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REGISTRATION OF NEW POTENTIAL BONE MARROW DONORS: EXPERIENCE IN THE INTERIOR OF PERNAMBUCO

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ABSTRACT

Objective: To report the experience of nursing students in an extension project to capture and raise awareness of potential bone marrow donors. **Methods:** This is an experience report resulting from actions carried out by an extension project. The actions took place in Pesqueira, Pernambuco, Brazil, held in three events between March and May 2019. The sample consisted of 369 new potential bone marrow donors. **Results:** The first intervention totaled 54 health professionals, in the second, 248 records were obtained in the general population. The last intervention provided a total of 67 student registrations. **Final Considerations:** The actions promoted reflections, in addition to raising awareness and attracting new potential donors, for doing something not yet seen in the city, showed that extension is a fundamental tool to carry out the exchange of values between the university and the community.

Keywords: Hemotherapy Service. Health Education. Bone Marrow. Bone Marrow

INTRODUCTION

Cancer is in the second position as the most relevant cause of death in the world, in every six conditions one death is due to the disease. In Brazil, it is estimated the occurrence of 600 thousand new cases of cancer in the 2018 to 2029. Of these, the hematological ones stand out, which in Brazil are estimated in 22,780 cases and of these 12,210 affect man and 10,570 women^{1,3}.

Leukemia is a disease that originates in the bone marrow (BM), the region in which blood cells are produced and its incidence occurs between 2 and 3 years of age, present in 17% in the first year of life. This disease is present in 80 per million people and is responsible for the largest number of childhood deaths related to cancer in Brazil, however, if diag-

nosed and treated early, it has an 80% chance of cure from the very therapeutic measure. successful as OM transplantation, a process in which the patient undergoes invasive technologies, highly complex medical procedures and immunosuppression^{4,5}.

Stem Cell Transplant (SCT) is a therapy that consists of replacing a diseased tissue with healthy cells between compatible individuals, related or not, with the aim of cellular reconstitution. When the option for transplantation is defined, the search for compatible donors in a specific database begins. In Brazil, this donor base is called REDOME, Brazil's Bone Marrow Registry, which is in the third position as the largest donation bank in the world and contains necessary information on the potential donor

who registers to try to achieve compatibility with potential recipients⁶.

The limitations of publication in open advertisement, as well as the lack of available blood centers in cities, can directly impact the knowledge and registration of the possible donor, and these factors influence the adherence to the registration as an BM donor. Thus, it is necessary to offer the population information about REDOME in order to increase the registration of voluntary MB donors, through dissemination, campaigns and social media in order to develop a sense of solidarity^{7,8}.

The process of training university students in the health area can contribute to the development and direction of remedial measures and educational campaigns, with educational interventions to inform the population about BMT through extension projects. In this way, the number of entries in REDOME can be further increased, as it is still insufficient for the need of countless patients who only have transplantation as a treatment^{9,10}.

The objective of this study was to report the experience of nursing students in an extension project to raise awareness and register potential bone marrow donors.

METHODS

This is an experience report resulting from actions carried out by the extension project entitled *Minha Vida na Sua Vida: Community Awareness on the Registration in the Bone Marrow Donor Bank* carried out at the Federal Institute of Education, Science and Technology, IFPE Campus Pesqueira in partnership with the Blood Center of Arcoverde, Pernambuco, Brazil and the Health Department of Pesqueira, State of Pernambuco, Brazil. The actions were carried out in three events between March and May 2019. The study was approved by the Research Ethics Committee, under Ruling No. 3.549.307.

The materialization of the project took place in Pesqueira, Pernambuco, Brazil, estimated at 67,395 inhabitants in 2019 according to the Brazilian Institute of Geography and Statistics (IBGE)¹¹. The city has basic health units, hospital, Emergency Care Unit (UPA) and private clinics, but it does not have a blood center, which makes it difficult for the population to access both information and the possibility of becoming a donor. In this context, it was decided to sensitize this population to increase the number of people registered in REDOM.

The study included individuals who met the criteria established as recommended by the REDOME: People who attended the events held to attract new potential donors who were aged between 18 and 55 years; in good general health; no infectious or disabling diseases; who did not have neoplastic (cancer), hematological (blood) or immune system diseases. Exclusion criteria were: Do not wait for the mandatory lecture from the blood center; away from the site. The study sample consisted of 369 new potential MB donors, numbers that exceeded the half-yearly goal of registered at the Pernambuco Hematology and Hemotherapy Foundation (HEMOPE) in the city of Arcoverde, Pernambuco.

