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Blood donation as community welfare – An investigation of social norms

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Abstract

Blood is the supreme element in any individual's life support system. It is the elementary unit in the existence of mankind without which the living being's survival in this world is impossible. Additionally, the process of blood formation takes place only by natural means i.e. it can neither be synthesized nor can be produced artificially in any laboratory. Hence, the only alternative left for the fulfilment of various blood needs and requirements is through blood donation. And, if that blood donation is achieved voluntarily, it can be none-the-less than a boon to mankind. Although, contribution to blood donation has now become an important society concern and there has been a significant rise in the number of effective blood donations yet the major challenge still remains as the recruitment and retaining the blood donors. The present paper is based on an attempt to identify and investigate the various socio-demographic, emotional, physiological as well as psychological factors that help in maintaining and retaining voluntary blood donors as well as motivating the non-donors to donate blood.

Keywords: Blood donation, socio-demographic, emotional, physiological

1. Introduction

In India, October 1st is observed as the 'National Blood Donation Day.' But what exactly is blood- The red stuff that oozes out of a person's body after a paper cut or logically speaking, a fluid that circulates constantly in our body, providing us with the basic nutrition, oxygen and waste removal. As

Explained by the author in ^[1], it is not just a simple fluid, but a group of cells suspended in it along with proteins that not only support our life system but also enables us to fight diseases and infections. But there is no "kitchen" which manufactures blood or no "substitute" available for it. Hence, Blood Donation is the only source through which blood can be received. As stated by the RedCross.org- "*The Blood You Donate Gives Someone another Chance At Life. One Day That Someone May Be A Close Relative, A Friend, A Loved One— Or Even You.*" That is, Donors are the only source through which Patients can receive blood. According to the author in ^[2], blood is made up of various constituents precisely – the red blood cells, white blood cells, plasma and platelets. These cells are concocted in the bone-marrow, which helps in oxygen transportation throughout the body, fight infection as well as control bleeding. According to 'friends2support.org', approximately 20 units of blood are required for bone-marrow transplant, 50 units of blood are required in automobile accident, 40 units are required for heart surgery and so on. Hence, bequeathing blood is an effective way of helping others as well as the whole society.

2. Importance of healthcare and blood donation

Blood donation, as the name implies, is a voluntary procedure of donating blood either partially or wholly i.e. donating only certain components of the blood as required for effective transfusion, and thereby helping the patient who needs it the most. Blood donation not only serves the need for a particular blood demand but also provides various advantages. For everyone, it's just a few moments out of their day but for patients in need, it may save their lives. Presence of the specialized medical staff during blood donation makes it a rather painless, easy and simple procedure. There is no risk involved while donating blood and rather it helps the patients to recover quickly.

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Also, donating blood is the only way to receive it. Despite medical and technological advances, blood cannot currently be made. The only way of getting hold of it is via blood donations from people who give blood. It is also said that a single pint of blood can save up to three lives. This is because; each blood donation provides three different blood components, each with its own role in treating patients, thus helping up to three different people. Donating blood can help in treating patients suffering from cancer, bleeding disorders, chronic anaemia associated with cancer, sickle cell anaemia and other hereditary blood abnormalities.

Along with that, the other major benefits of blood donation, specifically for donors, as explained by Dr. Mercola ^[3], are as followed:

- a) Abets in weight loss for donors.
- b) Benefits in detecting and lowering the risk of cancer.
- c) Condenses the risk of hemochromatosis.
- d) Downgrades the menace of heart and liver diseases caused by iron overload.
- e) Stimulates production of new cells and helps in maintaining good health.

Hemochromatosis is a health condition that occurs due to disproportionate iron absorption by the body chiefly due to alcoholism, anaemia or other disorders such as heredity problems. By donating the blood recurrently, excessive iron overload can be reduced thereby preventing hemochromatosis. Similarly, by donating blood, iron levels in the blood are maintained at the normal level, thereby moderating the cancer levels, cirrhosis, and liver failure, damage to pancreas and heart abnormalities like irregular heart rhythms. Cardiovascular diseases can be averted by blood donation because it helps in cutting the body weight which is also beneficial for obese people. Repeated blood donations may help your blood to flow better, possibly helping to limit damage to the lining of your blood vessels, which should result in fewer arterial blockages. Donating blood is certainly not a replacement for medical care, but it does give donors, an insight into their health (as well as notice if the donor has been exposed to an infectious disease without knowing).

