



TO STUDY THE EFFECT OF MOTIVATIONAL LECTURES ON VOLUNTARY BLOOD DONATIONS AMONG YOUNG BLOOD DONORS.

Dr. Rishiraj Sinha

MD, Senior Resident, Department of Transfusion Medicine, All India Institute of Medical Sciences, New Delhi (AIIMS), India.

Dr. Pratul Sinha*

MD, Additional Professor, Department of Transfusion Medicine, All India Institute of Medical Sciences, Bhopal (AIIMS), India.

Dr. Vilasini Patil

MD, Assistant Professor, Department of Transfusion Medicine, All India Institute of Medical Sciences, Bhopal (AIIMS), India.

ABSTRACT

Background: Voluntary blood donation is vital for maintaining a safe and adequate blood supply, especially in developing countries. However, recruiting and retaining young blood donors remains challenging despite their importance in ensuring a sustainable blood supply. Motivational speeches serve as a powerful tool to educate, dispel myths, and emphasize the benefits of blood donation for both individuals and society. This study aims to evaluate the impact of motivational talks on encouraging young people to donate blood voluntarily. By understanding how such interventions influence donor behavior, strategies can be developed to enhance youth engagement and ensure a steady and safe blood supply in the future. **Aims:** The study aimed to evaluate the importance of motivational lectures on voluntary blood donation among young individuals, particularly those nearing their 18th birthday. The focus was to see if lectures given in the year before their 18th birthday, followed by a reminder on their birthday, would increase blood donation. **Materials & Methods:** This community-based prospective study was conducted from November 2020 to May 2022 at a tertiary care center in Central India, focusing on high school students aged 16-18 years. Motivational lectures on blood donation were delivered both online and offline due to COVID-19 restrictions. Follow-up was conducted through communication platforms to assess students' intentions and experiences with blood donation after achieving the eligibility age of 18 years. **Results:** A total of 569 students participated, with 52.5% (299) attending online and 47.4% (270) attending offline lectures. While 62.65% expressed intent to donate after the lectures, this dropped to 54.54% at the three-month follow-up, with no donations during the study. Key barriers included the need for parental consent (increased from 6.02% to 11%) and health concerns (10.1%). **Conclusion:** Motivational lectures help to improve students' attitudes toward blood donation. However, these lectures alone do not significantly increase donations. Parental involvement should be added to these programs to make them more effective. Similar programs should be evaluated in the first year of higher education for greater exposure to blood donation.

KEYWORDS : Voluntary blood donation, Young Donors, Motivational Lectures, Parental involvement

INTRODUCTION:

Voluntary blood donation plays an essential role in ensuring a safe and sufficient blood supply, especially in developing countries. Voluntary donors are considered the safest group, as their motivations stem from altruism and a desire to help others. Despite this, recruiting and retaining such donors remains a significant challenge.

A consistent and adequate blood inventory is essential for effective transfusion services, which depends on the number of donations received in the blood center. However, the chronic worldwide shortage of blood for transfusion has emerged as a significant public health issue. These shortages result from an imbalance between the growing demand for safe blood and the insufficient organization of regular blood supply. Misconceptions and a lack of motivation among potential donors exacerbate the problem.

Targeted awareness programs, particularly those aimed at younger populations, hold immense potential to increase participation in blood donation. College students are an important demographic group and can substantially contribute to the blood supply. Introducing the importance of blood donation to students at an early age, such as in schools and colleges, can help develop long-term habits of regular blood donation.

Barriers such as inadequate knowledge, misconceptions, fears, and negative attitudes are frequently cited reasons for low participation rates among students in blood donation camps. Addressing these barriers through targeted education and outreach initiatives can help overcome these challenges and improve blood donation rates.

Based on these insights, the present study aimed to assess

how motivational lectures can influence young donors' willingness to donate blood and provide ideas to encourage more voluntary donations.

