



Barriers for Blood Donation in Non-Blood Donors: A qualitative study

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Abstract

Donating blood is a noble act that serves a humanitarian cause. This study aims to explore the barriers from donating blood amongst non-donors. Four focus group discussions (FGD) were conducted amongst non-blood donors. The discussions were carried out in the local language, and the verbatim was translated into English. Most of the participants were aware of the importance of donating blood to save other people. Fear is the most factors that hinders them from becoming a blood donor. The participants recommended the use of advertisements that could stir an emotional reaction. Blood banks should hence organise more blood donation campaigns to spread the awareness in the community.

Keywords: awareness; blood donation; blood bank; focus group discussion

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1.0 Introduction

Blood transfusion is a basic procedure that has helped save millions of lives each year. The transfusion of blood and its components is crucial in treating patients who are suffering from life-threatening conditions, elevating the quality of life of critically ill patients and supporting complex medical and surgical procedures. It also plays an essential, life-saving role in maternal and child care as well as during human-inflicted disasters. Therefore, there is an increasing need for adequate blood supply to be used for such clinical treatments.

Many countries are experiencing the shortage of good, quality blood supply to meet the rising demands. Approximately 80% transfusions are given to regulate a low haemoglobin (Hb) rather than to treat active bleeding (United Kingdom Blood Services. & Norfolk, 2013). Research findings have shown that 29.6% of people would only donate blood to help family members or friends who are in need (Jain & Gupta, 2012). In 2010, the Malaysian National Blood Centre projected that more than 10% of Malaysians would donate blood for the year; unfortunately, only 3% had been reported doing so. According to Malaysian Director General of Health (2010), only two in 1000 (2:1000) eligible blood donors in Malaysia have come forward to donate blood. As a result, it creates a challenge for the blood bank services to ensure the availability of sufficient blood supply that is safe and of high quality.

Blood donation is crucial and indispensable in the medical process of saving lives. It is essential to explore into the public awareness with regard to blood donation and its eligibility criteria. Many factors including fear and self-awareness influence the likelihood for a person to become a blood donor. Awareness is more likely to heighten when it involves a personal experience such as a family member needing a supply of blood for transfusion (Lim et al. 2018). According to Bilal et al. (2015), 83.7% of people will only donate blood if a family, relative or friend is in need of a blood transfusion. It shows that individual awareness is only limited to certain factors; hence, there is a need to explore deeper into the subject of public awareness with regard to blood donation.

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Although blood donation campaigns have been widely organised throughout the country, low participation has been recorded due to poor understanding (Pereira et al., 2016; Shakeri et al., 2012; Joshi D.& Merkin R.,2017). There is a need to understand the reasons behind such poor turn up. Voluntary donors are found to be different from non-donors concerning demographic influence, altruism, intention, anxiety and perception (McVittie, Harris and Tiliopoulos,2006). Further studies are needed to determine whether or not this finding applies to non-donors in other countries. Therefore, there is a need to explore into the reasons why a healthy person who is eligible to donate blood refuses to do so.

This current study aims to explore the reasons for not donating blood in eligible adults especially when it involves family members who are critically ill. It is hoped that this study will shed some light on the issue so that new strategies can be constructed to increase the number of donors to more than 10% of the population as set by the Malaysia National Blood Centre.

2.0 Methodology

This qualitative study was conducted among caregivers of patients in the ICU of a public hospital in Sabah who were full filled the criteria to donate blood. When this study was conducted among participants who were caring for their critically ill family members, a deep emotional awareness with regard to the importance of donating blood is evident. Although the qualitative study is less extensive, it could give a deeper understanding to uncover insights on the barriers to donate blood besides it can give detailed perspective of the subject matter as compared to quantitative study.

There is a total of four FGD with an overall total of 11 participants. The duration of the interviews is from 15 to 30 minutes. The interviews were conducted in a comfortable environment, i.e. in the discussion room at the hospital. The pre-selected criteria for the participants are (1) healthy caregivers who are eligible to donate blood, and (2) those who have never donated blood before.

In this study, the focus group interviews were carried out in four groups. The same moderator guided each group through a semi-structured interview. The same interview questions were given to all the participants in each FGD (Table 1). The moderator actively encouraged the participants to participate in the discussion.

The groups are determined using the purposive sampling based on the saturation of answers from the participants. The interview process was recorded using a video camera, and audio recorder. The interview protocol was conducted in a local language, and later the verbatim translation was done in English. Informed consent was taken from each of the participants before the FGD.

