Assessment of Factors Motivating Voluntary Blood Donation in Hubballi City

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ABSTRACT

> Introduction:

Blood is a crucial healthcare resource linked to saving patient's lives with accidents, surgeries, bleeding disorders, etc. Since blood cannot be stored for an indefinite amount of time, a constant source of blood donation is required. Rate of youngsters in voluntary blood donation is crucial to meet the demand of safe blood.

> Objectives:

- To assess the factors that motivate blood donation.
- To assess communication and education impact in blood donation.

> Methods:

In this study, we included 384 blood donors for a cross-sectional study & assessed the factors that motivate voluntary blood donation using a pre tested questionnaire.

> Results:

In this study, out of the 384 participants 41.4% donors belonged to age group 18–25 years and male donors were 58.3%. Out of the total respondents, 44.3% were regular donor, 87.8% were aware of the fact that donating blood saves life & 68.2% participated in blood donation awareness programmes. About 69.4% were willing to donate blood in future.

> Conclusion:

From the above results, it can be concluded that though many of them have donated blood but all of them are not regular donors which may be due to lack of health education that targets the continuity of blood donation. So, there is a need to create awareness among these people to be regular donors.

Keywords:- Blood Donation; Motivating Factors; City.

CHAPTER ONE INTRODUCTION

Blood donation is a vital act of generosity and humanity that saves millions of lives every year. The act of voluntarily giving blood is motivated by various factors, each reflecting the compassion and altruism inherent in the human spirit. Understanding these motivations is crucial for blood banks, healthcare organizations, and society at large to encourage and sustain this life-saving practice.

In this study, we will explore the factors that drive individuals to donate blood, ranging from altruistic motives to personal experiences, societal responsibility, and health benefits. By delving into these motivations, we can gain valuable insights into the reasons behind blood donation, promoting awareness and ensuring a stable and sufficient blood supply for those in need.

A. Need for Study

Blood donation is crucial for several reasons:

- Emergency Situations: Blood is needed in emergencies like accidents, natural disasters, and surgeries where a significant loss of blood can occur.
- Medical Procedures: Many medical conditions, including cancer treatments, surgeries, and childbirth complications, require blood transfusions to save lives.
- Chronic Illnesses: Patients with chronic illnesses like thalassemia and hemophilia often require regular blood transfusions to manage their conditions.
- **Blood Disorders:** Individuals with blood disorders such as anemia and sickle cell disease rely on blood donations for their treatment and overall health.
- **Research and Development:** Blood donations are essential for research purposes, helping scientists develop new treatments and understand various diseases.
- Short Shelf Life: Blood components have a limited shelf life. Regular donations are necessary to ensure a steady supply of fresh and safe blood for patients in need.
- **Community Support:** Blood donation strengthens community bonds by fostering a sense of unity and compassion among people willing to help others.

By donating blood, individuals contribute directly to saving lives and improving the health outcomes of patients facing various medical challenges.

B. Objectives

- To assess the factors that motivate blood donation.
- To assess communication and education impact in blood donation.

CHAPTER TWO METHODOLOGY

- Study Area:- Hubballi City
- Types of Study:- Cross sectional study
- Study Population:- Blood donors among general population of urban, rural, semi urban area in Hubballi
- Period of Study:- 29/09/2023 to 07/10/2023
- Sample Size of this Project:- 384
- Sampling Method:- Snow Ball technique.
- Inclusion Criteria: The subjects who had donated blood at least once.
- > Exclusion Criteria:
- The subject who have donated blood long time ago.
- Those did not give consent

> Data Collection Method: -

Population of Hubballi city were interviewed using a structured questionnaire.

- Structured pre-tested questionnaire to collect demographic details and other relevant data.
- Specific questionnaire for assessing the factors motivating voluntary blood donation in Hubballi.

> Data Analysis:

Data obtained through the general questionnaire was entered in MS excel and was analyzed using SPSS v25. Data obtained through specific questionnaire was analyzed.

CHAPTER THREE RESULTS

Table 1: Age Distribution		
	Frequency	Percent
18 - 25	159	41.3
26 - 35	126	32.7
36 - 45	87	22.6
46 - 55	13	3.4

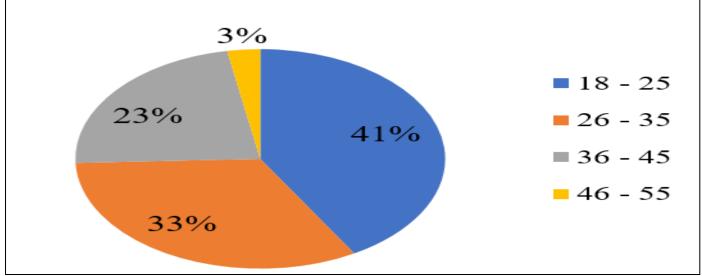


Chart 1: Age Distribution

Frequency Percent			
Female	160	41.6	
Male	225	58.4	
Total	385	100.0	

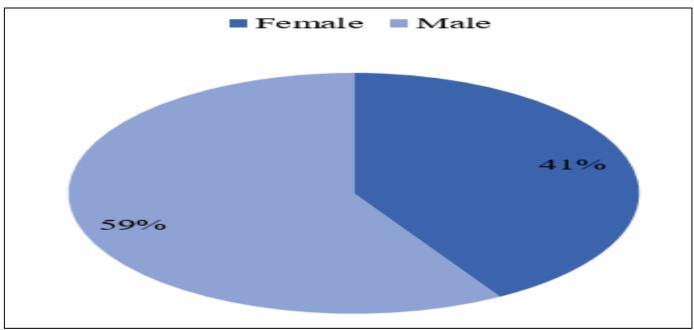


Chart 2: Gender Distribution

Table 3: Educational Backgro	und	
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	Frequency	Percent
Diploma	28	7.3
Graduate	127	33.0
High School	63	16.4
Illiterate	17	4.4
Middle School	28	7.3
Primary School	17	4.4
Professional Degree	105	27.3
Total	385	100.0

