



A study to assess the effectiveness of planned teaching programme on knowledge regarding blood donation in selected urban areas of Buldana

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Abstract

A study to assess the effectiveness of planned teaching programme on knowledge regarding blood donation in selected urban areas of Buldana.

Objectives

1. Assess the knowledge, attitude and practice of undergraduate students regarding blood donation.
2. Find association between socio-demographic factors which affect the knowledge, attitude and practice of blood donation.
3. Develop an instructional CD- Rom regarding blood and blood donation.

Methodology: The conceptual framework used for this study was based on modified Nola J. Pender health promotion model. The study was conducted on a sample of 30 peoples of urban area of Buldana. Non-probability convenient sampling technique was used for selecting samples. In the present study one group pretest posttest research design was adopted. The tool used for data collection was structured knowledge questionnaire. The data was collected, tabulated and analyzed by using descriptive and inferential statistics. The level of significance was at 0.05 levels.

Results: The study revealed that majority 38(76%) had an average knowledge, 9(18%) had poor knowledge and only 3(6%) had good knowledge regarding varicose veins.

Keywords: Blood donation, planned teaching program, knowledge.

Introduction

The primary responsibility of a blood transfusion service is to provide a safe, sufficient and timely supply of blood and blood products. In fulfilling this responsibility, the BTS should ensure that the act of blood donation is safe and causes no harm to the donor [3, 5, 8]. It should build and maintain a pool of safe, voluntary non-remunerated blood donors and take all necessary steps to ensure that the products derived from donated blood are efficacious for the recipient, with a minimal risk of any infection that could be transmitted through transfusion.^[12]

All prospective blood donors should therefore be assessed for their suitability to donate blood, on each occasion of donation. The purpose of blood donor selection is to:

- Protect donor health and safety by collecting blood only from healthy individuals
- Ensure patient safety by collecting blood only from donors whose donations, when transfused, will be safe for the recipients
- Identify any factors that might make an individual unsuitable as a donor, either temporarily or permanently
- Reduce the unnecessary deferral of safe and healthy donors
- Ensure the quality of blood products derived from whole blood and apheresis donations
- Minimize the wastage of resources resulting from the collection of unsuitable donations.

Information provided by 164 countries to the WHO Global Database on Blood Safety indicates that, worldwide, more than 92 million blood donations are collected annually. Of these, an estimated 1.6 million units are discarded due to the presence of infectious markers for TTI, including HIV, hepatitis B, hepatitis C and syphilis. In addition, at least 13 million prospective donors are deferred from donating blood due to anemia, existing medical conditions or the risk of infections that could be transmitted through transfusion^[9]. The scale of these discards and deferrals highlights the need for effective blood donor selection to minimize the unnecessary deferral of suitable donors, and the donation of blood by unsuitable donors that subsequently has to be discarded; this will reduce the wastage of resources, including donor and staff time, consumables and screening tests, and also avoid needless discomfort to donors.^[18]

Significant variations have been observed between countries in the extent to which national donor selection criteria are defined, prospective donors are assessed and the quality and effectiveness of the donor selection process are monitored. In some countries, national systems of blood donor selection are not well-developed and donor selection criteria are not clearly defined or applied uniformly. This may result in blood being collected from donors who have not been properly assessed for their suitability to donate; this may affect their health and pose a higher risk of transmission of infections through transfusion.^[24]

In many countries, donor selection criteria are still based on tradition and customary practice rather than on evidence^[10, 11] and criteria from one country are often adopted in other countries without due consideration of the profiles of the general and potential donor populations, the prevailing epidemiology of infections and diseases, local culture and available resources. Some countries take a highly precautionary approach to the selection of donors for the safety of blood products, donors and patients. Policies for donor selection should take into account the need for a balance between the safety and sufficiency of the blood supply and available resources^[11, 12, 13].

In 2005, World Health Assembly resolution WHA58.13^[14] urged Member States, inter alia, to establish or strengthen systems for the recruitment and retention of voluntary, non-remunerated blood donors and the implementation of stringent criteria for donor selection. World Health Assembly resolution WHA63.12^[15] in 2010 also urged Member States to take all necessary steps to update their national regulations on donor assessment and deferral. However, there are relatively few internationally-recognized guidelines on blood donor selection (Annex 1) and all of these have been developed to address the needs of specific regions or countries. There is therefore a need for global guidance on the development of systems and criteria for blood donor selection that could then be adapted at national level.^[26]

Statement of the problem

“A study to assess the effectiveness of planned teaching programme on knowledge regarding blood donation in selected urban areas of Buldana”

Research Objectives

1. Assess the knowledge, attitude and practice of undergraduate students regarding blood donation.
2. Find association between socio-demographic factors which affect the knowledge, attitude and practice of blood donation.
3. Develop an instructional CD- Rom regarding blood and blood donation.

Material & methods

Conceptual Frame work: Modified Nola J Pender's Health Promotion Model

Research Design: One group pretest posttest research design

Research Setting: The study was conducted in four selected urban areas of buldana:- as per the record 52 people of urban areas during the time of data collection.

Sample: Peoples of selected urban area at Buldhana.

