



A STUDY ON MEDICAL STUDENT'S PERCEPTION TOWARDS BLOOD DONATION

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ABSTRACT

Safe blood transfusion is an important component in improving health care and prevention of the spread of infectious diseases worldwide. Each year, millions of lives are saved through blood transfusion, yet the quality and safety of blood transfusion are still the interest especially in the developing countries. The World Health Organization (WHO) estimates that blood donation by 1% of the total population is generally the minimum needed to meet a nation's most basic blood requirements.

The present study was conducted to-assess the knowledge, attitude, and practices regarding blood donation among adult medical students at a medical college hospital and-identify the factors affecting blood donation preferences among these students by using a self administered questionnaire.

The study involved 300 medical students Of the study population, 39.7% were males and 60.3% were females. Their mean age was 21.6±1.0 years. Out of 300 respondents, 102 (34%) were non-donors and only 198 (66%) were previous donors.

The main reason for donation is moral satisfaction and non donation is fear of infection in the present study.

In order to reduce the fear in the medical students regarding blood transfusion: Information, Education & communication activities in the form of periodic awareness program should be done and these students should be involved in blood donation camp. The female students have adequate knowledge but the practice of donating blood is low. They should be encouraged regarding the same.

KEYWORDS : Blood donation, medical students, infection

INTRODUCTION:

Safe blood transfusion is an important component in improving health care and prevention of the spread of infectious diseases worldwide. Each year, millions of lives are saved through blood transfusion, yet the quality and safety of blood transfusion are still the interest especially in the developing countries.[1,2] The World Health Organization (WHO) estimates that blood donation by 1% of the total population is generally the minimum needed to meet a nation's most basic blood requirements.[3]

As most of the population is eligible for blood donation, abundant availability of blood is possible and expected. Yet, a permanent shortage of blood remains,[4] because only a small proportion of eligible people donate in developed and even fewer in developing countries.[5] Despite the fact that the need for safe blood is increasing at global level, only 1% donation rate is reported in 82 countries. The WHO recommends that countries should aim at securing 100% blood donation from young people and on non-remunerated voluntary basis.[3]

Availability of safe blood is an increasing need particularly for those who keep up serious traumas whether accidental or surgical in nature and those who are exposed to civil conflicts and military operations. In addition, some patients suffer severe anaemia due to various reasons and may need blood transfusion. or surgical in nature and those who are exposed to civil conflicts and military operations. In addition, some patients suffer severe anaemia due to various reasons and may need blood transfusion.[6]

Adequate supply of safe blood can only be ensured through regular donations by voluntary blood donation [7,8]. Understanding blood donors motivations are crucial to improve the effectiveness of donor recruitment and retention programme. One of the WHO's integral strategy advocates that the blood donation has to be from low-risk populations to promote blood safety and minimize risks. There are few studies done in the community , where the awareness about blood donation needed to be strengthened and assessment of awareness, attitude and practice regarding blood donation will help in creating effective health education strategy to enhance blood donation. Thus, the present study was conducted to assess the knowledge, attitudes and practice regarding blood donation among medical students of a medical college.

Based on the literature review, it can be stated that both developed and developing countries have problems with the unpaid blood donation system. Young people are the most probable blood donors in every

society and students compose a large portion of them.[9] Increase in the level of awareness and positive attitude towards blood donation is the highest priority of all blood transfusion centers. The initial step for achieving this goal is to perform comprehensive studies measuring the current situation of awareness, knowledge, beliefs, and attitude of the population towards blood donation.[10]

Young, healthy and physically fit young students are potential sources for safe and high quality blood. In order to target this population, it is important to evaluate their knowledge and attitude towards blood donation. Medical students are being in the field of health care and supposed to be more aware about the role of blood in saving life of patients than non-medical students, but does this hypothesis make them differ in their knowledge and attitude toward voluntary blood donation. There are no published studies about the level of knowledge and factors affecting knowledge and attitude towards blood donation among medical students. To fill this gap in information, this study was done to explore the knowledge and attitudes towards blood donation among medical students in NRI medical college, sangivalasa.

AIMS & OBJECTIVES:

The present study was conducted to-assess the knowledge, attitude, and practices regarding blood donation among adult medical students at a medical college hospital and-identify the factors affecting blood donation preferences among these students.

MATERIALS AND METHODS:

The present study was cross-sectional in nature conducted upon 300 MBBS students during august-october 2021 at a medical college of sangivalasa. A pre-designed, questionnaire was administered to these students. It included questions related to demographic factors, knowledge regarding blood donation, attitude towards the same, practice of donations and factors related to it. The reasons for donation and non donation were enumerated. The completely filled in questionnaires were analysed for results.

RESULTS:

The study involved 300 medical students Of the study population, 39.7% were males and 60.3% were females. Their mean age was 21.6±1.0 years. Out of 300 respondents, 102 (34%) were non-donors and only 198 (66%) were previous donors. Out of the 198 students who reported a history of blood donation, 100 (50.5%) donated once, 80 (40.4%) donate twice, and only 18 (9.09%) donated three times or more .(figure 1)

The majority of the students (60.6%) reported that moral satisfaction

was the main cause of donation.

