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Perspectives of a university community about body donation for human anatomy study

Perspectivas de uma comunidade universitária acerca da doação de corpos para estudo em anatomia humana

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ABSTRACT

Introduction: The cadaver is an irreplaceable piece in the learning of human anatomy, allowing a three-dimensional view of anatomical structures. However, there is a scenario of scarcity and increased demand for cadaveric parts in Brazilian universities. Therefore, several institutions, supported by article 14 of Law 10.406/2002 of the Brazilian Civil Code, implemented body donation programs aimed at bringing significant improvements in the teaching quality of the anatomy discipline.

Objective: To analyze the level of knowledge and perspectives of a university community regarding the voluntary donation of cadaveric bodies for educational and research purposes.

Method: This is an observational, cross-sectional and prospective study with a quantitative approach and data collection through an individual questionnaire. The subjects included in the study were teachers and students from the Federal University of Maranhão, Campus Dom Delgado – UFMA. The questionnaires were related to obtaining information about knowledge and opinions on the topic of body donation.

Result: A total of 264 answered questionnaires were obtained, which showed that 85.65% of students and 87.1% of teachers were aware of the possibility of donating their own bodies. However, it was observed that 94% of the interviewees did not know what procedures were necessary for the donation, and 86% did not have knowledge about the legislation that allowed this practice. Furthermore, 27.65% of the participants were able to donate their own body, 33.7% indicated that they would not donate and 38.9% reported that they had no formed opinion. The main reason given for donating was: "to contribute to the advancement of education in the health area", and for not donating: "I want to be buried or cremated".

Conclusion: There is a high percentage of individuals who do not know how to carry out the donation of their own bodies, being evidenced that the participants have low aptitude for donation. However, there is a significant percentage of individuals who do not have a formed opinion on the subject, demonstrating that the dissemination of this topic is a means to increase adherence to this practice. It is important to carry out the development of body donation programs to solve the problem.

Keywords: Donation; Anatomy; Cadaver.

RESUMO

Introdução: O cadáver é uma peça insubstituível no aprendizado da anatomia humana, pois permite uma visão tridimensional das estruturas anatômicas. Entretanto, observa-se um cenário de escassez e aumento da demanda das peças cadavéricas nas universidades brasileiras. Logo, diversas instituições, amparadas no artigo 14 da Lei nº 10.406/2002 do Código Civil brasileiro, implementaram programas de doação de corpos interessados em trazer melhorias significativas na qualidade de ensino da disciplina de anatomia.

Objetivo: Este estudo teve como objetivo analisar o grau de conhecimento e as perspectivas de uma comunidade universitária a respeito da doação voluntária de corpos cadavéricos para fins educacionais e de pesquisa.

Método: Trata-se de um estudo observacional, transversal e prospectivo com abordagem quantitativa e coleta de dados por meio de questionário individual. Os sujeitos incluídos foram os docentes e discentes da Universidade Federal do Maranhão (Ufma), campus Dom Delgado. Os questionários eram relativos à obtenção de informações sobre o conhecimento e a opinião acerca da temática da doação de corpos.

Resultado: Obteve-se um total de 264 questionários respondidos, os quais mostraram que 85,65% dos discentes e 87,1% dos docentes tinham conhecimento acerca da possibilidade da doação do próprio corpo. Contudo, observou-se que 94% dos entrevistados não sabiam que procedimentos eram necessários para a doação, e 86% não possuíam conhecimento acerca da legislação que permitia tal prática. Ademais, 27,65% dos participantes estavam aptos a doar o próprio corpo, 33,7% apontaram que não doariam e 38,9% informaram que não tinham opinião formada. O principal motivo apontado para doar foi: "para contribuir com o avanço da educação na área da saúde", e para não doar: "quero ser enterrado ou cremado".

Conclusão: Existe um alto percentual de indivíduos que não conhecem os meios para realizar a doação de corpos, sendo evidenciado que os participantes apresentam baixa aptidão para doação. Contudo, existe um percentual significativo de indivíduos que não tem opinião formada sobre o assunto, demonstrando que a divulgação dessa temática é um meio para aumentar a adesão a tal prática. É importante realizar o desenvolvimento de programas de doação de corpos para solucionar a problemática.

