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KNOWLEDGE, ATTITUDE, PRACTICE AND BELIEF TOWARDS BLOOD DONATION AMONG DENTAL STUDENTS IN VIRAJPET

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ABSTRACT:

According to 2012 World Health Organization(WHO)report, only nine million units of blood are collected annually, while there is need of 12 million units of blood. Recruitment of safe low risk blood donors is often a challenge particularly in developing countries where traditional cultural beliefs as well as the lack of knowledge and technical expertise often frustrate efforts to achieve a truly voluntary blood donor system. Our aim was to find the level of the knowledge, attitude, beliefs, and practice of blood donation among dental students and to compare with their demographic variables.

Materials And Methods:A structured questionnaire containing 19 questions was given to study subjects in which there are 6 knowledge based questions,3 attitude based questions,3 practice based questions,5 belief based questions. Statistical analyses were done. The associations between the demographic factors were analyzed by using the Chi square test.

Results: Among 263 dental students,123(46.7%) are males and 140 (53.3%) were females. Around (40%) of Muslims were found to have religious belief against blood donation and P value found to be highly significant P>0.001. According to Gender, no significant difference in response was found. According to qualification, UG's responses were found to be highly significant than PG's in relation to 3 knowledge based,2 practice based,1 attitude based and 4 belief based questions.

Conclusion: A majority of the subjects were willing to be regular donors. The students showed positive attitude towards blood donation. In this study most of the donors had good knowledge about blood donation and they feel comfortable in donating blood every 6 months.

Keywords: Perception, Blood donation, Dentistry.

INTRODUCTION:

Blood is a connective tissue in fluid form. It is considered as the **'fluid of life'** because it carries oxygen from lungs to all parts of the body and carbon dioxide from all parts of the body to the lungs. It is known as **'fluid of growth'** because it carries nutritive substances from the digestive system and hormones from endocrine gland to all the tissues. The blood is also called the **'fluid of health'** because it protects the body against the diseases and gets rid of the waste products and unwanted substances by transporting them to the excretory organs like kidneys. Blood transfusion is the process of transferring blood or blood components from one person (the donor) into the bloodstream of another person (the recipient). Transfusion is done as a life-saving procedureto replace

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blood cells or blood products lost through bleeding. Blood transfusion is essential in the following conditions – Anaemia, Trauma, Burns and Surgery etc [1]. In these kinds of situations, we should know about blood donation. According to 2012 World Health Organization (WHO) report, only nine million units of blood are collected annually, while there is need of 12 million units of blood [2]. Without blood donation there cannot be transfusion of blood.India faced a 10 per cent shortage in its estimated blood requirement in 2015-16, an improvement from the 17 per cent shortfall reported in 2013-14, government data says. The estimated requirement is around 1.2 crore units per annum.In 2015-16, blood collection through various sources, including blood donation camps, was 1.1 crore units — a shortage of 11.5 lakh units, according to data released by the Ministry of Health and Family Welfare[3].Donating blood can be lifesaving for individuals who have lost large volumes of blood from serious accidents, obstetric and gynecological hemorrhages, or surgery and stem cell transplant patients as well as for individuals who have symptomatic anemia from medical or hematologic conditions or cancers[4]. Therefore, blood is an important concern to the society.The number of potential donors were often reduced due to the strict selection criteria which were imposed to ensure the safety of the blood supplies. In addition to this, the blood centers find it difficult to retain new donors and to retain them for arranging a regular blood supply for needy people. Consequently, the blood organizations need to organize more frequent drives to maintain a regular blood supply and to adopt an approach for enhancing new blood donor recruitment and retention of the donor[5]. There is very little published data on status of Blood donation among dental students. This study was therefore conducted with an aim to find out knowledge, attitude, practices, and belief towards voluntary blood donation among dental students in Virajpet.

MATERIALS AND METHODS:

The present cross sectional, self-administered questionnaire survey was conducted at Coorg Institute of Dental Sciences, Virajpet, which included under graduates and the post-graduates. A pilot study was conducted on 10 subjects to check for the validity and reliability of the questionnaire. Cronbach's alpha value was calculated to be 0.8217 (good). Ethical clearance was obtained from the Institutional Review Board of Coorg Institute of Dental Sciences, Virajpet and Written Informed consent was taken from all the study subjects.Convenient sampling technique was followed. Questionnaires were distributed to 299 subjects. Each subject was given 15 minutes to complete the questionnaire. Finally, only 263 of them returned back the filled questionnaire.The questionnaireincluded Demographic information like age, sex and religion followed by 19 questions addressing a series of items regarding knowledge, attitude, belief and practices

about blood donation. The language of the questionnaire was English and it was a multiple choice question.

Statistical Analysis: The data was collected, coded and fed into the SPSS (Statistical Package for Social Sciences, version 21) for statistical analysis. Descriptive statistics included the frequency and percentage. Inferential statistics was calculated for categorical data using Chi-square test. Level of significance was set at 0.05 and was considered as statistically significant.

RESULTS:

The study participants comprised of 123 males (46.7%) and 140 females (53.3%) as shown in Table1. Religion wise distribution of study subjects showed that 114 were Hindus (43.3%), 61 were Muslims (23.1%) and 88 were Christians (33.6%) as shown in Table 2. Qualification wise distribution of study subjects showed that 171 (65%) were undergraduates and 92 (35%) were postgraduates as shown in Table 3. Statistical analysis showed that the response to Belief based question – 'Do you feel any religious belief against blood donation' was found to be statistically highly significant (p = 0.001) according to religion. The response to Belief based question – 'Blood donation cause hypertension' was found to be statistically significant (p = 0.019) according to religion. Responses to all other questions related to knowledge, attitude, practice and belief about blood donation were found to be statistically non-significant according to religion (Table 4). Statistical analysis showed that the response to Belief based question – 'Do you believe blood donation can cause sudden death' was found to be statistically significant (p = 0.05) according to gender. Responses to all other questions related to knowledge, attitude, practice and belief about blood donation were found to be statistically non-significant according to gender (Table 5). Statistical analysis showed that the response to following questions were found to be statistically highly significant according to qualification: Knowledge based question – 'knowledge about donation intervals' (p = 0.011); 'Can a diseased person donate blood' (p = 0.000); 'Required Hb level to donate blood' (p = 0.000); Belief based question – 'Blood donation cause weight loss' (p = 0.01); 'Blood donation make impotent' (p = 0.006); Response to following questions were found to be statistically significant according to qualification: Knowledge based question – 'About any tests done before donating blood' (p = 0.03); 'volume of blood that can be donated' (p = 0.02); Attitude based question – 'Factors that motivated you to donate blood' (p = 0.01); Practice based question–'Willing to be a regular donor' (p = 0.03); Belief based question – 'Blood donation cause hypertension' (p = 0.03). Responses to all other questions related to knowledge, attitude, practice and belief about blood donation were found to be statistically non-significant according to qualification(Table 6).

DISCUSSION:

In the present study, demographic details of study subjects showed that females were found to be more in number as compared to males. These findings are in contrast to a study done by *Glynn et al* [6] among voluntary blood donors in United States of America. In another study conducted by *Uma et al* [7], among the voluntary blood donors in Chennai, the female donors constituted around 7% where as in present study it was around 54%. The reason may be there are more female students in dental college when compared to males. In the present study, 74.9% of the total population had good knowledge on blood donation intervals, which was found to be slightly higher compared to a study conducted by *Akhtar et al* [4] among donors at tertiary public hospital in Saudi Arabia where it was found to be 52%. In a study conducted by *Arun et al* [7] among voluntary blood donors in Chennai, 52% of the voluntary donors didn't know about the required Hb level, where as in the present study, 87.8% study subjects knew about the required Hb level. In the present study, when asked about the mandatory tests done before donating blood, 96.2% of the total study participants knew that tests should be done before donating blood. These results are in contrast to the study conducted by *Uma et al* [7]among voluntary blood donors in Chennai, where only 34.2% knew that prior test should be done. In the present study, 92% of participants felt that opportunity was the best factor that motivated them to donate blood. These results are in contrast to the study conducted by *Salaudeen et al* [8]among students in tertiary institution in Nigeria, where only 45% of the students felt that opportunity was a factor that motivated them.

In the present study, fear of pain was found to be the main reason for not donating blood among 85% of participants, which was slightly higher compared to the study conducted by *Oliya et al* [9]among blood donors in Lagos in Nigeria, wherein it was found to be 54%.

