

Topic: A Study to Assess the Knowledge and Attitude Regarding Blood Donation among Undergraduate Nursing Students of Selected Colleges of Anand District

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Abstract

The current study aims “ A study to assess knowledge and attitude reading blood donation among undergraduates nursing student of selected colleges of Anand district.” Blood can save a millions of lives. The requirement of blood and blood product in country depend on the population.⁽¹⁾ The task of recruiting voluntary blood donor remains one of the major challenges for any blood transfusion service. A blood donation is truly is a “gift of life” that healthy individual can give to other in their community who are sick or injured. Blood donation is the mother all donation. It’s not only save one individual but also entire family of that individual. There should be enough blood unit in blood bank available for everybody’s requirement. But non availability of sufficient blood unit is problem India. The task of recruiting voluntary blood donors remain one of the major challenges for any blood transfusion service. The number of potential donors were often reduced due to the strict selection criteria which were impassed to ensure to the safety of the blood supplies. In addition to this , blood centers find it difficult to recruit new donor and to retain them of arranging a regular blood supply for need people.⁽²⁾

Keywords: Blood donation , undergraduates nursing student ,knowledge and attitude.

Introduction

“A literature review is body of text that aims to review the critical point of knowledge on particular topic of research.

– ANA 2000

A review of literature is description and analysis of the literature relevant to a particular field or topic. It provides an overview of what already had been carried out, who are key researcher who did that work, which of the question are already answer regarding particular area of research interest , what method and methodologies were used to answer the particular question and what are prevailing theories and hypothesis.

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Our body has approximately 5.5 liters of blood of which only 350ml-450ml of blood is taken depending upon weight of donor. The withdrawn blood volume is restored within 24 hours and the hemoglobin and cell components are restored in 2 months. Therefore it’s perfectly safe to donate blood every three months.

The blood goes to those suffering from cancer, sever burns, leukemia, anemia and hemophilia. Donors can donate blood again after 56 days, and if might just make your life a little healthier.⁽³⁾

Najd Alfouzan (2014) conducted a cross-sectional study at King Abdulaziz Medical City (KAMC). The purpose of this study is to explore the knowledge, attitudes, and motivations towards blood donation among Saudi population. Participants for this study were selected by convenient nonrandom sampling technique in 2013. Sample size is $n = 350$ with 95% confidence interval, $\alpha = 0.05$, accuracy of $\pm 5\%$, and power of 80%. A pilot study has been conducted on

20 participants to evaluate data collection tool and methodology of study. Only 39.3% reported that media encourage people to donate blood very well, 31.5% agreed with token gifts and 18.9% agreed with paying money as motivating factors for blood donation. The study concluded that most reported motivating factors for blood donation were one day off and mobile blood donation caravans in public areas and Chi-square was used to test for the difference between two categorical variables. Statistically significant differences were considered at $\alpha < 0.05$.⁽⁴⁾

Habtom Woldeab Gebresilase, Robera Olana Fite and Sileshi Garoma Abeya (2017) The comparative cross section study design was used in Adama Science and Technology University and Arsi University and in this students were selected stratified sampling. In this study some frequencies and proportions were computed and Chi-Square and logistic regressions were carried out and associations were considered significant at $p < 0.05$. Sample size was calculated using Epi-Info version 21 by considering a 23.6% prevalence of blood donation practice from Ambo study, 95% confidence level, 80% power of the study, a risk ratio of 2 and one to one ratio (1:1) in comparison groups. After addition of 5% Non-response rate, the final size became 360 (in each group it became 180). The study revealed that there was a significant knowledge difference ($\chi^2 = 152.779$, $p < 0.001$) and Attitude difference ($\chi^2 = 4.142$, $p = 0.042$) between Health Science students of Arsi University and Non-Health Science students of Adama Science and Technology University. From above result they concluded that there were no difference in the practice of blood donation between the two groups.⁽⁵⁾

