

LSHTM Tanzania network

- Introductions / drinks / snacks
- The network – overview and update
- Brief presentations (10 speakers?
– 3 mins each!)
– Quality of care & how to improve it



lshtmintanzania.wix.com/lshtmintanzania



About the LSHTM-Tanzania network

- **Our overall aim** is to improve public health research in Tanzania through joint research and capacity-building, including through better communications and networking for LSHTM staff, students, and alumni in Tanzania.
- **Membership** is open to LSHTM and collaborative site staff and research degree students whose work involves Tanzania; MSc students, both distance learning and face to face, who are Tanzanian or resident in Tanzania; and actively interested alumni linked to Tanzania.
- **Who's who**
- Leadership group: Saidi Kapiga, David Mabey, Natacha Protopopoff, Joanna Schellenberg, Jim Todd.
- Administrative support: Amina Farah (20% FTE, JMP, Moshi)

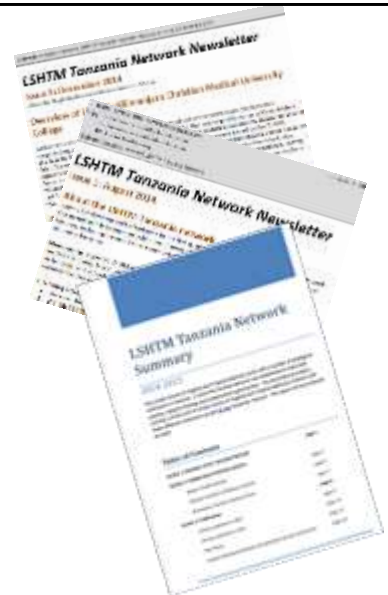
Subscribing and unsubscribing

- To send to the list, send your message to tanzania-network@lists.lshtm.ac.uk
- If you know of others who'd like to join, send them this link:
<https://lists.lshtm.ac.uk/sympa/subscribe/tanzania-network>



Network update

- Coordination meetings
- 4 newsletters
- Planning meeting for the scientific launch
 - Bringing in Ifakara Health Institute, KCMC, NIMR Mwanza
- Website created by Alex Wright, launched April 2015
- Inaugural scientific meeting , Dar es Salaam, April 2015
 - HIV, malaria, and health systems themes
- “Stocktaking” exercise
 - Lists all collaborative research involving LSHTM in Tanzania
 - Current and recent MSc and research degree students



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Views of the network from the 45 people at the launch meeting

- **What do you want the network to be ? How it should function?**
- A platform for:
 - Sharing research findings
 - Developing joint research ideas, driven by the Tanzanian institutions
 - Sharing information on employment opportunities and logistic resources
 - Supporting capacity building
- Implemented through:
 - A regular annual meeting
 - A website
 - Email list
 - Social media
 - News letter
 - Coordination group with a focal person from each institution would be useful.

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Improving uptake and quality of antenatal and delivery care in rural Tanzania



Christian Hansen

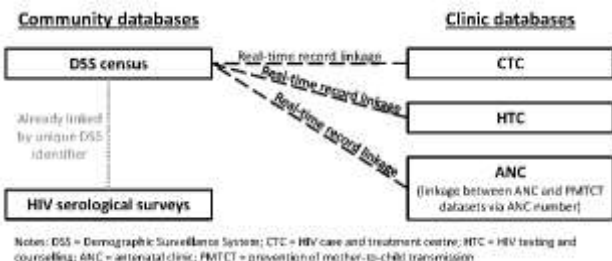
Real-time record linkage Kisesa ward, Tanzania

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What is record linkage?

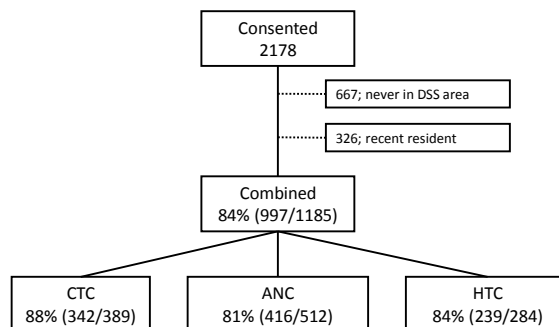
- To link an individual's records between multiple existing databases
- In Kisesa, linking clinic records to their DSS records:



What can we do with these linked data?

