



Strengthening Transfusion Research Capacity in Africa

Report of T-REC Lunchtime Symposium 31st July 2014

This symposium was held from 12.30 – 2.00 during the 7th Congress of the African Society for Blood Transfusion (AfsBT) and was facilitated by Imelda Bates, the Principal Investigator of the T-REC consortium. The Congress took place at the Elephant Hills Hotel, Victoria Falls, Zimbabwe from 30 July-2 August 2014. The T-REC symposium was an open session attended by 47 participants representing blood service staff, scientists, clinicians, commercial companies, students, professional organisations, universities and Ministries of Health (appendix 1).

Background to symposium

In 2008 AfsBT and Liverpool School of Tropical Medicine held a meeting in Mombasa attended by blood service directors and users from many African countries which was funded by the Wellcome Trust. The meeting was convened to address the problem that many transfusion policies and practices in use in Africa have been designed by and for ‘western’ countries and are therefore not necessarily appropriate or relevant for sub-Saharan Africa (SSA). The evidence-base for some of the policies is weak and research that would enable the policies to be adapted for the African context is lacking. The main outcome of the Mombasa meeting was a list of research priorities for blood services in sub-Saharan Africa coupled with a recognition that there was a severe lack of indigenous researchers to design and undertake such research.¹

In response to the lack of indigenous transfusion research capacity in SSA, a 4 year EU-funded consortium (T-REC) was established in 2011² to strengthen the research skills and infrastructure in blood services in SSA. T-REC’s African partners are AfsBT and the national blood services in Ghana and Zimbabwe; EU partners are the University of Copenhagen/National Blood Service, Denmark and the University of Groningen, Netherlands. The Liverpool School of Tropical Medicine, UK is responsible for coordination of the consortium.

To enhance transfusion research capacity the T-REC consortium funds 4 PhD students in Ghana and Zimbabwe, a 1 year part-time Diploma Course for blood service professionals to undertake their own work-based research project, and student bursaries to support undergraduates’ transfusion research

¹ <http://www.afsbt.org/index.php/resources/all-media-data/vidz>

² <http://www.t-rec.eu/>

projects (appendix 2). T-REC also supports development of the research infrastructure within the blood services and links between the blood services, AfSBT and African and EU universities.

Goal and objectives of the T-REC symposium

Since 2011 T-REC has made a substantial contribution to the long-term goal articulated at the Mombasa meeting to '*establish an Africa-wide programme to strengthen the capacity of transfusion services to conduct, share and utilise research*'. The purpose of this symposium was to pool ideas from a broad and diverse range of blood service stakeholders about the next steps to achieve this goal and to find out how the T-REC consortium could most effectively support the process.

The specific objectives of the symposium were

- to share experiences of conducting transfusion research in Africa including discussing challenges and potential solutions
- to propose ideas for strengthening the capacity of blood services to conduct and utilise research
- to find out how T-REC could contribute by convening a strategic meeting early in 2015.

Structure of the T-REC symposium

Following a description of the background and purpose of the symposium, Professor Banji Adewuyi, Editor-in-Chief of Africa Sanguine³, provided a brief orientation for participants on the importance and role of research in improving blood services in Africa. For the rest of the symposium, participants worked in groups of 6-8 people discussing the objectives outlined above. Their deliberations were captured on flip charts (appendix 3) and through verbal feedback, and are summarised below. The topics that were mentioned several times are presented at the beginning of each section.

Summary of participants' discussions

What are the challenges for blood services in conducting transfusion research?

The key challenges faced by blood services in doing research were a lack of organisational research culture and limited understanding about the research process and the potential benefits. There are many competing interests and consequently research is not a high priority for African blood services, or for their external funders. Although lack of funding is a common challenge it was recognised that not all types of research require additional funds. There is little internal research leadership or guidance within the blood services, and links with academia are weak or non-existent. The lack of equipment and complex ethical considerations also hinder some types of research. The long time frame from conception to generating results, and particularly in publishing and using results to improve service delivery, were also barriers to undertaking research. Although many individuals within the blood services are motivated to do research, most do not have the skills to write proposals or conduct research and there are usually no career incentives for individuals to do research.

