Motivating and deterring factors for repeat blood donation among donors of blood bank

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1. Introduction

With the advancement of the Modern medicine practice and increased human life expectancy, need for the blood has been on the rise. On the contrary, only a tiny percentage of eligible blood donors actually choose to donate blood on a regular basis.¹ So blood banks of hospitals and institutions are always in search of donors to cater the needs for their requirement of blood products by increasing the new donors as well as retaining the current donors. Various factors determine the donor’s frequency of blood donation like lack of awareness, life style barriers, and their present and past experience with blood donation. Hence, this study was aimed to determine the motivating and deterring factors for repeat blood donation among donors in blood bank of a tertiary care hospital and to analyze how these factors influence their decision for subsequent blood donation.

2. Materials and Methods

This study was carried out in the blood bank of a tertiary care Hospital. The study was initiated after getting approval of the Institutional Ethics committee. It was a cross sectional study in which both the voluntary and replacement donors visiting the blood bank for blood donation were included. Donors who been deferred for blood donation were excluded. Blood donors, who have been screened for blood donation and after their donation of blood and adequate rest, were informed about the details of the study. A written informed consent was obtained and
they were administered a questionnaire. The questionnaire included the details of the donor’s previous donations, their experience with the present donation and the intention of future blood donation.

If the participant is a first time blood donor, then they were asked for reasons for not considering the blood donation so far and the circumstances which made them to decide current blood donation were probed. The data collected were entered in an excel sheet and analyzed.

3. Results

Out of the total 100 blood donors participated in the study, 63 had a history of previous blood donation and their blood donation details are shown in Table 1. The remaining 37 donors when probed for the reasons for not donating blood, most 21(56.8%) expressed that they did not get a chance to donate blood. The other reasons were as shown in Table 2. Most of the donors 96% expressed their willingness for the repeat blood donation and were motivated to encourage their friends and relatives for future blood donation. (Table 3) 75% of the donors suggested that awareness programs can be created in the media to motivate the community for blood donation. (Table 4) 17 donors had a previous need for transfusion among family members and 46 had previous need for transfusion among themselves whereas 36 had not needed a transfusion till now. 7 donors had a past history of rejection for blood donation out of which 4 of them had medications and 3 donors with smoking and alcohol intake. Three of the donors expressed their unwillingness for repeat donation with the fear of ill health and they were adequately counseled about the blood donation and were encouraged for future donations.

4. Discussion

Most studies found that Altruism, tendency to help others is the major motivating factor for blood donation. The other reasons included social pressure, recognition, gaining experience and spiritual cause. The healthy younger generation should be motivated to donate blood as a regular practice which will increase the voluntary blood donation. The reason for first time blood donations of the donors came from the appeal from friend and relatives, medial appeal and an altruistic attitude. The altruistic attitude of the first time blood donors should be motivated to transform them into regular blood donors. Nguyen et al from University of California found that donors altruistic motivation and medical testing was the highly rated motivating factors for their decision of subsequent blood donation. They also suggested that frequent donor programs and a convenient place and time for the donors for blood donation will be the facilitating factors.

A sense of social responsibility and helping tendency is the major motivating factors and fear of needles and pain and feeling of ill health and objection from elders are the major hindering factors for the donors for repeat donation. Studies have found that some donors have even fear of transmission of infections via donating blood. Awareness programs among the community may alleviate these false beliefs and encourage the donors for future blood donation.

Ou-Yang J et al from China found tendency to help others was the major motivating factor and perception of ill health was the most hindering factor for blood donation. However a voluntary donor may not have a direct contact with the recipient, there is a chance of less empathetic feeling which should not affect the donor’s primary motivating intention for blood donation. Creating awareness of blood donation through campaigns and media will be the most effective tool for recruiting blood donors. In our study too, 96% of the donors were satisfied with the experience of their current blood donation and were motivated to donate blood in the future. They were also motivated to encourage their friends and relatives for the voluntary blood donation.

Jovanovic R et al from Serbia found that the condition before blood donation, pain during phlebotomy and the attitude of the blood bank staffs have a significant impact on donors future decision for repeat blood donation. They suggested that shortened waiting time and proper training of phlebotomists can motivate the donors for future blood donation.

Peers, media and Religion are the major influential factors which determine the donor’s decision for future blood donation. Education about blood donation will create awareness among donors about blood donation. A diverse reactions of the donors either during the current or past blood donation influenced their decision for future blood donation. Donor’s safety is an integral component of blood transfusion which has to be strengthened to retain the current blood donors. Donors demographic characteristics and their perceived behavioral beliefs are also the major determining factors for their intention of future blood donation. Hence, educational and practical strategies have to be adopted to encourage the donors for frequent blood donations.

A study by O Morantidou et al from Greece showed that donors demographic characteristics and incentives like preference for future availability for self and for family and free medical investigations were the major motivating factors for the donors to donate blood in the future. A study by Lemmens KP et al from Netherland concluded that the donors perceived personal and social responsibility was the major motivating factor which will help to return to blood banks for future blood donations.

