

# Knowledge, Attitude and Practices towards Blood Donation among Dental Undergraduates

Faazila Fathima<sup>1</sup>, Dr. Gheena .S<sup>2</sup>

<sup>1</sup>II BDS, Saveetha Dental College and Hospital, Saveetha University, Chennai

<sup>2</sup>Department of Oral pathology, Saveetha Dental College and Hospital, Saveetha University, Chennai

**Abstract:** ***Objective:** The objective of this study is to evaluate the knowledge, attitude and practices towards blood donation. **Methods:** A questionnaire consisting of 19 questions were framed based on knowledge and attitude towards blood donation online in survey planet app. The link was sent to dental undergraduates. They were explained about the purpose of the study. The questions were carefully studied and the corresponding answers were marked by them. The study population consisted of students who were approximately 17-25 years of age. **Result:** The level of knowledge and attitude among dental students was good. Majority of them got a score of more than 60% on knowledge based and a score of 75% on attitude based questions. However, it was observed that 55% of the students had not donated blood. 70 % of them were aware of the screening tests done and also of the spread of infectious diseases through blood transfusion. **Conclusion:** Although the demand for blood supply has progressively increased in developing countries, evidences indicate that there is a shortage of blood and blood products. Thus, identifying the attitude and knowledge of people on blood donation is necessary to overcome these problems.*

**Keywords:** Blood, donation, knowledge, attitude, dental undergraduates

## 1. Introduction

Blood can save millions of life, and Young people are the hope and future of a safe blood supply in the world.(1)India needs about 6 to 7.5 million units of blood annually and every year there is gradual increase in this demand.(2)National blood donation policy of India highlights on the need of supplying safe and quality blood to the needy through collecting blood from regular voluntary blood donors.(3) Availability of safe blood and blood products is a critical component in improving health care.(4)Millions of lives are saved each year through blood transfusions, but the concern is quality and safety of blood transfusion particularly in the developing countries.(5) Blood will be safe if there is a nationally coordinated blood transfusion service, collection of blood only from voluntary non-remunerated donors, testing of blood for transfusion transmissible infection and transfusion of the right blood to the right patient through the appropriate clinical use of blood.(6) It is a well known fact that in developing countries more than 50% of blood donations are made by paid and voluntary donors.(7,8) Fear and misconceptions about blood donations and lack of voluntary blood donors are major constraints in many developing countries to facilitate voluntary blood donation. Considering the estimated shortfall of 3 to 4 million units of blood annually in India, more awareness must be created among all strata of population especially among youngsters on importance of blood donation. (2) According to WHO, an estimated 38% of reported voluntary blood donations are contributed by people under the age of 25. WHO also insist countries to focus on young people to achieve 100 per cent voluntary unpaid blood donation.(9) Young students are healthy, active, dynamic and receptive and constitute a greater proportion of population. They have to be encouraged, inspired and motivated to donate blood voluntarily.(2) Considering the importance and significance of student community in voluntary blood donation this study has

carried out to understand knowledge, attitude and practice about blood donation among dental undergraduates.

## 2. Materials and Method

A questionnaire consisting of 19 questions were framed based on knowledge and attitude towards blood donation online in survey planet app. The link was sent to dental undergraduates. 5 questions were attitude based and 14 were knowledge based. They were explained about the purpose of the study. The questions were carefully studied and the corresponding answers were marked by them. The study population consisted of students who were approximately 17-25 years of age.

## 3. Result

The level of knowledge and attitude among dental students was good. Majority of them got a score of more than 60% on knowledge based and a score of 75% on attitude based questions. However, it was observed that 55% of the students had not donated blood (figure1). 55% of the students felt blood donation is harmful to donors and 25% of the students felt it may be harmful to donors (figure2). 70 % of them were aware of the screening tests done and also of the spread of infectious diseases through blood transfusion (figure 3&4)

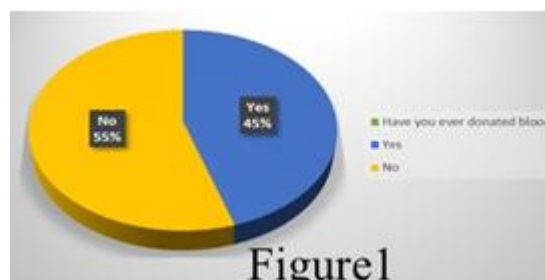
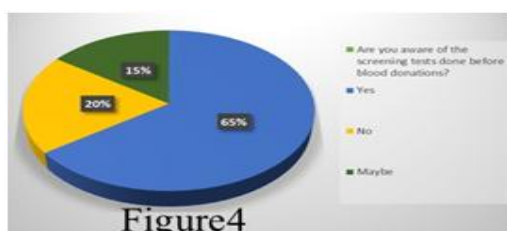
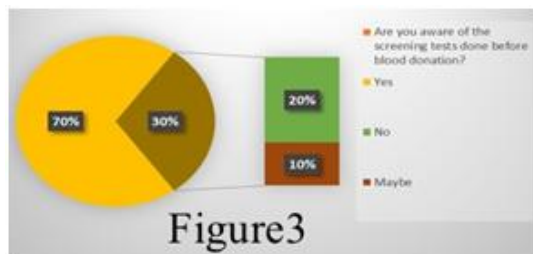
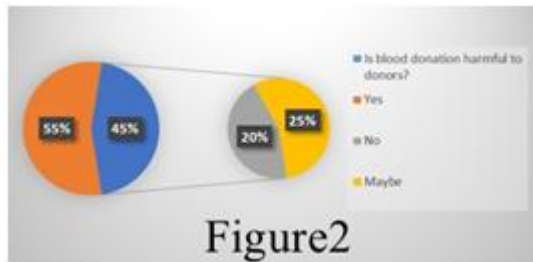