Palavras-chave: Doação de Corpos; Anatomia Humana; Cadáver.

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INTRODUCTION

Anatomy, in its broadest sense, is the science that macro and microscopically studies the constitution and development of living beings. Human anatomy is considered an ancient discipline, which is used as the basis for those who work in different health areas¹.

The cadaver is a fundamental piece for the training of students and professionals, since the practice with the cadaveric body allows greater learning, in addition to reducing future errors by health professionals². The practical learning of human anatomy using the cadaveric body is of fundamental importance to provide better knowledge of the body topography, since it allows students to analyze the anatomical relationships between different organs and structures. The handling of the cadaver by students is a practice that aims to strengthen, in addition to anatomical knowledge, the humanization of future health professionals³.

In the vast majority of educational institutions, the learning of anatomy is carried out through the use of unclaimed cadaveric bodies, i.e., of people who died and were not sought after by friends or family. Since November 30, 1992, according to Law N. 8501, these cadavers can be used for teaching and research activities⁴. However, there is currently a decrease in the supply of unclaimed bodies, a fact related to the recent improvement in the country's socioeconomic conditions, associated with the bureaucratic processes with a high cost in the regulation of unclaimed bodies⁵.

Faced with these difficulties, added to the expansion of the number of higher education institutions in the country, the teaching of anatomy finds itself in a scenario of scarce cadaveric pieces. Thus, in recent years, with the advancement of technology, new teaching methods have emerged, of the most variable nature, to meet the need for the cadaver as a means of teaching, such as digital whiteboards, videos, 3D software, synthetic anatomical models, among others⁶.

Several studies compare the new methodologies mentioned herein with the study of anatomy using the cadaver, demonstrating that the study with the anatomical piece is more effective in the teaching of students^{7,8}. Moreover, the teaching with alternative methodologies does not completely replace the study with anatomical parts, and may even contribute to learning errors⁹.

Considering this scenario, in an attempt to solve this problem, several countries, including Brazil, have established voluntary body donation programs. In 2002, article 14 of Law N. 10.406/2002 of the Brazilian Civil Code was approved, which states that "it is valid, with a scientific or altruistic objective, the free disposition of one's own body, in whole or in part, to be used after death¹⁰. The provision may be freely revoked at

any time." Therefore, with the creation of this law, the voluntary donation of bodies for study and research in Brazil became possible for the study of human anatomy¹¹.

Therefore, with the changes in the legislation and aiming at meeting the need for cadavers for teaching and research purposes, several Brazilian universities implemented a body donation program: Federal University of Rio de Janeiro, Faculty of Medicine of ABC, Federal University of Paraná, and the Federal University of São Paulo, among others¹¹.

Moreover, at the Federal University of Health Sciences in Porto Alegre, after the implementation of the body donation program, there was a change in the scenario related to the supply of these bodies, since before the creation of the program, most cadavers were unclaimed bodies and, shortly after the initiative, a large part originated from voluntary donations¹².

The donation and capture of cadaveric pieces is low all over the world, which highlights the importance of this topic in different universities. Moreover, to increase adherence to this practice, the effective development of programs, as well as their wide dissemination, become necessary¹³.

Despite this change in the national scenario, there is yet no body donation system in the state of Maranhão, especially at the Federal University of Maranhão. Thus, in an attempt to overcome the shortage of cadavers, the relevance of a body donation program for the study of human anatomy at the Federal University of Maranhão is highlighted.

Additionally, it is important to raise and identify the population's opinion on the subject of body donation for educational purposes, as well as to analyze the degree of these individuals' knowledge regarding this practice. Hence, the present study aimed to analyze the degree of knowledge and perspectives of the university community regarding the voluntary donation of cadavers for educational and research purposes.

METHOD

Study type

This is an observational, cross-sectional and prospective study with a quantitative approach and data collection through an individual questionnaire.

