



EFFICACY ASSESSMENT OF PLANNED TEACHING PROGRAM ON KNOWLEDGE AND ATTITUDE TOWARD BLOOD DONATION AMONG UNDERGRADUATE STUDENTS.

Nursing

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ABSTRACT

Background: This red liquid carries oxygen and nutrients to all the parts of body and carries carbon dioxide and other waste products back to the lungs, kidneys and liver for disposal. It fights against infection and helps to heal wounds, so that we can stay healthy. There is no substitute for blood. If people lose blood from surgery or injury or if their bodies can't produce enough, there is only one place to turn – 'Voluntary blood donors.

Objective of the study:- 1) Assess the existing knowledge toward blood donation among undergraduate students. 2) Assess the attitude toward blood donation among undergraduate students. 3) Assess the effectiveness of planned teaching program on knowledge and attitude toward blood donation among undergraduate students. 4) Associate knowledge toward blood donation among undergraduate students with selected demographic variables. 5) Associate the attitude toward blood donation among undergraduate students with selected demographic variables.

Material and Method: Quasi Experimental research design – one group Pre test and post test design Population was 200 undergraduate student studying in selected arts commerce, and science colleges. Structured questionnaire and attitude scale were used to collect the data. The content validity of the tool was done by various experts from different fields.

Result. post test 2(1%) of undergraduate students were having average level of knowledge score, 16.5% had good and 82.55% of them had excellent level of knowledge score. The minimum score in posttest was 10 and the maximum score was 20, the mean score for the posttest was 14.85 ± 2.38 and percentage score was 89.25 ± 11.93 . **post test 1(0.5%)** of undergraduate students were disagreed, 2% were undecided, 45.5% were agreed and 52% were strongly agreed about attitude score. The minimum score in posttest was 18 and the maximum score was 50, the mean score for the posttest was 41.89 ± 6.84 and percentage score was 83.78 ± 13.68

Conclusion: The pre test findings showed that knowledge and attitude toward blood donation among undergraduate students was inadequate. The administration of planned teaching program helped the undergraduate students to understand toward blood donation.

KEYWORDS

Knowledge, Attitude, Plan teaching, Undergraduate student.

INTRODUCTION

There is a bond that links all men and women in the world so closely and intimately that every difference is insignificant besides it. Never varying in temperature more than five or six degrees, composed of 55 percent water, the life stream of blood that runs in the blood vessels of every member of the human race proves that the family of man is a reality.

This red liquid carries oxygen and nutrients to all the parts of body and carries carbon dioxide and other waste products back to the lungs, kidneys and liver for disposal. It fights against infection and helps to heal wounds, so that we can stay healthy. There is no substitute for blood. If people lose blood from surgery or injury or if their bodies can't produce enough, there is only one place to turn – 'Voluntary blood donors'.

Blood has always held mysterious fascination for all and is considered to be the living force of our body. Ancient Egyptians recognized the life giving properties of blood and they used it for baths to resuscitate the sick, rejuvenate the old and infirm and as a tonic for the treatment of various disorders. Today the use of whole blood is a well accepted and commonly employed measure without which many modern surgical procedures could not be carried out.

Safe blood is a critical component in improving health care and in preventing the spread of infectious diseases globally. Millions of lives are saved each year through blood transfusions, yet the quality and safety of blood transfusion is still a concern, particularly in the developing countries.

About 5 to 10 percent of new HIV infections worldwide are transmitted through unsafe blood transfusions. The probable reasons for this includes blood collection from unsafe donors, poor laboratory procedures and inadequate testing of blood. Blood will be safe if there is a nationally coordinated blood transfusion service, non-remunerated donors, testing of blood for transfusion, transmissible infection and by transfusion of the right blood to the right patient through the appropriate clinical use of blood.

