



Beliefs of Nursing Professionals in the Organ Donation Process for Transplantation

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ABSTRACT

Background. This study sought to discover the beliefs of nursing professionals in the organ donation process and to establish a relationship between the training and the beliefs of these professionals.

Methods. This was a quantitative and exploratory study composed of 611 nursing professionals. The sample characteristics and the response frequencies were presented through the use of descriptive statistics. The Kruskal-Wallis test was used to evaluate the different results between the professional categories.

Results. When evaluating the association between professional nursing, technical and nursing auxiliaries, and beliefs in the donation process, significant differences were found regarding the belief that the transplant improves the quality of life of the recipient, that there is no death while there is a heartbeat, that people are hijacked for organ withdrawal, and that it is possible to buy an organ for transplantation.

Conclusions. For the beliefs presented by nursing professionals, it is evident that there is a need for educational programs to deconstruct negative beliefs and promote change in the professionals' posture.

THE LACK of organs reflects not only a deficit of potential donors but also a failure in the donation process, evidenced by the reduced conversion of potential donors to donors whose organs have been transplanted. Several factors may contribute to the donation (in) effectiveness, among them, the beliefs that permeate the understanding of nursing professionals regarding the donation process of organs and tissues for transplantation and those that may interfere in the decision-making of the relatives.

Among nursing professionals, the nurse is responsible for the planning, organization, coordination, execution, and evaluation of nursing care services and more complex technical care. The nursing technician performs mid-level activity, involving orientation and follow-up of nursing work in an auxiliary degree. The nursing assistant performs simple and repetitive activities under supervision.

Knowledge of these beliefs can contribute to the discussion, qualification, and improvement of professional practice. Thus, this study sought to know the beliefs of nursing professionals in the donation process and to establish a relationship between the training and the beliefs of these professionals.

METHODS

This was an exploratory, quantitative study, developed at the Regional Nursing Council of São Paulo, Brazil. The sample consisted of 611 nursing professionals. To collect data, a psychometric

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scale was constructed on the basis of the identification of beliefs described in the literature and in interviews with professionals working in the area. The scale is categorically ordered, in which 0 (zero) corresponds to the absence of opinion (I do not believe or disbelieve); 1, I do not believe; 2, I believe in part; 3, I believe strongly; and 4, I totally believe.

After approval of the project by the Research Ethics Committee and authorization of the institution, the data were collected and tabulated in Excel and analysis by software SPSS v.19.

The sample characteristics and the response frequencies of the scale items were presented through descriptive statistics. To evaluate the different results between the professional categories, group comparisons were performed by use of the Kruskal-Wallis test. To better understand the differences between the groups, Mann-Whitney U tests were also performed.

RESULTS

The participants ages ranged from 16 to 65 years, with an average of 35.96 (DP = 10.29 years). Female subjects prevailed, $n = 519$ (83.7%); other data included white race, $n = 302$ (48.7%); singles, $n = 244$ (39.4%) and married, $n = 241$ (38.9%); with children, $n = 355$ (57.3%); and Evangelical religion, $n = 228$ (36.8%) and Catholic religion, $n = 218$ (35.2%). Regarding training and performance, 274 (44.2%) were nursing technicians, 199 (32.1%) were nurses, 145 (23.4%) were nursing assistants, and 2 (0.3%) did not respond.

Descriptive analysis of beliefs is presented in Table 1.

When assessing the association between the training of professionals, nurses, technicians, and nursing assistants and the beliefs that they presented, significant differences were found in the scale items mentioned below:

- Item 09: Nurses had a significantly stronger belief than did assistants ($U = 11702.000$; $P \leq .02$) and technicians ($U = 23205.500$; $P \leq .02$) in relation to the unquestionable importance of donation of organs and tissues for transplantation ($\chi^2 = 7.622$; $P \leq .02$).
- Item 12: Technicians ($U = 20905.500$; $P \leq .01$) believed significantly more strongly than did nurses that there is no death while there is a heartbeat ($\chi^2 = 10.403$; $P \leq .01$).
- Item 14: Nurses believed significantly more strongly than did assistants ($U = 11256.500$; $P \leq .02$) and technicians ($U = 22865.500$; $P \leq .02$) that organs and tissue for transplantation improve the quality of life of the receiver ($\chi^2 = 10.524$; $P \leq .01$).
- Item 21: Assistants believed more strongly than did technicians ($U = 16809.000$; $P \leq .05$) and nurses ($U = 11256.000$; $P \leq .01$) that there are people who are kidnapped for organ removal. This belief is also stronger among technicians ($U = 23635.500$; $P \leq .04$) in relation to nurses ($\chi^2 = 9.053$; $P \leq .01$).
- Item 22: Assistants believed more strongly than did nurses ($U = 12153.000$; $P \leq .02$). Technicians believed significantly more strongly than did nurses ($U = 21565.000$; $P \leq .01$).
- Item 28: Assistants believed more strongly than did nurses ($U = 11453.500$; $P \leq .02$). Technicians believed

significantly more strongly than did nurses ($U = 22106.500$; $P \leq .01$).

