

Misconceptions About Blood Donation Among CMH Kharain Medical College Employees

ANEEQA CHUGHTAI¹, MUHAMMAD SAAD ABDULLAH¹, IFFAT NAIYAR², AIMAN FAROGH ANJUM³, MUHAMMAD ZEESHAN ANWAR⁴, IFFAT NOOR², SHAIZA SHOAI³, MUHAMMAD RAZI UL ISLAM HASHMI³, SHOAI NAIYAR HASHMI⁵, TALHA LAIQUE^{6*}

¹Department of Anatomy, CMH Kharain Medical College, Kharain-Pakistan

²Department of Community Medicine, CMH Kharain Medical College, Kharain-Pakistan

³Department of Physiology, CMH Kharain Medical College, Kharain-Pakistan

⁴Department of Biochemistry, CMH Kharain Medical College, Kharain-Pakistan

⁵Department of Pathology, CMH Kharain Medical College, Kharain-Pakistan

⁶Department of Pharmacology, Allama Iqbal Medical College, Lahore-Pakistan

* All the correspondence should be made to Dr. Talha Laique, Department of Pharmacology, Allama Iqbal Medical College, Lahore-Pakistan. Email: talhalaique51@gmail.com Tel:+92-331-0346682

ABSTRACT

Blood donation acts as a life saving measure and steps are required to remove misunderstanding about current issues. Blood donation is required every second in life globally.

Purpose: To determine and evaluate an attitude and knowledge of people regarding blood donation.

Study Design: Descriptive cross sectional study.

Methodology: Present study was conducted among the employees of CMH Kharain Medical College over a time period of 3 months. Data was collected by self structured questionnaire through convenient sampling. Data analysis was done by SPSS 20.

Results: Out of 180 participants, 87% had donated blood in the past, 81.66% were willing to accept blood donation. Most of the participants were unafraid of donating blood (83.34%). Only 35% thought that they will catch infection while 71.67% believed that they will become obese, unconscious and anemic.

Conclusion: We concluded that there was a positive attitude among the respondents towards blood donation. However, survey showed that blood donation (voluntarily & regularly) was low in actual practice according to WHO standards. Most likely reasons included misconception related to it. Hence, government should plan a strategy to educate common people regarding this health issue.

Key word: Blood Donation, Attitude, Health Issue and Employees.

INTRODUCTION

Every other second, humans of all ages require blood transfusions to survive globally This is because of high road traffic accidents, serious illnesses like carcinomas, surgeries in daily life. According to an estimate, around a million blood units are denoted each year. Unfortunately, demand needs many more millions of such donations and collections to meet the global demand and sufficiency of blood.¹ This blood donation was always considered as "humanitarian act" and a positive behavioral phenomenon. Literature review has revealed that in many countries there has been a shift in treatment and blood donation requirement. In one study held at Saudi Arabia showed that health services have undergone very swift transformation. The transformation included health services e.g free and highly specialized services (open heart surgery, transplant surgeries, cancer treatment). They provide blood to patients of bleeding as well as other hematological disorders.^{2,3} Today, with advancement and need of an hour, whole-blood usage is well-accepted and commonly employed measure.

Most essential thing for human survival is blood and unfortunately, no substitution has been formed. Literature review showed that in one study, blood donation by 1% of any population is the minimum requirement that has to be maintained by any nation in-order to fulfill its requirement of blood. However, its requirements are much higher in developed countries due to advanced health care systems. One estimate showed that average donation rate in

developed countries is 38.1 donations / 1000 population. This showed that average number of blood donations is much higher (12 times) per year in developed countries in comparison to low-income countries.⁴ According to one survey, majority of deaths (95%) among females during pregnancy and after child-birth occur due to hemorrhage or unavailability of blood. This requires requires blood transfusion hence, less blood donations become a major cause of maternal deaths.⁴

According to previous study held at Northern Pakistan, our nation requirement is around 9 million pints of blood/year. Unfortunately, around 1.5 million pints of blood are collected/year thus lacking behind the requirement by big margin. Majority (65%) of the blood donation include replacement donors, volunteer donors (25%) while professional donors (10%).⁵

A survey of 1735 blood centers and hospitals in the US depicted that blood collection rate for donors having age (18-55years) have shown a downward trend i.e from 88% to 85.6%. Similarly, in US 40% of adults fulfill eligibility criteria for blood donation but around 1/4th donate their blood sadly. Moreover only 3.5% of age-eligible population donates blood in Australia.⁶

Undoubtedly, blood works as a vector in transmission of many diseases like Hepatitis-B, Hepatitis-C, HIV, and many other blood borne diseases. With advancement and discovery of many new diseases and hazards related with blood transfusion has changed attitude and mindset among not only patients but also health workers. Screening of

donated blood before transfusion is the second major preventive step towards inhibiting disease transmission as well as safety of the recipients.⁷ The main objectives which are essential for the study is to find perception of views of people who are not willing to donate blood. To investigate the unwillingness regarding blood donation and to collect facts and figures regarding the people who have a fear associated with blood donation. It is also helpful in identifying the relationship between blood donor and blood recipient, to identify deficiencies in utilization of resources and the attitude of the blood receiving community. Although, millions of lives are saved through it but still a concern is related to its safety in developing countries.^{8,9}

In the light of above description and increasing unwillingness and misconceptions among pupils towards blood donation, we planned the current project to explore reasons for this unwillingness act. Moreover, present study may help to lessen the misunderstanding about blood donation.