Table 1: Topics covered in the interview protocols

Topic	Question
The awareness of blood donation among healthy non-blood donors	Have you ever heard about blood donation? What are your views regarding blood donation?
The knowledge regarding blood donation among healthy non-blood donors	What are the criteria for being eligible blood donors? What do you know about the need (importance) for blood donation?
The factors that hinder one from becoming a blood donor	What is the reason for you not donating blood?
Suggestions	Can you give a suggestion/motivation to become a blood donor?

The data analysis process involved three phases. The first phase was the process of filtering the data starting with the transcription of the verbatim. The process of copying the transcript required full observation by the investigator, and it was quite time-consuming. A language translator was employed to confirm the validity of the investigation. The transcription of the completed interview data was then sent to the participants for revision, correction, and verification to ensure the validity and reliability of the data.

When the copying process was completed, the full transcript was then indexed. The process of making the index of the transcript was done by alternating one code for every participant in this study. The determination of the legal codes for each transcript was important in facilitating the process of getting the original data and in making cross-references when writing and preparing the reports. The designation of the index codes for the transcript in this study was as follows: FG (1) -L. FG is the Focus Group, (1) refers to the first interview, L refers to the male gender, and P represents the female.

To understand the data, it involved repeated readings of the transcript. Every unit was examined paragraph-by-paragraph and verse-by-verse. The researcher looked for paragraphs that can be associated with the review questions. All the sentences/paragraphs that could be related to their respective reviewed questions were marked according to their established categories. The researcher reflected on the data obtained to form the characteristics of the blood donation awareness among non-donors.

Each paragraph in the transcription was called a unit. The step involved the researcher reading and carefully observing each unit to identify those that described the theme. An association between the sub-themes, themes, and categories were made to reflect the existence of an interaction between the groups of information obtained. The final step involved making a summary and writing a report. This study has been approved by the National Medical Research Register (NMRR) and the Committee of Ethics, University of Teknologi Mara (UiTM) Selangor.

3.0 Findings

A total of 11 participants were interviewed, where six (54%) are females, only four(36%) had tertiary education, and seven (63%) of the participants work in the private sector (table 2).

Table 2: Demographic data of participants

Category	FGD 1	FGD 2	FGD 3	FGD 4	Total
Age (years)					
18-29	2	2	1	1	6 (54%)
30-40	1	1	1	2	5 (45%)
Education background					
Primary school	1	0	1	0	2 (19%)
Secondary school	1	2	0	2	5 (45%)
Diploma/degree	1	1	1	1	4 (36%)
Work sector					
Private sector	2	1	1	3	7 (63%)
Government sector	0	1	0	0	1 (9%)
Student/not working	1	1	1	0	3 (27%)

3.1 Blood donation awareness

The results showed that the participants were aware of the importance of blood donation (10 out of 11). The majority of the participants heard about blood donation during their secondary school and when they sought for treatment in the hospital. The places from where they acquired the experience are stated in their responses such as the ones below:

"Heard about blood donation while attending school in 2010 and 2011." (FG1/P)

"Have heard about and witnessed blood donation many times before, i.e. in the hospital during treatment or when visiting relatives who were sick." (FG2/L)

All the participants agreed that donating blood is a good attitude because it can help other people in need such as stated below:

"When we donate blood, we are setting a good example of good moral values that can be emulated by others around us." (FG1/L)

"Blood donation is good and advantageous for saving the lives of others especially patients who really need it." (FG2/P)

3.2 Blood donation knowledge

This theme explored the participants' knowledge about the criteria for being a blood donor. The result showed that the participants did have a limited amount of knowledge in relation to the eligible criteria as a blood donor as shown in their responses:

"Characteristics to be blood donors include having enough haemoglobin, being healthy, and having no chronic diseases." (FG1/P)

"Conditions or criteria for blood donors are that they must be 18 years old and above, have normal haemoglobin reading, in healthy condition and have no harmful diseases." (FG2/L)

"I know that a blood donor must meet the requirements such as being healthy and having no dangerous diseases." (FG3/L).
(Show the face of earnest).

The majority of participants know the importance of blood donation in saving lives and helping people in need. This conclusion was derived from the participants' responses in the group focus interview such as those presented below:

"Very important to be able to save the life of people in need such as patients." (FG1/L)

"To help the Blood Bank because the hospital still cannot accommodate the needs of the patients; therefore, it is important to help." (FG3/P).

