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Investigating the Knowledge of Basic Health Care Professionals on Organ Donation in Municipalities in Maranhão, Brazil



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ABSTRACT

The objective of this study is to investigate the knowledge of primary health care (PHC) professionals on organ donation for transplants. A cross-sectional analytical study was performed consisting of 180 professionals linked to PHC in the cities of São Luís and São José de Ribamar in the state of Maranhão, Brazil. Data were collected through a questionnaire and interviews conducted from March to November 2018, followed by statistical analysis using the software STATA 15.0, which identified saving lives and helping others (89.9%) as the most relevant reason for organ donation. Among the reasons for non-favorability are fear, corruption, organ trade, lack of trust in doctors (66.6%), and mutilation (33.3%). It was also found that most professionals in favor of organ donation (81.1%) would not donate to relatives and/or friends (87.8%), would not authorize the donation of their organs after their death (87.9%), and believe that the person who is brain dead has a dead brain and a beating heart (66.4%) and that the medical diagnosis may be wrong and the patient may be alive (44.3%). They also said they fully trust the diagnosis given by the doctor (51.6%). However, they would not authorize the donation of organs from their family members (69.8%). Lack of knowledge often creates uncertainties and insecurities. The professionals in this study did not show confidence in the organ donation process, and this is reflected in the population. The health professional performance of primary care, as a direct link in the promotion of health education on organ donation, becomes relevant for improving knowledge and minimizing fears.

INTRODUCTION

The donation of organs, tissues, and parts of the human body for transplantation and treatment consists of an act of disposal of the own body in life or after death. The Federal Constitution of 1988, in its article 199, § 4, governs that "The law will provide for the conditions and requirements that facilitate the removal of human organs, tissues and substances for transplantation, research and treatment, as well as the collection, processing, and transfusion of blood and its derivatives, and all types of commercialization are prohibited" [1].

The donation of organs, tissues, and parts of the body began to be regulated by Law no. 9.434/97, which provides for the removal of organs, tissues, and parts of the human body for transplantation and treatment [2]. The Civil Code [3] provides for the legal protection of the human body, including the protection of living and dead bodies, in addition to tissues, organs, and parts susceptible to separation and individualization. Thus, the current civil system, in addition to the medical requirement, guarantees the disposition of the body itself for transplantation purposes, provided that it is free of charge. The legislation determines that acts of disposal of parts of the human body, whether dead or alive, will be performed free of charge provided it does not cause harm to the owner and with a view to a therapeutic, altruistic or scientific purpose.

On the other hand, Law no. 9.434/97 states that "the act of disposing of the body is only allowed if it does not pose risks to the life or health of the owner and if duplication of organs and parts of the body are renewable." It is also noteworthy that the transplant between living people depends on the consent of the owner and, as it is a manifestation of a will, it is fully revocable [2].

In 1997, Decree no. 2,268, which regulates the Organ Transplantation Law, introduced the National Transplant System (SNT), which brings together the bodies of the General Coordination of the National Transplant System (CGSNT), National Transplant Center, Notification, Collection and Donation Organ and Tissue Centers (CNCDOS), and Intra-hospital Organ and Tissue Donation Commissions for Transplantation (CIHDOTTS), in addition to providing for advisory bodies to the CGSNT, i.e., the National Technical Chambers (CTN) and the Strategic Advisory Group (GAE) [4].

The growing interest in regulating the transplantation of organs, tissues, and parts of the human body in Brazil has contributed to the improvement of the health network about this matter as it enabled the increase in the number of donors and consequently in the number of transplants. Thus, in the last decade, the consolidation of the transplant network has shown an expansion of health services aiming organ donation mainly due to economic investments and partnerships between public and private institutions. However, the prospect of a decrease of the waiting list for transplants by the Ministry of Health (MS) was 6% lower in 2018 than in 2017 (from 44 thousand patients to 41.2 thousand), showing that even with the increase of donors, it did not meet the existing demand as there was an increase in the number of patients in need of transplantation [5].

