

Education on blood donation and transfusion from the perspective of a state university extension project

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Abstract

Introduction: The extension project “Permanent education on transfusion therapy: promoting better care from donor to recipient” is aimed to impact the learning process on safe blood donation and transfusion through education, social and cultural influences on students and health professionals, as well as on the community. **Objective:** To promote educational activities and tools related to safe blood donation and transfusion. **Methodology:** Dissemination of information about blood donation and transfusion topics through social media, educational activities, including other extension projects, and conversation circles were planned. **Indicators,** such as the number of posts on social media, number of people reached, and events held from March 2021 to August 2022, were considered for quantitative analysis. **Results:** Thirty-six posts on the project’s Instagram® feed reached 270 people. Two events were registered at the University Extension Department and were executed. A conversation circle about blood donation in the context of the LGBTQIA+ community attracted 19 participants and a multidisciplinary team. One action for the “World Blood Donor Day”, contributed to a 54% increase in the number of candidates for donation to the blood bank at Pedro Ernesto University Hospital, compared to the previous year. There was a discussion on refusal to receive transfusion based on the book “The Children Act”, by Ian McEwan, involving another extension project called “Canga Literária”. **Conclusion:** The extension projects play an important role in education and allowed the inclusion of content that is not part of the medical syllabus, contributing to the dissemination of knowledge.

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Introduction

Blood donation and transfusion involve technical, ethical, emotional and philosophical issues that are not always discussed during the training of students and healthcare professionals and are rarely brought up for discussion in the non-academic community. Considering the relevance of university extension projects,¹ and their potential for cultural and social change, an extension project from the Medical Science Department of the State University of Rio de Janeiro (UERJ) was initiated in 2021. The project focused on the educational aspects of blood donation and transfusion as an opportunity to develop teaching strategies within and outside the walls of the university, reinforcing the role of university extension in promoting the democratization of educational and social actions.

The extension project “Permanent education on transfusion therapy: promoting better care from donor to recipient”, registered under number 6457 in the Extension Department (DEPEXT) of UERJ, considers the relevance of extension in the process of education and behavioral change from a social and cultural perspective in students, faculty, healthcare professionals and the community, with regard to blood donation and transfusion. Therefore, the project includes actions that involve different sectors of UERJ and the external community, and has the Hemotherapy Service of the Pedro Ernesto University Hospital (HUPE) as its main source of educational material. This multi- and transdisciplinary project includes the active participation of students from medicine and nursing schools at UERJ and various other professionals.

In addition to epidemiological and social changes, the COVID-19 pandemic has fostered technological advances that are aligned with the aspirations of this project, transforming the environment of social media networks, telemedicine and teleconferences into viable tools for the dissemination of knowledge. This work aims to highlight some educational actions on safe blood donation and transfusion from the perspective of an extension project.

Methodology

Goals were established to disseminate information about safe blood donation and transfusion through distance learning education platforms, social media (such as Instagram®), an open dialogue with the public and collaboration with other university projects. Actions undertaken between March 2021 and August 2022 were compiled and analyzed, in order to quantify their outreach potential. The activities were planned and executed according to a calendar and schedule established by the project members, with full involvement of the project’s students at all levels of planning and execution. The activities were conducted both remotely and in person. The indicators analyzed were the number of social media posts, people reached, and events organized and executed.

Results

During the period under analysis, 434 followers were counted on the project’s Instagram® feed, @hemoterapia.uerj, of which 308 (71%) resided in the city of Rio de Janeiro. With regard to the age breakdown of these followers, 325 (75%) were between 18 and 34 years old, and 342 (79%) identified as a woman. Thirty-six posts were published on this page, which reached 270 people (Table 1). From June to August 2022, project posts received 453 “likes” and 47 people shared the contents of the page. Three events were registered in the DEPEXT of UERJ and executed by the project, two of which were open discussion sessions and one was related to World Blood Donor Day (Table 2).

Table 1. Project Instagram's insights between September 2021-August 2022

Insights	Total N (%)
Followers	434 (100%)
Reach	270
Posts published	36
Stories published	78
Average engagement value	26
Between 18-34 years old	325 (74,88%)
Older than 34 years old	109 (25.12%)
Male	92 (21.24%)
Woman	342 (78.76%)
From Rio de Janeiro	308 (70.97%)
From other cities	126 (29.03%)

Source: The authors (2022).

Table 2. Events created and completed by the project from March 2021 to August 2022

Conversation circle about Blood donation in the LGBTQIA+ context
Conversation circle about Myths and Facts about Blood Donation"
World Blood Donor Day campaign

Source: The authors (2022).