Figure 1



#### 4. Discussion

In a study done by Sabu et al, majority of the participants (62%) never donated blood and majority of non-donors felt they are medically unfit to donate blood and about 25% responded they never thought about donating blood.(2) Similar results were observed in the present study were 55% of the students had not donated blood. The major reason for not donating blood reported by previous studies (10,11) was fear. Like- wise, previous studies reported same trend; a study conducted among female African American college students shows 51% were non-donors (12), a similar study carried out in Thailand indicates 89% of respondents never donated blood.(9) A study conducted among youngsters in Sikkim by Shenga et al. indicates 87.3% had never donated blood.(13)

In the study done by Sabu et al, the overall knowledge levels among majority of respondents were either good (42.7%) or average (43.9%). While the knowledge levels observed in the present study was 60%.The knowledge level and gender do not shown any statistical association which is similar to the finding of other studies (10,14).Maintaining an adequate and safe blood supply is an issue of concern to local health planners, especially with the increase in demand as a result of an increase in population size and an increase in the number of medical facilities in India. Therefore, understanding the various factors contributing to attitudes and level of knowledge associated with blood donation and transfusion is crucial. Blood transfusion is a fundamental and requisite part of any national health service for the optimum management of emergency conditions like severe trauma, shock, and resuscitation. (15)

#### 5. Conclusion

Role of healthcare institutions and its student's in voluntary blood donation are pivotal. They should lead from the front to donate blood voluntarily and take all necessary steps to create more awareness program on blood donations among entire student community. This study illustrates how increasing awareness and marketing 'Voluntary blood donation' can enhance adequacy of blood needs.

#### References

- [1] Dhingra N. World blood donor day: new blood for the world. World Health Organization.
- [2] SabuKarakkamandapam et al. Knowledge, Attitude and Practice on Blood Donation among Health Science Students in a University campus, South India. Online Journal of Health and Allied Sciences. Volume 10, Issue 2; April-June 2011.
- [3] National AIDS control Organization (NACO), India. Vol- untary blood donation programme -An operational Guideline, 2007
- [4] Agrawal, Amit et al. "Knowledge, Attitude and Practices of People towards Voluntary Blood Donation in Uttarakhand." Asian Journal of Transfusion Science 7.1 (2013): 59–62. PMC. Web. 12 Feb. 2017.
- [5] Dhingra N, Lloyd SE, Fordham J, Amin NA. Challenges in global blood safety. World Hosp Health Serv. 2004;40:45–9. 51, 52.
- [6] Shenga N, Pal R, Sengupta S. Behavior disparities towards blood donation in Sikkim, India. Asian J Transfus Sci. 2008;2:56–60.
- [7] Wake D, Cutting W. Blood transfusion in developing countries: problems, priorities and practicalities. Trop Doct. 1998;28:4-8.
- [8] Alam M, Masalmeh BE. Knowledge, attitude and practices regarding blood donation among the Saudi population. Saudi Medical Journal 2004;25(3):318-321.
- [9] World Health Organization (WHO). Blood Transfusion Safety.
- [10] Wiwanitkit V. Knowledge about blood donation among a sample of Thai university students. Vox Sang. 2002 Aug;83(2):97-99.
- [11] Hossain GM, Anisuzzaman M, Begum A. Knowledge and attitude towards voluntary blood donation among Dhaka University students in Bangladesh. East Afr Med J. 1997 Sep;74(9):549-553.
- [12] Shaz BH, Demmons DG, Crittenden CP et al. Motivators and barriers to blood donation in African American Col- lege students. TransfusApher Sci. 2009 Dec;41(3):191- 197.Epub 2009 Sep 24.
- [13] Shenga N, Pal R, Sengupta S. Behavior disparities towards blood donation in Sikkim, India. Asian J Transfus Sci. 2008 Jul;2(2):56-60.
- [14] Vasquez M, Ibarra P, Maldonado M. Blood donation: knowledge and attitudes of a university population in Chile. Rev PanamSaludPublica. 2007 Nov;22(5):323-238.
- [15] Purushottam A Giri et al, Knowledge and Attitude about Blood Donation Amongst Undergraduate Students of Pravara Institute of Medical Sciences Deemed University of Central India.2012(5)Issue:6:569-573.