

## A STUDY TO ASSESS THE EFFECTIVENESS OF PLANNED TEACHING PROGRAMME (PTP) ON KNOWLEDGE REGARDING BLOOD DONATION AMONG NON-PROFESSIONAL COLLEGE STUDENTS IN SELECTED AREAS IN JAIPUR CITY

Shambhu Singh\*<sup>1</sup>, Dr. Rajendra Prasad Sharma<sup>2</sup>

<sup>1</sup>Ph.D Scholar, Sarvepalli Radhakrishnan University Bhopal

<sup>2</sup>Guide, Sarvepalli Radhakrishnan University Bhopal

Corresponding author mail id: singhviprawan@gmail.com

### ABSTRACT

Health care professionals including doctors, nurses and paramedical staffs are the guardians of the community. It is the duty of the entire health care establishments to ensure speedy recovery of their patients by providing quality health care. On day 1st, informed written consent was obtained from each sample after explaining the purpose of the study and was given assurance for keeping the information confidential. A pre-test was conducted by administering structured questionnaire, and then it was followed by administering Planned Teaching programme on blood donation among non professional student. The pre-test was Administered for student. On the 15th day a post- test was administered by using the same tool which was used in the pre-test. The findings of the study reveal that the mean differences of the pre-test and post-test which is statistically significant at .05 levels. Hence it indicates a significant difference and effectiveness of planned teaching programme in terms of knowledge gain by the non professional students.

This clearly indicates that the level of knowledge of post-test among non professional students was higher than the pre-test. This shows that Planned teaching programme was effective in increasing the knowledge level of the samples regarding blood donation among non profession students . Findings of the study result reveals that there is statistically no significant association between the knowledge and the age of the non professional students at ( $p < 0.05$ ). It is observed that there is no significant association between the knowledge and the gender of non profession students ( $P < 0.05$ ). Result also found that there is no significant association between the knowledge and area of living among non profession student ( $P < 0.05$ ). Result also found that there is no significant association between the knowledge and religion of non profession student ( $P < 0.05$ ). Result also found that there is no significant

association between the knowledge and faculty of non profession student ( $P < 0.05$ ). Result also found that there is no significant association between the knowledge and pervious personal experience about blood donation ( $P < 0.05$ ). Result also found that there is no significant association between the knowledge and source of knowledge regarding blood donation among non professional student ( $P < 0.05$ ). The majority 91.67% of student in pre-test had a Average knowledge score (36-70%) and 8.33% of student had an Poor knowledge score (0-35%) and 00% having good knowledge score (70-100%) where as in post-test the majority 98% student had an good knowledge score, 1.67% Average knowledge score and 00% had Poor knowledge score.

Mean & S.D of Pre Vs Post A study to assess the effectiveness of Planned Teaching Programme on blood donation among non profession student in selected area at Jaipur city i.e. Pre group are  $9.14 \pm 3.63$ , Post are  $16.86 \pm 2.02$ . As per the table the mean difference of pre Vs post group Selected area in Jaipur is (7.72) and the t test was statistically significant as the obtained value (3.753) is higher than the tabulated value (1.97) required for t-ratio to be significant at .05 level of confidence.(C)The whole study was cost effective, simple and carried out in an acceptable way to assess the level of knowledge regarding blood donation in selected area Jaipur city. The result show that non profession students in adequate knowledge regarding of Age, Area of living, Religion, Faculty, Previous personal experience about blood donation.

In this present study the sample size were 60. All the samples were male. There is a significant difference between the pre-test and post-test knowledge of the student. After giving plan teaching programme the knowledge of the student is improved.

**Keywords:** Assess, Effectiveness, Planned teaching programme, Knowledge, Blood donation, Non profession college students.

### Introduction

Blood is a vital and lifesaving fluid which can neither be manufactured in factories, nor substituted with blood of any other creature. At the same time, blood proves to be a good medium for the growth of any organism because of its nutrients and oxygen, thus gets easily infected. Direct transfusion of large volume of infected blood can lead to transmission of various diseases like hepatitis, syphilis, malaria and HIV.