Objective: To determine and evaluate an attitude and knowledge of people regarding blood donation..

Methodology: This descriptive cross sectional study was conducted among the employees of CMH Kharian Medical College over a time period of 3 months. Those employees who were seriously sick during data collections were excluded from the study. A total of 180 healthy employees were selected as sample size for the research. Data was collected by presenting a self-administered questionnaire to a responsible individual in the study population.

Statistical Analysis: Data was entered and analyzed by SPSS version 20. Results were presented as frequency and percentage depending on distribution of perception and attitude among enrolled subjects.

RESULTS

Out of 180 participants, 87% had donated blood in the past, 81.66% were willing to accept blood donation. Most of the participants were unafraid of donating blood (83.34%). Majority of them believe that their blood will formed again (81.67%). Only 35% thought that they will catch infection while 71.67% believed that they will become obese, unconscious and anemic as shown in table-1.

Table-1: Perception of respondents about blood donation (n=180)

	YES	NO
People who have donated blood	87(48.33%)	93(51.66%)
People willing to accept blood at time of need	147(81.66%)	33(18.33%)
People considering blood donation as life saving measure	165(91.66%)	15(8.34%)
People afraid of donating blood.	30(16.66%)	150(83.34%)
People who think they will catch an infection.	63(35%)	117(65%)
People who think their blood will not be formed again.	33(18.33%)	147(81.67%)
People afraid of becoming obese.	51(28.33%)	129(71.67%)
People afraid of becoming anemic.	48(26.66%)	132(73.34%)
People afraid of sight of blood.	42(23.33%)	138(76.67%)
People afraid of needle prick.	54(30%)	126(70%)
People afraid of becoming unconscious.	24(13.33%)	156(86.67%)
People who trust the sterility of blood banks and equipment.	75(41.66%)	105(58.34%)

DISCUSSION

Our study revealed a significant proportion of health survey 83.34% respondents have a positive attitude towards blood donation and are not afraid of blood donation .91.66% of the respondents in our study think that blood donation is a life saving measure. A study conducted at King Hussein Medical Centre, in Jordan also showed a higher percentage of participants asserting to the fact that saving lives was the major importance of blood donation.¹⁰

The most common reason due to which individuals generally refuse donating and receiving blood is due to the reason of catching a deadly infection or disease during the process of blood transfusion. Another reason why people refrained from donating blood was fear of becoming anemic or fainting during or after the procedure of blood donation. Blood banks strictly follow instructions and screening guidelines in-order to ensure safety of recipients as well as donors.¹¹ In addition, new sterile disposable syringes are used for each donor just to minimize the risk of disease transmission. Nonetheless, almost 1/3rd participants thought that donating blood would cause diseases or harm to donors which is in-line with our findings.^{11,12}

Literature review revealed that in one study held in Saudi Arabia showed that 11.5% of their enrolled subjects believed that blood donation is harmful to them.¹¹ Similarly, Sastre et al. reported that French population had misconception that acquiring AIDS and hepatitis C infection occurred as a result of their blood donation.¹³ Therefore, changing the mindset and minimizing the misconception (harmful) regarding blood donation can increase in the pool of blood donors in our country as well as globally. The positive attitude about blood donation in our study is similar to the attitude among university students in Saudi Arabia.² Strength of our study is that it showed positive attitude and misconceptions about blood donation are very few and the limitation of the study is that we should increase our data pool by engaging other institutes too.

Limitation: Our study had several limitations like financial constraints, time restrictions, small sample number and fewer resources.

CONCLUSION

We concluded that there was a positive attitude among the respondents towards blood donation. However, survey showed that blood donation (voluntarily & regularly) was low in actual practice according to WHO standards. Most likely reasons included misconception related to it. Hence, government should plan a strategy to educate common people regarding this health issue.

Authors' Contribution:

AC & MSA: Conception and design of work

IN & AFA: Collecting and analyzing the data

MZA & IN: Drafting the manuscript

SS & MRI: Collecting and analyzing the data

SNH: Drafting the manuscript

TL: Drafting and revising the manuscript for intellectual content.

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