- Item 29: Assistants ($U = 11803.000$; $P \leq .04$) and technicians ($U = 23057.500$; $P \leq .03$) believed more strongly than nurses that it is possible to buy an organ for transplant ($\chi^2 = 5.980$; $P \leq .05$).

DISCUSSION

This research explored the main beliefs of nursing professionals (nurses, technicians, and nursing assistants) regarding the donation of organs and tissues for transplantation. This study is the first step to establish a broader understanding of the beliefs presented by this group of Brazilian professionals.

The belief that the donation of organs and tissues for transplantation is unquestionable because it improves the quality of life of the recipient was significantly stronger for the nurse when compared with the assistant and the nursing technician. Other studies corroborate this finding when they demonstrate that for the nurse, the donation of organs and tissues for transplants can benefit many people. A single potential donor in good condition will possibly help more than 10 patients [1–3].

The belief that there is no death while there is a heartbeat is similar to the belief manifested by families of deceased donors who refused to donate organs for transplantation, demonstrating that lack of understanding that brain death hinders the comprehension that a person can be dead even when there is advanced life support and the heart beating. In this circumstance, the consent of the donation of the organs is interpreted by the family as being the same as murdering, if decreeing or authorizing the death of the relative [4].

The assistant and the nursing technician believe that there are people who are kidnapped for organ withdrawal and, in the same line of thought, that it is possible to buy a body for transplantation. A study carried out with families who refused to donate organs for transplantation revealed similar beliefs presented by this group of health professionals [5].

It is of fundamental importance to promote education on organ donation and transplantation for these professionals. The concept of brain death is a priority that must be clarified. In addition, it is known that the negative attitude of the population generated by comments made by these professionals is difficult to reverse because this source of information is considered credible [6].

A study carried out in Poland found that 38% of the population believed that doctors could stop treatment or put the patient into an “eternal sleep” to obtain organs for transplants, and 32% of respondents answered “yes” when asked, “Are doctors capable of killing a patient to get organs for transplants?” [7].

Another study showed that distrust of the medical profession was the greatest cause of anxiety, fearing that doctors could remove the patient’s organs before he died. The concept of brain death was highlighted as the major barrier to becoming a donor [8]. Therefore, the belief that a

Table 1. Descriptive Analyses for the Items of the Belief Scale According to Different Professional Categories (n = 611)

Items	Valid % of Replies per Point of Scale ^a														
	Nurses (n = 199)					Nursing Technicians (n = 271)					Nursing Assistants (n = 141)				
	0	1	2	3	4	0	1	2	3	4	0	1	2	3	4
(01) The professional who interviews the family of the possible donor is interested only in collecting the organs and tissues.	11,20	30,10	20,90	17,90	19,90	11,32	32,45	23,40	22,64	10,19	12,23	28,06	28,78	15,83	15,11
(02) When a living person donates an organ, he/she is harmed.	7,10	66,00	18,80	5,10	3,00	7,12	58,05	25,84	5,99	3,00	10,14	60,87	21,01	5,80	2,17
(03) There is no legislation regulating the process of organ and tissue donation for transplants in Brazil.	15,50	56,70	8,20	9,80	9,80	24,71	36,88	18,63	11,41	8,37	24,46	33,81	21,58	12,95	7,19
(04) Religious issues influence the donation of organs and tissues for transplants.	4,10	7,10	10,70	21,40	56,60	5,26	11,28	12,03	17,29	54,14	4,26	9,22	12,77	24,82	48,94
(05) The discussion on donation of organs and tissues should begin in childhood.	12,70	14,70	13,20	22,30	37,10	11,48	17,41	17,78	18,15	35,19	9,29	17,86	15,00	17,86	40,00
(06) The population is misinformed about the organ donation process.	3,60	5,60	11,20	29,60	50,00	5,20	5,95	18,22	23,05	47,58	5,67	11,35	16,31	17,73	48,94
(07) I would agree to donate the organs of a relative in the event of his death.	7,10	7,70	8,20	14,80	62,20	10,37	12,22	8,89	10,00	58,52	8,76	10,95	13,87	13,87	52,55
(08) All people should donate organs and tissues.	13,20	6,10	8,10	23,90	48,70	7,81	7,06	15,24	18,59	51,30	13,04	12,32	15,22	9,42	50,00
(09) The importance of donating organs and tissues for transplantation is unquestionable.	14,70	9,10	8,10	19,30	48,70	16,80	10,40	15,70	20,10	36,90	17,30	18,00	15,80	10,10	38,80
(10) It is not right to donate the organs of a loved one to a stranger.	8,60	75,10	7,10	4,10	5,10	14,81	68,89	5,56	5,93	4,81	10,95	66,42	8,76	6,57	7,30
(11) Removal of organs and tissues for transplantation alters the appearance of the donor's body.	11,40	68,39	8,29	5,18	6,74	12,69	58,21	18,28	5,22	5,60	15,94	50,72	14,49	9,42	9,42
(12) There is no death while there is a heartbeat.	11,50	65,60	5,70	6,80	10,40	14,30	41,30	13,50	6,90	23,90	23,60	35,00	7,90	12,10	21,40
(13) In the removal of organs for transplantation, care is focused solely on the organs removed, to the detriment of the donor's body.	12,37	50,00	14,43	10,31	12,89	22,64	37,74	15,85	9,06	14,72	16,91	37,50	13,24	13,97	18,38
(14) Organ and tissue transplantation improves the quality of life of the recipient.	5,10	7,20	4,10	16,40	67,20	9,80	7,90	8,30	17,30	56,80	8,60	10,00	10,70	20,00	50,70
(15) The family should choose who to donate the organs of their relative.	16,84	59,18	7,14	9,18	7,65	17,60	58,05	10,49	7,87	5,99	18,71	51,08	13,67	6,47	10,07
(16) There are professionals who kill people to remove organs.	19,39	49,49	14,29	9,18	7,65	24,62	35,23	15,53	11,74	12,88	23,74	38,85	10,79	10,79	15,83

