



Research Article

Study to assess the effectiveness of Planned Teaching Program on knowledge and attitude regarding Voluntary Blood Donation among college students

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Abstract: Introduction: According to world health organization, an estimated 38% of reported voluntary blood donations are contributed by people under the age of twenty-five. India needs about million units of blood annually and every year there is gradual increase in this demand⁴ due to various anemic disorders, accidents and emergencies. **Aim:** To assess knowledge and attitude regarding Voluntary Blood Donation among college students in selected degree college of Palampur, Himachal Pradesh. **Settings and Design:** It was a pre-experimental study conducted among college students of Goswami Ganesh Dutt Sanatan Dharam College, Palampur (Himachal Pradesh), in the month of July-August 2022. **Material and Methods:** A pre-tested, structured questionnaire was used as a study tool. Data was collected from 60 samples who were selected by convenient sampling technique. Tool used to collect the data from the samples was structured knowledge questionnaire. It consists of two parts-Part A consists of Demographic variables, part B- Structured knowledge questionnaire and part C- Likert rating scale for attitude scoring. **Result:** The findings revealed that out of 60 samples, 88.3% students were in the age group 17-19 years, 66.7% were females which were in majority population than males who were 33.3%. 83.3% students resided in rural area. %. The mean difference between pretest and posttest knowledge score was 43.61% which explains the efficiency of planned teaching program on enhancing knowledge score of college students. %. The mean difference between pretest and posttest attitude score was 11.71% which depicts the effectiveness of planned teaching program on broadening the perception of students on Voluntary blood donation.

Keywords: Blood donation, college students, knowledge, attitude.

INTRODUCTION:

Blood⁽¹⁾ is manufactured by human beings and donation of blood by humans is the only way of acquiring blood to meet emergency requirements in cases of road traffic accidents, complications of pregnancy like ant partum and post-partum hemorrhage. According to world health organization, an estimated 38% of reported voluntary blood

donations are contributed by people under the age of twenty-five. India needs about million units of blood annually and every year there is gradual increase in this demand⁴ due to various anemic disorders, accidents and emergencies. Thomson⁽²⁾ stated that turning people into loyal blood donors-a term referring to at least two donations per year, according to the National Health Surveillance Agency is an extremely relevant issue, since increasing indices would raise the absolute number of donations coming from donors who are known to be both healthy and suitable.

Human blood is essentially a vital, lifesaving component, capable of saving millions of lives if ready availability can be ensured. According to the World Health Organization (WHO), at least 1% of the nation's population should donate blood voluntarily to meet the basic requirement for blood and blood products. Blood scarcity is frequently encountered in health-care settings and is attributable to an imbalance between increasing demand for safe blood and blood products on the one hand and failure to organize regular blood supply due to misconceptions, perceived harms and risks, and lack of motivation among potential donors⁽³⁾ The donation of blood by voluntary non-remunerated blood donors is recognized as being crucial for the safety and sustainability of national blood supplies. Replacement donation by the family and friends of patients requiring transfusion are rarely able to meet clinical demands for blood while paid “donation” poses serious threats to the health and safety of the recipients as well as the donors themselves, WHO and the International Federation of Red Cross and Red Crescent Societies (IFRC) are committed to the achievement of 100% voluntary blood donation (VBD) by 2020.⁽⁴⁾

OBJECTIVES

- To assess pretest and post-test knowledge and attitude regarding Voluntary Blood Donation among college students in selected degree college of Palampur, Himachal Pradesh.
- To assess effectiveness of Planned teaching program on knowledge and attitude regarding Voluntary Blood Donation among college students in selected degree college of Palampur, Himachal Pradesh.
- To find association between Posttest knowledge and attitude regarding Voluntary Blood Donation with selected demographic variables.

MATERIALS AND METHODS

Research approach: Quantitative approach

Research Design: Pre-experimental

Setting of the study: Goswami Ganesh Dutt Sanatan Dharam College, Palampur (Himachal Pradesh)

Study Population: Degree college students

Sample Size: 60

Sampling technique: convenient sampling technique

Inclusion criteria:

- College students above 17-25 years.
- Degree college students available at the time of data collection.

- 1st year students of degree college.

