

## SHORT ARTICLE

# Effect of Educational Intervention on Awareness and Attitude regarding Voluntary Blood Donation among Rural People: A Quasi- Experimental Study

Palak Goyal, Amit Kumar, Huma Khan, Ravi Kumar

Department of Community Medicine, Shri Ram Murti Smarak Institute of Medical Sciences, Bareilly, Uttar Pradesh

### CORRESPONDING AUTHOR

Mr. Ravi Kumar, Department of Community Medicine, Shri Ram Murti Smarak Institute of Medical Sciences, Bareilly, Uttar Pradesh 243202

Email: [srmsimsravi@gmail.com](mailto:srmsimsravi@gmail.com)

### CITATION

Goyal P, Kumar A, Khan H, Kumar R. Effect of Educational Intervention on Awareness and Attitude regarding Voluntary Blood Donation among Rural People: A Quasi- Experimental Study. Indian J Comm Health. 2023;35(4):526-528. <https://doi.org/10.47203/IJCH.2023.v35i04.021>

### ARTICLE CYCLE

Received: 30/04/2023; Accepted: 12/11/2023; Published: 31/12/2023

*This work is licensed under a Creative Commons Attribution 4.0 International License.*

©The Author(s). 2023 Open Access

### ABSTRACT

Donation of blood has always been considered as Humanitarian act. Despite the increasing demands for blood and its products, many people have little interest in donating blood. We undertook this study to assess the level of knowledge & attitude and to assess the effect of awareness talk regarding voluntary blood donation among rural people. Information from attendants of the patients visiting the Telemedicine Centre was collected using the Predesigned Pretested Semi open ended Interview Schedule. Out of 108 study subjects, 83 (76.8%) of study subjects didn't know their blood group. 52 (48.1%) said women cannot donate blood while they are pregnant or lactating. After the awareness talk, 78 (72.2%) were motivated for voluntary blood donation. There should be more awareness activities to promote voluntary blood donation in public.

### KEYWORDS

Voluntary Blood Donation; Barriers to Blood Donation; Effect of Health Education

### INTRODUCTION

Blood and blood products are a unique and precious resource.(1)It can give someone a second chance to live. Voluntary blood donors are the one who donate their blood purely for altruistic reasons.(2) Intensive awareness programs are important for donor knowledge, motivation and recruitment. Thus, raising awareness and creating an enthusiasm in people for such a noble cause. Many people in India are faced with ignorance, misperceptions and fears about the blood donation process.(3)

Therefore, this study was conducted to assess the level of knowledge and attitude regarding voluntary blood donation among rural people and to assess the effect of awareness talk regarding voluntary blood donation.

A cross-sectional study was conducted on Telemedicine Centre of village Bhairpura of District Bareilly, Uttar Pradesh on patient's attendants visiting Telemedicine Centre of more than 18 years of age giving consent from 20<sup>th</sup> August 2022 to 30<sup>th</sup> August 2022. Sample Size was calculated using prevalence of 79.5 %

based on the study of Agrawal et al(4) which came out to be 108. Non probabilistic Universal Sampling method was employed because of limitation of time. Interviewer was sensitized and trained. Information from each participant was collected maintaining full confidentiality using the Predesigned Pretested Semi open ended in person Interview Schedule before and 2 hours after a brief awareness talk about Voluntary Blood Donation in the waiting area. The research was approved Ethically from the Institute Ethical Committee. To enter and analyze the data, MS-Excel 2007 was used. Percentages were calculated and Wilcoxon Signed Ranks Test was applied for statistical analysis.



In the study conducted, total number of study subjects were 108 out of which 64 (59.2%) were males and 44 (40.7%) were females. Maximum study subjects belonged to the age group of 31-40 years. 67(62.0%) of study participants were Muslim and 91 (84.2%) were married. Majority of respondents belonged to socioeconomic class IV i.e. 55 (50.9%). 83 (76.8%) respondents didn't know their blood group.

**Table 1: Effect of Awareness talk on knowledge about Blood Donation (Wilcoxon Signed Rank Test**

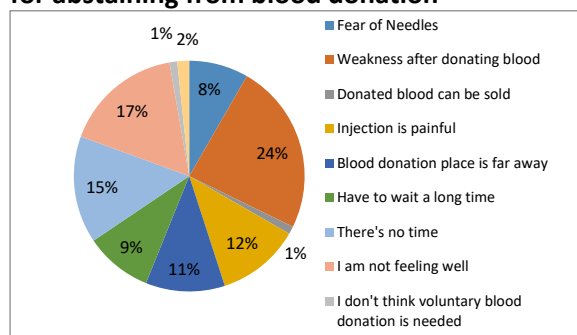
Ranks	N	Mean Rank	Sum of Ranks
Post - Pre	0a	.00	.00
Negative Ranks	107b	54.00	5778.00
Positive Ranks	1c		
Ties			
Total			
Post knowledge < Pre knowledge			
Post knowledge > Pre knowledge			
Post knowledge = Pre knowledge			
Test Statisticsa			
Z		Post - Pre	
Asymp. Sig. (2-tailed)		-9.020b	
Wilcoxon Signed Ranks Test		.000	
Based on negative ranks.			

