

Original Article

Knowledge, Attitude and Practices about Blood Donation among Urban Slums Dwellers – A Cross Sectional Study

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Received: 17-05-2019

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Accepted: 12-10-2019

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Abstract:

Background: It has been estimated that more than half of the donations are paid in developing countries like India. People do not know about the organizations engaged in voluntary blood donation. They are afraid about the blood donation. They have wrong concepts about the blood donations.

Objective: To study Knowledge, Attitude and Practices about Blood Donation among Urban Slums Dwellers

Methods: A community based cross sectional study was carried out at an Urban slum area, Shapur, Hyderabad for 4 months among 210 people. Data was collected using a predesigned, Pretested and structured questionnaire

Results: About half-half subjects were aware and not aware of their blood groups. Half of the subjects did not know their own blood group. Majority of the subjects i.e. 88.1% were aware that there is a phenomenon called blood donation and what is it. 17.6% of the subjects were aware that HIV test should be performed on the donated blood before it is given to the needed person. Only 2.4% knew about the malaria test. Overall 20.9% told about the other test names which are routinely done on the donated blood. But majority i.e. 59.1% did not know that any test should be performed on the donated blood. Majority i.e. 72.4% of the subjects were not aware about the knowledge on duration between each blood donation. The maximum subjects donated the blood only once contributing to 50%. The maximum subjects donated blood to their friends contributing to 38.46% and 31% of the subjects donated to their relatives.

Conclusion: Knowledge and attitudes related to blood donation was poor among the slum dwellers. Only 12.4% had donated blood but voluntary blood donation rate was very poor.

Key words: Knowledge, Attitude, Practices, Blood Donation, Urban Slums

Introduction:

Blood transfusion is life saving and hence important for the society. It is really important in certain conditions like accidents, patients having bleeding disorders, etc. To ensure safe blood transfusion, it is necessary that the blood donation should be voluntary and not on paid basis. This is really a major challenge for the blood banks.¹

Most donated tissue is blood. When it is used properly, it is life saving. There is no substitute to blood donation in spite of advances in the medical practice. Only human blood is ideal for blood donation in human patients under variety of medical conditions. Blood donation can save many lives.²

It has been estimated by The World Health Organization (WHO) that for any country the minimum quantity of required blood is one percent of that country's population. It has also been estimated that there is regular need of 6-7.5 million units of blood every year for India. As the year progresses, the demand increases.³

In order to ensure that the blood recipient remains in safe hands, the rules and regulations pertaining to blood donation have been made strict. The side effect is the reduction in the number of donors while the demand is on the rise. Regular blood supply by the blood banks is a challenging task for the blood banks. Hence more motivation for the voluntary blood donation is required. They need to develop new approaches to encourage people to donate more blood who are potential eligible donors.⁴

In the field of Transfusion Medicine National Blood Policy envisages promoting research and development. They encourage operational research on "knowledge, Attitude and Practice (KAP) among donors, the clinical use of blood, transfusion transmissible diseases etc".^{5,6,7}

It has been estimated that more than half of the donations are paid in developing countries like India. People do not know about the organizations engaged in voluntary blood donation. They are afraid about the blood donation. They have wrong concepts about the blood donations. Hence with

this context, present study was undertaken to study the knowledge, attitude and practices about blood donation.

METHODS:

Study Design: It was a community based cross sectional study

Study Area: The Present study was carried out at an Urban slum area, Shapur, Hyderabad which is the field practice area of department of Community Medicine of Malla Reddy Institute of Medical Sciences, Hyderabad.

Study Period: The present study was conducted for 4 months

Ethical Consideration: Institutional ethics committee permission was taken to conduct the study. Required information was obtained from every person. At the end of taking required information, every subject was imparted health education and advantages of donating blood.

Sample Size: Total numbers of 2012 study subjects were covered during the period of 6 days. It covers about 210 people

Data Collection: Data was collected using a predesigned, Pretested and structured questionnaire regarding the donors knowledge on eligibility criteria of blood donation, Their attitude and intensions with respect to first time and regular donations the measurement tools were Age, Weight, Sex, Occupation and other factors matched on blood donation.

