SUCCESSFUL VOLUNTARY BLOOD DONOR RECRUITMENT AMONG PREVIOUSLY SKEPTICAL (NAÏVE) DONOR POPULATION

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ABSTRACT

AIM*: To assess the responses of previously unexposed communities in Akwa Ibom State (AKS) to direct appeals for voluntary non-remunerated blood donations*

METHODS*: A transfusion Medicine training workshop which drew participants from different parts of the country was organised in UUTH, Uyo from July 4th to 15th, 2011. The academic programme with unique but relevant local features designed by Professors Watson-Williams, Christopher Gresens, Etim Essien and Mr Tom Schallet was arranged and executed simultaneously in three parallel components- Clinical, Laboratory and Blood Donor Recruitment Tracts.*

The Blood Donor Recruitment component conducted blood drives to different communities. The records of blood donors obtained after the training workshop were compared to those obtained prior to the training workshop.

RESULTS*: Within the year after the exercise, the contribution of Voluntary Non-remunerated Donors to UUTH blood supply increased substantially from 1.2% to 20.9%.*

CONCLUSIONS*: These results show that when communities are properly sensitized and enlightened on the health benefits and safety of blood donations, they are willing to become voluntary non-remunerated blood donors*

KEY WORDS*: Voluntary blood donation and Blood donor Recruitment.*

INTRODUCTION

Blood is a scarce resources and blood therapy is a life saving component of modern health care worldwide.[1]

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It has been proved worldwide that the safest blood for therapy is that from a regular voluntary, non-remunerated donor.[1]

The World Health Organisation (WHO) estimates that the annual average blood need for any population is one per cent (1%) of that population.[2]

Akwa-Ibom State (AKS) has a population of about 4.1 million[3] people and thus requires at least 40,000units of blood annually to meet its probable transfusion needs excluding blood products. UUTH being the only tertiary Referral Hospital in the state and having the largest patient's population some of whom may require blood transfusion in the course of their treatment is thus saddled with the responsibility of providing a substantial proportion of the estimated blood need of the state.

However from the UUTH Blood Bank records, we constantly fall short of the required blood supply from the population. In addition, WHO recommends that 100% of the blood requirements should be from voluntary non-remunerated blood donors (VNRBD).[4] Unfortunately, the record from our blood bank, (1.2% VNRBD) is a far cry from WHO recommendation.

To reverse this trend, a Transfusion Training Workshop was organised with the aim of improving and sustaining the quality of Transfusion Medicine Practice in UUTH, in the areas of blood donors' recruitment strategies, processing of blood and blood components, testing for transfusion transmissible infections (TTIs) and total quality management of the entire transfusion processes. Participants at the training were drawn from UUTH blood bank staff, AKS Health Service and Health Institutions from other States.

The aims of the Blood Drive component

were to educate and equip the participants with the practical knowledge on all aspects of donor recruitment at the community level and the strategies to adopt in retaining these donors.

Therefore, this study was conducted to assess the responses of previously unexposed communities in AKS after contact and direct appeal by the trained donor recruiters for voluntary, non-remunerated blood donations.

METHODS

STUDY SITE

The Transfusion Medicine Training Workshop was organised in UUTH from July 4-15, 2011.

The programme was designed by Professor John Watson-Williams, Christopher Gresens, Etim Essien and Mr Tom Schallert. (Tom Schallert was the immediate past president of The American Association of Blood Banks).

Participants were drawn from UUTH blood bank, AKS Health Service and other Health institutions from different parts of the country. The training was executed in three parallel components (tracts).These were: The Clinicians tract, the Laboratory tract and the Donor Recruitment tract. The tracts had unique but relevant features including the design of training aimed at involving the entire hospital community and the carefully selection of local consultants from all the Clinical and Laboratory Medicine Departments. These specialists were primed to deliver the lectures to all the participants at the training workshop.

The priming consisted of giving to each lecturer a copy of his/her specific lecture(s) in the week prior to actual exercise to study and get familiar with the text. Each then made pre-presentation to the teachers later in the week before the actual exercise the following week. The lectures were delivered to the whole audience before breakup to the respective component venues for clinicians, medical laboratory scientists and donor recruiters.

The Donor Recruitment Tract format consisted of lectures and demonstrations on mannequins and how to treat prospective donors and blood drives.

During the period of the workshop three blood drives were undertaken to different donor communities including donor "naïve" communities in the state. At the site, sensitization and advocacy were carried out to educate the prospective donors on the importance and health benefit of blood donation. Thereafter eligible donors were selected according to WHO blood donor selection criteria.[5]

STUDY DESIGN

This was a retrospective study conducted at the UUTH blood Bank. The records of blood donor population and the number of blood units collected in UUTH blood bank from January 2009 to December 2010 before the training workshop for the donor recruiters and those collected from July 2011 to December 2012 after the training workshop were reviewed.