3. Role of the blood bank sector and its concept

Blood Bank, as the name suggests, is a place or a site where the various constituents of blood that had been gathered through various blood donation drives, is stored and preserved so as to cater the innumerable blood-related needs and requirements.

It is a spot, where blood collected from donors is typed, separated into its various components, stored as well as prepared for effective blood transfusion. The blood bank performs the various functions:-

- a) **Blood Collection:** It can be defined as the process of collection of blood from the donors where donors are selected on specific criteria such as their health parameters, the constituents of the blood that are to be donated, their willingness to donate etc.
- b) **Blood Separation:** Technically, the blood consists of various components such as Red Blood Cells, White Blood Cells, Plasma, and Platelets. Hence, blood banks also perform the role of separating blood into individual units so that it can be transfused into different recipients with different needs.

c) **Storage and Preservation of Blood:** Blood banks are responsible for both storing and preserving blood up to long period of time so that pure and clean blood can be supplied to the patient. Storage of blood includes:

- To maintain the red cell viability and function of each constituent.
- To prevent any physical changes which may be harmful to the constituents
- To inhibit coagulation
- To thwart bacterial proliferation

As quoted in Wikipedia, the concept of blood banks dates to the times of the First World War, which acted as a rapid catalyst for the blood bank sector and innovation of various transfusion techniques. The concept involved so as to supply blood to the casualties of the war and helping them to heal and recover as soon as possible. With the advent in technology, more and more strategies and mechanisms were devised so as to perform effective blood transfusions and maintaining the shelf-life of obtained blood.

4. Identification of factors and changing the perception

Even though there has been a significant rise in the number of donors yet there are several reasons because of which people are not willing to donate blood. As explained by bloodrivesafety.com ^[4], these are basically due to some unfounded phobias or typical anxiety reasons. Conventional "excuses" given by the people are as follows:

1. **Fear of Needles:** Trypanophobia, or medically known as the fear of needles, is one of the most prominent reasons due to which people do not donate blood. Approximately, 20 per cent of the population suffer from the fear of needles and injections. Additionally, letting the nurse know about this fear can help them use their professional skills so as to complete the procedure in a painless way.
2. **Fear of the Sight of Blood:** Distraction from the scene of blood can be an operative method. This can be done by watching TV, or listening to music.
3. **Fear of Fainting:** Many researches have shown that people faint during this procedure but that does not mean that if it happens once, it will happen again. Donor centres take necessary steps to avoid such situations.
4. **Fear of Nausea:** Feeling dizzy is a very common scenario which can be easily avoided by keeping oneself hydrated, eat a full meal and then come to the centre for donation.
5. **Fear of Constant Pestering by Blood Banks:** This is again a crucial aspect for no donation because people are afraid of the persistent and endless annoyance by the blood banks to donate blood. Rather, it is a completely opposite setup since blood banks tend to respect the donors' privacy over and above determining how frequently the donors shall be contacted.
6. **Fear that it will lead to a Health Problem:** People are always screened for health problems before donating blood to ensure safe blood donation in addition to determining the potential health risks involved. In conjunction with this, disposable sets of needles and blood donation sets are used, to prevent the spread of Human Immunodeficiency Virus (HIV) or other illnesses.

7. Misconception about the abundance of blood availability: People also believe that there is an ample quantity of blood being donated which is in complete contrast to the veracity because if there was an enough supply of blood, there would be no need for any blood donation drives. Along with that in winter months, there is a decline in the donations because inclement weather makes it impossible for some people to get to a blood drive. Here's another reason that why blood is perishable; the whole blood has a shelf-life of 42 days and platelets have a shelf-life up to 5 days which clearly indicates that blood resources are scarce.

Whether fuelled by fear or a handful of misconceptions, many people opt out of donating blood when they could be saving a life and helping to replenish the blood shortages. Refraining from such myths and misconceptions can help save lives.