In Maranhão, the organ transplant service in that state began with the inauguration of the Organ Notification, Collection, and Distribution Center (CNCDO/MA), of the Hospital of the Federal University of Maranhão, in 2000, when they performed five transplants. That number increased to 2,115 (1,542 cornea and 573 kidney transplants) in the past seventeen years. In 2017, the CNCDO/MA recorded a waiting list with 914 patients, 701 recipients for cornea and 213 for kidney [6]. From 2013 to 2014, the state of Maranhão occupied the 19th position in kidney transplantation and the 21st in cornea transplantation [7].

The increase in *postmortem* donors may be associated with an increase in violence. Statistics show a high rate of victims of traffic accidents and firearms injuries. The World Health Organization (WHO) states that traffic accidents are a serious public health problem, considered as one of the main causes of deaths and injuries worldwide. The presence of firearms in acts of violence also contributes to the increased likelihood of death and serious injuries. In Brazil, in 2014, firearms were responsible for 29% of the 61,268 hospital admissions, most of them brain death in both cases [8].

Law no. 9.434/97 provides that "the *post-mortem* removal of tissues, organs or parts of the human body intended for transplantation or treatment must be preceded by a diagnosis of brain death, verified and recorded by two physicians not participating in the removal and transplantation, using clinical and technological criteria defined by resolution of the Federal Council of Medicine (CFM)" [2].

Transplantation is a procedure that allows the treatment of several chronic and disabling pathologies that affect people due to physical impacts or organ dysfunctions. Organ and tissue

transplantation is a procedure performed to guarantee the lives of those in need and for several other reasons [9], such as religion, discontent with hospital care, delay in the release of the body, distrust in the donation and transplantation process, and fear of organ trafficking [10]. Family members express their refusal in contributing to the donation process [9].

Decision-making by the population can be facilitated given the knowledge on the importance of organ and tissue donation for transplants, making the role of the health professional fundamental in this health education process [10].

Health education is one of the pillars of the health promotion model proposed by the Ministry of Health in 1994 [11] through the Family Health Strategy Program (ESF), which incorporates and reaffirms the principles of the Unified Health System (SUS) and is structured with an emphasis on primary health care, especially family health [12]. According to Freire [13], Popular Education in Health (EPS) is seen as emancipatory, since it is addressed by the pedagogy of awareness, playing a vital role in the reconstruction of society and reaffirming its importance in social transformation.

However, there is a need to stimulate conversation supported by the information offered by primary care (PC) health professionals, especially by Community Health Agents (CHA), on the theme of donation and transplantation process within families daily, in homes, before experiencing moments of pain due to the loss of a family member and aiming to encourage organ harvesting and consequently increasing donation rates [10].

Thus, the struggle for the life of those on waiting lists for an organ donation, in addition to the scarcity of research that addresses this issue and the absence in Brazil and in Maranhão of an EPS Program in PC aiming the Donation and Transplantation Process, with PC having the greatest bond with the community and their families, is the motivation to carry out a situational diagnosis seeking to identify the level of knowledge of professionals to mitigate doubts and difficulties, making it a link for the population to be a multiplier of knowledge in the health education process on donation and transplantation. This study highlights data related to health professionals in Maranhão in the context of organ donation. Given this context, the present study aims to "investigate the knowledge of PHC professionals in municipalities in Maranhão on organ donation for transplants".

METHODS

This is an analytical cross-sectional study. Data collection took place from March to November 2018 in eleven PHC units in the Distrito Tirirical in the city of São Luís and eight PHC units in the municipality of São José de Ribamar, which contemplated 180 professionals from PHC units from the referred municipalities in the state of Maranhão.

The sample was non-probabilistic. Health professionals assigned to the basic care units were interviewed. The participating professionals were doctors, nurses, nutritionists, dentists, physiotherapists, pharmacists, community health workers, nursing technicians, pharmacy assistants, dental assistants, and oral health assistants.

The inclusion criteria for the research participants were acting as a professional in the selected health units, agreeing to participate in the research, and signing the Informed Consent (IC). The exclusion criterion of the research participants was being contrary to these conditions.

