

Attitude to Blood Donation among Scientific and Non-Scientific Students of Al Imam Mohammad IBN Saud Islamic University in Riyadh, Kingdom of Saudi Arabia

Khalid Alkhalifa, MD. Al-OmariNaif, MD. AlsuwailemSulaiman, MD.
HamoodAlturaigi, MD.

College of Medicine, Al Imam Mohammad Ibn Saud Islamic University in Riyadh, KSA

Background: Blood donation is an important medical procedure in which blood is collected from donors to treat those in need. It is critical in treating individuals who have lost a significant amount of blood resulting from car accidents, wars, natural disasters and other sorts of injuries. In addition to this blood donation is also extremely important in treating chronic diseases that require continuous blood transfusions. The blood donor system in the Kingdom of Saudi Arabia depends on a combination of voluntary and involuntary donor's. Among the voluntary donors, studies show that the University students play a very vital role.

Objectives: This study aims to investigate the attitudes, beliefs, effect of time and motivations of donors and non-donors students from scientific and non-scientific colleges regarding blood donation in Al-Imam Mohammad Ibn Saud Islamic University.

Methods: A cross-sectional study was conducted at the Donor Centers at Imam Muhammad bin Saud Islamic University. A questionnaire was used to collect the data about attitudes, beliefs, effect of time, location and motivations of donors and non-donors students. Total of 452 students were selected by random sampling with 49% donors and 51% non-donors.

Results: 93% of students showed a positive attitude towards the blood donation to save lives. 93% believes that the campaigns achieve their assigned goals. Similarly, the same percentage (93%) were very much motivated and said that they will encourage others to donate blood. 59% prefer to donate blood in the proper blood bank instead of in the university campaigns because of different reasons.

Conclusion: These results reflect a slightly negative attitude toward blood donation. Further future planning with an emphasis on educational/publicity programs and careful organization of donor recruitment campaigns could see the dream of total voluntary donors.

Keywords: Attitude to blood donation, donor motivation, Saudi blood donors.

I. Introduction:

The Blood Transfusion Service (BTS) in the Kingdom of Saudi Arabia is basically a hospital-based blood banking system where blood banks are responsible for the whole service, including the recruitment of donors, testing donated blood for infective agents, and the preparation, storage and issue of components (Packed RBCs, fresh frozen plasma, platelet concentrate, cryoprecipitate and filtered products).[1]

Over the last three decades, the source of blood has shifted dramatically from imported blood to locally recruited blood donors. At the present time, the source of donated blood is a combination of involuntary donors (mainly relatives, friends and workmates of patients), and a growing number of voluntary no remunerated donors.[1]

A recent article that reviewed studies the factors that would influence the recruitment and retention of blood donors, has identified a range of physiological and psychological factors that influence people's willingness to donate blood.[2]

Education, whether the level of school education or general health education of the public about blood donation had a positive influence on the attitude of toward blood donation. Also, blood donor convenience and satisfaction with respect to the donation time and location were found to be important factors that foster the altruistic behavior of blood donors.[3, 4, 5]

However, detailed information on the attitude of blood donors is lacking in Middle Eastern countries, and particularly the oil-rich Gulf States, where the health service has undergone extensive and very rapid modernization with the inflow of the oil wealth. The medical services are now provided free and by state of the art hospitals which deliver highly specialized services, especially in areas, such as open heart surgery, hematology/oncology, transplant surgery.[1]

Objective:

This study aims to collect a data about the attitudes, beliefs motivations and effect of time among scientific and non-scientific students in Al-Imam Mohammad Ibn Saud Islamic University whether donors or non-donors toward blood donation.

