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Effect of structured teaching programme regarding knowledge on blood donation among selected college students

Shital Tike

Abstract

Objectives: To assess knowledge before and after structured teaching program regarding blood donation, to evaluate effectiveness of structured teaching programme regarding blood donation, to find out significant association between pre-experimental knowledge score with selected demographic variables among students in selected colleges of Navi Mumbai.

Design: pre-experimental one group pre-test and post-test design.

Sample: refers to the individuals who are in the age group of 18-22 years and studying in colleges

Result

1. Majority of college students were at the age group of 19-20 years (56%), Majority of females (58%) were participated in the study, most of them were from Hindu religion (90%), from urban area (74%).
2. There was a lack of knowledge among college students regarding blood donation before administering structured teaching programme.
3. In posttest, the knowledge of the college students were increased. The statistical paired t-test indicates that the difference between the pretest and posttest knowledge. The t value obtained for knowledge score was 15.08 $p < 0.05$, from these, it was concluded that the structured teaching programme was effective in increasing the knowledge of arts college students regarding blood donation.
4. Out of selected demographic variables religion and family income shown significant result and association with pre interventional knowledge.

Conclusion

1. This research study concludes that male college students have an average knowledge regarding blood donation.
2. The study also concludes that there is a significant association between some demographic variables with knowledge regarding blood donation

Keywords: Chhani, consumption, fuel-wood, households, Lanchaan

Introduction

According to Polit and Beck, "the analysis of research data provides the result of the study. These result need to be evaluated and interpreted. These chapter deals with analysis and interpretation of data collected from students of selected college of Navi Mumbai.

Analysis and interpretation of the data

This chapter deals with the systematic presentation of the analyzed data followed by the interpretation of the data. The collected information was organized, tabulated, analyzed and interpreted using descriptive and inferential statistics. The data collection was analyzed on the basis of objectives of the study.

Objectives

- To assess knowledge before and after structured teaching program regarding blood donation.
- To evaluate effectiveness of structured teaching programme regarding blood donation.
- To find out significant association between pre-experimental knowledge score with selected demographic variables among students in selected colleges of Navi Mumbai.

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Organization of the study findings

The collected data is tabulated, analyzed, organized and presented under the following headings.

Section I

It deals with the analysis of the demographic data of the sample.

Section II

It deals with the analysis of data related to effectiveness of structured teaching programme regarding blood donation.

Section III

It deals to find out association of pre interventional knowledge with selected demographic variables

Section-I

Distribution of Socio-Demographic variables of student

Table 1: Age Demographic data of samples

Age (in years)	Frequency	Percent%	Cumulative Frequency
17-18	14	28	28
19-20	28	56	84
21-22	4	8	92
above 22	4	8	100
total	100	100	

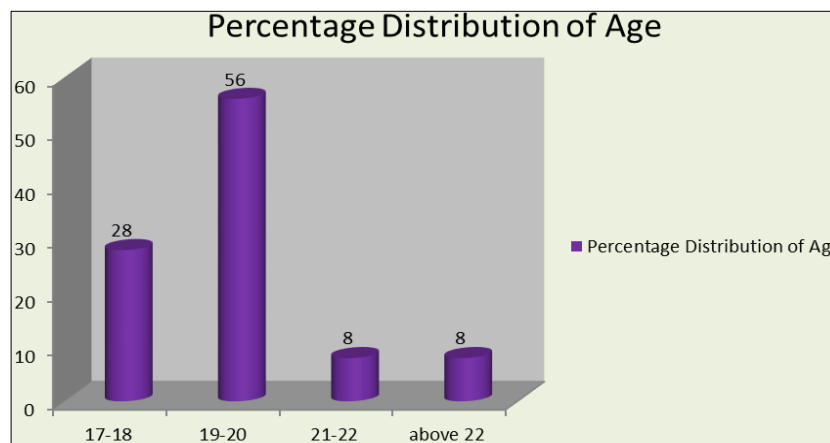


Fig 2: Graphical representation of frequency and percentage distribution of demographic variables of students according to their Age.

