

## Study on Knowledge, Attitude and Practice of Blood Donation among College Students in Bhavnagar, Gujarat, India

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### **ABSTRACT**

**Introduction:** World Health Organization (WHO) advocates that ideally 3-5% of the population should donate blood per year for maintaining a country's demand. According to WHO's integral strategy for safe transfusion, Youths who are healthy, enthusiastic and approachable as a group, if recruited young may become future donors and motivators?

**Aim & Objectives:** To assess the level of KAP regarding blood donation in college students in Bhavnagar, Gujarat, India. **Material and Methods:** A cross-sectional study was conducted on 268 students of 18-25 years of age from different colleges of Bhavnagar. Self-administered Questionnaires was used to collect data from cases selected by cluster sampling.

**Results:** Out of total 268 students, female students were more numbered than males. Only 12.32% had donated blood previously, most of them were voluntary donors. The most common reason for no donation was the lack of arousal of situation for donation. Most of them were aware about the criteria for age, weight, Hb needed for donation. But majority lack knowledge about the amount of blood being drawn while donation. **Conclusion:** Major obstacle for voluntary blood donors was the lack of arousal of situation for donation. To overcome that and to improve donation rates, Students must be educated and counseled properly. By increasing the awareness about voluntary donation, a blood bank can improve the number of voluntary donors.

**Key-words:** Blood donation, Hemoglobin, KAP study, Students

**Key Message:** We need to arouse college students to donate blood by providing them with a conducive environment through organization of voluntary blood donation drives and awareness campaigns.

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Conflict of interest: NIL

## **INTRODUCTION**

Blood donation is a self-directed volunteer service and this study finds the present situation of knowledge, attitude and practice related to donation. People are the future source of blood and they may have knowledge and awareness about donation but there is lack of regular donation practice among youngster. Regular donor in 18-25 age group is very less so it is very important to sensitize these people for regular donation.

Aim of the study is to assess the level of knowledge, attitude and practice regarding blood donation in college students in Bhavnagar, Gujarat, India.

## **MATERIALS AND METHOD**

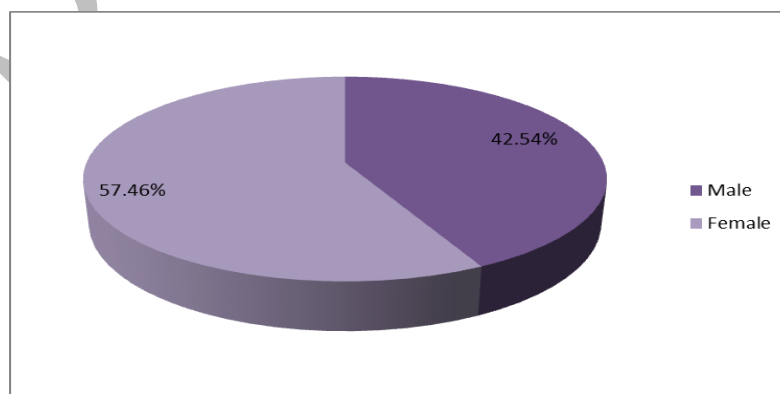
The research design was descriptive. It involved both qualitative and quantitative method. The sampling method was probability sampling method

## **RESULTS**

Out of total 268 students, female students were more numbered than males.

### **Practice:**

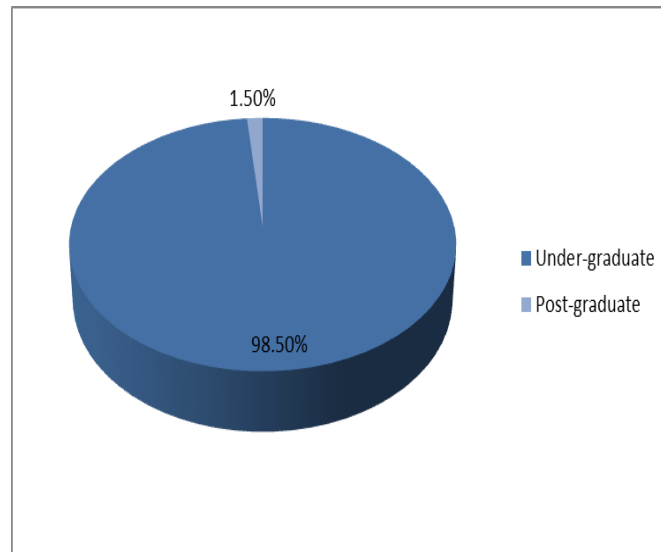
### **Total Participation:**



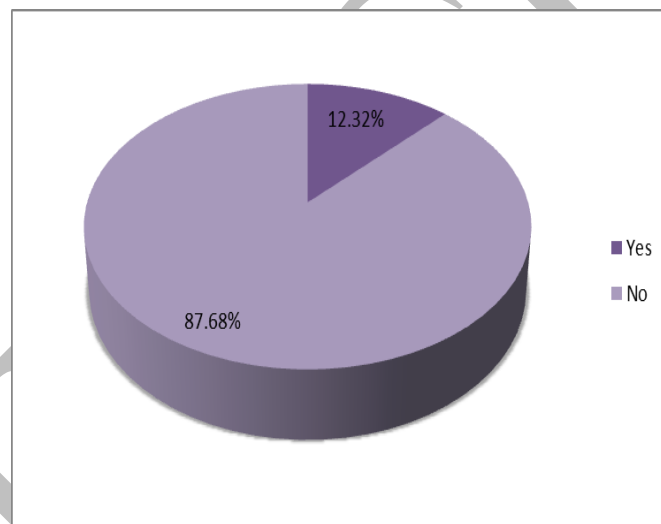
with cluster sampling technique based on EPI cluster method. The study unit was the bachelor level students of non-medical field aged 18 to 25 of different colleges of Bhavnagar after motivational lectures for blood donation in their colleges.

Self-administrative questionnaire was used as a data collection technique. Data recording, tabulation, analysis, and graphs were done by using the programs Microsoft Excel 2007 and SPSS 11.5 for Windows. The ethical consideration was taken by verbal consent of respondents. The main limitation/constraints of this study are time, money, materials and resource.

