

RETROSPECTIVE ANALYSIS OF REASONS OF DEFERRAL AMONG BLOOD DONORS IN A BLOOD CENTRE ATTACHED WITH TERTIARY CARE HOSPITAL OF GUJARAT

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INTRODUCTION

Blood transfusion saves millions of lives. Proper donor selection is an important step to ensure safety of both the donor and the recipient. All donors undergo strict selection criteria laid down by the Director General of Health Services and Drug Controller of India to ensure safety and quality of blood and blood components derived from their donation. Due to this, deferred must receive proper counselling and education regarding their deferral reasons. It is likely that donors may get deferred either temporarily or permanently. The Rates and Reasons for deferral vary from region to region. All donors who are deferred must receive proper counselling and education regarding deferral reasons.

AIM

The aim of the study is to analyse the rates and reasons of donor deferral in our blood centre

OBJECTIVES

- To observe the rates of deferral among blood donors
- observe the rates of temporary and permanent deferrals.
- To study the deferral rate among different genders
- To study the various reasons of deferrals

MATERIALS AND METHODS

It is a retrospective observational study done over a period of 1 year from 1st January 2023 to 31st December 2023. Details of the donors who were deferred either temporarily or permanently during the study period was collected from the donor registry stored within the Blood Bank Data Management System in our Blood centre.

RESULTS

Out of the 40131 donors who registered for blood donation during the study period, 2071 donors were deferred either temporarily or permanently due to various reasons. Total deferral rate was (5.16%) in our Blood centre. The major reasons observed were Haemoglobin less than 12.5g% (12%), Hypertension (6.9%), Ongoing Medication (5.8%), Surgical Procedures (7%). And among the rejections temporary deferral rate is (4.7%) and permanent deferral rate is (5.3%). When considering among different genders, females deferral rate is (10.7%) and among male it is (5.2%). Deferral rate among voluntary and replacement donors was 1.9% and 6.6% respectively

FIGURE 1. DEMOGRAPHIC PROFILE OF DONORS

DONORS REGISTERED	MALE 38060	FEMALE 1037	TOTAL 40131
ACCEPTED	37023	929	38060
DEFERRED	1937	134	2071

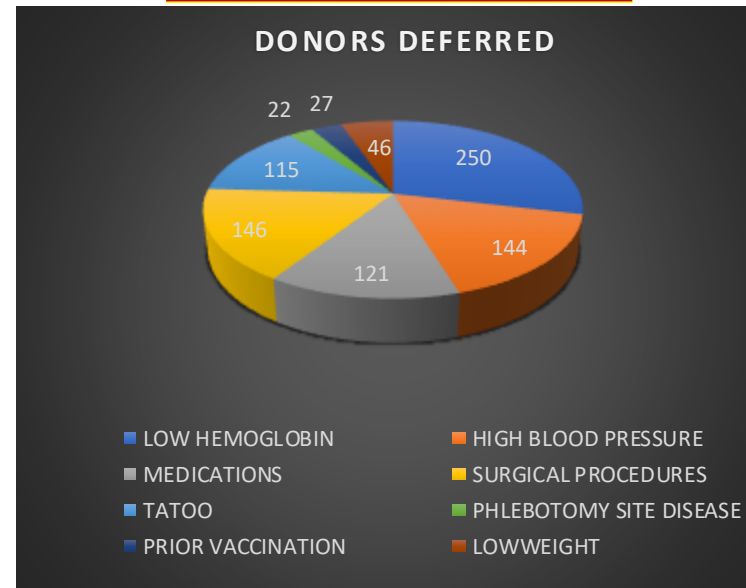
FIGURE 2. DEFERRAL PATTERN AMONG TYPE OF DONORS

TYPE OF DONOR	ACCEPTED	REJECTED	TOTAL
VOLUNTARY	12444	250	12694
REPLACEMENT	25616	1821	27437

FIGURE 3. REASONS FOR PERMANENT DEFERRAL

REASONS FOR DEFERRAL	TOTAL DONORS DEFERRED	PERMANENT DEFERRAL RATE	TOTAL DEFERRAL RATE
HYPOTHYROIDISM	15	13.8%	0.72%
CVS PROBLEMS	15	13.8%	0.72%
POLYCYTHEMIA VERA	10	6.1%	5.8%
EPILEPSY	5	4.6%	0.24%
MEDICATIONS	4	3.7%	0.19%
ASTHMA	4	3.7%	0.19%
SEXUALLY TRANSMITTED INFECTIONS	4	3.7%	0.19%

FIGURE 4. REASONS FOR TEMPORARY DEFERRAL



DISCUSSION

It is essential to understand various reasons of donor deferral both temporary and permanent, so that in case of temporary deferral, proper follow up can be conducted to bring them back to donor pool and in case of permanent deferral proper notification and counselling can be given. In our study males have outnumbered female donor population and the deferral rate in females was much higher compared to males. Higher female deferral rate and low participation may be due to high frequency of anemia, health problems, social taboos and cultural habits, lack of motivation and fear of blood donation. Among temporary deferrals, low hemoglobin was found to be the major reason similar to other studies in literature. Frequent blood donations, parasite infestations, poor nutrition can be major causes for low hemoglobin. Proper implementation of screening programmes can be conducted at community level, follow up with iron supplementation, deworming drugs can be given to rectify the issue.

LIMITATIONS: This study did not include donors who were accepted during screening but later found to be TTI reactive compared to other studies.

CONCLUSION

Analysing donor deferral data, guides health education initiative encouraging healthy habits and reducing health risk among potential donor and general public. Though there are many studies conducted to analyse health status, rates and patterns of donor deferral, it is necessary that every blood bank as well as health care professional analyse health status, rates and patterns of donor deferral in their own regions so that unnecessary deferrals especially due to temporary reasons can be avoided by conducting awareness programmes, mass screening programmes at least a week before blood donation camps are to be organized. These steps will ensure safe and quality blood and blood products for the patients. Deferred donors should be informed in warm and supportive manner, the reason for deferral and they should be informed when they will be able to donate blood in future. It is important to give positive healthy messages.

REFERENCES

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