MicroResearch Workshop
Blantyre Malawi
February 23-March 6, 2015

Building capacity for community focussed health research
A Workshop for Community Based Researchers
Held at
College of Medicine, University of Malawi, Blantyre, Malawi
Sponsored by Accordia Global Health Foundation

Faculty and Invited Guest Commentators

Robert Bortolussi, MD FRCPC
Professor Emeritus of Pediatrics,
Dalhousie University
IWK Health Centre, Halifax Canada

Noni MacDonald, MD MSC FRCPC
Professor of Pediatrics, Dalhousie University
IWK Health Centre, Halifax, Canada

Gertrude Kalanda Chapotera, MBBS
MPH PhD (Guest Commentator, Community Engagement)
School of Public Health and Family Medicine, College of Medicine,
University of Malawi.

Lucinda Manda-Taylor, PhD (Guest Commentator, Research Ethics)
COMREC (IRB) Administrator
University of Malawi, College of Medicine, Blantyre, Malawi

Walter Schlech, MD FRCPC
Professor of Medicine, Dalhousie University
Capital District Health Centre, Halifax, Canada

Organizing Committee

Chief Organizer: Towela Maleta of the Accordia Global Health Foundation.

Chancellor College: Dr Alistair Munthali (Director University Center for Social Research); Dr Foster Kholowa (Dean faculty of Education)

Polytechnic: Mr Kingsley Lungu (Chairman Polytechnic Research Committee): Mr. Uchizi Mughogho (Post Graduate Dean)

Kamuzu College of Nursing (KCN): Dr. Alfred Maluwa (Director of Research): Dr. Ursula Kafulafula (Lecturer)

College of Medicine (COM): Dr. Cecilia Maliwichi-Nyirenda (Director Research Support Center): Mrs. Atusaye Ngwira (Clinical Research Associate RSC)
Coaches
Bagrey Ngwira PhD, The Polytecnic College, University of Malawi
Gertrude Kalanda Chapotera MD: College of Medicine, University of Malawi
Blessings Nasyilia Kaunda-Khangamwa: College of Medicine, University of Malawi
Effie Chipeta: University of Malawi, College of Medicine, University of Malawi

Funding and In Kind Support
Accordia Global Health Foundation
MicroResearch
and
Dalhousie University, Halifax, Canada
IWK Health Centre, Halifax, Canada
Personal contributions:
R. Bortolussi, N. MacDonald and W. Schlech
Introduction and Background

Building on the achievements, including those in health, of the Millennium Development Goals (MDG), the United Nations in 2013 has proposed the Action Agenda for Sustainable Development. Developing local capacity to sustain and improve on MDG health gains is a challenge since resource limited developing countries bear 25% of the globe’s disease burden with the healthcare professional work force less than 1%. Furthermore, with only 2% of the research funds, much of this is outsourced research from industrialized countries with the developing country providing the patients and the data collection.

While both the MDG and the Action Agenda encourage national or regional strategies and collaborations to address complex health problems, local health problems need local, sustainable, culturally appropriate community based solutions.

MicroResearch (MR) (http://microresearch.ca) is an innovative strategy aimed at building the capacity of local health care professionals to better address community health care problems by finding local solutions for local problems [MicroResearch: Finding sustainable local health solutions in East Africa through small local research studies. Journal of Epidemiology and Global Health, 2014; 4,185-193 (http://download.journals.elsevierhealth.com/pdfs/journals/2210-6006/PIIS22106006014000161.pdf)].
The MicroResearch Workshop Program and Participants

The workshop ran for 10 half-days, from February 23 until March 6, 2015 at the College of Medicine in Blantyre, Malawi. The Workshop was organized with leadership of Towela Maleta of the Accordia Global Health Foundation (Accordia) with support from the Organizing Committee with representatives from each participating Centre. Towela’s effort ensured local buy-in to the MicroResearch concept by University leaders. She also arranged morning meetings for the MicroResearch faculty members with the organizing committee and senior members of the University, including: Grant K. Kululanga MSc, PhD Eng, Principal The Polytechnic; Nancy Chitera PhD, Vice Principal, The Polytechnic; Adamson S Muula PhD, Professor of Public Health; Dixie Maluwa Banda MA, PhD, Professor of Education and Psychology. Chancellor College, and Victor Mwapasa MD, MPH, PhD, Vice Principal College of Medicine, University of Malawi.