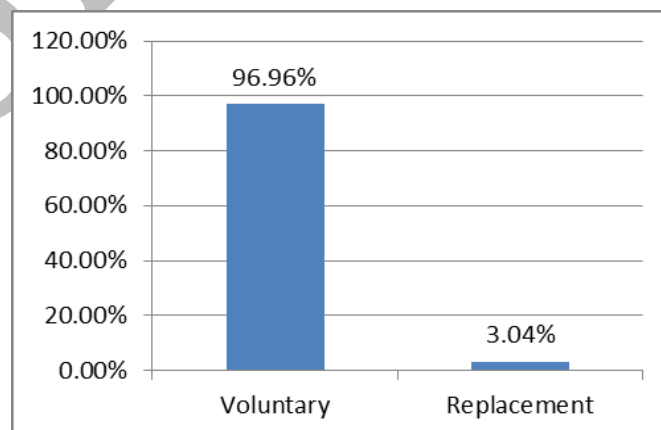
***Education:***



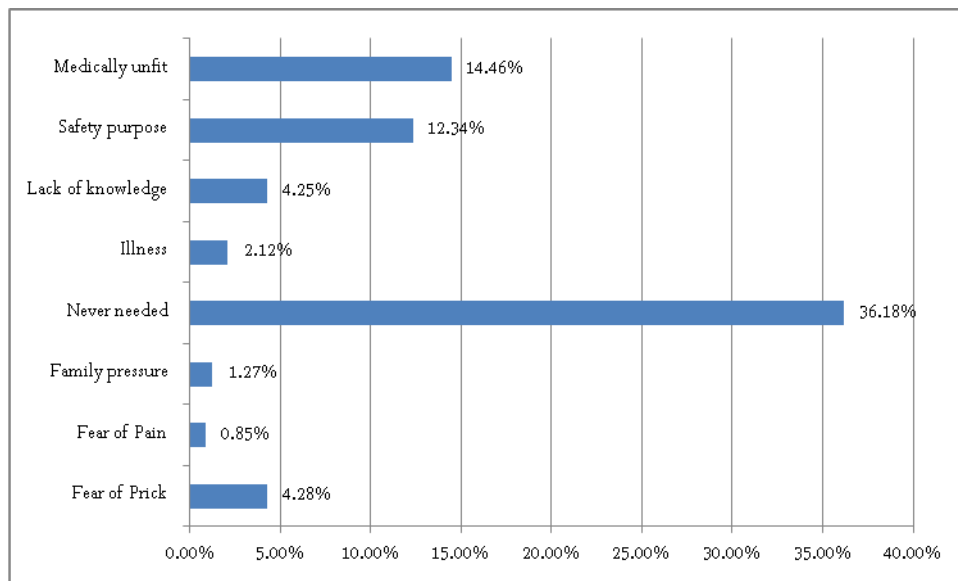
***Previous donations:***



***Donation type-Voluntary/Replacement:***

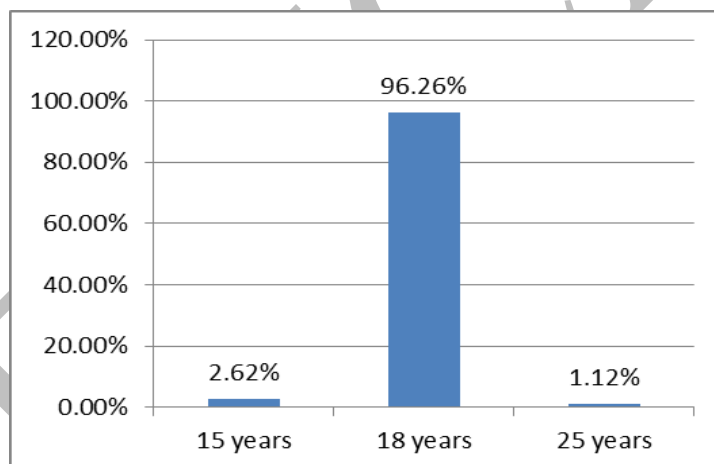


**Reasons for no donation:**

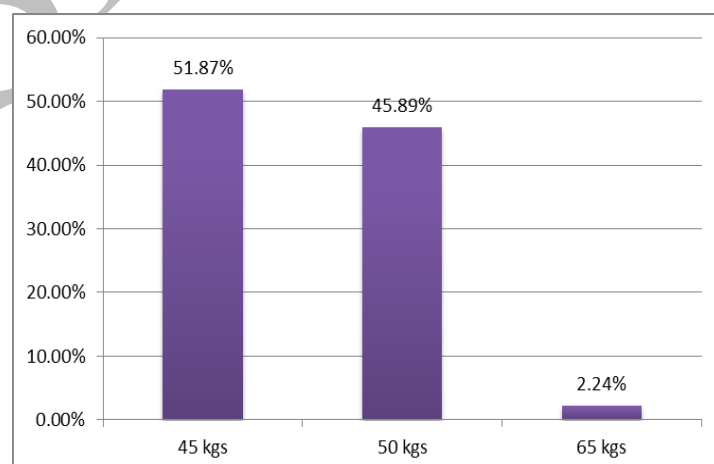


**Knowledge and Awareness:**

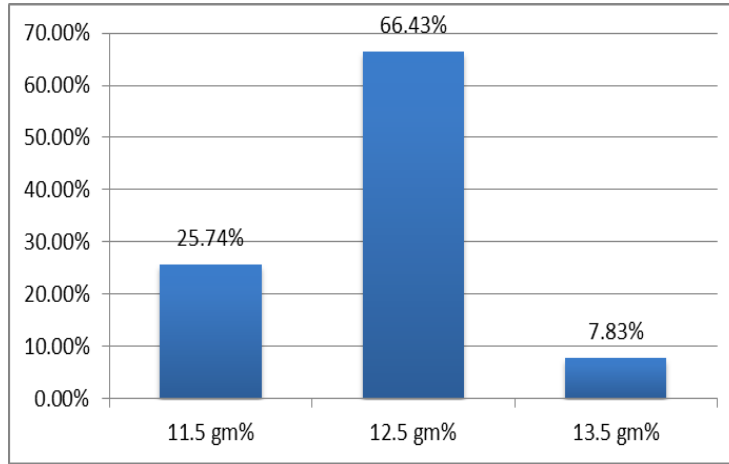
**Age:** Minimum cut-off value for donation.



