International Journal of Nursing Research (IJNR)

International Peer Reviewed Journal

Research article

A study to assess the effect of planned teaching program on knowledge regarding misconceptions on blood donation among junior college students in the selected college of Sangli, Miraj, Kupwad corporation area

Sunil Kulkarni[1*], Manisha Kulkarni[2]

BVDU, College of Nursing, Sangli, Maharashtra, India

Abstract

Blood transfusion help in improving health and saving the life of a patient, but many patients requiring transfusion do not have timely access to safe blood. Voluntary blood donation is considered as the backbone of blood safety and safe transfusion practices. Blood donations in India are conducted by several organizations and hospitals by organizing blood donation camps. Donors can also visit blood banks in hospitals to donate blood or directly to a receiver. Despite the shortage of donated blood, efforts by the government and various organizations have led to a decrease in the demand and supply gap over the years. **Aim:** To assess the existing knowledge on misconceptions regarding blood donation among junior college students in the selected college of Sangli, Miraj, Kupwad corporation area. To assess the effect of plan teaching on knowledge regarding misconceptions of blood donation among the junior college students in the selected college of Sangli, Miraj, Kupwad corporation area. **Methods:** The study was conducted in the junior college of Sangli, Miraj, Kupwad corporation area the population of the present study was junior college students of selected colleges from Sangli, Miraj, Kupwad Corporation Area. The sample size in this research was 138 junior college students. A pilot study was conducted from 19/09/17 to 25/09/17. This was done to assess the knowledge regarding the misconceptions about blood donation in the selected college of Sangli, Miraj, and Kupwad corporation area. **Results:** The mean pre-test knowledge score was 8.96 and post-test knowledge score of subjects was 11.53. Mean of post-test knowledge score was found to be significantly higher than mean pre-test knowledge score. The current study revealed that among the respondents the most prevalent misconception was that a blood donor has a risk of contracting infections like HIV or hepatitis B. **Conclusion:** The knowledge of blood donation was not up to the mark and many misconceptions ware prevailing among young students.

Keywords: Blood donation, misconceptions

***Corresponding author:** Mr. Sunil Kulkarni, BVDU, College of Nursing, Sangli, Maharashtra, India. Email Id-sunilmalharkulkarni@gmail.com

1. Introduction

One of the necessary goals of all introduction services is to recruit donor volunteers from low-risk teams of society because the demand for blood has accrued through the increase, aging populations, and application of latest ways resembling organ transplantation, treatment of cancer by more complicated surgeries and therapy [1][2][3]

Usually blood assortment centres on the planet so as to inform potential donors and encourage them to register for a the future donation use pamphlet or book as material education[4]. Although, these materials could also be economical teaching strategies to increase donor accomplishment. However, their effectiveness is limited [5,6]. An attempted to recruit potential donors through a specially designed brochure containing info concerning the

Access this article online

Website:www.innovationalpublishers.com/journal/ijnr | e-ISSN: 2456-1320

DOI: https://doi.org/10.31690/ijnr/49

How to cite this article: Suil Kulkarni, Manisha Kulkarni, A study to assess the effect of planned teaching program on knowledge regarding misconceptions on blood donation among junior college students in the selected college of Sangli, Miraj, Kupwad corporation area. Int J Nur Res. 2018; 4(3): 149-153.

requirement for blood and blood parts the comfort and safety of blood donation processes, and criteria for blood donation. Sadly, this book didn't show vital impact on the accomplishment of the latest donors compared to existing blood drives. It appeared once the foremost vital reasons for not gift blood, area unit worry of needles pain and therefore the chance of vasovagal reactions or alternative false beliefs concerning blood donation, academic materials love pamphlet or book might not enough to steer donors [7]

Blood transfusion is that the transfer of blood or blood parts from the donor into the blood of the recipient. it's a life-saving theme in each routine and emergency things to exchange blood cells or blood product lost through hurt [8][9].

Blood will save ample lives and youth are the hope and way forward for safe blood provides within the world.