3.3 Factors hindering from blood donation

This theme explored the factors hindering them from donating blood. The result showed that fear played a major role as exemplified in the responses below:

"I'm afraid of needles." (FG1/L)

"Phobic of blood." (FG2/P)

"I'm afraid that if I donate blood, I may get sick." (FG3/L)

Having no desire to donate blood is the second reason for the participants' refusal to donate blood as exemplified in the responses below:

"I've never donated and never attended any blood donation campaigns because I never have the sense of desire to donate blood despite knowing about the importance of blood donation." (FG1/P)

"I never had the desire to donate blood." (FG2/L)

Lack of time due to a busy schedule was the third reason for the participants' refusal to donate blood as exemplified in the responses below:

"I have never donated blood; the main cause is the constraints of time due to high work commitments." (FG2/L)

"I am busy with my daily work and tasks." (FG4/P)

3.4 Suggestions

Among the suggestions gathered from the participants' interview include:

"I must be committed to daring myself to donate blood." (FG1/L)

"I am willing to be a blood donor from today because I have to cast aside my fear". (FG2/L)

Another suggestion is to target the government sector where the employees are too busy to participate in blood donation campaigns:

"Get involved in more campaigns for the government sector. Come to schools to spread awareness about blood donation. I am always busy with work commitment so it would be nice if a blood donation facility were set up at workplaces so that employees could easily access it."(FG1/L)

"My suggestion is to enhance blood donation campaigns further because the existing ones are not enough to reach the target groups. Future campaigns should touch more on emotional aspects such as suffering of the patients. This could create awareness in the hearts of those who have never donated blood. I, too, was never moved enough to donate blood, but when I saw how the patients really need this, I was deeply touched and my awareness of its importance has been elevated."(FG2/P)"

"I hope hospital can provide a mobile donation especially to rural areas because not everyone has a transport to go to a hospital to donate blood." (FG3/L)

4.0 Discussions

All the participants stated that they had heard about blood donation. The majority of the participants had respectively expressed positive views about blood donation, believing that it is a good and noble gesture for saving lives and helping those in need. Previous studies also show similar findings (Toogeh et al.,2015; Joshi D & Meakin R.,2017).

The participants as a whole responded positively that blood donation is crucial for saving lives and helping those in need of treatment. One participant even noted that blood donation could help add the blood bank supply. The results indicated that the participants have limited knowledge regarding the criteria to give blood. They can answer the question, most of which are reiterating and superficial answers. This could be attributed to the fact that they have never donated blood before. This finding is supported by the previous study showing that a lack of knowledge about blood donation causes people to refuse to give blood (Shakeri et al., 2012; Joshi D.& Merkin R.,2017). However, this is in contrast to the study by Aldamiz-Echevarria & Aguirre-Garcia (2014), which found that knowledge does not directly affect a person's intention to become a blood donor. The study by Javadzadeh Shahshahani (2007) found that women in Yazd, Iran need to upgrade their knowledge about blood donation because a lack of understanding in the matter has caused them to refuse to donate blood.

The participants further stated that they acquired information about the importance of blood donation through advertisements and the mass media. One participant noted that blood donation advertisements would be even more effective if they involved interested audience (Alfieri S.,2017; Lim et al. 2018). Promotional communication by various channels can transmit the information regarding blood donation and lead to increased donor recruitments. Advertisements for blood donations which carry positive messages will inspire people to come forward and donate blood (Umakanth S. et al.,2015; Reinares-Lara et al.,2016; Muthivhi et al.,2016; Pereira et al., 2016; Ummi M.M.A. et al.2018). This study found that although the participants have never donated blood before, they are still aware of the importance of promoting blood donation.

Generally, the participants' fear is the main reason for their refusal to donate blood despite them knowing its importance. Three male participants and four female participants acknowledged their fear of needles as the factor that is holding them back from giving blood. This is consistent with the findings in the study carried out by Wevers et al. (2014) which indicated that the fear of needles as a result of a lousy experience causes people to refuse to donate blood. This view corresponds with the study conducted by Bantayehu (2015) who found that many people refuse to donate blood for fear of being infected with infectious diseases. A participant in FG3/L stated the fear of contracting diseases as the reason for his refusal to become a blood donor, and this is similar to another study (Pereira et al., 2016;). In addition to fear, the lack of desire to donate blood and laziness were also indicated as the hindering factors by the participants. The study by Javadzadeh Shahshahani (2007) found that the lack of time also hinders people from donating blood.

Participants in FG1/L suggested the use of self-motivation, just as they would if it was their family members who needed the blood. They also pointed out that people would only search for blood donation information when it had a direct effect on their lives. Family members are indicated to be the influencing factors in becoming blood donors (Tison et al.,2007). A total of seven respondents stated that they never discussed donating blood with their friends even when their peers were blood donors. This is because they feel that discussions related to blood donation are not as significant as compared to other matters such as work, family, and children. The study by Sojka (2007) also indicated the same results. Therefore, according to Kasraian and Maghsudlu (2012), social support becomes a method that will increase one's motivation to become a blood donor.