MATERIALS AND METHODS

This community-based prospective study was conducted in the Department of Transfusion Medicine and Blood Bank at a Tertiary care Centre in Central India from November 2020 to May 2022, following approval from the Institutional Human Ethics Committee. Motivational lectures were used as an intervention in secondary schools to promote awareness of blood donation.

The study population comprised final-year (Class 12th) high school students aged 16-18 years from secondary schools in the provinces of the Tertiary care Centre. Permissions were obtained from the school Principals to conduct motivational lectures for blood donation. Due to the ongoing COVID-19 pandemic and subsequent lockdowns during the study period, many schools were closed. As a result, motivational lectures were conducted in online and offline modes. The lectures were structured as both didactic and interactive, lasting 15-20 minutes each. Consent was obtained from students and their parents/guardians as per the approved research protocol.

Platforms such as Zoom and Google Classroom were used for online lectures, and a Google Form link was shared with students after the lecture to record their responses. Survey sheets were distributed in offline classes to collect data. Queries raised by students were promptly addressed. Students above 18 years of age were excluded.

The students were later contacted on their 18th birthday through their preferred communication modes, including

phone calls, SMS, WhatsApp, or email. They were informed about their eligibility for blood donation and asked about their plans to donate blood. A follow-up reminder was sent three months after their 18th birthday to inquire about their blood donation experiences and future plans.

All data collected during the study were stored in password-protected files, and confidentiality was maintained throughout the study period.

RESULTS

A total of 9 schools were approached, and 36 motivational lectures were conducted, out of which 12 lectures were held offline, while the remaining 24 were conducted online. Each session included 20–30 students. A total of 569 students attended the lectures, with 299 joining online and 270 attending offline sessions.

After applying inclusion and exclusion criteria, 569 students were included in the study. Among them, 257 (45.2%) were male, and 312 (54.8%) were female.

Mode of Communication

Students were contacted on their 18th birthday through their preferred mode of communication, with 270 (47.4%) opting for phone calls or WhatsApp messages and 299 (52.6%) choosing email.

Initial Responses

A significant non-response rate of 52.6% (122 students) was observed among those contacted via email.

The student's responses received among those who responded after the first contact on their 18th birthday were categorized as follows:

Table 1.: Initial Responses Of Students

Response Category	Count	Percentage
Plan to donate soon	280	62.65%
No plans for donation	70	15.66%
Health issues	54	12.04%
Parental consent required	27	6.02%
Out of station	16	3.61%

Responses to Reminder Calls

A second reminder call was given three months after the students' 18th birthday. The responses were as follows:

Table 2: Responses To Second Reminder

Response Category	Count	Percentage
Plan to donate soon	243	54.54%
Parental consent required	50	11.1%
Health issues	45	10.1%
No plans for donation	32	7.07%
Fear of infection	23	5.05%
Donate only to relatives	23	5.05%
Will donate when needed	18	4.04%
Out of station	13	3.03%

Comparison Of Responses

A comparison of responses to these reminder calls is mentioned in the table below.

Response	Reminder on 18 th birthday	Reminder three months after the 18 th Birthday
Will come soon for donation	62.65	54.54
No plan for blood donation	15.66	7.07
Health issues	12.04	10.10
Required parents' consent	6.02	11.1

Out of station	3.61	3.03
Fear of getting infected	0.0	5.05
Interested in donating to known relatives	0.0	5.05
Will donate when needed	0.0	4.04

Awareness Assessment

Responses to awareness questions asked after the lectures for levels of understanding among students were as below:

Table3: Awareness Of Blood Donation Requirements

Parameter	Correct Responses	Percentage
Minimum age (18 years)	543	95.5%
Minimum weight (45 kg)	306	53.8%
Hemoglobin threshold (12.5)	353	62.1%

Table4: Preferred Donation Locations

Location	Count	Percentage
Blood bank donation	491	86.4%
Hospitals	60	10.6%
Health centers	17	3.0%

Table 5: Family History And Motivation For Donation

Parameter	Count	Percentage
Family blood transfusion history	373	65.6%
Parent/sibling blood donors	423	74.4%
Motivation: Save lives	556	97.7%
Motivation: Save relatives	13	2.3%

DISCUSSION

Voluntary blood donation is critical for maintaining a safe and adequate blood supply, particularly in healthcare settings where shortages often arise due to an imbalance between growing demand and irregular blood supply. To address this issue, blood collection centers must implement effective campaigns to recruit and retain an active donor base. Educational programs and motivational lectures targeting young individuals have shown promise in raising awareness and promoting the importance of blood donation.