The research instrument was a semi-structured questionnaire and the data collected covered a sociodemographic distribution gender, age, marital status, religion, education/training area, family income, race/color, and aspects about organ donation classified as favorable, unfavorable and no opinion. For the treatment of the collected data, an electronic Excel spreadsheet and the software STATA were used. The results were described using tables.

As for the ethical aspects, this study followed the guidelines established by Resolution no. 466/2012, which provided for research involving human beings directly and indirectly. The study was approved by the Ethics Committee of the CEUMA University under opinion no. 2,592,810.

Data were entered and analyzed using the software STATA 15.0 (Stata Corp., College Station, Texas, USA). The descriptive statistics included calculation of absolute and relative frequencies (percentages), and the association between explanatory variables and response was performed using the Chi-square test. In the multivariate analysis, the associated factors were tested between the explanatory variable and the response variable, with an estimation of prevalence ratios (PR) and 95% confidence intervals (CI95%), considering a statistical significance of $p \leq 0.05$ for the number of exposed in the sample.

The multivariate analysis was performed using the Poisson regression model with robust adjustment of variance because of its characteristic data analysis. After association, the variables that presented $p \leq 0.20$ underwent univariate analysis. These variables were hierarchized for the final model of multivariate analysis. The variables that had a $p \leq 0.10$ remained. For non-binary variables, the Parm Test was performed and the results of the final model (individual and contextual covariates) were interpreted at the level of statistical significance of $p \leq 0.05$.

RESULTS

The professionals participating in the study worked mainly in the municipality of São José de Ribamar and were "*favorable to organ donation*," with the most prevalent professions/occupations being *technical/average education level on health* being "*favorable to organ donation*," followed by those of *higher education in the health area*; thus, both variables presented statistical significance ($p \leq 0.01$). The mean age of the sample was ± 40 years, "*favorable to organ donation*," showing statistical significance ($p = 0.02$) (Table 1).

The variable "*education level*" was, according to interviewees, *complete high school/incomplete higher education*, a group who declared to be *favorable* to organ donation, while for the variable "*family income*," the majority earns *one minimum wage*, presenting both variables a statistical significance ($p \leq 0.01$). For the variable "*race/color*," it was identified that most professionals participating in the study were *white* and they reported to be "*favorable to organ donation*," with statistical significance ($p = 0.04$) (Table 1).

Table No. 1: Distribution of sociodemographic and economic variables of primary health care professionals and the situation regarding the organ donation process. São Luís-MA and São José de Ribamar-MA

