

## A Comparative Study of Knowledge, Attitude and Practice of People towards Blood Donation among Urban and Rural Field Practice areas of SIMS, Shivamogga

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### Abstract

### Original Research Article

Blood donation saves lives during critical situations but, some of the patients needing transfusions do not receive timely access to safe blood. Safe blood is the one, which does not contain any viruses, parasites, drugs, alcohol, chemical substances that might cause harm, danger or disease to the recipient. The general public in many developing countries is laced with ignorance, misperceptions and fear about blood donation process, with the result that there are few voluntary donations. Lack of knowledge, fear, facilities, convenience and quality of service are some of the common factors that play up in the people's mind while deciding whether to donate blood on voluntary basis. Objectives of the study were to assess knowledge, attitude and practice of people residing in rural and urban communities towards voluntary blood donation and to motivate them to voluntary blood donation. It was a community based cross sectional study conducted in rural and urban field practice areas of SIMS, medical college, Shivamogga. It was observed that people had a positive attitude towards blood donation, but the practice of people towards blood donation is poor among both urban and rural areas because of the factors like lack of self-interest, fear and wrong beliefs. Thus, regular organization of awareness programs followed by blood donation camps may helpful in improving the practice among the people regarding blood donation.

**Keywords:** Knowledge, Attitude, Practice, Voluntary, Blood Donation.

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## INTRODUCTION

The gift of blood is the gift of life. There is no substitute to human blood. Blood is required to deliver oxygen and nutrients to the cells and transport waste away from the cell. There is an ever-increasing demand for blood and blood products over the last two decades. Patients require blood transfusion for reasons like major abdominal surgeries, road traffic accidents, woman in labour, war and civil riots etc. Thousands of blood banks are present in our country but the proportion of voluntary blood donation is only 52% which is far below the replacement level. Communities rather than the hospitals are the potential catchment areas of the voluntary blood donors, hence simple interventions like increasing the awareness and motivation improves blood donation. In a study conducted in South-India it was observed that a shift in the recruitment of donors

from hospital to community has yielded increase in the donors from 5% to 30%.

People from rural area seldom go for voluntary blood donation compared to urban, the reasons for this difference could be unawareness about the importance of blood donation, lack of knowledge about its benefits, fear and misconceptions. Hence this study was conducted with the objective to assess knowledge, attitude and practice of voluntary blood donation and factors influencing voluntary donation and thereby use the results of study to improve voluntary blood donation in the field practice areas.

## MATERIAL & METHODS

Study area: Urban and Rural field practice areas of SIMS, Shivamogga

Study design: A community based cross-sectional study

Study period: one month (February 2019)

Sample size: As it is a time-bound study, a convenient sampling technique was used and totally 166 participants were enrolled in the study (95 rural & 71 urban).

Study instrument: After obtaining Institute's ethical committee clearance, data was collected using a pre-designed and semi structured questionnaire. Proforma was pre-fed into the Google forms software and data was gathered from each household.

Data analysis: Data was analyzed by using descriptive statistics like percentages and proportions.

## RESULTS

Our study consisted of total of 166 participants, 95 rural and 71 urban. 43.2% of the rural participants and 42.3% of urban participants belong to age group of 26-40 years. Majority of study participants were female households and were uneducated.

In rural 19.8% were homemakers, 24.2% were manual labourers and 33% of farmers. In urban area, 43.3% homemakers and 38.3% were labourers.