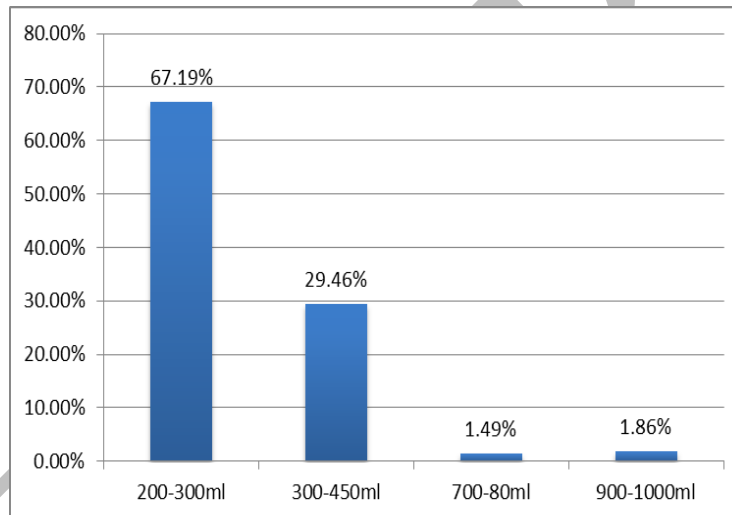
**Weight:** Cut-off for weight.



*Haemoglobin: Cut-off for Hb.*



*Amount drawn during blood donation:*



*Donation Interval:*

Interval( times per year)	Percentage
4 times	65.68%
2 times	27.98%
5 times	6.34%

*Donation side-effects:*

Side-effect	Percentage
Weakness	13.80%
Transmission of HIV	1.11%
No major side-effects	85.09%

*Future donation:* 51.89% students were willing to donate blood after getting proper counseling and knowledge for blood donation.

**DISCUSSION**

The world relies on safe blood, yet only 20-30% of the world's health systems are able to provide a safe and adequate blood supply<sup>1</sup>. Every year, about 108 million blood units are collected from blood donors. WHO estimates that blood donation by 1% of the total population is generally the minimum needed to meet a nation's most basic blood requirements. Many millions more are still needed to fulfill global requirements and ensure availability of blood when and where it is needed.

With the goal of ensuring universal access to safe blood and blood products, WHO recommends the five integrated strategy for blood safety and availability like Establishment of a national blood system with well-organized and coordinated blood transfusion services

and national blood policies, Collection of blood, plasma and other blood components from low-risk, regular, voluntary unpaid donors, Quality-assured screening of all donated blood for transfusion-transmissible infections (TTI), Rational use of blood and blood products to reduce unnecessary transfusions and minimize the risks associated with transfusion, Step-wise implementation of effective quality systems<sup>2</sup>. Ferguson in 1997, according to his articles "Making a blood donation, especially for first-time donors, can be a stressful experience." These feelings of stress may inhibit donors from returning<sup>3</sup>.

Studies assessing students' knowledge and practice of blood donation have reported that knowledge is usually incomplete, college students do not donate more than general population, and knowledge does not correlate with practice

of blood donation<sup>4,5,6,7</sup>. Blood donation is a self-directed volunteer service and blood donors feel a responsibility to help others, regardless of personal connection to those receiving the assistance. But, blood donors are at increased risk for unpleasant blood donation related symptoms (e.g., dizziness, weakness, and light-headedness), and the experience of such symptoms can contribute to a decreased likelihood of repeat donation. There is no such thing as artificial blood so it is necessary to retain donor for continuous supply of blood without hampering them.

According to the study, the most common reasons for not donating blood was the lack of arousal of situation for donation. The study concluded that these misconceptions regarding blood donation needs to be addressed soon.

#### **CONCLUSION:**

As per the study results, though the knowledge and attitude about blood donation is fairly acceptable among the respondents, blood donation practice is not satisfactory.

To overcome that and to improve donation rates, donors must be educated and counseled properly. By increasing the awareness about voluntary donation through social-media networks targeting the young crowd, national blood donation

awareness campaigns and improving easy accessibility to a blood bank, we can improve the number of voluntary donors.

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