

Awareness of Blood Donation among Female College Students- A Survey

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Abstract:

Aim:

To create awareness of blood donation among college students – FEMALE

Objective:

Objective of study includes knowledge about blood donation among female students and creating awareness of blood donation

Background:

Blood is a major vital component of the human body. Since it cannot be manufactured artificially, and can only be obtained from human resources, blood donation has become an important and essential process that every health care facility should take into consideration.

Conclusion:

This survey is conducted to know whether the students are aware of eligibility of blood donation.

INTRODUCTION:

Blood can save millions of life. The requirement of blood and blood products in a country depends on the population, health care structure, prevalence of conditions requiring regular transfusions, such as haemophilia and thalassaemia etc., availability of surgical centers using modern sophisticated techniques, and awareness amongst clinicians regarding judicious use of blood. However problem regarding a permanent shortage of blood is observed in blood services all over the world.(1) The only source of blood is by blood donation.(2) However, recruitment of voluntary, non-remunerated blood donors poses major challenges to transfusion services throughout the world.(3) As per World Health Organization (WHO) norms, 1% of the population is generally the minimum needed to meet the country's most basic requirements for blood.(4) In India, during the year 2006-2007, Voluntary Blood Donation (VBD) was only 54.4% and it increased to 79.4% during the year 2010 2011.(5) The total population of Tamil Nadu State in India comes around 72.1 million as per the census calculation. Annually, Tamil Nadu needs about a minimum of 700 thousand units of blood as per WHO's norms. Every year increase in population along with increase in life expectancy rate, urban development and associated increase in accidents and specialized surgeries requiring blood, the rate of blood usage is on the rises. Internationally, regular voluntary non-remunerated blood donors, who donate blood out of altruism, are considered safe blood donors. In many countries, continuous efforts are needed to achieve 100% VBD. Even though in Indian law forbidden collection of blood from paid donors, many times health care facilities forced to accept blood from paid donors as there are scarcity of voluntary blood

donors.(5) It is well established that paid donors constitute at a group with high risk behavior leading to greater chances of transfusion transmitted infections in the recipients. In addition blood shortage are experienced in Tamil Nadu state in India during the summer holidays. Hence awareness through education and motivation of the young people about the VBD are an important for recruitment and retention of the voluntary non-numerated blood donors. According to WHO, an estimated 38% of reported VBDs are contributed by people under the age of 25 years. WHO also insist countries to focus on young people to achieve 100% regular voluntary non-numerated blood donation.(6)

Young students are healthy, active, dynamic, resourceful, and receptive and constitute a greater proportion in the Indian population. Those young students have to be encouraged, inspired and motivated to donate blood voluntarily on regular basis. (7)

MATERIALS AND METHODS:

This study was conducted among female college students. Fifty students participated on voluntary basis. A briefing was given to the participants about the objective of this study and assured confidentiality in collection of personal data. A well structured validated and pre-tested questionnaire on Awareness of blood donation was assessed among students through questions covering nature of donation, requirements for donation, eligibility to donate blood, complications after donation and health benefits for blood donors. A scoring mechanism was used to understand the awareness on blood donation results were expressed in percentage.

RESULT:

KNOWLEDGE	PERCENTAGE
PEOPLE WHO DONATED BLOOD	21
AWARENESS OF COMMON BLOOD GROUPS	45
AWARENESS OF THEIR OWN BLOOD GROUP	65
MINIMUM BODY WEIGHT FOR BLOOD DONATION	27
SUITABLE AGE FOR BLOOD DONATION	70
NORMAL BLOOD PRESSURE FOR BLOOD DONATION	32
HAEMOGLOBIN LEVEL FOR BLOOD DONATION	41
AWARENESS OF DISEASE TRANSMISSIBLE THROUGH BLOOD DONATION	57
DURATION OF DONATION PROCESS	38
COMPLICATIONS AFTER BLOOD DONATION	49
TIME PERIOD FOR NEXT DONATION	26
VOLUME OF BLOOD COLLECTED DURING EACH DONATION	21

