

# Awareness and Motivation Towards Blood Donation: An Observational Study

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## Abstract

**Introduction:** Even with mankind's advances in science, there is still no substitute for blood. Voluntary blood donation is the safest and most ideal method to meet the current shortage. Increase in the awareness level about blood donation will lead to its acceptance by society, which will be beneficial to all.

**Aim:** This observational study aimed to analyze the awareness and motivation toward blood donation.

**Materials and Methods:** This observational study was conducted to assess population awareness toward voluntary blood donation and motivate them to become a regular donor. A total of 50 study people were included in this study. A self-administered questionnaire was prepared for every donor to assess their awareness and misconceptions toward voluntary blood donation.

**Results:** Out of 50 people, six were between 18 and 20 years, 24 people between 20 and 30 years, 12 people between 31 and 40, and eight people >40 years. Based on education level 14 were at the school level, 26 were at the college level, and ten were professional workers. Based on occupation 14 were self-employed, 20 were students, and 16 were private workers. Based on socio-economic status, 18 were low status, 24 were middle status, and eight were high status. Based on a number of donation, 18 patients were 1<sup>st</sup>-time donation giving, 22 patients had already given between 2–5 times, and ten patients had donated >5 times.

**Conclusion:** In our study, most donors were willing to be a regular donor but cannot be due to their lack of awareness and motivation. So by creating awareness and opportunities for blood donation by conducting many blood donation camps may provide a solution for our blood demands.

**Key words:** Blood, Donation, Awareness, Motivation

## INTRODUCTION

Science has advanced in leaps and bounds since the dawn of the 20<sup>th</sup> century. Blood transfusion has saved millions of lives ever since the discovery of ABO blood groups and advances in preserving collected blood. However, we are yet to find a substitute for this so-called life-giving force that is blood. Hence, blood donation, preferably voluntary donations, is still the only hope of life for the countless people who require blood transfusion every day. It is estimated that donation by 1% of the population is sufficient to meet a nation's most basic blood requirements.<sup>[1]</sup>

The supply of safe blood can only be guaranteed with regular, voluntary, and non-remunerated blood donors.<sup>[2]</sup> It has been found that voluntary non-remunerated blood donation is the safest form of blood donations.<sup>[3]</sup> These type of donors are considered as safest because it has been seen that the prevalence of transfusion-transmitted infections is lowest among these donors and seropositivity of transfusion-transmitted diseases is greater in replacement blood donors than voluntary donors.<sup>[4,5]</sup> There are also some medical benefits of blood donation, as the incidence of acute myocardial infarction is lesser in regular voluntary donors.<sup>[6]</sup> Voluntary blood donation also increases insulin sensitivity and helps maintain the equilibrium of glucose in the body.<sup>[7]</sup> It has been found that recruiting safe donors, mainly in developing countries, are a more challenging task.<sup>[8]</sup> Blood donation is motivated by various factors such as altruism, social pressure, and behavior and replacement needs.<sup>[8,9]</sup> There should be greater consciousness and increased level of a positive attitude about voluntary blood donation. Moreover, these donors

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can self-exclude themselves when they are not fit to donate blood as a regular donor; they are quite aware of donor deferral conditions.

The statistics prepared by the Association of Voluntary Blood Donors' Forum (AVBDF) on the percentage of voluntary blood donation to the total blood collection in individual states in the year 2009–2010 showed a rapid decline in the number of donors throughout India.<sup>[10]</sup>

According to the WHO, more young people donate blood in low- and middle-income countries, proportionally than in high-income countries. Demographic information of blood donors is important for formulating and monitoring recruitment strategies.<sup>[11]</sup> In a study in Nepal Medical College, Kathmandu, it was found that more medical students donated blood frequently and were more knowledgeable in all aspects of blood and blood donation related knowledge (*P* values 0.01 or less) than non-medicos.<sup>[12]</sup>

### Aim

This observational study aimed to analyze the awareness and motivation toward blood donation.

## MATERIALS AND METHODS

This observational study was conducted to assess the population's awareness of voluntary blood donation at government headquarters hospital, Dindigul. A total of 50 study people were included in this study. Volunteers below the age of 18 were excluded from the study as they would be below the eligible age for blood donation. A self-administered questionnaire was prepared for every donor to assess their awareness and misconceptions toward voluntary blood donation. Data were analyzed and presented in the form of percentages.

## RESULTS

Out of 50 people, six were between 18 and 20 years, 24 people between 20 and 30 years, 12 people between 31 and 40, and eight people >40 years [Table 1].

