

Knowledge, Attitude, Beliefs and Motivations of People in Western Part of Turkey Regarding Blood Donation

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Abstract

Introduction: The blood donor system in Turkey depends mainly on voluntary donors. We think that the attitude and beliefs of people can keep them away from voluntary donation. We aimed to evaluate the factors influencing blood donation in Turkish population in the present study.

Material and Methods: A self-administered questionnaire was developed for the assessment of various aspects of the attitudes, beliefs and positive/negative effects on blood donation. A random sampling technique was used to choose the participants from among donors and non-donors. The rate of consent to the study was 91% among donors. One thousand and thirteen subjects (488 donors, 525 non-donors) completed the questionnaire and answered the questions.

Results: Among donors, gender wise men donors were found significantly higher than women ($P < 0.05$). Repeat donors were significantly higher ($p < 0.05$) than the first time donors. Most of donors were donated to help someone else (65.2%). Positive and negative effects were described 70.4% (347), 11.7% (57), respectively. Never had to opportunity to donate and health problems were found to be the common reasons for not donating blood in nondonor group.

Discussion: It is recommended that an intensive blood donation campaign should be maintained. This will allow people to be well informed, turning the positive attitude of saving life through blood donation to a regular practice.

Keywords: Blood donation; Knowledge; Beliefs; Turkey

Introduction

Despite all advances in medicine there is still not a substitute for human blood and blood donors play an important role in health systems as a main source of blood supply. On the other hand safety blood transfusion is major concern for human health that prevents the spread of infectious diseases. Therefore establishment of effective national blood systems are crucial for the safety and accessibility of human blood and blood products [1,2]. Many differences exist about donor recruitments in different countries. Besides significant alterations also exist in rural or urban areas within the same country. Cultural, social, educational and other factors may have negative or positive effects on blood donors [3]. The blood donor system in Turkey depends mainly on voluntary donors. We think that the attitude and beliefs of people can keep them away from voluntary donation. We aimed to evaluate the factors influencing blood donation in Turkish population in the present study.

Materials and Methods

We conducted a pilot study at the blood center of a training and research hospital in western part of Turkey, Izmir. A self-administered questionnaire was developed for the assessment of various aspects of

the attitudes, beliefs and positive/negative effects on blood donation. A random sampling technique was used to choose the participants from among donors and non-donors. People who donated blood at our center were enrolled into the study as donors. The relatives of the donors who never donated blood and who accepted to participate to our study were included into the non-donor group. All statistical analyses were conducted using the SPSS (10) program. The Mann-Whitney U test and chi-square (χ^2) was used to determine differences between the groups. The level of significance was set at $p < 0.05$.

Results

The rate of consent to the study was 91% among donors. One thousand and thirteen subjects (488 donors, 525 non-donors) completed the questionnaire and answered the questions. Overall, there were 874 (86.3%) males and 139 (13.7%) females. There was significantly more man in the donor group when compared with the non-donor group. Patient demographics of the donor group revealed that ($P < 0.05$); 94.5% were married ($P < 0.05$), 41.8% were between 26-35 years age group ($P < 0.05$), 47.7% were secondary school graduated ($P < 0.05$) and 60.4% of them were employed ($P < 0.05$). Multiple donated donors were significantly higher than the single donated ones ($p < 0.05$). In non-donor group 52.4% of the group were males, 61.1 % were married, 40.6% were employed, 33.9% were 26-35

years age group, 40.2% were secondary school education. The demographic characteristics of participants is shown in Table 1.

	Donors (n: 488)	Nondonors (n:525)	Total (n:1013)
Age (years)			
18-25	88 (18.0)	92 (17.5)	180 (17.8)
26-35	204 (41.8)	230 (43.8)	434 (42.8)
36-45	135 (27.7)	141 (26.9)	276 (27.2)
46-55	54 (11.1)	53 (10.1)	107 (10.6)
>56	7 (1.4)	9 (1.7)	16 (1.6)
Gender			
Male	461 (94.5)	413 (78.7)	874 (86.3)
Female	27 (5.5)	112 (47.6)	139 (13.7)
Marital status			
Married	356 (73)	321 (61.1)	677 (66.8)
Unmarried	132 (27)	204 (38.9)	336 (33.2)
Education			
Elementary	187 (38.3)	106 (20.1)	293 (29)
Intermediate	85 (17.5)	47 (9)	132 (13)
High school	148 (30.5)	164 (31.3)	312 (30.8)
University	68 (13.9)	208 (39.7)	276 (27.2)
Occupation			
None	164 (33.7)	37 (7.0)	201 (19.8)
Employed	283 (58.2)	345 (65.8)	628 (62)
Self Employed	12 (2.4)	109 (20.7)	121 (12)
Student	29 (6)	34 (6.5)	63 (6.2)

Table 1: Demographic characteristics of participants (n,%).

Multiple donated donors were significantly higher than the single donated ones ($p < 0.05$). Most of donors were donated to help someone else (65.2%).

Exclusively positive and negative effects were described 70.4% (347), 11.7% (57), respectively, while no effect was reported 17.2% (84). Donors' opinions about blood center were good (65%) and they would think to donate again (78.9%). Donors' opinions about donation is shown Table 2.

