













“Flash Mob - donation league”: an educational strategy to promote the donation of human organs and tissues

“Flash Mob - Liga da Doação”: Uma estratégia educativa para promover a doação de órgãos e tecidos humanos

Carlos Alexandre Curylofo Corsi^{1,4} , Kátia Carmen Gabriel Scarpelini¹ , Rodolfo Leandro Bento¹ , Alan Vinícius Assunção-Luiz² , Samia Hussein Barakat³ , Maria Luisa Dias Scarso Villela³ , Maíra de Oliveira Azevedo³ , Marcos Eduardo dos Santos Alves³ , Eloá Silva⁴ , Elton Carlos de Almeida⁵ , Karina Dal Sasso Mendes³ , Luís Gustavo Gazoni Martins¹ 

ABSTRACT

Background. The professionals from the Human Tissue Banks (HTB) work to promote, disseminate, and clarify the importance of tissue and organ donation to meet the demands of making tissue available for transplants and research. However, there is a great deal of family resistance when it decides to donate the organs and tissues of a potential donor. This demonstrates the importance of designing and implementing a range of engaging and accessible educational strategies that can encourage acceptance of donations and reduce the number of family refusals. Therefore, this study aims to describe the experience of a playful educational campaign to inspire changes in attitude and behavior about organ and tissue donation. **Methods.** This is a descriptive study, based on an experience report of an educational campaign developed by the BTH of the Hospital das Clínicas da Faculdade de Medicina de Ribeirão Preto of the University of São Paulo (HCFMRP/USP). The event was attended by the fire department, journalists, local authorities and several HCFMRP/USP employees and students from the Transplant League of the Ribeirão Preto Nursing School of the University of São Paulo (LiTOT-EERP/USP). **Results.** The event was organized at the crossroads of the main avenues of a city in the interior of São Paulo, with the appropriate clearances and security. Interactive and fun activities were organized for the population. A choreographed Flash Mob was performed in the streets during the traffic light closures. In addition, gifts were distributed to people passing by, reaffirming the importance of informing family members about organ and tissue donation for transplants and inviting them to take part in the action. T-shirts, pens, and squeezes were made with the “Donation League” campaign logo and the donation mascots (superhero dolls in the shape of human tissues: bone, skin, corneas, and vessels). It is estimated that the action reached more than 2,000 people, extending the discussion and relevance of the cause through local television networks, as well as through interaction with the public present. **Conclusion.** It is believed that the increase in the number of donations reflects the educational investments made through playful and accessible campaigns to raise public awareness of this issue.

Keywords: Tissue and organ procurement, Tissue transplantation, Health education, Tissue banks, Awareness.

¹University of São Paulo, Human Tissue Bank of Ribeirão Preto Medical School, Ribeirão Preto, (SP), Brazil.

²National School of Public Health, Comprehensive Health Research Centre, Portugal

³University of São Paulo, Ribeirão Preto School of Nursing at Ribeirão Preto, (SP) Brazil.

⁴National Commercial Learning Service (Senac), Ribeirão Preto, SP, Brazil.

⁵Ministry of Health, Brasília, (DF), Brazil.



RESUMO

Introdução. Os profissionais dos Bancos de Tecidos Humanos (BTH) trabalham para promover, divulgar e esclarecer a importância da doação de tecidos e órgãos para atender às demandas de disponibilização de tecidos para transplantes e pesquisas. No entanto, há uma grande resistência da família quanto a doar órgãos e tecidos de seus familiares falecidos. Isso demonstra a importância de projetar e implementar uma série de estratégias educacionais lúdicas e acessíveis, que possam incentivar a aceitação para as doações e reduzir o número de recusas familiares. Portanto, este estudo tem como objetivo descrever a experiência de uma campanha educacional para inspirar mudanças de atitude e comportamento, em relação à doação de órgãos e tecidos. **Métodos.** Trata-se de um estudo descritivo, baseado em um relato de experiência de uma campanha educativa desenvolvida pelo BTH do Hospital das Clínicas da Faculdade de Medicina de Ribeirão Preto da Universidade de São Paulo (HCFMRP/USP). O evento contou com a presença do Corpo de Bombeiros, jornalistas, autoridades locais e vários funcionários do HCFMRP/USP e alunos da Liga de Transplantes da Escola de Enfermagem de Ribeirão Preto da Universidade de São Paulo (LiTOT-EERP/USP). **Resultados.** O evento foi organizado no cruzamento das principais avenidas de uma cidade do interior de São Paulo, com as devidas autorizações e segurança. Foram organizadas atividades interativas e divertidas para a população. Um Flash Mob coreografado foi apresentado nas ruas durante o fechamento dos semáforos. Além disso, foram distribuídos brindes às pessoas que passavam pelo local, reafirmando a importância de informar os familiares sobre a doação de órgãos e tecidos para transplantes e convidando-os a participar da ação. Foram confeccionadas camisetas, canetas e squeezes com o logotipo da campanha “Liga da Doação” e os mascotes da doação (bonecos de super-heróis em formato de tecidos humanos: osso, pele, córneas e vasos). Estima-se que a ação tenha atingido mais de 2.000 pessoas, ampliando a discussão e a relevância da causa por meio das redes de televisão locais, bem como pela interação com o público presente. **Conclusão.** Acredita-se que o aumento do número de doações reflete os investimentos educacionais realizados por meio de campanhas lúdicas e acessíveis para conscientizar o público sobre o tema.

