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Blood Donation

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PERCEPTION OF BLOOD DONATION AMONG PAKISTANI YOUTH

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ABSTRACT

Objective: To explore the factors which motivate or hamper our youngsters for blood donation and to understand the behavior of youth regarding blood donation through which we can rise voluntary blood donation.
Study Design: Cross sectional study.
Place and Duration of Study: Allama Iqbal Medical College Lahore, from Jan 2017 to Sep 2017.
Methodology: A self-designed detailed questionnaire was designed, comprised of the demographic status of the subject, various aspects of the attitudes, perceptions, and drives toward blood donation including the questions regarding earlier blood donation, their experience, future planning for blood donation and reasons for not donating the blood.
Results: Out of the 789 participants, only 284 (36.01%) were blood donors including 231 (81.39%) males and 53 (18.61%) females. Altruism, sense of social responsibility, volunteerism, spiritual pleasure and gaining experience were major factors for blood donation while never asked for donation, objection from elders, fear for the needle, fear of adverse effects, weight gain/loss were the barriers which impede our youngsters for blood donation.
Conclusion: Blood donation can be up surged with proper counseling, diminishing out spread myths and false perception among young population of Pakistan.

Keywords: Blood donation, Barriers, Motivational factors, Medical Pakistani youngsters.

INTRODUCTION

There is a significant gap between demand and availability of blood because of shortage of regular blood donors to meet the increased demands of blood. In addition to the limited supply, the safety, especially with regard to the risk of transfusion transmissible infections, is also an issue of utmost concern especially in the developing countries like Pakistan[1].

The blood collection from Volunteer Non-Remunerated Blood Donors (VNRBD) is a key tool for guaranteeing the wellbeing, excellence and uninterrupted availability of blood. The World Health Organization indorses that all countries should be self-reliant for all blood products and that all blood donations should be charitable, unidentified and non-remunerated[4]. The World Health Assembly (WHA) perse-verance WHA 28.72 and WHA 58.13 commended that adherent's states to ripen national blood transfusion services based on voluntary non-remunerated blood donation. The taking on the VNRBD model had already been acclaimed in the Blood Transfusion Act of Pakistan. This exemplar move will need major exertions in community wakefulness, for which the current mission is laying one of the foundation stones through a thorough analysis of the knowledge, attitudes, and practices (KAP) of a key segment of the society, which are young adults[2,3].

According to WHO global database on blood safety, in Pakistan estimated blood pool per 1,000 people is 16.6, only 10.6% of general public donate blood voluntarily while rest 89.4% blood donation is from family, friends or as replacement donation. Male to female quotient of blood intake is 40:60, but solitary 5% of the benefactors are female which echoes the ominous prerequisite to build up the spur and awareness campaigns for charitable blood donation, so that the demand and availability of blood may be on

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the equal state. Tactics for conscription and retaining of blood donors should be strategic and should be engrossed on the dynamics that affect the blood donation behavior[4,5].

Establishing voluntary non-remunerated blood donation system in a developing country like Pakistan is not an easy task. Concerning blood donation in Pakistan, there are notable differences between the public and private sectors. To overcome these differences it is in the public sector, most blood banks are hospital based, often with inadequate blood collection, processing and testing procedures and a strong predominance of the replacement donor app-roach. In the private and NGO sector, indepen-dent blood banks are operating, some of which have considerable experience in community mobilization and donor management[6].

Countries that quiet relianton blood donation by patients' kin, like in Pakistan, an surge of the percentage of intended donors among blood donors will aid to move the responsibility for blood provision from patients' kinsfolks to the health care organizations and likewise daunt people from vending their blood. The origin of this family bestowment method may be originated in cultural and ethnic backgrounds of sets of people who were used to meet and look after health of their own relatives and primary social circle. The majority of family replacement donation in Pakistan assumes an emphasis on the perception of need and care for the close relatives. The intended transformation focuses on the development of the perception of the need for donor blood from this rather restricted family and friends circle to the wide community at large[7,8].

