



# Organ Donation: A Comparison of Donating and Nondonating Families

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## ABSTRACT

The family interview to determine the wishes of the deceased during life about organ donation is not only a legal requirement, it is also the stage at which most potential donors are lost. Minimizing these losses necessitates awareness of all the variables involved in the family interview so that, before starting the interview, one understands the important key points affecting the outcome. We showed that some variables among 268 interviews are susceptible to intervention: the information and treatment perceived by the family members during the hospital stay and the preparation of the interview, such that a suitable number of the closest members of the family with a decision capacity is always present. Other noncontrollable factors that are important in the final decision included the social and demographic level, the prosocial attitude of the deceased, and prior knowledge and opinions about organ donation. Informative events within the hospital to improve the predisposition and collaboration of health care professionals were key to improving the public's perception of organ donation and achieving greater confidence in health care centers and their staff. Furthermore, the family interview must be planned by the transplant coordinators to limit improvisation.

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EVALUATION OF THE ORGAN donation process shows that family interviews resulting in refusal account for the greatest loss of potential donors. The mean frequency of losses is 20% to 24% at present. It appears particularly difficult to reduce these figures in some areas of Spain, despite the continued efforts of various organizations and administrations.<sup>1</sup> The family interview is a fundamental step in the process of organ donation. Multiple variables are involved, ranging from the preconceived attitudes of the family members to variables related to the hospital and its staff. The attitude of the family members toward these variables is key to obtaining a positive result.<sup>2</sup> Intervention in factors resulting in the refusal of the family is therefore the fastest, most direct way to increase the number of transplants, reduce the waiting time, and lower pretransplant morbidity. This study examined a consecutive series of family interviews at two hospitals in Andalusia, Spain.

## DONORS AND METHODS

From January 1998 to October 2003, we studied the histories of 268 possible donors accepted for transplant. A family interview was conducted in all cases. Using an appropriate statistical test for each variable we evaluated 52 items related to the characteristics of the donor, the admission, and the interview itself. The sample was

divided statistically into interviews with positive results and interviews with negative results.

## RESULTS

A total of 211 families authorized donation (78.4%) and 57 refused (21.2%). Table 1 shows the main features of the families according to whether they gave or refused permission for donation. In general, those families accepting donation were more aware of the wishes of the deceased concerning donation and had a better understanding and acceptance of the process leading to brain death. Their social level was also higher than the nondonating families.

The number of family members attending the interview was lower in those resulting in acceptance. Donation was spontaneous in 21% of the donating families after they were informed of the patient's brain death. More than one

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**Table 1. Variables Related With Characteristics of Donors, Families, and Interview**

|  | Donors<br>(n = 211) | Nondonors<br>(n = 57) | P    |
|--|---------------------|-----------------------|------|
| <b>Donor</b>   |                     |                       |      |
| Donor age (y)  | 42.3 ± 20.3         | 39.1 ± 18.6           | NS   |
| Male sex (%)   | 65.8                | 64.9                  | NS   |
| Foreign donors (%)   | 16.1                | 12.3                  | NS   |
| Days in hospital   | 2.9 ± 1.4           | 2.1 ± 1.1             | NS   |
| Previous admission in other hospital (%)                                   | 16.7                | 23.2                  | NS   |
| Urban residence of donor (%)   | 75.0                | 55.8                  | .014 |
| Organ donor card (%)   | 6.2                 | 0                     | .05  |
| Talked about donation with family (%)                                      | 23.2                | 1.8                   | .001 |
| <b>Family</b>  |                     |                       |      |
| Do not understand brain death (%)  | 28.9                | 38.6                  | NS   |
| Acceptance of brain death (%)  | 67.3                | 50.9                  | .044 |
| Age of main decider (y)  | 46.6 ± 13.4         | 50.6 ± 11.9           | NS   |
| Male sex of main decider (%)   | 55.2                | 46.8                  | NS   |
| Civil status main decider (%; married)                                     | 59.6                | 55.3                  | NS   |
| Bad opinion about own medical care (%)                                     | 4.5                 | 10.5                  | .05  |
| Friend/family of health care professional (%)                              | 17.5                | 5.0                   | .02  |
| Low to medium-low sociocultural level (%)                                  | 36.9                | 61.4                  | .001 |
| Know transplanted persons (%)  | 11.4                | 3.9                   | .008 |
| Cremation of body (%)  | 39.3                | 2.8                   | .001 |
| <b>Interview</b>   |                     |                       |      |
| Number of attendants at interview  | 3.5 ± 1.5           | 4.5 ± 1.8             | .001 |
| Number of interviews   | 1.18 ± 0.39         | 1.36 ± 0.48           | .004 |
| Total time of interviews (min)   | 22.8 ± 16.0         | 31.25 ± 16.3          | NS   |
| Family discrepancy at interview (%)  | 2.4                 | 17.5                  | .001 |
| Interview without main decider (%)   | 5.5                 | 14                    | .002 |
| Ambience strongly disagree or disagree at interview (%) (1–2 Likert scale) | 9.1                 | 37.2                  | .001 |

Results are mean ± SD.

interview was necessary in 60 cases, with 38 of these resulting in donation.

The main reasons for not donating (which could not be changed in one or more family interviews) were a wish to maintain the body whole ( $n = 28$ ), nonwillingness to donate expressed during life ( $n = 15$ ), sociocultural reasons ( $n = 11$ ), failure to understand or accept the brain death ( $n = 7$ ), adverse evaluation of the health care ( $n = 6$ ), and religious reasons ( $n = 2$ ).

## DISCUSSION

The interview for organ donation must be seen as a process that starts at the moment the family arrives at the hospital, receives medical information, and forms an opinion about the medical performance. The next key point occurs when the family is informed of the diagnosis of brain death. Third, the process concludes with the meeting between the transplant coordinator and the closest family members having a decision capacity.<sup>3</sup> The whole process may fail at any one of these three stages, though with families who are aware of the situation or who are motivated this may not be as important. However, in other cases failure in the performance of the hospital or its health care professionals may be an excuse not to donate. The predisposition of health care profes-

sionals regarding organ transplants and the treatment afforded to the families of patients liable to suffer brain death therefore seem transcendental in the donation process.<sup>4</sup> Studies coincide in pointing to intrahospital barriers as a key element in low numbers of donors. Health care professionals may be only poorly aware of or collaborative with organ donation programs and reluctant to face families of potential donors.<sup>5</sup>

The following conclusions can be drawn from this study: reducing the number of family refusals for donation is possible if the family interview is prepared with time, giving the family members full and correct information about the process leading to brain death. This approach achieves a high level of confidence among members of the deceased's family. The interview should not be started if the family members with a decision capacity are not present, or if the situation of brain death has not been accepted or understood. It also appears beneficial to limit the number of family members at the interview, since in cases of lack of unanimity regarding donation the possibility of refusal is greater. Finally, informative work within the hospital to improve the predisposition and collaboration of health care professionals is vital to improving the public's perception of organ donation and achieving greater confidence in health centers and their staff. Moreover, the interview must be

planned by the transplant coordinators to minimize improvisation.

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