Exclusion Criteria:

- Students who were absent at the time of data collection
- Students who were not willing to participate in the study.

DESCRIPTION OF TOOL

Structured questionnaire consists of three sections,

Section A- Socio demographic variables

Consist of selected socio demographic variables to obtain personal information from the Degree college students.

Section B –Self Structured knowledge questionnaire

consist of Structured Questionnaire to assess the level of knowledge regarding blood donation. It deals with the structured knowledge questionnaire to assess the level of knowledge regarding blood donation. It consists of 30 multiple choice questions with three options. In that three options, one option is the correct response and it carries one mark. The other two incorrect responses carry zero mark. The total score is 30 for 30 items. To interpret the level of knowledge, the score is classified as:

Table 3.1: Criteria measure for level of knowledge

Score	Percentage	Interpretation
21-30	67-100%	Good Knowledge
11-20	34-66%	Average Knowledge
Up to 10	Up to 33%	Poor Knowledge

Section C- Attitude Scale

Consist of Likert Scale to assess the level attitude regarding blood donation. There were 12 statements in the scale out of which 6 are positive statements and 6 are negative statements. It contains three responses such as agree, uncertain and disagree. Each correct response carries three marks, and each incorrect response carries one mark. The maximum score was 36 and minimum was 12.

To interpret the level of attitude the score is classified as:

- Negative attitude < 60%
- Neutral attitude-60-70%
- Positive attitude -80-100%

DATA ANALYSIS AND RESULTS

The data was collected and analyzed by applying descriptive and inferential statistics. The findings revealed that out of 60 samples, 88.3% students were in the age group 17-19 years, 66.7% were females which

were in majority population than males who were 33.3% Maximum subjects 45% were from Arts Stream, 40% had previous source of information regarding blood donation from health care personnel. The analyzed data were organized according to the objectives and presented under the following sections-

SECTION I: Frequency and percentage wise distribution of sample according to their demographic variables.

SECTION II: Assess the pretest knowledge and attitude regarding Voluntary Blood Donation among college students.

SECTION III: To assess posttest knowledge and attitude regarding Voluntary Blood Donation among college students.

SECTION IV: To assess effectiveness of Planned teaching program on knowledge and attitude regarding Voluntary Blood Donation

SECTION I**Description of demographic characteristics of Degree college students.****Table 1:** Frequency and percentage wise distribution of college students according to their demographic variables: (N=60)

Variables	Options	Frequency	Percentage
Age in years	17-19 years	53	88.3%
	20-22 years	6	10.0%
	23-25 years	1	1.7%
Gender	Male	20	33.3%
	Female	40	66.7%
Place of residence	Rural	50	83.3%
	Urban	10	16.7%
Father's education	No formal education	4	6.7%
	Primary education	9	15.0%
	Secondary education	30	50.0%
	Graduate /Post Graduate	17	28.3%
Mother's education	No formal education	3	5.0%
	Primary education	12	20.0%
	Secondary education	35	58.3%
	Graduate /Post Graduate	10	16.7%
Academic Stream	Medical	9	15%
	Non-Medical	10	16.7%
	Commerce	14	23.3%
	Arts	27	45%
Source of information from where you heard about blood donation.	Family members	15	25%
	Peer group	6	10%
	Health care personnel	24	40%
	Mass media	15	25%
Have you donated blood previously?	Yes	17	28.3%
	No	43	71.7%
How many times?	One time	15	25%
	Two Times	2	3.3%
Have you ever attended any organized camp on Blood Donation?	Yes	12	20%
	No	48	80%

Section-II**Assess the pretest knowledge and attitude regarding Voluntary Blood Donation among college students.****Table 2:** Frequency and percentage distribution of college students regarding Voluntary blood donation according to their level of knowledge score in pretest. (N= 60)

CRITERIA MEASURE OF PRETEST KNOWLEDGE SCORE		
Score Level	Frequency	Percentage
POOR KNOWLEDGE (0-10)	10	16.7%
AVERAGE KNOWLEDGE (11-20)	48	80%
GOOD KNOWLEDGE (21-30)	2	3.3%

Maximum Score=30 Minimum Score=0

Table 4.4: Frequency and percentage distribution of college students regarding Voluntary blood donation according to their level of attitude in pretest. (N= 60)

CRITERIA MEASURE OF PRETEST ATTITUDE SCORE		
Score Level	Frequency	Percentage
NEGATIVE ATTITUDE (12-20)	0	0%
NEUTRAL ATTITUDE (21-28)	28	46.7%
POSITIVE ATTITUDE (29-36)	32	53.3%

Maximum Score=36 Minimum Score=12

Section -III

Assess the posttest knowledge and attitude regarding Voluntary Blood Donation among college students.