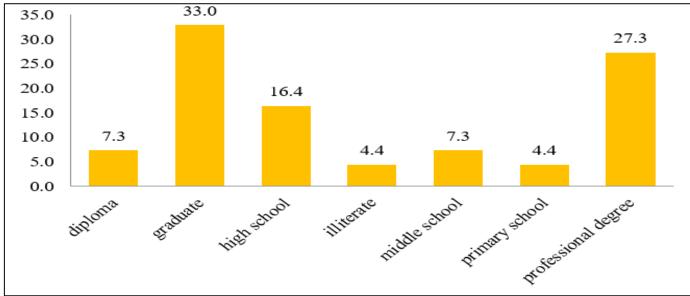


Chart 3: Educational Background

Table 4: Marital Status

	Frequency	Percent
Divorced	2	0.5
Married	199	51.7
Unmarried	184	47.8
Total	385	100.0

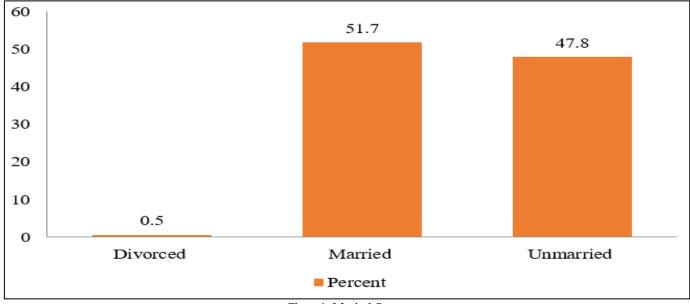


Chart 4: Marital Status

Table 5: Religion Distribution		
	Frequency	Percent
Christian	21	5.5
Hindu	316	82.1
Muslim	47	12.2
Other	1	0.3
Total	385	100.0

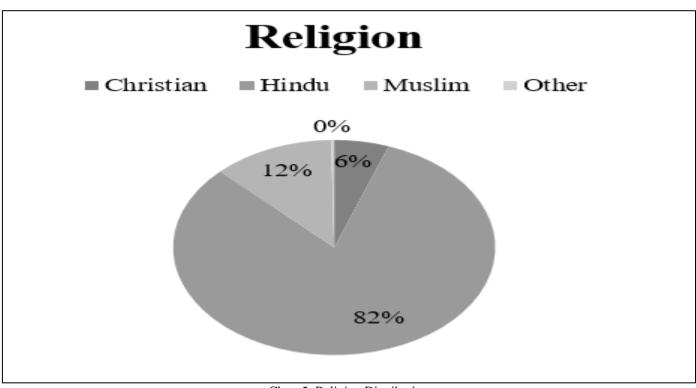


Chart 5: Religion Distribution

Table 6: Type of Family		
	Frequency	Percent
Joint Family	117	30.4
Nuclear Family	268	69.6
Total	385	100.0

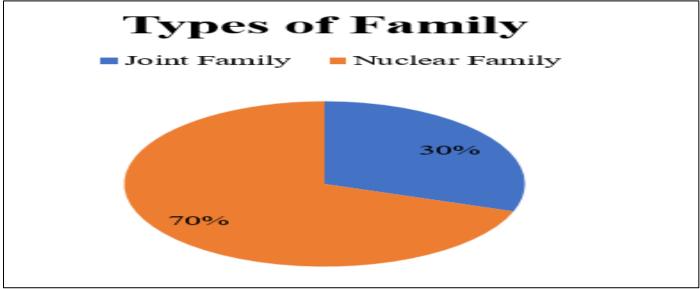


Table 7: Occupation		
	Frequency	Percent
Clerical/shop/farm	44	11.4
Professional	54	14.0
Semi Professional	36	9.4
Semi-Skilled	23	6.0
Skilled	78	20.3
Student	102	26.5
Unemployed	20	5.2
Unskilled	28	7.3
Total	385	100.0

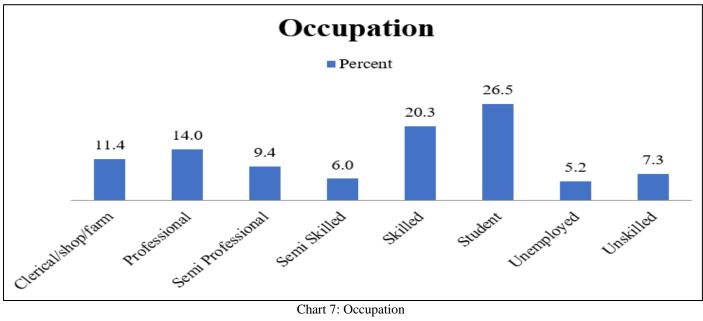


Chart 7: Occupation

	Table 8: Residency Distribution	
	Frequency	Percent
Rural	65	16.9
Semi Urban	33	8.6
Urban	287	74.5
Total	385	100.0

