# The Primary Care Physician Faced with Organ Donation: Attitudinal Study in South-Eastern Spain

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#### Abstract

Introduction: Attitude of health personnel, especially of physicians, has a significant influence on populational attitude towards organ donation and transplantation. The objective here is to analyse the attitude of Primary Care (PC) physicians towards cadaveric organ donation and transplantation and to determine the factors which condition this attitude.

Materials and methods: A random sample was stratified by geographical location (six health areas of our community) among PC physicians. A total of 155 responses from 32 health centres were collected. Attitude towards donation was evaluated using a psychosocial attitudinal questionnaire about donation validated in our geographical area. The co-ordinator of physicians in each centre was contacted in each centre and was made responsible for distribution and collection of the questionnaires which were completed anonymously. The  $\chi^2$  test and Student's t-test were applied.

Results: 88% (n=136) of the PC physicians are in favour of organ donation, 1% (n=2) are against and 11% (n=17) are undecided. Up to 84% of the PC physicians (n=130) have attended to transplant patients, although this fact is not related to a more positive attitude towards donation (p=0.059). In addition, 64% (n=99) have provided favourable information about organ donation and transplantation to their patients and one of the physicians admits having provided unfavourable information about the matter. On analysing the psychosocial variables which influence such an attitude, a relationship has only been found with respect to two variables: attitude towards cadaveric manipulation (p=0.035) and a partner's opinion towards the subject (p=0.006).

Conclusions: PC physicians have a very favourable attitude towards donation of their own organs and constitute a positive source of information on the subject for the general public.

### Introduction

Organ transplantation has become more efficient and offers increasingly better quality of life (1). However, this progress is limited by the shortage of available organs for carrying out the necessary number of transplants (2). In this respect, one of the limiting factors is family refusal to allow donation which in Spain causes the loss of one in 5 potential donors detected (3).

Primary Health Care (PHC) is the first point of contact between the public and the health system. For this reason, some authors emphasize that this first access to populational health could constitute an important channel for the communication and promotion of organ donation and transplantation. Therefore, it has been demonstrated that the information on organ donation given by PHC professionals is of great significance in the community population (4-5).

The objective of this study is to analyse the attitude of PHC physicians towards cadaveric organ donation and to determine psychosocial variables that affect this attitude.

### Materials and Methods

A sample was made of 1072 Primary Care physicians from the 75 health centres in the Autonomous Community Region of Murcia. This sample was initially stratified by geographical location and 32 centres were selected. Afterwards, a random sample was made among medical personnel, selecting a total of 179 physicians. A total of 155 out of 179 (87%) physicians answered the survey.

In order to evaluate attitude towards cadaveric organ donation, it was decided to use a psychosocial questionnaire on attitudes towards cadaveric organ donation, validated in our geographical area (6-7). The co-ordinator of physicians was contacted and given an explanation of the project. This person was made responsible for the distribution and collection of questionnaires among colleagues. The questionnaire was completed anonymously and was self-administered. The process was co-ordinated by two health collaborators from the Regional Transplant Co-ordination Centre in Murcia and two collaborators from the Association of kidney patients ADAER, with the study being carried out in the period of time between October 2002 and October 2003.

The variables that were analysed include: 1) sociopersonal variables: age, sex, marital status, work situation, location of the centre; 2) variables of knowledge about donation (previous experience, knowledge of the concept of brain death (BD); 3) variables of social interaction (family discussion of the matter, attending to transplant patients or those on the waiting list, partner's opinion about organ donation and transplantation); 4) variables of attitude towards the body (towards cadaveric manipulation); 5) variables of prosocial voluntary activity; 6) attitude towards donation of a family member's organs, 7) information requested and provided about the subject and; 8) evaluation of the possibility of needing an organ transplant in the future.

The data for the analysis of this study are stored on a database and were analysed using the SPSS statistical package (version 11.0). Descriptive statistics were carried out: Student's t-test and the  $\chi^2$  test together with an analysis of the remainders. On all cases, only values of p of less than 0.05 were considered to be statistically significant.

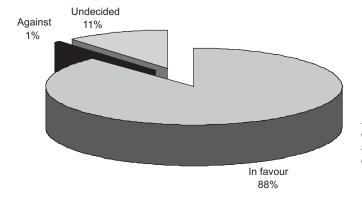


Figure 1. Attitude towards cadaveric organ donation among Primary Care physicians.

