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Available online at: www.jpardonline.com**Analysis of deferral causes in blood camp conduct by University**Praveen N M^{1*}, A K Sah², M Vijayasimha²¹Analytical and Development Department, Stelis Biopharma Pvt.Ltd, Bengaluru, Karnataka-560105, India.²Department of Medical Laboratory Technology, Amity Medical School, Amity University Haryana, Haryana-122051, India.Received: 18.08.2019
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ABSTRACT: Background: Blood transfusion plays a vital role in lifesaving process, during some clinical aspects like over blood loss, surgical procedure and accident case. Blood donation camps may help to supply required blood in emergency conditions. These studies undertake some relevant factors that may impact voluntaries about blood donation and considerate the psychosocial supports of donors. Healthy portion required for donor before blood donation and deferral criteria of the donor. **Aim:** The study was aimed to express their knowledge and useful facts on blood donation among healthy person. **Method:** Data were collected during blood donation camp conduct by Amity University Gurgaon campus from 10-01-2017 to 11-01-2017. The overall data was collected by 431 students and staffs those were participate in blood donation camp. **Results:** Overall acquaintance on blood donation was well extended and majority of donor were under the age group of 21 to 58 years. Domination of male donor was higher than female they are 207 and 114. About one fourth majority of deferral donors are pointed out due to temporary explanation on both gender. **Conclusion:** Our study reveal temporary and permanent deferral cause conduct during blood donation camp and motivate for temporary deferral in future donation while permanent deferral advice for proper treatment. The most common reason for rejection was anemia; other reasons were low BP, anemia bite, typhoid and menstrual cycle.

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INTRODUCTIONS:

A unit of blood can save the life of a person in critical condition. Present scenario younger generation step forward to donate blood voluntarily. This gives a hope and helps to supply blood in an emergency. Around 6 to 7.4 million units of blood required annually in India, it may increase their demands in the year to year [1]. Safe and quality of blood was collected by regular voluntary that has been highlighted by National blood donation policy.

According to world populations, World Health Organization (WHO) pointed that 81 million units of blood whereas annually collected but in developing countries it about 39 %^[2]. In last three decades, blood bank centers place a vital role in collecting and screening of donated blood and separation are made as required to recipients like whole blood, plasma, and packed cells^[3].

Some important criteria have to be followed before selecting a donor. Moreover, a multi-number of donors are not able to donate blood successfully due to several reasons, either they were temporally or permanently not qualified for blood donation. Deferral leads to loss of precious whole blood donor (WBD) and blood units available for transfusion purpose^[4]. Overhaul input position donating blood includes educating, recruiting, selecting, retaining and registering donor, collecting blood, processing, blood components separation, execute serological and hematological analysis on blood view as a national source that provides from healthy human volunteers^[5].

This study was entitled that student awareness of blood donation and deferral condition that may temporarily or permanently not qualified for blood donation and their aspects were pointed out.

MATERIAL AND METHODS:

Data Collection:

Donor’s data were collected by blood donation camp conduct by Rotary Blood Bank in Amity University Gurgaon. The data includes list of 431 donors visited 10-01-2017 and 11-01-2017.

Data Segregation:

The provide data were studied donors selection and deferral based on age wise and gender wise. Patient’s data was based on age group and gender wise using MS office Excel 2013.

Data Analysis:

Analyzed data based on deferral and donor’s complication those who visit the donation campus. This analysis was noted that the importance of blood donation and youth contribution.

RESULTS:

The study has tinted that contribution of donor and deferral reasons which he/she may not able to donate blood. Around 431 voluntary are registered for blood donation camp in which 207 (48.02 %) of male and 114 (26.45 %) of female donor and rest of voluntary are not

confirmed for blood donation they are 110 (25.55 %) due to temporary and permanent medical condition (Table 1 and Fig 1). The data shows that 1/4th of deferral donors are pointed out during pre-health checkup (Fig 2 and Table 2), majority of deferral cases are due to low hemoglobin concentration that leads to donor rejection (63.63 %) followed by low blood pressure (8.18 %), animal bit (6.36 %), typhoid (4.54 %), menstruation cycle (4.54 %), body tattoo (2.72 %), underweight (2.72 %), antibiotic (2.72 %), fast bleeding (0.9 %) and chikungunya (0.9 %), whereas in permanently deferred category it pointed out on low blood pressure (8.18 %) and thin vein (2.72 %).

Table 1. The data shows the voluntaries and deferral numbers and percentage.