Study location

The present study was carried out in a public higher education institution, the Federal University of Maranhão, Dom Delgado campus, located at Av. dos Portugueses, 1966 - Vila Bacanga, São Luís, state of Maranhão, 65080-805. Furthermore, the Department of Morphology (DEMOR) was also involved in this project, which served as support for carrying out the research stages.

Study sample

The sample for this study consisted of students enrolled at the Federal University of Maranhão (Campus Dom Delgado -UFMA) who had or had not yet attended the Human Anatomy course, as well as teachers at the institution. All students were, during the study, properly registered in the Integrated System of Academic Activities Management (SIGAA, *Sistema Integrado de Gestão de Atividades Acadêmicas* – https://sigaa.ufma. br). Additionally, regarding the teachers, professionals were selected from the different areas integrated in the university. Throughout the study, men and women aged 18 years or older were enrolled. The sample consisted of 264 individuals in all, of which 202 were students and 62 were teachers.

Data collection

Considering the context of the COVID-19 pandemic, during which this research was developed, the questionnaire was applied remotely and individually, using a form developed on the Google^{*} Forms platform. The participants signed an informed consent form attached to the questionnaire so they could be included in the study. To collect and analyze information about body donation for the purpose of studying human anatomy, two questionnaires were created based on questions already addressed on the subject in previous studies^{11,14-16}, with the first being specific for students, and the second for the teachers of the institution.

The UFMA website provides a list of actively enrolled students and teachers, separated by course. Thus, from the name of each student, it was possible to obtain the institutional e-mail address associated with the enrollment. The academic units at UFMA are divided according to the areas of knowledge: biological and health sciences, human sciences, social sciences, exact sciences and technology, agricultural and environmental sciences. For each unit, the UFMA digital platform provides a list of actively enrolled students and teachers¹⁷. From this list, it is possible to obtain the institutional email address associated with the Google Workspace platform. Then, the electronic address of the form was sent to all actively enrolled students and teachers with a registered institutional email address. Questionnaire application and data collection took place between August and November 2021.

Analysis of results

The data were analyzed according to the sociodemographic profile (gender, age, ethnicity/skin color, religion and marital status), sociocultural characteristics, knowledge and perspectives on voluntary body donation for teaching and research purposes, using the Python programming language, version 3.9.10. This is a popular, high-level scripting

language, the first version of which was released by Guido van Rossum in 1991. It is currently maintained by the non-profit organization Python Software Foundation and shared under the Python Software Foundation license. It is one of the main programming languages used in data science¹⁸, with a wide availability of free libraries and tools. For data processing, Pandas libraries version 1.4.3 were used, which focus on highlevel data manipulation^{19,20}, and SciPy software, version 1.8.1, a library with a wide range of statistical calculation algorithms. Both are free and open source, available on GitHub, the main source code hosting platform²¹. The Chi-square test was used for categorical variables, and statistical significance was considered for p values < 0.05, with a significance level of 95%. The results are expressed as mean ± standard deviation, for continuous variables, and percentages, for binomial variables. Data were tabulated using Microsoft Office Excel[®] software.

Ethical considerations

This research was submitted to the Research Ethics Committee CEP/CONEP and approved under Opinion n. 4,623,985. The reliability of the information provided was guaranteed to all participants, who signed the Free and Informed Consent Form (FICF). The collected data were used only for the purpose stated in the research objectives, with the information being presented collectively, without any harm to the people involved in the study. The data are under the custody of the researchers, and their secrecy and confidentiality are ensured.

RESULTS

The study sample consisted of two large groups, 202 students and 62 teachers from the Federal University of Maranhão. The following variables were evaluated in relation to the participants' sociocultural profile: age, gender, ethnicity/ skin color, marital status, area of training/activity and religion.

With regard to the students, the sample population had a mean age of 23.16 \pm 4.79 years, consisting of 127 (62.87%) female and 75 (37.13%) male individuals. The results indicated that 191 (94.55%) were single, 10 (4.95%) were married and only 1 (0.5%) was divorced and none of the students fit the "other" profile (living with partner, widowed, separated).