In the present study, the main source of information for the participants was multiple factors (95.2%), and this was higher compared to the study conducted by *Uma et al* [7] among blood donors in Chennai, wherein major source of information was multiple factors among 55.2%. This information is very useful for planning; as multiple sources of media can be used for creating awareness among people about blood donation.

In the present study, majority are willing to be regular donors (96.2%), which is much higher compared to a study conducted by *Sampath et al* [10] among multi ethnic publicin Trinidad and Tobago, where it was found to be 43.8%.

In a study conducted by *Oliya et al* [9]in blood donors in Lagos in Nigeria,23.8% of the blood donors believed that blood donation could cause weight loss, which was much higher compared to the present study, where only 5.3% believed so. In a study conducted by *Oliya et al* [9]

among blood donors in Lagos in Nigeria,5.2% believed that blood donation could cause hypertension, which was in accordance with the present study, where only 2.3% believed so. In a study conducted by *Oliya et al* [9] among blood donors in Lagos in Nigeria, 3.3% believed that blood donation could cause sudden death, which was in accordance with the present study, where only 1.1% believed so.

CONCLUSION:

So we conclude our study by saying cross-sectional, self- administered questionnaire survey shows that most of the participants had a good knowledge and positive attitude towards blood donation. Participants also showed positive attitude towards blood donation in all means and in that some of them had fear of pain while donating blood which was found to be very important and this could overcome by educational and motivational classes on blood donation by expertise. Around 40% of Muslims had religious belief against blood donation. Around 96.2% of the subjects are willing to be regular donors and they are willing to donate blood in every six months.

Recommendations: Therefore, to back the findings of the present study the following recommendations can be made:

1. Expanded implementation of blood donation program requires focused educational strategies to both general pubic and health professionals that reinforce acceptance and reduce the perceived barriers and concerns towards blood donation. The barriers include cultural, myths and taboos in blood donation
2. Further studies including all types of dental professionals in the country and general public including all social classes of the society will help to generalize the study.

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TABLES:

Table 1: Distribution of study subjects based on gender:

Total subjects	Males (%)	Females (%)
263	123 (46.7%)	140 (53.3%)

Table 2: Distribution of study subjects based on religion:

Religion	No. of subjects
Hindu	114 (43.3%)
Muslim	61 (23.1%)
Christian	88 (33.6%)

Table 3: Distribution of study subjects based on qualification:

Qualification	No. of subjects
BDS	171 (65.0%)
MDS	92 (35.0%)

Table-4 knowledge attitude practice and belief based questions according to religion

Questions	Response	RELIGION			Total(%)	Chi Square and significance
		Christian (%)	Hindu (%)	Muslim (%)		
1. Numb of times blood donation	2 -10 times	62 (70.5)	86(75.4)	38(62.3)	186(70.7)	$\chi^2 = 3.320$ p = 0.190 NS
	Not done	26 (29.5)	28(24.6)	23(37.7)	77 (29.3)	
2. Age you donated first	18-22 years	61 (69.3)	86(75.4)	38(62.3)	185 (70.3)	$\chi^2 = 3.357$ p = 0.187 NS
	Not done	27 (30.7)	28(24.6)	23(37.7)	78 (29.7)	
3. Knowledge about blood	Every 3 months	9 (10.2)	14(12.3)	11 (18)	34 (12.9)	$\chi^2 = 5.696$ p =0.458
	Every 6 months	65 (73.9)	90(78.9)	42(68.9)	197 (74.9)	