Variable	n=180 (%)	Favorable n (%)	Unfavorable n (%)	No opinion n (%)	p- value
Municipality					≤0.01
São Luís	68 (37.7)	65(43.6)	1(4.7)	2(20.0)	
São José de Ribamar	112	84(56.3)	20(95.2)	8(80.0)	
Gender					0.27
Female	137(76.1)	110(73.8)	18(85.7)	9(90.0)	
Male	43.0	39(26.1)	3(14.2)	1(10.0)	
Age					0.02
16-29	28 (15.5)	23(15.4)	2(9.5)	3(30.0)	
30-49	117	101(77.7)	14(66.6)	2(20.0)	
50-59	25 (13.8)	17(11.4)	5(23.8)	3(30.0)	
60 or older	10 (5.5)	8(5.3)	0(0.0)	2(20.0)	
Marital status					0.15
Single	70 (38.8)	62(41.6)	5(23.8)	3(30.0)	
Married	96 (53.3)	78(52.3)	13(61.9)	5(50.0)	
Separated	9 (5.0)	5(3.3)	3(14.2)	1(10.0)	
Widow	5 (2.7)	4(2.6)	0(0.0)	1(10.0)	
Religion					0.19
Agnostic	4 (2.2)	4(2.6)	0(0.0)	0(0.0)	
Catholic	99 (55.0)	87(58.3)	8(38.1)	4(40.0)	
Evangelical	60 (33.3)	48(32.2)	9(42.8)	3(30.0)	
Spiritist	5(2.7)	3(2.0)	1(4.7)	1(10.0)	
Other	12 (6.6)	7(4.7)	3(14.2)	2(20.0)	
Education level					≤0.01
No education	1 (0.5)	0 (0.0)	0(0.0)	1(10.0)	
Complete elementary school	3 (1.6)	2(1.3)	1(4.7)	0(0.0)	
Complete high-school or	97 (53.8)	71(47.6)	18(85.7)	8(80.0)	
Higher education or higher	79 (43.8)	76(51.0)	2(9.5)	1(10.0)	
Family income					≤0.01
Less than 1 salary	2(1.1)	2(1.3)	0(0.0)	0(0.0)	
1 salary	78(43.3)	54(36.2)	17(80.9)	7(70.0)	
2-3 salaries	49(27.2)	42(28.1)	4(19.0)	3(30.0)	
4-6 salaries	15(8.3)	15(10.0)	0(0.0)	0(0.0)	
7-10 salaries	14(7.7)	14(9.4)	0(0.0)	0(0.0)	
More than 10 salaries	22(12.2)	22(14.7)	0(0.0)	0(0.0)	
Race/color					0.04
White	75(41.6)	63(42.2)	11(52.3)	1(10.0)	
Black	32(17.7)	23(15.4)	5(23.8)	4(40.0)	
Yellow	3(1.6)	2(1.3)	0(0.0)	1(10,0)	
Brown	70(38.8)	61(40.9)	5(23.8)	4(40,0)	
Profession/occupation					≤0.01
Higher education in health	59(32.7)	59(39.6)	0(0.0)	0(0,0)	
Technical or high school level	114(63.3)	83(55.7)	21(100)	10(100,0)	
Higher education,	7(3.8)	7(4.7)	0(0.0)	0(0,0)	

n: total participants; %: percentage.

Source: Prepared by the authors (2018).

In the analysis of the variables related to “*organ donation*” program, most professionals reported being “*favorable to organ donation*,” justifying that it is an act that “*saves lives/helps the other person*,” those who manifested themselves as “*not in favor of donation*” revealed that the reason for not agreeing would be “*fear, corruption, and organs trafficking and the lack of trust in doctors*,” as pointed out in the alternative “*others*” (Table 2).

When associating the variables “*would donate organs to relatives or friends in life if it would not harm you*,” most professionals stated that they would not donate, followed by those who reported being “*favorable to organ donation*.” Those asked whether they “*would authorize the donation of their organs after death*” resulted in a predominance of “*would not authorize*” followed by those who are “*favorable to donation*.” The association of these variables was statistically significant ($p \leq 0.01$) (Table 2).



Table No. 2: Distribution variables about the perception of primary health care professionals regarding the organ donation process. São Luís-MA and São José de Ribamar-MA

Variable	n=180 (%)	Favorable n (%)	Unfavorable n (%)	No opinion n (%)	p- value
Yes/no Why					≤
Save lives	134(74.4)	134(89.9)	-	-	
Organ is useless	7(3.8)	7(4.7)	-	-	
I may need and Relatives	7(3.8)	7(4.7)	-	-	
<i>Mutilation</i>	7(3.8)	-	7(33.3)	-	
<i>Other</i>	25(13.8)	1(0.6)	14(66.6)	1(100.0)	
Would donate in life to relatives and/or friends					≤
Yes	8(4.4)	1(0.6)	7(33.3)	-	
No	140(77.7)	131(87.9)	8(38.1)	1(100.0)	
No opinion	32(17.7)	17(11.4)	6(28.5)	9(90.0)	
Would authorize donating organs after death					≤
Yes	18(10.0)	5(3.3)	13(61.9)	-	
No	131(72.7)	131(87.9)	0(0.0)	-	
No opinion	31(17.2)	13(8.7)	8(38.1)	10(100.0)	
A person with brain death					≤
Dead	34(18.8)	32(21.4)	2(9.52)	-	
Partly alive	19(10.5)	14(9.4)	4(19.0)	1(10.0)	
Dead brain and beating heart	107(59.4)	99(66.4)	8(38.1)	0(0.0)	
I do not know	20(11.1)	4(2.6)	7(33.3)	9(90.0)	
Diagnosis of brain death					≤
Could be wrong and patient be alive	94(52.2)	66(44.3)	19(90.4)	9(90.0)	
Always correct	86(47.7)	83(55.7)	2(9.5)	1(10.0)	
Trust in the diagnosis of brain death					≤
I do not trust	27(15.0)	8(5.3)	13(61.9)	6(60.0)	
Fully	78(43.3)	77(51.6)	1(4.7)	-	
Partially	75(41.6)	64(42.9)	7(33.3)	4(40.0)	
Authorization to donate organs to family members					≤
Yes	19(10.5)	8(5.3)	11(52.3)	-	
No	105(58.3)	104(69.8)	1(4.7)	-	
No opinion	56(31.1)	37(24.8)	9(42.8)	10(100.0)	

