

# How can Malawi Increase the Number of Voluntary Non-Remunerated Blood Donors?

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**Policy Brief**

## Introduction

The Malawi Blood Transfusion Service (MBTS) has a delegated mandate by the Ministry of Health (MoH) to provide safe and adequate blood and blood products, promote appropriate clinical use of blood and blood products, and spearhead improvement of blood transfusion systems within hospital blood banks (MoH, 2010). MBTS collects blood from voluntary non-remunerated blood donors and supplies it to all approved health facilities that perform blood transfusion. However, the demand for blood is enormous and MBTS is failing to meet it (Bates et al 2008). The shortage of readily available blood at MBTS has contributed to loss of lives.

### **Why the number of voluntary blood donations in Malawi is low**

Malawi has the smallest number of blood donors as a percentage of the total population when compared to the situation in the SADC region (Reddy 2012). About 77% of blood donors in Malawi are under the age of 25 while in countries which are doing well, about 70% of its donors are over the age of 25. The large proportion of blood donors below the age of 25 in Malawi partly explains why the country is failing to meet the target of 80,000 units per year. One of the main reasons the adult population are reluctant to donate blood could be due to superstitious beliefs and myths like in other African countries (Umeora et al, 2005). Many people, mainly those with low literacy, think that once they donate blood they could lose their strengths, manhood and sexual potency and reduce their lifespan. Other people fear testing HIV positive. Secondly, Diane de Conning in his 2014 KABP Study Report observes that not many people are aware of the benefits of blood donations in Malawi. Thirdly, even though data about finances and grants MBTS receives was not readily available, it is probable that inadequate funding to MBTS contributes to the under collection of blood units in Malawi. Reddy (2012) notes that inadequate budgets for blood donor recruitment and retention contributes to the low numbers of voluntary blood donors.

Currently, Malawi collects less than three units of blood per 1,000 population against the WHO recommendation of at least 10 units per 1,000 population (MamaYe 2015). The WHO goal is that by 2020, all countries should be collecting blood for transfusion from only voluntary non-remunerated donors (Reddy 2012). Voluntary blood donors are recognised to be the safest donors because they are motivated by altruism and the desire to help others and by

## Key Messages

- There is a severe shortage of blood in hospital blood banks in Malawi.
- A lot of women who lose excessive blood during childbirth, children with anaemia, and trauma patients die due to lack of emergency blood for transfusion.
- There is need for the Malawi Government to allocate adequate funds to Malawi Blood Transfusion Services to enable it discharge its core functions satisfactorily.

a sense of moral duty or social responsibility. They have no reasons to withhold information about their lifestyles or medical conditions that may make them unsuitable to donate blood. Blood from family replacement donors is believed to be more infectious with transfusion transmissible infections (TTI) than from voluntary non-remunerated blood donors (Bloch et al 2012).

### **Impact of inadequate safe blood and blood products in blood banks**

The World Health Organization (WHO) states that blood collection from voluntary non-remunerated blood donors is the cornerstone of a safe and sufficient blood supply in all countries. Malawi has a serious problem of inadequate blood units collected from voluntary non-remunerated blood donors. This shortage of blood greatly contributes to the high maternal mortality rate in the country, which is at 510 deaths per 100,000 live births. Many women die from pregnancy complications owing to excessive blood loss and inability to provide blood transfusion (Mataya 2014; Reddy, 2012; Mortimer et al., 2013; Colbourn et al., 2013).

Bates and others (2008) note that death from obstetric post-partum hemorrhage (PPH) can occur within two hours hence the need to have readily available and accessible safe blood and blood products in hospital blood banks. Similarly, children suffering from life-threatening anaemia caused by Malaria and malnutrition are at risk of death due to blood shortage. Malawi needs 320 units of blood each day and 80,000 units per year for blood transfusion (M'baya et al., 2007). For example, in 2014, only 42,000 blood units were donated against the required 80,000; meaning that many people requiring blood transfusion may have died due to blood shortage. Many of these deaths could be prevented through access to readily available safe blood and blood

products for transfusion. On the other hand, irrational use of blood in hospitals could also contribute to shortage of blood units as observed in the WHO Fact Sheet, reviewed in 2015.