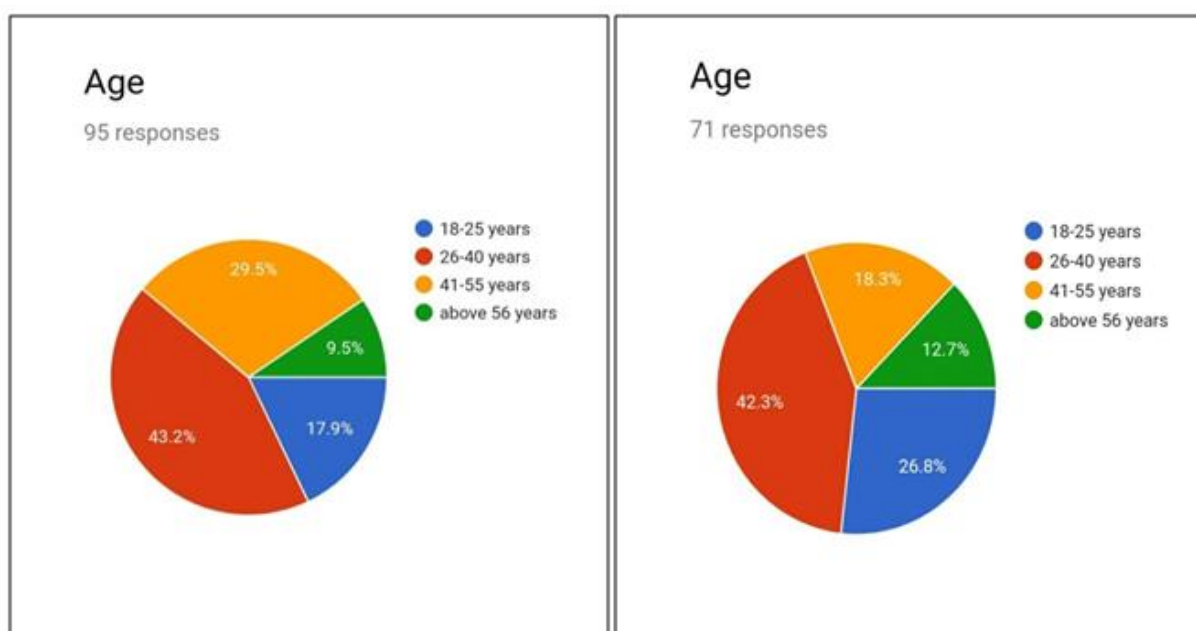


Fig-1

Our study assessed three domains, viz. Knowledge, Attitude and Practice of study subjects towards voluntary blood donation.

### Knowledge regarding blood donation

#### Knowledge about blood groups

- 45.3% in rural people have no idea about their blood group.
- 29.9% in urban people have no idea about their blood group.
- In both urban and rural areas majority of the participants belonged to O type blood group and least to AB type of blood group.
- 69.9% of the rural participants have no idea about the blood group of the family members; and 67.2% of the urban participants have no idea about the blood group of the family members.
- 58.9% of the rural participants have no idea about the types of blood group.
- 62.9% of the urban participants have no idea about

the types of blood group.

- Majority of the participants don't have an idea regarding *universal donor and universal recipient* blood groups, the blood group to which they can donate or from which they can receive the blood.

#### Knowledge about eligibility criteria for blood donation

- 69.5% in rural know the age and weight criteria for blood donation.
- 59.2% in urban know the age and weight criteria for blood donation.
- 87.4% in rural are of the opinion that blood donation is not possible in diseased condition.
- 81.7% in urban are of the opinion that blood donation is not possible in diseased condition.
- 35.8% in the rural are aware that diseases spread due to improper blood transfusion.
- 31% in urban are aware that diseases spread due to improper blood transfusion.

**Table-1: Factors hindering people from hindering blood donation**

| Sl.no | Factors           | Rural area(n=95) | Urban area(n=71) |
|-------|-------------------|------------------|------------------|
| 1     | Wrong belief      | 22 (23%)         | 21 (30%)         |
| 2     | No idea           | 02 (2%)          | 02 (3%)          |
| 3     | Lack of knowledge | 08 (9%)          | 04 (5%)          |
| 4     | Lack of interest  | 12 (13%)         | 06 (8%)          |
| 5     | Fear              | 39 (40%)         | 38 (54%)         |
| 6     | Health issues     | 12 (13%)         | 00               |