n: total participants; %: percentage.

Source: Prepared by the authors (2018).

The analysis of variables in the unadjusted and adjusted models of sociodemographic variables are described in Table 3. In the model adjusted to verify the strength of association between

variables, multivariate analysis was performed using the Poisson model to determine the prevalence ratios (PR). For non-binary variables, the Parm Test was performed.

Regarding sociodemographic variables, age of “30-49 years” had ($p \leq 0.01$; PR = 0.84; CI = 0.74-0.95); regarding the variable “education,” professionals who had completed elementary school/completed high school had ($p = 0.05$; PR = 0.60; CI = 0.36-1.00); with complete high school/incomplete higher education had ($p = 0.02$; PR = 0.02; CI = 0.40-0.95); with complete superior or higher had ($p = 0.05$; PR = 0.67; CI = 0.43-1.04); in the variable “race/color,” blacks had ($p = 0.05$; PR = 1.14; CI = 0.97-1.33); and in the “profession/occupation,” the higher education on administration had ($p = 0.05$; PR = 1.15; CI = 0.99-1.33) (Table 5).



Table No. 3: Distribution of the sociodemographic and economic variables of primary health care professionals in unadjusted and adjusted analyses. São Luís-MA and São José de Ribamar-MA

Variable	Unadjusted			Adjusted (p-value ≤ 0.01)		
	PR	CI	p-	PR	CI	p-
Municipality			0.02			≤0.01
São José de Ribamar	1	1	-	1	1	-
São Luís	1.13	1.01-	0.02	0.99	0.92-	0.85
Age			0.03			≤0.01
16-29	1	1	-	1	1	-
30-49	0.86	0.73-	0.05	0.84	0.74-	≤0.01
50-59	0.88	0.66-	0.41	-	-	-
60 or older	1.15	0.89-	0.26	-	-	-
Education level			≤ 0.01			0.05
No education	1	1	-	1	1	-
Incomplete elementary school	1	1	-	1	1	-
Complete elementary school or complete	0.33	0.14-	≤ 0.01	0.60	0.36-	0.05
Complete high-school or incomplete	0.44	0.40-	≤ 0.01	0.61	0.40-	0.02
Higher education or higher	0.49	0.47-	≤ 0.01	0.67	0.43-	0.05
Family income			≤ 0.01			0.50
Less than 1 salary	1	1	-	1	1	-
1 salary	0.87	0.75-	0.05	0.96	0.77-	0.71
2-3 salaries	0.97	0.87-	0.70	-	-	-
4-6 salaries	1	-	-	1.02	0.79-	0.85
7-10 salaries	1	-	-	1.01	0.80-	0.89
More than 10 salaries	1	-	-	1.05	0.83-	0.66
Race/color			0.07			0.19
White	1	1	-	1	1	-
Black	1.11	0.90-	0.10	1.14	0.97-	0.05
Yellow	1.53	1.01-	0.04	1.23	0.92-	0.15
Brown	1.13	0.99-	0.05	1.08	0.97-	0.12
Indigenous	1	1	-	1	1	-
Profession/occupation			≤ 0.01			≤ 0.01
Higher education in health	1	1	-	1	1	-
Technical or high school level in health	0.90	0.81-	0.05	1.05	0.93-	0.39
Higher education, administrative area	1	1-1	0.09	1.15	0.99-	0.05
Technical or administrative level	1	1	-	1	1	-

CI: Confidence interval; PR: Prevalence ratio.