Before conducting a awareness talk, while assessing the knowledge, it was observed that only 6.4% of the total study participants knew about the time after which a person can donate blood again and 30.5% knew about the age at which people can start donating blood. Only 6.4% people knew regarding the minimum required Haemoglobin levels and 14.8% knew minimum required weight. 62% of respondents said women can donate blood and 48.1% said pregnant or lactating women cannot donate blood. 29.6% said diabetics can donate blood and 45.3% did not know whether person suffering from Malaria can or cannot donate blood. After giving a awareness talk knowledge of the respondents improved to a great extent. The effect of Awareness talk on knowledge about Blood Donation is came out to be statistically Significant (P=0.000) (Table 1). After the awareness talk, 63.8% respondents strongly agreed that voluntary blood donation is important which was 35.% before the awareness talk. 8.3% of the respondents strongly agreed that blood donation should be done regularly which was 6.0% before the awareness talk.

Most of the people were not practicing blood donations when asked before starting awareness talk. Their practices in aspects of voluntary blood donation is assessed and it was observed that, before the awareness talk, 47 (43.5%) respondents said they would like to donate blood and out of them, only 17(36.1%) said they would donate blood to family members or relatives only. After the

awareness talk 78 (72.2%) people said they would like to donate blood and out of them, 51(65.3%) said that they would donate blood to family member, relatives as well as strangers. Respondents who would not like to donate blood gave various reasons. These respondents were counseled and the effect of counseling and health was seen in results as shown in Figure 1.

**Figure 1: A pie chart illustrating the causes for abstaining from blood donation**



As per my current study, it was observed that, before the awareness talk, 47 (43.5%) respondents said they would like to donate blood which is in contrast to the study done by Samreen S et al(5) and Mirza H et al.(6) After the awareness talk 78 (72.2%) people in my study said they would like to donate blood. However a study conducted by Chauhan R et al(7) before and after organizing an interactive awareness session concluded the increase in overall willingness from 9.15 to 97.5%. Most of their subjects cited the reason of feeling weakness if they donate blood. 24.5% said they have fear of needles which stops them from donating blood. A Study done by Aslami AN et al,(8) non availability of any opportunity came out to be the most common cause for not donating blood.

Blood donation is considered as selfless act of pure charity to mankind. For patients whose lives or wellness depend on blood transfusion, blood transfusion services must simultaneously provide an adequate supply of blood and blood products. Our study concludes that awareness activities are an important tool to improve the perception about voluntary blood donation. To improve the perception about voluntary blood donation, awareness activities can be an effective tool. Consider organizing awareness talks or workshops in rural areas, where the fear surrounding blood donation is often prevalent. These activities can provide an opportunity for common people to ask questions and address any concerns they may have about voluntary blood donation. By fostering an environment of open dialogue and education, awareness activities can greatly contribute to increasing the number of voluntary blood donors. The limitation of this study was the small sample

size which was due to scarcity of resources including time but the results showed a significant increase in the number of participants willing to donate blood after the talk. This highlights the importance of educating the public about the benefits of voluntary blood donation and dispelling common myths and misconceptions associated with it. Overall, this study reinforces the importance of promoting voluntary blood donation and emphasizes the need for informative talks and education to increase public awareness and participation.

#### ACKNOWLEDGEMENT

The authors express their gratitude to the attendants of the patients who took part in this study. They also acknowledge the valuable contribution of the healthcare workers and staff at the telemedicine center for their unwavering support throughout the study.

#### REFERENCES

- Jain J, Dixit M. A cross-sectional study among community on knowledge, attitude and practice about blood donation in Udaipur city of Rajasthan, India. *Int J Community Med Public Health*. 2016;952–6.
- Universal access to safe blood transfusion [Internet]. Who.int. [cited 2023 Apr 24]. Available from: [https://apps.who.int/iris/bitstream/handle/10665/69747/WHO\\_EHT\\_08.03\\_eng.pdf](https://apps.who.int/iris/bitstream/handle/10665/69747/WHO_EHT_08.03_eng.pdf)
- Dubey A, Sonker A, Chaurasia R, Chaudhary R. Knowledge, attitude & beliefs of people in North India regarding blood donation. *Blood Transfus*. 2012;20:1–7.
- Agrawal A, Tiwari AK, Ahuja A, Kalra R. Knowledge, attitude and practices of people towards voluntary blood donation in Uttarakhand. *Asian J Transfus Sci*. 2013;7(1):59–62.
- Samreen S, Sales I, Bawazeer G, Wajid S, Mahmoud MA, Aljohani MA. Assessment of beliefs, behaviors, and opinions about blood donation in Telangana, India-A cross sectional community-based study. *Front Public Health*. 2021;9:785568.
- Mirza H, Khan F, Naeem FJ, Ashraf B. Blood Safety and Donation Knowledge, Attitude and Practice (KAP) among 1st Year Medical Students at LMDC. *Pak J Med Health Sci*. 2015;9(3):992–4.
- Chauhan R, Kumar R, Thakur S. A study to assess the knowledge, attitude, and practices about blood donation among medical students of a medical college in North India. *J Family Med Prim Care*. 2018;7(4):693–7.
- Aslami AN, Jobby A, Simon S, Nazarudeen N, Raj P, Ramees M, et al. Assessment of knowledge, attitude and practice (Kap) of blood donation among mbbs students of a medical college in kollam, Kerala. *J Evol Med Dent Sci*. 2015;4(35):6086–95.