Twenty-four participants were selected for the workshop. Each College chose a specified number of participants and contributed the $160 registration fee for each student. The fee covered provision for rooms, audio-visual equipment and daily tea breaks. Participants came from a range of disciplines including medicine, nursing, social science, teaching, epidemiology, public health, and basic sciences, see Appendix 1.

The format for the workshop combined lectures and daily small group interdisciplinary, interactive working sessions. The topics covered, lecturers and the commentators for each session are noted in Appendix 2. Lectures started at 1:30 PM and were followed by at tea break and interactive small group project planning (from approximately 3:30 PM). A national holiday occurred on day 7, but participants decided to attend the workshop anyway. On the first day, each participant formulated their own idea for a research question based on their own experience. On the second day, in their assigned group, they shared their questions and each group selected one question to develop into a research proposal during the remainder of the workshop. The lectures were scheduled to coincide with the participants needs as they moved from team building, refining their question, developing a research design and methods, and finally to developing a presentation of the proposal to a panel of local judges who provided the first formal critique.

The MicroResearch Workshop Program:
Facilitators, Invited Guest Commentators and Coaches

The MR Workshop program in Malawi was a revised version of the program used at the other African sites in 2014. Changes included: increased “hands-on” exercises, more reference and information provided on the USBs, change in order of some lectures, and increased emphasis on “co-teaching” with guest commentators from the University of Malawi. The exercises were popular and included ones on abstract writing, poster presentation, knowledge translation, and health policy development. The lecture material was also improved. As in the past, material for the workshop was provided to each participant on a USB memory stick. The USB contained all lectures, major references for each lecture, the Handbook for Clinician Scientists, and three new MR Handbook e-
modules (Quantitative methods, Qualitative methods and Knowledge Translation). Participants were reminded that USBs had materials not covered in lectures.

Each team provided an update on their project periodically. Additional online materials on ethics for developing countries suggested by the guest commentator Lucinda Manda-Taylor was sent out as an email to all participants. On Day 4 several coaches and participants noted difficulty in access to the internet. Two limited internet access cards for airtime were purchased in time for the weekend for each team. On Day 5 the teams reported their revised question, research design and methods selected to the whole class for discussion and suggestions for improvement. During this workshop, a “train-the-trainer” initiative was attempted. As part of this initiative, several coaches met with MicroResearch faculty members before the workshop to review plans and assignments and periodically thereafter before seminar sessions. This provided a forum for discussion on shared experiences and the task ahead. Although some coaches were absent after day 4, those who remained gained insights from the interaction. This local coaching initiative will be reviewed and revised for future MR Workshops.

There were 5-7 participants on each of the four MicroResearch Teams. Their names are listed in Appendix 3. Of the original participants, only two did not meet the requirements for certification because of incomplete attendance (> 80% is required) and their names are not listed. All other participants showed full commitment to developing their skills in research, especially research that could improve health outcomes. Participation in discussion was enthusiastic as well. Daily attendance averaged at 95% (range 85 to 100%).

**MicroResearch Team Proposals**

As in previous workshops, the major training focused on the proposal development by each interdisciplinary team. Many members had not met or worked with each other prior to this workshop and hence learned about team building during the workshop as well. The collaboration started with the selection of the research question from those put forward by each team member on Day 2. The teams were guided by the lectures: Defining a Health Research Question, Principles of Clinical Research and Pitfalls in Research presented on Day 1 and 2. Each team discussed the merits of each question put forward by a team member and selected one that best fit “FINER” principles to work on as a team, to develop a proposal overview during the workshop. On Day 3, a spokesperson for each team then presented the topics to the class and noted the question selected by the team and the rationale for its selection (Appendix 3). The four questions initially selected on Day 3 of the workshop were:

1. What is the prevalence of urinary schistosomiasis and anaemia in school children with clinical malaria presenting at a health facility in Chikwawa?
2. Evaluation of locally made mosquito trap in curbing malaria vectors in Malawi?
3. Can Family centered approach reduce defaulter rate among women on option B+ in Rural setting in Malawi?
4. What knowledge and practices do caregivers have about drinks and snacks given to under-five children in relation to their health?
Final Day

Each team presented a 10-minute overview of their proposal to the judges. This was followed by questions from the judges and participants. MicroResearch criteria for assessment was used by the judges to help them assess how each proposal might be strengthened (Appendix 4).

