

# Blood Donor Deferral Pattern at SMS BLOOD CENTRE SMS Medical College and Attached Hospital, Jaipur

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## Introduction

Donor deferral is a significant challenge as it leads to the loss of motivated blood donors and reduces blood availability for patients in need. This study aims to analyze the frequency and reasons for blood donor deferral, including high hemoglobin deferral, which is often underreported. According to the World Health Organization (WHO), a nation's blood requirement is approximately 1% of its population. In India, during 2016-17, there was a shortfall of 1.9 million blood units against the target of 13 million units.

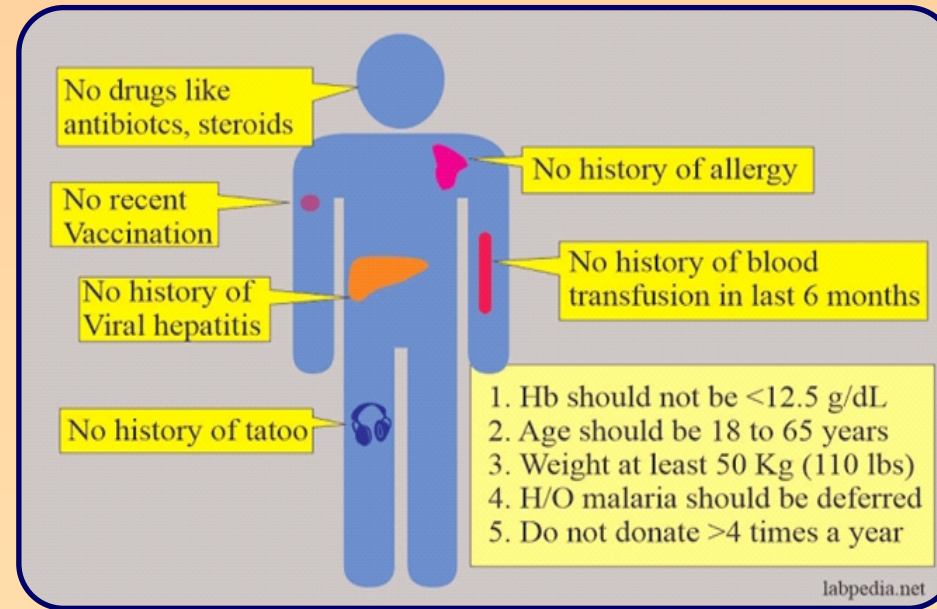
## Aim and Objectives

The aim of the study is to evaluate the incidence and different reasons of blood donor deferral in a tertiary care hospital.

## Materials and Methods

This retrospective study reviewed the deferral records of whole blood donors at a tertiary care hospital from July 2023 to June 2024. The deferral process was categorized into four stages:

1. Stage A: Evaluation through the Donor History Questionnaire (DHQ)
2. Stage B: Medical examination
3. Stage C: Hemoglobin (Hb) check using the Hemocue Hb 301 Analyzer Hemoglobin System
4. Stage D: Pre-phlebotomy examination. The study followed national guidelines for blood donation screening.



## Results

Out of 48956 pre-donation screenings, 9.8% of donors were deferred. The highest rate of deferral (56.04%) occurred at Stage C due to hemoglobin levels, with 53.55% attributed to low Hb and 3.85% to high Hb. High hemoglobin deferrals were seen only in male donors. The deferral rates at stages A, B, and D were 28.54%, 14.97%, and 0.45%, respectively. Female donors had a higher overall deferral rate (48.98%), while first-time donors and those aged 18 to 25 years were frequently deferred due to low hemoglobin, underweight status, or recent tattooing/ear piercing.

## Conclusion

Understanding the reasons for donor deferral can inform proactive strategies for donor recruitment and retention. Educate potential donors, especially first-time and young donors, about maintaining healthy hemoglobin levels through diet and supplements.

## References

- 1.Saran RK. Transfusion Medicine: Technical Manual New Delhi: Directorate General of Health Services Ministry of Health and Family Welfare, Govt. of India; 2003.