Palavras-chave: Obtenção de tecidos e órgãos, Transplante de tecidos, Educação em saúde, Bancos de tecidos, Conscientização.

INTRODUCTION

The transplantation of human organs and tissues represents a therapeutic surgical approach aimed at saving and/or improving the quality of life of patients with systemic organ failure and severe tissue failure that puts their health at risk. The feasibility of donation, for the most part, comes from both living related donors and deceased donors who are victims of brain death (BD) and systemic death with cardiorespiratory arrest ¹⁻³.

In Brazil, the donation is supported by the Brazilian Federal Constitution ⁴, re-

gulated by law 9175/2017 ⁵, and governed by subsequent laws, such as Consolidation Ordinance 04/17 ⁶ and Resolution of the Collegiate Board (RDC) of the National Health Surveillance Agency (ANVISA) No. 707/2022 [7]. These provisions aim to establish the National Transplant System (SNT) and its guidelines, as well as all the logistics that permeate the processes and services of organ and tissue donation and transplantation in the country, which is managed by the National Organ Notification, Procurement and Distribution Center (CNCDO) ⁵⁻⁷.

This organizational and administrative framework has enabled Brazil to be recognized as a world reference in transplantation, with approximately 95% of procedures fully and free of charge funded by the Unified Health System (SUS)⁸. However, it is already known that there are constant challenges to access, mainly related to the allocation of resources and inequalities in the SUS, which have a negative impact on transplant services⁸⁻⁹.

Another important point to highlight is the scarcity of transplantable organs, in contrast to the high number of patients on the waiting list in 2023, which totals 58,908 adult patients and 1,145 pediatric patients¹⁰. Therefore, the ratio between the number of candidates waiting for a transplant is not matched by the number of donors available, which is insufficient to meet these growing demands. Furthermore, when addressing the need for transplants at a national level, other factors must be considered, in particular the dilemmas linked to family members' awareness of the possibility of donation, together with the lack of knowledge and information about organ donation¹¹.

Data from the Brazilian Association of Organ Transplants (ABTO) indicates that by the third quarter of 2023, of the 5,998 families interviewed for donation, 2,573 (43%) had refused to remove organs and tissues from their relatives¹⁰. Among the main reasons for refusal are: the family's lack of knowledge about the donor's wishes, inadequate interviews, religious motivations, myths about organ trafficking, the desire to bury the body intact, lack of clarification and understanding about the diagnosis of brain death, among others⁹⁻¹¹.

In this scenario, despite having one of the largest donation and transplant pro-

grams in the world, family refusal to donate human organs and tissues for transplants in Brazil has remained high over the years¹². Thus, it is understood that refusal occurs mainly due to a lack of correct information on the subject and a lack of access to the necessary information that permeates the process of acceptance for donation, while still alive, and not allowing this decision to happen at the most delicate moment, in the face of death^{2,11-13}.

Given this, it is imperative to implement educational actions aimed at raising public awareness, bringing about a significant change in opinion and intention about donation, and raising discussion on the subject while still alive^{14,15}. In this sense, Human Tissue Banks (HTBs) play a crucial role in working to promote, disseminate and enlighten the population about the importance of donation. This is essential to meet the demands of availability and ensure a continuous flow of tissues for transplantation^{12,15}. Therefore, this article aims to describe the experience of a engaging educational campaign to inspire changes in attitude and behavior towards organ and tissue donation.

