Need For Motivation of Plateletpheresis Donors: Observational Study

Chirag Chaudhari *, Milind Dighe**, Farzana Kothari***, Swati Patel****

*3rd Year Resident, **Head of the Department, ***Associate Professor in Immunoheamatology and Blood Transfusion, Department of Immunohematology and Blood Transfusion, S.S.G Hospital, Baroda.

Abstract: Background: Blood donor motivation is an integral part of blood transfusion service. The National and State Blood Transfusion Councils, with support from various non-government organizations carry out extensive work for donor motivation and retention. However, these kind of motivational activities in the community are mostly directed toward whole blood donation. In this era of component therapy, apheresis plays a vital role in planning of transfusion therapy for patients especially those suffering from malignancy. The major indication for utilization of SDP's are during haematopoietic stem cell transplants, chemotherapy related thrombocytopenia and during exigent periods like dengue. With limited access and spread of knowledge regarding utilization of SDP's Compared with general utilisation and wastage of RDP's across India, the responsibility lay on us to motivate, recruit and spread awareness among donors for plateletpheresis. Also, collection of SDP's is a demand driven initiative, thereby reducing the indirect costs associated with wastage of RDP's. Aims: This study is done to assess the current status of the knowledge regarding Plateletpheresis procedure among prospective donors, so as to identify and recruit potential voluntary plateletpheresis donors. Methods: This is a prospective observational study conducted in our outdoor blood donation camps organised by the Department of IHBT, SSG Hospital between the time period July 2016 and November 2016. In this study, a Donor Questionnaire pertaining to Plateletpheresis donations would be given. The donor will be provided information regarding plateletpheresis by the Investigator and questions answered accordingly. Results: During our study period, a total of 53 camps were conducted with turnover of around 1978 voluntary blood unit collections. 140 prospective voluntary blood donors were selected randomly among 1978 donors. Among 140 donors, 27.1% of donors (38/140) were willing to donate platelets through Plateletpheresis procedure (SDP's). Among the 38 donors, 15.8% of donors (6/38) had a previous experience of Plateletpheresis donations and 84.2% (32/38) had no previous experience, but were willing to donate SDP's. The remaining 72.8% of donors (102/140) were not willing to donate platelets through apheresis technique. The major reasons for their nonconsent was contributed by the following factors namely viz., 59.8% due to increased procedural time (61/102 donors); 45.1% due to donor's apprehension of their own platelet count being drastically reduced (46/102 donors); 30.4% due to risk of infections and altered blood components returning back into circulation (31/102 donors). Conclusion: The study concludes that the need for plateletpheresis donors can be better met with specific plateletpheresis donor information, education, motivation, recruitment strategies & constant appraisal, focussing on strengthening and creating more awareness campaigns among prospective donors in co-ordination with blood camp organisers. [Chirag C NJIRM 2017; 8(2):140-142]

Key Words: Plateletpheresis , Donors Motivation, Knowledge

Author for correspondence: Chirag Chaudhari, Blood Bank, S.S.G. Hospital, Opp. Rukmani Chenani Building, Anandpura, Vadodara. 390001. Gujarat. E-Mail: drch.chaudhari@gmail.com M: 9825676801

Introduction: <u>Background</u>: Blood donor motivation is an integral part of blood transfusion service. The National and State Blood Transfusion Councils, with support from various non-government organizations carry out extensive work for donor motivation and retention. However, these kind of motivational activities in the community are mostly directed toward whole blood donation. In this era of component therapy, apheresis plays a vital role in planning of transfusion therapy for patients especially those suffering from malignancy.

Apheresis is a procedure where blood is withdrawn from a donor, separated into components, one (or more) of the components is retained and the remaining constituents are recombined and returned

to the individual. When such a procedure is applied to extract platelets from a donor it is called plateletpheresis and the platelet unit derived from such procedure is called a single donor platelet (SDP).