This issue is addressed also in Pakistan's new Blood Donor Policy (2011), which describes the on-going transformation process from a predominantly hospital-based system (with no community outreach requirements, as they follow the 'replacement donor' approach), in the direction of the inclusive exemplary with a functional and latitudinal split-up between integrated blood production and connected blood transfusion centers (i.e. hospitals). Voluntary donation system requires effective organizational structure which can improve the availability of voluntary blood donors from low-risk groups of population[9,10]. In countries with comparable population pyramids as Pakistan, the young people have been recognized as a vital low-risk donor group. The current study investigated the appealing factors for blood donation and the subtle liable for not bestowing blood amongst the youngsters.

METHODOLOGY

This cross sectional study was carried out in Pathology department, Allama Iqbal Medical College Lahore, using convenient sampling technique during the period of 1st January to 20th September 2017.

A self-designed detailed questionnaire was designed after a detailed review of earlier reports that explored the attitudes toward blood donation around the globe, comprised of the demographic status of the subject, various aspects of the attitudes, perceptions, and drives toward blood donation including the queries regarding earlier blood donation, their experience, future planning for blood donation and reasons for not donating the blood. The questionnaire contained multiple options for each statement and all subjects were requested to tick any of the option given. The questionnaire was distributed in 789 medical youngsters; all participants were also informed about, the objective of this study and assuring them for their confidentiality.

Before proper filling of questionnaire and informed consent were collected, then each part of the questionnaire was analyzed separately. All those participants who ever had donated blood were tagged as blood donor and other participants who had never experienced blood donation were labeled as non-blood donor. Data was analyzed by SPSS 21.0, frequency and percentages were calculated.

RESULTS

Out of total 789 enrolled medical youngsters 406 (51.45%) were male and 383 (48.55%) were females. Their ages were between 18-30 years

with mean age 21.65 ± 2.98 years. Out of 789 youngsters, 284 (36.0%) were blood donors and 505 (64.0%) were non-blood donors. Among blood donors, 231 (81.34%) were male and rest 53 (18.66%) were female.

Planning for blood donations among previously blood donor and non-blood donor community was calculated and found considerable for those blood donors who were previously blood donors but they are not willing for future blood donation because of factors (table-I).

Table-I: Breakup of future planning for blood donation.

Donation Status	Future Blood Donation Plan			
	Agree		Not Agree	
	Male, n (%)	Females, n (%)	Male, n (%)	Females, n (%)
Already blood donors	201 (87.02)	33 (62.26)	30 (12.98)	20 (37.7)
Previously non blood donors	150 (85.70)	210 (63.64)	25 (14.3)	120 (36.36)

Different factors which urge the non-blood donors for blood donation in future included "altruism" in both genders followed by "sense of social responsibility" (table-II).

Table-II: Factors which were motivating non-blood donors for becoming future blood donors.

Motivational Factors	Male (n=150)	Female (n=210)
	n (%)	n (%)
Altruism	71 (47.3)	81 (38.5)
Sense of social responsibility	25 (16.6)	43 (20.4)
Gaining experience	03 (2.0)	10 (4.7)
Social pressure	-	-
Earning money	-	-
Getting awards	-	-
Getting screened for diseases	14 (9.3)	09 (4.2)
Knowing blood groups	10 (6.6)	16 (7.6)
Spiritual pleasure	19 (12.6)	20 (9.5)
Voluntarily	08 (5.3)	04 (1.9)
Desired to lose weight	-	27 (12.8)

Table-III: Barriers which were restricting non-blood donors from becoming future blood donors.

