



RESEARCH ARTICLE

VOLUNTARY BLOOD DONOR RETENTION IN JOS, NEW TRANSFUSION TRANSMISSIBLE INFECTIONS: THE IMPLICATIONS FOR A RESOURCE DEPENDENT SETTING

^{1,*}Damulak, O. D., ²Adediran, A. A., ²Ogbennna, A. A., ³Bodunde, T.,
³Bolorunduro, S. A. and ⁴Smith, O.

¹Jos University Teaching Hospital (JUTH), Jos, Nigeria

²Lagos University Teaching Hospital (LUTH), Lagos, Nigeria

³National Blood Transfusion Service (NBTS), North Central Zonal Centre, Jos, Nigeria

⁴National Blood Transfusion Service (NBTS), Headquarters Abuja, Nigeria

ARTICLE INFO

Article History:

Received 16th September, 2014

Received in revised form

20th October, 2014

Accepted 15th November, 2014

Published online 27th December, 2014

Key words:

Donor Retention,
Transfusion Transmissible Infections,
Jos

ABSTRACT

Introduction: Blood donors are generally scarce and few in most developing countries, Nigeria inclusive. The retention of available safe blood donors, a pool of reliable committed blood givers, may reduce protracted acute blood shortage.

Aims: This study sought to determine the donor retention rate, new TTIs rate and make recommendations that suit our setting.

Methods: This retrospective study was carried out at the North Central Zonal Centre of the National Blood Transfusion Service (NBTS), Jos. All blood donors who donated at the NBTS centre between January 2009 and December 2013 were analyzed and categorized into first time and retained donors. Retained donors were further grouped according to their number of donations and rate of TTIs.

Results: Thirty thousand two hundred and sixty four people, mean age 24.6 years; 70.5% males and 29.5% females donated blood within the study period. The crude TTIs rate of all blood donors 18.5% and 9.1% among committed donors. Repeat blood donors were 11,198 (37.0%), consisting of 90.5% regular and 9.5% lapsed. 97.8%, and 2.2% retained donors donated 2-15 and above 15 times with the crude TTIs rates of 9.1%, and 0.0% respectively.

Conclusion: Blood donor retention could be successful in a resource poor setting with the advantage of decreasing TTIs rate associated with increasing number of donations. We further conclude that the retention of donors could enhance efficient utilization of donor funds.

Copyright © 2014 Damulak et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Blood donors are generally few in most developing countries, Nigeria inclusive. An evaluation of the return rate of registered volunteer blood donors at the Redeirao Preto Blood Centre reported a 40% individual return within one year after the first donation and 53% within two years with higher return rate among their black donors (Adriana et al., 2011). Studying blood donors in Hong Kong, Yu et al. (2007) reported three donation patterns; one-time, drop-out and committed blood donor behaviours and recommended the identification of first-time donors with potential to become committed and committed donors with the potential for more frequent donations as steps towards the development of targeted donor retention.² Schreiber et al in an earlier work, reported that long term donor return correlated progressively with increasing donation frequency in the first year (Schreiber et al., 2005). Thomson et al. in 1998 reported that only 3.4% of safe donors

in an American blood centre expressed low likelihood of donating again within the next 12 months (Thomson et al., 1998). A higher proportion of their donors unlikely to return were first-time, minority group and the uneducated. Safe donor loss was also likely among those who felt poorly treated by blood centre staff and poor physical wellbeing during and after blood donation (Thomson et al., 1998). France and colleagues in a 2004 donor reaction inventory study, reported that donors with mild donor reactions were less than half likely to return to donate in the following year (France et al., 2004). Yu and others reported institutional incentives for altruism such as post donation information services and the inherent mechanism of communication impacted to draw the public to donate blood in Mainland China (Yu et al., 2013). Misje and co-workers while analyzing motivational and socio-demographic factors for the development of long-term commitment to voluntary non-remunerated blood donation, reported the influence of an active donation as the most important (Misje et al., 2005). They further identified five dimensions of blood donor motivation; altruism, self esteem, moral obligation, positive experiences

*Corresponding author: Damulak, O. D.
Jos University Teaching Hospital (JUTH), Jos, Nigeria.