

Knowledge, Attitudes and Practices Regarding Blood Donation Among People From Various Areas in Karachi

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Abstract: Background: Over 90% of total blood transfused in Pakistan is donated by the friends and relatives of patients. The population of Karachi particularly healthy and active individuals can be a good source of quality blood if they are motivated and are willing to be voluntary blood donors. Therefore the objective of this study is to determine the knowledge, attitudes and practices about blood donations among people of Karachi.

Methods: A cross sectional study was conducted among people of Karachi from April 2015 to September 2015. A total of 300 people were interviewed with the help of structured questionnaire. Data analysis was performed in SPSS version 20.

Results: The study showed that the frequency of blood donation was significantly higher in males than females. In total, 273 of the participants have knowledge about blood donation whereas the remaining 27 participants were unaware. In total, 230 participants never donated blood. Regarding attitudes of participants, study showed that 31% participants think that they are weak, 23.7% told that it's harmful, 23% told that they are diseased, and 23.3% told that they have a fear of getting sick/infected.

Conclusion: Attitudes and performance regarding blood donation was less than satisfactory among the participants as compared to knowledge and awareness, this may be due to misconceptions, misbeliefs and restrictions. An intensive campaign should be implemented to encourage public about blood donation to alleviate their fears and to change their perceptions.

Keywords: Blood Donation, People living in Karachi, Knowledge, Attitude, Practices.

doi.org/10.21089/njhs.21.0020

INTRODUCTION

“More blood, more life” [1] this was the theme for World Blood Donor Day towards emphasizing the critical need for more people all over the world to become life savers by donating blood regularly. World Blood Donor Day is celebrated on the 14th of June every year to mark the birth anniversary of Karl Landsteiner who discovered the blood group system [2].

Around 93 million blood donations are donated annually by all types of blood donors (based on reports from 173 countries) [3].

Blood donation refers to the process of collecting, testing, preparing and storing blood and blood components [4]. According to World Health Organization (WHO), the estimated blood requirement for Southeast Asian region is approximately 16 million units per annum, but is able to col-

lect just 9.4 million units, leaving a gap of six million units [3]. The individuals which give blood voluntarily are called Blood Donors. According to WHO there are three types of blood donors [3]:

1. Voluntary unpaid
2. Family/replacement
3. Paid

Most donations are as a result of replacement donations, which are non- remunerated donations, provided by the relatives of patients. Paid donors are those who donate blood in exchange for money. Replacement and paid donors may be compelled to donate blood, though their health conditions are unsuitable to donate blood. They do not help maintaining a stock of blood for emergency situations.

Of the 108 million blood donations collected globally, approximately half of these are collected in the high-income countries, home to 18% of the world's population. This however has shown an increase of almost 25% from 80 million donations collected in 2004 [3].

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In Pakistan more than 1.5 million pints of blood are collected each year. Among them about 65% is from replacement donors, 25% from volunteer donors and about 10% from professional donors. The concept of voluntarily non-remunerated donors is mainly absent due to the lack of a blood donor recruitment and retention strategy.

The most prominent reason why people give blood is altruism beside community needs and support, family assurance and social pressure. On the other hand fear, lack of knowledge has proved to be primary obstacles for blood donation [5].

According to an estimate, over 70% blood donations in Pakistan are replacement or paid for donations [6].

Pakistan, with its limited resources, has 170 public and 450 private blood banks that are mostly hospital based. The system, however, lacks information regarding retention of donors, record keeping and recruitment of donors in most of the blood banks. A study done in Pakistan revealed inadequate knowledge, inappropriate attitude and misconceptions about blood donation among Army personnel as well [7].

OBJECTIVES

1. To determine the awareness among people regarding blood donation
2. To determine the knowledge among people towards blood donation
3. To assess the attitudes and behavior of people before and after donating blood
4. To understand the physical and psychological reaction after blood donation.

MATERIALS AND METHODS

This questionnaire based cross sectional descriptive study was conducted during April 2015 – September 2015 in different areas of Karachi. Cluster sampling technique has been used in this research, the target was mainly the common people aged between 18-45 years. A total of 300 people were included in the study. The participants were briefed about the objective of this study and verbal consent was taken. Pretest was also conducted which included 30 participants. The statistical analyses were done by using SPSS software.