Sample size & sampling technique: Sample size considered for the study was 30 people of urban area.

Sampling technique was Convenient Sampling which is a type of non-probability sampling.

Development & description of tool: The tool used for gathering relevant data, structured knowledge questionnaire, to assess knowledge regarding blood donation among people in selected urban area of Buldhana.

Description of tool

Section 1: deals with selected personal & socio demographic variables such as age, gender, educational status, religion, period of experience, Income per month.

Section 2: consists of structured questionnaire to assess the knowledge of people in selected urban area regarding blood donation.

Inclusion criteria

1. Register people living in the selected urban areas.
2. People living at various level of urban areas who living since 2 to 3 years.
3. People living in a urban areas who were available during the period of study.

Exclusion Criteria

1. People living in a urban areas who were not willing to participate in the study.
2. People living in a urban areas who had undergoing blood donation program.

Procedure for data collection

1. The investigator introduced themselves and explained purpose of the study.
2. On the day of the pretest at the very beginning the people of urban areas were explain the purpose of the study and inform consent was obtained.

The pretest was conducted on 01-12-2022 which includes assessment of knowledge of people of urban areas through the administration.

Plan teaching program was administered at the end of pretest.

The post test was taken 5 days later using the same structure Knowledge using.

questionnaire knowledge regarding blood donation used for their test on the same sample

Data collected was tabulated was analysis.

SAQs, the investigator has used school-based health education to teach on importance of healthy habits among school going people of urban areas belonged to research group. While presenting through power point, the contents.

Post-test

The post-test was carried out after 7 days for both control and research group using same tool used for pre-test. The school going people of urban areas were during a leisure period called to a classroom/multipurpose hall batch wise and data collected using same technique that was used for pre-test. Whole procedure of post-test was carried out in the presence of an investigator.

There were no dropouts in the post test. After the data collection, the investigator has thanked all school going people of urban areas who participated in the study and the concerned authorities for their kind cooperation.

Table 1: Distribution of frequency and percentage analysis of selected demographic variables N=50.

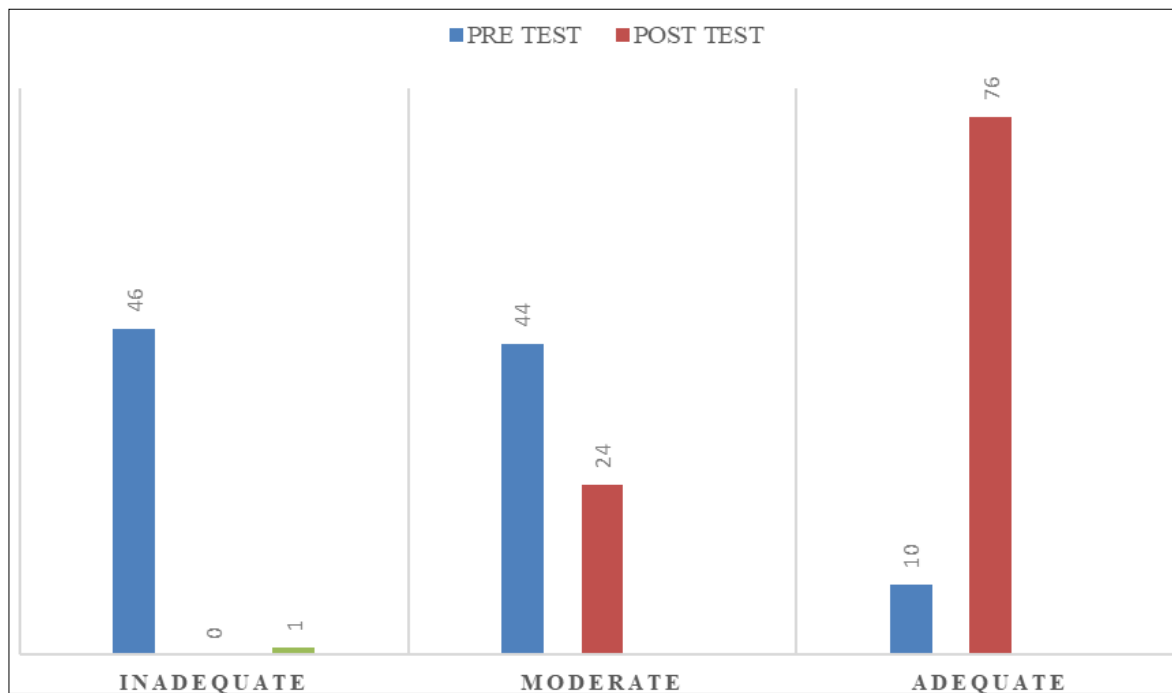
Sr.No	Demographic variables	Frequency (f)	Percentage (%)
1.	Age (in years)		
	a) 21-25	13	43.33
	b) 25-30	09	30
	c) 30-35	06	20
	d) above 35	02	6.66
2.	Gender		
	a) Male	13	43
	b) Female	17	57
3.	Religion		
	a) Hindu	11	36.6
	b) Muslim	05	16.6
	c) Buddhist	05	16.6
	d) Christian	09	30
4.	Educational qualification		
	a) Diploma	12	40
	b) Degree	09	30
	c) BA	07	23.3
	d) B.Com	09	30
5.	Period of experience(in years)		
	a) 1 to 5	23	46
	b) 6 to 10	22	44
	c) 11 to 15	04	08
	d) 16 and above	01	02
6.	Income per Month (in rupees)		
	a) Rs. 5,000- 10,000	17	56.6
	b) Rs. 11,000- 20,000	07	23.3
	c) Rs.21,000-30,000	04	13.3
	d) Rs.above 30,000	02	6.6