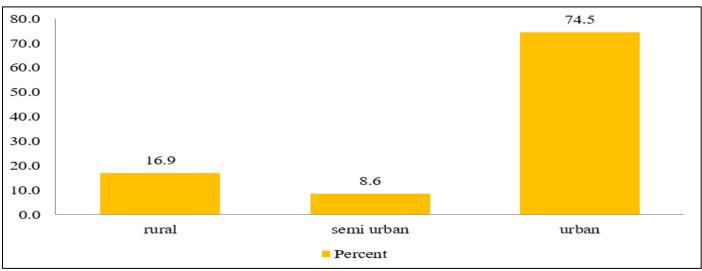


Chart 8: Residency Distribution

	Frequency	Per	cent
27883 - 69534	39	10	0.1
69535 - 92950	44	11	.4
92951	- 185894	22	5.7
9308	- 27882	22	5.7
less th	nan 9307	9	2.3
more th	an 185895	249	64.7
Т	otal	385	100.0

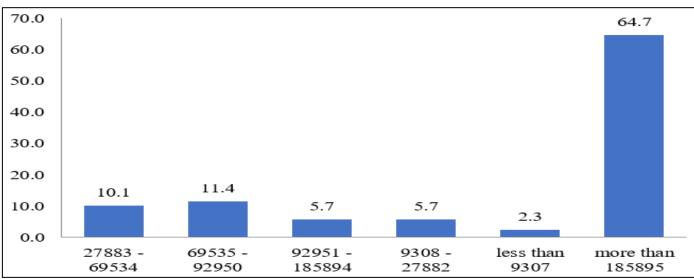


Table 9: Family Income (Per Annum)

Chart 9: Family Income (Per Annum)

	Frequency	Percent
No	215	55.8
Yes	170	44.2
Total	385	100.0

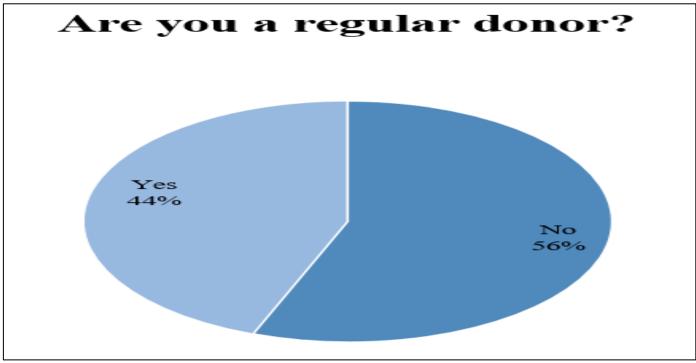


Chart 10: Regularity of Blood Donation

	Frequency	Percent
1 -4	192	49.9
13 - 16	34	8.8
17 - 20	22	5.7
20 - 24	4	1.0
5 - 8	76	19.7
9 - 12	48	12.5
more than 24	9	2.3
Total	385	100.0

Table 11: Frequency of Blood Donation

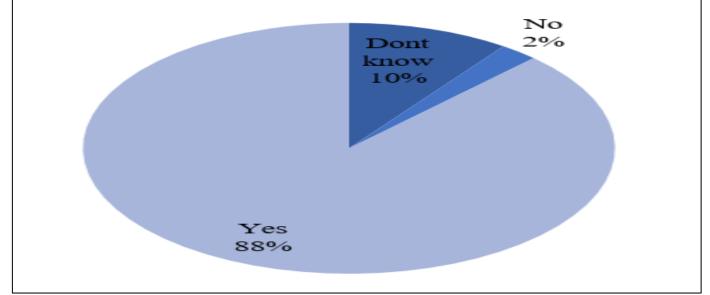
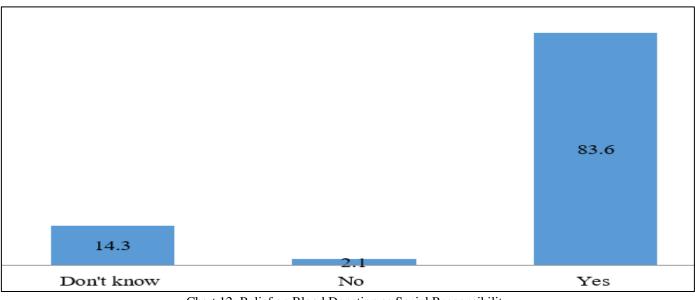
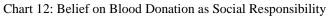


Chart 11: Frequency of Blood Donation

Table 12: Belief on Blood Donation as Soc	cial Responsibility
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	Frequency	Percent
Don't know	55	14.3
No	8	2.1
Yes	322	83.6
Total	385	100.0





9.9

Dont know

0

Yes

	Frequency	Percent
Dont know	38	9.9
No	9	2.3
Yes	338	87.8
Total	385	100.0
100		
90		
80		
70		
60		
50		07.0
40		87.8
30		
20		
10		