Judges:

Dixie Maluwa Banda MA, PhD: Professor of Education and Psychology. Chancellor College, University of Malawi
Levi Zeleza Manda, PhD: Malawi Coordinator, Worlds of Journalism Study, Managing Editor Journal of Development and Communication Studies

Judges General Comments:
All teams presented well and answered questions in a poised and mature manner. Both judges were of the opinion that the four research proposals demonstrated great teamwork, and commitment and that the proposals will likely influence the delivery of health services in Malawi and Africa and warrant international publication. Their comments are summarized in Appendix 5. They especially appreciated that proposals contained a rationale/application design and dissemination plan. They had no hesitation to recommend all teams be eligible for a MicroResearch Grant competition in the future.

However, they had a great deal of difficulty choosing the best presentation overall since every team did so well. In the end, Team 2 was deemed by the judges to have made the best presentation and received special recognition and “the Golden Chocolate Bar”.

Concluding Remarks:
Cecilia Maliwichi-Nyirenda PhD, Director of the College of Medicine’s Research Support Centre, made remarks emphasizing the importance of research for academic progress and to improve patient care and health outcomes in Malawi. She thanked all participants for their outstanding effort. This was followed by brief thoughtful and inspiring closing comments from Dixie Maluwa Banada who emphasized the importance of working as a team and what can be achieved.

Workshop Evaluation

Participants were invited to complete a questionnaire to evaluate the workshop. Twenty-two of 24 (90%) of participants completed the anonymous evaluation questionnaire. The workshop was extremely well received by participants. Of the 22 responders, 21 rated the workshop as 4 or 5 on a scale up to 5. Of note: 18 of 22 (85%) said it provided excellent stimulation for their research interest and 21/22 (95%) would recommend it to a colleague as an excellent experience. Several participants commented in class that it had changed their thinking and would use what they have learned for teaching and future research. The full Workshop Evaluation Report is in Appendix 6.
Recommendations

1. The MicroResearch planning process organized at the University, lead to strong senior support for MicroResearch from the four University Colleges. The process they adopted should be documented and considered for other sites in order to enhance senior University understanding and support for MicroResearch.

2. Accordia, the University of Malawi organizing committee and MicroResearch should develop strategies to support MicroResearch teams, for grant applications. The process in Ethiopia could be tried, i.e. 2-3 follow-up meetings after the workshop. In Ethiopia the first was held after 6-8 weeks, to review points raise by the judges. The 2nd was 2-3 months before the grant deadline, to review budget, KT and summary. A check on English is planned a month before grant deadline.

3. The Acordia Workshop was successful, largely due to the effort of the main local organizer. However, additional secretarial assistance, (e.g. for photocopying, recruitment lists, during registration, and certificate preparation) immediately before and during the workshop may enhance the efficiency of the workshop.

4. Consider providing WiFi access cards to teams at the start of the workshop to facilitate their searches of literature and communication with each other.

5. After reviewing the outcome and reports of participants, the University of Malawi and Accordia may consider holding a 2nd MicroResearch training workshop. If this is desired, a joint review of the outcome should be held in order to increase local University of Malawi faculty involvement, develop plans and negotiate the terms of a new contract.

6. Invite University of Malawi and successful participants to other MicroResearch events including a planned future MR Forum in Tanzania. Accordia or University of Malawi travel support for key local leaders will allow them to attend the forum and gain greater insight into other MicroResearch activities and collaborations.

7. Seek input from coaches and organizers of this workshop to identify barriers to their presence during the workshop team sessions on Day 3-8. This will provide suggestions on how to enhance their participation at future workshops.

8. A “train-the-trainer” plan was attempted at this workshop, by inviting coaches to review plans, assignments and discuss experiences. Some coaches were not engaged, but others gained insights from the interaction. Accordia, the organizing committee members and MicroResearch should review this plan to develop better strategies to accomplish this goal.

