Difficulties and strategies related to blood donation in a hemotherapy service

Dificuldades e estratégias relacionadas com a doação de sangue em um serviço de hemoterapia

ABSTRACT
Objective: to analyze the aspects that hinder blood donation and strategies to attract donors. Methods: qualitative study conducted with 12 donors. The data was collected through semi-structured interviews and analyzed using Content Analysis. Results: regarding the complicating aspects, the lack of time and little flexibility in service hours, the displacement in accessing the service and the fear of the donation process were scored. As strategies for attraction, the interviewees talked about the dissemination and internal campaigns in companies, education in schools and universities, loyalty of donors, flexibility in the hours of the blood center and mobile units for blood donation at strategic points in the city. Conclusion: donors pointed out difficulties and suggestions for strategies, constituting relevant information for innovative proposals that help in the process of attracting new blood donors.

Descriptors: Nursing; Hemotherapy Service; Blood Donors; Health; Strategies.

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RESUMO
Objetivo: analisar os aspectos dificultadores na doação de sangue e as estratégias para captação de doadores. Métodos: estudo qualitativo realizado com 12 doadores. A coleta de dados ocorreu por meio de entrevista semiestruturada e foram analisadas por Análise de Conteúdo. Resultados: em relação aos aspectos dificultadores, foram pontuados a falta de tempo e a pouca flexibilidade nos horários de atendimento, o deslocamento no acesso ao serviço e o medo do processo de doação. Como estratégias de captação, os entrevistados verbalizam sobre a divulgação e campanhas internas nas empresas, educação nas escolas e universidades, fidelização de doadores, flexibilidade nos horários do hemocentro e unidades móveis para doação de sangue em pontos estratégicos da cidade. Conclusão: os doadores pontuaram dificuldades e sugestões de estratégias, constituindo-se em informações relevantes para propostas inovadoras que auxiliem no processo de captação de novos doadores de sangue.

Descritores: Enfermagem; Serviço de Hemoterapia; Doadores de Sangue; Saúde; Estratégias.
Introduction

The transfusion of blood products has been gaining prominence in modern therapeutics, especially due to the advent of new techniques that made it possible to perform more complex surgeries, which increased the demand for blood transfusions. Moreover, the high demand for blood transfusions has been discussed as a public health challenge since there is no way to replace human blood for therapeutic purposes\textsuperscript{(1-2)}.

Although the population’s knowledge about blood donation is around 60\% in developing countries, the blood donation rate in low-income countries is considerably lower than in middle- and high-income countries\textsuperscript{(3)}. In this scenario, the goal recommended by the World Health Organization is that 4\% of the population of each country should be donors, setting this rate as ideal for the maintenance of regular stocks\textsuperscript{(4)}.

In Brazil, the legislation regulates the Public Blood Policy and considers donations an act of solidarity and altruism. In this sense, this action is understood as a pro-social behavior, which is defined as any act performed with the objective of benefiting others\textsuperscript{(5-6)}.

Unfortunately, Brazil faces the challenge of dealing with still low rates of donation, which creates difficulties to ensure the procurement and distribution of blood by attracting and retaining the loyalty of donors\textsuperscript{(1)}. Blood donation is a process that can save lives, and, in this context, there is a need to rethink and expand the strategies for obtaining blood products\textsuperscript{(5)}.

Hence the importance of knowledge of this issue by the population, in general, for the maintenance of the blood supply in health services\textsuperscript{(3)}. Therefore, this study has as its guiding question: What are the donors’ perceptions of the complicating aspects of blood donation and their suggestions for strategies to qualify the uptake?

This research aimed to contribute to the improvement of the blood component collection process, since it is necessary to understand the factors that hinder donation, thus promoting the analysis of more effective strategies to attract and retain donors. Moreover, the importance of this study is also justified to support the development of themes and knowledge relevant to the area of hemotherapy, as well as to encourage reflection on the construction of interventions to promote pro-social behaviors and, consequently, the act of donating blood.

This study aimed to analyze the aspects that hinder blood donation and strategies to attract donors.

