

## Healthcare assistants faced with cadaveric organ donation in a hospital with a solid organ transplant program

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The rate of solid organ transplantation is limited by a shortage of organs [1]. One of the barriers preventing the procurement of more transplant organs seems to be found within the hospital structure, given that a substantial percentage of the professionals who work in a hospital might be against organ donation [2,3].

Healthcare assistants are an important group the prevalence in whom a negative attitude towards donation has an impact on the attitude of the general public, given their close contact with the world of healthcare. There are data that suggest that a high percentage of these professionals are either against or undecided about donation [2–4]. Therefore, it is of interest to analyze the attitude of this subgroup toward donation and transplantation. The objective is to analyze attitude towards organ donation among healthcare assistants in a Spanish third level hospital with an ongoing program of different solid organ transplantation (cadaveric and living organ transplantation) and to determine the factors that condition this attitude. A random sample was carried out of healthcare assistants who work in the different services in our hospital ( $n = 157$ ; between the months of February and December 2003).

Attitude was evaluated using a questionnaire, validated in our geographical area [5,6]. The survey was completed anonymously and was self-administered. The whole process was coordinated by two health care collaborators from the Regional Transplant Coordination Centre. Statistical analysis: Student's *t*-test and the chi-squared test.

The 54% ( $n = 85$ ) of healthcare assistants surveyed are in favor of donation, whereas 46% are against or undecided ( $n = 72$ ). The main reasons given for being in favor are reciprocity (59%;  $n = 50$ ) and solidarity (47%;  $n = 40$ ), whilst fear of apparent death was among the reasons given for not being in favor (31%;  $n = 22$ ).

Those working in services related to the follow-up of transplant patients, tend to have a more positive attitude (89%) and those in nontransplant-related clinical services tend to have the least favorable attitude (44%;  $P = 0.014$ ) (Table 1).

Transplant hospitals are almost constantly involved in organ donation and transplantation. This practically

constant contact with donors and their recipients suggests these workers may have a certain amount of sensitivity toward the matter. However, there are hospital services with little or no contact with such a process, and it should be taken into consideration that not all the professionals have the same level of training nor do they accept the donation and transplantation process to the same extent. So, healthcare assistants are an important group of hospital representatives because of their large numbers and because of the nature of their work. Contrary to what was expected, we found a much more negative attitude towards donation than in our general public (54% vs. 64%;  $P = 0.0136$ ) [5]. This is a surprising finding, when our aim is to achieve a reduction in family refusals by 15–25% in our local area [7] and to achieve complete donation of all potential donors. This is an important point because it is not only doctors and nurses who have a direct responsibility in the promotion of transplantation, but the rest of the hospital personnel also have an important impact on the population. In this way, if a person who works in a transplant center has an unfavorable attitude, this will surely create fear among the general public who are exposed to this attitude [2].

The results of our study show that this negative attitude is correlated with the typical psychosocial factors that influence public attitude, although not all of them: For example, such an attitude is not affected by knowledge of brain death ( $P = 0.858$ ). However, it is surprising that for workers in a health center, only 44% of respondents understand the concept of brain death, even though they are healthcare assistants. Therefore, it is important that information about brain death is made available to these groups [8]. This finding is not entirely new. Likewise, in other Spanish hospitals, brain death is not as well understood as hoped [3]. If we undertake a self-critical analysis it means that while we are able to organize campaigns in the general public and at schools [9,10] give talks in the media etc., we have not considered whether our own staff are well-informed and fully understand what we are doing.

To conclude, we could say that hospital healthcare assistants have an attitude towards donation that is less

**Table 1.** Psychosocial variables that affect attitude toward cadaveric organ donation among hospital healthcare assistants.