Hossein Safizadeh, Nasim Pourdamghan, Batool Mohamadi (2007) In this cross sectional study, 500 students in Kerman city were evaluated using a questionnaire. This study was conducted to evaluate students awareness and attitude towards blood donation in Kerman city. Internal consistency was calculated by calculating Cronbach's α ($\alpha = 0.84$). T-test, Chi-square, and Pearson test were used as well. Data analysis revealed that there was no significant difference in students attitude between males and females, while males were more aware than females ($P < 0.001$). There was a positive and significant relationship between the students attitude and awareness ($P < 0.001$ and $r = 0.22$).

Only 24.6% of all students reported a history of blood donation whose awareness and attitude were better than other students ($P < 0.001$). This study concluded that evaluated students were not aware enough about blood donation and It is necessary to find obstacles and eliminate them to improve the situation.⁽⁶⁾

Shailesh Kumar Mishra, Suchet Sachdev, Neelam Marwaha, Ajit Avasthi (2016) This cross-sectional study was conducted by the Department of Transfusion Medicine, Postgraduate Institute of Medical Education and Research, Chandigarh, India, in 2013. The study was conducted to assess the knowledge and attitude of college-going students toward voluntary blood donation and to bring out and compare the reasons for donating or not donating blood. For this pilot study, the data were collected from 1,000 students of nine colleges from Chandigarh and adjoining areas of Punjab. Five hundred blood donor students and 500 nondonor students at the camp venue who consented to enroll for the study after being explained the nature and purpose of the study were enrolled after taking written informed consent and were given the pre validated self-administered structured questionnaire. About one in two (45.8%) college-going students fear that either they are not fit enough to donate blood (26.8%) or that they will become weak (19%) after blood donation. Almost one in four (27.4%) have fear of needle pain; therefore, they do not come forward for blood donation. Concluded that Majority of the donors were males (75.8%), and there were only 24.2% female blood donor students, whereas among nondonor students there were 55% males and 45% females.⁽⁷⁾

Purushottam A Giri, Deepak B Phalke (2013) : A cross-sectional study was conducted among 400 final year undergraduate students from medical, dental, nursing, and physiotherapy disciplines in a Pravara Institute of Medical Sciences University campus of central India in 2011. The present study was conducted to assess the knowledge and attitude about blood donation among undergraduate medical science university students. The data was analyzed in the form of percentage and proportions and Chi-square test. The study sample consisted of 268 males (67%) and 132 females (33%). The mean age of male students was 23 years (standard deviation, SD = 0.2 years), and the mean age of female students was 22.2 years (SD = 1.0 year) year 2012. The overall knowledge on blood donation was good. The

result stated that majority (52.5%) of students never donated blood. Knowledge level was found highest among medical students (53.1%) and lowest among physiotherapy students (20.7%). Non-consideration, forgetfulness, and lack of time were the major reasons for not donating blood. This study conclude that the importance of adopting effective measures in our campus to motivate about voluntary blood donation among students.⁽⁸⁾

Fauzia Haji Mohammad, Tabinda Ashfaq, Kashmira Nanji, Qudsia Anjum, Mohammad Ishaque Lohar (2010) This was a cross sectional survey done by the medical students of Ziauddin Medical College, Karachi in year 2010. All students of the College from first to final year MBBS in the current year were assessed through questionnaire and to assess the knowledge and attitude of medical students regarding voluntary blood donation and investigate factors affecting voluntary blood donation. Total 350 students enrolled in MBBS, out of these 310 completed the questionnaire. Among those 148 (47.7%) were male and 162 (52.3%) female. The most common reason for blood donation recognized by both the groups was social responsibility, 25% males and 12.9% females followed by mobile blood collecting units by 20.3% males and 7.4% females. They concluded that several factors that play role in motivating volunteers to donate blood and it is important to create and strengthen the donor recruitment strategies especially for younger generation⁽⁹⁾