³ <http://www.afsbt.org/index.php/resources/all-media-data/publications/africa-sanguine-content-pages>

How can these challenges be overcome?

Suggestions for addressing these challenges focused on strategic planning or practical activities. At the strategic level the following were considered important:

- prioritising research and making sure it was relevant and operational
- developing a research strategy and creating a research culture within the blood service
- making stronger links with research institutions and with clinical services

Practical activities included:

- fundraising for research activities (with applications to, for example, NBS, MoH, National AIDS Council, CDC, EU, international organisations)
- encouraging early-career staff to undertake research
- mentoring new researchers to become research educators
- establishing forums with clinicians to discuss research
- providing opportunities to critique evidence for existing practices.

How can we ensure that research is used to influence blood service policies and improve practice?

Several mechanisms were identified for influencing research uptake including:

- engaging senior managers and national policy makers in all stages of the research process
- National Blood Service (NBS) representation on national decision-making bodies
- close collaboration with the NBS and hospital/NBS committees to ensure research is focused on the institution's priority problems
- joint advocacy on research by NBS and clinical users
- establishing units in institutions and nationally to coordinate research and to review and disseminate findings.

Strategies for informing decision-makers about research findings included policy briefs, website articles and other advocacy media, publishing in peer-reviewed journals, presentations, conferences and seminars.

How can T-REC use its meeting in 2015 to contribute to the goal 'to establish an Africa-wide programme to strengthen the capacity of blood services to conduct, share and utilise research'?

To contribute to the goal, suggestions for what the next T-REC meeting should achieve included:

- research collaborations between African countries
- a network of active researchers for sharing ideas, expertise and results, and for e-learning in research
- identification of Africa-specific transfusion research priorities
- a commitment to research from heads of NBS with a strategy and implementation plan/road map to increase blood service research capacity
- clarification of mechanisms for translating research into policy.

Suggested invitees for the meeting were transfusion researchers, NBS directors and influential senior staff, ministers and policy makers, NBS and research funders, African research institutions/ universities, relevant professional societies (e.g. haemophilia), blood users and AfSBT 2014 T-REC session participants.

Next steps

We hope that this report can be used as an advocacy tool to mobilise resources to build on the T-REC and other similar initiatives so that together we can make progress towards achieving the goal of improving transfusion research capacity in Africa. The report will therefore be circulated to the symposium participants and other interested individuals. It will also be made available through the T-REC, AfSBT and LSTM websites. The participants' suggestions will be used to design the final T-REC meeting in early 2015.

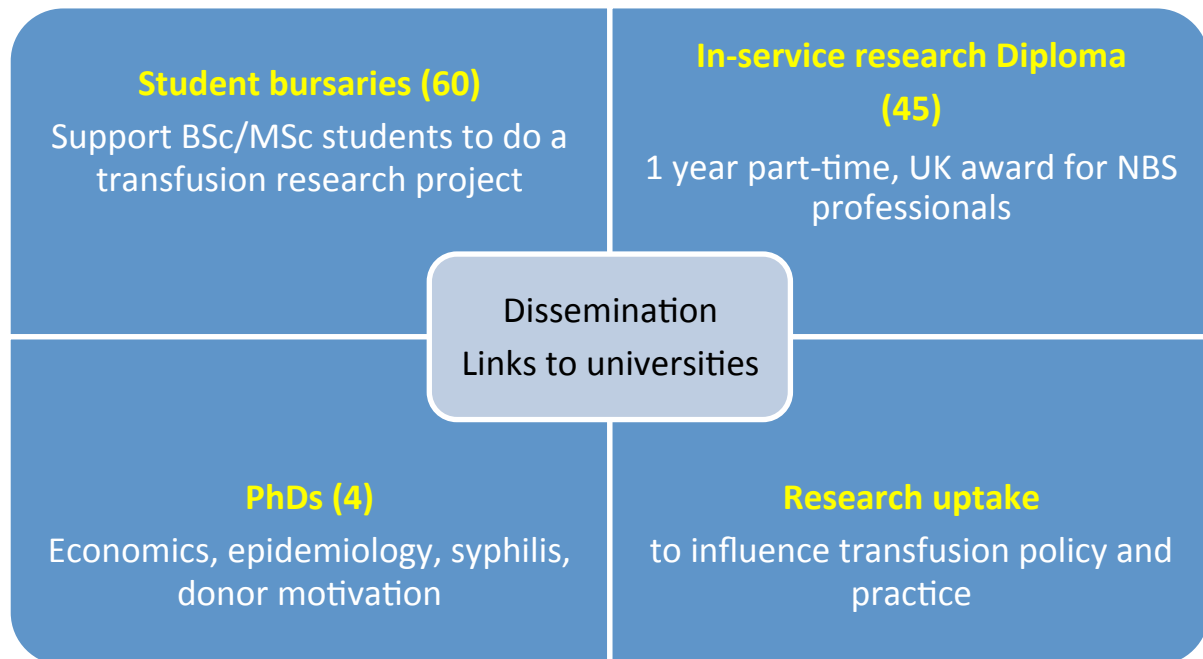
The T-REC team would like to thank all the symposium participants for their invaluable contributions.