Barriers	Male (n=25)	Females (n=120)
	n (%)	n (%)
Fear for needle	5 (20)	34 (28.3)
Fear of adverse effects	3 (12)	27 (22.5)
Objections from elders	4 (16)	14 (11.6)
Post donation anxiety	-	-
Never asked for donation	-	4 (3.3)
Transmission of diseases	1 (4.0)	3 (2.5)
Fear of discovering diseases	-	2 (1.6)
Lack of time	1 (4.0)	1 (0.8)
Rude behavior of health care staff	3 (12)	8 (6.6)
Misuse of blood	4 (16)	10 (8.3)
Leads to weight gain/loss	4 (16)	15 (12.5)
Being a female	-	2 (1.6)

Table-IV: Motivational factors among blood donors for future blood donations.

Motivational factors	Male (n=201)	Female (n=33)	Total (n=234)
	n (%)	n (%)	n (%)
Altruism (Doing good to others)	158 (78.5)	19 (57.5)	177 (75.5)
Sense of social responsibility	21 (10.4)	09 27.2	30 (12.8)
Gaining experience	-	-	-
Social pressure	01 (0.4)	-	01 (0.4)
Earning money	01 (0.49)	-	01 (0.4)
Getting awards	-	-	-
Getting screened for diseases	01 (0.4)	01 (3.0)	02 (0.8)
Knowing blood groups	-	-	-
Spiritual pleasure	08 (3.9)	01 (3.0)	09 (3.8)
Voluntarily	10 (4.9)	02 (6.0)	12 (5.1)
Desired to lose weight	01 (0.4)	01 (3.0)	02 (0.8)

Table-V: Barriers for future blood donation among previously blood donors.

Barriers	Male (n=30)	Female s (n=20)	Total (n=50)
	n (%)	n (%)	n (%)
Fear of adverse effects	5 (16.6)	4 (20)	9 (18)
Objections from elders	8 (26.6)	5 (25)	13 (26)
Rude behavior of health care staff	8 (26.6)	3 (15)	11 (22)
Misuse of blood	7 (23.3)	2 (10)	9 (18)
Leads to weight gain/loss	2 (6.6)	1 (5)	3 (6)
Being a female	-	5 (25)	5 (10)

Dynamics which inspire the subjects to keep donating blood in future include "Altruism" on top followed by "sense of social responsibility". Barriers which impede previous blood donors for future blood donation included "objection from elders", "rude behavior of healthcare staff", "misuse of blood". In spite of many policies and awareness programs, still we have some barriers which are major source for reduction of volunteer blood donation. Fear of needle was major factor in both genders followed by fear of adverse effects, objection from elders, misuse of blood (table-III).

Factors which were keeping the blood donors for future blood donations were "Altruism" and followed by "Sense of social responsibility" (table-IV).

Table-V depicts barriers which impede previous blood donors for future blood donation included "objection from elders", "rude behavior of healthcare staff", "misuse of blood" (table-V).

DISCUSSION

Blood safety depends on the health status of blood donor and their blood products[11,12]. The quality of the donors and their blood requires that each blood donor should be aware of about their health status. In human beings, blood is a lifeline for existence therefore deficiency of this body fluid in different situations of emergency leads to irreplaceable loss of human life[13,14]. Therefore blood donor is precious. The present study was planned to evaluate the perception of Pakistani youngsters about blood donation, so we may overcome all those barriers which are chiefly responsible for blood donation resistance, and also to evaluate factors which motivate youngsters for blood donation[15-17].

Of course there is vast difference for the factors which inspire or stop blood donor for blood donation. Probable cause for this difference is education, economy of the country. Developed countries which dependent on VNRBD rarely face problems arising due to the shortage of blood supply[15-17]. While in developing countries shortage of blood is still a dilemma. Most of blood donors are replacement/directed donation type where friends, colleagues of recipient donate blood. In both scenarios there is need to analyze the factors which motivate or hind the youngsters for donation blood for increasing the number of volunteer blood donations.

Out of 789 youngsters, 36% were blood donors and rest participants were non-blood donors. Among blood donors, 81.34% were male and remaining 18.66% were female participants.