Another participant suggested bringing blood donation drives to rural areas so that knowledge and awareness about the matter could reach all corners of the society. A participant in FG3/L stated that he came from a remote village far from the hospital and that he was unknowledgeable about the process and requirements of donating blood. He believed that blood donation would only be requested by the hospital when necessary, and he never thought that it could be done voluntarily.

The participants also pointed out that blood donation drives are usually carried out during inconvenient times for them to participate. Besides, distance also plays a significant role in their inability to donate blood which is consistent with a previous study (Javadzadeh S.,2007). Therefore, the participants suggested that blood donation drives should be organised at various government departments where the employees could easily find the time to donate blood as the facilities for doing so are already made available at their workplaces. Therefore, this matter should be taken seriously by policymakers so that more educational modules about blood donations could be developed. Policymakers should continuously provide information about blood donation regardless of the perceived attitude of the society on the matter.

4.1 Implications of Study

This study unearths some factors that hinder blood donation. If the awareness about blood donation can be fostered in all levels of society, there will undoubtedly be an increase in the number of voluntary blood donors.

This study was able to explore some sentiments with regard to blood donation from the perspective of individuals who have never donated blood before. The blood bank could also devise strategies to increase the number of blood donors to meet the needs of the public. In addition, this study also contributes to the additional plan of providing health education to the family members of patients with regard to blood donation and subsequently creating awareness amongst them.

4.2 Limitation of Study

This study has several limitations that can be highlighted. This study is limited to participants who have sick family members at the ICU in Sabah. It is not representative of the general population in Malaysia where there is only a small number of participants involved. Blood donation awareness may already exist among these participants as a result of the state of their ailing family members.

5.0 Conclusion & Recommendations

Blood donation awareness is very crucial in the effort to increase the number of voluntary blood donors. The general public still believes that blood donation is only required when the situation calls for it, such as when family members are in need of a blood transfusion. This study finds that knowledge is an important element in influencing someone to become a blood donor. Lack of knowledge about the eligibility criteria and the advantages of donating blood cause members of the public to hesitate to become blood donors. In this regard, health staff needs to inform the public about the importance and benefits of blood donation. Factors that influence their refusal to donate blood, such as fear, should also be managed.

Future qualitative studies on blood donation awareness among non-blood donors are suggested to focus on emotional awareness involving urban, semi-urban and rural communities at a more massive scale and covering multi-racial cultures represented in the Malaysian population. From that qualitative data study, a quantitative questionnaire tailored to demographic and local needs can be developed. As such, blood banks and hospitals can formulate specific plans according to the needs of the area. All relevant parties should assist in realising the Government's efforts to increase the number of blood donors to ensure that it does not become a wasted effort. The Government and the private sector should discuss and find solutions to the problem of low blood supply in the country. Therefore, the results from this study will serve as a guide to improve the number and percentage of voluntary blood donors as well as increase the supply to blood banks in hospitals for patients in need.

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References

- Abolghasemi, H., Hosseini-Divkalayi, N. S., & Seighali, F. (2010). Blood donor incentives: A step forward or backward. *Asian Journal of Transfusion Science*, 4(1), 9–13.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Aldamiz-Echevarria, C., & Aguirre-Garcia, M. S. (2014). A behavior model for blood donors and marketing strategies to retain and attract them. *Revista Latino-Americana de Enfermagem*, 22(3), 467–75.
- Alfieri, S. (2017). Representations and motivations of blood donation in adolescence through a mixed method approach. *Transfusion and Apheresis Science*, (November 2015), 1–9.
- Bantayehu, D. (2015). knowledge, attitude, and practice of voluntary blood donation and associated factors among health care providers in addis ababa health facilities, Ethiopia. *Occupational Medicine & Health Affairs*, 3(4).
- Bilal, M., Haseeb, A., Zahid, I., Lashkerwala, S. S., Saeeduddin, et al. (2015). Knowledge, attitudes and perceptions among non blood donor female health care professionals. *Global Journal of Health Science*, 8(4), 203–11.
- Blood Facts and Statistics. (n.d.). Retrieved from <http://www.ohcac.org/wp-content/uploads/2014/09/Blood-Facts-and-Statistics.pdf>
- Bradley, E. H., Curry, L. A., & Devers, K. J. (2007). Qualitative data analysis for health services research: developing taxonomy, themes, and theory. *Health Services Research*, 42(4), 1758–72.
- Dhara, J. & Richard, M. (2017). Views and attitudes towards blood donation: a qualitative investigation of Indian non-donors living in England. *BMJ Open*, 7:e018279, 1–9
- Hamid, N. Z. A., Basiruddin, R., & Hassan, N. (2013). The Intention to Donate Blood: An Analysis of Socio-Demographic Determinants. *International Journal of Social Science and Humanity*.