Zeeshan Ahmed, Mubashir Zafar, Adeel Ahmed Khan, Muhammad Umair Anjum and Muhammad Asad Siddique (2014) This cross sectional study was conducted in two public and one private medical college in Karachi from January to March (2012). The objective of this study was to determine the knowledge, attitude and practices about blood donation among undergraduate medical students in Karachi. Sample size was calculated from WHO software. Multiple regressions were used to examine the effect of two or more independent variables on a single dependent variable to test the statistical significance at 95% confidence level. P-value of < 0.05 was considered as significant. The result stated that majority of participants (92%) had appropriate knowledge regarding the various aspects of blood donation and attitude domain showed that around 42% of students were positive about blood

donation. Around 50% of students showed willingness to donate blood. They concluded that good knowledge about blood donation practices is not transforming in donating blood. They greatly enhance the movement for “voluntary non-remunerated blood donation”, to ensure good quality of blood and safe modern medical care.⁽¹⁰⁾

Durgesh Prasad Sahoo, Chaitanya Patil, Armaity Dehmubed(2017) The cross-sectional descriptive study was conducted on 111 interns of Topiwala National Medical College, Mumbai using universal sampling method (2015). Self-administered structured questionnaire was used to collect data. Inspiration among and participation of medical students is essential to make the “voluntary blood donation” movement a success. Chi-square test was applied to examine the association between knowledge level and independent variables like sex and blood donation status. A p-value of <0.05 was taken as statistically significant. In the result mean age of interns was 23.13 years with standard deviation of 0.832 of which girls comprised 48.6%. Forty seven point seven percent interns had donated blood before. The correct knowledge was prevalent in 45.0% only. Practice of blood donation amongst interns had male propensity and positive correlation with gender difference (p value 0.001). Most interns (79.3%) donated for moral satisfaction and social responsibility. The commonest reason in the non-donors, for not donating was being medically unfit for donating (69.0%). They concluded that almost half (55.0%) of the medical students under study didn't have adequate knowledge on blood safety and donor eligibility.⁽¹¹⁾

DR.E.Premila, DR.K.Suresh kanna(2017) The descriptive study using a semi structured and pre-tested questionnaire in selected college of karaikal. To assess the level of knowledge regarding blood donation among undergraduate students and to find out association between knowledge regarding blood donation with selected demographic variables and sample size consists of 80 first year undergraduate students. Data analysed using SPSS (Statistical Package for Social sciences) and they are expressed as mean, standard deviation and percentages. Chi-square test was applied to find the association of knowledge regarding blood donation. Blood Donation Statistics shows, in the year 2010. Out of 80 students, only 3 (4%) students had adequate knowledge, 44 (55%) students had moderate knowledge,

and remaining 33 (41%) students had inadequate knowledge and also there was significant association between knowledge scores of under graduate students with their with their religion, educational qualification of mother, Family income, Experience of participation in awareness program on blood donation at 5% ($p < 0.05$) level. From this study it can be concluded that majority of the undergraduate students had moderate knowledge on blood donation.⁽¹²⁾

Giancarlo Cicolini, Dania Comparcini, Sare Alfieri, Elena Zito, Elena Marta, Marco Tomietto, Valentina Simonetiti (2019) The cross-sectional study is the STROBE checklist was used to grant adequate and complete reporting of research is to investigate factors involved in the blood donation (BD) in a population of Italian nursing students (NSs). The study was carried out in five Italian Universities, and a structured, 22-item questionnaire was distributed to 532 NSs (mean age = 24.64, SD = 7.41, min = 19; max = 55; population, female = 80.8% of total) to explore propensity, obstacles, knowledge of BD and to assess associations between variables. The result stated that overall level of knowledge among NSs donors is high, when compared with non-donors ($p < 0.05$); the propensity for donation is acceptable (34.8% of the total are donors; mean = 3.17 donation). They concluded that specially tailored BD campaigning should be implemented to sensitise University students. NSs could become elective motivators among students of different Universities or faculties.⁽¹³⁾