[Fig 02 shows the distribution of college students by age in years. Out of 50 college students, 14 (28%) students were in the age group of 17-18 years, 28(56%) students were in the age group of 19-20 years, 4 (8%) students were in the age

group of 21-22 years and 4 (8%) students were in the age group of above 22 years. Hence it can be interpreted that majority of the arts college students were in the age group of 19-20 years]

Table 2: Gender demographic data of samples

Gender	Frequency	Percent%	Cumulative Frequency
Male	21	42	42
Female	29	58	100
Total	50	100	

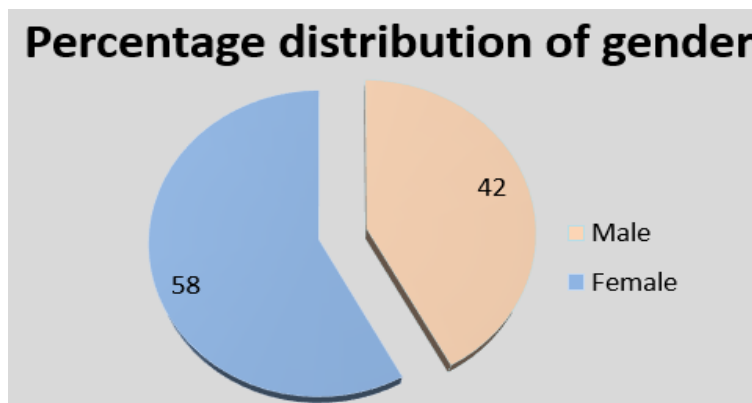


Fig 3: Graphical representation of Frequency and percentage distribution of demographic variables of students according to their Gender.

[Fig.03.showsthedistributionofcollegestudentsbytheirgender. Itshows29 (58%) students were females and 21 (42%) students were males. Hence it can be interpreted that

majority of the college students who participated in this study were females.]

Table 3: Religion demographic data of samples

Religion	Frequency	Percent%	Cumulative Frequency
Hindu	45	90	90
Muslim	3	6	96
Christian	1	2	98
Other	1	2	100
	50	100	

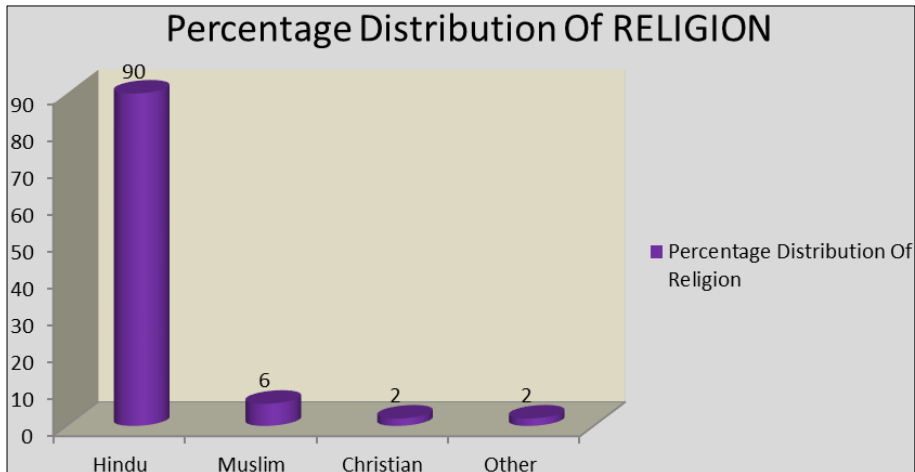


Fig 4: Graphical representation of Frequency and percentage distribution of demographic variables of students according to their Religion.

[Fig.04 shows the distribution of religion in selected college of Navi Mumbai. It shows 45(90%) were Hindu, 3(6%) were Muslim, 1(2%) were Christian and 1(2%) from other

religion. Hence it can be interpreted that majority of the college students who participated in this study are from Hindu religion.]

Table 4: Occupation of father demographic data of samples

Occupation	Frequency	Percent%	Cumulative Frequency
Business	11	22	22
Service	24	48	70
Retired	3	6	76
Other	12	24	100