- Hogan, B., Hershey, L., Hogan, R., & Callum, C. (2007). Using a Sponsorship to Improve the Success of Blood Drive Donations. *Health Marketing Quarterly*, 24(1–2), 51–61.
- Jain, R., & Gupta, G. (2012). Family/friend donors are not true voluntary donors. *Asian Journal of Transfusion Science*, 6(1), 29–31.
- Javadzadeh Shahshahani, H. (2007). Why don't women volunteer to give blood? A study of knowledge, attitude and practice of women about blood donation, Yazd, Iran, 2005. *Transfusion Medicine*, 17(6), 451–454.
- Lim, M. L., Thock, S. H., Andrew, K.G.T. & Gwee, S.L. (2018). Determinants of blood donation status in Malaysia: profiling the non-donors, occasional donors and regular donors. *Kajian Malaysia*, 36(1), 43-62
- McVittie, C., Harris, L., & Tiliopoulos, N. (2006). "I intend to donate but ...": Non-donors' views of blood donation in the UK. *Psychology, Health & Medicine*, 11(1), 1–6.
- Mutivhi, T.N., Olmsted, M.G., Park, H., Sha, M., Raju, V., et al. (2016). Motivators and deterrents to blood donation among Black South Africans: a qualitative analysis of focus group data. *Transfusion Med*, 25(4), 249-258
- National Blood Bank: Enough, but we always need more | Malaysia | Malay Mail Online. (n.d.). Retrieved May 30, 2017, from <http://www.themalaymailonline.com/malaysia/article/national-blood-bank-enough-but-we-always-need-more>
- Pereira, J.R., Sousa, C.V., Matos, E.B, Rezende, L.B.O., Bueno, N.X., & Dias, A.M. (2016). To donate or not donate, that is the question: an analysis of the critical factors of blood donation. *Ciencia & Saude Coletiva*, 21(8), 2475-2484
- Reinares-Lara, E., Martín-Santana, J. D., & Muela-Molina, C. (2016). The Effects of Accent, Differentiation, and Stigmatization on Spokesperson Credibility in Radio Advertising. *Journal of Global Marketing*, 29(1), 15–28.
- Shakeri, M. T., Vafaee, A., Esmaeily, H., Shafiei, N., Bazargani, R., & Khayamy, M. (2012). The causes for lack of interest to blood donation in eligible individuals, mashhad, northeastern iran. *Iranian Red Crescent Medical Journal*, 14(1), 37–40.
- Shaz, B. H., & Hillyer, C. D. (2010). Minority donation in the United States: challenges and needs. *Current Opinion in Hematology*, 17(6), 544–9.
- Sojka, B. N., & Sojka, P. (2007). The blood donation experience: self-reported motives and obstacles for donating blood. *Vox Sanguinis*, 0(0), 070926073051001
- Tison, G. H., Liu, C., Ren, F., Nelson, K., & Shan, H. (2007). Influences of general and traditional Chinese beliefs on the decision to donate blood among employer-organized and volunteer donors in Beijing, China. *Transfusion*, 47(10), 1871–1879.
- Togeh, G., Seyed, M.M., Seyed, M.T., hamid, R.T., Suzanne, H.A. & Mohammad, S. (2015). Women's blood donation: a qualitative study exploring the reasons for non-donation of blood in female staff at Tehran blood transfusion center. *International Journal of Health Studies*, 1(3), 24-28.
- Umakanth, S., Thasian, Rita, I., Selvaraj, KG., Dolly, D., Joy, J.M. & Sukesh, C.N. (2015). A qualitative study of identifying factors which contribute and non-contribute to voluntary blood donation through focus group discussions among blood donors and non-blood donors. *International Journal of Emergency Mental Health and Human Resilience*, 17(1), 337-340
- Umami, M.M.A., Mariam, M. & Norazmir, M.N. (2018) Blood donation awareness via interactive media among visitors of Pusat Pakar Perubatan UiTM. *Advanced Sciences Letters*, 24, 2491-2493
- United Kingdom Blood Services., & Norfolk, D. (2013). *Handbook of transfusion medicine*. Stationery Office.
- Wevers, A., Wigboldus, D. H. J., de Kort, W. L. A. M., van Baaren, R., & Veldhuizen, I. J. T. (2014). Characteristics of donors who do or do not return to give blood and barriers to their return. *Blood Transfusion = Trasfusione Del Sangue*, 12 Suppl 1(Suppl 1), s37-43.