Ankita Thakur, Hoshiar Singh Chauhan, Bishwas Acharya(2015) The cross section study was carried out in 2015 among this 277 undergraduate students of district Una, Himachal Pradesh. To assess the knowledge and practices of blood donation among undergraduate students. The result stated that out of 277 students, 165 were male and 112 female. More than half of respondents, 142 (51.3%) had a poor level of knowledge. Only 48(17.3%) of the total respondents had donated blood and 32(19.4%) of the boys and 16(14.3%) of the girls had donated blood. A highly significant statistical association was found between gender and knowledge regarding amount of blood in body (p -value=0.001). Stream of education was found to be highly significantly associated with knowledge about own blood group (p -value=0.003), knowledge regarding

number of constituents present in blood (p -value=0.001) and knowledge regarding blood donation to HIV/AIDS affected person (p -value= < 0.001). A highly significant association was found between practices of blood donation and age group (p value=0.002). They concluded that majority of the donors, 41(85.4%) had donated blood only once in their life. Good knowledge and practice of blood donation among undergraduate students were found quite low.⁽¹⁴⁾

Siddhanth Suresh, Crlyse Saldanha(2019) For this the cross-sectional study was conducted over a period of 2 months among 191 medical students who were provided with a pre-designed, self-administered questionnaire. Data was analysed by frequency, percentage, mean, standard deviation and Mann-Whitney test. This study was to assess the knowledge, attitude and practice with regard to voluntary blood donation among medical students, thereby aiding to generate possible and appropriate measures to tackle the paucity of blood donors worldwide. Statistical significance was set at $P \leq 0.05$. Data was analysed by frequency, percentage, mean, standard deviation and Mann-Whitney test. Result stated that total no. of 191 medical students participated in the study. 55 (28.8%) were 1st year MBBS students and 136 (71.2%) were 2nd year MBBS students. Out of them, 155(81.2%) were females and 36 were males (18.8%). The overall knowledge score based on percentage of correct responses was 48.09% with a mean score of 7.21, which falls under moderate level of knowledge. The general attitude among the students was good however, most of the students had never donated blood before (90.6%). From this they concluded that knowledge, attitude and practice towards voluntary blood donation are disappointing for a population of medical students.⁽¹⁵⁾

Woldemichael Tadesse, Yohannes Ayalew, Engida Yisma, Misgan Legesse Liben and Mesfin Wudu (2018) The cross-sectional quantitative study was used to assess KAP and associated factors towards voluntary blood donation (VBD) among health science students of Samara University, Afar Northeast Ethiopia (2016). For this study proposed sample size was 351. The proportion for this study was taken from previous study using knowledge level 83.7%, attitude 68% and practice 23.4%²⁴, at $\alpha=0.05$ 95% confidence level ($Z_{\alpha/2}=1.96$) and absolute precision or margin of error to be 5% ($d=0.05$)

and a 5% anticipated non-response rate. The data collection tool was adopted from WHO tools. Data was analyzed by SPSS version 20.0. Logistic regression analysis was used to identify associated factors. Predictor variables with p-values up to 0.25 in bivariate regression were entered to multivariate regression and p-value <0.05 used as cut-off point for a variable to become independent predictor. The result stated that out of total participants, 67% were males and mean age range, 21.29 ± 1.66 years. Less than one quarter, 83 (24.5%) (95% [CI]: 20.0%-29.0%) had ever donated blood. Being department of nursing increased odds of practice [AOR (95%CI)=1.881(1.002, 3.532)]. Above result concluded that the level of knowledge on VBD was low while, significant number of students had unfavorable attitude towards VBD and there was poor practice. Then it is better to incorporate short training course for health science students in the existing curriculum.⁽¹⁶⁾