Table No 1 Revealed that 28 samples were in the age group 31-40 years, 17 were in the age group 20-30 years and only 5 were in the age group 41-50 years. Majority i.e., 26 samples were females and 24 were males. Majority of samples i.e. 48 belonged to Hindu and only 2 were others. Educational status of majority of samples was graduation and above and only 5 completed higher secondary. 23 samples had 1-5 years of experience, 22 had 6-10 years of experience, 4 had 11-15 years of experience and only 1 sample had more than 16 years of experience in teaching.

Table 2: Mean, Median Mode, Standard deviation of knowledge scores of people leaving in urban area regarding blood donation. N=30

Aspect	Observation	Mean	Mean percentage	SD	't' value	'p' value
Overall knowledge score	Pre –test	20.18	50.45	1.826	42.375	[p0.05] highly significant
	Post-test	31.26	78.15			

Table no: 2 Above table revealed that the pretest mean knowledge score of sample was 20.18, while posttest mean score was 31.26, pretest median score was 50.45 while posttest median score was 78.15 and standard deviation was 1.826.



Graph 1: Knowledge of people leaving in urban area regarding Blood Donation.

Graph No 1 Revealed that people leaving in urban area have pretest knowledge score i.e 46 % inadequate 44% moderate 20% adequate while posttest knowledge score i.e of 1% inadequate 24 % moderate 76% adequate regarding blood donation.

Table 3: Comparison of pretest and post test knowledge regarding blood donation among people living in urban areas.

Aspect	Observation	Mean	Mean Percentage	Effect	SD	't' value	'p' value
Introduction of blood donation	Pre test	8.4	76.36	1.82	2.852	6.823	P0.05 significant
	Post test	8.6	78.18				
Type of blood donation	Pre test	1.5	50.00	26.66	0.7812	9.318	P 0.05 significant
	Post test	2.3	76.66				

Preventive measure	Pre test	9.3	48.96	28.42	3.2343	11.990	P0.05 significant
	Post test	14.7	77.36				
Role of nurse	Pre test	3.58	51.14	28.86	1.6193	9.9420	P0.05 significant
	Post test	5.6	80.00				

Table No 3 revealed that chi square calculated value of socio demographic variables was lesser than table value so they were not associated.

Table 4: Comparison of mean scores between pre test and post test of knowledge regarding blood donation.

Aspect	Observation	Mean	Mean percentage	SD	't' value	'p' value
Overall knowledge score	Pre -test	20.18	50.45	1.826	42.375	[p0.05] highly significant
	Post-test	31.26	78.15			

Table 5: Association between the knowledge regarding blood donation with the demographic variables in pretest & post test

Knowledge score	Pre test	Post test
Inadequate	16	86.36
Moderate adequate	14	72
adequate	12	67

Conclusion

The findings of study showed that majority of primary school teachers had average knowledge regarding varicose veins. Thus it was found to be important to create awareness regarding varicose veins so that they can take precaution to prevent further complications.

References

1. Who Occupational Health. [Online]. Available from URL: <https://www.who.int>. (Cited on November 2018).
2. Occupations That Increases the Risk of Varicose Veins. [Online]. Available from URL: <https://www.coastalvein.com>. (Cited on November 2018).
3. Varicose veins Wikipedia. [Online]. Available from URL: <https://en.wikipedia.org>. (Cited on November 2018).
4. Common Complications of Varicose Veins. [Online]. Available from URL: <https://www.mnveincenter.com>. (Cited on November 2018).
5. Brown D, Edwards H. Lewis's Medical Surgical Nursing-I. New Delhi; ELSEVIER; 2nd ed, 2015, 895-897.
6. Incidence and Prevalence of Varicose Veins in India. [Online]. Available from URL: <http://www.google.com/search?source=hp&ei=UjP6W>. (Cited on November 2018).
7. Over Seven Percent Adults in India Suffer From Varicose Veins Disease. [Online]. Available from URL: <https://www.medindia.net>. (Cited on November 2018).
8. Risk factors of varicose veins among security guards- Research Gate. [Online]. Available from URL: <https://www.researchgate.net/publication/275462695>. (Cited on November 2018)
9. International Journal Of-Science and Research (IJSR). [Online]. Available from URL: <http://ajner.com/HTMLPaper.aspx?Journal=Asian%20Journal%20of%20Nursing%20Education%20and%20Research;PID=2014-4-4-13I>. (Cited on November 2018).
10. What Are Varicose Veins? |SIGVARIS GROUP United States. [Online]. Available from URL: <https://www.sigvaris.com/usa/enus/conditions/varicose-veins>. (Cited on November 2018).