9. With organizing committee members, explore strategies to augment local grant fund sources as well as local NGO links for enhancing knowledge translation.
Acknowledgements

In closing we would like to express our gratitude for the interest, energy and help of the MicroResearch Organizing Committee and especially to Towela Maleta. The coaches are very important for success of the MicroResearch initiative. Among those who coached, Blessing Nyasilia Kaunda-Khangamwa stood out for her outstanding effort. The two judges who joined us on the last day (Dixie and Levi) deserve special mention for the insights and enthusiasm that they shared with everyone. Thank you so much!

Lastly, it was a joy to work with such keen and enthusiastic participants who engaged early and deeply in this MicroResearch program.

Respectfully submitted for the 2015 University of Malawi MicroResearch Workshop Program Team by:

Noni E. MacDonald MD, FRCPC, FCAHS                    Robert Bortolussi, MD, FRCPC
Walter Schlech MD, FRCPC.

Appendices

1. List of participants, professional backgrounds, sites and email addresses
2. Program Schedule, lecturers and Commentators
3. MicroResearch Teams, Photo, Names, Coach and Proposed Questions
4. Scoring System used by the Judges
5. Specific comments for each Team
6. Course Evaluation by Participants
## Appendix 1: MicroResearch Workshop Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Sex</th>
<th>Profession</th>
<th>College and Specialty</th>
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<tbody>
<tr>
<td>Alinune Kabaghe</td>
<td>M</td>
<td>MD</td>
<td>Majete Malaria Research</td>
</tr>
<tr>
<td>Atupele Mulaga</td>
<td>F</td>
<td>Statistician</td>
<td>(Poly T), Statistics</td>
</tr>
<tr>
<td>Wyness Gondwe</td>
<td>F</td>
<td>RN</td>
<td>(KCN) Nursing Education</td>
</tr>
<tr>
<td>Jomo Banda</td>
<td>M</td>
<td>Researcher</td>
<td>(COM) Malaria Alert Centre</td>
</tr>
<tr>
<td>Pauline Katundu</td>
<td>F</td>
<td>Lab Tech</td>
<td>(COM) Med Lab Sciences</td>
</tr>
<tr>
<td>Osborne Kachaje</td>
<td>M</td>
<td>Teacher</td>
<td>(Poly T) teacher Physics</td>
</tr>
<tr>
<td>Mayeso Gwedela</td>
<td>F</td>
<td>RN</td>
<td>(KCN) Nursing Education</td>
</tr>
<tr>
<td>Jaden Bendabenda</td>
<td>M</td>
<td>MD</td>
<td>(COM) Medical Doctor</td>
</tr>
<tr>
<td>Goodal Nyirenda</td>
<td>M</td>
<td>IT</td>
<td>(Poly T) ICT Specialist</td>
</tr>
<tr>
<td>Towera Maleta</td>
<td>F</td>
<td>RN</td>
<td>Accordia Public Health</td>
</tr>
<tr>
<td>Clifford Mwale</td>
<td>M</td>
<td>Pharm</td>
<td>(COM) Pharmacist</td>
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<tr>
<td>Ibrahim Chikowi</td>
<td>M</td>
<td>Chemist</td>
<td>(CHAN) Social Scientist</td>
</tr>
<tr>
<td>Martin Chiumia</td>
<td>M</td>
<td>Biologist</td>
<td>(COM) Malaria Alert Center</td>
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<tr>
<td>Miriam Simbota</td>
<td>F</td>
<td>RN</td>
<td>(KCN) lecture child health</td>
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<tr>
<td>Blessings Nyasilia Kaunda-Khangamwa</td>
<td>F</td>
<td>* Soc Sci Research</td>
<td>(COM) Social Scientist</td>
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<tr>
<td>David Kulapani</td>
<td>M</td>
<td>MD</td>
<td>Pathologist</td>
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<td>George Chirambo</td>
<td>M</td>
<td>MD</td>
<td>Biochemist</td>
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<td>Vinitha Jayachandran</td>
<td>F</td>
<td>MD</td>
<td>(COM) Public health specialist</td>
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<tr>
<td>Esnath Kapito</td>
<td>F</td>
<td>RN</td>
<td>(KCN) Lecturer Maternal Health</td>
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<tr>
<td>Kondwani Chidziwisano</td>
<td>M</td>
<td>*Envir Health</td>
<td>(Pol T) Environmental Health</td>
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<tr>
<td>Charles Chiotcha</td>
<td>M</td>
<td>*Project Man.</td>
<td>(Poly T) Quantity &amp; Project Management</td>
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<td>Rex Mbewe</td>
<td>M</td>
<td>Biologist</td>
<td>(Poly T) Enviro/Microbiology</td>
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<td>Ursula Kafutulafula</td>
<td>F</td>
<td>RN</td>
<td>(KCN) Nurse-midwife</td>
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<tr>
<td>Lekeleni Mbewe</td>
<td>F</td>
<td>* Soc Sci</td>
<td>(CHAN) Centre Social Research</td>
</tr>
</tbody>
</table>