Moreover, the analysis of the religious profile showed that 78 (38.61%) students were Catholic, 53 (26.24%) declared having no religion, 38 (18.82%) were Evangelicals, 22 (10.89%) did not want to declare their religion and 11 (5.44%) followed other religions (Kardecist, Spiritist, Afro-Brazilian religions). Regarding ethnicity/skin color, 93 students (46.04%) were mixed race, 79 (39.11%) were white, 27 (13.37%) were black, and 3 (1.48%) others (yellow, indigenous, does not know). Statistical analysis allowed us to infer that 125 (61.88%) students were from the health area and 77 (38.12%) were not from the health area, with students being from the most diverse courses at the institution, such as Law, Journalism, Languages and Linguistics, Computer Sciences, Engineering, Design, Economics, among others.

When analyzing the students' knowledge regarding the possibility of donating their own bodies for teaching and research purposes, 173 (85.64%) answered they were aware of this possibility and 29 (14.36%) answered they did not know about it.

When asked if they would donate their body for study and research in anatomy, it was observed that 34 (27.2%) health students said they would donate, 44 (35.2%) said they would not donate, and 47 (37.6%) did not have a formed opinion about it. Regarding students who were not from the health area, 21 (27.27%) said they would donate their body, 22 (28.57%) said they would not donate their body and 34 (44.16%) did not have a formed opinion about it. There was no statistically significant difference between the two groups (p > 0.05).

Considering these results, the reasons given by the students for being in favor of donating their own bodies were analyzed, as described in Table 1. Regarding students from the health area, when analyzing the 34 (27.2%) students who said they would donate their own body, 17 indicated that they would donate their body "to contribute to the advancement of education in the health area", 7 indicated: "I will be useful even after my death", 6 indicated that they would donate because "I know the need for this material in laboratories ", 3 indicated: "to help others to be a more qualified professional", 1 indicated that they would donate "in gratitude to science". As for students who were not from the health area, when analyzing the 21 (27.27%) students who declared that they would donate their own bodies, 11 indicated that they would donate their bodies "to contribute to the advancement of education in the health area", 5 indicated: "I will be useful even after my death", 3 indicated that they would donate "in gratitude to science" and 2 indicated they would donate because "I know the need for this material in laboratories".

Following this reasoning, the reasons that led the students not to be in favor of donating their own bodies were also analyzed, as described in Table 2. Regarding the 44 (35.2%) students from the health area who stated that they did not would donate their own body, 26 indicated that they would not donate because: "I want to be buried/cremated or others", 5 indicated that "students disrespect the cadaver", 4 indicated that "family members would not accept it", 3 indicated that they would not donate for "religious reasons", 2 indicated they would not donate because "they would be ashamed of being recognized", 2 indicated that they would not donate because of: "the university's unpreparedness to receive the cadavers", and 2 indicated "another reason", which was: "I prefer that my body be destined for organ donation". Regarding the 22 (28.57%) students who were not from the health area and who stated that they would not donate their bodies, 12 indicated that they would not donate because: "I want to be buried/ cremated or others", 4 indicated that "students disrespect the cadaver", 3 indicated that "family members would not accept it", 3 indicated "another reason" which was: "I prefer that my body be destined for organ donation".

Regarding the students' knowledge about the procedures and documents required to donate one's body for educational purposes, it was observed that the vast majority of the participants, 195 (96.53%) did not have any knowledge about what would be needed to carry out the donation. Moreover, most students, 176 (87.12%) answered they did not know about the Brazilian law that allows the donation of bodies.

Regarding the teachers' results, the sample population had a mean age of 49.65 ± 9.95 years, consisting of 32 (51.61%) female and 30 (48.39%) male individuals. The results showed that 46 (74.19%) were married, 8 (12.90%) were divorced, 6 (9.68%) were single and 2 (3.23%) were widowed.

Table 1.	Reasons described b	w students for being	g in favor of donation.