Statistical Analysis: The data was entered in MS Excel and analyzed using proportions.

RESULTS:

Table 1: Distribution of study subjects as per Age

Age	Number	%
17-24	50	23.8
25-34	72	34.3
35-44	46	21.9
45-54	29	13.8
55-70	13	6.1
Total	210	100

Majority of the study subjects were in the age group of 25-34 years (34.3%) followed by 17-24 years (23.8%).

Table 2: Distribution of subjects as per awareness of their own blood group

Knowledge about own blood group	Number	%
Yes	106	50.5
No	104	49.5
Total	210	100

About half-half subjects were aware and not aware of their blood groups. Half of the subjects did not know their own blood group.

Table 3: Distribution of subjects as per awareness on blood donation

Awareness on blood donation	Number	%
Yes	185	88.1
No	025	11.9
Total	210	100

Majority of the subjects i.e. 88.1% were aware that there is a phenomenon called blood donation and what is it. Only 11.9% of the subjects reported that they were not aware of it. In spite of this, knowing own blood group was only 50.5% as seen from table 2 which do not correlate with table 3 findings.

Table 4: Distribution of subjects on awareness about type of tests performed on blood donation

Variables	Number	%
HIV	37	17.6
Malaria	5	2.4
Other	44	20.9
Don't know	124	59.1
Total	210	100

17.6% of the subjects were aware that HIV test should be performed on the donated blood before it is given to the needed person. Only 2.4% knew about the malaria test. Overall 20.9% told about the other test names which are routinely done on the donated blood. But majority i.e. 59.1% did not know that any test should be performed on the donated blood.

Table 5: Distribution of subjects as per awareness on weight required to donate blood

Required weight (kg)	Number	%
< 50	11	5.2
50-60	70	8.1
> 60	24	11.4
Do not know	158	75.2
Total	210	100

5.2% of the subjects wrongly stated that required weight for blood donation was less than 50 kg. 8.1% of the subjects stated that required weight should be between 50-60 kg. While 11.4% guessed that the weight should be more than 60 kg to be eligible to donate the blood. 158 subjects did not know that there is any such eligibility required to donate the blood.

Table 6: Distribution of subjects as per awareness on duration between each blood donation

Correct knowledge on duration between each blood donation	Number	%
Yes	58	27.6
No	152	72.4
Total	210	100

Majority i.e. 72.4% of the subjects were not aware about the knowledge on duration between each blood donation while only 27.6% of the subjects were aware about it.

Table 7: Distribution of subjects as per their reasons for blood donation

Reason of blood donation	Number	%
Helping others	19	73
Good for health	07	27
Total	26	100

The motivation of Blood donation of majority of the students was to help others contributing to 73.07%.

Table 8: Distribution of subjects as per their reasons for not donating the blood

reasons for not donating the blood	Number	%
Not eligible	54	29.3
No time	43	23.4
Fear	38	21
No chance	24	13
Not interested	51	28
Total	184	100

The majority of subjects didn't get a chance to donate their blood contributing to 29.34%

Table 9: Distribution of subjects as per the number of times they have donated blood

number of times they have donated blood	Number	%
Once	13	50
Twice	8	31
Thrice	1	4
Four times	2	8
Six times	1	4
Eight times	1	4
Total	26	100

The maximum subjects donated the blood only once contributing to 50%.

Table 10: Distribution of subjects as per their relation to the recipient

relation to the recipient	Number	%
Friends	10	38.5
Relatives	8	31
Voluntary	4	15.4
Others	4	15.4
Total	26	100

The maximum subjects donated blood to their friends contributing to 38.46% and 31% of the subjects donated to their relatives.

DISCUSSION:

The maximum subjects were in the age group of 25-34, catering to 34.28% and the minimum subjects were in the age group of 55-70, catering to 6.1%. In one study maximum subjects were in the age group of 18-25 years contributing to 61.3%.⁸ In another study majority of the participants were in the age group of 25-39 years contributing to 47%.⁹ Ehimen FA et al¹⁰ reported that majority of the study subjects belonged to the age group of 16-26 years.