The major indication for utilization of SDP's are during hematopoietic stem cell transplants, chemotherapy related thrombocytopenia and during exigent periods like dengue. With limited access and spread of knowledge regarding utilization of SDP's Compared with general utilization and wastage of RDP's across India, the responsibility lay on us to motivate, recruit and spread awareness among donors for plateletpheresis. Also, collection of SDP's is a demand driven initiative, thereby reducing the indirect costs associated with wastage of RDP's.

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<u>Aims:</u> This study is done to assess the current status of the knowledge regarding Plateletpheresis procedure among prospective donors, so as to identify and recruit potential voluntary plateletpheresis donors.

Method: This is a prospective observational study conducted in our outdoor blood donation camps organised by the Department of IHBT, SSG Hospital between the time period July 2016 and November 2016. In this study, a Donor Questionnaire pertaining to Plateletpheresis donations would be given. The donor will be provided information regarding plateletpheresis by the Investigator and questions answered accordingly. Since there is no ethical risk associated with study; approval from the ethical committee was not obtained.

Result: During our study period, a total of 53 camps were conducted with turnover of around 1978 voluntary blood unit collections. 140 prospective voluntary blood donors were selected randomly among 1978 donors. Among 140 donors, 27.1% of donors (38/140) were willing to donate platelets through Plateletpheresis procedure (SDP's). Among the 38 donors, 15.8% of donors (6/38) had a previous experience of Plateletpheresis donations and 84.2% (32/38) had no previous experience, but were willing to donate SDP's. The remaining 72.8% of donors (102/140) were not willing to donate platelets through apheresis technique. The major reasons for their nonconsent was contributed by the following factors namely viz., 59.8% due to increased procedural time (61/102 donors); 45.1% due to donor's apprehension of their own platelet count being drastically reduced (46/102 donors); 30.4% due to risk of infections and altered blood components returning back into circulation (31/102 donors).

Discussion: Donor recruitment for plateletpheresis to meet the huge demand from the clinicians was not an easy task. However constant counseling of patient's relatives and friends and motivation of the staff helped us to achieve the goal. The main hindrances faced during donor recruitment were: The people who would come to donate were totally ignorant about the procedure When explained about the procedure, the donors were usually reluctant to volunteer for platelet donation because it is time consuming (ranges from 60 to 150 min)2

Donors were apprehensive regarding the remaining blood components being transfused back. They were afraid that it might carry infections

Donors were also apprehensive regarding lowering of their own platelet count after donation and feared that it might lead to bleeding.

The above observations led us to think that most blood donors are not aware of SDP donation and plateletpheresis procedure. Hence, motivational activities should be directed toward platelet donation also. Plateletpheresis is a need based procedure and hence platelet donations cannot be accepted randomly at any time. However, voluntary blood donors can be targeted and motivated to donate SDP whenever required. The advantages of platelet donation over whole blood donation should be stressed upon. The regular voluntary blood donors should be made aware that there is no or minimal blood loss in this procedure and they are fit to redonate after 15 days.[3] It should also be highlighted that this procedure yields a higher quality product, reduces multiple donor exposure and causes fewer donor reactions due to return of fluid.3

The principles of donor recruitment may be short term, i.e. to recruit SDP donors to meet the immediate need.[1] This is usually done in most of the centers practicing plateletpheresis. However without any long-term planning to recruit donors of tomorrow, a culture of voluntary blood donation in the community cannot be developed. Thus, short term and long-term programs should go hand in hand.1Such kind of long-term strategies, if incorporated in routine donor motivational programs, will help to enlighten the people regarding the procedure of plateletpheresis and also help the transfusion service to acquire SDPs when required.

Conclusion: The study concludes that the need for plateletpheresis donors can be better met with specific plateletpheresis donor information, education, motivation, recruitment strategies & constant appraisal, focussing on strengthening and creating more awareness campaigns among prospective donors in co-ordination with blood camp organisers.

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