Category of donor	No of donor	Over all percentage
Male	207	48.02
Female	114	26.45
Overall deferral	110	25.52
Total	431	100

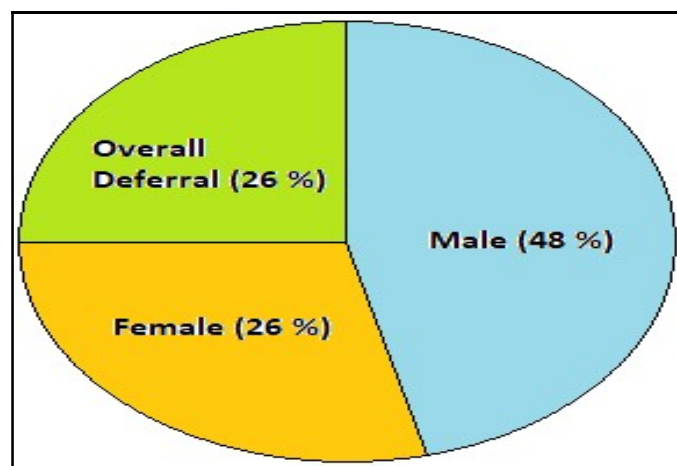


Fig 1. The pie chart shows voluntary donors and deferral percentage.

DISCUSSION:

Donor selection secure transfusion process, according to Directorate General of Health Science, Health and Family Welfare of National and International practice they should they should ensure for protected blood collection through screening, education and strict criteria followed by American Red Cross^[6].

Blood donation is a vital obligation for time, the process of blood donation doesn’t harm donor. Before donor selection, pre-diagnosis has to be conducted. Several clinical aspects are not able to gather a large number of blood donors either due to temporary or permanent rejection^[7].

Rejection of donors during blood camp that impulse negative feeling about themselves. Unpleasant impression on a donor's due to deferring reasons this impact negative feeling on donors and make donor come out form this pessimistic feeling [8].

Table 2. The temporal and permanent deferral percentage.

Causes of deferral	Number of deferral	Temporary deferral (%)
Low Hb	70	63.63
Low BP	09	8.18
Animal Bit	07	6.36
Typhoid	05	4.54
Menstrual cycle	05	4.54
Body Tatoo	03	2.72
Under weight	03	2.72
Antibiotic	03	2.72
Thin vein	03	2.72
Fast Bleeding	01	0.9
Chickengune	01	0.9
Total	110	100

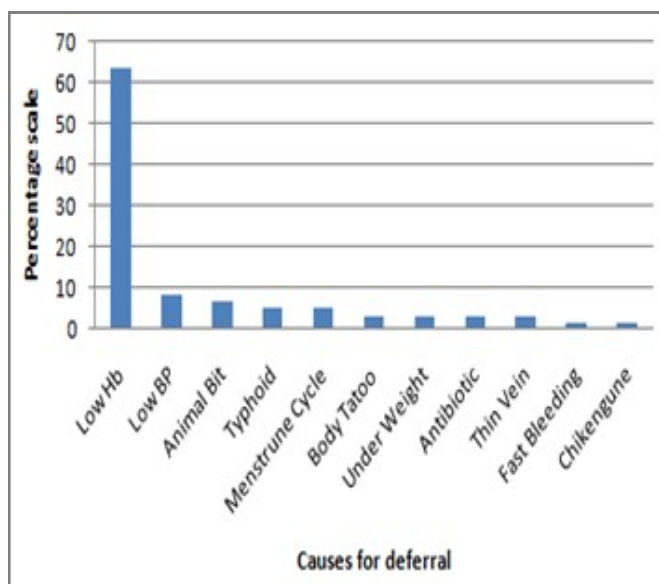


Fig 2. The temporal and permanent deferral percentage.

Donor selection plays a vital output in blood bank even during transfusion. The existing cram note on donor's selection and deferment reason they may be temporary or permanently tardy from blood donation. This shown that majority of men donor (48.02 %): women explanation (26.45 %) and overall adjournment illustrate (25.55 %) in both genders. The previous and present study tells that most common cause of fleeting deferral conditions due to low hemoglobin concentration or

anemia (63.63 %) followed by low BP, animal bit, typhoid, menstruation cycle, body tattoo, underweight, antibiotic, thin vein, fast bleeding, and chikungunya. Anemia occurs due to improper dietary source and intake of junk food and snacks that lead to decreased nutrition level [9,10].

Majority of deferral donors are due to low hemoglobin concentration or anemia. It can states that larger rife in developing countries, the trivial reasons among deferral donors who came actively for donation but they are not capable to donate. Anemia can be treated in donor take proper treatment with regular checkup and awareness of dietary source. Consumption of medication during the past 72 h may lead to deferral this due to the clinical condition of donor [11].

Temporary deferral donors can be condensed in next visit of blood donation camp by taking proper measures about their medical issues. The study show for donors lows hemoglobin concentration by advise them to take iron implement sources during their treatment. Therefore all deferred individuals are guided to overcome and contribute in the next visit.

CONCLUSION:

The study shows that safety majors are advice for donors before donation like the previous history of blood donation; medical history; examination and screening were mediatory before donor selection. The major cause for deferral was low hemoglobin concentration, low blood pressure, animal bite, typhoid menstrual cycle and so on. Supervision provides for permanent rejected donors and advice for proper treatment to relevant disease, for temporarily deferred donors provoked for further donations. However larger numbers of donors were rejected due to essential awareness regarding the importance of blood donation camp. If the donor is aware of basic knowledge about deferral condition, then it may reduce the deferred rejection.

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