



## Impact on institutions

“The need for blood in Africa is different from the Western world. It is important that we have an evidence base in Africa.”

This statement from Justina Ansah, Director of the National Blood Service Ghana, speaks volumes about the difficult and complex situations that blood services across sub-Saharan Africa face. For example, how unsafe is it to accept blood from malaria-positive donors in malaria endemic areas when, in some countries, such a policy could reduce available blood by 30-50%? Evidence about blood practices we take for granted in high-income countries may not be appropriate for low-income African countries.



Launch of T-REC in Zimbabwe

## Working with blood services

International academics, experienced in designing and conducting research, worked closely with blood service staff and managers in Ghana and Zimbabwe who have in-depth knowledge of their services. T-REC supported the following local research in Ghana and Zimbabwe:

- Four African researchers undertook PhDs relating to blood services
- 44 African blood service staff undertook training and conducted workplace research, as part of the Diploma in Project Design and Management (DPDM)
- 46 African graduate students undertook small research projects on blood services.

## Impact

What difference did the support of research capacity building make to the institutions involved, especially National Blood Services in Ghana and Zimbabwe?

- Research generated by the PhD, diploma and bursary students is providing evidence that can be used by national blood services to modify their current policies and practice.
- National blood services and policy makers are more engaged with locally generated research and are better able to support and use findings.
- Staff at blood services are more motivated and engaged to improve their work, as a result of taking part in a workplace research diploma.
- In both Ghana and Zimbabwe, universities and higher education institutions have stronger links and relationships with national blood services, increasing the likelihood of further research on blood services.
- Blood service institutions are increasingly embedded in international networks to promote and support research in blood services.

Ultimately this will have an impact on the health of populations, particularly women and children in sub-Saharan Africa, through a more effective and safer supply of blood to those who need it.

### T-REC

In Mombasa in 2008 a group of blood services directors and transfusion users from across Africa identified the problem of a scarcity of local research and an urgent priority to strengthen the research capacity in Africa's blood services. From 2011-2015, the European Commission funded T-REC, a programme to strengthen local research capacity in Zimbabwe and Ghana.

## Impact of Phd studies

Four PhD students from Zimbabwe and Ghana were selected through open competition and jointly supervised by researchers from their local university and a European university. Their projects cover donor motivation, rationalising syphilis screening, changing HIV patterns and economics of infection screening.

Although it is too early to identify any blood service policy change as a direct result of their research, they have, as PhD student Tonderai Mapako said, “Raised the scientific bar for the institution.”

“ In one of my objectives I looked at general population data on HIV changes and its effect on programming activities such as blood safety.

Highly collaborative papers managed to bring together policy makers and different players in the HIV response in Zimbabwe.

The studies on HIV also highlighted the challenges of relying only on HIV as a primary marker for risk management. The risk management model in Zimbabwe is currently being re-defined based on these ongoing studies



Tonderai Mapako,  
PhD student, Zimbabwe.

“ We have collected and reported some essential data such as profiles of transfusion recipients and costs of producing blood which were previously not available. This data may be useful for training clinicians, guiding discussions, improving planning activities and guiding decision-making at various levels in the country.



Nyasha Mafirakureva,  
PhD student and regulatory  
pharmacist in Zimbabwe.

## Impact of workplace research

The Professional Diploma in Project Design and Management (DPDM) is a one-year, part-time course that introduces health professionals to research by ‘learning-through-doing’ in the workplace. In both Ghana and Zimbabwe, 44 students took part in the DPDM, with projects ranging from looking at information management systems, blood donor motivation and testing blood for safety.

The DPDM course was successfully rolled out from Kumasi in Ghana to Accra and then to Harare in Zimbabwe. This involved recruiting and training new facilitators, markers and supervisors to run the courses in each of the new centres. Feedback has indicated that DPDM graduates are making a greater contribution to their workplace as a result of completing the course.

“ The research taught me that it is not all about just collecting blood. Blood needs a proper inventory management in order to reach its final destination in proper conditions.



Ripai Govo,  
National Blood Service,  
Zimbabwe

## Impact of small bursaries

A total of 46 undergraduate and graduate students within Ghana and Zimbabwe conducted research projects related to blood transfusion within their degrees. This resulted in the following:

- Links were created between the blood transfusion services in Ghana and Zimbabwe and Universities within the countries
- Research outputs from the bursaries have the potential to influence policy and practice.