TRENDS OF BLOOD DONATION AMONG MEDICAL AND DENTAL STUDENTS

AUTHORS:
1. DR. HASSAN ALI, DHQ HOSPITAL FAISALABAD
2. DR. SHAHID HUSSAIN, BOLAN MEDICAL COLLEGE QUETTA
3. DR. SARA TAHIR, FATIMA MEMORIAL HOSPITAL LAHORE

ABSTRACT:
A blood donation occurs when a person voluntarily has blood drawn and used for transfusions and/or made into biopharmaceutical medications by a process called fractionation (separation of whole-blood components). Donation may be of whole blood, or of specific components directly (the latter called apheresis). This survey study was conducted among different medical and dental college students of different medical and dental colleges. Different questions about knowledge and frequency of blood donations were asked. A total of 210 medical and dental students participated in the study. There were 143 males and 67 females in the study. The mean age of the students was 21.89±2.45 years. Out of 143 males, 42 were regularly donating blood after six months. Thirty-seven male students donated blood last year during an emergency. Only four females donated blood last year. The frequency of blood donation was much greater than that of female students.

Keywords: Blood donation, Medical Students, Dental Students
INTRODUCTION:
A blood donation occurs when a person voluntarily has blood drawn and used for transfusions and/or made into biopharmaceutical medications by a process called fractionation (separation of whole-blood components). Donation may be of whole blood, or of specific components directly (the latter called apheresis). Blood banks often participate in the collection process as well as the procedures that follow it. Today in the developed world, most blood donors are unpaid volunteers who donate blood for a community supply. In some countries, established supplies are limited and donors usually give blood when family or friends need a transfusion (directed donation). Many donors donate as an act of charity, but in countries that allow paid donation some people are paid, and in some cases there are incentives other than money such as paid time off from work. People can also have blood drawn for their own future use (autologous donation). Donating is relatively safe, but some donors have bruising where the needle is inserted or may feel faint. Potential donors are evaluated for anything that might make their blood unsafe to use. The screening includes testing for diseases that can be transmitted by a blood transfusion, including HIV and viral hepatitis. The donor must also answer questions about medical history and take a short physical examination to make sure the donation is not hazardous to his or her health. How often a donor can donate varies from days to months based on what component they donate and the laws of the country where the donation takes place. For example, in the United States, donors must wait eight weeks (56 days) between whole blood donations but only seven days between plateletpheresis donations and twice per seven-day period in plasmapheresis.
The amount of blood drawn and the methods vary. The collection can be done manually or with automated equipment that takes only specific components of the blood. Most of the components of blood used for transfusions have a short shelf life, and maintaining a constant supply is a persistent problem. This has led to some increased interest in autotransfusion, whereby a patient's blood is salvaged during surgery for continuous reinfusion—or alternatively, is "self-donated" prior to when it will be needed. (Generally, the notion of "donation" does not refer to giving to one's self, though in this context it has become somewhat acceptably idiomatic.) (1-3).

MATERIAL OF METHODS:
This survey study was conducted among different medical and dental college students of different medical and dental colleges. The personal and demographic data were collected on a predefined proforma. Different questions about knowledge and frequency of blood donations were asked. All the data was analyzed with SPSS Ver. 23.0. Relevant statistical analysis was performed. The qualitative variables were presented as frequency and percentages. The quantitative variables were presented as mean and standard deviation.

RESULTS:
A total of 210 medical and dental students participated in the study. There were 143 males and 67 females in the study. The mean age of the students was 21.89±2.45 years. Out of 143 males, 42 were regularly donating blood after six months. Thirty-seven male students donated blood last year during an emergency. Only four females donated blood last year. The frequency of blood donation was much greater than that of female students.

DISCUSSION:
Blood donations are divided into groups based on who will receive the collected blood. An 'allogeneic' (also
called 'homologous') donation is when a donor gives blood for storage at a blood bank for transfusion to an unknown recipient. A 'directed' donation is when a person, often a family member, donates blood for transfusion to a specific individual. Directed donations are relatively rare when an established supply exists. A 'replacement donor' donation is a hybrid of the two and is common in developing countries such as Ghana. In this case, a friend or family member of the recipient donates blood to replace the stored blood used in a transfusion, ensuring a consistent supply. When a person has blood stored that will be transfused back to the donor later, usually after surgery, that is called an 'autologous' donation. Blood that is used to make medications can be made from allogeneic donations or from donations exclusively used for manufacturing. Blood is sometimes collected using similar methods for therapeutic phlebotomy, similar to the ancient practice of bloodletting, which is used to treat conditions such as hereditary hemochromatosis or polycythemia vera. This blood is sometimes treated as a blood donation but may be immediately discarded if it cannot be used for transfusion or further manufacturing.

The actual process varies according to the laws of the country, and recommendations to donors vary according to the collecting organization. The World Health Organization gives recommendations for blood donation policies, but in developing countries many of these are not followed. For example, the recommended testing requires laboratory facilities, trained staff, and specialized reagents, all of which may not be available or too expensive in developing countries.

An event where donors come to donate allogeneic blood is sometimes called a 'blood drive' or a 'blood donor session'. These can occur at a blood bank, but they are often set up at a location in the community such as a
shopping center, workplace, school, or house of worship (4-6).

REFERENCES:


