Attitude of the Older Population Toward Controlled Asystole Donation

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ABSTRACT

Introduction. Studies about the knowledge of and attitude toward new lines of organ donation in a group of older people are important due to the increase in older organ donors.

Objectives. To analyze the attitude of citizens over 65 years of age in southeastern Spain toward controlled asystole donation (CAD) and to determine the psycho-social profile that influences this attitude.

Methods. The study population consisted of citizens over 65 years of age. A representative sample was obtained in southeastern Spain (N = 420). A questionnaire about attitudes toward CAD was used, detailing in the questionnaire that this is a type of donation from people who have died of circulatory and respiratory criteria after the limitation of life support treatment. Several psychosocial variables were also taken into account. Statistical analysis included the χ^2 test and multivariate analysis.

Results. The completion rate was 84% (n = 351). Favorable attitude toward organ donation and transplantation (ODT) was 98% (n = 344) overall, and CAD was viewed favorably by 45% (n = 158). The psychosocial variables that influenced attitude toward CAD were mainly having received a talk about ODT (odds ratio [OR] 5.6), knowing the opinion of one's partner (OR 7.95), acceptance of cremation (OR 1.09), and acceptance of autopsy (OR 3.002).

Conclusions. The attitude of older people toward CAD is unfavorable despite a willingness to support ODT in general. This attitude is influenced by variables of social and family dialogue about ODT, attitude to body manipulation, and having received information about ODT.

THE increase in controlled asystole donation (CAD) in recent years [1] has made it necessary to study in greater depth different aspects that can influence the process [2]. In this type of donation, the family interview for the organ request can be somewhat more complicated. It is essential that family members know and understand their loved one's situation before making a donation request, which includes knowing the meaning of the limitation of life support treatment [3]. The greatest weight during the donation interview lies in effective communication with family members detecting barriers that may cause a negative impact [4].

The aging of the population has led to modifications in some approaches to the organ donation and transplantation (ODT) process, evaluating older people as potential donors. There is no absolute age limit in CAD, but it tends to be more restrictive than in donation after brain death. Although initially a limit of 65 years was established, this limit could be reassessed as experience with this type of donation is gained [5]. In addition, this population subgroup is also important when requesting organs from a family member for CAD because less knowledge and certain factors could negatively influence donation.

The objectives are to analyze the attitude toward CAD among people over 65 years of age and to determine the psychosocial variables that may influence their attitude.

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Table 1. Multivariate Analysis

Variable	Regression Coefficient (β)	Standard Error	Odds Ratio (Coefficient Interval)	*P* Value
Acceptance of cremation	0.740	0.271	1.097 (1.232-3.569)	.006
Acceptance of autopsy	1.099	0.258	3.002 (1.811-4.975)	< .001
Knowing the opinion of one's partner toward ODT	2.073	1.601	7.952 (0.345-183.225)	< .001
Having received a talk about ODT	1.726	0.807	5.617 (1.156-27.301)	.032

ODT, organ donation and transplantation.

MATERIAL AND METHODS

An observational sociologic study was used. This was a multicenter study conducted with a representative sample of people over 65 years of age, stratified by sex and geographic location in southeastern Spain (N = 420). The attitude was assessed using a validated questionnaire of attitude toward organ donation and transplantation involving CAD, detailing in the questionnaire that this is a type of donation from deceased people according to circulatory and respiratory criteria after the limitation of life support treatment, also explaining this concept. The questionnaire was completed anonymously and was self-administered.

Statistical Analysis

The data were stored in a database and analyzed using a statistical package. Descriptive statistical analysis was carried out; for the bivariate analysis, the Student's *t* test and the χ^2 test were complemented by an analysis of remainders. Fisher's exact test was applied when the contingency tables had cells with an expected frequency of <5. Based on the significant variables of the bivariate analysis ($P < .05$), a multivariate analysis was applied.

RESULTS

The completion rate was 84% (n = 351). Favorable attitude toward organ donation and transplantation (ODT) was 98% (n = 344) overall. The favourable attitude towards ACE was 45% (n = 158). No differences were found in attitude toward CAD according to epidemiologic variables (age, gender, and marital status), sources of information, prosocial activities, or religious attitude ($P > .05$). Differences were found in the variables of social interaction as follows: the favorable opinion of one's partner (68% vs 32%; $P < .001$); discussing the issue of organ donation with family members (56% vs 44%; $P = .005$) and friends (64% vs 36%; $P < .001$); knowing about advance directives (63% vs 37%; $P = .001$); having met a donor (57% vs 43%; $P = .022$); having received a talk about ODT (84% vs 16%; $P < .001$); acceptance of cremation (61% vs 39%; $P < .001$) and autopsy (58% vs 42%; $P < .001$); and concern about scarring after organ donation (24% vs 76%; $P = .018$). The variables that persisted as significant in the multivariate analysis were knowing the opinion of one's partner (OR 7.95), having received a talk about ODT (OR 5.6), acceptance of autopsy (OR 3.002), and acceptance of cremation (OR 1.09) (Table 1).

DISCUSSION

Considering that more than half of donors are currently over 60 years old [1], it is important to know the older group's opinion toward this type of donation. Our data reflect that although respondents are well disposed toward ODT in general, less than half would be in favor of CAD. When CAD began, some studies of attitudes toward this type of donation were carried out among health workers, observing a lack of information and awareness about this type of donation [6,7]. This lack of awareness in the general population could also influence our results, so it would be important to inform the population more about this type of donation [7,8] to improve their predisposition [9].

In the multivariate analysis, it has been observed that respondents who had received a previous talk about ODT had a more favorable attitude toward CAD. A previous study in the United States showed that by providing adequate information to the population, attitudes toward CAD could become more favorable, surpassing even the attitude toward donation after brain death [10].

In the previously conducted study of attitude toward CAD in the general Spanish population, the attitude was more favorable, noting that prior knowledge of the attitude of the deceased relative favorably affects predisposition among respondents [8]. Our study has also shown that knowing about advance directives positively influences attitude, in the same way as social and family dialogue about ODT and talking about the issue mainly with one's partner. Family influence has been previously described in numerous studies [11,12], so when providing information to the population about this type of donation, it is important to encourage social and family discussion and to raise the issue with one's partner. Attitude toward manipulation of the body also influences a willingness to support CAD, as is also the case with attitude toward donation after brain death observed in other studies [13].

To conclude, older people tend to have an unfavorable attitude toward CAD despite being willing to support ODT in general. This attitude is influenced by variables of social and family dialogue about ODT, attitude toward body manipulation, and having received information about ODT.

DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that might appear to influence the work presented in this article.

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