

Blood donation awareness in youngsters and parental role as a best source of motivation?

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Abstract- Students of young age group are the most active donor population all over the world. This study targeted awareness of young age group and their willingness for blood donation. A questionnaire based survey was conducted with 500 students by cluster sampling design. Only 16.5% individuals were past donors. 84.5% mentioned willingness to donate in future among the group of non donors. We concluded that act of blood donation and attitude of students is related with the education given by their parents. On the other hand we find out that the positive responses for the future blood donation were mostly from the male students. Other factors participating are awareness, mental approach and fears. Although majority of students had positive attitudes towards blood donation but 3.5% of males and 8.7% of females showed regret to adopt this practice because of donor bed's fear and of already getting weakness due to physiological blood loss every month respectively. 37% of the students showed the fear of needle prick while donating blood. By proper motivational efforts of government or university administration it is easy to change the regrets into positive responses. Informative teaching programs and awareness meetings for the parents to educate their children from initial steps regarding the fact that we can increase our donor population by educating the parents.

I. INTRODUCTION

Blood donation is the route of getting safest blood for transfusion. However the purging of healthy blood donors is always a difficult task all over the world. An effective way of extending donor pool is to provoke the youngsters from universities and colleges.

Our demand for blood and its products is rising day by day because of emergency, accidents, terrorism and natural disasters. Whole of the world is facing a shortage of donated blood as compare to the need. Pakistan is one among the seventy seven countries in the world that faces blood donation ratio below 1% of its total population (2). Pakistan is a developing country and its blood banking and transfusion system is progressing like wisely. This system is mostly hospital based with a total of 620 blood bank settings across the country (study done in 2008). 170 facilities are run entirely by public sectors while 450 settings are under private organizations (3,4). The estimated requirement of blood in Pakistan is approximately 1.5 million bags per annum, 87.65% of which are met by replacement donation, 15% of the blood is donated by professional donors whereas 12.3% of the blood covered from voluntary donation (4).

There are 87 blood banks in Karachi that are fairly insufficient to fulfill the demand of blood in the mega city (3). Patients from suburb and rural areas of the entire province of

Sindh are frequently referred to Karachi, which aggravates the demand of stored blood and stresses on smooth blood supply. However, poor quality of blood banking practices, inappropriate use of blood (with 80-85% of blood being used as whole blood) and the unavailability or high cost of blood preservatives result in about 40% shortage in blood supply (3,5).

Unsafe blood mostly from drug addicted donors carry infections and a very common route for spreading blood borne diseases. Other type of donors are party donors who donate blood to their relatives. The challenge for us is to provide the safe blood transfusions.

To assess the knowledge attitude and practice among the general population we have many studies¹⁴. They concluded that the donation phenomenon is depending on many factors like motivation and beliefs. This type of study plays a major role for motivation of non donors 15-17. The decision of blood donation is being diverted by some misconceptions like altruism, social behavior and pressure and replacement.^{18,19} we have a number of studies to examine the blood donors background to influence the psychology. Their socio-economic status, sex, age, ethnicity, marital status and education are contributing factors for dividing them into two groups i.e. donors and non donors.¹⁹⁻²². Study carried out to mention the gender differences depicted no significant difference in attitudes regarding blood donation²³. A study conducted at Thai University concluded that education is not the leading phenomena to change the attitudes for donating blood²⁶. Many studies have been done to find out the factors that motivate the population towards donation of blood²⁸⁻³¹. Memories of donors regarding past donor area's environment is very important for procrastinating future decisions. An individual's personal attachment or relationship with the recipient also contributes for this positive act³⁵⁻³⁷. Physical complicacy and fear are the common reasons among the non donors group^{38,39}.

University students can play a role for motivating the general population especially medical university students who carries the full awareness regarding the procedures and its outcomes. They can be a role model for others by donating blood regularly and promoting campaign for blood donation in campus.

II. METHODOLOGY

Medical students of Karachi is the population being focused in this study. We used the four stage cluster sampling design. Two campuses of medical university were chosen. Students were selected using the proportional allocation scheme. We designed a structured questionnaire about basic information; blood donation information and attitude scale ranging from strongly disagree to

strongly agree. Statistical techniques used were multivariate analysis. We did factor analysis using orthogonal factor model.

III. RESULTS

In a pilot study we concluded that 242 students 45% (p=0.45) were the past donors taking 95 percent confidence interval and 5 percent chances of error. Standard deviation(d) =0.05. sample size 500 was decided by Cochran's formula. We evaluate data from 500 students 305(63%) were males. Only 10% of them were unaware of their own blood group. 30% students were from foreign countries. About 70% of them have graduate education of parents as a minimum qualification. Among the non donors 73% showed the positive attitude for future blood donations. 4% of the students were having the misconception about the universal donor or recipient. 28.7% gave the true age limit of donating blood. Only 3 % were aware about the exact interval recommended between two donations. Among the past donor students 9.2% donated in the blood bank, 31.3% at the hospital 2% with an NGO. 50.2% donated for their relative as an exchange donor. 34.4% had gone through the screening procedure.

The students who never donated blood 24.6% gave the reasons for any disability. 21.1% had a fear to needle prick or

getting infection. 40.8% were not ever asked for donation. 6.10% explained that it is time consuming. 2% simply excused to donate blood.

We also tabulate it with bivariate analysis in pairs. Results showed significant association with education of the parents. Profession of their parents showed no significant association.

IV. CONCLUSION

Medical students are well aware of blood donation benefits, and adverse effects. We can suggest that most of them have positive attitudes for donating blood. By organizing blood donation camps or awareness programs through motivational advertisements in campus cafeteria or classrooms can produce thousands of regular donors.

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