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PLATELETPHERESIS - CHALLENGES IN ACQUISITION AND SENSITIZATION OF DONORS: NARRATIVE LITERATURE REVIEW

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ABSTRACT

Objective: Apheresis platelet donation is the donation of a blood component extracted using a collecting machine, which separates the blood components by centrifugation, allowing for the selective collection of one or more of its components. **Materials and Methods:** The study was a narrative literature review with a qualitative approach. Searches were performed at databases on the theme acquisition of family of donors of blood and blood components through the descriptors extracted from the Health Sciences Descriptors (MeSH, DeCS) in Portuguese, English and Spanish. **Results:** The sensitization of blood donors of platelets by apheresis presents still represents a great national challenge. The findings suggest that mostare related to Ministerial Decrees, with little use of educational activities and sensitization of society. **Conclusion:** The apheresis platelet is the gold standard in blood transfusion by platelets. More studies are necessary to address this theme in order to make them understand the importance of donors of blood components, the collection form, the need for each patient to receive this product, especially the sensitization of their families so that they can perceive the difference in apheresis platelet donation.

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INTRODUCTION

Blood donation is the voluntary withdrawal for use by another individual, through a blood transfusion. This demand focuses on people who have suffered accidents, faced chemotherapeutic processes, or certain procedures, such as

cardiac surgeries and transplants (Santos, 2018). Blood donation is a problem of worldwide interest, either in part or in its entirety to replace the blood tissue. The production of platelets by apheresis constitutes the ideal measure in transfusion of severe patients requiring platelet transfusion.

This process involves fully automated steps, traceable, whose productivity depends on the availability of voluntary donors (Bontekoe *et al.*, 2019). Plateletpheresis is the process that removes the blood from one individual (donor or patient) with the separation of its components by a specific equipment, retaining the blood portion one wants to remove and returning the remaining components to the donor/patient. It allows for collecting what one wants through the separation of the blood parts and return of the remaining blood components. Data from the Ministry of Health (MH) showed that, between 2003 and 2013, the number of transplants increased 84%, from 12,722 to 23,457, 619% in surgeries, going from 12.3 million to 88.9 million, and 627% in emergency care, going from 898.2 million to 9.1 billion procedures. The increased number of transplants, surgeries, emergency care and surgeries demonstrates the need for strategies aimed at the acquisition of blood donors to meet the growing demand of these procedures and others that appear in the daily work of health units (Brazil, 2015). The Hematology Center is the body responsible for carrying out these procedures for donors, recipients and acquisition of people to keep the stock always available. Therefore, this may be the biggest challenge of blood banks, ensuring the acquisition and safe distribution, in a sustainable manner, through acquisition and retention of donors. The stock of a blood bank is tied to the donation by volunteers who are sensitized to this action (Rodrigues; Reibnitz, 2011).

The acquisition and selection of a blood donor correspond to the first step of the so-called blood cycle, which is followed by the clinical-epidemiological screening, blood collection, laboratory screening of blood samples, processing, storage, transport and distribution, transfusion and hemosurveillance procedures. The services of hemotherapy classified as Hematology Centers or Hemotherapy Centers are responsible for performing all these steps (Veran *et al.*, 2015). All hemotherapy service that performs blood collection should draw up and implement a program for acquisition of donors, according to documented selection criteria that ensure the protection of the donor and potential recipient, with the participation of professionals qualified for this practice (Veran *et al.*, 2015). The programs for acquisition of blood donors are characterized as a nursing fertile field, because its powers and responsibilities include "plan, accomplish, coordinate, monitor and evaluate programs for acquisition of donors" (Anvisa, 2014). The deficit of blood donors and the high levels of clinical and serological unfitness may cause a decrease in bloodstocks, causing adverse consequences for individuals and the health of the population in general. In this way, it is essential to encourage blood donation, either by the continuous mobilization of the population or the retention of donors (Brazil, 2001).

