

Study on attitude of medical students towards voluntary blood donation and associated practice in a medical college hospital

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Abstract

Background: Safe blood is a critical component in improving health care. The present study was done to assess the knowledge, attitude and practice with regard to voluntary blood donation among medical students, thereby aiding in appropriate measures to tackle the paucity of blood donors. **Methods:** A cross-sectional study was conducted among 234 medical students who were provided with a pre-designed, self-administered questionnaire. **Results:** A total of 234 medical students participated in the study. 74(31.7%) were 1st year MBBS students and 160 (68.3%) were 2nd and 3rd year MBBS students. 63 (26.9%) of the students had donated blood earlier. The main reasons cited by those who had not donated blood were fear of weakness / side-effects (40.8%), willing to donate for friends and family only (31.6%) and advise by guardian/ others against blood donation (27.6%). **Conclusions:** Knowledge, attitude and practice towards voluntary blood donation are disappointing for a population of medical students. Appropriate measures need to be taken to abolish myths and clear misconceptions regarding voluntary blood donation.

Key Words: attitude, blood donation, knowledge, students, voluntary

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Introduction

Blood is a specialized body fluid which performs many important functions within the body. Blood transfusion plays a vital role in saving the life of those patients requiring transfusion. Fear, misconception and ignorance about blood donations and lack of voluntary organizations working for blood donation are major problems in developing countries to facilitate voluntary blood donation. There is estimated shortfall of 3 to 4 million units of blood units annually in India. So, more awareness must be created among society on importance of blood donation [1]. Most of the blood components used for transfusions have a short shelf life. Maintaining a constant supply is a challenge. The need for blood transfusion may occur at any time and the unavailability of blood has led to deaths and ill- health. There is a marked difference in the level of access to safe blood between high- and low-income countries. There is an inadequate supply of safe blood, and blood services face the challenge of making sufficient blood available, while also ensuring its quality and safety. [2].

Adequate supply of safe blood can only be ensured through regular donations by voluntary blood donation [3]. Understanding blood donors motivations are crucial to improve the effectiveness of donor recruitment and retention programmes [4]. 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. [5-6] There are few studies done in the community [7-16], 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.

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 234 MBBS students during March – May 2019 at a medical college of Bihar. A pre-designed, pre-tested 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 range of knowledge was between 0 to 15. Correct responses were given a score of "1" while incorrect responses were given "0." Five point Likert scale was used for assessing attitude. Higher score indicated positive attitude towards blood donation. Data was entered in MS Excel 2007 and was analysed using Statistical Package of Social Sciences (SPSS) v 20. P value ≤ 0.05 was considered to be statistically significant.

Results

A total of 234 medical students were included in the present study. 74(31.7%) were 1st year MBBS students and 160 (68.3%) were 2nd and 3rd year MBBS students. The age of the students ranged from 18 to 21 years. All students had attained the minimum age limit for blood donating blood. 132(56.2%) were females and 102 were males (43.6%). A total of 77 (32.9%) strongly disagreed and 120 (51.3%) disagreed that people who donate blood are at risk of other diseases.

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A total of 28(12%) commented that if they donated blood, they would get free investigations. 63 (26.9%) of the students had donated blood earlier. 73.1% of those who have donated blood, donated it during blood camp organised by medicos. Others donated as part of replacement. 39.7% of the students had adequate knowledge regarding blood donation. Friends and family (41.8%), the internet (43.6%) and study curriculum (15.6%) were the main sources of

information regarding blood donation. Blood was donated for unknown persons (73.1%), followed by family (17.4%) and friends (9.5%). The main reasons cited by those who had not donated blood were fear of weakness / side-effects (40.8%), willing to donate for friends and family only (31.6%) and advise by guardian/ others against blood donation (27.6%) .

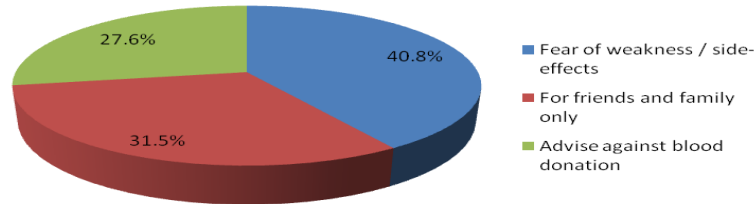


Fig 1: Reasons for not donating blood

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 [7,9,13,15].

In our study, 79.9% of the students knew the correct age limit for donating blood. A study conducted by Chopra D et al [8] found similar results. Another study conducted by Manikandan et al among medical professionals observed lower proportion of having correct knowledge about the age limit [13]. Shahshahani et al conducted study among the general population who are voluntary donors and also reported similar results as reported by our study [11]. 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 [7,8]. The correct knowledge about the interval was low among our study participants.

In our study, 26.9% 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 [8]. This significant difference might be due to the fact in Indian scenario including even the medical professionals; females are more anaemic than males.

Conclusion

It was seen in the present study that the medical students did not have correct knowledge regarding voluntary blood donation. 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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Ethical approval

The study was approved by the Institutional Ethics Committee

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