Table 13: Belief on Blood Donation as Life Saver

Chart 13: Belief on Blood Donation as Life Save

No

|--|

	Frequency	Percent
No	77	20.0
Yes	308	80.0
Total	385	100.0

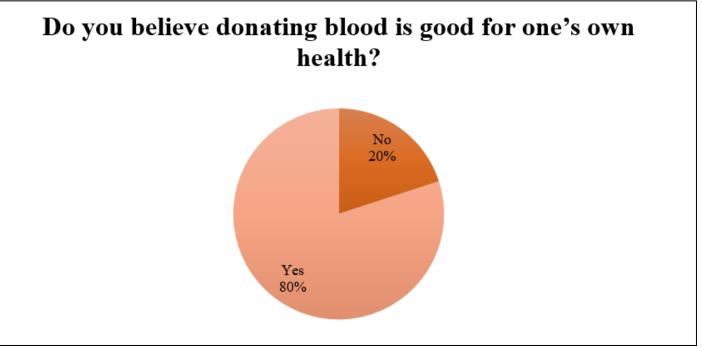


Chart 14: Belief on Blood Donation as Good for Own Health

	Frequency	Percent
No	24	6.2
Yes	361	93.8
Total	385	100.0

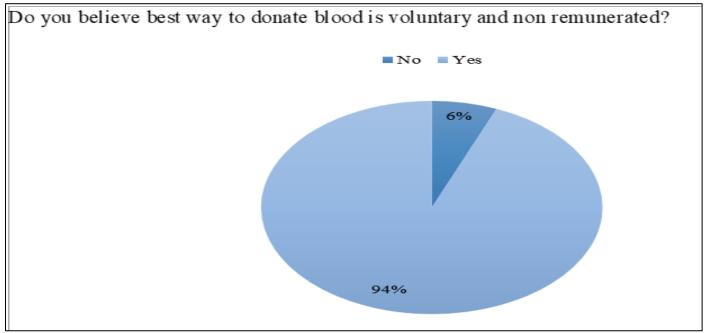


Chart 15: Belief on Blood Donation as Voluntary and Non-Remunarative

Table 16: Belie	f on Fact Reveil Own Health Status I	Before Blood Donation

	Frequency	Percent
No	11	2.9
Yes	374	97.1
Total	385	100.0

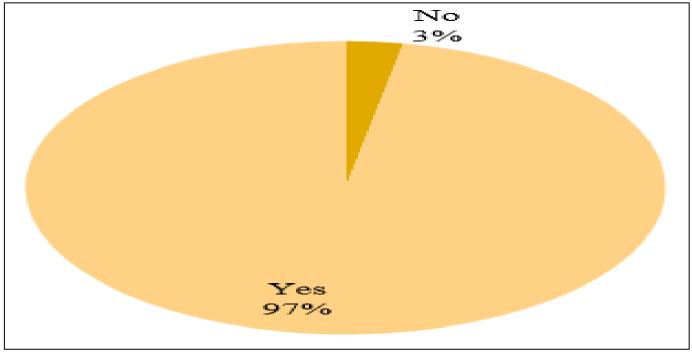


Chart 16: Belief on Fact Reveil Own Health Status Before Blood Donation

Table 17: Blood Donation Awareness Programme Participat	ion
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	Frequency	Percent
No	122	31.7
Yes	263	68.3
Total	385	100.0

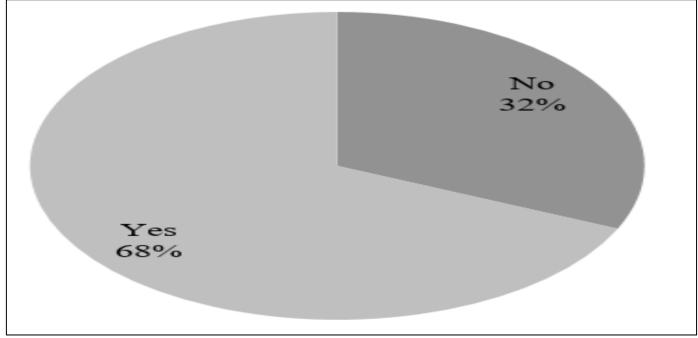
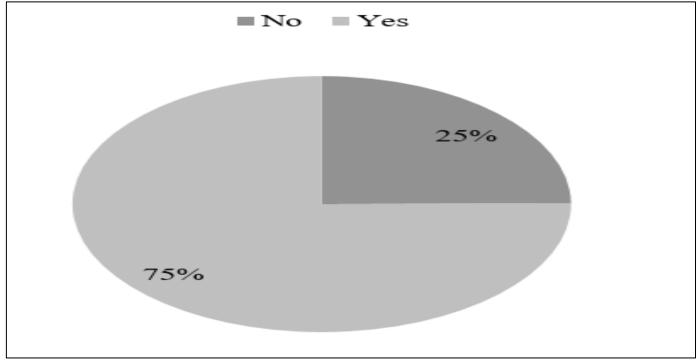


Chart 17: Blood Donation Awareness Programme Participation

Table 18: Own Health Status Detterring from	n Blood Donation
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	Frequency	Percent
No	96	24.9
Yes	289	75.1
Total	385	100.0



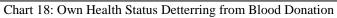


Table 19: Experience After Blood Donation		
	Frequency	Percent
Neutral	149	38.7
Pleasant	204	53.0
Unpleasant	32	8.3
Total	385	100.0