For this, the services use programs for acquisition of donors, which seek to sensitize people in good health status to become blood donors. This acquisition can be developed in different ways at different places, such as schools, work environments, media, among others (Rodrigues; Reibnitz, 2011). Hematology centers have difficulties to keep the bloodstock to meet specific and emergency needs, putting at risk the health and life of the population. The world statistics show that the blood donations do not accompany the increase in blood transfusions. Many countries face difficulties to meet the demand for blood and blood components, especially in those where there is a prohibitive policy in relation to blood marketing, such as Brazil. In this case, the sensitization and

knowledge are the best tools for the acquisition of donors, requiring the use of consistent strategies to make blood donation part of the habits and values of the population (Rodrigues; Reibnitz, 2011). The donation has difficulties because there is no effective government program that encourages these people and relatives for voluntary donation, since apheresis platelet donation is a procedure different from the common donation of blood and blood components, mainly by one hour spent in relation to the 12 minutes of total blood donation. Other differences are more selective suitability criteria and the cost of the sterile single-use individual kit for each donor (Brazil, 2015). Therefore, the donor is not as available for this donation as imagined, even with some benefits such as the right to work/service day off. This study arose from the need to identify the challenges of blood donation by recipients' family, since this donation is essential for stock replenishment, often empty due to lack of donation. Moreover, one intends to identify in the literature the causes of non-donating platelets by apheresis, once we found assiduous blood donors. Thus, this literature review aimed to contribute to knowing what scientific literature addresses on the causes of non-donating platelets by apheresis. Favoring the acquisition of people for this type of donation by contributing to the development of educational actions so that they become protagonists of this action. Thus, the main objective of this research is to identify the causes of non-replenishment by family and society of blood recipients to replenish the stock. In this context, the following guiding question emerges: What are the challenges faced by family and society of blood recipients in donations for stock replenishment?

MATERIALS AND METHODS

The study will be a narrative literature review with a qualitative approach, in order to deepen the experiences, points of view, opinions and meanings, that is, the way for researchers to realize subjectively their reality. It provides a comprehensive overview of previous researches and contributions, leading to the necessary point for future investigations and the development of further studies. Narrative literature reviews are studies that analyze the scientific production through literature in certain thematic area, within a time clipping, providing an overview or report of the state-of-the-art on a specific topic, highlighting new ideas, methods, sub-themes that have received greater or lesser emphasis by the selected literature (Silva, 2019). Therefore, searches were performed at databases on the theme acquisition of family of donors of blood and blood components through the descriptors extracted from the Health Sciences Descriptors (DeCS) in Portuguese, English and Spanish. Data will initially be collected at secondary databases, including all works that meet the guiding question, among them: theses, monographs, dissertations and articles. The gradual construction is a continuous process, in which each new research is inserted, supplementing or contesting contributions previously given to the study. In the end, the result and discussion will be presented as a text that gathers information found in the literary body on the theme of interest. Thus, this review will contribute to strengthening what exists in the scientific environment, corroborating with new knowledge, so that other reviews may arise.

What blood transfusion is and how it occurs: Blood donation is the voluntary withdrawal for use by another individual, through a blood transfusion. This demand focuses

on people who have suffered accidents, faced chemotherapeutic processes, or certain procedures, such as cardiac surgeries and transplants (Santos, 2018). Until recently, the blood cannot be synthesized in laboratories neither sold, and this action is very important for the lives of a significant number of people. It is a quick, painless procedure, with no risk for the donor, since the amount removed is minimal (approximately 500 ml), replaced in few days. This requires firstly following the sequence of steps, a register, then the patient should make a test for anemia, which uses one or two drops of blood withdrawn from the finger with the aid of a lancet. The blood pressure and temperature are also measured. If the patient is not anemic, with fever or pressure outside normal parameters, the volunteer is sent to a screening, in which certain questions will be made to verify the feasibility of the donation (Santos, 2018). The interviewee must be honest in their responses, once an incorrect donation can endanger the recipient's life, with irreparable consequences. The infection by the HIV, for example, has the so-called "window period", a term that designates an interval between infection and the detection of the virus in blood samples, thus, the blood removed from an individual in this phase can be mistakenly transfused. Some people are motivated to donate due to the free tests, such as those for hepatitis B and C, Chagas disease, HTLV, syphilis and HIV, as well as the identification of blood group and Rh factor. However, we know that these tests will only be performed when there is no impairment in the early stages (Anvisa, 2007).