METHODS

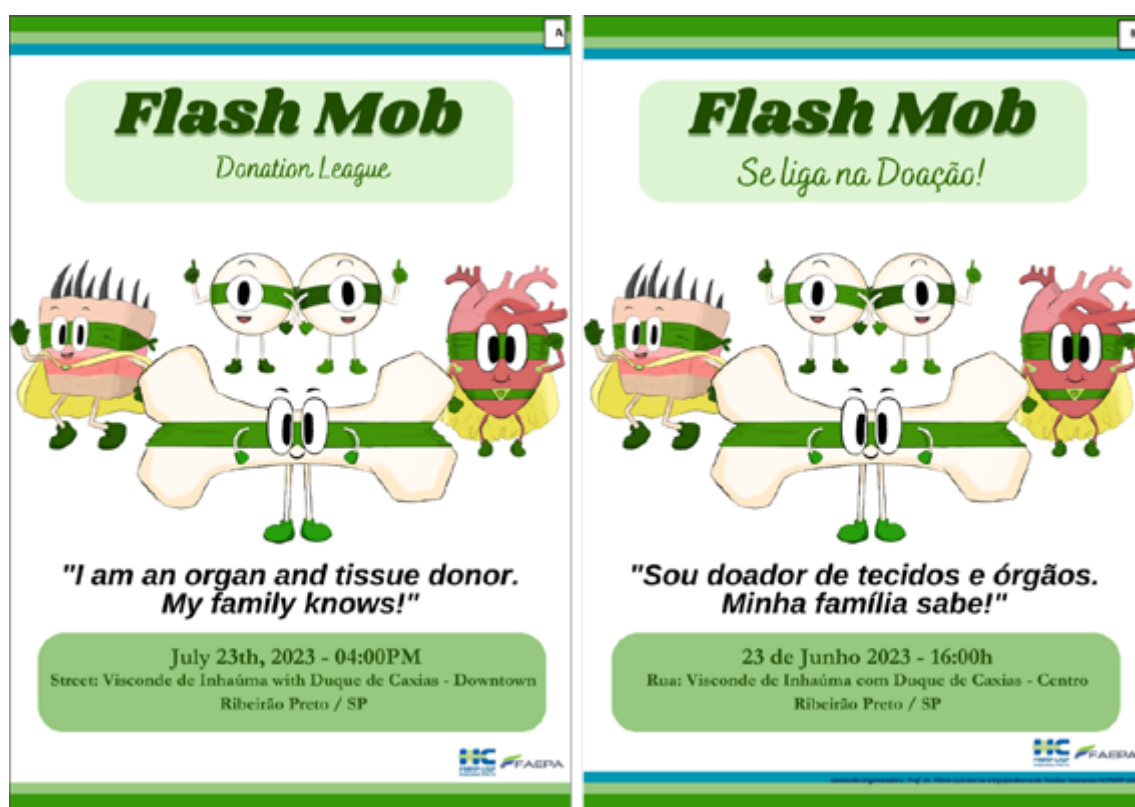
This is a descriptive experience report, with a qualitative approach, about the process of developing a strategy and educational intervention through an event, created, and developed by employees of a BTH and students from a higher education college, located in a city in the interior of São Paulo state.

The project was drawn up in advance, by selecting the organizing team and establishing the goals to be developed on the day of the event, as well as developing

program content and strategically defining the place, date, methodology, and target audience to be addressed. T-shirts, pens, and squeezes personalized with the “Donation League” campaign logo and donation

mascots (superhero dolls in the shape of human tissues: bone, skin, corneas, and vessels) were also made for distribution to participants (Figure 1 A and B).

Figure 1. Preliminary material to publicize the event. Authors’ personal archives, where: A) Previous event publicity material, translated into English and; B) Previous event publicity material, from the original in Portuguese. Art & Designer: Eloá Silva.



In addition, the action was publicized in advance on the social media of the institutions involved in the project, to optimize recruitment and the effective participation of the academic and general population, without any restriction on the course, schooling, or age of those interested. Organizational meetings took place from the beginning of March 2023 until June 2023, with the date chosen for the event being June 23, 2023.

