

Assessment of the Motives for Voluntary Blood Donation in the Donors of Iraqi National Blood Bank in Baghdad

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ABSTRACT:

BACKGROUND:

Understanding the factors that motivate donors to donate blood will facilitate improvement in recruitment programs. Highlighting aspects of blood donation that are particularly motivating or attractive is important to both induct first-time donors and enable repeat donors to continue their donation behavior.

OBJECTIVE:

Assessment the motives for voluntary blood donation in the donors of Iraqi National Blood Bank through the study of sample of these donors.

DONORS AND METHODS:

This study conducted in the Iraqi National Blood Bank-Baghdad, in the period from November 2015 to February 2016. The persons who included in the study were voluntary donors, conveniently included in the study. A special form was prepared for each donor and a questionnaire is performed to fill the form.

RESULTS:

The study included 208 blood donors; the mean of age was 35.4 years with range of 18 to 60 years. One hundred and ninety eight (95%) donors were males while 10 (5%) females and Males: Female was 19.8:1. Forty donor (19%) donated the blood for the first time (first time donor) while 168 donors (81%) donated blood for more than one time.

The most common motive for blood donation as general, was humanity which was the motive in 89 donors (42.8%), followed by polycythemia (increased blood) which was the motive in 67 donors (32.2%), while patriotic motive was in 31 donors (14.9 %), followed by emergency motive in 14 donors (6.7%) while high blood pressure was the drive in 7 donors (3.4%).

CONCLUSION:

Most of the donors were in the forth decade of life and the majority were males. The most common motives for voluntary donation were humanity, increased blood, patriotic, emergency and high blood pressure

KEYWORDS: blood donation, iraqi national blood bank, voluntary donor.

INTRODUCTION:

The increased requirement for blood transfusion make a challenge for blood transfusion centers to balanced between the number of blood donations and demand for blood transfusion.⁽¹⁾

The selection of potential blood donor and processing of these donor units are the first stage of blood banking process that lead to the transfusion.⁽²⁾

The blood donation is the only source of blood, and it should, in all circumstances be voluntary.^{(3),(4)} Various scientific researchers showed that blood donated by non-remunerated blood donor is safer in many aspects and that why identifying motivational factors affecting blood donation and recruitment of safe and low risk donor is a

Understanding the factors that motivate donors to donate will facilitate improvement in recruitment programs.⁽⁷⁾ Highlighting aspects of blood donation that are particularly motivating or attractive to specific demographic groups is important to both induct first-time donors and enable repeat donors to continue their donation behavior.⁽⁸⁾

Motivation for blood donation requires interest in the idea of blood donation; this interest develops over time, with the family or among friends, in school or in the workplace, through discussion and reconsideration. Motivation implies that the person has a desire to give blood. This desire is found only in people who have already been made aware and interested. Desire may come in an organized fashion, through the process of being asked, by a friend or colleague, to give

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challenge all around the world.^{(5),(6)}

blood. Motivation is a continuing process, requiring public education, group organization, discussion and good planning; it will not happen without continual effects. ⁽⁹⁾

AIM OF THE STUDY:

assessment the motives for voluntary blood donation in the donors of Iraqi national blood bank through study of sample of these donors.

Donors and methods

This is a cross sectional study, conducted in the Iraqi National Blood Bank-Baghdad (INBB), in the period from November 2015to February 2016.

The persons who included in the study were voluntary donors, conveniently included after the medical examination by the responsible blood bank physician, and each donor informed that this is a study to evaluate the motives for blood donation; the replacement (Family) donors did not included in the study.

A special form was prepared for each donor and a questionnaire is performed to fill the form.

The form included the following information: age, sex, and number of donations, duration between donations, and the motive for donation; several motives were included in the form and it explained to the donor and asked if one of these motives represent his or her drive to blood donation or if he /she has another motive.

The motives included in the form are:

- 1-Huminity: this means that the donor comes to the blood bank to help other people who need blood.
- 2- Patriotic: this means that the donor come to the blood bank because the country in a situation that need blood donation and consider the blood donation as a responsibility toward his country.

3-Emergency: this means that the donor comes to the blood bank when he heard from the media or other people that there are bombs or accidents and the people in demand for blood.

4-High blood pressure: this means that the donor come to the blood bank because he thinks that blood donation reduce blood pressure and make his health better.

5-Increased blood: this means that the donor comes to the blood bank because he thinks that he has increase blood and donation will reduce the blood and makes his health better.

When the donor donate for the first time then he/she called first time donor and when the donor donate frequently and reaches 20 donations and more then he/she called long time donor. ⁽¹⁰⁾

Statistical analysis:

The data was presented by frequency distribution, and means and standard deviations were made for selected variables.

The statistical significance of the association between two numerical or categorical variables was assessed by t-test and an estimate was considered statistically significant if the p value was ≤ 0.05 .

RESULTS:

The study included 208 blood donors; the mean of age was 35.4 (SD+/- 9.3) years with range of 18 to 60 years.

If the donors divided into groups according to their age, then the highest percentage of donors was in the age of 31-40 years ; 75 (36%) donors were of age ranged 31- 40 years and 68 (32.6%)donors were of age ranged 21-30 years ; this means that the donors of 20-40 years age constitute 68.6 %; table 1.