In Brazil, 1.8% of the population donates blood, a number that is within the parameters of at least 1%. The rate, however, is far from the goal of the World Health Organization (WHO), which is 3% of the donor population. A single blood donation can benefit up to four people. In Brazil, about 3.5 million people perform blood transfusions per year. In total, there are 27 hematology centers in the country and 500 collection services (Agência Brasil, 2017). According to a report released by the Pan-American Health Organization (PAHO), less than half of the blood donors in Latin America and the Caribbean are volunteers. The percentage of voluntary blood donors grew from 38.5% to 44.1% between 2013 and 2015 in the region, still far from the level of 100% recommended by the WHO. In some countries, there is remunerated donation, in addition to those for replenishment, when the donor makes a donation on behalf of any patient. In Brazil, there is not remunerated donation. In 2015, 61.25% of the donations were voluntary and 38.17% were for replenishment. Brazil is not prepared for the acquisition of the donor since childhood. Without such a policy, we cannot build the future donor. It is necessary to build donors with real social responsibility; specialists point to the unawareness of the population as one of the main limiters for increasing blood donation in Brazil (Brazil, 2016).

Indications for the use of platelets by therapeutic and non-therapeutic apheresis: The blood is composed by plasma, erythrocytes, platelets and coagulation factors. The platelets are small cells that participate in the coagulation process, acting in bleeding (hemorrhage). Platelet transfusion is performed during the treatment of patients with cancer, leukemia, aplastic anemia and other diseases. These patients benefit even more from transfusion of platelets obtained by apheresis donation, the so-called plateletpheresis. During the apheresis donation, blood is removed from the donor's arm, passes through a sterile and disposable kit, installed in an equipment that separates cells through centrifugation. The

blood does not come into contact with the machine. The desired component is drained to a collection bag and the other components continually returns to the donor. In the plateletpheresis, only platelets are separated and collected from the donor (Brazil, 2016). In 2015, 3.7 million blood bags were collected, 200 thousand more than in 2013, increasing by 4.55%. Blood transfusions grew 6.8% in the period: 3.3 million in 2014 against 3 million in 2013. In general terms, only 1.8% of the Brazilian population between 16 and 69 years donate blood, the UN considers "ideal" a rate from 3% to 5%, such as Japan, the United States and other developed nations. This does not mean, however, that Brazil donates "little", but it could "donate more", according to experts from the health sector. The goal now, according to the Ministry of Health, is to increase the number of donations from the current 1.8% of the population to around 2.2% to 2.3% over the next five years (Brazil, 2016).

Therapeutic apheresis: Apheresis consists of removing the blood from a person (donor or patient) with the separation of its components by a specific equipment, retaining the blood portion one wants to remove and returning the remaining components to the donor/patient. It allows for collecting what one wants through the separation of blood parts and return of the remaining blood components. The principle of this method is the difference in density between the blood cells and plasma and cells among themselves, allowing for grouping and collecting the components (Brazil, 2014). The different densities and the automatic adjustment of the centrifugation speed and depth of aspiration in equipment allow for collecting exactly what the operator defined. Therefore, it is necessary to make a brief summary of the differences between Non-Therapeutic and Therapeutic Apheresis. In the Hematology Center, apheresis can be used with two objectives: the first is the production of specific blood components from selected donors, in a procedure called apheresis collection or automated collection. The second is the Therapeutic Apheresis, which is the removal of cells or plasma related to the development of pathologies and its replacement by replenishment liquids or healthy cells, in therapeutic procedures (Hemoce, 2019). Patients may be submitted to the procedures of therapeutic apheresis in inpatient or outpatient regime, depending on the clinical conditions, the underlying disease and the level of complexity of the procedure itself.

During the procedures, the following precautions must be taken: the patient should not be in fasting, and may eat during the procedure, if desired; Practical Guide for Therapeutic Apheresis; The patient's cardiac rhythm should be monitored; The parenteral medicinal products should not be administered during and in the 4 hours before the procedure, but preferably soon after finishing it; Blood collection for tests, and other punctures, should not be performed on antecubital veins in these patients in the period of submission to the cycle of procedures, because they must be preserved; The hemotherapeutic physician will follow the procedure in-person; In the hospital, the first session or according to the severity of the clinical picture, should be carried out preferably in Intensive Care Unit (ICU), and in case there is no bed, it can be accomplished in the CCIE or in Emergency, in special situations of performing the procedure in a stable serious patient with vasoactive drugs, the assistant physician is responsible for handling these drugs at the time of the procedure (Hcfm, 2017). The adverse reactions associated with therapeutic apheresis are usually mild and quickly reversed,