H. Sanayaima Devi, Jalina Laishram, Shantibala K, Vijaya Elangbam conducted a cross sectional to assess the knowledge, attitude and practice about blood safety and donation among 1st and 2nd MBBS students of RIMS, Imphal and to determine any association between knowledge level and selected variables like gender, those who had ever donated blood and were willing to donate in future. This cross sectional study was conducted in Regional Institute of Medical Sciences, Imphal during September to December 2010. Students were interviewed face to face using a pre-tested, pre-designed semi-structured questionnaire. Students' level of knowledge was assessed by scoring scale. A p-value of <0.05 was taken as statistically significant. Data were presented in percentages, mean and standard deviation. Pearson's chi square test was used for significance testing. The proportion of students having adequate knowledge was 33.1% with the mean score of 12.2 ± 2.89 . 89.8% intended to donate blood in future, but only 13.9% had ever donated blood and out of which, 64.8% of donors were first timers. Knowledge on blood safety and donation was significantly associated with blood donation status. Regular CMEs and seminars should be conducted to increase awareness about blood safety and donation and to increase the number of voluntary blood donation.⁽¹⁷⁾

Obsa MS, Weji BG, Dedecho AT and Worji TA conducted a study on May 30, 2018. The purpose

of the study is to Assessment of Knowledge, Attitude and Practice of Graduating Health Science Students towards Blood Donation at Wolaita Soddo University. All selected graduating health science students were included. Regular supervision and follow up was made. The data was collected from October 2 to 10, 2017 at Otona Campus of Wolaita Soddo University. It is located at Wolaita Soddo town which managerial city of the zone is Wolaita Zone. Here are six main roads connecting Soddo to the other cities, which make it the centre of business. The total population of Wolaita Zone is 1.7 million and out of which 120,000 is the population of Sodo Town. Here are three hospitals and seventy health center in Wolaita zone. A total of 96 graduating health science students were included. Most of the participants were male. The overall knowledge on blood donation among respondents was 75.26%. Highest percentage of study participants agree that blood donation cannot affect health of donors. It was also found there were poor practices of blood donation. Conclusion and Recommendation: In this study, there were high knowledge and attitude towards blood donation. However, there was a poor practice of donating blood. Therefore, it is very important to promote blood donation practices.⁽¹⁸⁾

Ashish kumar Nathabhai kanani, jitendra H vachhani, shweta B upadhyay, spruha K dholakiya conducted a cross section study among 500 government medical sciences undergraduate students in Jamnagar during the period of 3 months (February 2017 to April 2017). The purpose of the study is to compare the reasons for blood donation and knowledge about blood donation among medical science undergraduate students. It constitutes of MBBS, Dental, Ayurvedic, Physiotherapy, and Nursing College. A pre-designed, pretested, self-administered questionnaire was devised to collect data. Data were collected after obtaining informed consent. Ethical clearance from the institute was obtained before the study. The results were analyzed using Microsoft Excel 2007 database sheet, and percentage and Chi-square test were applied to calculate association between different variables with P value set as significant when <0.05. The response was gathered from a total of 500 respondents who voluntarily participated in the study. Out of them, 31.52% ($n = 165$) males and 14.03% ($n = 335$) females donated blood in their lifetime. Among MBBS students, 90.19% ($n = 1100$) had shown

a good level of knowledge (given a positive response), whereas dental, ayurvedic, physiotherapy, and nursing student respondents showed the same by 78.27%, 71.64%, 89.55%, and 76.27%, respectively. Among factors that hindered the study cases from donating blood, the most important was that they were never approached by anyone (52.2% - whenever required) for blood donation. The conclusion of the present study indicates a greater awareness among the medical and physiotherapy students in comparison to nursing, dental, and ayurvedic students. Hence, these sectors need more targeted attempts to increase awareness and motivation among these masses, which will eventually enable us to increase the spectrum of motivated donors among the common people population.⁽¹⁹⁾