Methods

Qualitative study, guided by the Consolidated Criteria for Reporting Qualitative Research (COREQ)\textsuperscript{(7)}. The study was carried out in a Hemotherapy Service of a hospital in southern Brazil. This service provides transfusion support to the hospital and performs laboratory and therapeutic procedures, as well as attracting, registering, screening, and collecting blood from donors.

Individuals who had already donated blood, at least once, and who applied for blood donation at the Hemotherapy Service of the hospital were invited to participate in this research through an individual approach by the researcher about the interest in participating in the interview in the triage of the Service from 8am to 12pm. In this period, 15 potential donors passed through the triage.

The following conditions were used as inclusion criteria for the research: individuals who were blood donors, aged 18 years or older and who had performed at least one blood donation. Those who presented some previous definitive impediment to making a new donation were excluded, such as: hepatitis after 11 years of age, without laboratory evidence, and individuals weighing less than 50kg. After the invitation made by the researcher at the screening, only three individuals were excluded from the sample: one person weighed less than 50kg and two had never donated before.
The selection of participants was defined by convenience, and the ideal sample is the one that makes possible the total comprehension of the investigated problem in its multiple dimensions, without the need for statistical representativeness\(^8\), and thus was composed of 12 donor participants.

Data were collected through the semi-structured interview technique, involving closed questions about the profile of the individual blood donor (gender, age, and education) and open questions about aspects that hinder donation and suggestions for strategies to attract new donors. To ensure anonymity and preserve the identity of the interviewed subjects, codes beginning with the letters ED were used to identify the interviewed donors, which were numbered according to the order in which the interviews were carried out, as ED1, ED2, and so on, successively.

Information was collected during the months of January to March 2017. The interviews were conducted by only one of the researchers who had experience with this data collection technique and with the donor present. They were conducted in person in an office located in the hemotherapy service of the hospital, with an average duration of 30 minutes, recorded on audio equipment (MP4) and later transcribed in full for better understanding of the material. There was no need to conduct new interviews and there were no dropouts after this stage.

To analyze the information, we used the thematic content analysis technique\(^8\) which consists of five steps: 1) preparation of the information, 2) unitarization or transformation of the content into units, 3) categorization or classification of the units into categories, 4) description and 5) interpretation, allowing the grouping into two analytical categories: Aspects hindering blood donation and Strategies for attracting.

The study respected the ethical precepts set forth in Resolution 466/2012, of the National Health Council. The research was submitted to the evaluation of the Research Ethics Committee of the institution where the study was conducted, obtaining favorable opinion No. 1,894,987/2017. After being informed about the study objectives, the participants signed the Informed Consent Form.

**Results**

Regarding the profile of the interviewees, 79.4% were female and 20.6% were male. As for the age bracket, 9.9% were between 18 and 24 years old; 57.3% were 25 to 40 years old, and 32.8% were over 40 years old. Regarding education, the graduate level had the highest representation among the participants, with 37.8%, followed by higher education with 33.1%, high school with 27.3%, and elementary school, representing 1.8%.

**Aspects that hinder blood donation**

In this category were listed the aspects that make it difficult for the interviewees to donate blood, such as the lack of time and the little flexibility in service hours, the displacement in the access to services, and the fear of the donation process.

The lack of time and the little flexibility in the working hours of the hemotherapy service was verbalized as one of the challenges to making the donation. They also reported that the opening hours of the institution are the same as business hours, when people are working and not everyone can leave: *I think what makes it difficult is the rush of life and also the opening hours of the services, which coincide with people’s working hours, because at lunchtime you can’t donate* (DI4). *I think the difficulty of the opening hours of the blood bank with people’s working hours* (ED3).

According to the interviewees’ reports, the difficulty in reconciling the act of donating with their work routine is a challenge to be overcome to donate blood, because the service at the hemotherapy service coincides with business hours, when most people are working, which hinders this action.

The displacement and the lack of parking at the referred service were also aspects highlighted by the participants as hindering the performance of a blood donation: *What also makes it difficult is the displacement, becau-
se sometimes the blood bank is not close to work or close to home (ED10). The location of the blood bank also makes it difficult for people to move around. The parking lot is missing for the donor, we feel this difficulty (DI1).