Variable	Unfavorable attitude (n = 72; 46%)	Favorable attitude (n = 85; 54%)	P-value
Mean age: 43 ± 7 years	44 ± 7	43 ± 8	0.299
Sex (n)			
Male (6)	3 (4%)	3 (4%)	0.833
Female (149)	68 (96%)	81 (96%)	
DK/NA (2)	1	1	
Marital status (n)			
Single (32)	13 (18%)	19 (22%)	0.184
Married (102)	48 (68%)	54 (64%)	
Widowed (3)	0 (0%)	3 (4%)	
Separated/divorced (19)	10 (14%)	9 (11%)	
DK/NA (1)	1	0	
Type of service (n)			
Procurement units (20)	10 (14%)	10 (12%)	
Tx Service (30)	12 (40%)	18 (21%)	0.014
Tx follow-up service (9)	-1 (1%)	+8 (9%)	
S not related to Tx (80)	+45 (63%)	-35 (41%)	
Centrales clinical S (18)	-4 (6%)	+14 (17%)	
Job contract situation (n)			
Permanent (84)	38 (53%)	46 (55%)	0.083
Temporary (41)	24 (33%)	17 (20%)	
Contracted (31)	10 (14%)	21 (25%)	
DK/NA (1)	0	1	
Experience of donation and Tx (n)			
No (78)	44 (61%)	34 (40%)	0.008
Yes (79)	28 (39%)	51 (60%)	
Voluntary activities (n)			
Yes (37)	13 (18%)	24 (28%)	0.386
No, nor will I (8)	5 (7%)	3 (4%)	
No, but I would like to (91)	43 (60%)	48 (57%)	
DK/NA (21)	11	10	
Family organ donation (n)			
Yes (43)	-5 (7%)	+38 (45%)	0.000
No (22)	+19 (26%)	-3 (4%)	
I would respect opinion (86)	45 (63%)	41 (48%)	
DK/NA (6)	3	3	
Family discussion about donation (n)			
No (40)	23 (32%)	17 (20%)	0.087
Yes (117)	49 (68%)	68 (80%)	
Knowledge of the concept of BD (n)			
Wrong concept (11)	5 (7%)	6 (7%)	0.858
Concept known (69)	30 (42%)	39 (46%)	
Concept not known (77)	37 (51%)	40 (47%)	
Favorable attitude toward cremation (n)			
No (82)	38 (53%)	44 (52%)	0.899
Yes (75)	34 (47%)	41 (48%)	
Favorable attitude toward burial (n)			
No (110)	41 (57%)	69 (81%)	0.001
Yes (47)	31 (43%)	16 (19%)	
Favorable attitude toward autopsy (n)			
No (128)	64 (89%)	64 (75%)	0.029
Yes (29)	8 (11%)	21 (25%)	

**Table 1.** continued

Variable	Unfavorable attitude (n = 72; 46%)	Favorable attitude (n = 85; 54%)	P-value
Concern about mutilation after donation (n)			
No (18)	12 (20%)	6 (8%)	0.049
Yes (117)	49 (80%)	68 (92%)	
DK/NA (22)	11	11	
Religion (n)			
Catholic (126)	60 (88%)	66 (88%)	0.550
Atheist-Agnostic (16)	7 (10%)	9 (12%)	
Other religion (1)	1 (2%)	0 (0%)	
DK/NA (14)	4	10	
Opinion of religion toward DTO (n)			
In favor (41)	-13 (21%)	+28 (41%)	0.024
Against (5)	+4 (7%)	-1 (2%)	
Opinion not known (84)	45 (73%)	39 (57%)	
DK/NA (27)	10	17	
Partner's opinion about DTO (n)			
Yes, in favor (60)	-19 (29%)	+41 (57%)	0.003
Opinion not known (31)	+19 (29%)	-12 (17%)	
Yes, against (19)	+14 (21%)	-5 (7%)	
Does not have partner (28)	14 (22%)	14 (19%)	
DK/NA (19)	6	13	
Possibility of needing a Tx for oneself (n)			
Yes (39)	19 (26%)	20 (24%)	0.038
No (5)	+5 (7%)	-0 (0%)	
Doubts (113)	48 (67%)	65 (77%)	

Tx, transplant; S, service; DK/NA, don't know/no answer; BD, brain death.

favorable than that described in the population, although the psychosocial profile is similar in the two groups. It has become a priority to carry out promotion and awareness-raising activities in this personnel group more than campaigns in the general public because, given the nature of the work they carry out, any negative attitude on their part will have an adverse effect on public attitude.

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