Frequency of donation	
1	132 (27)
2-5	197 (40.4)
5<	159 (32.6)
Opinion about blood center	

Good	317 (65)
Satisfactory	106 (21.7)
Bad	65 (13.3)
Disliked which aspect	
None	273 (56)
Behaviour of staff	52 (10.6)
Donor room environment	45 (9.2)
Long waiting period	53 (10.9)
Unpleasant atmosphere	48 (9.8)
Hard to filling the forms	17 (3.5)
Why did you donate	
To help someone else	318 (65.2)
To be healthy	14 (2.9)
My friend/family need blood	155 (31.8)
To learn blood group	1 (0.2)
Effects of blood donation	
Nothing	84 (17.2)
Positive effect	209 (42.8)
Feeling of satisfaction	
Feeling healthy myself	138 (28.3)
Subtotal	347 (71.1)
Negative effect	
Diminished physical capacity	50 (10.2)
Vertigo/dizziness	7 (1.4)
Subtotal	57 (11.7)
Would you donate again	
Yes	385 (78.9)
No	103 (21.1)

Table 2: Blood donors' experience about donation (n:488,%).

The most common reasons for male participants not donating blood were that they were busy having no time to donate (37.7%), fear of a disease spread (12.1%) and getting bored during donation (8.7%). Whereas associated health problems (28%), being busy having no time to donate (26.8%), fear of a disease spread (8%) were the common reasons for female participants cited for not donating blood. Nondonors' opinions on donation were shown in detail in Table 3.

	Male (n:413)	Female (n:112)
No time to donate	156 (37.7)	30 (26.8)
Donation process is long and boring	36 (8.7)	6 (5.3)

Fear of diseases spread	50 (12.2)	9 (8)
Health problems	30 (7.2)	31 (28)
Donation is painful	21 (5)	8 (7.1)
Afraid of needle or sight of blood	10 (2.5)	6 (5.3)
Donation is harmful to health	22 (5.3)	8 (7.1)

Table 3: Non-donors' attitude towards blood donation (n:525,%).

Discussion

More detailed investigation of sex differences in donor motivation has found that women, more so than men, enjoy helping others, believe in a community responsibility to donate, and believe that donating is the right thing to do. In contrast, men appear to be more swayed by social pressure and are reluctant to disappoint someone who has asked them to donate [4,5]. The present study showed that there was a male prevalence among donors in Turkish population. Our demographic data revealed that females accounted for only 5.5% of our blood donors. This result is well correlated with most of the studies conducted in developing countries whereas different participation is reported from other countries [5,6]. This can be attributed to factors such as anemia, prevalent beliefs, customs, lifestyle and pregnancies in Turkish population [7]. There are some religious reasons to decrease in the number of donors, but only during Ramadan. Some people think that donation break their's fast. So the president of religious affairs declares that donation is not breaks one's fast and it is the duty of people to save the life of patient.

In our study, education of donors were found high school graduated (47.7%). Studies in Tanzania [8], Nigeria [6] and Thailand [9] found that voluntary donations were correlated with secondary school education. Many previous studies have shown that, compared to general population, university students have a higher level of knowledge and a more positive attitude towards blood donation [5].

Dubey [5] was found that more of the voluntary donors than replacement donors had given blood repeatedly. The present study revealed that most of donors had given blood repeatedly (73%) and their consideration about the blood center were generally good (65%). The rate of blood donation for humanitarian reasons was 65.2% among our donors. Our data also indicated that family and social influences were also important.

The results presented in this study show that 404 of the 488 blood donors experienced an effect during blood donation. Despite majority of the donors (70.4%) reported exclusively positive effects (11.7%) reported negative effects. The most common positive and negative effects were the feeling of satisfaction (42.8%) and diminished physical capacity (10.2 %), respectively. In some studies the frequency of negative reactions were found 25% [10], 18% [5]. Vasovagal reaction-like complaints (vertigo/dizziness) were reported by seven subjects (1.4% of all donors) in our study, which is lower than the studies in the related literature (2-7%) [10,11]. Interestingly, none of the blood donors reported complaints about local reactions such as bruise, hematoma or pain.

The majority of the donors (56%) liked the aspects and reported an intend to donate (78.9%) again. Long waiting period, unkind behaviour of the staff, the unpleasant atmosphere of the donation center were the main aspects disliked by the donors. Training of staff is

mandatory in order to show more pleasant attitude towards the donors, listen them and their concerns, complaints and advices. Positive donation experience do not only increases donors' intention to return but also their probability of donating again. In this study, being busy, having no time to donate and health problems were found to be the main excuses for not donating blood in non-donor group. Fear, risk of health and physical harm from blood donation was featured frequently in many studies [12-14].

Our results demonstrated that every effort should be made to modify non-donors' incorrect beliefs and attitudes about donation. Therefore in this way they could be motivated and start donating blood.

In conclusion, the results of our study highlighted the need for appropriate motivational organizations to improve the "favorable attitude" of non-donors towards blood donation. We were glad to reveal that most of the donors could be influenced to become regular/ repeat blood donors, as most agree that donation can be given more than once every year. Well-planned donor education programs should be established to promote voluntary blood donation aimed at better understanding fears and wrong concepts about dangers of donating blood. Well-planned donor education programme must include that;

There is no risk for health and blood transmission infections by donation, donation feels people better to help someone else, donation is not break one's fast during Ramadan .

There is a potential danger due to the alterations in societies leading to a decline in regular blood donations over the next decades in many developed countries. Therefore we should developed new strategies to overcome the intra-society changes in the attitude towards blood donation as an important altruistic behaviour.

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