usually not affecting the clinical condition of the patient. The most frequent complications are: Hematoma from multiple punctures, when using peripheral venous access. When using central catheter, the adverse effects may include thrombosis, bacterial contamination, formation of arteriovenous fistulas. Signs and symptoms resulting from the hypocalcemia, induced by the anticoagulant solution used: perioral paresthesia, and/or extremities, chills, tremors, nausea, vomiting, abdominal cramps, headache, hypotension, bradycardia, cardiac arrhythmia, tetany, signs of Chvostek and Trousseau. Hemodynamic changes: hypotension and hypovolemia may be associated with the retained volume in the extracorporeal circuit, inadequate water balance or use of inhibitors of angiotensin-converting enzyme (ACE). Other complications include allergic manifestations; electrolytic alterations, such as hypocalcemia; hematological alterations such as thrombocytopenia and anemia; risk of transmissions of infectious diseases in case of replacement with blood components; reduced serum levels of drugs administered earlier (especially those that bind to albumin) (Hcfm, 2017).

Non-therapeutic apheresis: Apheresis platelet is the donation of platelets by apheresis whose purpose is to use blood transfusion of the collected blood component, more commonly performed in Brazil. The absence of loss of iron, by the absence of loss of erythrocytes during collection, allows for donations to be made in smaller intervals than the donation of whole blood, resulting in a greater number of donations from a single donor over time. This leads to an improvement in the stock of the hemotherapy service and allows for meeting patients that require multiple blood transfusions. These donors need to be evaluated regarding venous access, volume and platelet count. The amount of platelets in each unit collected by apheresis is exponentially higher than that obtained by conventional donation (Anvisa, 2014). In this way, a single apheresis donation of platelets allows for providing a therapeutic dose for transfusion to an adult patient, whereas there would be necessary 6 through 8 donors per dose. Inclusion criteria for apheresis platelet donation: at least one previous donation of whole blood; the same criteria of total blood donation are used; being male according to Decree 2,712 of 12 November 2013; In the first apheresis platelet donation, a minimum mm^3 platelet count will be accepted those with a history of use of acetylsalicylic acid (three days) or non steroid anti-inflammatory drug (24 hours) will be temporarily excluded due to alteration of platelet function caused by these medications (Anvisa, 2013). In addition, aspirin, anti-inflammatory and some antacids cannot have been used at least seven days before, since these substances neutralize the effect of platelets. The person must eat normally on the day, including in their diet sources high in calcium (Santos, 2018).

In this process, through a venipuncture, the donor's blood is pumped to the machine, in a disposable system, which will separate approximately 30% of platelets available, returning the other cells, also by intravenous route. The material collected is stored in small bags, at ambient temperature - between 20 and 24°C. Lasting approximately 90 minutes, in the first one hour, 10% of platelets are already recovered; with complete replenishment in approximately 48 hours. A curiosity is that the same donor can provide their platelets again in 72 hours (Santos, 2018). Apheresis Donation of Erythrocytes allows for obtaining two bags of red blood cells in a single donation. If a bag of red blood cells can save a life, this type of donation can save two. There is no risk of acquiring any

infectious disease through blood donation or double-concentrated red blood cells. All the material used in donations is used only for their donation, in accordance with the safety standards for the donation of double-concentrated red blood cells. The interval for a new donation is 4 months for men and 6 months for women. Who can donate double-concentrated red blood cells? Preferably male donors, with weight above 70 kg and at least 42% of hematocrit (Hemocentro/SP, 2016). A larger amount of cells can be obtained from a single donation, optimizing its time. It is indicated preferably to maintain inventory of erythrocyte concentrates the O Rh D negative. Quality control of the blood components by apheresis: to ensure the effectiveness expected in a transfusion, it is essential to preserve the platelet hemostatic function. The quality control contemplates, individually, each requirement of the hemotherapeutic legislation (platelet count, count of residual leukocytes, pH volume and microbiological analysis), being explored and discussed with the team involved, every step of the process, from collection, the whole storage period until the transfusion of these blood components (Hccfmb, 2017).