### Email Addresses

alinnue@yahoo.com; amulaga@poly.ac.mw; wynessgondwe@yahoo.com; wynessgondwe@yahoo.com; jbanda@mac.medcol.mw; pakatundu@gmail.com; pkachaje@poly.ac.mw; mgwedela@medcol.mw; jbangabenda@gmail.com; gnyirenda@poly.ac.mw; tmaleta@mac.medcol.mw; csmwale@medcol.mw; chikoweib@yahoo.co.uk; mchiumwa@mac.medcol.mw; msimbota@gmail.com; b.n.kaunda@gmail.com; dkulapani@medcol.mw; gchirambo@medcol.mw; vjayachandran@medcol.mw; esnathkapito@kcn.unima.mw; kchidziwisano@poly.ac.mw; echiocha@poly.ac.mw; rmbewe@poly.ac.mw; ursulakafutulafula@kcn.unima.mw; lekelenimbewe@gmail.com;
Appendix 2: Program Outline

MICRORESEARCH TRAINING WORKSHOP

Week One

Day 1 (Monday 1:30 pm- 4:30 pm)
- Welcome and introduction of faculty and participants –
- Introduction to the Course and Objectives- RB
- Introduction to the Web program- RB
- Defining the research question- WS

_Homework: Each participant was challenged to identify a research question from their own experience._

Day 2 (Tuesday: Lectures 1:30-3:00pm followed by teams working together)
- Principles of Clinical Research-WS
- Pitfalls in Research- NM

_Team activity: The Team selected a chair and a secretary and then chose one of their questions based upon FINER criteria to develop and refine into a research project._

Day 3 (Wednesday: Lectures 1:30-3:00pm + teams)
- Getting started on writing a proposal RB
- Each Team Presented their Research Question with discussion by all workshop participants- Chair NM

_Team activity: Refine research question, begin search for background materials, choose research design and meet coach

Day 4 (Thursday: Lectures 1:30-3:00pm + team work)
- What editors are looking for- NM
- How a manuscript is reviewed NM

_Team activity: Refine proposal, work on background and start work on methods

Day 5 (Friday: Lectures 1:30-3:00pm + team work)
- How to get published and exercise- NM
- Basic and local research Ethics – RB
- Teams present in 3 minutes their refined research question, design and methods selected. Chairs RB, NM

_Team activity: Refine proposal, name budget officer- begin development of budget, start, develop content for slides for background, further work on methods

Day 6 (Monday: Lectures 1:30-3:00pm + team work) [Revised schedule]
- Local Research Ethics Issues (Commentator LM-T)
- Writing a report –RB
- Poster exercise and lecture – NM, RB

_Team activity: Refine proposal- start on PPT, select “orator”, develop background PPT slides, research question PPT slide, work further on methods._
Day 7 (Tuesday: Lectures 8:30-11:00am [Revised schedule])
- Community Engagement NM, (with Commentator GKC)
- How grants are reviewed RB

*Team activity: Refine proposal: Check in on progress- start on KT and next steps; further refine methods and start on PPT methods slides*

Day 8 (Wednesday: Lectures 1:30-3:00pm + team work[Revised schedule])
- Principles of Knowledge Translation. RB
- Moving Research into Policy with exercise. NM

*Team activity: Refine proposal: smooth out background, methods, KT ,budget, develop next steps, polish PPT*

Day 9 (Thursday: Lectures 1:30-3:00pm + team work)
- Career documentation and planning RB

*Team activity: “Polish” proposal for presentation, develop responses to potential questions from judges .*

Day 10 (Friday 1:30pm – 4:45pm)
- Each Team Presents their research proposal overview

*Team Activity: Awards and Graduation Ceremony*

Legend:
- RB  Robert Bortolussi
- GKC  Gertrude Kalanda Chapotera
- NM  Noni MacDonald
- LM-T  Lucinda Manda-Taylor
- WS  Walter Schlech
Appendix 3: Research Teams