Blood is the part of life that is given to those who need it by those who have the resource to satisfy the need. The love of fellow human and a desire to share something of one self is what singles out a blood donor from the others. Emergencies occur every minute. For each patient requiring blood, it is an emergency and the patients could have set back if blood is not available. A single donation from person can help one or more patients. This is possible because whole blood is made up of several useful components. These components perform special functions in your body and in the body of patients who receive blood. The various blood components are Red Blood Cells, White Blood Cells, Platelets, Plasma and selected Plasma Proteins. Each of these components can be separated from persons donated volume of blood and transfused into a specific patient requiring that particular component. Thus, many can benefit from one unit of blood. India with a population of about one hundred cores is naturally the country which requires lot of blood to save lives of its citizens. It has been quoted that there is a need of about 8 million units of blood every year in our country.

The blood is needed every minute to replace blood loss because of accidents, to treat shock, for minor and major surgeries, for burn victims. Patient suffering from anemia, during childbirth for the mothers, for children suffering from ailments like thalassemia, hemophilia, leukemia & blood cancer. In India 60% of population are eligible to donate blood, yet less than 5% do. Unfortunately, 83% of global population living in developing countries have access to only 40% of blood supplied rather than voluntary non-remunerated low risk donors & this blood in 60% of cases is collected from paid & replace donors.

### **Need of the study**

Human blood is an essential element of human life and there are no subsidies. The need for blood is growing day by day as a result advancement in the clinical medicine .In terms of the need for blood transfusion, it is noted that in the country, the death rate for road accident has increased due to unavailability blood transfusion service near to the accident site. Voluntary non remunerated blood donation has been universally shown to be the corner stone of safe blood .

Blood banks are centre to provide adequate and safe blood supply to the community. However ,blood supply level fluctuates throughout the year with the level tending to fall during holiday session ,because the demand remain stable as even increase but the donation decline. In addition strictly enforced screening guidelines and eligibility requirements to make sure that donated blood will not harm the donor, or the recipient, reduces the number of people who are eligible to donate. The blood and blood components can be obtained can be obtained from voluntary donors, direct donors, paid donors or through auto loud donation .Volunteer donors are carefully screened and

interviewed before blood donation to blood banks, direct donors are usually friends or family members recruited by the recipient to donate blood and the blood is designated specifically for transfusion to that specific recipient, However, if the intended recipient does not use the blood in exchange of money. Lastly autofocus donation is the collection and storage of blood or blood components from a person for subsequent transfusion to that same person which may be done prior to an elective surgery .

### Objectives of the study

- ❖ Asses the knowledge of student regarding blood donation before and after **PTP**
- ❖ Develop and administer**PTP**
- ❖ Evaluate the effectiveness of **PTP** by comparing pre test and post test knowledge scores
- ❖ Identify the association between selected socio demographic variables with knowledge score

### Hypothesis

- ❖ H1:- There will be significant difference between pre-test post-test knowledge score regarding blood donation among student.
- ❖ H2:- There will be significant association between knowledge scores with selected demographic variables.

### Assumptions

- ❖ The knowledge will be varying according to the selected demographic variables.
- ❖ The planned teaching programme regarding blood donation will improve the knowledge of student.
- ❖ The student may have some knowledge about the blood donation.
- ❖ Filling the communication gap by providing adequate communication techniques.
- ❖ Effectiveness of the planned teaching programme can be evaluated.

### Conceptual framework

A conceptual framework is the processor of a theory. It provides broad perspectives for nursing practice, research and education. Conceptual frame work plays several interrelated roles in the progress of science. In nursing, conceptual model identify concepts and describe their relationships to the phenomena of central concern to the discipline. It helps to conceptualize and plan care. Their overall purpose is to make scientific findings meaningful and generalizable.

