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## **Original Research Article**

### **Awareness about Blood Donation among Medical Students in Manipur**

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**Abstract:** Awareness about blood donation especially among medical students is need of the hour, as blood is priceless and useful in many therapeutic and preventive aspects of medical treatment. Increase in the awareness level about blood donation will lead to its acceptance by the society which will be beneficial to all. The present study was undertaken to determine the awareness level about blood donation among medical students in RIMS, Imphal. A survey was conducted among 69 first year MBBS students admitted in Regional Institute of Medical Sciences, Imphal in the month of September, 2015 with the help of a preformed and pretested questionnaire which contained 25 questions. The study showed that most of them (92%) out of 69 students had never donated blood so far. Majority (76%) of them received the information about blood donation from social media like internet etc., while only (14%) got from books. Majority (97%) of them were aware about screening of blood and spread of HIV/AIDS and Hepatitis-B through blood donation. But a large proportion (40%) of them did not know about spread of malaria through it. Most of them (79%) did not know about professional blood donors and its ban in India. Majority (57%) of them were aware of World Blood Donor's Day. 42% of them knew that donated blood can be used for 3 months. Most of them (65%) suggested that there is need for conduct of awareness programmes, so that the misconceptions about blood donation are removed. The above study shows that the awareness level about blood donation among the students are quite high, In spite of lower rate of its acceptance. So, the students can be motivated and encouraged to donate blood through conduct of proper awareness programmes in the school and college levels.

**Keywords:** Blood donation, medical students, awareness, programmes

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#### **INTRODUCTION**

Blood transfusion saves lives and improves health, but many patients requiring transfusion do not have timely access to safe blood. Providing safe and adequate blood should be an integral part of every country's national health care policy and infrastructure. WHO recommends that all activities related to blood collection, testing, processing, storage and distribution be coordinated at the national level through effective organization and integrated blood supply networks. The median blood donation rate in high-income countries is 36.8 donations per 1000 population. This compares with 11.7 donations in middle-income countries and 3.9 donations in low-income countries [1].

Blood can save millions of life. The only source of blood is by blood donation. 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 [2]. 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 lowest among this group[1].

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 2009-10 showed a rapid decline in the number of donors throughout India [3].

According to 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[1]. 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 [4].

Therefore, the present study was aimed to study the knowledge, attitude and awareness about blood donation among medical students in RIMS, Imphal, Manipur.

**EXPERIMENTAL SECTION/MATERIAL AND METHODS**

It was a cross-sectional study done among sixty-nine(69) first year MBBS students in the month of September, 2015 in Regional Institute of Medical Sciences(RIMS), Imphal. A briefing was given regarding the aims and objectives of this study. A pretested and preformed questionnaire containing 25 questions was given to each of the students and they were asked to give their response as directed. The results were analyzed using Microsoft Excel 2007 database sheet and percentages were calculated.

**RESULTS AND DISCUSSION**

This study was conducted among 69 first year MBBS students of which majority were males (44).Most of them (57%) were aware of World Blood Donor’s Day. 63% of them knew that blood donation is necessary for emergency treatment, and majority (89%) of them knew that blood is stored in blood banks.

Table no.1 shows the knowledge of students about spread of diseases through blood donation. Majority (97%) of the students were aware of screening of blood as well as spread of HIV and Hepatitis-B through blood donation. But only a lesser percentage (60%) of students knew that malaria can also spread through blood donation.

**Table 1: Knowledge about spread of diseases through blood donation**

Questions	Yes	No	No idea
Should blood be screened for infection before donation?	67	01	01
Can HIV/AIDS spread through blood donation?	64	03	02
Can Hepatitis-B spread through blood donation?	62	03	04
Can Malaria spread through blood donation?	38	28	03

Table no. 2 describes the knowledge about professional blood donation. Majority (56%) did not have idea about professional blood donors, whereas

very few students knew about ban of professional blood donation in India presently.

**Table 2: Knowledge about professional blood donation**

Questions	Yes	No	No idea
Do you know about professional blood donors?	12	55	02
Is professional blood donation banned in India?	14	39	16

Table no.3 reveals the knowledge about benefits of blood donation where majority (82%) of students was aware about the medical benefits of blood

donation. Most of them said that blood donation is helpful for donors also and were not aware of adverse effects of it.

**Table 3: Knowledge about benefits of blood donation**

Questions	Yes	No	No idea
Does blood donation have any medical benefits?	57	06	06
Is blood donation helpful for donors also?	59	06	04
Does blood donation have any adverse effects?	15	51	03

Table no.4 reveals the concept about blood donation. Majority (86%) knew that blood cannot be donated weekly and an anemic person cannot donate

blood anytime. Most of them (91%) were of the view that consent should be taken before blood donation from the donor.

**Table 4: Concept about blood donation**

Questions	Yes	No	No idea
Can an anemic person donate blood?	06	60	03
Can you donate blood weekly?	10	56	03
Should consent be taken from blood donors?	63	02	04

The study showed that most of participants (92%) had never donated blood so far, which is almost comparable with studies among health professional students by Manikandan S *et al*[2](89.25%) and by Desai KN *et al*[5](78.7%). But it was far less among students in studies conducted by Kowsalya V *et al*[6](62.6%) and Giri PA *et al*[7](52.5%).

Majority (76%) of the students acquired the information about blood donation from social media like internet etc., while only few (14%) knew from books. This result is different with the result of a study by Dubey A *et al*[8] 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%). Majority (97%) of them were aware about screening of blood for transmissible infection before donation. Around 92% of them had idea about spread of major diseases like HIV/AIDS through blood donation which is more than that found in studies conducted by Patel P *et al*[9] (60%) and Kumari S *et al*[10](62.5%). Again, in the study by Patel P *et al*[9] around 95% of the study participants knew that hepatitis-B can also be transmitted through blood donation, which was almost similar (89%) in our study. Approximately 40% of participants of our study did not know about spread of malaria through it which is contrary to the result of a study by Patel P *et al*[9] where almost everybody were aware of it.

Most of them (56%) did not know about professional blood donors and its ban in India which was almost similar with the study (49.34%) by Kumari S[10]. 42% of them knew that donated blood can be used for 3 months which is less than the results in studies by Patel P *et al*[9] (45.7%) and Vasisht S *et al*[11] (53.14%). In our study, 82% of the students believed that blood donation have medical benefits, whereas this percentage was quite high in the study by Giri PA *et al*[7](92%). Another study by Abdul Majeed[12] found that 88.5% of the participants believed that blood donation is beneficial to the donor. 68% of the students in the study by Kumari S *et al*[10] had knowledge that blood donation has medical benefits. Most of them (65%) suggested that there is need for conduction of awareness programmes, so that the misconceptions about blood donation can be removed.

## CONCLUSION

It may be concluded that regular awareness programmes on various aspects of blood donation need to be conducted in various levels of schools and colleges, so that the needy persons can be given the life-saving blood at the appropriate time.

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