The methodology used to capture the public’s attention was “Urban Body Communication”, through an attractive and

fun action called “Flash Mob”. This artistic movement is characterized as a modern Information and Communication Technology (ICT), which provides means of communication that are accessible and easy to understand for the target audience, to facilitate and popularize the processes, study interests and themes to be addressed^{16,17}.

Flash Mobs are characterized by instantaneous gatherings of people (the organizing team) in a public place to perform a certain unusual action, such as choreographed and synchronized movements, previously

agreed upon. These actions are presented instantaneously and then quickly disperse¹⁶. In this study, the Flash Mob actions were realized during the interval between the opening and closing of traffic lights.

RESULTS

The event was organized at an intersection of two main avenues in a city in the interior of São Paulo, with the necessary permits and authorizations. There were interactive and playful activities for the population, as well as a choreographed Flash Mob in the streets during the closing of the traffic lights. In addition, gifts were distribu-

ted to people passing by, talking about the importance of informing the family about their decision to donate or not donate their organs and tissues and inviting them to take part in the action.

The event was also attended by the Military Police, Fire Department, journalists, local authorities, employees of the HC-FMRP/USP Human Tissue Bank, and students from LiTOT-EERP/USP. According to data from the Military Police and Fire Department, it is estimated that the action reached more than 2,000 people, spreading the discussion and relevance of the cause to local television media (Figure 2 A-C).

Figure 2. Images from the day of the Flash Mob event. Authors' personal collection, where: A) Interviews and local media coverage; B) BTH team, organizers of the campaign; C) Team collaborating on the campaign.



Considering that donation is a constitutional right of the individual and their family⁴⁻⁵, access to all information on this subject also becomes a citizen's right. It is therefore crucial to develop educational tools that are designed and adapted for each target audience. This process requires adequate preparation on the part of those involved, given the complexity of the subject and the population's lack of familiarity with this type of action. It is essential to approach this issue with sensitivity and specific strategies, allowing them to deal with it in a clear, humanistic, supportive, and ethical way¹².

DISCUSSION

Many cultures tend to deny death and are not prepared to accept it as a natural process in the life cycle^{2,13}. That said, it is important to reflect on the need to expand scientific and educational activities in an accessible and understandable way, addressing issues that clarify the mystical process of death and, consequently, donation and transplantation for the general population^{2,11,15}.

When it comes to organ and tissue transplants, there is a long way to go for the process to take place effectively. From the moment a patient is diagnosed with BD, making them a possible candidate for donation, specialized teams work to safely facilitate the process, going through several consecutive stages [18]. After the diagnosis of BD is confirmed with two clinical tests and an imaging exam carried out by the medical team, the Organ Procurement Organization (OPO) is called in to carry out the physical and social screening of this possible donor.

This process includes interviewing the family to accept the donation and sig-

ning the consent form, notifying the Organ and Tissue Procurement and Distribution Notification Center (CNCDO), which is responsible for scheduling the surgery, procurement, and calling in the respective teams to carry out these procedures. The OPO will be responsible for allocating the organs and tissues collected, while the CNCDO, together with the doctors responsible, will recruit the recipients so that transplantation can finally take place^{2,5-7,9}.

In this sense, since its creation, great governmental efforts to continuously improve the processes involving donation and transplantation have been applied by the SNT⁵. However, it is necessary to adopt a deeper and more existential approach, to raise the meaning of life through personal choices and responsibilities, through awareness and perception of one's own body, which lives through experiences in a concrete reality^{14,19}. Thus, education emerges as a fundamental element in fostering acceptance of donation and should be incorporated as the first step in the process of donating and transplanting human organs and tissues, since, without it, no other stage of the process can take place¹².

In this way, the study presented here used different active methodologies that made it possible to create a critical-reflective imagination, suggesting awareness among the participants at the event. However, there are many other possible approaches, which can easily be adapted depending on the characteristics of the study population^{12,20-21}.

These dialogic and visual movements in which the population perceives itself as the protagonist of its own knowledge, questioning, and decision-making responsibility can facilitate the process of raising

awareness among the population about the importance of organ and tissue donation. Among the different educational approaches and target audiences for dialogue, it is worth highlighting the relevance of this discussion with students in the school development phase, who are natural replicators of the social and environmental agendas they believe in, which can have a direct impact on the communities in which they live, as was seen on the day this study was carried out and the event was held ¹².

CONCLUSION

It is believed that educational investments aimed at developing playful and accessible campaigns represent promising resources for raising mass awareness on the subject. These initiatives have the potential to have a positive impact on the number of donations, becoming a determining factor in reducing waiting lists and the number of people who die while waiting for an organ.