Source: Prepared by the authors (2018).

Table 4 shows the unadjusted and adjusted models and in relation to the variables "organ donation program." It was verified in the variable "reason for organ donation" had for "mutilation" ($p \leq 0.01$; PR = 0.97 ; CI = 0.81-1.46); when observing the "authorization for organ donation," the answer "yes" presented ($p = 0.02$; PR = 1.75; CI = 1.08-2.84) and "has no opinion" presented ($p \leq 0.01$; PR = 1.96; CI = 1.18-3.26); for the variable "informed your family members of your will" and "donation in life to relatives and/or friends" and "would authorize organ donation from your family members," the answer "yes" had ($p = 0.03$; PR = 1.28; CI = 1.02-1.62) and the answer "no opinion" had ($p \leq 0.01$; PR = 1.37; CI = 1.06-1.76).

Table No. 4: The distribution of variables about the perception of primary health care professionals regarding the organ donation process is adjusted and unadjusted analyses. São Luís-MA and São José de Ribamar-MA

Variable	Unadjusted			Adjusted (p-value ≤ 0.01)		
	PR	CI	p-	PR	CI	p-value
Yes/no Why			≤ 0.01			≤ 0.01
Save lives	1	1	-	1	1	-
Organ is useless	1	0.99-1.00	1.00	0.99	0.93-	0.94
I may need and Relatives	1	0.99-1.00	1.00	0.95	0.88-	0.19
<i>Religion</i>	1	1	-	1	1	-
<i>Mutilation</i>	1	0.81-1.46	≤ 0.01	0.97	0.81-	≤ 0.01
<i>Other</i>	0.83	0.53-1.32	0.45	-	-	-
Would authorize donation of organs			≤ 0.01			≤ 0.01
Yes	3.6	1.70-7.59	≤ 0.01	1.75	1.08-	0.02
No	1	1	-			
No opinion	3.83	1.74-8.42	≤ 0.01	1.96	1.18-	≤ 0.01
Informed relatives of his/her will			≤ 0.01			≤ 0.01
Yes	1.13	0.99-1.30	0.05	1.02	0.97-	0.41
No	1	1	-	1	1	-
Would donate in life to relatives and/or friends	0.04					≤ 0.01
Yes	1	1	-	1	1	-
No	7.59	1.20-47.80	0.03	3.59	0.60-	0.15
No opinion	8.74	1.37-55.70	0.02	3.96	0.70-	0.11
Would authorize donating organs to family			≤ 0.01			≤ 0.01
Yes	2.35	1.38-3.99	≤ 0.01	1.28	1.02-	0.03
No	1	1	-	1	1	-
No opinion	2.41	1.39-4.18	≤ 0.01	1.37	1.06-	≤ 0.01

Source: Prepared by the authors (2018).

DISCUSSION

In this research, we sought to analyze the knowledge of health professionals on organ donation. For this purpose, the two largest municipalities located in the region of São Luís island were delimited since they serve a large population in primary care, which is responsible for promoting health education for users. The sociodemographic data found in this study demonstrated conformity with the reality found in the state of Maranhão [14].

The predominance of the acceptance of organ donation, pointed out in this research, was similar to the sample of a study carried out by Teixeira, Gonçalves and Silva [15], who indicated 84.6% of organ donation favorability, with no sociodemographic factors interfering with the decision on donation.

In this study, most primary health care professionals were female. This reaffirms information from the last census of the Brazilian Institute of Geography and Statistics [14], which states that most of the population in the metropolitan region is female. A study carried out in the state of Pará by Teixeira, Gonçalves and Silva [15] at the Escola do Marco Health Center, showed similar results, demonstrating that the average age was 39 years.