The importance of apheresis platelet: The special platelet concentrate obtained by collection through per apheresis machine. The bag collected is equivalent to 6-8 units of platelet concentrate or a bag of pooled platelets concentrate (Hemominas, 2014). It is a platelet concentrate of better quality, because it mostly comes without leukocytes, from a single donor (less risk of transfusion adverse events) and may have lower final volume of infusion, in a transfusion for adults. This procedure is performed through specific filters that remove leukocytes from a cellular blood component (red blood cells and platelets). A unit of whole blood has approximately 2 through 3 x 10^9 leukocytes. The component without leukocyte must contain less than 5×10^6 cells. This procedure results in a reduction of 99% of leukocytes in the initial product, remaining in the final product less than 5×10^6 cells. Most tools for apheresis collection already produce blood components without leukocytes (leukocyte contamination smaller than 10^6) (Brazil, 2015). The apheresis offers approximately 8% more platelets than the total blood donation. Some people, such as those undergoing chemotherapy, radiotherapy and bone marrow transplant tend to bleed due to the low concentration of platelets in the blood. In this way, they need to receive blood transfusions containing them and, to this end, there must be donors. The donation of platelets, or apheresis, is a procedure less known than the total blood donation, being able to provide eight times more platelets than a traditional donation. Contemplating the same basic conditions indicated for blood donors, the donor must have resistant veins as a requirement (Brazil, 2015). It is indicated in the prevention of complications related to transfusion of halogenic blood products due to exposure of the recipient to the donor's leukocytes. Indications: Hemoglobinopathies; Hereditary hemolytic anemias; History of two or more febrile non-hemolytic reactions (FNHR); Syndromes of congenital immunodeficiency; Candidates for bone marrow transplant; Plastic Anemia; Acute myeloid leukemia; Severe oncological-hematological diseases until clear diagnosis; Individuals with platelet diseases with frequent need for blood transfusion; Prevention of infection for CMV in the following situations: HIV-positive patients with negative serology for CMV; Candidates for transplantation of organs and bone marrow if donor and recipient are negative for CMV (Brazil, 2015). Apheresis platelets have the same indication as other types of

platelet concentrates, due to limited offer of this type of blood component, which should prioritize certain types of patients, in case of low stock, such as candidates for multiple transfusion (oncological-hematological patients), candidates for bone marrow transplantation, patients with negative serology for cytomegalovirus (especially pregnant women and immunocompromised patients), those with allergic reactions to transfusion, patients with multiple transfusions and refractoriness to transfusion of other types of platelet concentrate (if possible transfusion with plateletpheresis bag from HLA-compatible donor). The period of validity is 5 days, and should be kept in continuous agitation and temperature between 20-24°C, like all other types of platelet concentrate (Hemominas, 2014).

Autologous serum x platelet concentrate: The autologous serum displays characteristics that are very similar to those of tears, such as pH, osmolarity, vitamin A and immunoglobulin A. Zhou; Beuerman evidenced that the tear has several components, which vary individually, such as albumin, lactoferrin, lysozymes, aldolase, amylase, fibronectin and P substance (Ribeiro *et al.*, 2017). The tears and the serum contain abundant growth factors and antibacterial components in common, which allow for the nutritional factors necessary to keep the cellular viability in the epithelial repair process. The use of autologous serum was described for the first seeking a lubricating eye drops free of harmful preservatives, subsequently noting that the presence of growth factors and vitamins could mean a true epithelial trophic potential (Ribeiro *et al.*, 2017). Thus, the serum began to be used as a new therapeutic approach to disorders of the ocular surface, such as epithelial defects or severe persistent dry eye untreatable with conventional therapy (Ribeiro *et al.*, 2017). The autologous serum was described not only as a lubricant on the ocular surface, but also as a supplier of various substances essential for the reconstruction of the epithelial damage, including vitamin A, epidermal growth factor, fibronectin and a variety of cytokines. With these epithelial trophic factors, serum facilitates the proliferation, migration and differentiation of the epithelium of the ocular surface. Furthermore, it is known for its anti-catabolic properties, inhibiting the inflammatory cascade triggered by interleukin-1 (IL-1) when it binds to its receptors, which avoids the destruction of the tissue (Quinto; Campos and Behrens, 2008).

In this way, there stands out the advantage of concentrate, which does not contain these immunoglobulins of inflammation and regulates the expression of several genes in the cellular communication and differentiation, improving the biological activity of corneal epithelial cells when compared to the autologous serum. Furthermore, the PC becomes more effective since it presents higher rates of growth factors such as: EGF (epidermal growth factor), vitamin A, nerve growth factor (NGF), insulin-type I growth factor and platelet factor IV. Ribeiro *et al.*, (2016), also demonstrated how the factors imitate physicochemical properties of natural tears, which were also demonstrated by Quinto; Campos and Behrens (2008), in relation to its importance for the stability of the conjunctival and corneal epithelium and by having mechanical and lubricant properties, in addition to epithelial trophic and antimicrobial effects. The growth factors exist in high concentrations in the PRP, such as anabolic agents, to assist or increase the healing of damaged tissues, being proteins that play an essential role in tissue repair and regeneration processes (Zhou & Beuerman, 2012). Apheresis is a process