Out of 50 people based on education level 14 were at the school level, 26 were at the college level, and ten were professional workers [Table 2].

Out of 50 people based on occupation, 14 were self-employed, 20 were students, and 16 were private workers [Table 3].

Out of 50 people based on socio-economic status 18 were low status, 24 were middle status, and eight were high status [Table 4].

Out of 50 people based on a number of donation, 18 patients were 1<sup>st</sup>-time donation giving, 22 patients had already given between 2–5 times, and ten patients had donated >5 times [Table 5].

Out of 50 people, all of them aware that HIV patients cannot donate blood and donate blood at what age. Majority of them do not know how much volume of blood to be donated [Table 6].

The majority were willing to become a regular donor and motivated by social media, relatives, and organization awareness program [Table 7].

## DISCUSSION

Escalating demand for safe blood and its availability in our region can be only ensured through enhancing voluntary blood donation. Youngsters' role in voluntary blood donation is crucial to meet the demand for safe blood and youngsters having a better understanding of our country's health-care requirements should come to the forefront. The shortage of blood in India is due to increased demand, with fewer voluntary blood donors. Our study shows a lack of awareness and motivation among our donors regarding the mandatory test done after the blood collection, the amount of blood donated, and whether people could get infected by receiving blood. Hence, there is well need to create awareness among our youngster and replacement donors to become a regular, voluntary donor.

The majority (76%) of the students acquired the information about blood donation from social media such as the internet, while only a few knew from awareness program and relatives. This result is different with the result of a study by Dubey *et al.*<sup>[13]</sup> where television was considered to be the most effective medium (45.2%), followed by newspapers (39.8%), radio (9.2%), banners (2.8%), pamphlets (2.2%), and SMS (0.8%).

The majority (100%) of them were aware of blood screening for transmissible infection before donation. Around 100% of them had an idea about the spread of major diseases like HIV/AIDS through blood donation which is more than that found in Patel *et al.*<sup>[14]</sup> (60%) and Kumari *et al.*<sup>[15]</sup> (62.5%). Again, in the study by Patel *et al.*<sup>[14]</sup> around 95% of the study participants knew that Hepatitis-B could also be transmitted through blood donation, which was almost similar (100%) in our study.

In the present study, it was observed that 100% of respondents knew about the suitable age group of blood donation (18–65 years). Similar findings were observed in

**Table 1: Age distribution**

Age group	Frequency	Percentage
18–20	6	12
21–30	24	48
31–40	12	24
>41	8	16

**Table 2: Distribution of education level**

Education	Frequency	Percentage
School	14	28
College	26	52
Professional	10	20

**Table 3: Distribution of occupation**

Occupation	Frequency	Percentage
Self-employed	14	28
Students	20	40
Private	16	32

**Table 4: Distribution of socio-economic status**

Socio-economic status	Frequency	Percentage
Low	18	36
Middle	24	48
High	8	16

**Table 5: Distribution of a number of donation**

Number of Donation	Frequency	Percentage
1 <sup>st</sup> time	18	36
2–5	22	44
>5	10	20

**Table 6: Knowledge about blood donation**

Knowledge	Aware	Not aware
Knowledge about donation intervals	12	38
Age to start blood donation	50	0
Can HIV person donate blood	50	0
Required Hb level to donate blood	32	18
The mandatory test was done on the donated blood	28	22
The volume of blood donated	4	46

**Table 7: Motivational about blood donation**

Motivational of blood donation	Frequency	Percentage
Organization awareness program	18	36
Request for donation by social media	20	40
Relatives	12	24
Willing to become a regular donor	46	92

the study, which was done by Aslami *et al.*<sup>[16]</sup> (85%), Uma *et al.*<sup>[17]</sup> (79.4%), and Chopra *et al.*<sup>[18]</sup> (90%).

In our study, 24% of subjects had the correct knowledge regarding minimum interval of blood donation, which was not similar to the study of Agravat Amit *et al.*<sup>[19]</sup> (80%). In a similar study, Chopra *et al.*<sup>[18]</sup> and Aslami *et al.*<sup>[16]</sup> found that their subjects who had correct knowledge about a minimum interval of blood donation were 48.9% and 45%, respectively.

## CONCLUSION

In our study, most donors were willing to be a regular donor but cannot be due to their lack of awareness and motivation. Hence, by creating awareness and opportunities for blood donation by conducting many blood donation camps may provide a solution for our blood demands so that the needy persons can be given the lifesaving blood at the appropriate time.

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