



Retrospective study of discard of blood & its products in a blood bank of tertiary care hospital in South Gujarat.

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BACKGROUND :

- ❖ Millions of lives are saved every year in regular and urgent situations for medical and surgical indications by the accessibility of safe blood transfusion services.
- ❖ It also significantly improves the life expectancy and quality of life of the patients with a variety of acute and chronic conditions.
- ❖ Human blood has no complete substitute till date.^(1,2) Hence each unit of blood is precious and has to be utilized judiciously with minimal discards.
- ❖ To deal with the necessity and supply of blood and blood components, more strict measures should be accessible and pursued for the right utilization of this insufficient reserve.⁽³⁾

AIMS :

- ❖ The aim of this study was to find out the reasons for discarding blood and its blood components.

METHODS :

- ❖ Retrospective analysis done for discard rate among the blood and its components collected during 6½ years period between 01/01/2012 to 30/06/2018 at our tertiary care teaching hospital blood bank attached to Immuno-Hematology and Blood Transfusion department, Government Medical College Surat in Southern part of Gujarat, India.

RESULTS :

- ❖ The total number of blood units collected during this study period was 58,242 of which 7,353 units were collected as Whole blood in single blood bags system & remaining other units (50889) were collected in multi-bag system of double, triple and quadruple blood bags for making various blood components like, RCC, FFP, PC, Cryoprecipitate, CPP etc.
- ❖ Out of 1,12,949 blood components 6849 components were discarded due to various reasons like expiry date, seroreactivity for TTI, leakage in bags, low volume of components, haemolysis, hyperlipemia, red cell contamination in plasma/platelet products, improper storage, return components, clotted components, components set for QC, etc.
- ❖ 6% (6849) of the total blood/ components products were discarded, the break-up on this in component-wise is depicted in figure 1 and the break-up with different reasons in figure 2.

Fig 1: Component-wise discard distribution

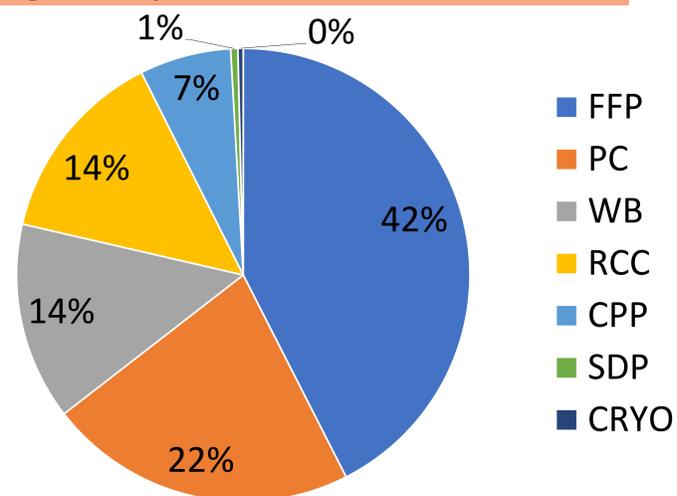
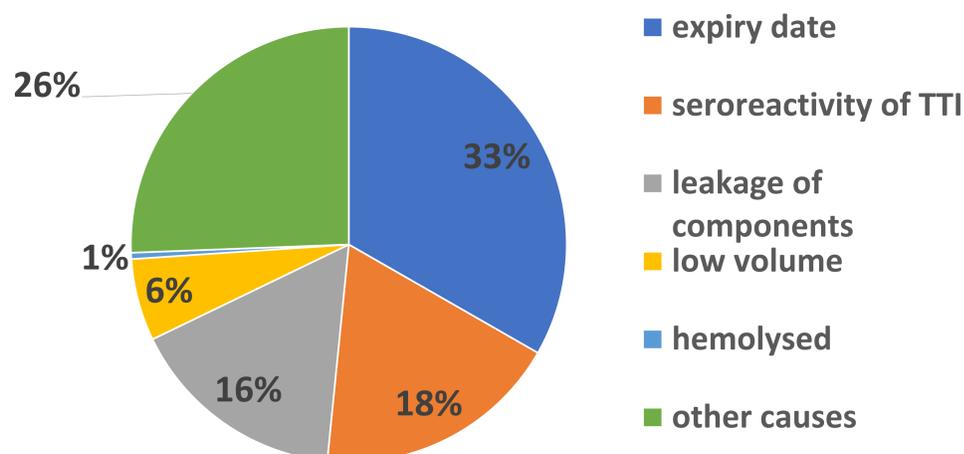


Fig 2: Various reasons wise discard distribution



- The most common component discarded was FFP(42%) followed by PC (22%).
- The most common reason of discarded was expiry date (33%) followed by seroreactivity of TTI (18%).

CONCLUSION :

- ❖ A properly conducted donor screening, notification and counselling of permanently deferral are some of the measures to reduce discard rate of collected blood.
- ❖ Adhering to SOP on components preparation, storage and education/ training of staff ^(4,5) about this, may also help reducing discard rate.
- ❖ Coordination with stake-holders on clinical side may also help in reducing the wastage rate.

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