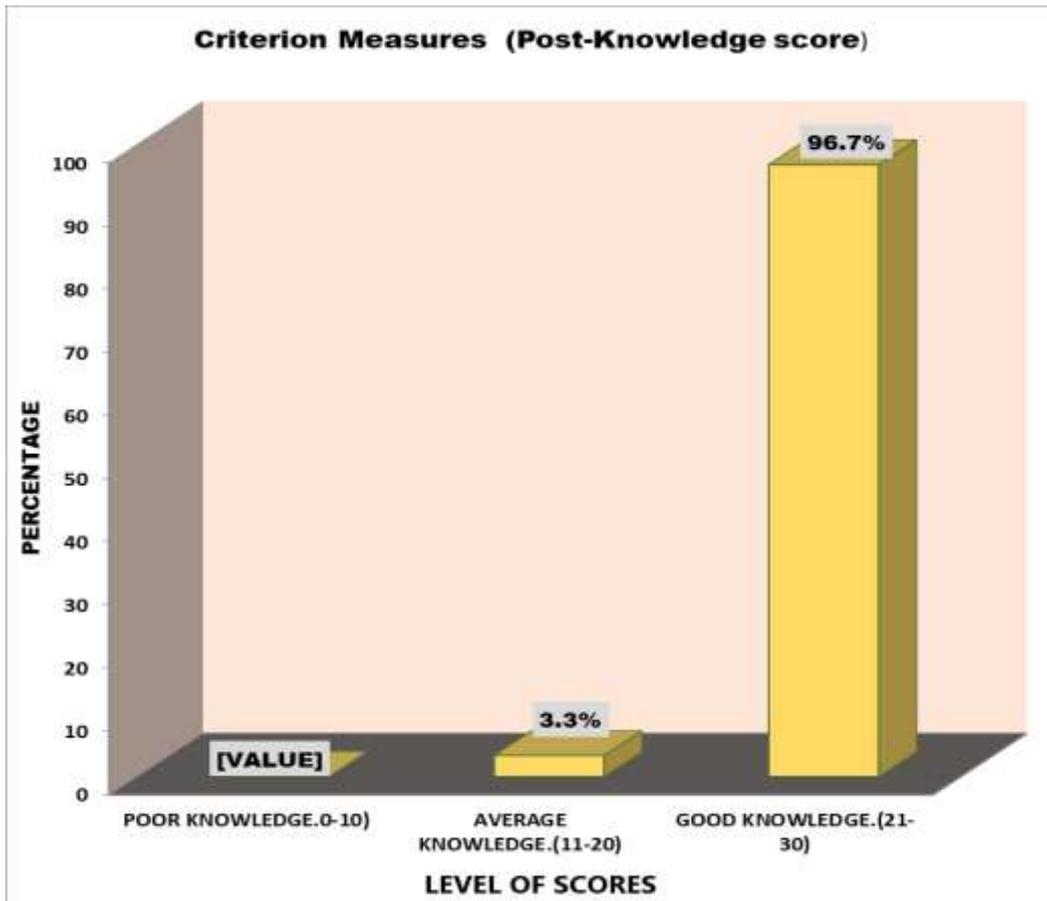


Figure 1: Percentage distribution of college students according to their level of knowledge score in posttest