II. Materials & Methods:

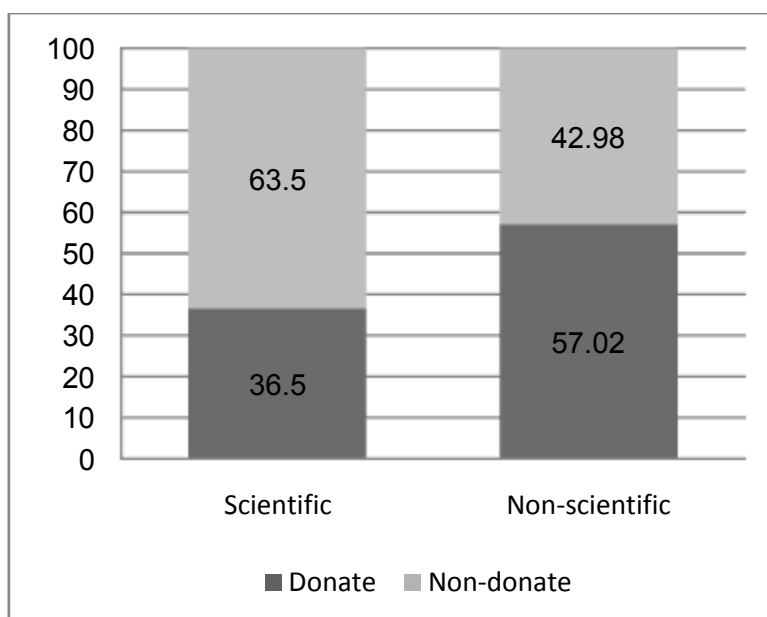
This exploratory cross-sectional study was carried out at the Imam university, Riyadh, Kingdom of Saudi Arabia, A total of 452 student males were interviewed. Each individual completed a questionnaire in Arabic language containing epidemiological data and knowledge regarding blood donation and reasons of blood donation or non-donation. The study subject is Students of Imam university, sample size 452 students, with confidence level 95% and confidence interval 5 drawn out of 20000 students. The sample size 377 multiplied by 1.2 for response rate. We divided the students into two categories those who represent (Medicine, Engineering, Science, etc.) whom we referred to as Scientific. Those who represent (Religious studies, Language, Law, etc.) whom we referred to as non-scientific (**Table1**). The reasons of this dividing are to seek information of how majoring effect on donation, the amount of material the student have to cover in relation to free time. Students were recruited at random from three colleges out of 6, Islamic Study Colleges, Computer Since Colleges, Media College, Engineering Colleges, Languages and Translation College, Business Administration College. The three colleges were drowned is Engineering Colleges, Business Administration College, Media College. Randomly drowned by unknown Secretary. Taking a simple random sample of classrooms, respondents were requested to give an answer to the most question by a "Yes" or "NO", To estimate the prevalence of attitude toward blood donation. We represent our questionnaire in Arabic language cause it is the main language of subjects. The collected data were entered in Microsoft Excel 2010 and analyzed with SPSS (Statistical Product and Service Solutions, version 19 (SPSS INC; 200 W Madison St, STE 2300, Chicago, IL 60606-3416).

Age	College		Total
	Scientific	Non-scientific	
(18-20)	98 (21.9%)	94 (21%)	192
(21-23)	118 (26.3%)	117 (26.1%)	235
(24 and more)	6 (0.01%)	14 (0.031%)	20
Total	222 (49.66)	225 (50.3%)	447

Table1: Age according to colleges groups (Scientific and Non-scientific).

III. Result:

Our research was conducted on 443 students 46.7% donated 53.3% didn't donate. Out of those who donated 36.5% were from scientific and 57% were from non-scientific (**Figuer1**).



Figuer1: Donation of Scientific & Non-scientific Colleges.