that removes the whole blood from a donor or patient, separating it into components, allowing for retaining one or more components while the remaining elements return to the donor or patient. According to the component removed, it may be classified as plasmapheresis, cytappheresis or selective apheresis (when only a substance present in the plasma is retained and not the plasma as a whole). It can be used with therapeutic purpose or for obtaining a blood component with transfusion purposes. Therapeutic apheresis procedures aim to remove a pathogenic element present in the blood, such as an immunoglobulin, plasma protein and platelets (Quinto; Campos and Behrens, 2008). Autologous transfusion or donation is a procedure in which the binomial donor-receiver occurs in a same individual. This is an alternative to the use of blood or components in patients undergoing (elective or emergency) surgeries, preventing the use of homologous blood and possible consequences of its employment, such as the transmission of diseases.

Sensitization of apheresis platelet donation: According to the dictionary, the term sensitize means to make aware or responsive, to render sensitive. Sensitization is a fundamental tool for behavioral and attitude change. Sensitizing is to seek to achieve a predisposition of the population for a change of attitude. Changing attitudes requires education, presenting the means of change that will lead to the best attitude, the appropriate behavior concerning the recognition of the need (Veran *et al.*, 2015). The reception of blood donors is essential for a positive response. It is a possibility of retention in addition to expanding collections, facilitating the donor's return, for this reason, blood banks develop donor-centered educational actions in order to welcome them.

RESULTS AND DISCUSSION

The acquisition of blood donors is an essential activity to keep stocks of blood banks. Programs aiming at sensitizing the population regarding the importance of voluntary donation are essential. The findings of this study show that the theme is little discussed and the knowledge comes from ministerial decrees and handbooks. There is a constant need of hemotherapy services to retain donors, so that there is no absence of blood in the services, as well as to decrease last-hour donors. The old models of acquisition for blood donation should be discarded, in which individuals donated only when a relative or friend required, and represents a task of all hemotherapy professionals, as well as from the government and society as a whole (Dias *et al.*, 2015). To do so, health professionals, such as from the interdisciplinary and multiprofessional team, together with the professionals from hemotherapy and acquisition services, need to develop, through existing policies for blood banks and hemotherapy services, health education strategies that sensitize people at blood collection in relation to the retention of this donation, through the reception since the beginning of the procedure (Brazil, 2013). Thus, surveys on information about the satisfaction levels of donors in relation to the service become necessary, enabling the provision of data for decision-making that allow for an increasing number of donors and, especially, of satisfied donors (Brazil, 2016). In addition, from the knowledge of the needs, perceptions and behavior of donors in relation to blood and its donation, blood banks can enhance their relations with them, allowing for increasing the number of voluntary donors. In other words, the ability of the institution to meet the population depends on its ability to

understand, accept and dominate this environment and the relationships established in it. To achieve success, a customer service for the donor should be able to accomplish the art of good acquisition of donors (Lopes and Almeida, 2015). Due to the increased demand for blood transfusions, there is a growing concern with the search for donors. Seeking to meet these transfusion needs of each country, sensitization campaigns aiming to disseminate the indispensable requirements to the donation for the population constitute an important tool for the recruitment of new donors. In order to contribute to improving the quality of the transfused blood, the process of donor selection is very strict. Consequently, there is a decreased number of individuals who meet the suitability criteria (Rodrigues and Reibnitz, 2011).

FINAL THOUGHTS

This study revealed that blood donation is still permeated by myths and prejudices. Although professionals from hospitals and blood banks know the importance of transfusion of blood components, especially the apheresis platelet donation, the size of the population's unawareness is still big regarding blood donation, being a challenge for the development of sensitization strategies for this purpose. In most cases, the report does not distinguish the donations, considering that all donations are equal. Nevertheless, health professionals, through educative action, must take the knowledge to the population. Aiming to make them understand the importance of the donor of blood and blood components, this collection form, the each blood receiver's need, especially, sensitization of donors and their families so that they can perceive the difference in platelet apheresis donation and understand the deeper selectivity of selection criteria. The blood transfusion involves risks and needs to be seen with responsibility and for the hospitalized patient. Requiring blood transfusion may be disturbing, but feeling the love of the donor, the empathy of their relatives in the act of donation is, above all, a very important act of love.

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