donation intervals	Once in a year	11 (12.5)	6(5.3)	5 (8.2)	22 (8.4)	NS
	Don't know	3 (3.4)	4 (3.5)	3 (4.9)	10 (3.8)	
4. What age you can start donating blood	12 years	11 (12.5)	11 (9.6)	11 (18)	33 (12.5)	$\chi^2 = 4.202$ p =0.649 NS
	16 years	66 (75)	89(78.1)	40(65.6)	195 (74.1)	
	18 years	10 (11.4)	12(10.5)	8 (13.1)	30 (11.4)	
	Don't know	1 (1.1)	2 (1.8)	2 (3.3)	5 (1.9)	
5. Can a diseased person donate blood	Yes	6 (6.8)	10 (8.8)	8 (13.1)	24 (9.1)	$\chi^2 = 5.167$ p =0.271 NS
	No	82 (93.2)	104(91.2)	52(85.2)	238 (90.5)	
	Don't know	0 (0)	0 (0)	1 (1.6)	1(.4)	
6. Required Hb level to donate blood	11.5gm%	5 (5.7)	7 (6.1)	9 (14.8)	21 (8)	$\chi^2 = 6.845$ p =0.144 NS
	12.5gm%	79 (89.8)	104 (91.2)	48(78.7)	231 (87.8)	
	Don't know	4 (4.5)	3 (2.6)	4 (6.6)	11 (4.2)	
7. Are there any tests done before donating blood	Know	82 (93.2)	112 (98.2)	59(96.7)	253 (96.2)	$\chi^2 = 3.541$ p =0.170 NS
	Don't know	6 (6.8)	2 (1.8)	2 (3.3)	10 (3.8)	
8. Volume of blood that can be donated	250ml	6 (6.8)	5 (4.4)	4 (6.6)	15 (5.7)	$\chi^2 = 3.519$ p =0.741 NS
	350ml	81 (92)	103 (90.4)	55(90.2)	239 (90.9)	
	450ml	1 (1.1)	4 (3.5)	1 (1.6)	6 (2.3)	
	Don't know	0 (0)	2 (1.8)	1 (1.6)	3 (1.1)	
9. Factors that motivated you to donate blood	Opportunity	81 (92)	103 (90.4)	58(95.1)	242 (92)	$\chi^2 = 10.547$ p =0.103 NS
	Asking personally to donate blood	5 (5.7)	2 (1.8)	3 (4.9)	10 (3.8)	
	Information about need of blood	2 (2.3)	5 (4.4)	0(0)	7 (2.7)	
	others	0 (0)	4 (3.5)	0 (0)	4 (1.5)	
10. Reasons for not donating blood	Fear of pain	23(26.1)	23(20.2)	19(31.1)	65(24.7)	$\chi^2 = 6.012$ p =0.422 NS
	Didn't get an opportunity	3(3.4)	3(2.6)	3(4.9)	9(3.4)	
	Others	0	2(1.8)	0	2(0.8)	
11. Best ways to share the messages on blood donation	Personally	1 (1.1)	3 (2.6)	1 (1.6)	5 (1.9)	$\chi^2 = 4.913$ p =0.555 NS
	Radio/ TV	1 (1.1)	1 (.9)	2 (3.3)	4 (1.5)	
	Printing/banners	0 (0)	2 (1.8)	0 (0)	2 (.8)	
	Multiple	86 (97.7)	108 (94.7)	58(95.1)	252 (95.8)	
12. Reasons for donating blood first time	For friends/relatives	2 (2.3)	12 (10.5)	5 (8.5)	19 (7.3)	$\chi^2 = 7.021$ p =0.135 NS
	Voluntarily	60 (68.2)	73 (64)	33(55.9)	166 (63.6)	
	Not done	26 (29.5)	29 (25.4)	21(35.6)	76 (29.1)	
13. Willing to be a regular donor	Yes	87 (98.9)	109 (95.6)	57(93.4)	253 (96.2)	$\chi^2 = 3.082$ p =0.214 NS
	No	1 (1.1)	5 (4.4)	4 (6.6)	10 (3.8)	
14. How do you	Satisfaction	10 (16.1)	15 (17.4)	7 (17.9)	32 (17.1)	$\chi^2 = 0.199$