According to WHO, South East Asia's calculable blood demand is about sixteen million units per annum. However, it collects with reference to nine million units annually, effort a spot of half dozen million units. India with the large population of over one billion is insulant behind in blood assortment. The Republic of India has 2433 blood banks which will collects 9 million units of blood units annually, however, collect solely seven million. Nowadays Blood donation remains one in all the most element of care and treatment that required each minute to interchange blood lost to an accident, to treat shock, for minor and major surgeries, for burn victims patient stricken by anemia, throughout birth for the mothers, for kids suffering from ailments like thalassemia, hemophilia, Leukemia & blood cancer. One donation from a person will help one or additional patients. Nothing is loved the preciousness of human blood. Hence, increase the extent of knowledge relating to blood donation is that the uppermost priority to reduce the shortage of blood donors within the world. The first step to attaining the goal is to perform a study to assess the level of information relating to blood donation by conducting a planned teaching programme among the children as they are the backbone of the country can bring changes within the world.

Although the prevalence of adequate information toward blood donation is calculable to be an hour in developing countries, blood donation rate in low-income countries is way not up to that in middle- and high-income countries [10][11]. The prevalence of blood donation was not up to satisfactory because of misconceptions, poor information, and an unfavourable perspective toward donation. Additionally, sex, age, and academic standing were found as predictors of voluntary blood donation.[12]–[15]. Members of the Ethiopian somebody community showed a very restricted intention to gift blood [16].

Each year, 25% – 40% of Ethiopian mothers die because of lack of enough blood from donors thus, making certain the supply of safe blood the least bit health facilities may scale back maternal deaths, that makes certain that the lives of each mother won't be vulnerable just in case of emergencies for lack of blood Despite the actual fact that the country's annual demand for blood was 250,000 units, the quantity of blood collected from donors by 2014 was eighty-eight,000 units.10 Likewise, the Harar bank wants thirty-seven,000 units of blood annually, yet only 4,000 units annually were collected in 2014.

2. Materials and methods

The study was conducted in the junior college of Sangli, Miraj, Kupwad corporation area. The population of the present study was junior college students of selected colleges from Sangli, Miraj, Kupwad Corporation Area. A sample is a small portion of the population selected to participate in the research study, the sample size in this research was 138 junior college students by using the simple random sampling technique

Dependent variable

Knowledge regarding misconceptions on blood donation among junior college students of the selected college of Sangli, Miraj, Kupwad corporation area.

Independent variable

Planned teaching program on knowledge regarding misconceptions on blood donation among junior college students of the selected college of Sangli, Miraj, Kupwad Corporation Area.

Inclusion criteria

Junior college students those who were willing and giving consent to participate in the study.

Based on the study objectives structured questionnaire was used for collection of data. The tool was divided into sections.

Section I – consist of objectives questions related to demographic data

Section II – contained 14 true or false questions for assessing the knowledge regarding misconceptions on blood donation

The correct answer scored with 1 mark and the maximum score was 14.

15 Experts did the content validity of the tool. They gave us some corrections which were made and the final tool was prepared. The tool was translated into the Marathi language by experts and established the validity of the translated tool.

The reliability of the tool was determined by administering the structured questionnaire test to 30 samples by Karl Pearson's correlation coefficient and Browman's

prophency formulas ware used for estimation of reliability the reliability coefficient ‘r' of the structured questionnaire was 0.9 which is more than 0.7, hence it was found to be reliable.

Table no 01:

Sr no.	Reliability conducted	pretest date	Post test
1	Chintamanrao college of commerce, Sangli.	10/9/2017	17/9/2017

Table no. 1 shows that there were total 138 samples taken out of which 75 of them were the males and 63 of them were the females. Out of 138 students, 32 of the students have attended blood donation, and 106 of them have not attended any blood donation.