Appendix 1

Name	Job title	Institution
Absolom Mbinda	M4E Officer	ZINQAD
Phili Mushonga	Sales Manager	Becton Dickinson
Sarika Vandayar	Applications Specialist	Becton Dickinson
Radhi Chikwereti	Project Officer	NBSZ
Daniel Ansong	Lecturer / Co-ordinator DPDM	KATH /
Emmanuel Rigal		HUG (HWG?) Geneva
Prof. Banji Adewuyi	Consultant Haematologist	AfSBT
JP Allain		University of Cambridge
Chancelar Kaffre	Quality Officer	National Blood Service Zimbabwe
Nyasha Magrakueva	Phd Student	National Blood Service Zimbabwe
Emmanuel Meme Dei		National Blood Service Ghana
Tichaona Chidakwa		Womens University Africa
Brighton Malunga	Lab Scientist	Markbright Health
David Mvere	Chair AfSBT Organising Committee	NBSZ
G Gwinji	Permanent Secretary	Ministry of Health and Childcare, Zimbabwe
Angille Heintzman	National Quality Manager	NHS Blood and Transplant
Judith Chapman	Exec Director ISBT	ISBT
Soreya Afar Eldusouqui	Asstant Director Regional BT,Uni Geneva	University of Geneva
Justina Ansah	Director -NBSG	NBSG
Joseph B Ansah	Admin / HR Manager	
Veena Sharma	Phd Student	LSTM
Martin Surid	Managing Director	Sanguin Consulting Service
David Chama	Laboratory Manager	ZNBTS
Dr Shirley Owusa	Deputy PI	TREC Ghana
Esther Massundah	Public Affairs Manager	National Blood ZW
John Pitman	Health Scientist	CDC / PEPFAR
Francis Sarkodie	Biomedical Scientist	National Blood Service Ghana
Edington Muchokwami	Donor Recruitment Consultant	National Blood Service Zimbabwe
Graciam Bvuma	Public Relations	National Blood Service Zimbabwe
Dluwatolin Dairo	Senior Program Officer	National Blood Service Zimbabwe
Julie Salum	Program Co-ordinator	Haukeland University Hospital
Martin Thalmann	Country Co-ordinator	Swiss Red Cross
Nkomo Sisodwa	Lab Scientist	NBSZ
Tapiwa Matare	Lab Scientist	Triangle Ltd
Lucy Asamoah- Akmoko	Head of Research and Development	National Blood Service Ghana
Daniel Kimani	Technical Adviser	CDC
Eric Wakaria	SLMTA Co-ordinator	Global Communities - Kenya
Aka Nicheline	Technician / Adviser Blood Safety	CDC Cote de Ivoire
Peter Chimkudea	Senior Lecturer	DeMontford University
E. Chiganze	Lab Scientist	PSMI
Bvuma Graciam	Public Relations	NBSZ

