

Knowledge, Attitude & Practise of Voluntary Blood Donation in Students of BRLSABVM Medical College, Rajnandgaon, Chhattisgarh

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Abstract

There is a crucial need for awaring people regarding blood donation all over the world. According to Census 2011 Rajnandgaon city, Chhattisgarh has 1,63114 population and only around 1000 Voluntary Blood Donation done per year³. This depicts the lack of knowledge and social awareness regarding the blood donation among the population of Rajnandgaon (C.G).

Material and Method: The present study is a cross sectional study and conducted among the students of the various graduate and post graduate colleges of Rajnandgaon, to assess their knowledge and attitudinal variables towards voluntary, non-remunerated blood donation.

Sample Size: It is calculated by using Kish and Lisle formula for cross-sectional studies⁸. Four hundred students were selected to participate in this study

Result: After analyzing the data, we observe that the overall knowledge regarding blood donation in study population was found to be 46.11%. Most amazing thing is that 370 student out of 400 never did blood donation (92.5%). Overall 30.60% of students have negative attitude towards blood donation which includes generalized tiredness after blood donation (10.12%), hypovolemic anemia(15.12%) and decrease in Immunity is (5.36%). Around 69.40% of students have positive attitude and are willing to donate blood if they are demanded for blood donation (39.40%), 3% of non-donors not know much importance of blood donation and 27% don't know the procedure and place where to do blood donation.

Conclusion: Through this study we suggest that appropriate motivational campaign should be launched immediately among this young section of the population to convert this favourable "attitude" towards blood donation into a regular "practice" in order to increase the voluntary blood donation in Rajnandgaon.

Keyword: Voluntary blood donation, knowledge, attitude, practice, hypovolemic anemia.

Introduction

"More blood, more life¹," lifesaving theme of World Blood Donor Day 2011 to express the importance of the crucial need for awaring people regarding blood donation all over the world. According to WHO, Around 93 million blood donors are donating blood annually all over the world². Blood donation is one of the important

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components in saving the lives of many people in routine and emergency situations like in major surgery, pregnancy and childbirth, trauma etc. It has been observed that low income countries have nine times less donation as compared to high income countries, while day by day in the developing countries like India; the demand for blood supply has progressively increased. Various evidences indicate that there is a major shortage of blood and blood products in these countries.

As per the world health organization the minimum 1% blood donation must be done to meet the demand in given population, but according to Census 2011 Rajnandgaon city, Chhattisgarh has 1,63114 population and only around 1000 Voluntary Blood Donation done per year³. This depicts the lack of knowledge and social awareness regarding the blood donation among the population of Rajnandgaon (C.G). Acceptable age for blood donation is between 18 and 65 years⁴. It has been worldwide reported that college students can be a very good source of quick and accessible quality blood, if they are motivated and recruited well as potential voluntary blood donors⁵. However, information from various blood banks in Rajnandgaon has shown that only one-thirds of college students reported to have ever donated blood with varying reasons but many do not donate any longer.

The common reasons faced by college going students regarding Blood donation may be tight schedule at college, lack of knowledge and awareness of blood donation, fear of needle or infection, and lack of opportunity. In many countries, to understand factors that influence blood donation blood donation surveys have been used⁶.

There is no current published information on factors influencing voluntary blood donation among young people and among college students in Rajnandgaon. To fill that information gap, the study aimed at determining awareness, level of knowledge, and attitudes towards voluntary blood donation among university students by using the case of Rajnandgaon region. Such information would be vital in planning for raising awareness and helping young people to donate blood in the country.

Aims and Objectives:

Objectives of the study were as follows: To assess

the level of knowledge regarding blood donation, among the undergraduate and post graduate college students in Rajnandgaon, CG.

To assess the attitudes, regarding the blood donation.

To assess the awareness about practices regarding blood donation.

Material and Method

The present study is a cross sectional study and conducted among the students of the various graduate and post graduate colleges of Rajnandgaon, to assess their knowledge and attitudinal variables towards voluntary, non-remunerated blood donation. The Rajnandgaon city has average literacy rate 86.83% with high rate (94%) of college enrolment⁷.

Including and excluding criteria: We included all healthy adult male and female participating students willing for study. We excluded all visiting students and those who do not have consent to participate or having health related issues.

Sample size: It is calculated by using Kish and Lisle formula for cross-sectional studies⁸. Four hundred students were selected to participate in this study and interviewed face to face on various aspects of blood donation using a structured questionnaire.

Data Collection Tools and Procedures: Questionnaires used in this study were self administrative paper-pencil questionnaire type. The filled questionnaires were collected by hand by the investigators on the same day after distributing them to the students. The questionnaire were developed from review from other pilot studies^{9,10}. Questionnaire contains questions related to socio-demographic characteristics of participants.