Table 1: distribution of donors according to age groups.

Age group (years)	No. of donors	Percentage of donors
18-20	4	1.9
21-30	68	32.6
31-40	75	36
41-50	45	21.6
51-60	16	7.7
Total	208	99.8

One hundred and ninety eight (95%)donors were males while 10 (5%)females and Males to Female was 19.8:1; the mean of age for males was 34.9 (SD+/- 9.3) years with range of 18-60 years while the mean of age for females was 42.8 (SD +/-9.4) years with range of 32-53 years . The age is significantly higher in females than males (p \leq 0.05).

The majority of the donors were from Baghdad; 202 donors from the capital (110 donors from

Karch while 92 from Resafah), 2 donors from Dewaniah , 2 from Karbalah , 1 from Dialah and 1 donor from Thecar.

Forty donors (19%) donated the blood for the first time (first time donor) while 168 donors (81%) donated blood for more than one time, including 10 donors (5%) donated more than 20 units of blood(long time donor); for those who donated more than one donation, the median of number of donations for these donors was 5.0

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donations with range of 2-30 donations and the mean of duration between each donation was 8.1 months (SD +/- 6) with range of 2-36 months. The most common motive for blood donation as general, was humanity which was the motive in 89 donors (42.8%), followed by polycythemia

(increased blood) which was the motive in 67 donors (32.2%) while patriotic motive was in 31 donors (14.9 %), followed by emergency motive in 14 donors (6.7%) while high blood pressure was the drive in 7 donors (3.4%) table 2.

Table 2: The motives for donation in the Iraqi National Blood Bank in the studied sample.

The motive	No. of donors	Percentage
Humanity	89	42.8
Increased blood	67	32.2
Patriotic	31	14.9
Emergency	14	6.7
High blood pressure	7	3.4
Total	208	100

When the donors divided into first time, and long time donors, the most common motives for both groups was humanity-table 3

Table 3: The motives in first time and long time donors.

The motive	No. and percentage of First time donors	No. and percentage of long time donors
Humanity	14 (35%)	6(60%)
Increased blood	13 (32.5%)	4(40%)
Patriotic	8 (20%)	
Emergency	2 (5%)	
High blood pressure	3 (7.5%)	
Total	40	10

DISCUSSION:

Identifying motivational factor affecting blood donation and recruitment of safe and low-risk donors is a challenge all around the world; in the present study, there will be evaluation for the motivations that derive the voluntary donors to give their blood in the Iraqi National Blood Bank through a questionnaire with a sample of these donors.

The present study demonstrated that the highest percentage of donors was in the 4th decade of life (31-40 years) and this result is similar to the study of Salim 2013 which was carried out in the same institute (INBB) and demonstrated that the highest percentage of donors were in the range of 30-39 years old age. ⁽¹¹⁾

The present study showed that the majority of donors were males and few were females and this result, nearly, similar to the study of Salim 2013 who demonstrated that 84.7% were male donors ⁽¹¹⁾; also, Omar et al 2015 reported that all donors in his study were males and females rarely donate blood in the Iraqi National Blood Bank ⁽¹²⁾, beside that Shahshahans 2005 reported that in the city Yazad in Iran, only 5% of blood donor are women ⁽¹³⁾; The suggested causes for such status are the increased prevalence of anemia in females, fear, lack of time, difficulty in access to the donation centers and probably social causes.

The results of the present study demonstrated that, generally, the most common motive for blood donation was humanity followed by increased blood, patriotic, and emergency and to reduce blood pressure; these results is the same for the first time donor or long term donor. The humanity motive represent what is called altruism (blood donation without usefulness or remuneration ¹⁰⁾) and this motives constitutes more than 40% of the motives while the motives of increased blood pressure and increased blood can be grouped under (positive effect on health) which constitute 36%, while the motive of responding to emergency demand and patriotic motives can be related to the effect of media and this constitute more than 20% in the present study.

Sojka and, Sojka 2008 reported that the most commonly reported motive, as a general, for donating blood was altruism (40%) followed by social responsibility (19%) and influence of friends (17%) while in the first time donors the influence from a friend was the most frequent motive (47.2% of donors) followed by 'request via media' (23.5% of donors) ⁽¹⁴⁾; in the present study, no effect of friends reported in the studied group.

Kasraian and Maghsudlu 2012 reported in Iran that the majority of donors (85%) donated blood

for altruism reasons followed by positive effect of donation on the health (11%) and for free laboratory test is the third (1%)⁽⁷⁾; in the present study no effect of free laboratory test were reported.

Misje et al 2005 reported that 55% of recruited donors were due to influence of active blood donors through interpersonal contact while the second motive was media advertising (20% of donors)⁽¹⁰⁾ which are nearly similar with the results of the present study.

Baig and Habib 2013 in Kingdom Saudi Arabia – Jeddah ,demonstrated that the major motivations for donors were to help family or friends (30%), saving others lives(28%), religious reason (20%) and altruism (12%)⁽³⁾; in the present study no religious motive recorded

CONCLUSION:

Most of the donors were in the fourth decade of life and the majority were males. The most common motives for voluntary donation were humanity, increased blood, patriotic, emergency and high blood pressure.

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