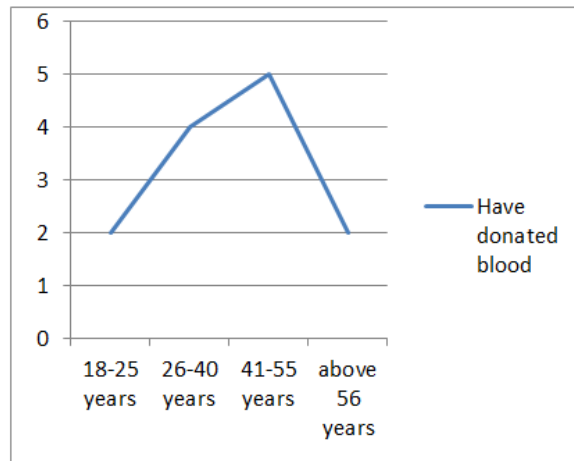
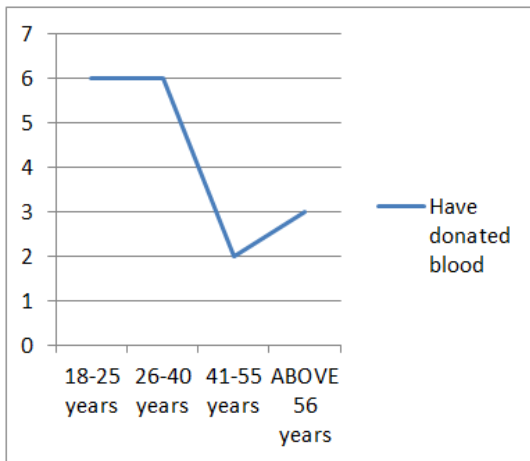
Wrong belief and fear of adverse effects of blood donation were the common factors hindering them from voluntary blood donation.

**Table-2: Reasons for not donating blood**

| Sl. no | Reasons                 | Rural area(n=38) | Urban area (n=34) |
|--------|-------------------------|------------------|-------------------|
| 1      | Lack of eligibility     | 07 (18%)         | 07 (21%)          |
| 2      | Health issues           | 09 (24%)         | 10 (29%)          |
| 3      | Not interested          | 12 (32%)         | 11 (32%)          |
| 4      | Fear of adverse effects | 10 (26%)         | 06 (18%)          |

Regarding practice of blood donation, 82.1% in rural area and 81.7% in urban area haven't donated blood. On asking the reasons for not donating blood, lack of interest and fear of

adverse effects after donating blood were the common reasons quoted by both rural and urban people.



**Fig-2: Comparison of practice of blood donation among different age groups in rural and urban area Rural area urban area**

## DISCUSSION

Comparing our results with the review of literature, study conducted by Chauhan R *et al.* overall 225(95.7%) were aware of their blood groups and in our study 38% of them were aware of their blood group as many of them were school drop outs comparing with the students in the former study, 22.9% in the former study have donated blood and 18.1% in the latter have donated blood signifying that practice is similar among the participants of both the studies. Majority of them in both studies felt the need to donate blood [1].

In study conducted by Namagay Shengai *et al.* 78.7% of the people felt that people should donate blood to save a life as is the case in our study.46% of the subjects in the former study were ready to donate

blood voluntarily but in the latter only 29.4% in rural and 7% in urban had voluntarily donated blood. The percentage of the voluntary donors in the former study increased on being educated and in the latter the number of donors in the extremes of the education have least donors and moderately educated have more number of donors [2].

A good majority of the respondents were of different ABO blood groups (96%) and Rh types (92.5%). Thw rural population had a relatively low awareness on blood transmissible diseases (65%) when compared to their urban counter parts (92%). Majority of the respondents (77.5%) knew the time taken for blood transfusion. The knowledge on blood donor eligibility was 71%. Knowledge of urban respondents

was more compared to their rural counterparts. Most incorrectly answered question was the maximum age for blood donation. The knowledge when an eligible person may not donate blood was 80%. Urban respondents had more misconceptions and fears regarding blood donation. Surprisingly about 67% of them believed that there was a risk of contracting HUV by donating blood. Similarly 63% had fears about contracting hepatitis B.

#### **Respondent's attitude towards blood donation**

89% agree that blood donation is a noble act only 48% intend to donate regularly. About 32% of respondents believe that blood banks collect blood from donors to sell it to those in need. Urban respondents were more motivated to donate blood regularly (60%) compared to their rural counterparts (37%).

#### **Regarding practice of blood donation**

Practice of blood donation had male propensity. Blood donation rate was high among males(63%) compared to females (26%).

## **CONCLUSION**

According to our study results, rural people lack knowledge regarding their blood groups and donation methodology compared to urban people. But, attitude of people towards blood donation in both urban and rural areas appears positive as both of them accept it as their social responsibility.

In spite of having this positive attitude, practice of people towards blood donation is equally poor among urban and rural areas because of the similar arresting factors like lack of self-interest, fear and wrong beliefs.

Thus, regular organization of awareness programs followed by blood donation camps may helpful in improving the practice among the people regarding blood donation.

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