Linking an individual's DSS record to their clinic records provides a unique opportunity to produce an augmented data source for better monitoring access to and utilization of health facility services in this rural African setting.

Results (1 June to 16 Sept)



Christopher Rentsch

Tanzania-LSHTM Network

24 September 2015

Mentoring & measurement for improving maternal and newborn survival: developing an intervention to put accountability into practice in Tanzania

- Maternal and newborn mortality remain high in Lindi & Mtwara regions
 - Despite >75% births in a facility and improved newborn care in the community
- DFID/ESRC/MRC/Wellcome health systems development grant
- Learning from audit & QI, vital registration, WHO MDSR, social networks, VA...
- Principal Investigators: **Joanna Schellenberg**, LSHTM; Fatuma Manzi, IHI
- Collaborators: Godfrey Mbaruku, Elibariki Mkumbo, Ifakara Health Institute ; Claudia Hanson, Karl Blanchet LSHTM
- Advisory group: Dr Moke Magoma, Evidence for Action Tanzania, Dr Veronique Filippi, LSHTM, Dr E Eliakimu, A Makuwani & Dr Neema Rusibamayila, Tanzanian Ministry of Health & Social Welfare, Dr Theopista John, WHO office for Tanzania, Dr Asia Hussein, UNICEF Tanzania

Joanna Schellenberg

Without slides ...

- Chris Grundy
 - Data collection, survey methods and GIS / mapping

Research related to quality of care – MITU Mwanza

Ongoing

- ◆ Improving the Health Systems Response to Chronic Diseases in Africa

Proposals under development or review

- ◆ Improving uptake and quality of antenatal and delivery care in rural Tanzania (see presentation by Christian Hansen)
- ◆ Improving health care in fishing communities of Lake Victoria
- ◆ Improving treatment adherence to ART among HIV infected patients with hazardous alcohol use

Improving the Health Systems Response to Chronic Diseases in Africa

Collaborating institutions:

- MITU/NIMR Mwanza, MoHSW Tanzania
- MRC/UVRI Uganda, MoH Uganda
- LSHTM

4 phases:

Phase 1: Explore problem: 4 cross-sectional surveys in Tanzania / Uganda

Phase 2: Develop and implement intervention package

Phase 3: Evaluate intervention using a randomised controlled design

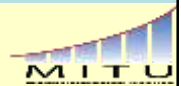
Phase 4: Dissemination; adjustment of existing policies

Timeframe: 2012 – 2016

LSHTM staff involved: Heiner Grosskurth, Saidi Kapiga, Richard Hayes Anna Vassall, Sedona Sweeney, Liam Smeeth

Funding: MRC (UK), DFID

Heiner Grosskurth



Major observations made so far

In both Uganda and Tanzania, across rural and urban strata:

- High prevalence of hypertension 15 – 25%
- High prevalence of cardio-metabolic risk factors 35 – 50%
- Low / modest prevalence of other NCDs => window of opportunity for intervention

Kavishe B, Biraro S et al BMC Med 2015

Health services not yet well equipped to cope with the chronic disease burden

- Lack of equipment, drugs and guidelines
- Lack of training and supervision
- NCD patients frequently referred to hospital
- Hospitals overburdened, peripheral health facilities underutilised

Peck R et al Lancet GH 2014; Katende D et al TMIH 2015

Heiner Grosskurth





Where there is no laboratory: the cost-effectiveness of anaemia diagnostic methods for under-5s in rural Tanzania

Background

- Presumptive iron therapy/supplementation not recommended in malaria-endemic areas (e.g. Sazawal et al 2006)
- No cheap, portable iron tests available so have to screen for anaemia instead. But clinical diagnosis of anaemia inaccurate.
- WHO Haemoglobin Colour Scale cheap and more accurate than clinical opinion. HemoCue better still but expensive. No CEA done on either yet.