## Review of literature

A study conducted on Knowledge practices regarding blood donation prevalent in medical and paramedical personnel in Muzaffarpur (India) from 15th March 2003 to 15th September 2003, 83 doctors and 83 paramedics were interviewed. Results of the study was Maximum number of doctors was in the age group ranging from 30 to 50 years while maximum paramedics were in the range of 30-40 years of age. 63 out of 83 doctors were blood donors, whereas 34 out of 83 paramedics were blood donors. Observations of the study were more blood donations from medical doctors are observed in study as compared to the paramedics. This phenomenon seems to be related to the basic and advanced medical education of doctors that obviously tends to increase their level of awareness manifolds as compared to the paramedics. Maximum number of non-donors (both medical and paramedical) in the study stated the reason of their non-donation being "no one has ever asked them to donate blood". This implies that even the increased level of awareness on the subject does not result in actual act of donating blood. It would, therefore, not be justified to expect from general public 'humane gesture of preserving life' without creating in them awareness of the importance of voluntary blood donation.

A cross sectional study was conducted on 1394 people to assess the knowledge regarding blood donation in city of Yazad, Iran. By cluster sampling people were asked to fill a specially formatted questionnaire. Data were analysed by analysis of variance, sheffe test and t-test. Less than half of the population was aware about appropriate age for blood donation. 38% of population under study had donated blood at least once in past. There was no relationship between knowledge and performance. The study concluded that advertisements should be with the aim of increasing the level of awareness of the general population regarding specific factors of blood donation and keeping fresh the idea of regular voluntary blood donation.

## Research Methodology

Research methodology is defined as a way to solve the research problem systematically. It may be understood as a science of studying how research is done scientifically. The scope of research methodology is wider than that of research methods. Research methodology is not only about the research methods but also consider the logic behind the methods use in the context of the research study. It explains why a particular method or technique is used or not used in the study. Thus, research results are capable of being evaluated either by the researcher or by others.

## Research approach

The selection of approach is the basic procedure for the condition of research enquiry. A research approach tell us what data to collect and how to analysis it. It also suggests possible conclusion to be drawn from the data. An evaluator research approach was used to find out the effectiveness of planned teaching programme on blood donation among non profession students.

## Research design

The term Research Design refers to the plan of scientific investigation. The research design helps the researchers in the selection of subjects, identification of variables, their manipulation and control, observations to be made and type of statistical analysis to be used to interpret the data. The research design selected for present study was Quasi-experimental research design with one group Pre-test and post-test design, in which pre-test is followed by the Planned teaching Programme and then conducting post- test for the same group after 7 days

## Setting of the study

Setting of the study refers to the area where the study is conducted. The study was conducted in selected college at Jaipur

## Sample & Sampling technique

Sample is a portion of the population that has been selected to represent the population of interest. The sample for the present study is 60 Non Professional college Students Study in GURUKULMAHAVIDYALYA, Jaipur. It refers to the process of selecting a portion of the population to represent the entire population. In this study, a simple random sampling.

## Data analysis & Interpretation of findings

Among 20 questions, for each item there were four options, out of which one is correct. The maximum score for correct response to each item was one and incorrect was zero. Total score was converted into percentage and interpreted as 0-35% poor, 35-70 % average, 70-100% good. Thus for 20 questions there were 20 correct answers with 20 maximum obtainable score. The collected information was statistically analysed by using frequency and percentage distribution.

**TABLE NO. I**

**SCORING OF KNOWLEDGE OF NON PROFESSION STUDENT REGARDING BLOOD DONATION.**

GRADE	ACTUAL SCORE
Poor	0-7 (0-35%)
Average	8-14 (35-70%)
Good	15-20 (70-100%)

**CONTENT VALIDITY**

Content validity refers to the determination of whether a measurement instrument actually measures what is purported to measure. To ensure Content Validity of the tool, the structured questionnaire along with the Planned teaching content was sent to 7 experts. They were requested to give their opinions on the appropriateness, relevance of the items in the tool and the contents of the Planned teaching programme. The experts were from the field of Medical Surgical Nursing. Modifications were made according to the suggestions made by them.