The reports show that the location of the blood bank can be an obstacle to the donation, because in some cases it is far from both the home and work of people. Some donors travel to the service by car; however, they may encounter difficulties in finding a parking space nearby, making this another obstacle to the act of donating blood.

The fear of feeling pain and possible adverse reactions were pointed out by the interviewees as an aspect that hinders donation: Campaigns should demonstrate that a donation does not carry any risk, that the material is sterile and disposable (ED2). I am afraid of feeling sick, afraid of the needle, of seeing the blood leaving the body (ED12). Look, I think that some people are afraid of the procedure, they do not know how the process is. So, if this were more publicized (ED6).

The discomfort of donating blood, such as seeing the blood coming out of the body and the fear of feeling sick and of needles during the donation were aspects approached by the interviewees related to the procedure. The speeches also refer to the importance of disclosure of how the donation process occurs to demystify these fears, explaining that the possible risks are low and that the materials used are safe.

**Attracting Strategies**

In this category, the strategies identified were dissemination and internal campaigns in the companies, education in schools and universities, donor loyalty, flexibility in the blood centers’ schedules, and mobile units for blood donation at strategic points in the city.

The dissemination in the media about campaigns involving the importance of blood donation and the low stocks were pointed out as a capitation strategy aimed at reaching a larger audience of donors, raising awareness, and encouraging donors to seek the services.

Moreover, the participation of companies, in a more active way, was, likewise, related by the participants as a fundraising strategy through the development of internal campaigns, stimulating employees to reflect about the awareness of social responsibility and organizing, at opportune moments, their release to donate: When you hear that they are in need, that bank stocks are low, people become more aware. I think that people become sensitized because many times we do not have this information. That is why through the campaigns the population in general gets to know about the need that exists (ED6). The more campaigns we do, the more we participate, the more it becomes a habit. So, maybe like this generation that does not smoke, for example, because we come from a generation that looked at the Marlboro advertising as a beautiful thing, of freedom. But today’s generation can no longer have this vision because that has changed, it is a habit, right (ED4). If something about blood donation appeared in things people consume, a small note on the milk carton, for example, so that people would remember this gesture of donation more (ED11). I think there should be an internal campaign, more directed to employees, a schedule by sectors (ED10).

The reports refer to the importance of disseminating the need for donations through larger campaigns such as those that encourage the habit of quitting smoking, as well as internal campaigns in companies, because many people are unaware of this need. The interviewees verbalized that when people hear about the fact that blood bank stocks are low, this can sensitize more people to make donations spontaneously. In this sense, the more disclosure there is, the greater the possibility of culture change regarding the act of donating blood, making it a routine practice in people’s lives.

Another strategy verbalized by the interviewees for attracting donors was the need for education in schools and universities, raising awareness among children and young people so that they can be guided to understand the importance involved in the act of donating and the entire donation process: If blood donation became a real educational issue. This thing of awakening social responsibility as something educational, maybe it would make a difference. Besides, the solidarity prank I thought was cool, several times
as a college student I saw this happening (DI4). What I think would also sensitize people to donate would be school campaigns, that could sensitize children, to take this subject to be discussed in the families (ED8). Suddenly, implement a way to educate, from the school, stressing the importance of donating blood... I think this could come from the classroom (ED7).

In this context, the interviewees reported that education about blood donation in classroom environments, such as in schools and universities, could sensitize students to discuss this subject with their families, aiming to stimulate in them the feeling of helping their neighbor, besides spreading the information to a larger number of people. Solidarity pranks are a social action because they help the health system to increase its stocks of blood, besides positively influencing a change in culture among young people.

The strategies involving donor loyalty were also related by the interviewees to influence individuals who are already donors to return to the service. Even the participants themselves suggested, as a loyalty building strategy, to give priority to those who donate more often, and the blood center should somehow send an individual thanks through a message, alerting the donor about the moment he or she is ready to make a new donation: I think we should think of a way to pay back, not only on the donor’s day... a periodic routine, schedule something with the donors and give this feedback, a thank you (ED1). One thing that blood banks do and that I find remarkably interesting is in relation to loyal donors, they have priority in the service, not because they are ahead or because it is something better, but this recognition of the service to those who donate often enough (ED5). I think that the telephone contact, a social network, e-mail, WhatsApp, the direct request for the service, with a closer contact it would be easier for people to come (ED10).