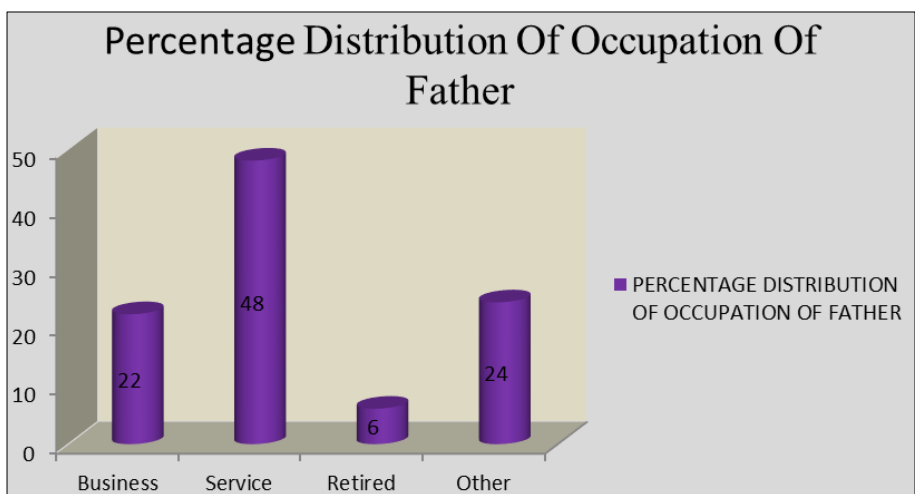


Fig 5: Graphical representation of Frequency and percentage distribution of demographic variables of students according to occupation of father.

[Fig 05 shows the distribution of college students by occupation

their of father. Majority of students father work as service24 (48%) followed by business11 (22%)]

Table 5: Occupation of mother demographic data of samples

Occupation	Frequency	Percent%	Cumulative Frequency
Service	4	8	8
Housewife	42	84	92
Retired	1	2	94
Other	3	6	100

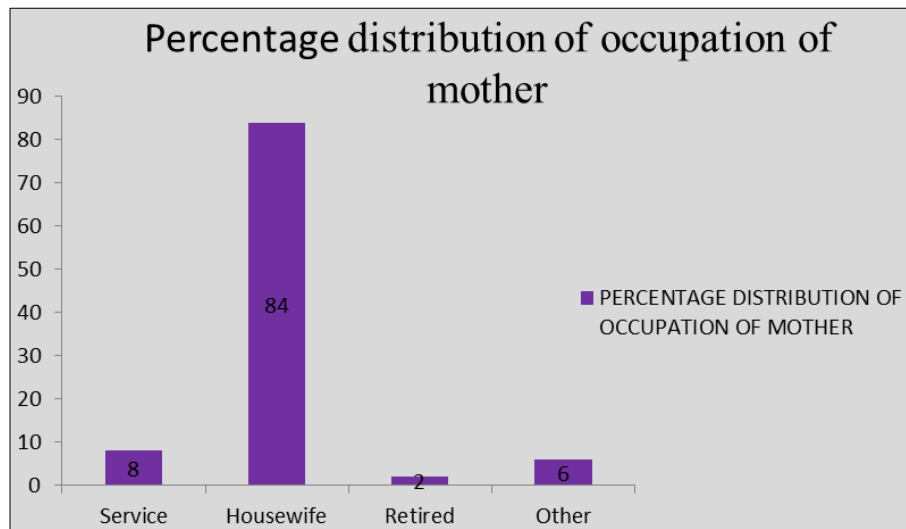


Fig 6: Graphical representation of Frequency and percentage distribution of demographic variables of students according to occupation of mother.

[Fig 06 shows the distribution of college students by occupation of mother. Majority of students mother work as a housewife 42(84%) followed by service 4(8%), retired (2%) and other 3(6%)]

Table 6: Monthly income demographic data of samples

Monthly income a	Frequency	Percent%	Cumulative Frequency
10,000-15,000	22	44	44
16,000-20,000	18	36	80
21,000-30,000	5	10	90
>30,000	5	10	100

