

Priority needs and wisdom strategy for blood transfusion safety in developing low-resource countries.

Transfusion and Apheresis Science.Vol: (54) No:(1) ;February ,2016, 147-149. ISSN: 1473-0502.

Abstract

OBJECTIVE:To evaluate the implementation of alternative safety measures to reduce the risk of transfusion transmissible infections an affordable measure in low resource countries.

BACKGROUND: It is still difficult in developing countries with limited resources to mandate nucleic acid testing due to its high cost. Although NAT reduces the window period of infection, the developing countries are still in need of an efficient and effective transfusion program before implementing the complex high cost NAT.

STUDY DESIGN AND METHODS: Two thousand eight hundred eighty sero-negative first-time and repeat donations from Fayoum University blood bank were individually analyzed by NAT for HIV, HBV and HCV. Only discriminatory-positive NAT were classified comparing the non-remunerated and family replacement donations.

RESULTS: Significant discriminatory-positive differences were observed for HBV NAT results, 2 remunerated donations compared to 0 non-remunerated sero-negative donations. The discriminatory positive differences were also significant for HCV NAT results, 4 remunerated donations compared to 1 non-remunerated seronegative donation.No sero-negative discriminatory-positive NAT HIV case was found. Seven out of 8 discriminatory positive cases were from first time donations.

CONCLUSION: In order to ensure blood safety, the recruitment and retention of voluntary, non-remunerated repeat donors should be a major commitment for low resource countries in which NAT implementation is costly and not feasible.