The positive attitude to blood donation was overwhelming as all of the interviewed donors agree that blood donation is important and that it helps needy individuals. Our results show that 93% of students agree that blood donation is important to save the lives of those in need, and most of them are encouraged to donate. We found that 95% of those who study in scientific colleges agreed that donation is going to save lives and 5% don't know. Those whom study in non-scientific colleges 96% agreed on the importance of donation and only 4% don't know. Regarding blood donation campaigns, more than 93% agree that the campaigns achieve their assigned goals, while 40% of students do not know, and only 7% of them do not agree that blood campaigns achieve their goals. 79% of students do not agree with importing of blood from other countries .49% of the sample was donated in other side 51% wasn't. The 49% how donate was donated as volunteer with 79% of them and 21% for their families' or friend's asking. The most common cause for non-donors to not donate is "not having time to donate" 42.6%, the other factors fear, health related issue, afraid for her health (**Table2**). Which was more affecting those whom are in scientific 45.3% and 39.7 for non-scientific colleges. 98% of students will donate if a family member or friends' need's blood. 64% were disagreeing to give a gift to the donors but 74% agrees to give money to donors. We as well asked both groups those who are in "Scientific & non-scientific colleges" about wanting to donate blood. The Scientific colleges 85.5% wants to donate and 14.5% don't. While those who are in non-scientific 87.7% wants to donate blood and 10.3% don't. We also asked about the encouragement of donation scientific colleges 96.8% said Yes and 3.2% said No. Non-scientific 94.2% said Yes and 5.8% said No.

		Colleges	
		Scientific %	Non-scientific %
The reason for not donate	Fear	17.45	15.57
	Health Reason	18.39	17.58
	Not Having Time	45.28	39.69
	Afraid of Health	3.77	3.01
	No Specific Reason	15.09	25.12

Table2:Causes of non-donors to not donate.

IV. Discussion:

One of the most important cornerstones of every society are hospitals and in every hospital, it's a must to have a blood bank. You'll need them in a lot of situations for example in surgeries, emergency rooms, and other places. It plays a very important role in life-threatening conditions. There is no doubt that the problems surrounding donor recruitment differ in different countries and in rural or urban areas within the same country, and are determined by cultural, social, educational and other factors. Thus, in developed countries where the donors are voluntary non-remunerated, a decline in blood supply is the main concern [6, 7, 8], while in most developing countries, where the shortage of blood is still a serious problem [9, 10, 11]. We found that majority of our participants were aware of the importance of blood donation both scientific and non- scientific colleges agreed on the importance of donation. There are lots of areas to improve some thought that it may affect their health others claimed that blood bank are not easy to reach and they have no time for that. We should give lots of attention and campaigns to improve the knowledge of the students and the whole society. And each mobile blood bank should have as well an excellent attention and instruction so it becomes easily reachable and educates people more about the donation and how it going to save lots of life and won't be harmful to the donor. We can see that in our study only 8% donated their blood although 90.5% of the students wanted to donate for both groups scientific and non- scientific that's why we insect on focusing on those blood banks. So we should try to find more time for donation cause as we said it is the main reason for not donating it was affecting both those who study in scientific and non-scientific colleges but more for the scientific. Discuss with the donor regarding their fears and explain how donation won't affect their health. Encouraging donors and encouraging blood donation campaigns to reach fulfill their goals. Also, we showed focus on the noble part of donation and how it'll affect the humanity.

V. Conclusion:

The information accumulated from the current study highlighted the need for appropriate motivational campaigns to exploit the "favorable attitude" of non-donors toward blood donation. It is also a source of optimism that most of the donors could readily be converted into regular/repeat donors, as most agree that donation can be given more than once every year. There is also need for building the loyalty of voluntary blood donors, through well-planned donor education programs aimed at dispelling any myths, fears and wrong concepts about dangers of donating blood. This should be coupled with special personal care directed toward blood donors, by listening to their complaints, worries, and suggestions and attending to them. Special attention should also be directed to reducing any inconvenience posed by the donation process, its location or timing. The educational programs should take into account social and other variables (including donor educational level)

that determine donor attitude and behavior and directed to motivate non-donors to come forward and undertake the first and usually most stressful donation and to continue donating regularly thereafter. Recruitment efforts and strategies should also include well planned but limited and effective incentives. The current token gifts seem to be acceptable and desirable to both donors and nondonors. These incentives coupled by the medals awarded to 10, 25, 50 donations should be kept and widely advertised and celebrated in news media. These motivational/education campaigns should be launched among young sections of the population (mainly schools), not only to recruit new donors but to "CONVERT" those with favorable attitude into a regular practice thereby fostering the building of voluntary donor pool and ultimately establishing the long-awaited total voluntary no remunerated donor system.

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