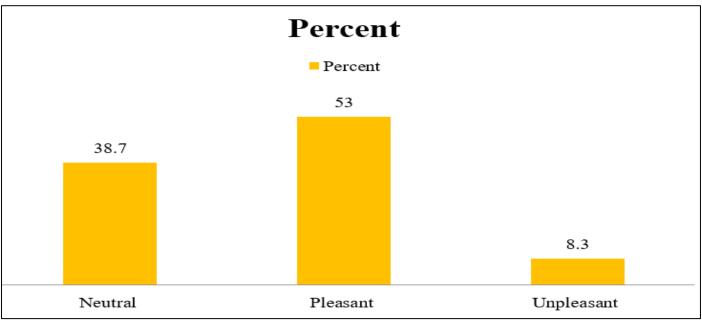


Chart 19: Experience After Blood Donation



	Frequency	Percent
No	28	7.3
Yes	357	92.7
Total	385	100.0

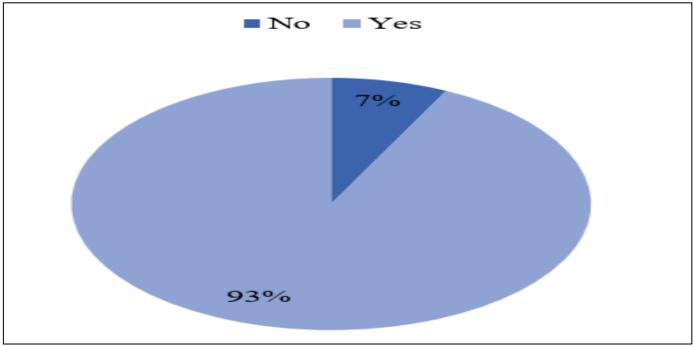


Chart 20: Prior Informed Consent Before Blood Donation

Table 21: Future Blood Donation		
	Frequency	Percent
Don't know	113	29.4
No	4	1.0
Yes	268	69.6
Total	385	100.0

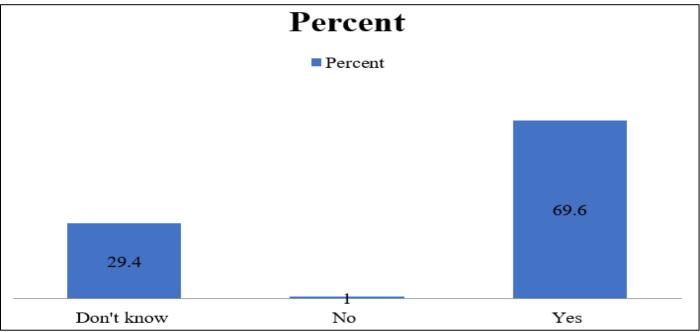
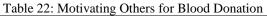


Chart 21: Future Blood Donation



	Frequency	Percent
Don't know	94	24.4
No	4	1.0
Yes	287	74.5
Total	385	100.0

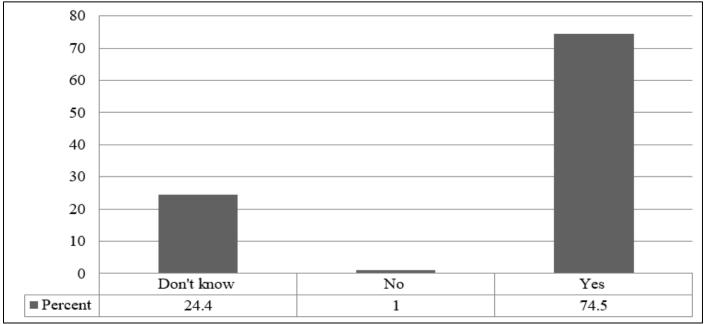


Chart 22: Motivating Others for Blood Donation

Table 23: Clarification of Misconce	ntions about Blood Donation	hy Awareness Programmes
rable 25. Clarification of Miscolice	phons about Blood Donation	by Awareness Flogrammes

	Frequency	Percent
No	171	44.4
Yes	214	55.6
Total	385	100.0

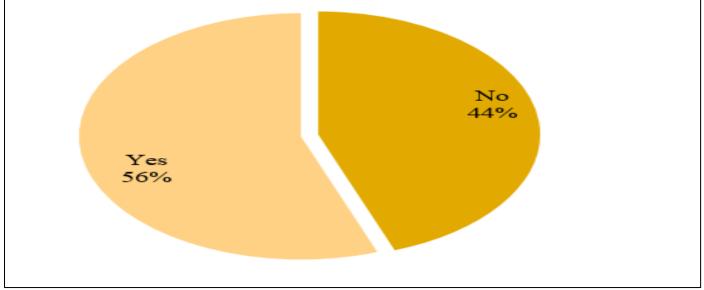
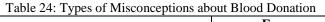


Chart 23: Clarification of Misconceptions about Blood Donation by Awareness Programmes

	Frequency	Percent
No Misconceptions	154	40.0
it will make extremely weak/ tired/ anaemic	149	38.7
its time consuming and lengthy process	58	15.1
No	6	1.6
risk of getting infection in the process is high	61	16.0
Total	385	100.0



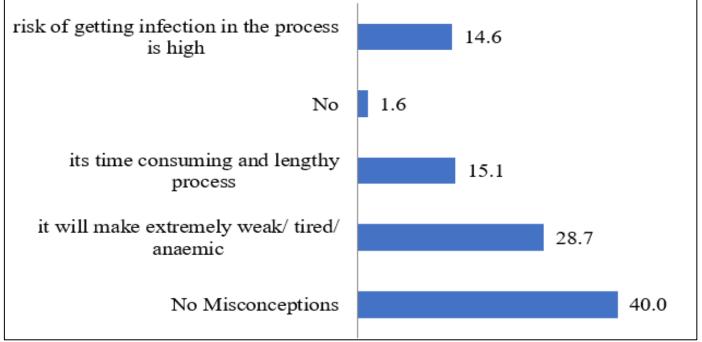


Chart 24: Types of Misconceptions about Blood Donation

Table 25: Knowledge Improvement About Blood Donation by Awareness Programmes

	Frequency	Percent
No	21	5.5
Yes	364	94.5
Total	385	100.0

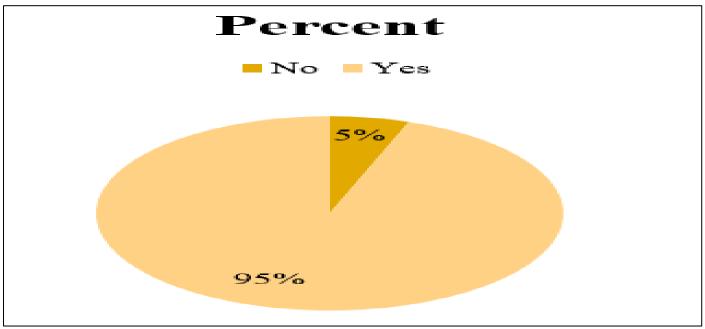


Chart 25: Knowledge Improvement About Blood Donation by Awareness Programmes

Table 26: Feelings Before Blood Donation	
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	Frequency	Percent
Anxious	66	17.1
Calm	137	35.6
Excited	71	18.4
Neutral	111	28.8
Total	385	100.0