Team 1 (Coach: Bagrey Ngwira PhD)

From Left to Right:
A Kabaghe, W Gondwe,
O Kachaje, P Katundu,
A Mulaga, M Gwedela, J Banda

Alinune Kabaghe       M       MD       Majete Malaria Research
Wyness Gondwe         F       RN       KCN, Nursing Education
Osborne Kachaje        M       Lab Sci   Poly T, teacher Physics
Pauline Katundu        F       Lab Tech  COM, Med Lab Sciences
Atupele Mulaga         F       Statistician Poly T, Statistics
Mayeso Gwedela         F       *Teacher  COM, Physiology teacher
Jomo Banda             M       *Researcher COM, Malaria Alert Centre

*Other Profession

Emails: alinune@yahoo.com; amulaga@poly.ac.mw; wynessgondwe@yahoo.com; wynessgondwe@yahoo.com;
jbanda@mac.medcol.mw; pakatundu@gmail.com; okachaje@poly.ac.mw; mgwedela@medcol.mw;

Questions Generated: (Chosen Question in Italics)

1. How can road traffic accidents among school-going children of up to junior primary presenting at QECH in Blantyre city be prevented? (What are the contributing factors to road traffic accidents among school-going children of up to junior primary in Blantyre city?)
2. What is the prevalence of worm infestation in children living in rural/peri-urban areas in Blantyre?
3. How sustainable are solar energy technologies in reducing neonatal mortality?
4. Initially: What is the prevalence of urinary schistosomiasis and anaemia in school children with malaria presenting at a health facility in Chikwawa?
   Final Day: “Determining the prevalence of polyparasitism in under-five children in an endemic area”
5. What is the knowledge, attitude and practices of alcohol use by pregnant women in rural/peri-urban Blantyre?
6. What factors influence pregnant women’s choice of place of delivery in rural Blantyre?
7. Have can TB associated with secondary smoking be prevented?
Team 2 (Coach: Gertrude Kalanda Chapotera MD)

From Left to Right:
M Chiumia, C Mwale, T Maleta, I Chikowwe, J Bendabenda, G Nyirenda

Email: jbendabenda@gmail.com; gnyirenda@poly.ac.mw; tmaleta@mac.medcol.mw; csmwale@medcol.mw;
chikoweib@yahoo.co.uk; mchiumwa@mac.medcol.mw

Questions Generated: (Chosen Question in Italics)

1. **Initial**: Evaluation of locally made mosquito trap in curbing malaria vectors in Malawi?
2. **Final Day**: Assessing the efficacy and acceptability of homemade mosquito trap
3. What are the care giver factors that influence poor early childhood development in rural Malawi?
4. Management of cold chain facilities which stock vaccines for children
5. What is the efficiency of using spatially separated medical data at Queen Elizabeth Central Hospital to increase maternal care?
6. What challenges do parents have in ensuring that their children have food to eat before going to school?
7. Effects of temperature and humidity as adverse effects to the medical supply chain system in Malawi?
Team 3 (Coach Blessing Nyasilia Kaunda-Khangamwa)

Blessings Nyasilia Kaunda-Khangamwa  F  Social Wk  COM, Social Scientist Researcher
Vinitha Jayachandran  F  MD  COM, Public health specialist
Esnath Kapito  F  RN  KCN, Lecturer Maternal Health
George Chirambo  M  MD  COM, Biochemist
Miriam Simbota  F  RN  KCN, lecture child health
David Kulapani  M  MD  COM, Pathologist
*Other

Emails: msimbota@gmail.com; b.n.kaunda@gmail.com; dkulapani@medcol.mw; gchirambo@medcol.mw;
vjayachndran@medcol.mw; esnathkapito@kcn.unima.mw;

Skypes: <Miriam Simbota>, <blessings.khangamwa>, <david king kulapani>, <gchirambo>, <vinti_19>, <Esnath Kapito>.