**RELIABILITY**

Reliability is the degree of consistency that the instrument of procedure demonstrated whatever it is measuring.

In order to establish the reliability of the tool; the split half technique was used. The reliability coefficient of the tool for knowledge was 0.79 ( $r=0.79$ ). It was statistically significant and reliable. The reliability coefficient was calculated by using Split Half Method. In the split half method the test is first divided into equivalent “Halves” and the correlation found for these half tests from the reliability of the past half. The reliability was obtained by computing coefficient of correlation by using Karl Person Method, which was found to be 0.79. Hence the tool was found to be reliable.

**DEVELOPMENT OF PTP REGARDING BLOOD DONATION**

The Planned teaching programme was developed based on the review of related research and on research literature.

The following steps are adopted to develop the Planned teaching programme.

- Development of Planned teaching programme.
- Establishment of content validity by subject expert.
- Final draft prepared.

**(a) STATING THE OBJECTIVE**

The objectives were identified and written in behavioural terms depending on the needs of the non profession student regarding blood donation.

**(b) SELECTION OF THE CONTENT**

The content of the Planned teaching programme on blood donation among non profession was selected through review of literature and its consultation with the experts.

**(c) ORGANIZATION OF THE CONTENT**

The content was organized in to the following chapters:

1. Introduction blood donation.
2. Definition of blood donation.
- 3.



4. Enlist the benefits of blood donation.
5. Enumerate the health condition in which blood donation.
6. Describe the standard criteria.
7. Discuss the screening criteria of blood donation.
8. Enlist the contraindication.
9. Explain the procedure of blood donation.
10. Describe storage guidelines for donate blood.
11. Discuss DO's and DONT's after blood donation.
12. Explain possible complication of blood donation .
13. Discuss myth and facts about blood donation.

#### **(d) CONTENT VALIDITY OF PTP**

The initial draft was validated by experts in the field of Medical surgical Nursing.

#### **(e) PILOT STUDY**

PILOT STUDY is the trial run of the methodology planned for the major project to make improvements in the research projects and to detect problems that must be solved before the major study is attempted. After obtaining permission from the concerned authority the pilot study was conducted from one week at Jaipur National University Jaipur, to find the effectiveness of the tool and study in terms of enhancement of knowledge regarding blood donation among non professional student. The samples chosen were similar to population under study. The investigator used non probability convenient sampling technique to select the samples from the total population. Ten samples were selected for the study and these were excluded from the final study. A pre-test was conducted by administering structured questionnaire, and then it was followed by administering Planned Teaching Programme on Evidence Based Nursing Practice. The pre-test was administered for each student. On the 15th day a post-test was administered by using the same tool which was used in the pre-test

#### **PROCEDURE OF DATA COLLECTION**

##### **(a) PERMISSION FROM THE CONCERNED AUTHORITY**

Formal prior permission was obtained from the ethical committee of GURUKULMAHAVIDYALYA JAIPUR to conduct the study.

##### **(b) PERIOD OF DATA COLLECTION**

The main study was conducted for a period of 2 weeks at GURUKULMAHAVIDYALYA,



JAIPUR.

**(c) PRE-TEST (O1)**

The knowledge questionnaire was used to obtain data from non profession student with blood donation in GURUKULMAHAVIDHYALYA, JAIPUR . Questionnaire was administered for each student with blood donation.

**(d) POST-TEST (O2)**

The same pre-test questionnaire was used for post-test. It was conducted on the 15day after pre-test.

**PLAN FOR DATA ANALYSIS**

Data analysis helps the researcher to organize, summarize, evaluate, interpret and communicate the numerical facts.

The collected data was planned for data analysis in terms of objectives of study by using.

The following plan will be developed for data analysis on the basis of the opinion of expert;

Data analysis helps the researcher to organize, summarize, evaluate, interpret and communicate the numerical facts.

