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Research Article

POST BLOOD DONATION PSYCHOLOGY IN BLOOD DONORS

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ABSTRACT

In the present age, Human being is the only and the most vital reservoir of Human blood available. It is therefore of utmost importance to propagate and educate people about the importance of Blood Donation. Hence the following article is studied to understand the Post Blood Donation Psychology of blood donors and to offer ways to reduce the anxiety associated with blood donation and to help them understand the benefits of blood donation to themselves and to the society as a whole.

Key Words: Blood Donation, Post Blood Donation Psychology, Benefits of blood donation

INTRODUCTION

Blood is a prerequisite for life. Human being is the only source of Human blood. The ABO blood group antigens, as seen in humans, are also seen in apes like Chimpanzees, Bonobos and Gorillas. But the antigenic structure is not always the same, resulting invariably in an agglutination reaction, if tried to transfuse to a human Socha (1988). Thus, Human is the only reservoir for human blood.

Some Facts about Blood Donation

- An adult body has 5 litres of blood, out of which 450 ml (One pint) is removed from donors on each visit.
- Donated Whole Blood (RBCs) is replenished in the body in 20 60 days (Pottgiesser, 2008) and Plasma in 2 3 days (Community Blood Center, 2008).
- One bag of blood saves three lives. This is because blood is separated into three components viz.
- Packed Cells, Platelets and Fresh Frozen Plasma (FFP), and each component is used in patients who require that component.
- Packed Cells can be stored for 35 45 days by refrigeration (2 60 C) (Saran, 2003), FFPs for 1 year by deep freezing (-180 C), Platelets for 5 days at 22 240 C with constant agitation to prevent clumping (Saran, 2003b),.
- Once donated, a person should not donate blood (RBCs) at least for 3 months
- Donation of other blood products are called "Apheresis".
- Plasmapheresis (Plasma Donation) can be done once in 2 weeks.
- Plateletpheresis can be done once a week.
- A person donating blood should weigh > 45 kgs.
- Anybody can donate blood between 18 to 60 years of age.
- The donor should NOT have anemia, high Blood Pressure, Diabetes, Heart Disease, Cancer of any type. A routine precheck includes Blood Hemoglobin levels measured by Specific gravity method using acidified CuSO4 or Sahli's Hemoglobinometer (Saran, 2003), BP, Pulse and Temperature.
- The donor should not have had any drugs or vaccines or alcohol for atleast 48 hours. People taking Anti Arrhythmics, Digitalis, Vasodilators, Anti Coagulants, Anti Thyroid and Anti Convulsant agents are deferred permanently from donation.
- Donors should not have had Jaundice for the past 3 years and should not have any kind of Cancer or Renal disease or any other systemic affection.
- When a person donates blood, he gives implied consent to be tested for HIV, HBsAg, HCV, VDRL and Malarial parasite among others.

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Benefits of Blood Donation

- No factory or machine in the present date can manufacture blood. The human being is the only source of blood to humans!
- Blood donation benefits the recipient in need, be it accidents or surgeries.
- Blood donation also benefits the donor by giving the Blood Producing system a "Good Exercise".
- In individuals prone to Iron Overload, it prevents Iron Overload (Fields and Grindon, 1999).
- Reduces the risk of heart diseases by decreasing the load on heart (Tuomainen et al., 1997).
- Reduces BP, Blood Glucose, HbA1C, LDL/ HDL ratio and the Heart Rate

About the study

A group of 50 randomly selected donors were questioned. The questionnaire included the following:

- 1. Is this your first time for donating blood?
- **2.** If not, when was the last time you donated blood?
- **3.** How frequently do you donate blood?
- **4.** How did you come to know about blood donation?
- **5.** Were you nervous before donating blood? Did you have any problems after donation?
- **6.** Do you know the benefits of blood donation?
- 7. Will you donate blood again?