RESULTS

The mean age of the population was between 20-30 years. The questionnaire was completed by 300 participants, of whom 235 (78.3%) were male and 65 (21.7%) were female (Table 1), it showed that frequency of blood donation was significantly higher in males as compared to females. Among our study population 138 (46%) were unemployed, 32% were student, 8% were self-employed, 8.7% were gov-

ernment employed, whereas 5.3% were private sector employed (Table 2). Overall it was noticed that the unemployed persons contributed to a greater part among our study population. In total, 273 (91%) of the population had knowledge about blood donation, whereas 27 (9%) of the population were unaware. So, it shows that the people of Karachi have good knowledge about blood donation. 223 (74.3%) of our study population donated blood in order to save someone's life, whereas aim of other participants were sympathy 7%, charity 8%, money 14.7%, on the other hand 2.3% participants had no aim and inspiration regarding blood donation (Table 3). Among the participants, about 10% had donated blood just once, 10.7% for 3-5 times, 2% for 5-10 times and 7% for >10 times but the evaluating thing in our study was that 230 (76.7%) of the people never donated blood (non-donors). . In order to find out the level of knowledge about the frequency of blood donation we came to know that 115 (38.3%) persons knew that there should be a 6 months gap, however 13.7% population told that it should be a 2 months gap, 31% population for 3 months gap and 17% population for 4 months gap (Table 4).

About 199 (66.3%) think that they could donate blood, whereas 101 (33.7%) did not want to donate blood, 31% think they are weak, 23.7% think that it is harmful, 23% were diseased and 23.3% have fear of getting sick/infected. About 133 (44.3%) people stated that blood donation can get them infected due to unsterilized needle. Similarly, 16.3% population think that the site of needle's insertion may be painful, 38.3% people have a fear that they may faint, 7% of the population have a misconception of infertility and 3% of the people think that if they donate blood then the blood recipient will become their half-brother/sister.

DISCUSSION

Blood donation is very important issue which has to be focused. According to our study, 76.6% of the populations in Karachi are non-donors, 13.4% are regular donors and 40% are voluntary donors. The donors who regularly donate are mostly between the age of 20-30 years, among these the incidence of male donation is far more better in Karachi than other countries, but despite those females who have a spirit to donate blood are not independent to give blood with freedom due to cultural and family matters. Family plays an important role in guidance and knowledge of the people.

What was the Reason Behind?

The majority said that to save someone's life is just like saving the whole humanity but unfortunately 76% people still never donate blood. Besides having this beautiful spirit 49% people donate blood only in emergency to their family members but not to other people because of cultural misconceptions and misbelieve.

Table 1. Frequency distribution of the participant's sex.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	235	78.3	78.3	78.3
	female	65	21.7	21.7	100.0
	Total	300	100.0	100.0	

Table 2. Frequency distribution of participant's occupation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unemployed	138	46.0	46.0	46.0
	Student	96	32.0	32.0	78.0
	Self employed	24	8.0	8.0	86.0
	Government employed	26	8.7	8.7	94.7
	Private sector employed	16	5.3	5.3	100.0
	Total	300	100.0	100.0	

Table 3. Frequency distribution of aim of blood donation.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	to Save Someone's Life	223	74.3	74.3	74.3
	Money	44	14.7	14.7	89.0
	Charity	24	8.0	8.0	97.0
	Sympathy	2	.7	.7	97.7
	none of them	7	2.3	2.3	100.0
	Total	300	100.0	100.0	

Table 4. Frequency distribution of the participants.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2 months gap	41	13.7	13.7	13.7
	3 months gap	93	31.0	31.0	44.7
	4 months gap	51	17.0	17.0	61.7
	6 months gap	115	38.3	38.3	100.0
	Total	300	100.0	100.0	

As 91% have knowledge about blood donation, they have also positive attitudes but they resist to donate blood because

of lack of time, fear of complications and anemic, which act as a barrier in both sexes.

Our study reveals that more than that 66.3% of people want to donate blood because they had a positive and healthy attitude towards blood donation yet 33.7% of our respondents are not willing to donate blood due to weakness/disease or just because they are afraid of the process. 33.3% of our donors agreed that they have been donating blood so as they will get a complementary blood screening for major diseases like hepatitis, HIV etc.

Non donors expressed their fear of needle, getting faint or in some cases becoming infertile. People from specific areas have shown the fear of alterations in their relationship with family members. Although we unfortunately found out that professional blood donor tend to donate blood without consideration of time period just to get money/cash for their major requirements/addictions.

CONCLUSION

An intensive campaign should be implemented to encourage public about blood donation to alleviate their fears and to change their perceptions. Barriers to blood donation have to be properly investigated and evaluated. Qualitative surveys should be done in order to rule out individual's decision to give blood. An adequate reward that suits the community could be developed for these donors and also encouraging especially to those people who have knowledge but still refuse to donate blood because of lack of time.

ACKNOWLEDGEMENT

Declared None.

CONFLICT OF INTEREST

Declared None.

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