### **Current measures hospitals use to supplement availability of blood units**

To alleviate the shortage of blood in Malawi, hospital blood banks request patients' relatives to donate blood in order to save lives (Kongnyuy and Van den Broek, 2008). But this kind of arrangement is against the 2012 MoH Guidelines on the Practice of Blood transfusion in Malawi. Similarly, WHO encourages member states to use blood from voluntary blood donors as it is proven to have low TTIs such as HIV, Syphilis, Hepatitis B and C (Steven and Allain, 2007).

## **Methodology**

This policy brief is based on a comprehensive review of existing literature. The literature reviewed included scientific papers, research reports and government policy documents.

## **Discussion of Policy Options**

Several efforts such as celebration of the gift of blood donation, recognition of voluntary blood donors, conducting open day blood donations and extensive use of public media to promote blood donations are some of the initiatives MBTS has employed to increase public awareness of voluntary non-remunerated blood donations in the country (Reddy, 2012).

Secondly, MBTS is partnering with other stakeholders to mobilise voluntary non-remunerated blood donors in a quest to increase the number of voluntary blood donors. For instance, MamaYe, a non-governmental organisation, is working with communities in a few selected districts in Malawi to set up village committees to encourage people to freely donate blood so that it could be readily available in respective hospital blood banks. Data was not available to evaluate the initiative, but reports from respective hospital blood banks indicate that when MBTS goes for blood collection substantial amounts of units are collected compared to when MamaYe was not running this programme.

In 2004, MBTS established Club 25, to encourage members to commit themselves to make at least 25 blood donations during their lifetime (WHO, 2014). The other aim of Club 25 is to promote safe lifestyles to their peers and assist the organisation in encouraging others to donate blood. More youths are donating blood now compared to when it had just been established.

*“For example, in 2014, only 42,000 blood units were donated against the required 80,000; meaning that many people requiring blood transfusion may have died due to blood shortage.”*

### **What other countries have done to address the issue of blood shortage**

Even though South Africa and Namibia are collecting more blood, some of their prospective blood donors also have misconceptions and fear to test HIV positive. This experience is similar to Malawi but the two countries have bigger funding towards donor recruitment and retention. Their system is also well established. For instance, Club 25 members in South Africa pledge to donate blood 20 times by the age of 25 while in Malawi it is in a life time. South Africa Club 25 has a dedicated budget and a responsible and committed staff member to oversee operations of the Club (WHO, 2014). They also have quality systems covering all activities related to blood transfusion and adequate numbers of trained staff. The proportion of donors aged over 25 years is higher in South Africa and Namibia compared to Malawi where the number is low. The two countries have a good communication system including a well developed road network.

*“For example, in 2014, only 42,000 blood units were donated against the required 80,000; meaning that many people”*



## Recommendations

**i. Increase funding to MBTS** - MBTS should lobby for increased funding to vigorously campaign for voluntary blood donations. More voluntary blood donors are needed to meet the increasing needs and to improve access to this life-saving therapy.

**ii. Expand the blood donor age group beyond 25 years** - Most blood donors in Malawi are young men of between 16 to 25 years. Therefore MBTS should institute mechanisms to widen the donor age group by massively targeting the older age group.

**iii. Strengthen and operationalize Hospital Blood Transfusion Committees** - The Ministry of Health should ensure that Hospital Blood Transfusion Committees are functional so that unnecessary blood transfusions are avoided when the availability and use of simpler, less expensive treatments could provide equal or greater benefits.

**iv. Strengthen Club 25** - MBTS should strengthen and scale up formation of Club 25 at different levels like secondary schools, universities and communities.

**v. Expand partnerships** for increased blood donations - MBTS should engage more community-based partners like MamaYe with interests in maternal health and related activities to mobilise communities to voluntarily donate blood. Even though an evaluation has not yet been done by MamaYe, it appears the few districts in partnership with this organization are collecting considerable amounts of blood from communities.

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