While the main cause of non-donation reported by the students was fear of infection (47.05%). [table 2]

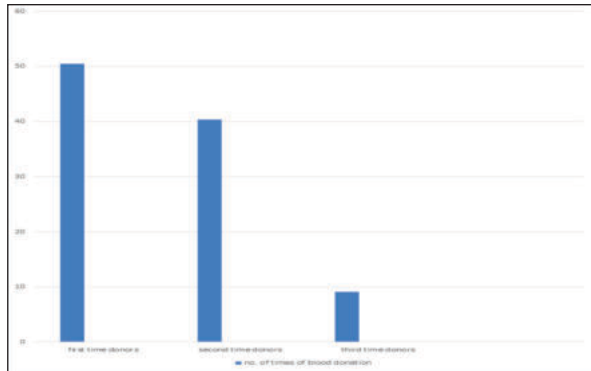


Figure 1

Fear of drawing blood and health problems, form 15.68% and 9.8% of the reasons for non-donating respectively. There was no statistical association between gender, age and level of knowledge.

Students of the study have shown good level of knowledge in items of blood volume that to be donated each time, the time interval between two successive donations, suitable age for blood donation, and minimum weight for blood donation.

Positive attitude towards blood donation was observed among 66% of the studied students (198 students out of 300). (figure 2) Most of the students of the the study reported that blood donation is a good habit and there is no need for incentives to those who donate blood. In addition, they intended to donate if there is an emergency or a need for blood donation [Table 1].

Table 1

Sl no:	Causes for donation:	No of participants (198)
1	Moral satisfaction	120 (60.6%)
2	Relatives in emergency	20 (10.1%)
3	In a blood camp	50 (25.25%)
4	Multiple reasons	8 (4.04%)

Table 2:

Sl no:	Reasons for non-donation	Number(percentage)- 102
1	Fear of drawing blood	16 (15.68%)
2	Fear of infections	48 (47.05%)
3	Fear of side effects	5 (4.9%)
4	Fear of sight of blood	-
5	Lack of knowledge	10 (9.8%)
6	Medical reasons	10 (9.8%)
7	Multiple reasons	13 (12.74%)

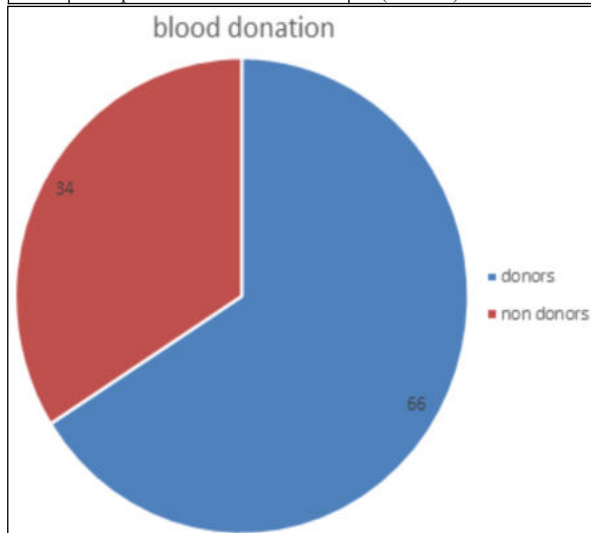


Figure 2

DISCUSSION:

Motivation among young doctors like interns and undergraduate students will add up to the pool of safe blood from low risk populations. 39.7% of the medical students had adequate knowledge about donor eligibility and safety aspects of voluntary blood donation in the present study. A study in a tertiary institution in Nigeria by Salaudeen AG et al [16] reported that 64.8% had good knowledge about blood donation. Ahmad Nadeem Aslani et al, Ponnari et al, Desai et al and Manikandan et al in different parts of the country have reported 35%, 26%, 37.3% and 35.65% respectively having adequate knowledge among the young health professionals [7,9,13,14].

In our study, 69.9% of the students knew the correct age limit for donating blood. A study conducted by Chopra D et al [12] found similar results. Another study conducted by Manikandan et al among medical professionals observed lower proportion of having correct knowledge about the age limit [14]Shahshahani et al conducted study among the general population who are voluntary donors and also reported similar results as reported by our study. Chopra D et al and Ahmad Nadeem Aslani et al found that 49.8% and 45% of the medical professionals had correct knowledge about the interval between two blood donations respectively [12]. The correct knowledge about the interval was low among our study participants.

In our study, 66% of the students had donated blood in the past. A study conducted by Desai et al in Gujarat reported a higher proportion of medical professionals not donating blood in the past (78.7%) [9].

Study conducted by Salaudeen AG et al (15.3%) reported lower proportion of the people who had donated blood in the past [16]. The practice of blood donation was significantly higher among males when compared to females in our study. Similar results were reported by Chopra et al [12]. This significant difference might be due to the fact in Indian scenario including even the medical professionals; females are more anaemic than males.

The participants reported that moral responsibility or need of relatives or friends for blood were the reasons for blood donation. The need of receiving money or an incentive for blood donation is low in this study. Studies in different countries also concluded that people donate blood for humanity reasons.17,18

Not being asked to donate, never thought about blood donation, health issue, fear of drawing blood, and fear of contracting infection were the main reasons for nondonating blood. A result, which is in agreement with that of other researches.19,20

This study had some limitations. First; the sampling was a purposive non-probability one and was limited to one college only, therefore precaution should be considered in generalizing the results. Second, information was self-reported. Hence, reporting bias cannot be excluded.

CONCLUSION:

The main reason for donation is moral satisfaction and non donation is fear of infection in the present study.

In order to reduce the fear in the medical students regarding blood transfusion: Information, Education & communication activities in the form of periodic awareness program should be done and these students should be involved in blood donation camp. The female students have adequate knowledge but the practice of donating blood is low. They should be encouraged regarding the same.

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