RESULTS

- 94 % (47 out of 50) of the donors were voluntary donors.
- 20 % (10 out of 50) of the patients were donating blood for the first time.
- The ones who had donated blood before, had donated blood at least 3 months before; and had donated blood at least 3 4 times before.
- 78 % (39 out of 50) of the donors came to know about blood donation through friends; 16 % (8 out of 50) of the donors donated blood on social occasions like Birthdays (Their own or their close one's birthday); 6 % (3 out of 50) were replacement donors, who replaced blood required for their relatives.
- 90 % (9 out of 10) of the first time donors were apprehensive and anxious about blood donation. Their main concern seemed to be either an unexplained fear of blood or the nature of the needle prick. None of them felt any problems after blood donation.
- All the first time donors had only a vague awareness of the health and societal benefits of blood donation. All of them were educated about the various benefits as discussed above.
- After knowing the benefits and after their apprehension and anxiety were addressed, all of them were willing to donate blood again.

Also, all the voluntary donors were rewarded "Donor Cards" (Saran, 2003). Many of whom utilized these Donor

Cards for their friends or family were more enthusiastic and donated blood more frequently.

DISCUSSION

Blood donation is an important means of maintaining a constant availability of blood for all kinds of emergencies and surgeries. So, motivating and educating the masses plays a very vital role. Explaining the above mentioned benefits and telling them about their Hemoglobin status, HIV, HBsAg, HCV, VDRL status and pointing out that their good health can be be put to altruistic purposes so the society could benefit as a whole is a good start point.

Voluntary donors are always considered safer than Replacement donors. But Replacement donors can be motivated easily by making them realize the many number of people requiring blood like their relative at present.

The most common factors causing anxiety in first time donors were found to be Fear of blood and the anxiety of needle pricks. The ways found effective in dealing with these common situations were to make

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them as comfortable as possible, like, switching on the air conditioner, playing soft music and explaining them that the needle prick won't feel anything more than an insect bite. Also, giving them biscuits and tea or coffee after donation has been known to help in many cases.

In this study, it was found that many donors were motivated by giving "Donor Cards". Donor Cards are a means by which blood is provided to self, friends or family without any deposit, as an incentive to blood donors.

Other means of motivation can be:

- Providing Pins and Badges.
- Frequent donors should be recognized for their efforts by organizing functions and commemorating them at these functions. Each donor should be praised for their valuable voluntary donation by letting them know the amount of lives they are possibly saving!
- Social events like Birthdays, Camps for Religious sentiments and National events are also a good way of mass motivation for blood donation.

We should make use of the growing awareness about health services and motivate the youth to cultivate "Health Friendly" habits so society can reap the benefits.

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REFERENCES

Community Blood Center (2008). Donating Apheresis and Plasma. Retrieved 2008-06-11.

Fields AC and Grindon AJ (1999). "Hemochromatosis, iron, and blood donation: a short review". Immunohematology **15**(3) 108–12.

Pottgiesser T, Specker W, Umhau M, Dickhuth HH, Roecker K, Schumacher YO (Jul 2008). Recovery of hemoglobin mass after blood donation". Transfusion 48 (7) 1390–7.

Socha WW (**August 1980**). "Blood groups of apes and monkeys: current status and practical applications". *Lab. Animal Science* **30** (4 Pt 1) 698–702.

Saran RK(2003). Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India. *Transfusion Medicine Technical Manual 2nd Ed.* 3 24.

Saran RK (2003). Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India. *Transfusion Medicine Technical Manual 2nd Ed.*3 32.

Saran RK (2003). Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India. *Transfusion Medicine Technical Manual 2nd Ed.*2 15.

Saran RK (2003). Directorate General of Health Services, Ministry of Health and Family Welfare, Government of India. *Transfusion Medicine Technical Manual 2nd Ed.*17.

Tuomainen TP, Salonen R, Nyyssönen K and Salonen JT (Mar 1997). "Cohort study of relation between donating blood and risk of myocardial infarction in 2682 men in eastern Finland". BMJ 314 (7083) 793–4.