Roopadevi V, Ranjini Nanjaiah, Aravind Karinagannanavar [2017] conducted a descriptive study on factors affecting blood donation among young adult students in natl J Community the intervention of study explores the practice of blood donation among the young adult students. A cross sectional study of 583 students among three degree colleges during June 2014 to August 2014 by systematic sampling. Data was collected using semi-structured questionnaire after taking informed consent. As age increased practice of blood donation decreased and it was statistically significant with p-value <0.001. Prevalence of blood donation in males (22%) was more than females (1.5%) and was statistically significant with p value <0.001. Overall 70 (12%) had donated blood and 86.6% were willing to donate blood. Conclusion according to study is young adult males are future potential donors who can be approached in colleges as most of them are students. Conducting awareness programs regularly in the colleges keeps them well informed and motivated. This awareness about blood donation should be coupled with the prevention strategies of the major disease that consume much of the blood.⁽²⁰⁾

Dnyanesh Limaye, Pooja Naik, Tejal Varekar, Priyanka Salunkhe, Chaitali Shah, Arlan Sydymanov, Vaidehi Limaye, Ravi Shankar Pitani, Sushama Sathe, Atul Kapadi, Gerhard Fortwengel has done a research on “Knowledge and attitude towards voluntary blood donation among students from Mumbai University” on 15 May, 2018. A cross-sectional study was carried out among students from Mumbai

University, India during May–June 2017. Two hundred and fifty students were approached to participate in the study of which 201 agreed to participate (males: 104; females: 97). Pretested questionnaire was distributed and collected data was analyzed using IBM SPSS version 23. High number of participants agreed about encouraging general public about voluntary blood donation (96%; 193/201), lack of awareness about VBD in general public (82%; 164/201). But not a single participant was able to respond to the knowledge part of the questionnaire with 100% accuracy. Almost all the participants had correct knowledge about blood groups (98%; 196/201) and blood matching need (195/201; 97%). The study concludes that participants showed good attitude but demonstrated poor knowledge about voluntary blood donation. Details about blood donation should be incorporated in the undergraduate curriculum and periodic awareness programs should be organized for students.⁽²¹⁾

Shiv Lal Solanki, Abhilasha Mali have carried-out research on “Study on Blood Donation Among medical Students of Udaipur City, Rajasthan”, published on 11 August 2018. Blood is a very specialized body fluid of humans which deliver necessary substances such as nutrients and oxygen to the cells and help in transportation of metabolic waste products away from the cells. Blood is manufactured by human beings and donation of blood by humans is the only way of acquiring blood to meet emergency requirements in cases of road traffic accidents, complications of pregnancy like ant partum and post partum hemorrhage, blood loss during childbirth, various anemic disorders and surgical emergencies. Objective of this research is to know the knowledge, attitude and behavior towards blood donation among medical college students. This cross sectional study was conducted on 150 first MBBS students of Geetanjali Medical College and Hospital, Udaipur, during October 2016 to December 2016. Information regarding knowledge, attitude and practice for blood donation was recorded in a pre tested proforma, after obtaining the written consent from study subjects. Data was analyzed and results were expressed as using proportional percentage. To conclude with, It is evident by our study that greater knowledge about blood donation does not lead to high frequency of blood donation by medical college students. Special campaign is to be conducted to convert in to the actual blood