feel after blood donation	Generally better	6 (9.7)	7 (8.1)	3 (7.7)	16 (8.6)	p =0.995 NS
	Mixed feelings	46 (74.2)	64 (74.4)	29(74.4)	139 (74.3)	
15. Do you feel any religious belief against blood donation	Yes	2 (2.3)	0 (0)	24(39.3)	26 (9.9)	χ^2 = 77.652 p=0.001 HS
	No	86 (97.7)	114 (100)	37(60.7)	237 (90.1)	
16. Blood donation cause hypertension	Yes	0 (0)	3 (2.6)	3 (4.9)	6 (2.3)	χ^2 = 11.816 p=0.019 S
	No	86 (97.7	111 (97.4)	54(88.5)	251 (95.4)	
	Don't know	2 (2.3)	0 (0)	4 (6.6)	6 (2.3)	
17. Blood donation cause weight loss	Yes	3 (3.4)	9 (7.9)	3 (4.9)	15 (5.7)	χ^2 = 5.625 p=0.229 NS
	No	80 (90.9)	104 (91.2)	56(91.8)	240 (91.3)	
	Don't know	5 (5.7)	1 (.9)	2 (3.3)	8 (3)	
18. Blood donation makes impotent	Yes	5 (5.7)	3 (2.6)	3 (4.9)	11 (4.2)	χ^2 = 2.685 p=0.612 NS
	No	79 (89.8)	109 (95.6)	56(91.8)	244 (92.8)	
	Don't know	4 (4.5)	2 (1.8)	2 (3.3)	8 (3)	
19. Blood donation can cause sudden death	Yes	2 (2.3)	1 (0.9)	1 (1.6)	4 (1.5)	χ^2 = 0.653 p=0.721 NS
	No	86 (97.7)	113 (99.1)	60(98.4)	259 (98.5)	

Table-5 knowledge attitude practice and belief based questions according to Gender

Questions	Response	GENDER		Total(%)	Chi Square and significance
		Male(%)	Female(%)		
1. Numb of times blood donation	2 -10 times	85(69.1)	101 (72.1)	186 (70.7)	χ^2 = 0.292 p=0.591 NS
	Not done	38 (30.9)	39 (27.9)	77 (29.3)	
2. Age you donated first	18-22 years	84(68.3)	101(72.1)	185 (70.3)	χ^2 = 0.465 p=0.502 NS
	Not done	39 (31,7)	39 (27.1)	78 (29.7)	
3. Knowledge about blood donation intervals	Every 3 months	17(13.8)	17 (12.1)	34 (12.9)	χ^2 = 0.370 p=0.946 NS
	Every 6 months	90 (73.2)	107 (76,4)	197 (74.9)	
	Once in a year	11 (8.9)	11 (7.9)	22 (8.4)	
	Don't know	5 (4.1)	5 (3.6)	10 (3.8)	
4. What age you can start donating blood	12 years	12 (9.8)	21 (15)	33 (12.5)	χ^2 = 5.358 p=0.147 NS
	16 years	96(78)	99(70.7)	195 (74.1)	
	18 years	11 (8.9)	19 (13.6)	30 (11.4)	
	Don't know	4 (3.3)	1 (.7)	5 (1.9)	
5. Can a diseased person donate blood	Yes	10 (8.1)	14 (10)	24 (9.1)	χ^2 = 1.178 p=0.555 NS
	No	113(91.9)	125 (89.3)	38 (90.5)	
	Don't know	0 (.0)	1 (.7)	1 (.9)	
6. Required Hb level to donate blood	11.5gm%	12 (9.8)	9 (6.4)	21 (8)	χ^2 = 1.405 p=0.495 NS
	12.5gm%	107 (87)	124 (88.7)	231 (87.8)	
	Don't know	4 (3.3)	7 (5)	11 (4,2)	