Given that the educational strategy adopted reached a significant number of participants in the campaign, it also proved effective in broadening the discussion on the importance of the issue in the local media. This approach enabled clear information to be provided, to bring about a change in attitudes towards organ and tissue donation. This impact is particularly relevant in the context of high rates of family refusal during donation interviews and limited knowledge on the part of the general population about the process of donating and transplanting human organs and tissues.

In addition, it is essential to note that this initiative was facilitated and driven by the collective and intersectoral engagement between health and educational institu-

tions, as well as the support of security and communication bodies on behalf of society. However, this is the essence and power of health actions with cross-cutting approaches that seek to overcome barriers, even in the face of the arduous journey to raise awareness and build a culture of organ and tissue donation in the country.

REFERENCES

- 1 Victorino JP, Mendes KD, Westin ÚM, Magro JT, Corsi CAC, Ventura CA. Perspectives toward brain death diagnosis and management of the potential organ donor. *Nurse ethics*. 2019;26(6):1886-96. DOI: 10.1177/0969733018791335.
- 2 Corsi CAC, Almeida EC, Santos MJ, Bueno SM, Santos MA. Mapping of educational strategies for elementary school students regarding the process of donation and transplantation of human organs and tissue: an integrative review. *Arquivos de Ciências Saúde UNIPAR*. 2020;24(03):169-77. DOI: 10.25110/arqsaude.v24i3.2020.7426.
- 3 Silva Jr HT, Felipe CR, Abbud-Filho M, Garcia V, Medina-Pestana JO. The emerging role of Brazil in clinical trial conduct for transplantation. *American Journal of Transplantation*. 2011; 1;11(7):1368-75. DOI: 10.1111/j.1600-6143.2011.03564.x.
- 4 CONSTITUTION OF THE FEDERATIVE REPUBLIC OF BRAZIL. BRASÍLIA, https://www2.senado.leg.br/bdsf/bitstream/handle/id/518231/CF88_Livro_EC91_2016.pdf; 1988 [accessed 22.11.2023].
- 5 BRASIL. Ministério da Saúde. Regulamento nº 9.175, de 18 de outubro de 2017. Regulamenta a Lei nº 9.434, de 4 de fevereiro de 1997, para tratar da disposição de órgãos, tecidos, células e partes do corpo humano para fins de transplante e tratamento. *Oficial da República Federativa do Brasil*. 1997.
- 6 BRASIL. Ministério da Saúde. Portaria de Consolidação nº 04, de 28 de setembro de 2017. Consolidação das normas sobre os sistemas e os subsistemas do Sistema Único de Saúde. *Oficial da República Federativa do Brasil*. 2017.
- 7 BRASIL. Ministério da Saúde. Resolução da Diretoria Colegiada (RDC) da Agência Nacional de Vigilância Sanitária (ANVISA) nº 707, de 1 de julho

de 2022. Dispõe sobre as Boas Práticas em Tecidos humanos para uso terapêutico. Oficial da República Federativa do Brasil. 2022.

8 Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES). Ministério da Educação [internet]. Brasília - DF. [cited 04 dez. 2023]. Available from: <https://intranet.capes.gov.br/noticias/10058-brasil-tem-o-maior-programa-publico-de-transplante-de-orgaos-do-mundo#:~:text=De%20acordo%20com%20o%20Minist%C3%A9rio,95%25%20dessas%20opera%C3%A7%C3%B5es%20no%20Pa%C3%ADs>

9 de Sousa Santos E, da Silva SS. Specialized medical force-fem/specialized medical care service—same: a proposal for creation and institutionalization by the brazilian ministry of health. *Health and Society*. 2023 Nov 1;3(05):364-83. DOI: 10.51249/hs.v3i05.1703.

10 Associação Brasileira de Transplante de Órgãos [internet]. São Paulo: 1-23 [cited 23 nov. 2023] Registro Brasileiro de Transplantes. Ano XXIX. Available from: <https://site.abto.org.br/wp-content/uploads/2023/12/rbt2023-3trim-naoassociados.pdf>.

11 de Araujo HV, Araujo AT, de Souza RZ, da Cruz SR. The main factors in refusing organ and tissue donation in the family scope: Literature Review. *Brazilian Journal of Implantology and Health Sciences*. 2023 Oct 18;5(5):1223-43. DOI: 0.36557/2674-8169.2023v5n5p1223-1243.