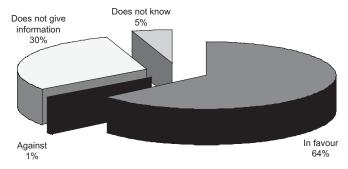


Figure 2. Information about organ donation provided by Primary Care physicians.

## Results

Attitude towards the donation of one's own solid organs is favourable in 88% of cases (n=136), 1% (n=2) are against and 11% (n=17) are undecided (Figure 1). Over half of respondents (54% (n=84)) would donate the organs of a dead member of their family. 84% of respondents (n=130) have attended to transplant patients or patients awaiting transplant. 52% (n=80) of respondents were requested information about the matter and 65% (n=100) report that provided information about organ donation and transplantation to their patients. Only 1% (n=1) of these physicians offered unfavourable information (Figure 2).

On analysing the psychosocial variables that can affect a physician's attitude towards this matter, no relationship is found with sociopersonal variables nor with knowledge nor with prosocial activity (p>0.05) (Table 1). A health care professional's undecided attitude towards the donation of his or her own organs is related to two social interaction variables: not having discussed organ donation and transplantation in the family (p=0.007) and knowing a partner's opinion towards organ donation and transplantation (p=0.006) (Figure 3).

As for variables of attitude towards the body, those who prefer burial after death are related to being more indecisive (p=0.035) and those who are concerned about possible mutilation due to the donation and/or transplant process (p=0.004) tend to have an unfavourable attitude towards the matter (Figure 4).

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*Table 1.* Psychosocial variables which influence the attitude of Primary Care physicians towards the donation of their own cadaveric organs

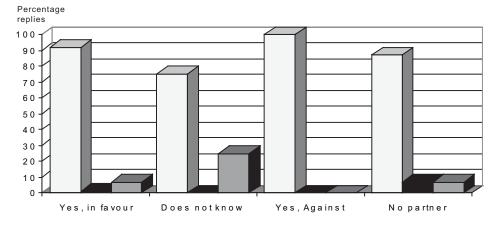
Variable	In favour (n=136)	Undecided-Against (n=19)	p
Mean age: 42 ± 8 years	42 ± 8	41 ± 10	0.603
Sex: Male (n=82) Female (n=71) DK (n=2)	69 (51%) 65 (48%) 2	13 (68%) 6 (32%) 0	0.166
Marital Status: Single (n=31) Married (n=115) Widowed (n=1) Separated/Divorced (n=7) DK (n=1)	27 (20%) 101 (74%) 1 (1%) 7 (5%) 0	4 (21%) 14 (74%) 0 (0%) 0 (0%) 1	0.141
Work situation: Permanent (n=65) Temporary (n=59) Contracted (n=20) Resident (n=8) DK (n=3)	60 (44%) 50 (37%) 18 (13%) 6 (4%)	5 (26%) 9 (47%) 2 (10%) 2 (10%) 1	0.368
Location of the centre: Urban (n=98) Rural (n=57)	84 (62%) 52 (38%)	14 (74%) 5 (26%)	0.313
Attention to transplant patients: Yes (n=130) No (n=22) DK (n=3)	117 (86%) 16 (12%) 3	13 (68%) 6 (32%) 0	0.059
Experience with ODT: Yes (n=75) No (n=80)	66 (48%) 70 (52%)	9 (47%) 10 (53%)	0.924
Prosocial activities: Yes (n=45) No (n=98) DK (n=12)	41 (30%) 87 (64%) 8	4 (21%) 11 (58%) 4	0.133
Donation of family organs: Yes (n=84) No (n=5) Respect wishes of dead (n=65) DK (n=1)	82 (60%) 4 (3%) 49 (36%) 1	2 (10%) 1 (5%) 16 (84%) 0	0.001
Family comments about donation: Yes (n=107) No (n=48)	99 (73%) 37 (27%)	8 (42%) 11 (58%)	0.007
Knowledge of concept of BD: No (n=4) Yes (n=120) DK (n=31)	4 (3%) 106 (78%) 26	0 (0%) 14 (74%) 5	0.598
Cremation: Yes (n=79) No (n=76)	71 (52%) 65 (48%)	8 (42%) 11 (58%)	0.409

Table 1 (cont.)