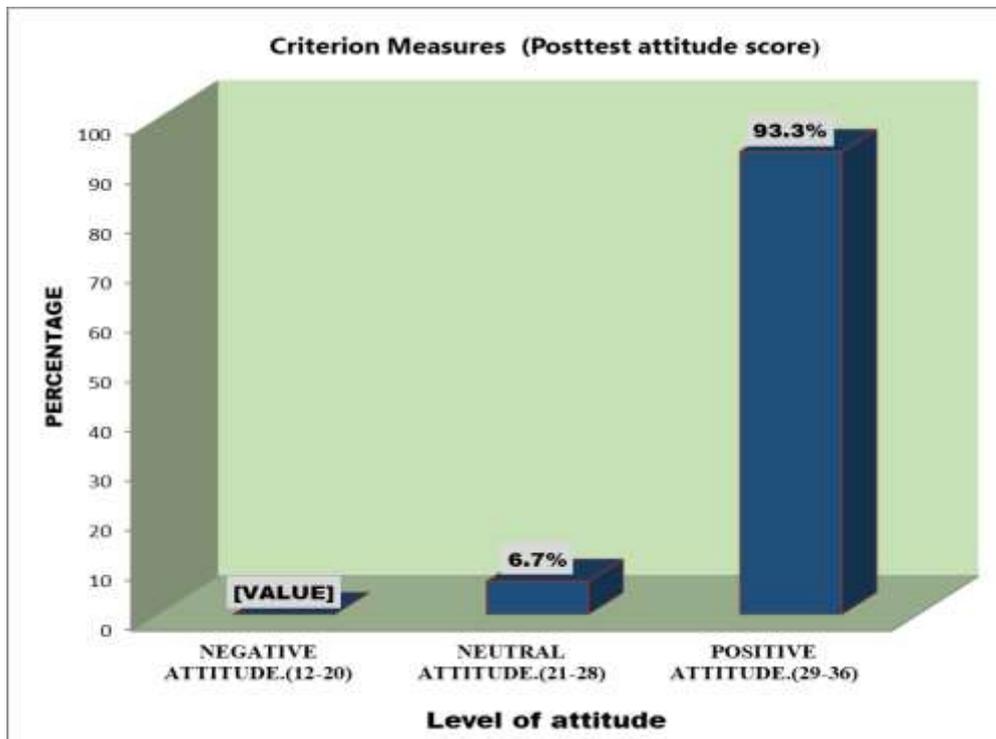


Figure 2: Percentage distribution of college students according to their level of attitude score in posttest

SECTION: IV

To assess effectiveness of Planned teaching program on knowledge and attitude regarding Voluntary Blood Donation