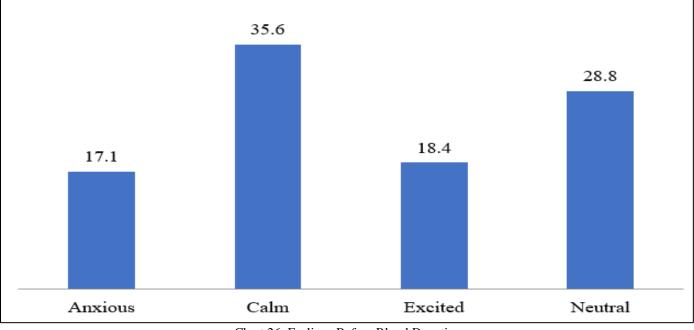


Chart 26: Feelings Before Blood Donation

Table 27: Pride Feeling After Blood Donation		
	Frequency	Percent
No	13	3.4
Yes	372	96.6
Total	385	100.0

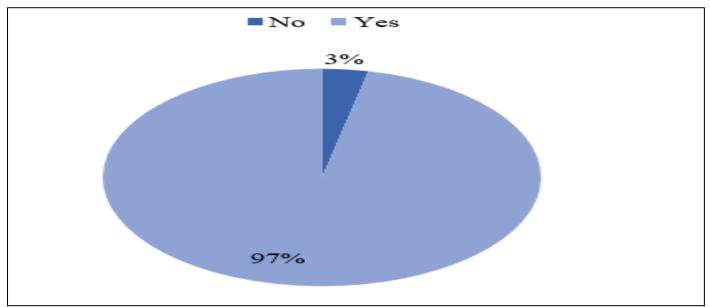


Chart 27: Pride Feeling After Blood Donation

Table 28: Feeling of Proper	Utilization of Blood Donated
rable 28: reening of Proper	Utilization of Blood Donated

	Frequency	Percent
No	318	82.6
Yes	67	17.4
Total	385	100.0

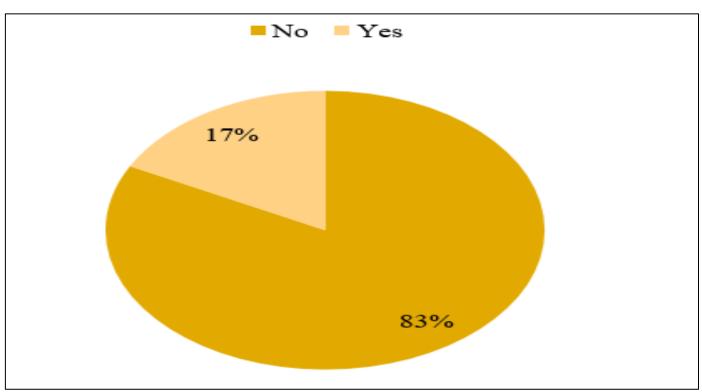
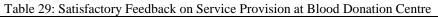


Chart 28: Feeling of Proper Utilization of Blood Donated

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	Frequency	Percent
No	18	4.7
Yes	367	95.3
Total	385	100.0

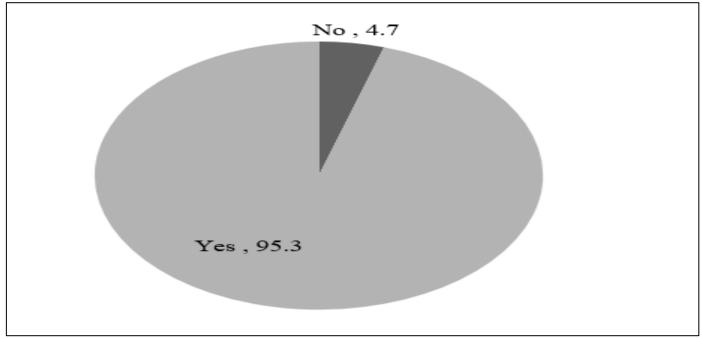


Chart 29: Satisfactory Feedback on Service Provision at Blood Donation Centre

	Frequency	Percent
No	207	53.8
Yes	178	46.2
Total	385	100.0

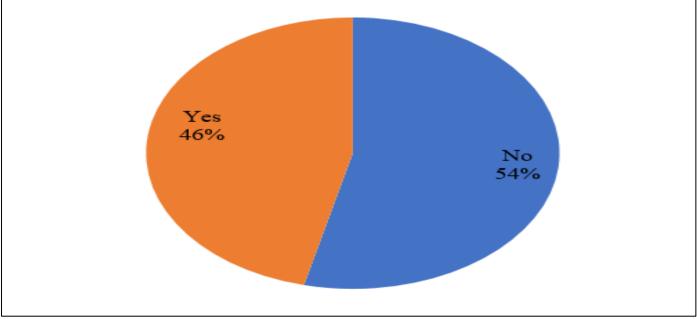


Chart 30: Hindering Adverse Effects in First Blood Donation

	Frequency	Percent
No Adverse Effects	197	51.2
Arm discomfort that restricted his mobility	44	11.4
Bleed from the site	36	9.4
Bruises (bluish discoloration at the site)	55	14.3
Fever and chills	25	6.5
Tired	28	7.3
Total	385	100.0