In this sense, the participants reported that a closer contact through messages on social networks or some priority of those who donate more frequently could impact the agility of the service and would sensitize them to return to the service to make a new blood donation.

The proposal of flexibility in the working hours of hemotherapy services was also a strategy verbalized by the interviewees to encourage those who cannot organize themselves to donate, due to the coincidence of their working hours with the working hours of the Blood Bank. In addition, the existence of a mobile unit for collection in some points of the city and on certain days could facilitate those who have an interest in donating and cannot because of their routine: I think there could be a flexibility in the service schedules to encourage people to donate. There is a rule that you cannot donate during your working hours, I think this should be more flexible (ED9). Maybe a donation in the afternoon, increase the opening hours, when people leave work, because at lunchtime you cannot donate. Another idea would be a Mobile Unit in some places, a weekend at the “Redemption” park or in a park, that people could visualize and think about it. Maybe something like this could facilitate it (ED4).

In this sense, considering that the hemotherapy service studied works during business hours, coinciding with the working hours of many people who are unable to donate blood, the flexibility of the establishment’s hours could encourage people to perform this gesture of solidarity.

Moreover, considering the lack of time and the difficulties in commuting for subjects to donate, the interviewees also suggested that a mobile unit could be available on some days of the week, facilitating its access to people and thus promoting the act of donating blood for those who have a difficult and/or troubled routine.

Discussion

Regarding the limitations of the study, it was conducted in only one hemotherapy service and the data are restricted to the reports of the interviewees from this institution and cannot be generalized to other Blood Banks. Further studies addressing other perspectives, such as health professionals, are suggested, aiming to expand the discussion on aspects related to the blood donation process.

It is noteworthy the contribution of the proposed theme, since besides the scarcity of productions on the subject, it is important to motivate the reader...
to reflect on the need for blood donation as an act of citizenship. In addition, bringing to light difficulties and strategies for capturing blood can help managers in the development of new plans and public policies involving the subject.

Work has great importance in people’s lives, both socially and financially, and takes up a large part of the workers’ time. When working during business hours, hemotherapy services make it difficult for a large part of the population to donate blood. In addition, hemotherapy services may be distant and, with the significant increase in the automobile fleet in the country, it takes more and more time to move in traffic, as well as greater difficulty in finding parking spaces, which becomes, for some people, an impediment to donation (9).

Fear, on the other hand, is denoted as a factor of great adversity to a donation, either the fear of needles or of post-donation reactions (10-11). Blood donation is a safe procedure, and most donors complete the process without any adverse effects (12). However, donation involves a variety of stimuli, including significant volumes of blood, use of large needles, pain related to venipuncture, and the possibility of fainting and other adverse reactions, which can raise anxiety in advance of the act of donating (13).

In this sense, adverse events and temporary incapacity are determining factors for the non-performance of a donation, especially when, in a first donation, the individual manifests adverse reactions or is considered unfit. Such obstacles strongly reduce the performance of subsequent donations (10,14).

While such stimuli can dissuade part of the population from donating blood, for some people motivational aspects can encourage them to face their fears, considering that the feeling of helping others outweighs their fears. Moreover, the use of stress and anxiety reduction techniques can promote positive results through coping strategies, either by distraction when doing some reading or listening to relaxing music during the donation (10). In this sense, when individuals receive specific guidance to face common concerns related to donations, they subsequently report less anxiety related to the act of donating, being more likely to perform them (13).

The deficiency in the informational process can permeate the negative behavior towards donation because it hinders the dissemination of advertisements and information related to the process and clarification for the donor, influencing the act of donating (8). On the other hand, the influence of family and friends helps to overcome the obstacles that negatively influence the donor’s behavior and suggests that the strategies for capturing donors should involve social marketing actions, aiming at building communication formats focused on stimulating people from their social circle, establishing them as multipliers of the act of donating blood (15).