	Health area students		Students from other areas	
-	Ν	%	N	%
To contribute to the advancement of education in the health area	17	50	11	52.4
I will be useful even after my death	7	20.6	5	23.8
I know the need for this material in laboratories	6	17.64	2	9.5
To help others to be a more qualified professional	3	8.82	-	-
In gratitude to science	1	2.94	3	14.3
Total	34	100	21	100

Source: prepared by the authors.

Regarding the analysis of the teachers' religious profile, the data analysis showed that 35 (56.45%) were Catholic, 8 (12.90%) classified themselves as having "no religion", 7 (11.29%) declared themselves evangelicals, 7 (11.29%) as Kardecists and 5 (8.06%) belonged to other religions or did not want to declare it. As for ethnicity/skin color, 35 teachers (56.45%) declared themselves to be white, 25 (40.32%) mixed race, 1 (1.61%) yellow, and 1 (1.61%) black. The statistical analysis allowed inferring that 43 (69.35%) of the teachers were in the health area and 19 (30.65%) were not in the health area.

As for the analysis of the participants' knowledge regarding the possibility of donating their body for teaching and research purposes, 54 (87.1%) answered they were aware of this possibility and 8 (12.9%) answered they did not know about it.

When asked if they would donate their body for the purpose of study and research in anatomy, it was observed that 10 (23.26%) teachers in the health area declared they would donate their own body, 16 (37.21%) said they would not, and 17 (39.54%) did not have a formed opinion about it. Regarding the teachers who were not from the health area, 8 (42.11%) stated they would donate their own body, 7 (36.84%) said they would

not donate their own body and 4 (21.05%) declared they did not have a formed opinion. There was no statistically significant difference (p > 0.05) between the two groups.

Considering these results, the reasons given by the teachers for donating or not donating their own bodies were analyzed, as shown in Table 3 and Table 4. With regard to teachers in the health area, analyzing those who stated they would donate their own body, 5 indicated they would donate their body "to contribute to the advancement of education in the health area," 3 indicated: "in gratitude to science", 1 indicated as reason: "I know the need for this material in laboratories", and 1 indicated: "to help others to become more qualified professionals". As for the teachers who were not from the health area, analyzing those who declared that they would donate their own body, 7 indicated they would donate their body "to contribute to the advancement of education in the health area, analyzing those who declared that they would donate their own body, 7 indicated they would donate their body "to contribute to the advancement of education in the health area", and 1 indicated: "I will be useful even after my death".

When analyzing the factors that led teachers to not donate their own bodies, it was identified among the teachers in the health area that a total of 8 professionals would not do it because: "I want to be buried/cremated or others", 4 indicated that "family members would not accept", 2 indicated

Table 2. Reasons described by students for being against the donation of their bodies.

	Students from the health area		Students from other areas	
	Ν	%	N	%
I want to be buried/cremated or others	26	59	12	54.54
Students disrespect the cadaver	5	11.37	4	18.2
family members would not accept it	4	9.1	3	13.63
Religious reasons	3	6.81	-	-
They would be ashamed of being recognized	2	4.54	-	-
The university's unpreparedness to receive the cadavers	2	4.54	-	-
Other reasons	2	4.54	3	13.63
Total	44	100	22	100

Source: prepared by the authors.

Table 3. Reasons described by teachers for being in favor of donation.

	Teachers from the health area		Teachers from other area	
	N	%	Ν	%
To contribute to the advancement of education in the health area	5	50	7	87.5
In gratitude to science	3	30	-	-
I know the need for this material in laboratories	1	10	-	-
To help others to become more qualified professionals	1	10	-	-
I will be useful even after my death	-	-	1	12.5
Total	10	100	8	100

Table 4. Reasons described by teachers for being against donating their own bodies.