donation by the medical students.⁽²²⁾

Jasim N. Al-Asadi, Asaad Q. Al-Yassen has conducted research on “Knowledge, attitude and practice of blood donation among university students in Basrah, Iraq: A comparison between medical and non-medical students” on 1st November 2018. .Aims and Objectives: To evaluate the knowledge and attitude of Basrah University students about blood donation. Materials and Methods: This descriptive cross-sectional study involved students of two colleges in Basrah University. It was carried out during the period from January to April 2017. A non-probability purposive sampling method was used in selecting the participants for this study. Information on socio-demographic characteristics, knowledge and attitude towards blood donation were collected through a structured self-administered questionnaire. There was no significant difference in causes of non-donation between the students of the two colleges ($P=0.390$). Results: A total of 422 students were targeted, of these 393 (93.1%) completed the questionnaire. Only 51 (13%) of total respondents had a history of blood donation, of those 64.7% donated only once. The most mentioned reasons behind not donating were; not being asked to donate (24.6%), inconsideration of donation (11.1%), and fear of drawing blood (8.8%). Adequate knowledge was detected in 66.7% and positive attitude in 68.7%. Students of College of Medicine were younger, more knowledgeable, and donate more than those of College of Administration and Economics. Conclusion is that a substantial number of the university students had inadequate blood donation knowledge. Education programs and motivational campaigns should be enhanced.⁽²³⁾

Renu Chauhan, Rajesh Kumar, Supriya Thakur has made research on “A study to assess the knowledge, attitude, and practices about blood donation among medical students of a medical college in North India” published in 2018. Scarcity of blood and blood products is frequently encountered in health care institutions. Medical students can serve as an important pool of potential blood donors for the attached teaching hospitals. To determine the knowledge, attitude and practices (KAP) of medical students about voluntary blood donation. It was a cross-sectional study conducted among medical students of Dr RPGMC Tanda in Himachal Pradesh, in the months of August to

December, 2015. 235 students participated in the study, 102 (43.4%) males and 133 (56.5%) females. The mean age was 20.42 ± 1.38 years. This study suggests that the study population has relatively good knowledge and a favorable attitude about voluntary blood donation. However, the prevalence of blood donation among the students is still low, especially among the girls. This reflects a need for ongoing, educational, and motivational activities for encouraging voluntary blood donation by the students.⁽²⁴⁾

Hesamedin Askari Majdabadi, Mehdi Kahouei, Soghra Taslimi, Mahnaz Langari has done research on “Awareness of and attitude towards blood donation in students at the Semnan University of Medical Sciences” published on May 2018. This study aimed to assess the university students’ awareness of and attitude towards blood donation. This study aimed to assess the university students’ awareness of and attitude towards blood donation. In this cross-sectional study, a descriptive analytical approach was used to examine awareness of and attitude towards blood donation among students in Semnan University of Medical Sciences, Semnan, Iran. The study was performed in 2015-2016. A total of 749 university students participated in this study. A special questionnaire was used to collect demographic information and the participants’ awareness of and attitude towards blood donation. Before beginning the main phase of the study, the reliability and validity of the questionnaire were examined and verified. The SPSS software, version 16, was used for statistical analysis. We used descriptive statistics, specifically chi-square and Friedman tests, to analyze the data. A p-value of <0.05 was considered significant. 63.55% of the participants were female. Only 9.74% of the participants had a history of blood donation. Based on the results, 253 participants (35.33%) had low awareness, 352 participants (49.16%) had moderate awareness, and 111 participants (15.5%) had good awareness of blood donation. In addition, 176 participants (23.59%) had negative attitude, 438 participants (58.71%) had moderate attitude, and only 132 participants (17.69%) had good attitude towards blood donation. Results also showed a statistically significant relationship between gender and awareness of the history of blood donation ($p=0.047$). However, there was no significant relationship between gender and attitude towards blood donation ($p=0.27$). When asked about their favorite method of receiving information

about blood donation, 376 participants (50.2%) preferred social media. The study concludes that a considerable percentage of students have low awareness of and negative attitude towards blood donation. The low awareness and negative attitude towards blood donation can be considered as important factors contributing to the lack of interest and poor participation in blood donation among this population. Therefore, there is a critical need for training and culture building activities and programs in order to increase university students awareness and improve their attitude towards blood donation.⁽²⁵⁾

Conclusion

Majority of the samples are lacked in the adequate knowledge and attitude regarding blood donation among health professionals of selected colleges of Anand District.

Conflict of Interest: None

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Ethical Clearance: Permission of obtained from College Head of Anand District and consents taken from participants.

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