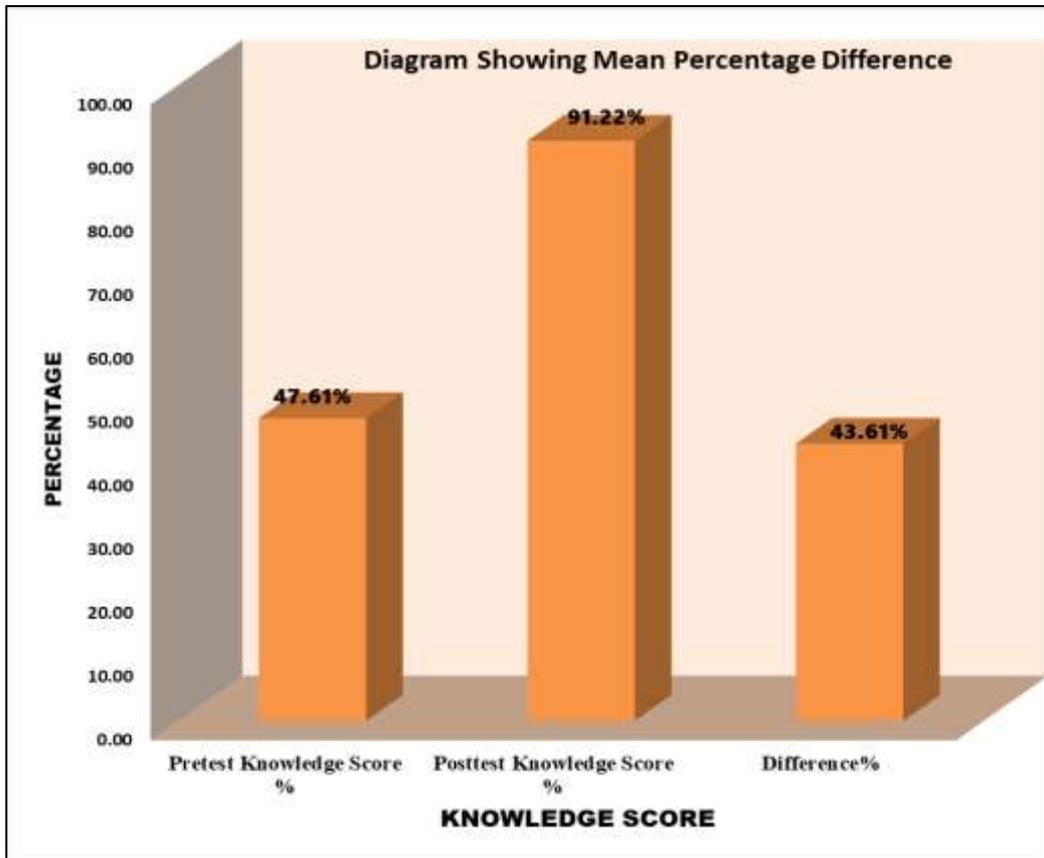


Figure 3: Diagram illustrating the pretest and post knowledge score and the mean difference of planned teaching program regarding Voluntary blood donation.

In pretest mean knowledge score was 14.28 ± 3.79 which was 47.60% of total mean knowledge score percentage whereas, in posttest mean knowledge score was 27.37 ± 2.37 which was 91.20%. The mean difference between pretest and posttest knowledge score was 43.61% which explains the efficiency of planned teaching program on enhancing knowledge score of college students.

While in pretest mean attitude, score was 28.87 ± 3.41 which was 80.20% of total mean attitude score percentage while on contrary posttest mean attitude score was 33.08 ± 2.83 which was 91.90%. The mean difference between pretest and posttest attitude score was 11.71% which depicts the effectiveness of planned teaching program on broadening the perception of students on Voluntary blood donation.