Objectives

1. Make a preliminary assessment of the cost-effectiveness of the Colour Scale and HemoCue
 - Assume anyone with symptoms of either malaria or anaemia is tested for both (malaria rapid test)
2. Develop a publicly-available, easily-adaptable, Excel-based model
3. Highlight further research needs

Derek Foster

Results

- VERY preliminary ICERs (provider perspective):
 - Colour Scale: ~\$40/DALY averted (~\$2,300/death averted)
 - HemoCue: ~\$140/DALY averted (~\$5,800/death averted)
- But high uncertainty from both model and parameters

Research needs

- Accuracy of tests (these and new devices coming to market) in 'real life' practice
- Adherence to test results
- Acceptability (to patients/clinicians/policymakers) of algorithm as well as tests
- Excess mortality risk from anaemia and incorrect iron therapy
- Other populations/purposes (pregnant women, prophylactic iron supplementation, other countries)
- Societal perspective analysis

What else?

Derek Foster

Hai Health and Demographic Surveillance Site Kilimanjaro, Tanzania



Dr Ewan Hunter
Clinical Lecturer
LSHTM



Hai HDSS

Adult Morbidity and Mortality Project (AMMP) 1994-2003

- DfID UK/Tanzanian Ministry of Health
- Enumeration network
- Verbal autopsy system

Ongoing projects/cohorts

- Stroke incidence 2003 - 2006
- Parkinson's Disease 2005
- Epilepsy 2009
- Skeletal fluorosis 2009
- Atrial fibrillation 2010
- Neurological disabilities in >70s 2010
- Dementia 2010

Quality of Care

- Community-based diagnosis/management of chronic disease
- Epilepsy treatment gap 68.4% (Hunter et al, *Seizure*, 2012)
- Hypertension 'rule of sixths' (Dewhurst et al, *J Hum Hypertens*, 2013)
- IDEA study – plans for non-pharma intervention (Paddick et al, *BMC Geriatr*, 2015)
- Public Engagement

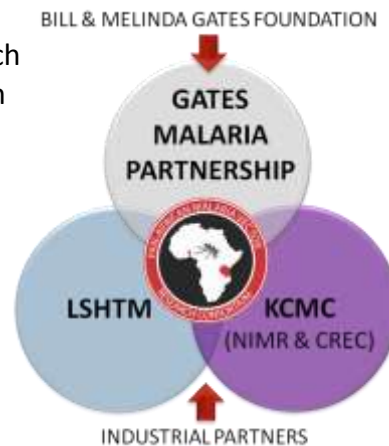
PAMVERC

• LSHTM Gates Malaria Partnership 2001-2005 invigorated the Vector Control Research sites at KCMC and NIMR in 2002, the construction of insectaries, experimental hut suites, and biotechnology laboratories

• The Pan African Malaria Vector Research Consortium PAMVERC was established in 2008

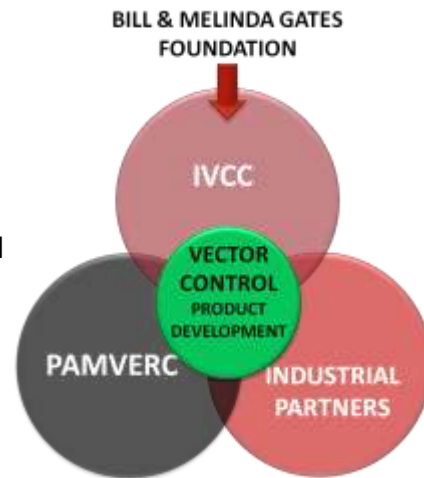
• Research stations in Moshi, Muheza and Muleba in Tanzania, and sites in Benin and Ivory Coast