Questions Generated: (Chosen Question in Italics)
1. What are the effects of gender roles on antenatal care health seeking behavior?
2. Does Delayed antibiotic prescription have an outcome on Respiratory illnesses and colds in children under 5 years in Blantyre?
3. What is the relationship between BMI, Fasting glucose and BP in teenagers in urban Blantyre?
4. What is the extent and distribution of most likely causes of stroke among young adults in a rural community in Malawi?
5. What knowledge and skills do caregivers of children discharged from undernutrition programs have to prepare them for home feeding practice in rural/urban areas of Blantyre district in Malawi?
6. Initial: Can Family Centered approach reduce defaulter rate among women on option B+ in Rural setting in Malawi?

Final Day: Appropriateness of Family Centered Care strategy on adherence to ART including Option B+: A formative research in Mdeka, Blantyre, Malawi
Team 4 (Coach: Effie Chipeta RN)

From Left to Right:
C Chiocha, U Katulafula.
L Mbewe, K Chidziwisano,
R Mbewe

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<tr>
<th>Name</th>
<th>Gender</th>
<th>Title</th>
<th>Organization</th>
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<tr>
<td>Charles Chiotcha</td>
<td>M</td>
<td>*Project Man. Poly T, Quantity Management</td>
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<tr>
<td>Ursula Katulafula</td>
<td>F</td>
<td>RN</td>
<td>KCN, Nurse-midwife</td>
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<td>Lekeleni Mbewe</td>
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<td>M</td>
<td>*Env Health</td>
<td>Poly T, Environmental Health</td>
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<td>Rex Mbewe</td>
<td>M</td>
<td>Lab Sc</td>
<td>Poly T, Enviro/Microbiology</td>
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*Other

Email: kchidziwisano@poly.ac.mw; cchiocha@poly.ac.mw; rmbewe@poly.ac.mw; ursulakatulafula@kcn.unima.mw; lekelenimbewe@gmail.com;

Questions Generated: (Chosen Question in *Italics*)

1. Alcohol use among pregnant women in Mbayani Township and the outcomes of pregnancy.
2. Can improved plastic made handwashing facilities improve hand washing practices among primary school pupils in rural schools?
3. *Initial*: What knowledge and practices do caregivers have about drinks and snacks given to under-five children in relation to their health?
   *Final Day*: Knowledge and practices of caregivers on drinks and snacks in relation to the health of school going children in Blantyre city, Malawi
4. Does lack of play ground infrastructures affect the growth of children/youth in Malawi?
5. What is the impact of malaria prevalence among school age children on vulnerable groups (pregnant mothers and children)?
Appendix 5: Project Evaluation

Judges:

Dixie Maluwa Banda MA, PhD: Professor of Education and Psychology. Chancellor College, University of Malawi

Levi Zeleza Manda, PhD: Malawi Coordinator, Worlds of Journalism Study, Managing Editor Journal of Development and Communication Studies

General Comments:
All teams presented extremely well and answered questions in a poised and mature manner. Both judges were of the opinion that the four research proposals demonstrated great teamwork, and commitment. They felt the proposals will likely yield results that are publishable internationally and influence the delivery of health services in Malawi and Africa. They especially liked that the proposals had a dissemination plan and a rationale/application design. The judges had no hesitation to recommend that all teams be eligible for a MicroResearch Grant for a future competition.

They had great difficulty in choosing the best presentation overall since every team did so well. In the end, the selection was based on an exemplary presentation, which can be used as a model by all of the teams. Group 2 was selected on this basis for the best presentation.

Specific Comments:

Team 1: Determining the prevalence of polyparasitism in under-five children in an endemic area
The presentation was well organized and told a compelling story on the need for the research study, with good background slides and KT plan. Given the impact of malaria, and the severity in children under 5 years of age, this is an important study. Twelve additional specific comments were sent to the team.

Team 2: Assessing the efficacy and acceptability of homemade mosquito trap
The presentation was judged to be the most compelling of the four. This is novel, and quite different from most MicroResearch projects from the past. The study is important as well, since the introduction of any vaccine for malaria, will need to be accompanied by strategies to control mosquito population, to be effective. Thus, the study will be timely if it offers a viable strategy to control the vector. Nine additional specific comments were sent to the team.

Team 3: Appropriateness of Family Centered Care Strategy (FCCS) on Adherence to ART including Option B+: A formative research in Mdeka, Blantyre, Malawi
Given the prevalence of HIV in Malawi and the know risks for vertical transmission, this is an important study and the results may have significant impact. The presentation was well organized. The importance of FCC in the roll out of the B+ program hasn’t been looked at before, making this study timely and novel. Work like this is needed to determine the best strategy for implementation. Nine additional specific comments were sent to the team.