The majority were females, 153 participants catering to 72.85% and males are 57 catering to 27.14%. In one study males were the main study subjects contributing to 84.4%.⁸ The maximum subjects have the educational qualification of high school contributing to 35.23% and minimum subjects have the qualification of post graduation and primary school contributing to 3.80%. In one study majority were graduates 60.3%. Ehimen FA et al¹⁰ reported that majority (58.1%) were males when they carried out the study in the peri-urban community.

The maximum subjects were unemployed contributed to 63.33% and minimum subjects were professionals contributing to 0.9%. It was the reverse finding in one study the employment status was 69%.⁹ The maximum subjects belong to Hindu religion contributing to 89.04% and minimum subjects belong to other religions contributing to 0.95%.

The maximum subjects were nuclear contributing to 88.57% and minimum subjects were extended contributed to 1.4%. The maximum subjects belong to class – 3 contributing to 46.66% and minimum subjects belong to class – 5 contributing to 2.85%. Almost 41% belong to middle class. The maximum subjects were aware of their blood group contributing to 50.47%. The maximum subjects were aware of blood donation contributing to 88.09%. The maximum subjects were not aware on place of blood donation contributing to 40%.

The majority of subjects were not aware on investigations performed on Blood donation and in one study done by Uma S et al.¹¹ About 68% don't that investigations performed on donated blood. The majority of subjects were not aware on tests performed on Blood donation contributing to 59.04%. The majority of subjects were not aware on eligibility age on Blood donation contributing to 67.61%.

The maximum number of subjects were not aware on weight to donate blood contributing to 75.23% and 5.23% of subjects were aware that the minimum weight to donate blood was below 50 kg. Most of the people acquired knowledge on blood donation through TV contributing to 71.42%. Internet was the main source of information one study contributing to 31%.

The maximum subjects were not aware on the duration between each blood donation contributing to 72.38%. Maximum no of people surveyed think that blood donation is important and necessary contributing to 93.33%. The incentive for blood donation of majority of the subjects was

to help others contributing to 69.04%. The motivation of blood donation of majority of the students was to help others contributing to 73.07%. The majority of subjects didn't get a chance to donate their blood contributing to 29.34%. Melku M et al¹² found that 48.2% had adequate knowledge about blood donation in a study conducted among health science undergraduate students.

The maximum subjects contributing to 87.61% didn't donate blood. In one study 69% of the subjects donated the blood which was opposite finding to our study.⁸ Melku M et al¹¹ found that 12.5% had ever donated the blood. The maximum subjects donated the blood only once contributing to 50%, which was almost similar to a study done by Uma S et al.¹⁰ Melku M et al¹¹ found that 79.2% had positive attitude about blood donation in a study conducted among health science undergraduate students. Arage G et al¹³ in their study conducted among health professional found that 33.2% practiced blood donation compared to only 12.4% in the present study. The reason for this discrepancy is clear that present study was carried out among slum dwellers and the study by Arage G et al¹³ was carried out among the health professionals. Ehimen FA et al¹⁰ reported that majority also reported that 91.5% of the participants in their study never donated blood. Salaudeen AG et al¹⁴ noted that 61% had good knowledge on blood donation. But 85% never donated blood. Voluntary blood donation rate was mere 3%.

The maximum subjects donated blood to their friends contributing to 38.46% and 31% of the subjects donated to their relatives. Maximum subjects donated blood to friends and relatives contributing to 47.2%.

CONCLUSION:

Knowledge and attitudes related to blood donation was poor among the slum dwellers. Only 12.4% had donated blood but voluntary blood donation rate was very poor. There is need to conduct awareness camps in the community to increase knowledge, remove fear and improve attitudes related to blood donation.

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Cite this article as: Sushma K, YL Apoorva, T Yugala, T Kavya Sri, SyedaSumaya Faheem, V Prathyusha et al. Knowledge, Attitude and Practices about Blood Donation among Urban Slums Dwellers – A Cross Sectional Study *MRIMS J Health Sci* 2020;8(1):6-9

Source of Support: Nil. Conflict of Interest: None