

## MISCONCEPTIONS AND MOTIVATION TOWARDS BLOOD DONATION

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### Abstract

*Blood is perceived as the most precious gift under certain situations, and therefore blood donation is certainly an act of human dignity. However, there are just too many people believing in many myths and misconceptions surrounding the procedure of blood donation and therefore cannot help others, even if they can. To determine the people's misconceptions about blood donation, this study was conducted during a blood donation camp organised in Khalsa College of Nursing, Amritsar with 71 respondents. Data were collected through questionnaires that comprised of demographic characteristics, misconceptions about blood donation and reasons of motivation to donate blood. Finally data were analysed using SPSS software. Majority of the subjects were in the age bracket 18-27 years, males, hailed from urban areas, belonged to nuclear families, educated up to 10+2 standard and were non-vegetarians. The major area of misconceptions was around the view that infectious diseases like HIV could be contacted while donating blood. In conclusion, regular effective health education campaigns are essential for removing misconceptions about blood donation so that blood donation rate can be raised in developing countries like India.*

**Key words:** Misconceptions; Motivation; People; Blood donation.

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## INTRODUCTION

**“The gift of blood is the gift of life”**

The demand for blood donation is constant and sometimes critical. Donating blood on a regular basis is necessary to help meet the need, since the need always persists. Natural disasters and accidents cannot be foreseen, so a preparedness to donate blood regularly is the way to help the needy.

There are benefits too of donating blood regularly. Regular donations help in decreasing iron in the body which leads to decrease in free radicals within the body, something that may possibly be responsible for causing degenerative diseases. It decreases the incidence of heart diseases. Each time a person gives blood, they get a free blood pressure check, diabetes check, glucose, pulse and haemoglobin check, as well as being checked for communicable diseases. All of these are free and a person is basically getting a free health check up each time he/ she donates blood.

Giving blood is not only beneficial physically, it is also mentally and spiritually rewarding. Being a regular donor makes you get a sense of accomplishment. Although a donor never knows who will be receiving the blood, but certainly it will be someone who really needs it. A person does not have to be wealthy to give blood but just willing. It enhances the sense of pride in a person and it develops an altruistic attitude among the mankind.

Blood donors can be voluntary unpaid, family replacement and paid. An adequate and reliable supply of safe blood can be assured by a stable base of regular, voluntary, unpaid blood donors. These donors are also the safest group of donors as the prevalence of blood borne infections is the lowest among this group. A donor to donate blood, must be 18 to 60 years of age and having a minimum body weight of 50 Kg. A donor's Haemoglobin level should be 12.5% minimum. A donor can again donate blood after 3 months of last donation of blood. His/ her pulse rate must be between 50 to 100 mm Hg without any irregularities. The diastolic and systolic BP must be between 50 to 100 mm Hg and 100 to 180 mm Hg, respectively. Body temperature should be normal and oral temperature should not exceed 37.5 degree Celsius.

A donor should not suffer from cardiac arrest, hypertension, kidney ailments, epilepsy or diabetics. Ladies with a bad miscarriage should avoid donating blood for the next 6 months. If a donor has already donated blood or has been treated for malaria within the last three months, undergone any immunisation within the past one month, consumed alcohol within the last 24 hours, HIV+ must avoid donating blood. An intending donor should wait for 24 hours after having a dental work and wait for one month after having a major dental procedure.

As per WHO, an increase of 8.6 million blood donations from voluntary unpaid donors from 2004 to 2012 has been reported by 162 countries. The highest increase of voluntary unpaid blood donations is in South-East Asia (78%) and African regions (51%). The maximum increase in absolute numbers was reported in the Western Pacific Region. Blood donation rate in high-income countries is 36.8 donations per 1000 population, 11.7 donations in middle-income countries and 3.9 donations in low-income countries. Around 108 million units of donated blood are collected globally every year. More than half of these are collected in high-income countries, home to 18% of the world's population.<sup>1</sup>

India faces a blood deficit of approximately 30-35 percent annually. The country needs around eight to ten million units of blood every year but manages a measly 5.5 million units. As per WHO standards, India's demand for blood and blood components should be one percent of the total population. The shortage seems largely due to the misconceptions and myths surrounding the noble act of blood donation.<sup>2</sup>

WHO recommends that all blood donations should be screened for infections prior to use. Screening should be mandatory for HIV, hepatitis B, hepatitis C and syphilis. Blood collected in an anticoagulant can be stored and transfused to a patient in an unmodified state. This is known as 'whole blood' transfusion. However, blood can be used more effectively if it is processed into components, such as red cell concentrates, platelet concentrates, plasma and cryoprecipitate. In this way, it can meet the needs of more than one patient. Unnecessary transfusions and unsafe transfusion practices expose patients to the risk of serious adverse transfusion reactions and TTI (Transfusion Transmitted Infections). Unnecessary transfusions also reduce the availability of blood products for patients who are in real need.