Few questions were based on the awareness and knowledge of blood donation. While few questions was related to attitudes towards blood donation which were of "yes/no" answer type, and some questions were on attitude towards blood donation. A part of questionnaire was devoted to collect the source of information regarding blood donation and lastly there are questions related to reasons for donating and not donating blood with open ended type questions.

Observation and Results

Table No. 1: Knowledge towards blood donation

Knowdge	Percentage (%)
Age criteria for blood Donation	67.82
Weight criteria for blood donation	70.34
Blood pressure range for blood donation	54.22
Maximum blood donation per year	36.25
Quantity of blood volume withdraw each time	20.63
Up to how many days blood can be store	16.40
What are the different blood groups	70.31
Lives saved through each unit of blood	26.21
Benefits of blood donation	52.81
Over all percentage of knowledge	46.11

Table No. 2: Attitude towards blood donation

Attitude	92.5% (Never did blood donation)
Blood donation causes generalized tiredness	Negative 10.12%
It causes hypovolemic anemia	Negative 15.12%
It hampers the Immunity	Negative 5.36%
Nobody asked or motivated for blood donation	Positive 39.40%
Non-donors don't know importance of blood donation	Positive 3%
Don't know what to do and where to do blood donation	Positive 27%

Table No. 3: Practice on blood donation

Reason for not a regular donor	7.5%
Lake of privacy while procedure	28.37%
Students felt uneasiness after donation	9.23%
Students donated blood only once	7.5%
Never asked or motivated again for blood donation	62.40%
Willing to voluntary donate blood if they are demanded for blood donation	69.40%

After analyzing the data, we observe that the overall knowledge regarding blood donation in study population was found to be 46.11%(Table 1). Most amazing thing is that 370 student out of 400 never did blood donation (92.5%). Overall 30.60% of students have negative attitude towards blood donation which includes generalized tiredness after blood donation (10.12%), hypovolemic anemia(15.12%) and decrease in Immunity is (5.36%) (Table 2). Around 69.40% of students have positive attitude and are willing to donate blood if they are demanded for blood donation (39.40%), 3% of non-donors not know much importance of blood donation

and 27% don't know the procedure and place where to do blood donation. We observed that only 30 students (7.5%) donated blood once(Table 2). We found that amongst the blood donors,28.37% of donors said there is lake of privacy while procedure, around 9.23% felt uneasy after donation and 62.40% said they are never asked or motivated for blood donation(Table 3).

Discussion

Day by day due to population growth hike and other factors like medical emergency, Road traffic accidents the demand of blood and its substitute is tremendously

increased. In spite of available resources and facilities the number of voluntary blood donation is quit less. As per the world health organization the minimum 1 % blood donation must be done to meet the demand in given population, but according to Census 2011 Rajnandgaon city, Chhattisgarh has 1,63114 population and only around 1000 Voluntary Blood Donation done per year. This depicts the lack of knowledge and social awareness regarding the blood donation among the population of Rajnandgaon (C.G).It has been worldwide reported that college students can be a very good source of quick and accessible quality blood, if they are motivated and recruited well as potential voluntary blood donors. So in this study we tried to fill that gap between demand and attitude towards voluntary blood donation.

In the above study we found that students have average knowledge (46.11%) regarding blood donation. If we educate them regarding health benefit of blood donation and eradicating the myth towards the various false fact like donation causes anemia, weakness we can change the negative attitude (30.6%) in them.

The common reasons faced by college going students regarding Blood donation are lack of knowledge and awareness of blood donation, fear of needle or infection, and lack of opportunity (39.40%). By motivating them this figure can be easily added in voluntary blood donation.

Conclusion and Implication

Recruiting a sufficient number of safe blood donors in India is an emerging challenge especially with the increase in demands as a result of an increase in population size and an increase in the number of medical facilities. The present study was conducted in Rajnandgaon city in order to understand the various factors contributing to beliefs, attitudes, and level of knowledge associated with blood donation and transfusion that will help the blood centre in building and maintaining an adequate and safe blood supply. The current study was aimed to reflect a general lack of information regarding donation policies and practices among the surveying individuals.

It is also possible that an increased availability of correct information on donation requirement to more eligible potential donors may help persuade some of them to donate. Through this study we suggest that appropriate motivational campaign should be launched immediately among this young section of the population

to convert this favourable “attitude” towards blood donation into a regular “practice” in order to increase the voluntary blood donation in Rajnandgaon.

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Ethical Clearance: This study was approved by the Institutional Committee.

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