For the capture of possible donors, the nearest blood center located in Arcoverde, Pernambuco, which made available the presence of its team on pre-scheduled dates, to carry out the registration and collection of blood material that are necessary for the insertion of the citizen in the donor bank.

The project had four extensionists who underwent training in the collection of blood material and more than 30 volunteers who helped in the dissemination and organization of the actions that took place in the community, through the delivery of pamphlets and posters in the public health services sectors of the city: in the hospital, ten health posts, health secretary and public health polyclinic. The extension team, together with the coordination of the nursing course and the direction of the Pesqueira, Pernambuco campus, also participated in interviews to publicize the actions on the city's local radio, so that the news reached and sensitized the greatest possible number of citizens in the region.

RESULTS

In the initial period of carrying out the actions, the general population adhered to the proposal offered by the extension. As the city of Pesqueira, Pernambuco does not have a blood center, the project made this access possible through the coming of the HEMOPE team to the city to carry out the registration of people who showed interest in being a donor, from the dissemination of the theme carried out by broad way.

Candidates who met the criteria established by REDOME filled out the free and Informed Consent Form (ICF) and a questionnaire about prior knowledge about BM donation, after that, they underwent a mandatory lecture, held by the coordination of HEMOPE, with the information necessary for the poten-

tial donor to be aware of the decision and how the entire donation process takes place. For registration, a specific form established by the blood center was used, which contained sociodemographic data and personal contact information, and after filling it out, the potential donor went to the collection site for 5ml of blood material to complete their registration.

On March 22, 2019, the first intervention took place at the IX Municipal Health Conference of Pesqueira, as shown in Figure 1, this choice was due to the concentration of a greater number of health professionals in a single event. It is understood that health professionals are more sensitive to the cause due to the higher level of knowledge about BM transplantation. At the time, a total registration of 54 health professionals, potential bone marrow donors, was obtained.

FIGURE 1: IX Municipal Health Conference of Pesqueira



Then, on April 29, 2019, the second intervention took place, this time at the IFPE Campus Pesqueira and the target audience was the general population informed of the event from the local radio. This action was attended by people from the locality and neighboring towns, soldiers from the Pesqueira, Pernambuco army and students. The choice of the place of action was due to the infrastructure facilitating the meeting of a significant number of people, as shown in Figure 2. It was possible to register 248 new potential donors.

FIGURE 2: Federal Institute of Education, Science and Technology, IFPE - Campus Pesqueira



Subsequently, on May 14, 2019, the third intervention developed in an event during the nursing week of the IFPE, Campus Pesqueira took place, as shown in Figure 3. The location was chosen due to the high concentration of nursing students, which provided a total of 67 registrations.

FIGURE 3: Federal Institute of Education, Science and Technology, IFPE - Campus Pesqueira



There is a large number of records in Brazil, however the levels of incompatibility are alarming due to the country's miscegenation⁵. This fact leads to a greater need for the registration number to be even more relevant to reduce the rates of deaths in the waiting list for a match. Due to the difficulty of compatibility and the number of people registered in the donation banks, it was decided to sensitize the population about bone marrow donation in order to encourage the feeling of collaboration and solidarity with others in the community. A minority of the population in the aforementioned study site has access to knowledge generated at universities, especially on issues related to health, and for this reason there are questions about bone marrow donation and how it is performed.

Thus, extension is an essential tool for the democratization of this access to knowledge, which makes interventions by academics from extension projects essential, as it provides opportunities for the provision of services that benefit communities, as well as enabling a reflection about the existing social difficulties. Activities of this nature contribute positively to the search for social solutions, in addition to preparing the student for the professional environment. These health education practices end up including a greater diversity of knowledge to society and promote greater adhesion of the population^{12,13}.

Repercussions obtained within the community are perceived as positive not only in the context of learning, but in the perspective of contributing to the process of developing the population's awareness and promoting change.

FINAL CONSIDERATIONS

The actions provide an opportunity for a process of sensitization of the population that presented itself in a satisfactory way, as these actions promoted reflections regarding the performance of blood centers, bone marrow donation and transplantation in the municipality of Pesqueira, Pernambuco. In three actions, it was possible to sensitize the entire population of Pesqueira, Pernambuco, as well as neighboring cities, and promote the registration of 369 new potential donors, which contributed to the growth in the number of registered in REDOME.

In this report, it was possible to observe that the project, in addition to raising awareness and attracting new potential donors, as it does something not yet seen in the city, showed that extension is a fundamental tool to exchange values between the university and the community. In addition, it significantly impacted lives, sensitized and disseminated knowledge to a large portion of the population, while students learn with the knowledge of the communities to obtain performances that meet the characteristic needs of that environment, thus representing a successful experience to everyone involved.

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