Present study showed that female population which forms more than half of our country population was at grossly low level of blood donation. This reflects that it is badly need to motivate females for blood donation by correcting the reasons which stop them for donating blood. We found that 6.69% of total blood donors were donating blood voluntarily. Another study among health professionals showed only 3.4% of doctors and 0% of paramedics were regular voluntary blood donors[14]. Another study from Kingdom of Saudi Arabia reported 71% voluntary blood donation rate[18]. This increase in voluntary blood donors may be due to the donor and public motivational campaign.

A major motivational factor which was attracting youngsters for blood donation was "Doing Good to others (Altruism)", "Sense of social responsibility". "Social pressure" and spiritual pleasure. Most common barriers that were hindering our population for blood donation was "Never asked for donation' followed by "Objection from elders", "Fear of needle", "Fear of adverse effects" and also the transmission of diseases.

Present findings for barriers and motivational factors were strongly in agreement with previous literature[15,19,20]. We also found that 9.33% and 6.66% blood donors were donating blood for "Getting screened for diseases" and "to know their blood groups", respectively. Another previous study reported that 2.8% of the population had donated blood just to get tested for HIV[21]. In Shah *et al*. study reported that 32.4% of blood donors believed that HIV infection can

be transmitted through blood donation between donors[22]. It reflects the need of time to educate public about the benefits and facts of blood donation. Factors which reduce the number of blood donation can be corrected by arranging public awareness campaign where public can be educated about the facts and beliefs regarding blood donations.

When previous blood donors were asked about their future plans for blood donation, out of 231 male donors only 30 (12.99%) refused to donate but rest 201 (87.01%) wished to keep donating blood. From 53 previously female blood donors only 33 (62.26%) were willing for blood donation in a future life. This fall in a number of blood donors is really a dilemma and threat for the supply of healthy blood as female blood donors are already very few in numbers.

When previously non-blood donors were asked about their future plan for blood donation, out of 175 males only 25 (45.45%) refused to donate blood and remaining 150 (42.74%) showed a desire to donate blood regularly.

Female donors were more excited for future blood donation planning than the males. From 330 non-donor females 210 (63.64%) were agree to donate blood on regular basis but remaining 120 (36.36%) were not interested in future blood donation planning still. When previous blood donors were asked about their future plan for blood donation, 50 of blood donors refused to donate blood. From these 50 donors 40% were females and remaining was male population. They were refusing for blood donation because of "Fear for adverse effects", "Objection from elders", "Rude behavior of healthcare staff", "Misuse of blood" and most of the females refused to donate blood due to factor "being a female".

In our study, the most frequent blood donor gender was male while female donors were less in number and frequency of blood donation. Of course the number of female blood donor is increasing but still this is an alarming condition that female population which is the more than half of our country population, don't use to donate blood even when they are fit for blood donation and If they are donating blood most of them are not agree for donating blood in future. These all above mentioned myths and beliefs about blood donation in our population must be corrected by arranging seminars and awareness campaign at colleges, universities, madras as and other public places like a shopping mall, cinema, and bus stops. Print and social media can also play a crucial role to enroll new voluntary blood donors by educating the public by the need of the blood in society and also the results of its deficiency.

CONCLUSION

The factors which impede youngsters for blood donation include objection from elders, rude behavior of healthcare staff, and fear of adverse effects. Factors which motivated the study population for blood donations are Altruism, sense of social responsibility, voluntarily, spiritual pleasure knowing their blood groups and getting screened for diseases. To increase the number of blood donations, the younger population must be encouraged so that all the folklores and fabricated beliefs about blood donation can be corrected. This aim can be achieved by arranging awareness campaigns, seminar, and talks in colleges, universities, other common places like parks and bus stop etc. Print and electronic media can also play a vital role in achieving this objective.

CONFLICT OF INTEREST

This study has no conflict of interest to be declared by any author.

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