One event that involved another extension project from UERJ was held in June 2022 and happened via Teams software as a synchronic activity on the book "The Children Act".² The first conversation circle (Figure 1) was an in-person event and discussed the topic of blood donation in the LGBTQIA+ context. It was attended by 19 people and facilitated by nurses, hematologist physicians, a social worker, and a representative from "Rio Sem LGBTfobia" program, which is part of the public LGBTQIA+ program of the Rio de Janeiro state government. The second conversation circle, held in September 2022, addressed the topic "Myths and Facts about Blood Donation", with 84 registered participants, of whom 37 (44%) attended, creating an opportunity to clarify many issues related to blood donation and transfusion raised by the participants (Figure 2). The event related to "World Blood Donor Day", which took place on 14 June 2022 at the Hemotherapy Service of the HUPE, included the active participation of the project, resulting in a 54% increase in the presence of blood donation candidates at the HUPE blood bank and a 59% increase in the number of blood bags collected in comparison with 2021 (data obtained from the Hemote Plus system, used in the Hemotherapy Service of the HUPE). The interaction with another extension project "Canga Literária" from UERJ focused on the topic of blood transfusion among Jehovah's Witnesses, covered in the book "The Children Act" (Ian McEwan, 2014),² which served as inspiration for the discussion. The event had the active participation of 18 people via Teams® who read the book and introduced their impressions and questions.

Figure 1. Conversation circle on blood donation by LGBTQIA+



Figure 1. Conversation circle on "Myths and Facts about Blood Donation"



Discussion

The tripod of teaching, research, and extension, contained in Article 207 of the Brazilian Federal Constitution,³ seeks to strengthen student and teacher training with the purpose of contributing to better living conditions and increased well-being for the people and the country. Resolution No. 7 of December 18, 2018, from the Ministry of Education (MEC),⁴ presents guidelines for university extension and mentions the urgency of incorporating extension activities into undergraduate curricula in Brazil.

Blood transfusion is one of the most frequent treatments in the world,⁵ and for this to occur, healthcare professionals must have full knowledge of its functions and adverse effects. In addition, the population needs to understand the importance of blood donation and, therefore, must also be provided with information on safe blood transfusion. Extension projects are relevant in providing guidance to the population on blood donation and serving as institutional support for clarification on citizenship issues.¹

In Brazil and around the world, education on hemotherapy and transfusion medicine in medical schools is deficient, insufficient, or even non-existent.⁵⁻⁸ Extension plays a key role in the propagation of education and allows for the insertion of content that is not part of the undergraduate curriculum, with the active participation of students. This is the premise of the “Permanent education on transfusion therapy: promoting better care from donor to recipient” extension project. With just over one year of existence, the project seeks to identify unmet needs on the topic through posting of content on social networks, where users can leave questions that are explored in conversation circles, Instagram® posts, and virtual or face-to-face meetings. The focus of the information is directed at both healthcare professionals and the lay community. Social media networks have become a valuable resource for information, including teaching, and have gained strength during the COVID-19 pandemic and their use for the dissemination of knowledge should be maximized.^{9,10} They constitute an important supporting tool for the project.

In summary, understanding that extension is an educational tool, discussion groups that explored questions related to blood donation by men who have sex with other men (MSM) and myths and facts about blood donation were also created and encouraged to bring up concerns. Those who signed up for events were invited to ask questions at the time of registration, which were explored during the meetings. From this standpoint, project members were able to realize how much misinformation and doubt exist about several topics. Blood transfusion in the context of people with religious beliefs that do not accept this procedure is an unmet need that needs to be explored inside and outside the university gates.

The limitations of this extension project are related to the difficulties faced by university students in including extension activities in their curriculum, which is often already highly demanding; the lack of scholarships for those involved in the projects; difficulties in raising funds for events; and problems in recruiting people with available time to dedicate to the project. Extension plays a key role in the dissemination of education and allows the inclusion of content that is outside the curriculum of undergraduate studies, in addition to helping bring the university closer to the community,¹¹ with the active participation of the students. It plays a relevant role in the dissemination of knowledge and engagement with the community and, in the context of the project under analysis, highlights the importance of extension in the impact of transfusion education.

Some actions for the near future are already in the planning phase, one of which is the implementation of an evaluation form on knowledge of hemotherapy and transfusion medicine for medical and nursing students and residents, which will serve as a basis for the development of educational strategies within the university departments involved.

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