5. Importance of voluntary blood donations

Even though blood donation is a benevolent and humane practice which acts as a boon to humankind yet it has some economic viewpoints as well. Some people donate blood willingly and some professionally. People have taken up the donation of blood as a professional practice where they stroll from one blood bank to another in order to 'sell' their blood and earn money. This kind of frequent donation leads to contamination of blood as the person gets unhealthy due to which he/she is prone to infection. Even though voluntary donation of blood is a very healthy practice yet some people take advantage of this practice as well. Broadly voluntary blood donations can be classified as –

- i) Voluntary Donations by people who donate blood not for any specific person, but for their own self-satisfaction and health.
- ii) Relatives or friends who act as donors.
- iii) Professional donors who 'sell' their blood from one blood bank to another and as frequently as possible. Such donations should be discouraged because they act as a high source of infections. Moreover, such people have a poor quality of blood because of low haemoglobin levels due to frequent donations. A professional donor should never be accepted and bled. They are usually identified by needle prick marks on their arms.

Blood Banks anywhere uses as far as possible voluntary donors and relative donors. A voluntary donor should be accorded highest courtesies as they are self-motivated and can be greatest motivators.

Moreover, voluntary blood donations are considered as the safest source of blood because of the low prevalence of Transfusion Transmissible Infections. Many countries follow the practice of voluntary blood donations and in other countries, various strategies are implemented so as to promote voluntary blood donations wherein educating the younger generation to donate blood is the primary goal. It is the crucial aspect to meet the demands of safe blood transfusion. In India, during the year 2006-2007, Voluntary Blood Donations were only about 55% which increased up to 80% during the year 2010-2011. As mentioned in a research by Manikanandan^[5], every year the population in the world is growing at a steady rate because of which meeting the demands of blood due to any kind of blood-

related surgeries, and associated increase in accidents leads to the overall increase in the demand of blood. According to WHO, an estimated 38% of voluntary blood donations are contributed by the people under the age of 25 years i.e. Youth primarily forms the social community which takes up the responsibility to donate blood. Therefore, the primary concern for every country should be to increase the number of youth donors specifically in the age of 20-30 because of their willingness to work for the elevation of society along with their dynamic, healthy and active behaviour personality.

In conforming to^[7], specifically the following goals are to be achieved in order to inculcate the feeling of donation of blood which can be accomplished only by the community engagements:

- i) Bridging the gap between the theory and practice of enforcement of effective community standards, i.e. besides speaking, creation of community knowledge systems that can be seen as the legitimate partners for innovations as well as training human resources.
- ii) Promotion of deeper interactions between higher educational institutions and local communities for identification of real-life problems and discovering potent and fruitful solutions for them.
- iii) Facilitating the partnerships between the institutions so that an understanding can be developed and the current needs can be fulfilled.
- iv) Catalysing the acquisition of various public services and values and motivating active citizenship amongst the students and youth, which would also boost, nurture and harness the natural idealism of youth.
- v) Undertake research projects which are need-based and community-oriented leading to policy formulation for societal development.
- vi) Participation of students in community engagement projects that should earn them credits plus partially meet graduation requirements which should be integrated in their evaluation systems.

The main components of the Donor Recruitment Program are:

- (i) To create awareness among students/ youths regarding blood donation,
- (ii) To sensitize principals and teachers of colleges/ educational institutes/ local clubs/ Non-Governmental Organisations (NGOs) regarding voluntary blood donation,
- (iii) To motivate the students/youths for blood donation,
- (iv) To form a network of peer motivators from various colleges/ educational institutes/local clubs/ NGOs,
- (v) To try and evaluate the effectiveness of various strategies for donor motivation.

6. Conclusion

Despite the brisk and notable expansions in the fields of medical sciences today, lack of the ability to produce blood synthetically, has led to only one way of accruing it at safe storage to meet emergency necessities i.e. through donation, that too, voluntary donations. Blood banks are typically based on a healthy person voluntarily donating blood which is then used for diagnosis, transfusions or into medications. Hence, not mixing the pecuniary and financial facets into

this will help save a live or two. Accompanied with the increased role of youth in this, makes it a beneficial act.

Contributing blood means giving life to someone and it is believed that voluntary blood donors command the highest respect for their sacrifice.

It is proposed to extend this study by collecting data from students of various Under- Graduate courses so as to get a real picture of blood donations and associated beliefs. Data, hence collected, would be mined for extracting hidden facts related to blood donations.

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