	Teachers in the health area		Teachers from other areas	
	N	%	Ν	%
I want to be buried/cremated or others	8	50	5	71.4
Students disrespect the cadaver	-	-	-	-
Family members would not accept	4	25	-	-
Religious reasons	2	12.5	1	14.3
They would be ashamed of being recognized	-	-	-	-
The university's unpreparedness to receive the cadavers	-	-	-	-
Other reasons	2	12.5	1	14.3
Total	16	100	7	100

Source: prepared by the authors.

that they would not donate for "religious reasons", 2 indicated "other reasons", namely: "I am an organ donor" and "I still feel emotionally unprepared for this". In addition, with regard to teachers who are not in the health area and who indicated that they would not donate their own body, 5 indicated that they would not donate because: "I want to be buried/cremated or others", 1 indicated that they would not donate for "religious reasons" and 1 indicated in "other reasons": "I leave that option to the wife and children".

The teachers were asked what procedures and documents would be necessary to donate their bodies for teaching and research purposes, and it was observed that most participants, 54 (87.1%), did not have any knowledge about what would be required to make the donation. Moreover, most of the teachers, 52 (83.9%), answered they did not know about the Brazilian law that allows body donation.

DISCUSSION

This research has a particularity due to the fact that it took place during the social distancing period caused by the Covid-19 pandemic, where the academic community was also unprecedentedly involved. Thus, the need to maintain a number of cadavers for medical teaching becomes essential in the learning of human anatomy, as it allows a three-dimensional view of anatomical structures, in addition to demonstrating the textures of different tissues in a real context¹⁶. It is worth remembering that the anatomical knowledge provided by the study of cadaveric bodies, the experience in the dissection room and the contact with the cadaver offer an opportunity to develop ethical practice principles among students since the beginning of their academic training²².

In an attempt to solve the lack of such a foundation in teaching, Brazilian universities, based on article 14 of Law N. 10.406/2002 of the Brazilian Civil Code¹⁰, developed body donation programs for teaching and research in anatomy. Despite this change in the national scenario, there is yet no body donation system in the state of Maranhão, especially at the Federal University of Maranhão. Thus, aiming at the future implementation of a body donation program at UFMA, aiming to solve the scarcity of cadavers at the institution, the present study analyzed the degree of knowledge and perspectives of the university community regarding the voluntary donation of cadaveric bodies for educational and research purposes.

When analyzing the participants' knowledge about the possibility of voluntary donation of their own bodies, a high percentage was observed, both among students (85.64%) and teachers (87.1%). However, when evaluating the degree of knowledge of these groups about the procedures and documents necessary to make the donation, as well as what would be the Brazilian legislation that allows such practice, it was observed that both groups have a low percentage of knowledge about these topics. Regarding the students, it was identified that 96.53% and 87.12% did not know the procedures and the legislation, respectively. Regarding the teachers, 87.1% and 83.9% did not know the procedures and legislation, respectively. Consequently, these results demonstrate that the participants, despite having prior knowledge about the possibility of donating their own bodies, lack information on how to do so, as well as the Brazilian legislation that allows such practice.

The present study evaluated the opinion of the university community about the willingness to donate their own body. When analyzing the availability of the university community in general, it was observed that only 27.65% of the participants were able to donate, 33.7% indicated that they would not donate their own body and 38.9% indicated the option: "I have no formed opinion". A similar result was found in another study in the literature, in which it was pointed out

that 25% of the respondents were willing to donate their own bodies, 51% answered they would not donate and 24% had no opinion on the topic¹³.

Although teachers and students in the health area have greater knowledge about and contact with human anatomy and the cadaveric body, no statistically significant association was found with the issue of donating their own bodies, that is, in the present study, these populations were not more likely to do it. It was also observed that teachers and students who are not from the health area show a higher favorable percentage when asked about donating their own bodies for anatomy teaching and research than teachers from the health area, in addition to showing a lower percentage of refusal when asked about the donation.

Furthermore, both students and teachers show a high percentage of indecision, showing they do not have an opinion about donating their own body or not, opening up a possible margin for increase in the willingness to donate, which can be achieved through the use of social media, websites, exhibitions at universities and in public places to disseminate information on this topic²³. A similar idea is shared by Ranjan et al.²⁴, who state that campaigns can be carried out to raise public awareness.