Table No 2: Pre-test and post-test knowledge score

N=138

Sr no.	Questions	Pre test score	Post test score
1	If you are a vegetarian it means that you do have enough blood to donate.	97	103
2	If you donate blood it will hurt you at the site of venipuncture.	69	87
3	Giving blood is time-consuming.	95	118
4	There is only a sufficient amount of blood in your body and it is healthy if you give some amount of blood away.	105	134
5	If you are healthy you are fit and have more blood to donate	82	125
6	Age between 18-60 years can safely donate blood	71	135
7	Your health will deteriorate after you donate blood.	92	128
8	You will not be able to take part in sports or any other physical activity after you donate blood.	77	138
9	Whenever you need blood, blood can be manufactured.	100	128
10	I will not become blood deficient after I donate blood.	53	100
11	If I donate blood I will need to take a day off as it is impossible to work immediately after donating blood.	67	105
12	The interreligious person can donate blood.	92	127
13	If you take medicines that mean you cannot donate blood.	76	87
14	HIV and other infections cannot be transferred from blood donation.	70	82

Table no. 2 shows that pre test and post tests knowledge score of 138 students on the misconceptions of blood donation.

Table No 3: Analysis of the effect of planned teaching program on knowledge of students on misconceptions.

N=138

	Mean	Std. Deviation	Std. Error Mean	t value	p-value
pre-test	8.96	1.356	0.115	-16.867	0.05
post test	11.53	1.461	0.124		

Table no. 2 Shows that the mean of pre-test knowledge score is 8.96 and of post-test knowledge, the score is 11.53. The std. deviation of pre-test score is 1.356 and of the post-test score is 1.461. The p-value of the data is 0.05, and the t value is -16.867. So planned teaching program on knowledge of students on misconceptions regarding blood donating was effective.

Table No 4: Association between the selected demographic variable and knowledge score.

N=138

SN	Socio-demographic variable	Pre test score		Chi square	P value	Presence of association
1.	Gender	Average	Good			
	Female	62 98.40%	1 1.60%	0.708	0.05	There is no association.
	Male	72 96.00%	3 4.00%			
2.	Have you attended any blood donation process?					
	Yes	32	0	0.59	0.05	There is no association
	No	106	0			

Table no. 3 shows that there no association between the socio-demographic variable and the knowledge score. However, the males had a better score than the females about the misconceptions about blood donation.

4. Discussion

The current study found that the knowledge of the respondents was not up to the mark. These results were similar to several previous studies. In contrast to our findings, several studies showed that all the students had incomplete knowledge and many misconceptions regarding blood donation. Average knowledge was about 32.4% whereas in our study the average pre-test knowledge score was 59.31%. Most of the previous study did not provide any planned teaching program. In our study a planned teaching program was given in order to provide appropriate knowledge regarding blood donation, clear the misconceptions and encourage the students to donate blood. The average knowledge score after the planned teaching program was improved as compared to the, i.e., the students had the average knowledge score of 82.65%. This showed that it was very effective to provide a planned teaching program when the pre test and the post test knowledge score are compared. Similar too many of the previous studies the males had more knowledge related to blood donation than the females. Reasons that people were not attempting blood donation were evaluated, already [17]–[19] and the most frequent response to why you did not or don`t donate blood was the fearing of being anemic. Lack of time, fear of needle and difficulty in access to donation sites were subsequent reasons. In addition, some of the false beliefs about blood donation were shown in past studies for example blood donation is harmful to women, blood donation leads to infertility, blood donation causes hepatitis or HIV infection, therefore, an increase in knowledge about the safety of blood donation and correction of false beliefs in order to evidence-based management could lead to more blood donor recruitment.

Our study reveals that there was no association of the knowledge score with the gender and the attendance of the students for the blood donation procedure. The previous study shows that there was 26% misconception on transmission of diseases or infections like HIV or Hepatitis B & C, whereas in study it was 49.27%, blood donation leads to permanent weakness or anemia has 11% of misconception while in our study it was 33.33%, a painful procedure had 15% of misconception while in our study it was 31.15%. The current study revealed that among the respondents the most prevalent misconception was that a blood donor has a risk of contracting infections like HIV or hepatitis B&C. The knowledge of blood donation is not up to the mark, and many misconceptions are prevailing among young students.

Conclusion

Based on the objectives and hypothesis the collected data were analyzed by using descriptive and inferential statistics. Statistically mean score finding showed that planned teaching program about misconceptions on blood donation was effective in increasing the knowledge regarding misconceptions on blood donation among the junior college students. It shows that junior college students need to improve knowledge regarding misconceptions on blood donation among junior college students.

