

# A Study to Assess the Effectiveness of Structured Teaching Programme on Knowledge Regarding Blood Donation among Nursing Students of Selected Nursing College of Kanpur, U.P.

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## ABSTRACT

The present time is hasty, full of rush. This often brings about unexpected situations to which man is not prepared. Patient with bleeding disorders, accidents, surgeries, inherited/acquired haematological disease and malignancies are of an important concern for the society. Hence, blood is the vital component of human life and there are no alternatives developed till now. Accessibility of safe and wholesome blood and its products is a critical aspect of any health care Activity. Developed countries with well established health care system and blood transfusion amenities are largely able to meet this demand. However people in developing countries like India are confronted with unawareness, fears and misperceptions about blood donation, which result in a restricted figure of voluntary blood donors. However, researcher felt the need of awareness among nursing students of this period is crucial for the development of an individual's attitude and pro-social skills. Many health habits are developed and consolidated during nursing students, and the health habits that are developed during nursing students continue to influence health throughout the life span.

**KEYWORDS:** *Haematological Disease, Bleeding Disorder, Blood Donors*

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## Statement of the problem

A study to assess the effectiveness of structured teaching programme on knowledge regarding blood donation among nursing students of selected nursing college of Kanpur, Uttar Pradesh. The objectives of the study are to assess the pre-test knowledge regarding blood donation among nursing students. to assess the post-test knowledge regarding blood donation among nursing students. to evaluate the effectiveness of structured teaching programme on knowledge regarding blood donation among nursing students. to determine the association between pre-test knowledge with their selected demographic variables. Quantitative Approach along with quasi-experimental (one group pre-test post-test) research design was used to conduct study on 50 nursing students. The nonprobability convenient sampling

technique was used to select the samples (50 nursing students). Structured knowledge questionnaire was used to collect the data and data was analyzed by using descriptive and inferential statistics. Study revealed that comparisons of the pre-test and post-test means of the knowledge were done by the paired 't' test. The pre-test average score was 10.28 with standard deviation of 3.67. The post-test average score was 21.82 with standard deviation of 4.49. The test statistics value of the paired t test was 38.82 with p value 2.00 at df 49 is significant at 0.05 level. That means there is significant difference in pre and post-test knowledge. Thus it was noticed that structured teaching programme on knowledge regarding blood donation, improved knowledge of nursing students from selected nursing college, Kanpur.

### Need for the study:-

Around 112.5 million units of donated blood are collected globally every year, however, many patients requiring transfusion do not have timely access to safe blood and blood products. In 2016-2017, 11.09 million units of blood was collected across the country, about 2% more than the collection in 2015-16. Though the collection has increased by about 12% between 2013-14 and 2016-17, it is still short of the requirement, as per the WHO norm of 1% of the population, by 15%. While voluntary blood donation & awareness have improved over the years, the situation in some states is alarming. Promoting the idea of Blood Donation is one of the most important challenges for the public health. The development of Blood Donation depends on the level of knowledge about rules and profits of being Blood donor.

In order to have a safe and sufficient Blood supply, it is necessary to rely on solid voluntary Blood donor base. While the WHO recommend countries to develop strategies for 100% voluntary Blood Donation. Donated Blood is the basic material for production of biological drugs, such as albumin and antihemophilic factors. Putting all these together with the failure of technology, to produce an artificial substitute for human Blood able to be used for transfusions, we are still dependent on voluntary blood donor

### Objectives

1. To assess the pre-test knowledge regarding blood donation among nursing students.
2. To assess the post-test knowledge regarding blood donation among nursing students.
3. To evaluate the effectiveness of structured teaching programme on knowledge regarding blood donation among nursing student.
4. To determine the association between pre-test knowledge with their selected demographic variables.

### Material and method:-

**Research approach and design:-** quasi experimental Quantitative approach with pretest post test research design was adopted.

**Setting of the study:-** Regency institute of nursing Kanpur, U.P.

**Study population:-** Nursing students of regency institute of nursing, Ambedkarapuram, kalyanpur, kanpur.

**Accessible population:-** Nursing student Kanpur U.P.

**Sample size:-** 50

**Sampling technique:-** Non probability convenient sampling technique.

### Inclusive criteria:

1. Nursing students who are willing to participate in the research study.
2. Nursing students who are studied at selected nursing college.

### Exclusion criteria

1. Students who are ill at the time of data collection.
2. The students who are exposed to same kind of study in previous years.
3. Students who are selected for pilot study

### Variables under study

**Independent variable:** The planned teaching programme is the independent variable.

**Dependent variable:** The knowledge among nursing students regarding blood donation is the dependent variable.

**Demographic variables:-** In this study the demographic variables were age, gender, religion, residence, class and course, knowledge, source of knowledge have you heard about blood donation, source of information.