12 Corsi CA, Assunção-Luiz AV, Pitta NC, Cintra AS, Scarpelini KC, Bento RL, Martins LGG, de Almeida EC. Educational Actions to Raise Student Awareness About the Donation and Transplantation of Human Organs and Tissues. *Transplantation Proceedings* 2023. DOI: 10.1016/j.transproceed.2023.04.024.

13 Calsavara VJ, Scorsolini-Comin F, Corsi CA. The communication of bad news in health: approximations with the person-centered approach. *Revista da Abordagem Gestáltica*. 2019;25:92-1. DOI:10.18065/RAG.2019v25.9.

14 Freire P. *Pedagogy of the Oppressed*. 17th ed. Rio de Janeiro: Paz e Terra. 1987; p.343-8.

15 Manyalich M, Mestres CA, Ballesté C, Páez G, Valero R, Gómez MP. Organ procurement: Spanish transplant procurement management. *Asian Cardiovascular and Thoracic Annals*. 2011;19(3-4):268-78. DOI: 10.1177/0218492311411590.

16 Al-Khateeb S, Agarwal N. Flash mob: a multidisciplinary review. *Social Network Analysis and Mining*. 2021 Dec;11(1):97. DOI: 10.1007/s13278-021-00810-7

17 Alisma J, van Saase JL, Nanayakkara PW, Schouten WI, Baten A, Bauer MP, Holleman F, Ligtenberg JJM, Stassen PM, Kaasjager KHKA, Haak HR, Bosch FH, Schuit SCE. The power of flash mob research: conducting a nationwide observational clinical study on capillary refill time in a single day. *Chest*. 2017 May 1;151(5):1106-13. DOI: 10.1016/j.chest.2016.11.035.

18 Vasconcelos TF, Meneguetti MG, Corsi CAC, Michelon-Barbosa J, Sato L, Basile-Filho A, Becari C, Dantas RAS, Auxiliadora-Martins M. Assessment of physicians' knowledge about brain death and organ donation and associated factors. *Medicine*. 2022 Sep 23;101(38):e30793. DOI: 10.1097/MD.00000000000030793.

19 Martins, J., Bicudo, M.A.V. *Qualitative research in psychology: foundations and basic resources*. São Paulo: Editora Moraes, 1989.

20 Luiz AV, Pitta NC, Santos JT, Corsi CA, Borges PV, Ferreira MV, Junior AA, Fernandes TM, João HA, Fernandes AP. "UNIVERSITY FOR A DAY PROGRAM": Action of social responsibility and inclusion. *Revista Mineira de Enfermagem*. 2021 Jan 1;25. DOI: 10.5935/1415-2762-20210021.

21 Lima LV, Pavinati G, Gonçalves LD, Corsi CA, Cabianchi EC, Freitas RA, Baldissera VDA. A dialog on organ and tissue donation: Gamification in permanent education in health. *Cogitare Enfermagem*. 2023 Sep 25;28:e86384. DOI: 10.1590/ce.v28i0.91377.

Criteria for inclusion in the authors'/ contributors' list: This article is a multicenter study. The authors were selected based on their participation in the project, action and collaboration in writing the article.

Acknowledgments: The authors of this article are grateful to Hospital das Clínicas da Faculdade de Medicina de Ribeirão Preto - Universidade de São Paulo (HCFMRP-USP).

DISCLOSURES: The authors declare no conflict of interest, and no AI tools to analyze and draw insights from data as part of the research process. The authors allow the reproduction of previously published material.

The manuscript has been read and approved by all authors. Authorship requirements have been met and each author believes that the manuscript represents honest work.

Sources of funding: Do not apply. The authors declare that there was no financial support or funding.

Contributions: CACC, KCGS, RLB, AVAL, SHB, MLDSV, MOA, MESA, ES and ECA: Conceived and planned all activities leading to the study, participated in the review process, and data collection; discussion and results presented; Wrote the manuscript, revised its successive versions, and participated in the collection and search results; KDSM and LGGM: Corrected and approved the final version.

Corresponding author:

Carlos Alexandre Curylofo Corsi.
carlos_ccorsi@hotmail.com

Received: jan 23, 2024

Approved: mar 12, 2024

Editor: Prof. Dr. Felipe Villela Gomes