MATERIALS AND METHODS:

This study was based on interventional approach. Population was 200 undergraduate student studying in selected arts commerce, and science colleges. Structured questionnaire were used to collect the data. The inclusion criteria was Undergraduate students studying in selected arts

commerce, and science colleges. Exclusion criteria were Undergraduate students those are not willing to participate in the study. Undergraduate students those who have donated blood earlier. Has attended educational program on blood donation. The content validity of the tool was done by various experts from different fields. Suggestions proposed were incorporated in tool and appropriate changes were made.

RESULT:- MAJOR FINDING OF THE STUDY AND DISCUSSION

Table 1: Percentage wise distribution of UG students according to demographic characteristics.

Demographic Variables	No. of UG students	Percentage(%)
Age(yrs)		
17-18 yrs	58	29.0
19-20 yrs	75	37.5
21-22 yrs	39	19.5
>22 yrs	28	14.0
Gender		
Male	78	39.0
Female	122	61.0
Stream of education		
Science	66	33.0
Arts	67	33.5
Commerce	67	33.5
Residence		
Rural	109	54.5
Urban	91	45.5
Educational status of father		
Primary	25	12.5
Secondary	86	43.0
Higher Secondary	49	24.5
Graduates	40	20.0
Educational status of mother		
Primary	21	10.5
Secondary	109	54.5
Higher Secondary	40	20.0
Graduates	30	15.0

Table 2. Assessment of knowledge regarding blood donation by giving pre test and post test.

Findings of pre test 63(31.5%) of undergraduate students were having poor knowledge, 49.5% had average, 18% had good and only 1% of them had excellent level of knowledge score. The minimum score in pretest was 2 and the maximum score was 17, the mean score for the pretest was 7.69±3.19 and percentage score was 38.42±15.98. post test 2(1%) of undergraduate students were having average level of knowledge score, 16.5% had good and 82.55% of them had excellent level of knowledge score. The minimum score in posttest was 10 and the maximum score was 20, the mean score for the posttest was 14.85±2.38 and percentage score was 89.25±11.93

Assessment of attitude by giving pre test and post test:-

findings pre test 27(13.50%) of undergraduate students were strongly disagreed about attitude, 15.50% were disagreed, 15% were undecided, 49% were agreed and only 7% of them strongly agreed about attitude score. The minimum score in pretest was 10 and the maximum score was 47, the mean score for the pretest was 27.93±11 and percentage score was 55.86±22.

post test 1(0.5%) of undergraduate students were disagreed, 2% were undecided, 45.5% were agreed and 52% were strongly agreed about attitude score. The minimum score in posttest was 18 and the maximum score was 50, the mean score for the posttest was 41.89±6.84 and percentage score was 83.78±13.68.

Table 2: Significance of difference between knowledge score in pre and post test of undergraduate students in relation to blood donation

n=200

Overall	Mean	SD	Mean Percentage	t-value	p-value
Pre Test	7.68	3.19	38.42	32.06	0.0001 S,p<0.05
Post Test	17.85	2.38	89.25		

This table shows the comparison of pretest and post test knowledge scores of undergraduate students regarding blood donation. Mean, standard deviation and mean percentage score values are compared and student's paired test is applied at 5% level of significance. The tabulated value for n=200-1 i.e 199 degrees of freedom was 1.968. The calculated values was 32.06 for overall knowledge score. The calculated 't' value are much higher than the tabulated value at 5% level of significance which is statistically acceptable level of significance. Hence it is statistically interpreted that planned teaching program on knowledge regarding blood donation was effective. Thus the H1 is accepted.

Table 3. Significance of difference between attitude score in pre and post test of undergraduate students in relation to blood donation

n=200

Overall	Mean	SD	Mean Percentage	t-value	p-value
Pre Test	27.93	11	55.86	12.58	0.0001 S,p<0.05
Post Test	41.89	6.84	83.78		

This table shows the comparison of pretest and post test attitude scores of undergraduate students regarding blood donation. Mean, standard deviation and mean percentage score values are compared and student's paired test is applied at 5% level of significance. The tabulated value for n=200-1 i.e 19 degrees of freedom was 1.968. The calculated values was 12.58 for overall attitude score. The calculated 't' value are much higher than the tabulated value at 5% level of significance which is statistically acceptable level of significance. Hence it is statistically interpreted that planned teaching program on attitude regarding blood donation was effective. Thus the H1 is accepted.