The last Brazilian Institute of Geography and Statistics census conducted in 2010 shows that most of the population of the two municipalities declared themselves Catholics, brown, with incomplete elementary education and a family income of 2.45 minimum wages, similarly to data of the present study [14]. By analyzing the sociodemographic variables of both municipalities, there is a predominance of Catholics, married, white, with complete high school and incomplete higher education, family income of up to one minimum wage, and profession/occupation at a technical and/or high school level on health. It corroborates Bendeko et al. [16], who conducted a study in Curitiba with health professionals and obtained findings similar to those of this study, with a predominantly female (73%) and Catholic (59%) sample.

In this study, most professionals in favor of organ donation (81.1%) would not donate to relatives and/or friends (87.8%), would not authorize the donation of their organs after their death (87.9%), and believe that the person who is brain dead has a dead brain and a beating heart (66.4%) and that the medical diagnosis may be wrong and the patient may be alive (44.3%). However, they said they fully trust the diagnosis given by the doctor (51.6%), but they would not authorize the donation of organs from their family members (69.8%).

The study carried out in Curitiba in 2007, which analyzed the opinion and the knowledge of the city population about donation and transplantation, pointed out that the majority of the sample that was in favor of organ donation declared that the main reason for being favorable to the donation of organs was to save lives and help others, and the main reasons for not being favorable were not trusting in medicine or the organ collection and distribution system due to organ trade and fear of mutilation of the body [16].

The study by Teixeira, Gonçalves and Silva [15] at the Escola do Marco Health Center in the state of Pará, showed results similar as those of this study, demonstrating that the majority of the sample is in favor of organ donation, believed that the doctor could be mistaken in the confirmation of the diagnosis of brain death, only 18.4% trusted the diagnosis given by the doctor, 72% agreed that their organs were donated after their death, and the same 72% informed that they would also authorize the donation of their family members.

In a study carried out by Shafer et al. [17], it was revealed that in organ donation programs, the role of the health professional was fundamental to achieve the success of the increase in transplants, as they can act directly in shaping the opinion of the population about the donation process, turning them into a facilitating link in health education.

A study carried out in Spain with patients attended at primary health care centers showed that 7% of the researched population obtained clarification from primary health care professionals about the transplant and that even in face of a small number and despite the negative information, the clarification generated a new view on organ donation [18].

Given these findings, Conesa et al. [19] stated that the health professional, working in education, can demystify the misconceptions that surround the donation process. For that, the professional needs to be qualified to become a stimulator of discussions on the subject among the population. Changing the existence of an erroneous conception requires the development of planned, structured and organized programs aiming permanent education to make the debates more and more constant among the population in general, since many family members discuss the act of giving only when the relative is already lost, making many donations impossible.

CONCLUSION

Proposing changes to an existing reality is a challenge that often goes beyond idealization considering that this study showed that primary care professionals from both municipalities believe that an organ donation is an act that saves lives, but they would not donate their organs to relatives and/or friends.

The primary care professional has a fundamental role in promoting health education for the population. Qualification and continuous training of these professionals are necessary to make them multipliers of knowledge. Thus, the gathering of researched data from the two municipalities encouraged the writing of a booklet to clarify and guide professionals of the health units on the most diverse issues in the organ donation process.

The perspective of health education for primary care professionals is to make them qualified to address this issue with the population at a time of reflection in health units and in homes of families before the fatal blow on families since it is known that this approach is not included in the public policies of these units nowadays, leaving this role only to professionals in the hospital environment. This demonstrates, according to the many reports on difficulties of acceptance by the family during the optimal time of the act of donating experienced in a moment of pain due to the loss of a relative, that the donation is impossible to be carried out mainly due to lack of confidence in the medical diagnosis. This situation could be avoided by proposing a new approach to the population.

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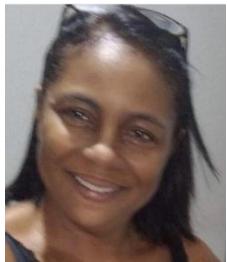
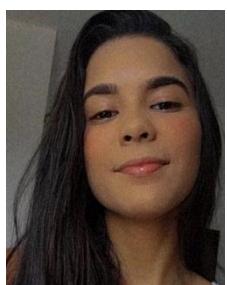
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