### Description of Tools

A Socio demographic variables and Knowledge questionnaire on blood donation was constructed by the investigator which contains items in the following aspects.

It consisted of 7 items regarding demographic variables of the nursing students that were developed to collect the background information of them. The items included in the demographic variable were age, gender, religion, residence, class and course, knowledge, source of knowledge.

### Section B:

It consisted of 30 items to assess the knowledge of nursing students regarding blood donation.

Minimum score = 0

Maximum score = 30

### Data collection procedure:-

The investigator planned to do data collection in the following way:

- Prior to the collection of the data, written permission was obtained from the college principal.
- Informed consent and ascent were taken from all the subjects prior to data collection.
- The period of data collection commenced on 17/08/2024

The selected nursing students were asked to gather in the hall to start with data collection.

The demographic data and modified Questionnaire was given to the nursing students, after giving instructions on how to answer the tool. Administration of planned teaching programme After completing the pre-test, planned teaching programme was administered regarding blood donation. The teaching was interactive session. A post test was conducted on day 7 after administering planned

teaching programme regarding blood donation. The same modified questionnaire was used by the researcher to evaluate the “effectiveness of planned teaching programme on knowledge regarding blood donation among nursing students of selected nursing college.”

#### Limitations of the study

1. Only 50 samples are used for this study.
2. Only samples form selected nursing college of Kanpur

#### Analysis and interpretations

##### Section I:- Base line characteristics of participants.

Sl. no	Demographic variables	frequency	Percentage
1	<b>Age in year</b>		
	17-18 years	10	20
	19-20 years	27	54
	21 and above	13	26
2	<b>Gender</b>		
	Male	7	14
	Female	43	86
3	<b>Religion</b>		
	Hindu	45	90
	Muslim	1	2
	Christian	4	8
	others	0	0
4	<b>Residential status</b>		
	Rural	42	84
	urban	8	16
5	<b>Class and course of study</b>		
	GNM IST	17	34
	GNM IIND	15	30
	GNM IIIRD	18	36
6	<b>Previous knowledge regarding blood donation</b>		
	Yes	35	70
	no	15	30
7	<b>Sources of knowledge</b>		
	Social media	7	14
	Multi media	2	4
	Advertisement	0	0
	Health care professional	41	82

##### Section II:- Effectiveness of STP on blood donation

**Table no 2:- Effectiveness of STP on Anemia.**

Knowledge level	Poor	Average	Good
Pre test	43	07	00
Post test	00	20	30

Paired t test used to assess the effectiveness of STP on knowledge regarding blood donation and the obtained value was 38.82 and the table value was 1.68 at 0.05 level of confidence. Since the obtained value greater than the table value STP was effective So, the H1 hypothesis was accepted. The investigator concluded the structured teaching programme was effective.

**Assess the association between pre test knowledge score with selected demographic variables.**

**Table no:- 3 chi square showing association between post test knowledge with selected demographic variables.**

	Demographic variables	Pretest level of knowledge			Chi square	Inference
		poor	average	good		
1	<b>Age in year</b>					
	17-18 years	08	02	00	1.12	NS
	19-20 years	23	04	00		
	21 and above	12	01	00		
2	<b>Gender</b>					
	Male	06	01	00	14.36	S
	Female	37	06	00		
3	<b>Religion</b>					
	Hindu	39	06	00	0.58	NS
	Muslim	01	00	00		
	Christian	03	01	00		
	others	00	00	00		
4	<b>Residential status</b>					
	Rural	36	06	00	0.01	NS
	urban	07	01	00		
5	<b>Class and course of study</b>					
	GNM IST	15	02	00	1.75	NS
	GNM IIND	14	01	00		
	GNM IIIRD	14	04	00		
6	<b>Previous knowledge regarding blood donation</b>					
	Yes	43	07	00	0.64	NS
	no	00	00	00		
7	<b>Sources of knowledge</b>					
	Social media	06	01	00	6.98	NS
	Multi media	02	00	00		
	Advertisement	00	00	00		
	Health care professional	35	06	00		

The chi-square calculation explains that there was a significant association between pre test knowledge level and the sociodemographic variables such as gender as the chi-square value was greater than the table value at 0.05 level of significance.

#### **Conclusion:-**

From the study findings it is concluded that the structured teaching programme was effective in improving the knowledge of nursing students regarding blood donation.

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