DISCUSSION:

The findings of the study were discussed with reference to the objectives stated in chapter I and with the findings of the other studies in this section. The present study undertaken was Efficacy assessment of planned teaching program on knowledge and attitude towards blood donation among undergraduate students.

A detailed review of literature indicated that most of the studies indicating that after planned teaching improve knowledge and attitude toward blood donation among undergraduate students.

Quan et.al, reported that 71.2 % of the interviewees had poor knowledge and 21.6% of people had a negative attitude towards blood donation which is in conformity with the present study. In present study pre test 63(31.5%) of undergraduate students were having poor knowledge, 49.5% had average, 18% had good and only 1% of them had excellent level of knowledge score.

In pre test 27(13.50%) of undergraduate students were strongly disagreed about attitude, 15.50% were disagreed, 15% were undecided, 49% were agreed and only 7% of them strongly agreed about attitude score.

Various studies have shown that only a small percent of college students donate blood. Wiwanitkit, 2010 a study among Thai University students stated that only 11 percent had ever donated blood voluntarily. Another study conducted by Hosain, 1997 among Dhaka University students also reported that only 16 percent of the respondents had actually donated blood voluntarily. It has been found from the present study that only 7 percent of the students had strongly agree to donated blood.

Marantidou et.al that women and young people donate the least in Greece. Moreover the findings of the American Red Cross that overall annual frequency of blood donations, men outpaces women are also in consensus with the findings of the present study.

Mikkelsen , reported that most donors take the decisive step to become a donor and go to the blood centre, when another person (relative, friend and colleague) recommends this. In the present study also 14.5 percent of the students donated blood because they were encouraged by a family member, friend or class mate.

Ownby reported that rate of donation increased with age and education and the results of another cross sectional study in India by Singh 2002, donor status was significantly associated with age, sex, literacy status, occupation and knowledge about other aspects of blood donation. The results of the present study agree with the above findings.

Sudha rani conducted a study in S.N.R College of Arts and Science found that the education can improve the knowledge on voluntary blood donation among youth by 32 percent. This finding also supports the present study. in present study 82.5 percent undergraduate student have improve the knowledge.

Kavitha , conducted a study using planned teaching as educational tool, found that planned teaching was effective in improving the knowledge of first aid in primary school teachers. In the present study also the tool used for educational intervention was a planned teaching on blood and blood donation and was found effective in improving the knowledge and attitude of undergraduate students.

RECOMMENDATIONS:

- Specific campaigns are needed to convert favorable knowledge about blood donation into regular voluntary blood donation.
- As part of community health program the services of BSc. Nursing students can be utilized to teach youth regarding the need for blood and blood donation.
- The membership of undergraduate students in voluntary organizations should be strengthened.
- A similar study can be conducted among Post graduate students.
- The same study can be conducted in another category of youth such as police men, IT professionals, Medical graduates etc.
- The study can be repeated with a large sample.

CONCLUSION

The main aim of the study was efficacy assessment of planned teaching program on knowledge and attitude towards blood donation among undergraduate students. The following conclusion drawn on the basis of findings of the study:

The pre test findings showed that knowledge and attitude toward blood donation among undergraduate students was inadequate. The administration of planned teaching program helped the undergraduate students to understand toward blood donation. There was substantial

improvement in the knowledge and attitude scores after the administration of the planned teaching program.