References

[1] Hopkins CK, Yuan S, Lu Q, Ziman A, Goldfinger D. A severe case of atypical hemolytic uremic syndrome associated with pneumococcal infection and T activation treated successfully with plasma exchange. Transfusion. 2008 Nov; 48(11):2448-52.

[2] Chmielewski D, Bove LL, Lei J, Neville B, Nagpal A. A new perspective on the incentive–blood donation relationship: Partnership, congruency, and affirmation of competence. Transfusion. 2012 Sep; 52(9):1889-900.

[3] Misje AH, Bosnes V, Heier HE. Gender differences in presentation rates, deferrals and return behaviour among Norwegian blood donors. Vox Sanguinis. 2010 Apr 1; 98(3p1):e241-8.

[4] France CR, France JL, Wissel ME, Kowalsky JM, Bolinger EM, Huckins JL. Enhancing blood donation intentions using multimedia donor education materials. Transfusion. 2011 Aug; 51(8):1796-801.

[5] Martín-Santana JD, Beerli-Palacio A. Intention of future donations: a study of donors versus non-donors. Transfusion Medicine. 2013 Apr; 23(2):77-86.

[6] Gimble JG, Kline L, Makris N, Muenz LR, Friedman LI. Effects of new brochures on blood donor recruitment and retention. Transfusion. 1994 Jul; 34(7):586-91.

[7] Hupfer ME, Taylor DW, Letwin JA. Understanding Canadian student motivations and beliefs about giving blood. Transfusion. 2005 Feb; 45(2):149-61.

[8] Kaur P, Basu S, Kaur G, Kaur R. Transfusion protocol in trauma. Journal of Emergencies, Trauma and Shock. 2011 Jan; 4(1):103.

[9] McDaniel LM, Etchill EW, Raval JS, Neal MD. Transfus Med. 2014 Jun; 24(3):138-44.

[10] Karim AM, Admassu K, Schellenberg J, Alemu H, Getachew N, Ameha A, Tadesse L, Betemariam W. Effect of Ethiopia's health extension program on maternal and newborn health care practices in 101 rural districts: a dose-response study. PLoS One. 2013 Jun 4; 8(6):e65160.

[11] McDaniel LM, Etchill EW, Raval JS, Neal MD. Transfus Med. 2014 Jun; 24(3):138-44.

[12] Abolfotouh MA, Ala'a AB, Mahfouz AA, Al-Assiri MH, Al-Juhani AF, Alaskar AS. Using the health belief model to predict breast self examination among Saudi women. BMC Public Health. 2015 Dec; 15(1):1163.

[13] Ingale L, Gessese S, Miruts G. Magnitude and factors associated with voluntary blood donation practice among adult Mekelle population, north Ethiopia: a community-based cross-sectional study. Research & Reviews: Journal of Oncology and Hematology. 2015

Dec 29; 4(3):5-13.
[14] Melku M, Terefe B, Asrie F, Enawgaw B, Melak T, Tsegay YG, Areba M, Shiferaw E. Knowledge, attitude, and practice of adult population towards blood donation in Gondar Town, Northwest Ethiopia: a community based cross-sectional study. Journal of blood transfusion. 2016; 2016.
[15] Alfouzan N. Knowledge, attitudes, and motivations towards blood donation among King Abdulaziz Medical City Population. International journal of family medicine. 2014; 2014.
[16] Merav BN, Lena G. Investigating the factors affecting blood donation among Israelis. International Emergency Nursing. 2011 Jan 1; 19(1):37-43.
[17] Javadzadeh Shahshahani H, Yavari MT, Attar M, Ahmadiyėh MH. Knowledge, attitude and practice study about blood donation in the urban population of Yazd, Iran, 2004. Transfusion Medicine. 2006 Dec; 16(6):403-9.
[18] Javadzadeh Shahshahani H. Why don't women volunteer to give blood? A study of knowledge, attitude and practice of women about blood donation, Yazd, Iran, 2005. Transfusion Medicine. 2007 Dec; 17(6):451-4.
[19] Lemmens KP, Abraham C, Hoekstra T, Ruiter RA, De Kort WL, Brug J, Schaalma HP. Why don't young people volunteer to give blood? An investigation of the correlates of donation intentions among young nondonors. Transfusion. 2005 Jun; 45(6):945-55.