From administrative point of view, India has four types of blood banks/ centres. They are managed by the public (government) sector, Indian Red Cross Society (IRCS), non-government organisations (NGOs, on no profit basis), and commercial sectors. Roughly, about 55% of blood banks are from the government sector, 5% from the IRCS, about 20-25% from the NGO sector and the rest are from corporate profit-making sectors.<sup>3</sup> With 909 government-promoted blood banks, 362 voluntary organisations, 684 blood banks associated with private hospitals, and 500 blood banks owned by private charity organisations, the blood bank services sector is highly fragmented in the country.<sup>4</sup>

In India, the ratio of usage of blood components to whole blood is 15 : 75, while globally it is 90 : 10, and there are many reasons for this. Many blood banks in India still lack the required facilities to make blood components and thus most of them issue whole blood; thus, contributing to the shortage of blood and unnecessarily overburdening the patient causing harm at times, as blood transfusion reactions are more common in with whole blood transfusions.<sup>5</sup>

### Research problem

A descriptive study to assess the misconceptions about blood donation and the reasons to donate blood among people attending Blood Donation Camp in Khalsa College of Nursing, Amritsar (Punjab)

### Research objectives

1. To assess the misconceptions among people.
2. To assess the reasons of motivation to donate blood among people.
3. To determine the association of misconceptions among people with their selected demographic variables.

### Operational definitions

- **Misconceptions:** It refers to an incorrect view or opinion of people about blood donation based on faulty thinking or understanding.
- **People:** It refers to the individuals attending blood donation camp to donate their blood
- **Blood donation:** It refers to the unpaid volunteers donating blood for community supply.

### METHODOLOGY

A descriptive study design was selected for the present study. The setting for the present study was Khalsa College of Nursing, Amritsar, in November, 2008, when a voluntary blood donation camp was organised in collaboration with Red Cross Society, Amritsar. Besides the organisational arrangements vis-a-vis the place and staff, refreshments for the donors were also arranged. Those who were willing to participate in the study were selected as subjects using convenient sampling technique. A total of 71 subjects were selected who were either donors or non-donors.

Before moving towards the blood donation room, a structured questionnaire was distributed. Around 5-10 minutes were taken by them to fill in the questionnaire. After filling the questionnaires, the researcher tried to motivate them by clearing their doubts. Even they were reassured by opening the sterile instruments in front of them before drawing blood sample. The structured questionnaire comprised of two parts. The first part consisted of demographic data including age, gender, place of residence, type of family, education, habits and dietary pattern. The second part of the tool contained 20 questions assessing misconceptions regarding blood donation having three options i.e. yes, no and don't know. The tool was translated into Punjabi and Hindi languages.

### RESULTS

More than half of the subjects were aged 18-27 years (54.9%) followed by those aged 28-37 years (39.4%), >37 years (14.1%) and <18 years (7.6%). Out of 71, 42% had never donated blood before, 28.2% had donated once and 12.7% had donated blood more than once. Majority of the subjects were males (77.3%) while females were only 22.7%. Regarding place of residence, majority were urban (69%) as compared to rural inhabitants (31%). Regarding type of family, majority (66%) belonged to nuclear families as against joint families. As per their education, more than half were educated upto 10+2 (52.1%) followed by graduates/ & above (28.2%) and 10th passed (19.7%). Maximum of the subjects had non-vegetarian dietary pattern (45%) as compared to others i.e. eggetarian (35%) and vegetarian (20%). The main motivation factor to donate blood was saving other people's lives (70), family/ friend/ relatives (47), altruism (44) and religion (23) among those who donated blood. Out of total 71 subjects, 58 finally donated their blood.

Around 42.25% of the subjects believed, since they were living on vegetarian diet they lacked appropriate amount of iron in their system. Hence they could not donate blood. Nearly one-fourth (22.53%) reported donating blood hurts a lot. About 14.08 % had misconception that giving blood consumed a lot of time. Very few accepted that our body has limited blood, so it was not advisable to donate blood from the point of view of health. Many had apprehension about post donation weakness. Many were ignorant about who was eligible for donation and the time restriction before re-donation.

Age can deter blood donation as per 46.47% of the subjects. About 29.8% believed only heavier people should donate blood because they have more blood in them. 38.02% believed health deteriorates after donating blood. Only 6 subjects believed sports or other physical activities would not be possible again after donating blood. Nearly three fourths (74.64%) accepted that one cannot donate blood if he/ she were on any medication. 35 subjects were not aware of the rules regarding blood donation while being affected by seasonal allergies. 69% believed that people with high blood pressure and high cholesterol could not give blood.

Majority of the subjects (70%) believed that anaemic people could not donate blood. Maximally (65%) were with the view that cancer patients cannot donate blood. A large proportion of the subjects (77.3%) accepted that donating blood means donor becomes susceptible to contact infectious diseases like HIV. (39.5%) believed as a woman one cannot donate blood. After donating blood one may fall ill believed 24.26% of the subjects. 46% of the subjects were of the view that a person who went abroad could not donate blood. Only age and education had significant association with myths and misconceptions among the subjects.

## CONCLUSION

There is tremendous demand for blood in hospitals. Blood transfusion saves lives and improves health. But many patients requiring transfusion do not have timely access to safe blood. And they die because they are not able to cope with the loss of blood. Though blood transfusion has been responsible for saving millions of lives each year around the world, the quantity and quality of blood pool available for transfusions are still major concerns across the globe, especially in the developing countries. It is mainly due to various misconceptions prevailing in the Indian society that lead to hindrance in donating blood. The most common misconceptions were found to be susceptibility to infectious diseases like HIV and that one cannot donate blood if he/ she is taking any medication. The misconceptions were deep rooted among the people. It can be said that the knowledge of the people on blood donation is not upto the mark.

There is a need for active education programme to encourage the public for blood donation. More proper and regular motivational campaigns are required to enhance the awareness and remove misconceptions in the society related blood donation and transfusion. Providing safe and adequate blood should be an integral part of every country's national health care policy and health infrastructure. This indicates that large international organisations should mainly emphasise on the awareness raising initiatives to encourage people to prepare their communities as donors.

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