



Assessing Whole Blood Donor Deferral Pattern in Eastern India: Insights from a Tertiary Care Hospital

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INTRODUCTION

Whole blood collection is a critical component of blood transfusion services, ensuring the safety of both donors and recipients.

Donor screening and deferral, coupled with stringent blood bag testing, are essential to maintain the quality of donated blood.

While deferrals are necessary to mitigate risks, they can also lead to a loss of potential donors.

Analysing donor deferral patterns is crucial for optimizing blood collection practices and maximizing the availability of safe blood products.

AIMS AND OBJECTIVES

To determine the deferral rate and categorize the reasons for blood donor deferrals.

To develop evidence-based recommendations for reducing donor deferrals.

MATERIALS AND METHODS

- This study was conducted in the Department of Transfusion Medicine and Blood Bank of AIIMS Patna.
- Donor deferral records of **6 months** were used from **January 2024 to June 2024**. National guidelines laid by **Drug and Cosmetic Act 1940(amendment 2020)** were used for donor deferral criteria.

RESULTS

- Of **11774** total registrations, 10169(86.36%) donations were accepted and **1605(13.63%) prospective donors deferred**.
- 1317(11.4%) of male donors were deferred majorly due to **hypertension(2.75%), anemia(2.17%) and inadequate sleep(1.48%)** {Table 1}
- 288(92.3%) of female donors were deferred due to the cause of **anemia (44.87%), underweight(11.85%) and hypertension(8.65%)**{Table 1}

Table 1: Deferral rate due to different reasons in both male and female WBD

	MALE(11462)	FEMALE(312)
ANEMIA	2.17%	44.87%
HTN	2.75%	8.65%
LESS SLEEP	1.48%	3.2%
UNDERWEIGHT	0.61%	11.85%
ON MEDICINES	0.80%	4.80%
TATTOO	0.43%	0.32%
ALCOHOL	0.46%	0
TYPHOID	0.42%	0.3%
TACHYCARDIA	0.12%	3.2%
BRADYCARDIA	0.02%	0
FUNGAL INFECTION	0.12%	1.28%
DENGUE	0.29%	0.3%
VACCINE	0.21%	0.9%
UNDERAGE	0.18%	2.5%
HYPOTENSION	0.02%	0.64%
MISCELLANEOUS	1.34%	9.2%

DISCUSSION

Common reasons for deferrals can be attributed to existing socioeconomic challenges and community overall health.

Shah et al. in Western Indian population found a higher deferral rate of 33%, with low Hb(78.3%) being the leading cause similar to our study.

Sundar et al reported a lower deferral rate of 5% with females deferral due to anaemia, underweight and hypotension, and males due to hypertension, underweight, and anaemia.

CONCLUSION

It is imperative to address the deferred donors with targeted **interventions, education and proper counselling** about the reason and period of deferral as applicable.



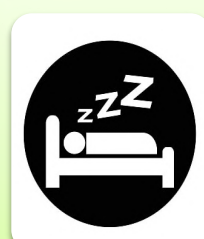
ANEMIA
(24.23% of total deferred)

- Fortification of food with iron
- Prescribing iron supplements



HYPERTENSION
(21.37% of total deferred)

- Encourage hypertensives to seek timely medical intervention



INADEQUATE SLEEP
(11.4% of total deferred)

Counsel and educate donors about the importance of well rested body.

Temporarily deferred donors should receive proper counselling regarding their deferral reasons and the necessary steps for requalification