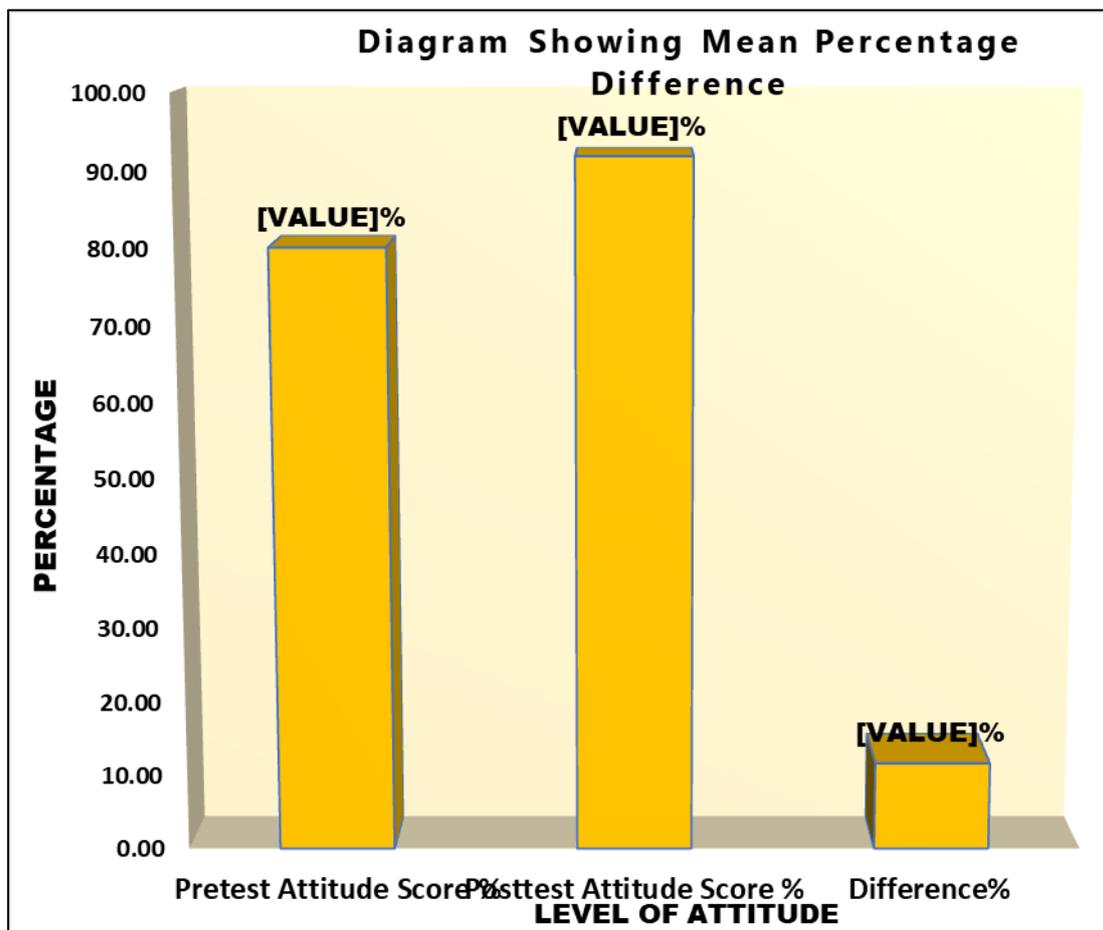


Figure 4: Diagram illustrating the pretest and post attitude score and mean percentage difference of planned teaching program regarding Voluntary blood donation

The calculated paired T test value for pretest and posttest knowledge score was 21.07 Significant association was found between the posttest knowledge and attitude score when compared with socio-demographic variable i.e., How many times students had donated blood earlier? The calculated chi-square value was more than the table value at the 0.05 level of significance.

DISCUSSION

In the present study participants were included in the age range of 17-25 years. 88.3% (53) of college students were in the age group of 17-19 years, 10% (6) college students were in the age group of 20-22 years. Out of 60 samples 66.7% (40) of college students were female whereas 33.3% (20) of students were male. 45% (27) students were from Arts stream, 23.3% (14) from commerce, 16.7% from non-medical and 15% (9) from medical stream. Only 28.3% (17) students had donated blood previously while 71.7% (43) had no experience of blood donation.

Similar study was done by Tinju James, Richard Sunny⁽⁵⁾ where 153 students were in the age group 18-20 years were included. The mean age of the study group was 20.91. Among the study group, 44.7% were

male and 55.3% were females. 25.8%, 39.7% and 34.4% of the students belonged to first year, second year and final year of their medical study. 61.6% of the study group had not donated their blood before. 62.3% of the study group attended awareness programs regarding blood donation.

The present study shows that the mean difference of pretest and posttest level of knowledge was 33.33. The result shows that there was a significant difference between pretest and posttest level of knowledge score. It was interpreted that Planned Teaching Programme was effective in enhancing the knowledge of Degree college students. The study was supported by Mr. Israel Jeba Prabu and Mrs. Janet Anbumani,⁽⁶⁾ finding depicts that the mean difference of pretest and posttest level of knowledge was 7.92. The result shows that there was significant difference between pretest and posttest level of knowledge. It was observed that the planned teaching programme played a vital role in improving the knowledge regarding blood donation.

Implications

The findings of the study suggest many implications for the nursing research, nursing practice, nursing administration and nursing education.

Nursing education: As a nurse educator there are abundant opportunities for nursing professionals to educate the health care professionals to educate the health care professionals and patient's care givers regarding blood donation.

Nursing Practice: Nurse are the key person of the health team, who play a major role in the health team, who play a major role in the health promotion and maintenance. The general public can also be made aware about the importance of blood donation.

Nursing research: This study helps the nurse researcher to develop appropriate health education tools to educate the public regarding blood donation

Nursing Administration: Nursing administrator may use the study findings to improve the quality of knowledge. The concept of extended role of nurse offers many opportunities for a nurse

CONCLUSION

This study concludes that majority of the adolescent students had good knowledge regarding Voluntary blood donation as assessed by structured questionnaire after the implementation of planned teaching programme in post-test. Difference in mean percentage was 43.61%. This study also signifies that knowledge and attitude of college students was independent of demographic variables i.e., age, gender, area, 7.

educational status. The present study also recommends that there is a strong need for IEC (Information Education Communication) activities in community area, administrator to improve the knowledge of voluntary blood donation.

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