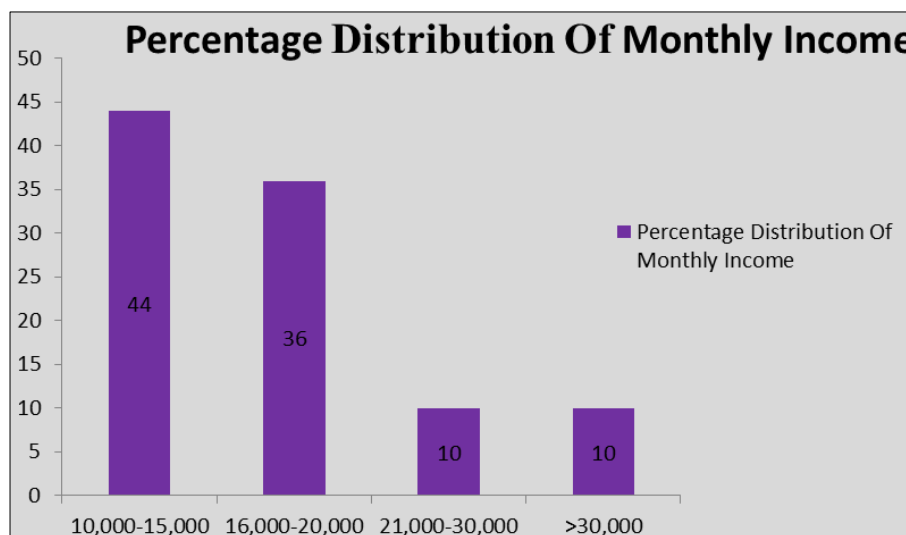


Fig 7: Graphical representation of Frequency and percentage distribution of demographic variables of students according to their monthly income.

[Fig 07 shows distribution of arts college students by monthly income of their family. 22(44%) college students had monthly family income of Rs.10,000-15,000, 18 (36%) students had monthly family income of above Rs.16,000-20,000. 5(10%) students had monthly family income of Rs.21,000-30,000 and 5(10%) students had monthly family income of Rs.>30,000.

Table 7: food status demographic data of samples

Food Status a	Frequency	Percent%	Cumulative Frequency
Vegetarian	16	32	32
Non-vegetarian	7	14	46
Vegetarian	0	0	46
a and b	27	54	100

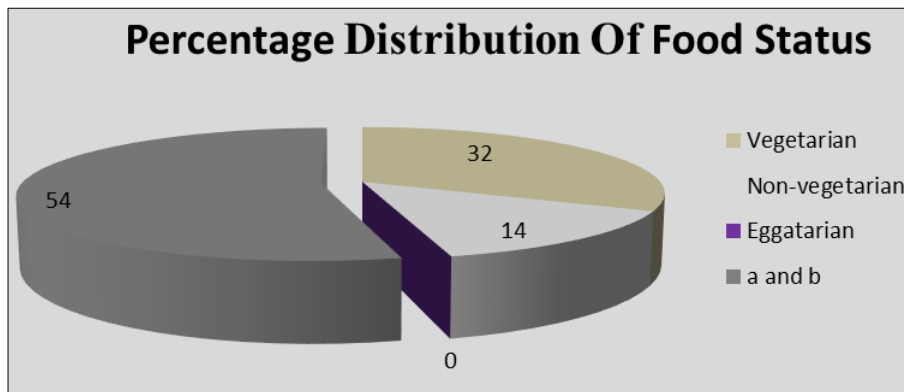


Fig 8: Graphical representation of Frequency and percentage distribution of demographic variables of students according to their food status.

[Fig.08 shows distribution of food status of college students. 16(32%) consumed vegetarian diet, 7(14%) consumed non-veg diet and 27(54%) consumed mixed diet (both veg and non-veg)]

Table 8: Locality demographic data of samples

Locality	Frequency	Percent%	Cumulative Frequency
Rural	13	26	26
Urban	37	74	100
Total	50	100	

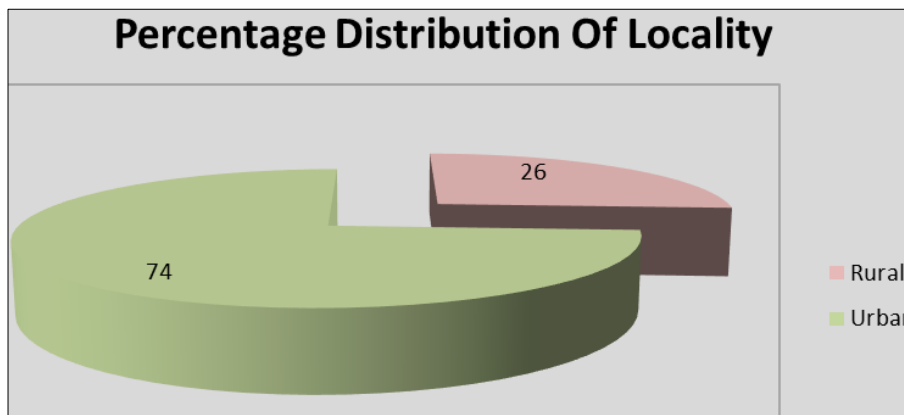


Fig 9: Graphical representation of Frequency and percentage distribution of demographic variables of students according to their Locality.