The present study focused on the impact of motivational lectures on high school students aged 16–18 years. This age group represents an ideal target demographic as they are nearing eligibility to donate, face fewer health-related deferrals, and have the potential to become long-term donors. Understanding their motivations and barriers is crucial for developing effective recruitment strategies.

The motivational sessions engaged 569 students. However, their willingness to donate blood decreased from 62.65% immediately after the sessions to 54.54% at the second follow-up. Despite raising awareness, none of the students donated blood during the study period, suggesting a gap between intention and action.

Several barriers to blood donation were identified in the study. One significant barrier was parental consent, initially reported by 6.02% of students but rising to 11% at the second follow-up. Concerns about the COVID-19 pandemic and academic pressures for final-year students likely contributed to this hesitation. This highlights the importance of parental encouragement and support in motivating young donors. A supportive and motivational attitude from these family members could have played an essential role in encouraging these students to become voluntary blood donors, thereby increasing the rate of voluntary donations. Counseling parents about the importance and safety of blood donation is equally needed. The study by Anne Wilkinson (2016) reported that 4.1% of youth did not donate blood due to a lack of family support, reflecting a broader unawareness among both youth

and elders. Alessandrini M (2007) also emphasized that parental involvement in social activities and positive attitudes toward blood donation significantly influence young donors. Therefore, raising awareness among families is essential to encourage youth participation in blood donation.

Health-related concerns were reported by 12.04% of students initially, decreasing to 10.1% at the second follow-up. Additionally, 5.05% also expressed fear of infections, emphasizing the need for better education on the safety of blood donation.

Directed donations were another barrier, with 9.09% of students stating they would donate only to relatives or in emergencies. This indicates a limited understanding of the importance of regular, voluntary blood donations and highlights the need for repeated engagement to change this perception. A decline in motivation from 62.65% to 54.54% also reflects the necessity of sustained motivational efforts, such as regular follow-ups and interactive initiatives, to maintain interest and convert intent into action.

A self-administered questionnaire was used to assess the students' basic knowledge of blood donation. The analysis showed that while 95.5% of students were aware of the minimum age requirement, only 53.8% knew the weight criteria, and 62.1% were familiar with the hemoglobin requirements for donation. This highlights the need to emphasize key eligibility criteria in motivational lectures for young donors.

Our analysis revealed that 65.6% of students had relatives who had received blood transfusions, and 74.4% had parents or siblings who had donated blood. This indicates that most students were aware of the need for blood transfusions and had family members with blood donation experience. Sharing experiences from parents as regular donors can also help reduce misconceptions and build confidence in students.

Limitations Of The Study

1. The COVID-19 pandemic disrupted regular school activities, significantly reducing the number of in-person motivational sessions and limiting outreach efforts. While online lectures were conducted, it was challenging to reach all students.
2. The Follow-up reminder for willingness and intent was over a very short period of time. a longer follow-up could show lasting motivation and actual donations.

CONCLUSION

Motivational lectures can raise awareness, but additional efforts are required to transform willingness into action. Barriers such as parental consent, health fears, and knowledge gaps must be addressed. Parental attitudes play a significant role; counseling parents, involving them in awareness programs, and addressing their concerns can help reduce consent-related barriers. Interactive workshops, peer-led campaigns, and integrating blood donation education into school curricula can further enhance awareness and sustain motivation among young donors.

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