs stand out. That is why it is interesting to know the influence of aspects related to religion in different social groups: potential donors, potential candidates for transplantation, and health professionals. Current medical students will become agents involved with the ODT process in the near future. In addition to being professionally linked to this therapeutic option, health professionals become agents that modulate the opinion of the rest of the population. Therefore, it is essential to know the attitude toward ODT of this group of health professionals and analyze the influential factors on it, including religious factors. Spanish people are, by culture and tradition, believers (86.2%), and most are Catholic (70%–75%) [5].

The objective of this work is to assess the impact of the religious beliefs of medical students on their attitude toward cadaveric organ donation.

METHOD

Population Under Study

We surveyed medical students from 21 Spanish universities, with a total of 9275 respondents. A random representative sample was obtained according to academic year (number of students per course: first year = 2090, second year = 1965, third year = 1375, fourth year = 1301, fifth year = 1113, sixth year = 1431).

Valuation Tool

We used a validated attitudinal questionnaire for organ and transplantation—PCID-DTO RIOS: Questionnaire of Proyecto Colaborativo Internacional Donante sobre Donación y Trasplante de Órganos (in Spanish), developed by Dr. Ríos [5]. This questionnaire presents a total explained variance of 63.203% and a Cronbach alpha reliability coefficient of 0.834.

Fieldwork

For the distribution of the questionnaires, each university was contacted, and a collaborating researcher was determined; this researcher was responsible for the distribution, application, and sending of the survey in the selected courses of his university. The questionnaire was completed anonymously and self-administered.

Statistics

A descriptive statistic was performed, and the Student *t* test, χ^2 , Fisher, and a logistic regression analysis were applied.

RESULTS

Religious Attitudes

Of the 9275 respondents, 58% (n = 5368) are declared religious (Catholics = 55% [n = 5102], Muslims = 0.2% [n = 8], Protestants = 0.1% [n = 1], others that do not want to specify = 2.7% [n = 257]), and the remaining 42% (n = 3907) is defined as atheist or agnostic. Those who consider themselves atheists or agnostics have a more favorable attitude toward organ donation than those who consider themselves religious (84% versus 76%, *P* < .001). Among those who consider themselves religious, Catholics are more in favor of organ donation than non-Catholics (77% versus 64%, *P* < .001). Regarding the opinion of these doctrines on donation and transplantation, it is noteworthy that of the respondents, 57% (n = 3050) consider that their religion is in favor of donation and transplantation, while 22% (n = 1152) believe that their religion has not declared a position, 13% (n = 723) think that the religions are against donation, and 8% (n = 443) do not know.

Religious Beliefs and Attitude Toward Organ Donation

In the attitude toward cadaveric organ donation, it should be noted that 80% of those evaluated are in favor (n = 7376), 2% are against (n = 154), and 18% are undecided (n = 1745). Regarding religious attitudes, there is an objective association between the religious beliefs of those evaluated and the attitude toward organ donation. Thus, 84% (n = 3293) of atheists and/or agnostics are in favor; 77% (n = 3914) of Catholics and 64% (n = 169) of believers in other non-Catholic doctrines are also in favor (*P* < .001). Among religious people, it is observed that respondents who believe that the opinion of their religion is favorable toward donation and transplantation are more in favor of cadaveric organ donation than those who consider that their religion has not pronounced a position on this issue (79% vs 35%; *P* < .001) (Table 1).

DISCUSSION

It is important to know the attitude toward ODT of the population that will be health personnel in the future because of the influence they can exert on the rest of the population that can be a donor or transplanted. One of the factors associated with this attitude is the religion they profess because, whether they are believers or not, they will be given certain guidelines for making decisions, especially when they concern the mutilation of the body in life or, more, after death. Up to now in Spain, the religion professed by the

Table 1. Attitude Toward Own Organ Donation When Dying in Function of the Religious Attitude of Medical Students and the Knowledge of the Attitude of Their Own Religion Toward the Donation and Transplantation of Organs

Variable	In Favor n = 7376 (80%)	Not For n = 1899 (20%)	P
Religious attitude			
Catholic (n = 5102)	3914 (77%)	1188 (23%)	
Atheist/agnostic (n = 3907)	3293 (84%)	614 (16%)	<.001
Other religion (n = 266)	169 (64%)	97 (36%)	
Attitude of own religion toward transplant according to the respondent			
In favor (n = 3050)	2413 (79%)	637 (21%)	
Not for (n = 723)	536 (74%)	187 (26%)	<.001
Does not know (n = 443)	325 (73%)	118 (27%)	

Studied about those who profess some kind of religious beliefs.

majority of citizens has been Catholic; after decades of immigration from different countries and cultures, other religions are implanted in the country. In the same way, the number of people who consider themselves agnostic and/or atheist grows, especially among young people. It is noteworthy that 30% of respondents say that either their religion has not pronounced about organ donation or they do not know what position it holds. This information is important in relation to being able to propose training campaigns for health personnel in this scope [4,6–14].

The results are similar to those performed in different populations of university students of health careers and countries previously and a majority position favorable to organ donation [2,3,7]. It is noteworthy that the population under study is university medical students who in the future will exercise, if possible, a greater influence on decision making than other health professions analyzed. In conclusion, we can say that professional religion for medical students in Spain conditions the attitude toward organ donation, which is why it is a factor to be considered in the promotion of organ donation.

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