7. Are there any tests done before donating blood	Know	116 (94.3)	137 (97.9)	253 (96.2)	χ^2 = 2.254 p=0.197 NS
	Don't know	7 (5.7)	3 (2.1)	10 (3.8)	
8. Volume of blood that can be donated	250ml	5 (4.1)	10 (7.1)	15 (5.7)	χ^2 = 2.520 p=0.472 NS
	350ml	112 (91.9)	127 (90.)7	239 (90.9)	
	450ml	4 (3.3)	2 (1.4)	6 (2.3)	
	Don't know	2 (1.7)	1(.7)	3(1.1)	
9. Factors that motivated you to donate blood	Opportunity	115 (93.5)	127 (90.7)	242 (92.0)	χ^2 = 1.043 p=0.791 NS
	Asking personally to donate blood	4 (3.3)	6 (4.3)	10(3.8)	
	Information about need of blood	3 (2.4)	4 (2.9)	7 (2.7)	
	others	1 (.8)	3 (2.1)	4 (1.5)	
10. Reasons for not donating blood	Fear of pain	33 (89.2)	32 (82.1)	65 (85.5)	χ^2 = 2.075 p=0.354 NS
	Didn't get an opportunity	4 (10.8)	5 (12.8)	9 (11.8)	
	Others	0	2(5.1)	2(2.6)	
11. Best ways to share the messages on blood donation	Personally	3 (2.4)	2 (1.4)	5 (1.9)	χ^2 = .388 p=0.943 NS
	Radio/ TV	2 (1.6)	2 (1.4)	5 (1.5)	
	Printing/banners	1 (.8)	1 (.7)	2(.8)	
	Multiple	117 (95.1)	135 (96.4)	252 (95.8)	
12. Reasons for donating blood first time	For friends/relatives	11 (8.9)	8 (5.8)	19(7.3)	χ^2 = 2.081 p=0.353 NS
	Voluntarily	73 (59.3)	93 (63.4)	166 (67.4)	
	Not done	39 (31.7)	37 (26.8)	76 (29.1)	
13. Willing to be a regular donor	Yes	119 (96.7)	134 (95.7)	253 (96.2)	χ^2 = .191 p=0.754 NS
	No	4 (3.3)	6 (4.3)	10 (4.8)	
14. How do u feel after blood donation	Satisfaction	19 (22.1)	13 (12.9)	32 (17.1)	χ^2 =3.114 p=0.211 NS
	Generally better	8 (9.3)	8 (7.9)	16 (8.6)	
	Mixed feelings	59 (68.6)	80 (79.2)	139 (74.3)	
15. Do you feel any religious belief against blood donation	Yes	17 (13.8)	9 (6.4)	26 (9.9)	χ^2 =4.017 p=0.061NS
	No	106 (86.3)	131 (93.6)	237 (90.1)	
16. Blood donation cause hypertension	Yes	3(2.4)	3 (2.1)	6 (2.3)	χ^2 =2.252 p=.325NS
	No	119 (96.7)	132 (94.3)	251 (95.4)	
	Don't know	1 (.8)	5(3.6)	6(2.3)	
17. Blood donation cause weight loss	Yes	6 (4.9)	9(6.4)	15 (5.7)	χ^2 =.604 p=.739NS
	No	114 (92.7)	126 (90.0)	240 (91.3)	
	Don't know	3 (2.4)	5 (3.6)	8 (3.0)	
18. Blood donation makes impotent	Yes	7 (5.7)	4 (2.9)	11 (4.2)	χ^2 =2.221 p=.331NS
	No	111 (90.2)	133 (95)	244 (92.8)	
	Don't know	5 (4.1)	3 (2.1)	8 (3)	
19. Blood donation can cause sudden death	Yes	0 (0)	4 (2.9)	4 (1.5)	χ^2 =3.3569 p= 0.059 S
	No	123 (100)	136 (97.1)	259 (98.5)	

Table-6 knowledge attitude practice and belief based questions according to qualification.