Team 4: Knowledge and practices of care givers on drinks and snacks in relation to the health of school going children in Blantyre city, Malawi
The presentation was well organized and told a compelling story for an emerging health problem. The results will be important for health planners and the public. The presentation was excellent. Seven additional specific comments were sent to the team.
Appendix 6: Workshop Evaluation

Section I (22/25 responses, 92%)

Score: 1=low to 5=excellent
Number respondents (n), median score indicated in bold

a) How would you rate this workshop?
   1 (0), 2 (0), 3 (1), 4 (5), 5 (16)

b) Did it raise research issues you had not considered before?
   1 (0), 2 (0), 3 (0), 4 (5), 5 (17)

c) Did it stimulate your interest in research?
   1 (0), 2 (0), 3 (0), 4 (4), 5 (18)

d) Would you recommend it to a colleague?
   1 (0), 2 (0), 3 (0), 4 (1), 5 (21)

Section II (Participants could offer multiple comments)

1. Why did you come to the workshop?
   • To learn or improve knowledge X 10
   • To improve research skills X 8
   • Develop publishing and/or writing skills X 5
   • Academic interest X 3
   • Learn about grant application X 2
   • Learn about multidisciplinary teams X 2

2. What was most helpful in the workshop?
   • Everything X 4
   • How to write: proposal, manuscript (e.g. IMRAD) or publish X 9
   • Formulating research question (e.g. FINER) X 7
   • Teamwork skills X 3
   • Presentation, poster skills X 2
   • KT X 2
   • Material provided (e.g. USBs), research design, motivation MR process (1 each)

3. What might be changed?
   • Change nothing X 5
   • Add more time (whole day sessions or 3 weeks) X 2
   • Do it away from workplace X 2
   • Reduce lecture time X 2
   • Increase in research methods X 2
   • Decrease time, more detailed KT, go beyond medical model, more local presenters, offer each participant chance for grant, better time of year (1 each)

4. What lecture(s) was (were) most helpful?
   • All or everything X 4
   • Poster/oral presentations X 8
• Publishing/writing skills X 6
• Methodology and design X 5
• Career Planning X 5
• FINER X 4
• KT, Pitfalls in Research (each X 3)
• Community Engagement, IMRAD (each X 2)
• Report writing, health policy, Grant review, Ethics, Internet use (1 each)

5. What lecture(s) topic could be shortened or dropped?
• None (No changes) X 16
• Career Planning should be shorter X 2
• Some lectures shorter to allow more discussion X 1
• KT, Manuscript Writing, Ethics should be shorter (1 each)

6. How will you use what you learned?
• Use it to help (or to motivate) me plan or do research X 16
• Use it for teaching or sharing with students X 6
• Use it to do (motivate for) doing PhD or Post Grad studies X 4
• Use it to apply for a grant X 4
• Use it to improve writing skills X 3
• Use it to prepare better CV, do better collaboration (1 each).

Other comments.
• “I really like the course because it quite challenging and fruitful. This is going to help me perform better in my institution. Once again thank you.”
• “This was very good.”
• “Target various categories of staff, such as senior members. (This workshop) ties well with decentralization policy where education, health environment, etc, all work under the district commissioner in local government. They will need to be together at a later time.”
• Very good workshop. We need more of these in Malawi.”
• “A general overview would be helpful shared in advance. This could be carried out in 5-day morning-afternoon session out of college for better attendance and time management where accommodation is available.”
• “Good practical workshop.”
• “I hope there will be mechanisms put in place for follow up in what the team members/ groups are doing to keep fire burning.”
• “Keep up the good job. Looking forward to having your continued support. MicroResearch will be my life long collaborator.”
• “Include local coaches to balance the experience of research. Sometimes international coaches are better place to get grants.”
• “This has been the best course I have ever attended in my life. Facilitators (esp Bob and Noni... [Wally]) were very good. They are all senior people, respected, but they conducted themselves and carried us all through the unknown to known, simple to complex – KEEP IT UP PLEASE !”
• “I have found this training very beneficial. I now know how best to write a proposal and a study report.”
• “Please come again, Zikomo.”