REFERENCES

1. Ali N, Anwar M, Bhalti FA, Nadeem M, Nadeem A, Ali M (2010). Frequency of ABO and Rh blood groups in major ethnic groups and casts of Pakistan. *Pakistan J. Med. Sci.* 21:26–29.
2. Belda Suarez, I., Fernandez-Montoya, A., Rodriguez Fernandez, A., Lopez-Berrio, A., & Cillero-Penuela, M. How regular blood donors explain their behavior. *Transfusion*, 44, 1441-1446. Retrieved February 18, 2011, from Academic Search Premier.
3. Bhatia, R. Blood Transfusion Services of Developing Countries in South-East Asia, *Transfusion Today*, p.4-5
4. Bhattacharya P, Chandra PK, Datta S, Banerjee A, Chakraborty S, Rajendran K, Basu SK, Bhattacharya SK, Chakravarty R. Significant increase in HBV, HCV, HIV and syphilis infections among blood donors in West Bengal, Eastern India 2004-2005: Exploratory screening reveals high frequency of occult HBV infection. *World J Gastroenterology* 2007; 13(27): 3730-3733.
5. Bir Singh, RM Pandey, N D'Souza, A Anushyanthan, Knowledge, Attitudes and Socio-Demographic Factors Differentiating Blood Donors From Non-Donors in an Urban Slum of Delhi; *Indian Journal of Community Medicine* Vol. 27, No. 3 .
6. Black JM, Hawks JH, Keene AM. *Medical surgical nursing*. 6th ed. Philadelphia: Elsevier Mosby; 2006.
7. Joyce M Black, Jane Hokanson Hawks. "Medical Surgical Nursing". 7th edition, 2007, vol-I P:No; 1243-1244
8. Suzanne. C. Smeltzer; Brenda. G. Bare. "Text book of medical Surgical Nursing". 10th edition; 2004; p:No; 1150-1153.
9. Brant L J, Bukasa A, Davison K L, Newham J, Barbara J A. Increase in recently acquired syphilis infections in English, Welsh and Northern Irish Blood donors. *Vox Sanguinis*; 93: 19-26
10. Breckler S, Wiggins E. Scales for measurement of attitudes towards blood donation. *Transfusion* 40:1-4.
11. Calhoun I, Petz L D, Erythrocyte antigens. In: Beutler E, Lichman MA, Coller BS, Kipps TJ, Selishon U. *Williams Hematology*, 6th edn, McGraw-Hill, Inc, Health Professions Division: New York; 2001. p.1849-57.
12. Choudhury L P, Tetali S, Ethical challenges in voluntary blood donation in Kerala, India. *Journal of Medical Ethics* 140-145
13. Coste, J., Reesink, H.W., Engelfriet, C.P. et al. Implementation of donor screening for infectious agents transmitted by blood by nucleic acid technology: update to 2003. *Vox Sanguinis*, 289–303.
14. Crawford Stephen O, Reich Nicholas G, Wen An-Ming, Brookermeier Ron, Louis Thomas A, Nelson Kenrad E, Notari Edward P, Trend Jonathan Touern, Zou Shimian; Regional and temporal variation in American Red cross blood donations. *Transfusion* 2012; 48:1576-1583.
15. Dodd R, Kurt Roth W, Ashford P, Dax EM, Vyas G. *Transfusion medicine and safety*. Biologicals 2009 Feb 19. Dorothy. D. Nguyen, Peborah. A. Devita, Nora V. Hischler and Edward I. Murphy: Blood donor satisfaction and intention of future donation; *Transfusion*, vol:48, April 2010 P.P 742-748.
17. Ferguson E. Predictors of future behavior a review of the psychological literature on blood donation. *Br. Journal of Health Psychology* 227-308.
18. Francois A, Andreu G, Bierling P. Trends in blood transfusion indications. *Rev Prat*. 79-85.
19. Glynn, S.A., Kleinman, S.H., Schreiber, G.B., Zuck, T., McCombs, S., Bethel, J., et al. Motivations to donate blood: Demographic comparisons. *Transfusion*, 42, 216-225.
20. Godin G, Sheeran P, Conner M Factors explaining the intention to give blood among the general population. *Vox sanguinis* 140-149.