DATA COLLECTION AND ANALYSIS

Data of all blood donors at the UUTH blood bank and during the Mobile Blood Drives in the communities and the number of blood units collected over the stated period were reviewed using a structured proforma designed for the study. The data were analysed using appropriate statistical tools for descriptive study using SPSS window version 11.5 and the results were presented in simple tables.

ETHICAL CONSIERATION

Ethical approval was obtained from the Ethics and Research Committee of UUTH before the study was undertaken.

Table 1
Summary of Blood Collection before and after the training workshop from January 2009-June 2012

PERIOD	TOTAL NO. COLLECTED	NO. VOLUNTARY UNITS	NO. OF DISCARDS	NO. OF ACCEPTED VOLUNTARY UNITS	TOTAL NO. OF ACCEPTED BLOOD UNITS
JAN-DEC 2009	2520	0	0	0	2520
JAN-DEC 2010	2115	31	0	31	2115
JAN-JUNE 2011	1070	38	04	34	1066
JULY-DEC 2011	1502	441	42	399	1460
JAN-JUNE 2012	1385	164	13	151	1372

Table2: Proportion of Voluntary Blood Donors from Jan 2009- June 2012

PERIOD	PERCENTAGE VOLUNTARY BLOOD DONORS (%)
JANUARY 2009- JUNE 2011	1.2
JULY 2011- JUNE 2012	20.9

RESULT

The results of blood collection during the period under review are summarised in tables 1&2.

A total of 5705 units of blood were collected from January 2009 to June 2011 before the commencement of the training. From this number, 69 (1.2%) units were collected from VNRBD. The rest of the blood units (98.8%) were collected from family replacement donor. (Table 1)

However, after the training workshop (from July 2011 to June 2012), and mobilization of donor recruiters into the communities, there was some appreciable increase in the number of blood unit (2887 units) collected within the period compared with previous years. Also, there was a substantial increase in the number of VNRBD from 1.2% previously to 20.9%. (Table 1 & 2 respectively)

DISCUSSION

Studies have identified various barriers militating against voluntary blood donation in Nigeria. Umeora et.al, identified certain socio-cultural barriers including 'not having enough blood and not having food to eat,' exposure to witchcraft among other reasons, as the major barriers to successful blood donation in a Nigerian community.[6] Olaiya et.al, in their study identified factors such as fear of contracting diseases such as Human immune deficiency virus (HIV) infection, Hepatitis B virus(HBV) infection; loss of libido, weight loss and developing hypertension as reasons for not donating blood,[7] while Okpara RA, in his study among blood donors at University of Calabar Teaching Hospital, identified religious beliefs as the single most important factor impeding blood donation.[8] In all of these studies, the reasons adduced for not donating blood have been based entirely on misconception, misinformation and ignorance about the health benefits and safety of blood donation. Attitalla-IH, advocated for motivational and educational campaign as a key factor towards a swift attitudinal change by potential donors toward blood donation.[9]

The basic goal of donor education is to promote knowledge, attitudinal change and beliefs and also to educate the donors about self-selection and self-exclusion. Donor education allays all fears and reinforces public confidence in safe blood supply. This can be facilitated through attractive messages that must be designed and developed in a manner and language that attracts the target listeners.[10]

This was the focus of the transfusion training workshop undertaken prior to donor community sensitization and enlightenment on the benefits and safety of blood donation. The results from this study have shown substantial increase in the proportion of VNRBD from 1.2% before the training workshop for donor recruiters to 20.9% after the workshop. We may therefore infer that when blood donor recruiters are properly trained and equipped with information and skills on the benefits of blood donation, same could be easily passed on positively to the community, thus allowing for community participation and ownership of the programme. Our finding is similar to that reported in a study in Calabar in which after appropriate community mobilization and sensitization there was an appreciable increase in the numbers of voluntary blood donation.[11] The same strategy has been adopted in countries like Haiti and Vet Nam and this has resulted in substantial increase in VNRBD.[12]

Also, various studies have shown that blood from VNRBD is safer and less likely to harbour transfusion transmissible infections (TTIs). Study by Amiwero et.al,[13] showed that prevalence of TTIs was less in VNRBD compared to family replacement donors. Similar findings have been reported by other studies.[14,15] In our study, the fewer numbers of blood units discarded due to TTIs positivity alluded to the above assertion. However (from Table 1) it may seem that blood from donors other

than those from VNRBD was all accepted for use. This is not the case. For walk-in-donors to the UUTH blood bank, pre-donation blood screening for TTIs is the adopted protocol and practice; only donors that test negative for the TTIs are allowed to donate. Majority of the walk-in-donors in UUTH blood bank are family replacement donors. This practice is not feasible during mobile blood drive because of the large numbers of donors encountered; hence post-donation TTIs screening is the practice and those blood units that tested positive for any of the TTIs are discarded.

CONCLUSION

This survey has shown that when communities of people are correctly sensitized and enlightened on the health benefits and safety of Blood Donation by trained blood donor recruiters, they are often willing to become voluntary non-remunerated blood donors.

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