# BLOOD DONOR TURN AROUND TIME (TAT): Quality parameter for Transfusion Services

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### BACKGROUND:

Blood donors Turn Around Time (TAT) is defined as time taken by blood donors for the entire donation process i.e. from the time of entry to the time of exit. It indicates quality of blood donation complex. The donation process includes a set of direct questions and limited medical and laboratory examinations, collection of blood and post-donation care to ensure safety of both donors and recipients. TAT helps in time management of the donors and improve donor's retention

## **AIMS & OBJECTIVES**

- To calculate total time taken for blood donation by in-house blood donors.
- 2. To evaluate reasons for increase in blood donation time.
- 3. To plan improvement strategies for donation process.

165 Delay

2835 No Delay

# **METHODS:**

This prospective cross-sectional study was conducted from January 2024 to March 2024 in Deptt. Of Transfusion Medicine, R.N.T. Medical College Udaipur, Rajasthan with 3000 randomly selected in - house blood donors. All the donors were first explained about the study and those who gave consent were given a donor card to note time at each point of donation. As per our departmental SOP we allot approximately 45 minutes for the entire donation process, of which 10 minutes is for pre-donation registration and medical tests, 10 minutes for screening & physical examinations, 10 minutes is for phlebotomy & 15 minutes for post-donation care. Any delay were documented at each step to assess the reason afterwards. The donors who did not give consent, SDP donors, TP donors, in-house camp donors were excluded here. Data were collected from donors card, donor screening register and bleed register and further processed and analyzed. Values more than our practiced SOP were considered as delay and were further evaluated. All the data were compiled using MS Excel spreadsheet and further analyzed using SPSS version 19.0.

# Pre-Donation Tests Screening Phlebotomy Post - Donation

# **RESULTS**:

Data are presented as Mean (45.25 minutes) and SD (45+/-2.16 minutes). Out of 3000 donors only 165 (5.5%) required a longer duration than the average time to complete the entire donation process. 2835(94.5%) donors had completed the whole procedure of donation within 45 minutes. Out of 165 donors 87 (52.7%) got delayed at pre-donation laboratory tests, 63 (38.1%) had delay during medical examination & screening, 6 (3.6%) had delay during phlebotomy process, 9 (5.4%) had delay at post-donation phase. The factors causing increase in donation process include time taken to understand the procedure especially the first time donors; excessive rush of donors during peak hours and weekends; lack of communication between donor & patient attender; unexpected donor reactions mostly vasovagal attacks and shortage of manpower and space.

As per our study donors delay is insignificantly associated (p=>0.005) with the TAT as per our SOP.

## **CONCLUSION:**

TAT helps to evaluate loopholes in the chain of events. Proper strategies are to be implemented to improve and prevent delay like recruiting appropriate staff presence at appropriate counter, pre-donation counselling, prompt attention to donor reaction and effective management, team efforts to overcome challenges during donation process. Once the short comings are identified necessary measures are to be implemented. This is vital to improve all aspect of donor retention.

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