Variable	In favour (n=136)	Undecided-Against (n=19)	p
Burial:			
Yes (n=49)	39 (29%)	10 (53%)	0.035
No (n=106)	97 (71%)	9 (47%)	0.055
Autopsy: Yes (n=65) No (n=90)	59 (43%) 77 (57%)	6 (32%) 13 (68%)	0.329
Concern about mutilation: Yes (n=4) No (n=147) DK (n=4)	2 (1%) 132 (97%) 2	2 (10%) 15 (79%) 2	0.004
Partner's opinion about ODT: Yes in favour (n=107) Not known (n=24) Yes against (n=3) No partner (n=15) DK (n=6)	99 (73%) 18 (13%) 3 (2%) 13 (10%) 3	8 (42%) 6 (32%) 0 (0%) 2 (10%) 3	0.006
Needing a transplant : Yes (n=80) No (n=2) DK (n=73)	73 (54%) 2 (1%) 61	7 (37%) 0 (0%) 12	0.304

DK = Don't know ODT = Organ Donation and Transplantation

BD = Brain death



Partner's opinion towards organ donation (p=0.006)

 $\square$  In favour donation ■ Against donation  $\blacksquare \, {\tt Undecided}$ 

Figure 3. Attitude towards organ donation according to a partner's attitude.

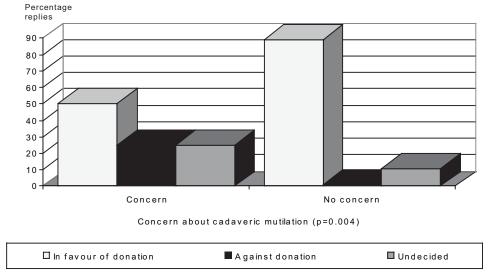


Figure 4. Attitude towards organ donation according to concerns about cadaveric manipulation.

### Discussion

The process of obtaining organs involves the participation of many professionals, both inside and outside the hospital (8). For this reason, it is necessary for all the health personnel to understand that a patient who is brain dead, but whose organs and tissues function, is essentially different from a living human being and that it is impossible to inflict any damage on the potential donor, whatever this action involves.

It has been seen that the attitude of PC health professionals and the information provided by them to the general public is a fundamental factor for creating populational attitude in favour of donation<sup>5,9</sup>. Thus, the doctors who give out positive information generate a very favourable populational attitude towards donation and vice versa, those who generate negative information, generate a very unfavourable populational attitude. What is more, in these cases, as attitude is based on information obtained from health professionals, it is much more difficult to reverse this attitude to a positive attitude towards donation. If we add to this that PC offers access to most of the general public, these physicians become a vitally important element in the promotion of organ donation in the community (5,9).

It has been seen that nearly 90% of doctors surveyed express a positive attitude towards donation of their own organs, which is much higher than that of the general public in our community (90% versus 64%) (6). Nonetheless, we should aim to reach 100% as it must be remembered that each doctor has a mean of quota of 1500-2000 patients, which after calculation means more than 30,000 people who depend directly on treatment from the physicians surveyed in this study, will receive a negative message or doubts when asking for information about donation.

One aspect which is worth our attention is that only 50% would donate the or-

gans of a dead family member, which is a slightly lower percentage than that of the general public towards this issue (54% versus 64%) (6). It is difficult to explain this attitude, but it raises the question of whether the first answer given about attitude towards donation was due to the need to please and whether they really do have such a positive opinion.

With respect to psychosocial factors that determine this attitude, we have found that most classic psychosocial factors in the population do not have an influence (6–7). What does in fact determine attitude are family factors: family communication on issues about donation and transplantation as well as partner's or spouse's opinion about organ donation. Attitudes towards the cadaver, such as preference for burial over any other option for the cadaver, and fear of cadaveric manipulation also has an influence. Nevertheless, the impact of this last factor is not very significant as only 4 respondents answered that they were concerned about mutilation of the body after death (6).

Finally, we would like to highlight that 88% report understanding the concept of brain death, which far from seeming high, should be considered low, as all physicians should clearly understand that this is an actual death concept.

To conclude, we can say that the PC physicians in our geographical area have a very favourable attitude towards donation of their own organs, and their attitude is determined by family factors and concern about cadaveric manipulation.

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