• Initially a collaboration between WHO, LSHTM and private sector innovators



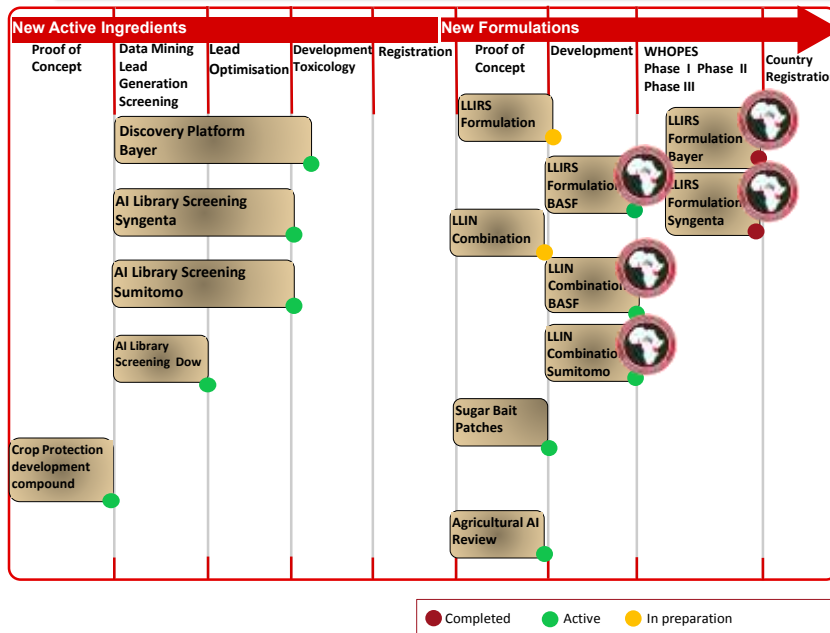
PAMVERC & IVCC at KCMUCo

- IVCC is a product development partnership by the Gates Foundation to Liverpool School of Tropical Medicine in 2005.
 - The development and field testing of novel insecticides is done mainly at PAMVERC KCMUCo (Tanzania) and CREC (Benin) sites
 - The name PAMVERC gave LSHTM and its African trial sites collaborators an identity distinct from the IVCC
-
- The diagram illustrates the organizational structure. At the top, 'BILL & MELINDA GATES FOUNDATION' is written in black. A red arrow points down from this text to a large red circle labeled 'IVCC'. Below the 'IVCC' circle is a green circle labeled 'VECTOR CONTROL PRODUCT DEVELOPMENT'. The green circle is partially overlapping the bottom of the red circle. To the left of the green circle is a dark grey circle, which is partially overlapping the bottom of the red circle. The circles are arranged in a triangular pattern, with the red circle at the top and the other two at the bottom.



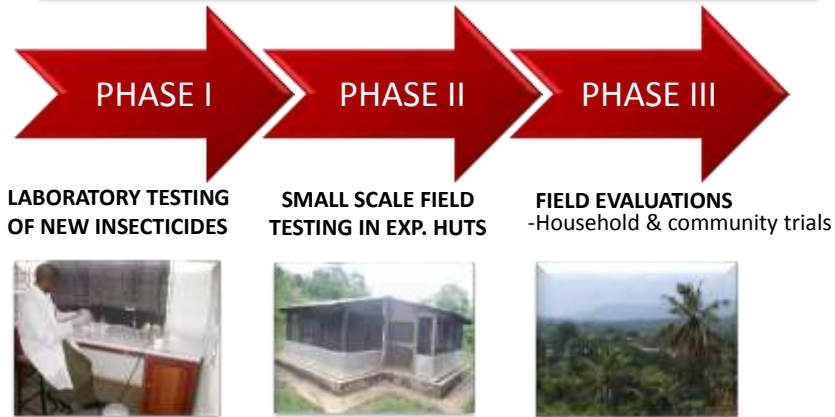
Mark Rowland

IVCC PUBLIC HEALTH INSECTICIDES PORTFOLIO



Mark Rowland

PRODUCT DEVELOPMENT ACTIVITIES



- The role of PAMVERC continues beyond product development:



PRODUCT EVALUATION

Muheza – Phase II&III
Muleba – Phase III



Mark Rowland