The general population is still unaware of the need for blood transfusion, therefore, educational, and awareness-raising actions should be developed, so that they awaken people’s solidarity (1). The effort to recruit donors through public information campaigns and interpersonal communication should focus on strengthening positive attitudes towards donation, aiming to awaken acts of solidarity, as well as demystify fears, taboos, and false demotivating ideas (16).

To successfully capture donors, it is necessary that there are educational actions, projects and programs that allow critical reflection with the aim of educating, mobilizing, and attracting a public, enabling them to participate consciously and responsibly in the blood donation process (1). In this context, to stimulate blood donation, it is essential to develop a culture focused on the importance of this act through the discussion of concepts and values of individuals to then make blood donation a cultural habit of the Brazilian population (17).

Developing intersectoral actions with educational institutions with attention focused on beginners, as much as for those in higher education, are essential for the promotion of the process of donating blood, since the knowledge produced through the social environment is fundamental to its constitution and
assimilation. From this perspective, the creation and encouragement of producing actions such as science, culture, and health fairs and the involvement not only of the academic community, but of society in general in the activities\textsuperscript{(17)} can broaden and sensitize their view on the importance of helping the health system.

In this sense, the perception of schoolchildren about blood donation shows that values such as citizenship and altruism can be taught since the early grades and that it is important to bring to light the real function of the school in health education programs, since it is responsible for the formation of individuals and conducts aimed at the collectivity\textsuperscript{(18)}. One of the great challenges for blood services is to make the first blood donation, which occurred voluntarily, become a continuous and regular donation. This problem, in turn, can be minimized with the dissemination of blood donation in the media, ensuring that those who have donated once become assiduous donors so that the minimum stocks of blood and blood components in blood centers are maintained\textsuperscript{(1)}.

Retention is seen as more advantageous than recruitment, since in current donors the risk of blood-borne infections is lower than in new donors; besides the cost of recruiting new donors is higher than that of retention\textsuperscript{(10)}. Fidelity strategies, especially the marketing actions developed in blood centers, can increase this uptake. These actions can be done by sending letters, e-mails, or phone calls to those people whose deadline to make a new donation had already expired\textsuperscript{(1)} , because the recognition of the gesture of solidarity could sensitize them to return to the services and make a new donation.

Thus, strategies involving retention are focused on how to welcome donors to the services, methods committed to reducing fear and adverse events related to donation\textsuperscript{(10-11)}. The planning of services through the expansion of opening hours is also highlighted as a strategy to promote the inclusion of those who cannot donate due to the coincidence of service hours with their working hours\textsuperscript{(17)}.

The interviewees also verbalized the importance of itinerant actions with the intention of expanding the number of donors to increase the uptake and reduce possible difficulties of access between services. Thus, blood centers that have mobile units for blood collection\textsuperscript{(17)} can make it easier for people to donate.

Conclusion

The interviewed donors were able to verbalize their perceptions regarding the hindering aspects and suggestions for strategies to qualify the attraction of blood donors.

Among the challenges, the lack of time was configured as a problem in the hectic routine of the interviewed workers, in addition to the opening hours of the blood center not cooperating with the potential donor, given the hours offered. Added to these factors, the service has no parking lot, being pointed out by the interviewees as an impediment to donation. Many mentioned fears of the procedure, even though this is a safe process and with little risk of adverse reaction. In the second category, the participants verbalized strategies to attract donors such as the promotion of internal campaigns in companies, education in schools and universities, the loyalty of donors, and the flexibility in the schedules of the blood center and the installation of mobile units. Therefore, the aspects pointed out by the interviewees constitute relevant information for innovative proposals that help in the process of attracting new blood donors.

Collaborations

Mesquita NF and Vazquez ACS contributed to the conception and design, data analysis and interpretation, article writing, relevant critical review of the intellectual content, and final approval of the version to be published. Duarte MLC, Silva DG, and Mattos LM contributed to the relevant critical review of the intellectual content and final approval of the version to be published.
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