Table.1- PERCENTAGE OF PEOPLE WHO ARE AWARE OF BASIC ELIGIBILITY FOR BLOOD DONATION

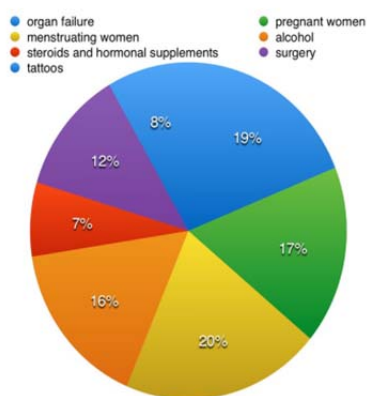


Table.2-Percentage of people who are aware of eligibility for blood donation

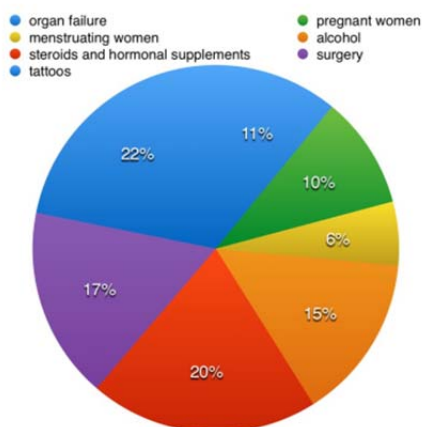


Table.3-People who are not aware of eligibility for blood donation

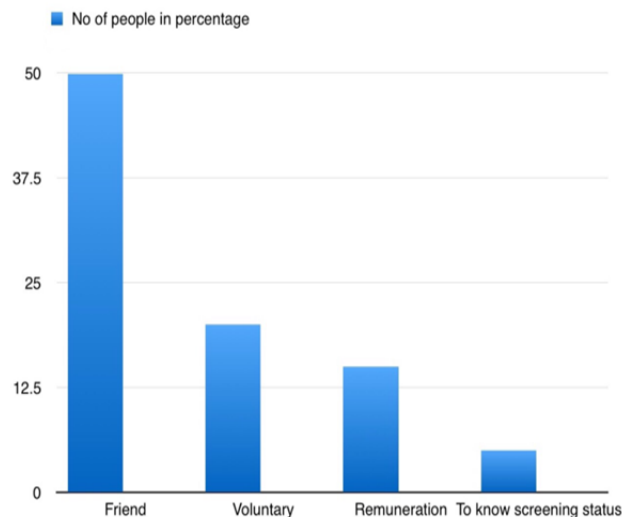


Table.4-Reason for blood donation among female students

DISCUSSION:

Studies to understand the various factors that could change the perception and awareness about blood donation among the student community may come out to be useful for the successful implementation of 100% Voluntary blood donation program in the Tamil Nadu state. The present study assessed the awareness regarding blood donations among female college students in Chennai, Tamil Nadu, India. Knowledge on blood donation among students was measured using the following questions; which comprised of respondents' understanding the general requirements to become an eligible donor, how many times in a year a healthy male and female can donate blood, volume of donated blood and complications after blood donation. Present study showed that lack of awareness on blood donation was there among female college students.

Hence, a periodic awareness program on blood donation in various educational institutions across India is needed to achieve a 100% Voluntary blood donation. The present study indicates that majority of the participants (79%) never donated blood. The reasons for non-donations were no one has ever asked to donate blood; lack of information on blood donation and its importance and don't know where to donate blood. Their doubts regarding blood donation should be clarified and they should be motivated to donate blood on regular basis.(8)

Major reason for blood donation is to a friend or relative. Percentage of people who know about their blood groups(65%) are higher than the people who know all the common blood groups(45%). Many people are aware of suitable age for blood donation(70%). Percentage of people who are aware of normal blood pressure is 32%, minimum haemoglobin level is 41% and common diseases transmitted through blood transfusion is 57%. Least number of people are aware of how often can an individual donate

blood(26%) and amount of blood collected during blood donation process. Majority of students are aware of these criteria –people with organ failure cannot donate blood(77%),pregnant women cannot donate blood(70%),menstruating women are strictly not allowed to donate blood(83%),person who consumed alcohol cannot donate blood(66%),people taking steroids or hormonal supplements cannot donate blood(29%) and people who are having permanent tattoos anywhere on their body cannot donate blood(21%).

CONCLUSION:

Present study concludes that students should lead from the front to donate blood regularly on voluntary basis and also to take all necessary steps for spreading awareness about the advantages of blood donation not only for the recipient but also for the donor himself could be a motivating factor. Making students aware of recent findings, like frequent and long-term blood donation is associated with a lower risk of cardiovascular events in donors can motivate them to be regular donors. This study will also create awareness on blood donations among the entire student's community. Such studies are needed to be carried out at all district levels across the Tamil Nadu to march towards 100% blood donation only on Voluntary basis in the Tamil Nadu State, which will be spread to other states in India.

REFERENCE:

- [1] Sojka BN. The blood-donation experience: perceived physical, psychological and social impact of blood donation on the donor. *Vox Sang.* 2003; 84: 120-128.
- [2] Olaiya MA, Ajala A, Olatunji RO. Knowledge, attitudes, beliefs and motivations towards blood donations among blood donors in Lagos, Nigeria. *Transfusion Medicine.* 2004; 14: 13-17. the correlates of donation intentions among young donors. *Transfusion.* 2005; 45: 945-955
- [3] Hupfer ME, Taylor DW, Letwin JA. Understanding Canadian student motivations and beliefs about giving blood. *Transfusion.* 2005;45: 149-161. AUTHORS First Author – Dr. S. Manikandan, MSc, PhD., 1Department of Physiology, Tagore Medical College and Hospital, Chennai, Tamil Nadu, India. Email: drsmanikandan@yahoo.com Second Author – Dr. R. Srikumar MSc, PhD., Department of Microbiology, Sri Lakshmi Narayana Institute of Medical Sciences, Pondicherry, India. Email:
- [4] Misje AH, Bosnes V, Heier HE. Gender differences in presentation rates, deferrals and return behaviour among Norwegian blood donors. *Vox Sang.* 2010;98 :e241-248.
- [5] World Health Organization Blood Transfusion Safety. e2008. Available from: http://www.who.int/bloodsafety/voluntary_donation/en/
- [6] NACO annual report- www.nacoonline.org/.../NACO%20Annual%20Report%202010-11.p
- [7] Zaller N, Nelson KE, Ness P, Wen G, Bai X, Shan H. Knowledge, attitude and practice survey regarding blood donation in a Northwestern Chinese city. *Transfus Med.* 2005; 15: 277-286
- [8] Lemmens KP, Abraham C, Hoekstra T, Ruiters RA, De Kort WL, Brug J, et al., Why don't young people volunteer to give blood? An investigation of the correlates of donation intentions among young donors. *Transfusion.* 2005; 45: 945-955.