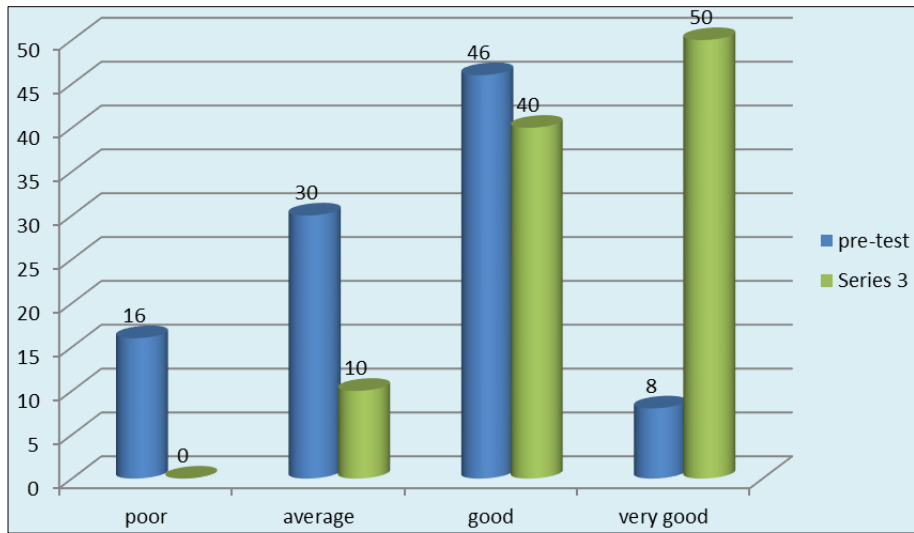
[Fig 09 shows Out of 50 students 37(74%) students were from urban area and remaining 13(26%) were from rural area]

Section II

Effectiveness of structured teaching programme regarding knowledge on blood donation among students in selected colleges of Navi Mumbai

Table 9: Pretest and posttest knowledge score

Interpretation	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Poor	8	16	0	0
Average	15	30	5	10
Good	23	46	20	40
Very good	4	8	25	50



In this table and Fig.10 of this section, as per as the score interpretation frequency of pre and post-test has been calculated to compare pre-test knowledge score and post-test knowledge score.

- In table of this section, as per as the score interpretation frequency of pre and post-test has been calculated to understand effectiveness of structured teaching programme regarding blood donation.

Table 10: over all pretest and posttest mean knowledge

Aspects	Students Knowledge		
	Mean	Mean (%)	SD
Pre test	10.46	52.3	3.66
Post test	15.08	75.4	3.29

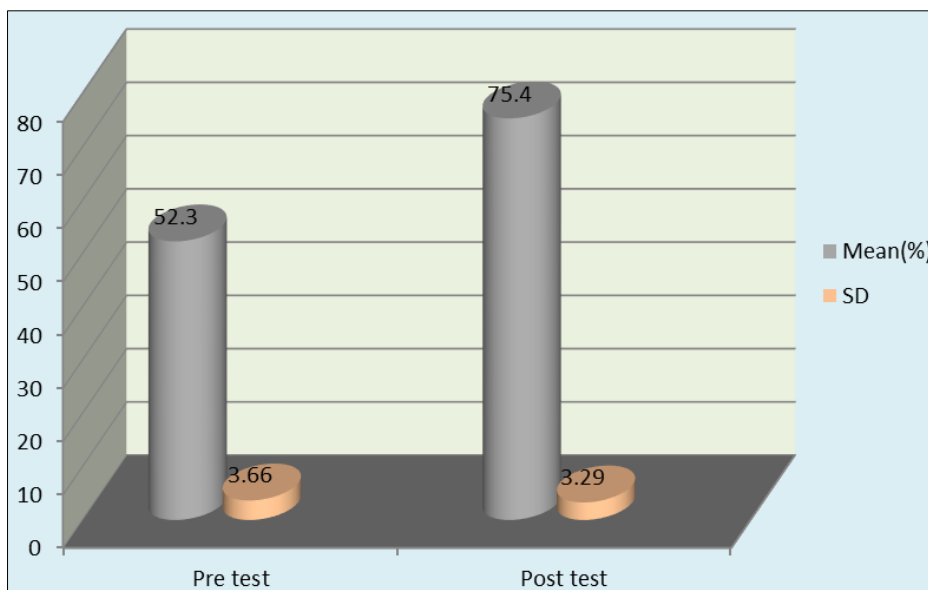


Fig 11: Bar diagram shows Comparison between Pre and Post Test knowledge score of students.