Kala Mohandar	Blood Bank Physician	Montefiore Med Centre
Muchokwami	Donor Recruiter	NBSZ
Susan Jones	T-REC manager	Liverpool School of Tropical Medicine
Oliver Hassall	T-REC deputy principal investigator	Liverpool School of Tropical Medicine
Tony Cegileka	T-REC educational developer	Liverpool School of Tropical Medicine
Imelda Bates	T-REC deputy principal investigator	Liverpool School of Tropical Medicine
Denise Wellings	T-REC administrator	Liverpool School of Tropical Medicine

Appendix 2. Components of T-REC consortium



Appendix 3

T-REC lunchtime symposium: 'flip chart' notes of participants' discussions

1a. What are the challenges faced by blood services in doing research?

Lack of:

Motivation/incentives to do research xxx⁴
Money/proposal writing/funding processes xxxx
Expertise and knowledge xxx
Tradition/culture of research/understanding of research 'mystery' xxx
Training
Perseverance
Institutional support/guidance xxx
Equipment/research tools xxx
Research prioritisation/competing interests/appreciation of value of research xxx
Identification of individuals in blood service who are interested in research
Association with research organisations
Data
Long time frame/support for research to improve service delivery xx

Also:

Research approval bureaucracy/ethical considerations
Is research a function of NBS? Other organisations perceived to do research
Difficult to get research support when externally funded

1b. How can these challenges be overcome?

Encourage research at junior levels
Collaboration with research institutions/clinical services xxxx
Focus on operational research
Budget/fundraising for research activities (e.g. NBS, MoH, National AIDS Council, CDC, EU, international organisations) xx
Research training/mentorship xx
Use new researchers as research educators/champions xx
Prioritise research
Create research culture
Lack of money does not preclude doing research
Clinical forums for research
Encourage critique of evidence for existing practices
Widen expertise base in research (e.g. involve in institutional research strategy)

2. What mechanisms can be used to make sure research is used to influence blood service policies and improve practice?

Local level

Build awareness of value of research xx
Address problems through research
Work through hospital/national blood service committee
Get engagement of institution for research topic

⁴ X = number of times item was mentioned

Research meetings within NBS to discuss topics and findings xxx
Department for collating all blood service research

National level

Advocacy to policy makers re importance of research
Need mechanisms for research uptake
Present results to NBS/policy briefs xx
NBS representation at national/governance level xx
Link local NBS to top NBS management/national policy makers/all parties; inform them of all stages of research so they are supportive/involve policy makers in research team xxxxx
Link NBS to local universities
Conferences/seminars and invite health authorities
Research collaboration between clinicians and NBS to influence policy makers
National agency for collating all blood service research

International level

Publications xxxxx
Websites/media xx
Conferences/scientific gatherings (e.g. AfSBT) xxx

3. T-REC will convene a meeting in 2015 to contribute to the vision: *to establish an Africa-wide programme to strengthen the capacity of blood services to conduct, share and utilise research* What outcomes do you want this meeting to achieve?

Africa-specific research priorities
Better research collaborations between African countries xx
List of expertise for collaborations
Systems established to ensure more research opportunities for African NBS institutions
e-learning in research
Network of active researchers/share ideas xx
Way forward for extending T-REC programme/wider coverage in Africa
Commitment to research from heads of NBS
Comprehensive strategy and implementation plan to increase blood service research capacity/sustainable research programme road map xx
Grants for research capacity building
Agree position [re blood service research capacity] and mechanism for implementation
Mechanisms for translating research into policy

Who should we invite?

NBS directors xx
Established/potential blood service researchers/research builders xxx
Influential senior staff
AfSBT 2014 T-REC session participants
Ministers/policy makers xx
T-REC research team
Donor funders (e.g. CDC)
African research institutions/universities
Transfusion-relevant professional societies (e.g. haemophilia)
Technical staff
Blood users