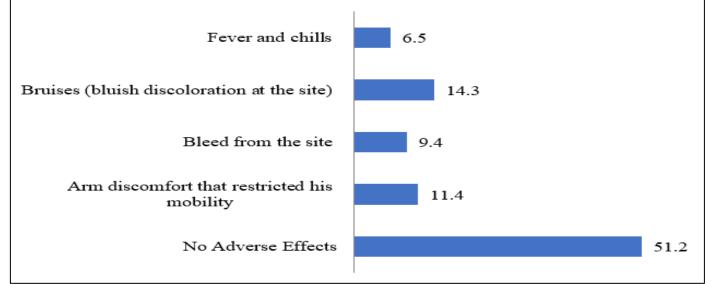


Chart 31: Type of Adverse Effects Encountered

Table 32: Instructions/ Take Home Messages Received After Blood Donation	on
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	Frequency	Percent
No	21	5.5
Yes	364	94.5
Total	385	100.0

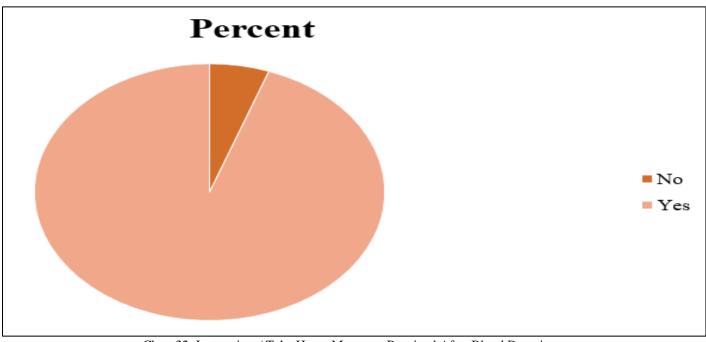


Chart 32: Instructions/ Take Home Messages Received After Blood Donation

Table 33: Blood Donation Frequency Less then Three Months		
	Frequency	Percent
No	348	90.4
Yes	37	9.6
Total	385	100.0

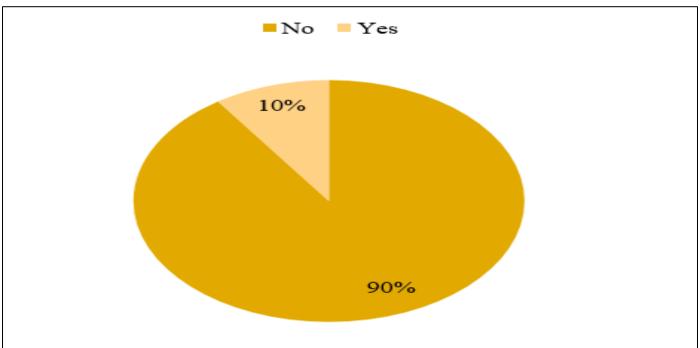


Chart 33: Blood Donation Frequency Less then Three Months

	Frequency	Percent
Blood camps	156	40.6
health benefits	80	20.8
Others	8	2.3
religious or cultural beliefs	37	9.6
replacement of blood	104	27.0
Total	385	100.0

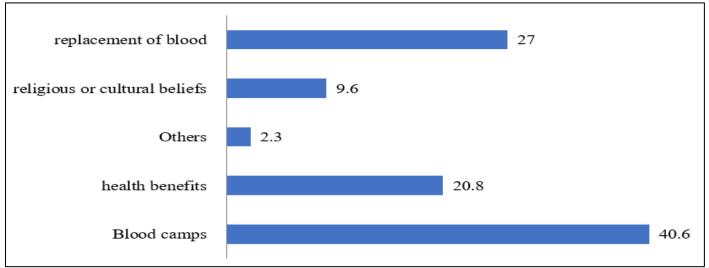
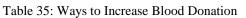


Chart 34: Reason for First Blood Donation

	Frequency	Percent
conducting more blood donation camps	155	40.4
providing incentives for blood donors	88	22.9
through awareness through social media	142	36.9
Total	385	100.0



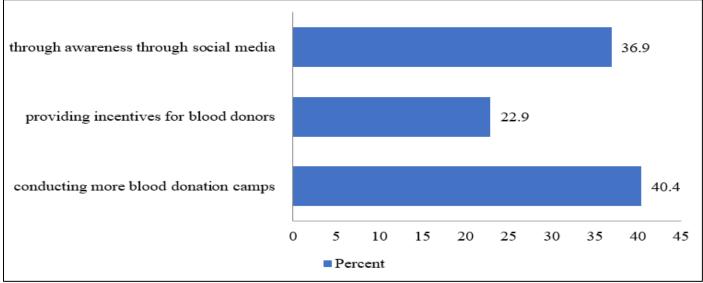


Chart 35: Ways to Increase Blood Donation

	Frequency	Percent
No	96	24.9
Yes	289	75.1
Total	385	100.0

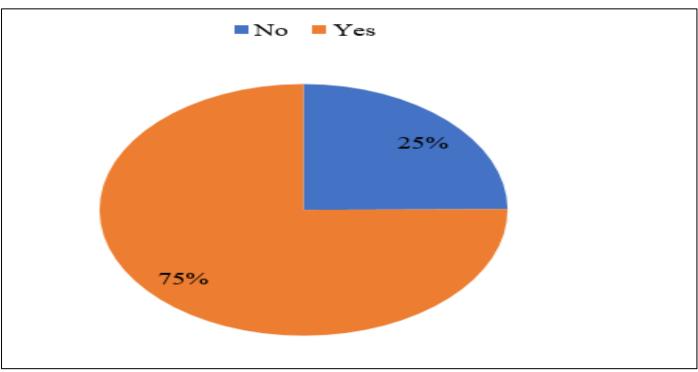


Chart 36: Disclosing as Blood Donor

> Associations

There Existing Few Significant Associations as Follows:

	Variable 2 →	Regularity		
Variable1	Options	Yes	No	P Value
Age	18 - 25	104	55	0.05
Γ	26 - 35	65	61	
	36 - 45	37	3	1
	46 - 55	8	1	

Association 1: Between Age & Regularity of Blood Donation

Between Age & Regularity of Donor: .

The association has been found from our study, as Regularity of seen more in case of young individuals. Since they are highly motivated to donate blood.

Association 2: Between Place of Residence & Regularity of donor		
Variable 2 →	Regularity	

	Variable 2 →	Regularity		
Variable1	Options	Yes	No	P Value
Residence	Urban	148	139	0.02
	Semi Urban	40	25	
	Rural	27	6	

Between Residence & Regularity of Donor: •

The association has been found from our study, the people living in urban area shows more regularity of donating blood as compared to rural, since urban people have easy access of blood bank (p = 0.02).

Association 3: Between Educational Background & Belief on Blood Donation as Voluntary and Non-Remunerative

	Variable 2 →	Belief on Blood Donation as voluntary and non-remunerative		
Variable 1	Options	Yes	No	P Value
Educational	Professional degree	102	3	0.05
Background	graduate	120	7	
	Diploma	26	2	
	High School	56	7	
	Middle School	28	0	
	Primary School	17	0	
	Illiterate	12	5	

Between Educational Background & Best Way to Donate Blood is Voluntary and Non-Remunerated: -•

The association has been found from our study, Greater the level of education, greater the subject believes that best way to donate blood is voluntary and non-remunerated (p = 0.05).

CHAPTER FOUR DISCUSSION

- According to cross sectional study on knowledge attitude and practice towards blood donation among residential students and teachers of religious institutions in Bangladesh out of the total participants 42% were regular donors and in our study the percentage was 56% owning to increase in number of blood camps and better service provided at these camps.
- Out of the total participants in the same study conducted above 74% showed positive attitude towards blood donation whereas in our study the percentage 93.8% the main reason for this is realization of people that donating blood is beneficial to their own heath and it saves lives as well mainly through health awareness programmes and education
- According to study on assessment of beliefs, behaviour and opinions about blood donation in Telangana, India among all the respondents 61.2% believed that donating blood saves lives and 87.8% respondents believed the same in our study
- According to study on knowledge, attitude and practice regarding voluntary blood donation among medical students in Pondicherry, India the overall knowledge on blood donation among respondents was 87.5% compared to 95% in our study this might be because of better utilization of social media for awareness of blood donation.

CHAPTER FIVE CONCLUSION

- From the above results it may be concluded that majority of the general public had enough knowledge and awareness about blood donation.
- We also conclude that despite having positive attitude towards blood donation only few of them are regular donors.
- The results provide useful insight that can be used to form plans to encourage current donors to donate more often, to motivate people eligible to donate and to support the nations transfusion needs and to convert the existing body of replacement donors into voluntary donors.
- In conclusion good knowledge may lead to higher desire for blood donation.

> Limitations

• As study was mainly conducted in blood donors of government blood bank (KIMS), the blood donors of private blood banks can be covered to have generalized view.

➢ Recommendation

- Highlight the impact of their blood donation by promoting positive differences their donation can make such as saving lives, supporting medical research and helping those in need
- Use of social media and digital communication makes young people more involved
- Connect with influencers to spread the word, potentially could reach millions of followers and encourage them to get involved
- Make blood donation easy and convenient by setting up blood donation drives in college campuses, near student housing and others areas where people can donate blood quickly and easily

ACKNOWLEDGEMENT

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REFERENCES

- Hossain, M.S. *et al.* (2022) 'Knowledge, attitude, and practice towards blood donation among residential students and teachers of religious institutions in Bangladesh – a cross-sectional study', *Heliyon*, 8(10). doi:10.1016/j.heliyon.2022.e10792.
- [2]. Ibrahim, A.A., Koç, M. and Abdallah, A.M. (2021) 'Knowledge level, motivators and barriers of blood donation among students at Qatar University', *Healthcare*, 9(8), p. 926. doi:10.3390/healthcare9080926.
- [3]. Kowsalya, V. *et al.* (2013) 'A study on knowledge, attitude and practice regarding voluntary blood donation among medical students in Puducherry, India', *Pakistan Journal of Biological Sciences*, 16(9), pp. 439–442. doi:10.3923/pjbs.2013.439.442.
- [4]. Marantidou, O. *et al.* (2007) 'Factors that motivate and hinder blood donation in Greece', *Transfusion Medicine*, 17(6), pp. 443–450. doi:10.1111/j.1365-3148.2007.00797.x.
- [5]. Samreen, S. *et al.* (2021) 'Assessment of beliefs, behaviors, and opinions about blood donation in Telangana, India—a cross sectional community-based study', *Frontiers in Public Health*, 9. doi:10.3389/fpubh.2021.785568.