[Fig.11 shows there was a lack of knowledge among college students regarding blood donation before administering structured

teaching programme. In post-test, the knowledge of the college students were increased.]

Table 11: Difference between pre and post test

Sample No.	Pre test	Post test	Difference between pre and post test	D2
1	12	18	6	36
2	9	14	5	25
3	14	18	4	16
4	13	12	1	1
5	11	16	5	25
6	5	14	9	81

7	8	13	5	25
8	3	8	5	25
9	10	15	5	25
10	6	14	8	64
11	9	17	8	64
12	15	20	5	25
13	11	13	2	4
14	4	11	7	49
15	15	18	3	9
16	15	18	6	36
17	11	17	6	36
18	2	10	8	64
19	7	14	7	49
20	13	17	4	16
21	17	19	2	4
22	11	16	5	25
23	13	15	2	4
24	19	20	1	1
25	10	18	8	64
26	5	11	6	36
27	11	14	3	9
28	8	13	5	25
29	5	16	11	121
30	11	13	2	4
31	13	9	4	16
32	8	16	8	64
33	4	13	9	81
34	9	6	3	9
35	11	17	6	36
36	16	15	1	1
37	12	18	6	36
38	14	15	1	1
39	17	20	3	9
40	8	14	6	36
41	11	17	6	36
42	12	16	4	16
43	15	17	2	4
44	14	19	5	25
45	12	18	6	36
46	7	15	8	64
47	4	11	7	49
48	13	17	4	16
49	14	19	5	25
50	6	10	4	16

According to t test formula:

$N=50,$

$\sum d=252$

$\sum d^2=1544$

$$t = \frac{\sum d}{\sqrt{\frac{(n\sum d^2) - (\sum d)^2}{n-1}}}$$

$$t = \frac{252}{\sqrt{\frac{(50 \times 1544) - (252)^2}{50-1}}}$$

$$= \frac{252}{\sqrt{279.51}}$$

$$= \frac{252}{16.71}$$

$t=15.08$

Calculated value =15.08

Table value = 2.010

Therefore table value < calculated value

Hence, there is significance difference in pre and post-test so, the null hypothesis is rejected and the alternative hypothesis is accepted. Therefore this indicated that there is effectiveness of structured teaching programme regarding knowledge on blood donation among students in selected colleges of Navi Mumbai.

Section III

Association between pre-experimental knowledge score with selected demographic variables among students in selected colleges of Navi mumbai

Chi square test

Table 12: Shown significant result and association with pre interventional knowledge

Association between demographic data and stress level	Chi- square statistics	P- value	Association
Age	4.169	0.899942	Not Significant
Gender	1.4905	0.817849	Not Significant
Religion	8.6385	0.471293	Significant
Occupation of father	5.1855	0.332181	Not Significant
Occupation of mother	7.88	0.546286	Not Significant
Family income	10.2301	0.332181	Significant
Food status	3.7102	0.92943	Not Significant
Locality	1.1734	0.759382	Not Significant

Out of selected demographic variables religion and family income shown significant result and association with pre interventional knowledge

The findings of the study are

1) Majority of college students were at the age group of 19-20 years (56%), Majority of females (58%) were participated in the study, most of them were from Hindu religion (90%), from urban area (74%).

2) There was a lack of knowledge among college students regarding blood donation before administering structured teaching programme.

3) In posttest, the knowledge of the college students were increased. The statistical paired t-test indicates that the difference between the pretest and posttest knowledge.

Theft' value obtained for knowledge score was 15.08 $p < 0.05$, from these, it was concluded that the structured teaching programme was effective in increasing the knowledge of arts college students regarding blood donation.

4) Out of selected demographic variables religion and family income shown significant result and association with pre interventional knowledge.

Conclusion

1. This research study concludes that male college students have an average knowledge regarding blood donation.
2. The study also concludes that there is a significant association between some demographic variables with knowledge regarding blood donation

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