



TURNAROUND TIME OF THE BLOOD DONATION PROCESS IN BLOOD CENTRE AT A TERTIARY CARE HOSPITAL - A PROSPECTIVE STUDY

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INTRODUCTION

- Turnaround time (TAT) is one of the quality indicators of blood centre defined by National Accreditation Board for Hospitals and Healthcare providers (NABH).
- The workflow can sometimes have gaps or bottlenecks that prolong TAT of the blood donation process.
- This can result in a bad experience for the donor and may discourage the donor from donating.

AIMS AND OBJECTIVES

- To evaluate the turnaround time of the blood donation process.

MATERIALS AND METHODS

- This was a prospective cross-sectional study done at the Department of Immunohematology and Blood Transfusion from May to June 2024.

- Blood donation process includes registration, hemoglobin estimation, blood grouping & Rh typing, medical examination, blood collection and post-donation care. The time for each phase of the process was observed separately. Donations that completed the entire process were included in the study. Deferred donations were excluded. The data collected was entered in Microsoft Excel and analyzed.

RESULTS

- Out of 123 donors observed, mean TAT for donor to complete blood donation was 47.70 ± 12.60 minutes, pre-donation phase was 25.09 ± 11.42 minutes, donation phase was 6.47 ± 1.84 minutes and post-donation phase was 16.13 ± 5.30 minutes.
- Table1:The pre-donation phase steps mean and standard deviations of blood donation(n=123).

Predonation phase steps	Mean and standard deviation (Minutes)
registration	3.79 ± 1.13
Haemoglobin estimation, Grouping & Rh typing	2.68 ± 1.64
Medical examination	2.68 ± 1.64
Waiting	12.51 ± 11.03

Table2: Reasons for prolongation of Predonation phase TAT

S.NO	REASONS
1	Donors' food intake more than 4 hours.
2	Multiple donors arriving simultaneously.
3	Duty changeover of phlebotomists at 1 pm.

- TAT of post-donation phase was prolonged when adverse donor reactions were encountered.

CONCLUSION

- The longest TAT was observed in the pre-donation phase. This can be reduced by assigning staff or residents exclusively to that donation area when multiple donors come for donations. Creating awareness among first-time donors may alleviate the problems with food intake.

REFERENCES

1. Bumanglag, Gabriel, et. al. "Evaluation of the Turnaround Time of the Blood Donation Process in the Blood Bank of Manila Central University Filemon D. Tanchoco Medical Foundation Hospital: an Operational Study." *Philippine Scientific Journal*, vol. 53, no. 1, 2020, pp. 12-18.