Similarly, according to Signorati¹⁶, only having specific legislation for body donation is not enough to solve the problem of body scarcity, and the dissemination of information is an important point to help spread the information about the right to donate one's own body, something that it is already done through a website, pamphlets and campaigns at the Federal Technological University of Paraná (UTFPR).

An important step to intervene in individuals' willingness to donate is to know the factors that lead people to donate their own body, as well as the factors that prevent this practice. Thus, the present study analyzed that among the students and teachers, the main reasons that led to the donation were: "to contribute to the advancement of education in the health area", "to be useful after my death", "I know the need of the cadaver in the anatomy laboratory", "in gratitude to science" and to "help others to become a more qualified professional". These data also corroborate those published by Marsola¹¹, a study that indicated similar reasons for voluntary donation. In addition, the main reason identified was the desire to be useful after death, as elucidated by Bolt et al.²⁵.

Regarding the reasons that would prevent the practice of donation, the most frequent ones pointed out by students and teachers were: "I want to be buried or cremated", "students disrespect the cadaver", "family members would not accept it", "religious reasons", "the university's unpreparedness to receive the cadavers" and "they would be ashamed of being recognized". Similarly, according to the present research data, studies indicate that reasons such as fear of being recognized, religious reasons, wish to be cremated/buried and possible inadequate treatment of bodies by the universities are reasons that negatively influence voluntary donations^{26,27}.

Faced with the factors that negatively influence the donation of cadaveric bodies, added to the large number of undecided individuals on whether or not to donate their own bodies, and the degree of misinformation regarding this issue, the importance of disseminating this topic in the media and society is highlighted, using continuously carried out campaigns containing information and educational resources on the donation of bodies for teaching and research purposes.

The implementation of a body donation program, combined with systematic dissemination on websites and social media, focused on informing the population about this right and about the legislation that allows the practice of donation, can constitute an important aid to solve the scarcity of cadavers in Brazilian universities. An important example is that of UFMG, which has a body donation system called "Life After Life", which is publicized on its website and on its social media and has already had more than 60 bodies donated throughout the program's existence²⁸.

A positive result is also observed in the literature, as that demonstrated by Rocha et al.¹², with the implementation of a voluntary donation program at the Federal University of Health Sciences of Porto Alegre, in 2008, which, with the launching of the program, observed an increase in the number of donations from 26 (obtained in the period 2003-2007) to 147 bodies, from the year 2008 to 2012, with an average of 29.4 cadaver registrations per year.

Synergistically with these actions, international studies point to the importance of respecting the corpses to improve donation rates, since disrespect for the cadaver on the part of students is a reason indicated by individuals for being against donation. Attitudes of respect and admiration should be taught to students and all health professionals when using the cadaveric body, a measure that makes potential donors more confident in the act of donating and makes them better understand the importance of the cadaver²⁷.

FINAL CONSIDERATIONS

It was evident that most of the interviewees are aware of the possibility of donating their own bodies for teaching and research purposes. However, we identified a high percentage f individuals who does not know the procedures and legislation that allows the donation.

Regarding the willingness to donate their own body, it is concluded that the participants have a low aptitude

for donation; however, they are motivated to donate as a contribution to education in the health area.

We conclude that the creation of a body donation program serves as a means of making voluntary donation possible, and this action, in addition to the dissemination of the topic through the media, is an important way to assist in the problem of scarcity of cadavers in Brazilian universities, in addition to bringing significant improvements to the quality of teaching of students and better medical professional training.

AUTHORS' CONTRIBUTION

Luigi Antony Vinhaes Prohmann, Vinícius Santos Mendes and Ozimo Pereira Gama Filho participated in the study design, collection and analysis of results, discussion and the writing and review of the manuscript. Rogério Ramos Figueiredo, Francisco Santos de Almeida and Mateus Balbino Barbosa de Carvalho participated in data collection and analysis, and in the review of the manuscript.

CONFLICTS OF INTEREST

The authors declare no conflicts of interest.

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