The collected data was planned for data analysis in terms of objectives of study by using descriptive and inferential statistics.

The following plan will be developed for data analysis on the basis of the opinion of expert;

1. Organized the data in a master sheet.
2. Frequencies and percentages to be used for analysis of demographic data.
3. Calculation of mean, standard deviation of pre-test and post-test score.
4. Application of paired t-test to test whether there is significant difference in the mean knowledge score of pre-test and post-test values.

Chi-square to find out the association between the level of knowledge and their demographic variables

**Conclusion**

- The whole study was cost effective, simple and carried out in an acceptable way to assess the level of knowledge regarding Patient with colostomy Admitted in Selected Hospital. The result show that Patient With colostomy had in adequate knowledge regarding of Age, Religion, Educational Status, Marital Status, Occupational status, Duration of diagnosis, Monthly Income, Family history of colon cancer and Source of information for you about colostomy and Dietary management after Colostomy.

- Data presented in the table revealed that there is a no significant association between the knowledge regarding dietary management among patient with colostomy and age as the calculated Chi-square value 16.239 was lesser than the tabulated value 18.307 at  $p>0.05$ .
- Data presented in the table revealed that there was no significant association between the knowledge regarding dietary management among patient with colostomy and Religion as the calculated Chi-square value 6.076 is lesser than the tabulated value 12.592 at  $p>0.05$ .
- Data presented in the table revealed that there was no significant association between the knowledge regarding dietary management among patient with colostomy and Educational status as the calculated Chi-square value 12.623 is higher than the tabulated value 12.592 at  $p>0.05$ .
- Data presented in the table revealed that there was no significant association between the A study to assess the effectiveness of self instructional module on regarding dietary management among patient with colostomy and Marital status as the calculated Chi-square value 6.187 is less than the tabulated value 12.592 at  $p>0.05$ .
- Data presented in the table revealed that there was significant association between the knowledge regarding dietary management among patient with colostomy and Occupational Status as the calculated Chi-square value 13.430 is higher than the tabulated value 12.592 at  $p>0.05$ .
- Data presented in the table revealed that there was no significant association between the knowledge regarding dietary management among patient with colostomy and Duration of diagnosis as the calculated Chi-square value 8.456 is lesser than the tabulated value 12.592 at  $p>0.05$ .
- Data presented in the table revealed that there was significant association between the knowledge regarding dietary management among patient with colostomy and Monthly income as the calculated Chi-square value 13.978 is higher than the tabulated value 12.592 at  $p>0.05$ .
- Data presented in the table revealed that there was significant association between the knowledge regarding dietary management among patient with colostomy and Family History of colon cancer as the calculated Chi-square value 6.154 is higher than the tabulated value 5.991 at  $p>0.05$ .

- Data presented in the table revealed that there is a significant association between the knowledge regarding dietary management among patient with colostomy and Source of information for you about colostomy diet as the calculated Chi-square value 16.182 was greater than the tabulated value 12.592 at  $p>0.05$ .

## References

- Indian journal of Medicine, Volume-II, page no. 24-26.
- Nilsson Sojka B, Sojka P., The blood-donation experience: perceived physical psychological And social impact of blood donation on the donor. Vox Sang 2003 Feb; 84(2): 120-8.
- Oswalt RM, Hoff TE. The motivations of blood donors and non-donors: A community survey. Transfusion 1977; 15:68-73.
- Watanabe KK, Screiber GB, Hayes A, Williams AE. Factors influencing the recruitment and retention of young donors. Transfusion 1999; 39: Supplement: A3-20A.
- FarooqFazili, MD, Blood Safety and Rational Use of Blood, Indian Journal for the Practicing Doctor, Vol. 3, No. 1 (2006-03 - 2006-04).
- Ghosh A, Basu A., "Blood". West Bengal Voluntary Blood Donors Forum; 1996. P.59.
- India's National Magazine from the publishers of THE HINDU, Volume 22 - Issue 14, Jul 02 - 15, 2005