Questions	Response	QUALIFICATION		Total(%)	Chi Square and significance
		BDS(%)	MDS(%)		
1. Numb of times blood donation	2 -10 times	123 (71.9)	63 (68.5)	186 (70.7)	χ^2 =.344 p=.572
	Not done	48 (28.1)	29 (31.5)	77 (29.3)	
2. Age you donated first	18-22 years	122 (71.3)	63 (68.5)	185 (70.3)	χ^2 =.236 p=.672
	Not done	49 (28.7)	29 (31.5)	78 (29.7)	
3. Knowledge about blood donation intervals	Every 3 months	15(8.8)	19 (20.7)	34 (12.9)	χ^2 =11.152 p=0.011 S
	Every 6 months	137 (80.1)	60 (65.2)	197 (74.9)	
	Once in a year	15 (8.8)	7 (7.6)	22 (8.4)	
	Don't know	4 (2.3)	6 (6.5)	10 (3.8)	
4. What age you can start donating blood	12 years	21 (12.3)	12 (13.0)	33 (12.5)	χ^2 =3.671 p=.299
	16 years	132 (77.2)	63 (68.5)	195 (74.1)	
	18 years	15 (8.8)	15 (16.3)	30 (11.4)	
	Don't know	3 (1.8)	2 (2.2)	5 (1.9)	
5. Can a diseased person donate blood	Yes	0 (.0)	24 (26.1)	24 (9.1)	χ^2 =51.378 p=0.000 HS
	No	171 (100)	67 (72.8)	238 (90.5)	
	Don't know	0 (.0)	1 (1.1)	1 (.4)	
6. Required Hb level to donate blood	11.5gm%	5 (2.9)	16 (17.4)	21 (8.0)	χ^2 =25.692 p=0.000 HS
	12.5gm%	163 (95.3)	68 (73.9)	231 (87.8)	
	Don't know	3 (1.8)	8 (8.7)	11 (4.2)	
7. Are there any tests done before donating blood	Know	168 (98.2)	85 (92.4)	253 (96.2)	χ^2 =5.605 p=0.036 S
	Don't know	3 (1.8)	7 (7.6)	10 (3.8)	
8. Volume of blood that can be donated	250ml	5 (2.9)	10 (10.9)	15 (5.7)	χ^2 =9.343 p=0.025 S
	350ml	3 (1.8)	3 (3.3)	6 (2.3)	
	450ml	162 (94.7)	77 (83.7)	239 (90.9)	
	Don't know	1 (.6)	2 (2.2)	3 (1.1)	
9. Factors that motivated you to donate blood	Opportunity	164 (95.9)	78 (84.8)	242 (94.0)	χ^2 =10.462 p=0.015 S
	Asking personally to donate blood	4(2.3)	6 (6.5)	10 (3.8)	
	Information about need of blood	2 (1.2)	5 (5.4)	7 (2.7)	
	others	1 (.6)	3 (3.3)	4 (1.5)	
10. Reasons for not donating blood	Fear of pain	40 (83.3)	25 (89.3)	65 (85.5)	χ^2 =1.288 p=.525
	Didn't get an opportunity	6 (12.5)	3 (10.7)	9 (11.8)	
	Others	2 (4.2)	0 (.0)	2 (2.6)	
11. Best ways to share the messages on blood donation	Personally	2 (1.2)	3 (3.3)	5 (1.9)	χ^2 =2.052 p=0.562
	Radio/ TV	2 (1.2)	2 (2.2)	4 (1.5)	
	Printing/banners	1 (0.6)	1 (1.1)	2 (0.8)	
	Multiple	166 (97.1)	86 (93.5)	252 (95.2)	

12. Reasons for donating blood first time	For friends/relatives	10 (5.9)	9 (9.8)	19 (7.3)	χ^2 =1.633 p=0.422
	Voluntarily	113 (65.7)	55 (59.8)	166 (63.6)	
	Not done	48 (28.4)	28 (30.4)	76 (29.1)	
13. Willing to be a regular donor	Yes	168 (98.2)	85 (92.4)	253 (96.2)	χ^2 =5.605 p=0.036 S
	No	3 (1.8)	7 (7.6))	10 (3.8)	
14. How do u feel after blood donation	Satisfaction	24 (19.5)	8 (12.5)	32 (17.1)	χ^2 =4.668 p=0.097
	Generally better	7 (5.7)	9 (14.1)	16 (8.6)	
	Mixed feelings	92 (74.8)	47 (73.4)	139 (74.3)	
15. Do you feel any religious belief against blood donation	Yes	16 (9.4)	10 (10.9)	26 (9.9)	χ^2 =0.154 p=0.672
	No	155 (90.6)	82 (89.1)	237 (90.1)	
16. Blood donation cause hypertension	Yes	1(.6)	5 (5.4)	6 (2.3)	χ^2 =7.016 p=0.030 S
	No	167 (97.7)	84 (91.3)	251 (95.4)	
	Don't know	3 (1.8)	3 (3.3)	6 (2.3)	
17. Blood donation cause weight loss	Yes	4 (2.3)	11 (12.0)	15 (5.7)	χ^2 =13.233 p=0.001 HS
	No	164 (95.9)	76 (82.6)	240 (91.3)	
	Don't know	3 (1.8)	5 (5.4)	8 (3.0)	
18. Blood donation makes impotent	Yes	3 (1.8)	8 (8.7)	11 (4.2)	χ^2 =10.282 p=0.006 S
	No	165 (96.5)	79 (85.9)	244 (92.8)	
	Don't know	3 (1.8)	5 (5.4)	8 (3.0)	
19. Blood donation can cause sudden death	Yes	1(.6)	3 (3.3)	4(1.5)	χ^2 =2.860 p=0.125
	No	170 (99.4)	89(96.7)	259 (98.5)	