(17) It is possible to circumvent the transplant waiting list.	20,30	31,98	15,74	16,24	15,74	30,48	24,91	14,50	13,01	17,10	17,86	32,14	19,29	12,14	18,57
(18) There are few people needing organs for transplantation.	4,62	74,36	5,64	4,62	10,77	8,15	66,67	9,63	8,89	6,67	11,35	62,41	9,93	10,64	5,67
(19) The giving family should receive some benefit.	14,29	73,98	5,10	2,55	4,08	12,73	66,67	6,74	5,62	8,24	13,57	62,86	8,57	7,86	7,14
(20) After the diagnosis of brain death, it is possible to reverse the condition.	8,67	75,00	5,10	5,10	6,12	14,34	65,28	9,06	4,15	7,17	19,86	58,16	7,09	5,67	9,22
(21) There are people who are kidnapped for organ removal.	23,90	20,30	16,80	13,70	25,40	21,50	14,70	14,30	18,10	31,30	18,60	13,60	8,60	20,0	39,30
(22) The recipient has the right to know the donor family.	23,60	26,20	12,80	17,90	19,50	14,70	22,90	14,30	16,90	31,20	18,60	28,60	5,70	15,70	31,40
(23) It is possible to perform the removal of an organ for transplantation outside the hospital environment.	7,81	73,44	7,29	6,25	5,21	13,75	66,54	7,81	4,09	7,81	12,06	59,57	12,77	6,38	9,22
(24) All bandits should be forced to withdraw organs taken for transplantation.	14,29	58,16	10,20	4,59	12,76	19,10	47,94	9,36	5,62	17,98	16,55	51,80	9,35	6,47	15,83
(25) No one should refuse to donate their organs because, after death, the organs are of no use.	15,82	37,24	8,67	10,71	27,55	18,80	27,44	11,28	11,28	31,20	13,57	33,57	10,71	7,86	34,29
(26) When there is interest in a person's organs, therapy is interrupted to hasten death.	13,78	69,39	7,65	5,10	4,08	21,27	57,84	9,33	6,72	4,85	20,86	57,55	6,47	5,76	9,35
(27) Anyone who opposes the donation should not receive an organ, in the case that he needs it.	11,34	69,07	8,76	3,61	7,22	20,75	54,72	11,70	5,66	7,17	15,22	59,42	13,04	5,80	6,52
(28) The donor family has the right to know the recipient(s).	22,10	30,80	10,30	17,40	19,50	18,60	21,30	14,10	15,20	30,80	19,60	22,50	9,40	13,00	35,50
(29) It is possible to buy an organ for transplant.	26,80	42,30	10,80	10,30	9,80	26,00	30,50	11,90	11,90	19,70	24,50	30,20	15,80	13,70	15,80
(30) It is not possible to sell an organ for transplant.	27,92	39,09	14,21	10,15	8,63	24,72	40,22	16,61	7,01	11,44	27,34	31,65	15,11	8,63	17,27
(31) There is no religion contrary to organ donation.	20,92	49,49	5,10	10,20	14,29	20,00	38,89	8,89	10,37	21,85	19,71	45,99	2,92	9,49	21,90

*Scale of answers: 0, neither believe nor disbelieve; 1, I do not believe; 2, I believe in part; 3, I strongly believe; 4, I totally believe.

person's death can be anticipated by donating reinforces the idea that there is trade in organs for transplantation. In addition, actions that may dehumanize or threaten the dignity or individuality of the body were viewed with suspicion and anguish. Such beliefs included the notion that organ donation may lead to the body being treated as spare parts or meat cuts [4,8].

Belief that the process of organ allocation is unfair, particularly against minority or poor ethnicities, is considered a reason not to be a donor [8].

CONCLUSIONS

On the beliefs presented by nursing professionals, it is evident that there is a need for educational programs to deconstruct negative beliefs and promote change in the professionals' posture.

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