Every blood bank should adopt strategies for completely non-replacement blood donations. Regular blood donation awareness campaigns and mobile blood camps should be conducted to strengthen the social support and also to
Table 1: Details of Previous donation in previous donors

| Details of previous donation: (N=63) | Number of donations | Frequency of donations |
|-------------------------------------|----------------------|------------------------|
| Previous donation for               |                      |                        |
| Family                              | 19                   | 1                      | 20         | 3 months | 4               |
| Friends                             | 13                   | 2                      | 12         | 6 months | 8               |
| Others                              | 31                   | 3-5                    | 23         | 1 year   | 36              |
|                                     |                      | 6-10                   | 7          | 2 year   | 6               |
|                                     |                      | >10                    | 1          | 3-5 years| 8               |

Table 2: Reason for not donating blood so far in first time blood donors

| Donors statement                  | Number of donors (N=37) |
|-----------------------------------|-------------------------|
| Did not get a chance              | 21                      |
| Fear of pain                      | 5                       |
| Fear of getting ill health        | 3                       |
| Lack of time                      | 2                       |
| Considered myself not eligible    | 6                       |

Table 3: Experience with current blood donation

| Donors statement                  | Number of donors |
|-----------------------------------|------------------|
| Satisfied with the refreshments   | 79               |
| Positive feelings associated with blood donation | 77               |
| Co-operative blood bank personnel | 95               |
| Willingness for repeat donation   | 96               |
| Will encourage friends and relatives for blood donation | 96               |
| Problems faced during current blood donation | 10               |

Table 4: Donors suggestion to improve future blood donations

| Donors suggestions                  | Number of donors |
|-------------------------------------|------------------|
| Can create awareness via media      | 75               |
| Awareness programs in community     | 21               |
| Can increase mobile blood banks for voluntary donation | 12               |
| Incentives can be given for blood donation | 4               |

recruit the voluntary blood donations. Feed backs should be taken from every blood donor after blood donation and whenever any negative experience is faced, the blood bank organization should take appropriate coping strategies.\(^{11}\)

The Altruistic nature of the regular blood donors should deserve a special consideration and should be appreciated.\(^{12}\) Instead of providing incentives which may attract the high risk donors, signs of appreciation like awarding certificates for voluntary blood donation, stars for each donation, preference in the medical checkup will encourage more voluntary donors and will result in complete non replacement blood donations.

Lack of blood donation drive in the community may be due to less motivational forces in their surroundings. Women in developing nations participate less in the blood donation programs due to prevalent beliefs, customs, life style and poor nutrition.\(^{13}\) Highlighting the community about health benefits of regular blood donation such reduced incidence of cardiovascular diseases, improved glucose balance by reduced insulin resistance can further motivate the donors for regular voluntary blood donation.\(^{14}\)

A strong coordination and cooperation of health professionals, blood bank personnel, governmental and nongovernmental organizations is essential to increase the blood donation drive in the community. Educating the younger generation about the blood donation practices will help to recruit more voluntary donors and also to achieve the retention of the recruited donors into the pool of regular blood donors.

5. Conclusion

Blood banks should adopt strategies to encourage the current donors as a regular blood donor to meet the huge transfusion demand of the nation and current replacement donor should be a voluntary donor in future. Non monetary benefits like free health check up, eliminating the fear of needles and fear of ill health by proper counseling, creating awareness among the community and eliminating the lifestyle barriers like convenient blood donation centre
by encouraging mobile blood camps can increase the donor’s inflow to the blood bank.

6. Source of funding

None.

7. Conflict of interest

None.

References

1. Marantidou O, Loukopoulou L, Zervou E, Martinis G, Egglezou A, et al. Factors that motivate and hinder blood donation in Greece. Transfus Med. 2007;17(6):443–450.
2. Kumari S, Raina TR. A comprehensive analysis of Factors that motivate and hinder the Blood Donation Decision among the Younger Population. J Behav Health. 2015;4(4):107–111.
3. Nguyen DD, Devita DA, Hirschler NV, Murphy EL. Blood donor satisfaction and intention of future donation. Transfusion (Paris). 2008;48:742–748.
4. Ou-Yang J, Bei CH, He B, Rong X. Factors influencing blood donation: a cross-sectional survey in Guangzhou, China. Transfus Med Off Engl. 2017;27(4):256–267.
5. Einolf CJ. Empathic concern and prosocial behaviors: a test of experimental results using survey data. Soc Sci Res. 2008;37:1267–1279.
6. Jovanović R, Radlovački V, Pečujlija M, Kamberović B, Delić M, et al. Assessment of blood donors' satisfaction and measures to be taken to improve quality in transfusion service establishments. Med Glas Off Publ Med Assoc Zenica-Doboj Cant Bosnia Herzeg. 2012;9(2):231–238.
7. Abderrahman BH, Saleh MYN. Investigating Knowledge and Attitudes of Blood Donors and Barriers Concerning Blood Donation in Jordan. Procedia - Soc Behav Sci. 2014;116:2146–2154.
8. John CA, Theodora UE, Gloria AN, Chika EA. Adverse reactions to blood donation: A descriptive study of 3520 blood donors in a Nigerian tertiary hospital. Med J Dr Patil Univ. 2017;10(1).
9. Natan MB, Gorkov L. Investigating the factors affecting blood donation among Israelis. Int Emerg Nurs. 2011;19(1):37–43.
10. Lemmens KPH, Abraham C, Hoekstra T, Ruiter RC, Kort D, et al. Why don’t young people volunteer to give blood? An investigation of the correlates of donation intentions among young nondonors. Transfusion (Paris). 2005;45(6):945–955.
11. Jaafar JR, Chong ST, Alavi K. Experience as factors associated with repeat blood donation among university students in Malaysia. Southeast Asian J Tropical Med Public Health. 2017;48(5):1118–1126.
12. Kasraian L, Maghsudlu MM. Blood donors’ attitudes towards incentives: influence on motivation to donate. Blood Transfus. 2012;10:186–190.
13. Durugu S, Ganta SR. A study of knowledge, attitudes and practices of voluntary blood donation among relatives of patients admitted to a tertiary care hospital in North coastal Andhra Pradesh, India. Int J Community Med Public Health. 2016;3(8):2237–2243.
14. Kumari S, Raina TR. Knowledge, attitude and practices (KAP) regarding voluntary non-remunerated blood donation (VNRBD) among the students of colleges of Jammu, India. Int J Community Med Public Health. 2015;2(1):45–50.

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