

**Report**  
**MicroResearch Senior Family Medicine Resident Workshop**  
**Kabarak University and Affiliated Teaching Hospitals**

May 15–May 26, 2017

Held at  
Kabarak University, Kenya

**Facilitator**

<p><b>Noni MacDonald</b>, MD, MSC, FRCPC, FCAHS, Professor of Pediatrics, IWK Health Centre and Dalhousie University, Halifax, Canada <a href="mailto:noni.macdonald@dal.ca">noni.macdonald@dal.ca</a></p>
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**Kabarak University Family Medicine Resident Workshop**  
**And MicroResearch Program Co-ordination**

<p><b>Bruce Dahlman</b> MD, FAAFP, MSHPE Head, Department of Family Medicine and Community Care School of Medicine and Health Sciences, Kabarak University Main Campus Kabarak, Kenya <a href="mailto:Head.FamilyMedicine@kabarak.ac.ke">Head.FamilyMedicine@kabarak.ac.ke</a></p>	<p><b>Geoffrey Wechuli</b> MBChB MMed FM Deputy Head, Department of Family Medicine and Community Care and Dept. Research Coordinator, Kabarak University Main Campus Kabarak, Kenya <a href="mailto:wechulig@kabarak.ac.ke">wechulig@kabarak.ac.ke</a></p>
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**Teachers**

<p><b>Joy Mugambi</b> MBChB MMed FM Family Medicine Eldama Ravine Sub-county Hospital, Eldama Ravine, Kenya <a href="mailto:dr.mugambijoy@gmail.com">dr.mugambijoy@gmail.com</a></p>	<p><b>Jason Brotherton</b>, BSc, MSc, MD, Med-Ped Residency Consultant- Internal Medicine and Paediatrics PCEA Chogoria Hospital Chogoria, Kenya <a href="mailto:jb042107@gmail.com">jb042107@gmail.com</a></p>
<p><b>Dino Crognale</b> MD MAAFP Tenwek Hospital Family Medicine Program Coordinator Kabarak University School of Medicine and Health Sciences Bomet, Kenya <a href="mailto:TenwekPC.FamMed@kabarak.ac.ke">TenwekPC.FamMed@kabarak.ac.ke</a></p>	<p><b>Peter Halestrap</b> BMBCh MA MRCGP DRCOG DCH AIC Kijabe Hospital Family Medicine Program Coordinator, Kabarak University School of Medicine and Health Sciences Kijabe, Kenya <a href="mailto:KijabePC.FamMed@kabarak.ac.ke">KijabePC.FamMed@kabarak.ac.ke</a></p>

### Guest Lecturer

**Stephen O Muhudhia** MBChB, M Med Paeds, Bioethics Consultants – Africa Children’s Clinic, The Nairobi Hospital , Doctors Plaza #307, Nairobi Kenya  
drmuhudhia@yahoo.com

### Biostatistician Tutor

**Chepkutto Willy** BSc, MSc PhD candidate  
Department of Public Health, School of Medicine and Health Sciences,  
Kabarak Univeristy  
chepkutto@gmail.com

### Coaches

Family Medicine Affiliated Hospital Training Site	Coach for Fam Med Resident MR Project
AIC Kijabe Hospital, Kijabe Kenya	Peris Kiarie Kariuki BScN, MNursing, DNP Principal, Kijabe School of Nursing Kijabe, Kenya Email: Princ.ksn@kijabe.net Dr. Pete Halestrap (see above)
PCEA Chogoria Hospital, Chogoria, Kenya	Larry Smith MD AAFP Chogoria Hospital Family Medicine Program Coordinator Chogoria, Kenya Email: ChogoriaPC.FamMed@kabarak.ac.ke Jason Brotherton (see above)
Tenwek Hospital, Bomet, Kenya	Eli Horn MD AAFP Family Medicine Consultant Tenwek Hospital, Bomet, Kenya Email:elijhorn@gmail.com

### Kabarak University MicroResearch Site Core Leadership

Dr. Bruce Dahlman, Head, Department of Family Medicine and Community Care, KABU  
(Head.FamilyMedicine@kabarak.ac.ke)

Dr. Geoffrey Wechuli - Deputy Head, Department of Family Medicine and Community  
Care and Dept. Research Coordinator, KABU (wechulig@kabarak.ac.ke)

Dr. Stephanie Onguka - Education coordinator, Department of Family Medicine and  
Community Care, KABU (educoord.fammed@kabarak.ac.ke)

**Funding for the Senior Family Medicine Resident MicroResearch  
Workshop at Kabarak University (KABU)**

Kabarak University & Affiliated Teaching Hospitals for Family Medicine Residency  
AIC Kijabe Hospital, Kijabe Kenya  
PCEA Chogoria Hospital, Chogoria, Kenya  
Tenwek Hospital, Bomet, Kenya

Academics Without Borders

Canadian Paediatric Society

Society of Obstetricians and Gynecologists of Canada

IWK Health Centre

Dalhousie Medical Research Foundation

Dalhousie University

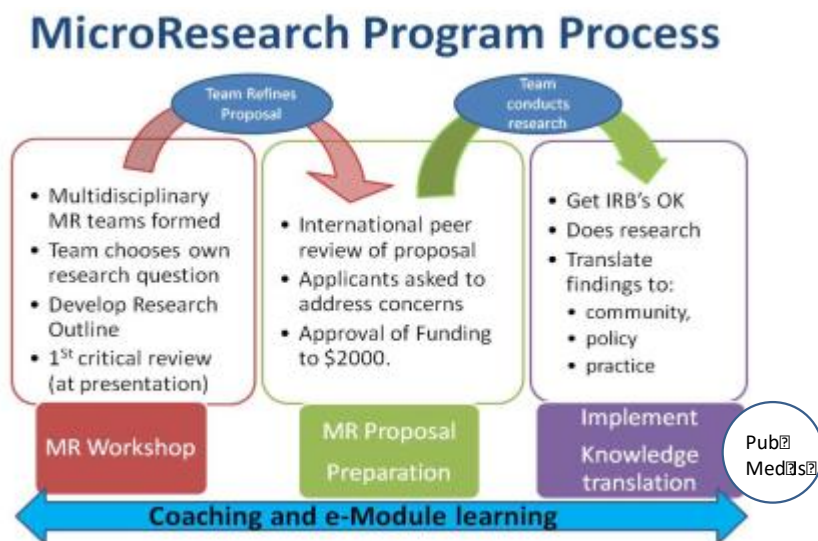
Personal donation: N. MacDonald

## Introduction and Background

Kabarak University (KABU), Kabarak Kenya, is a not-for-profit Christian university established in 2001 by the former President of the Republic of Kenya and the Chancellor of the University, Daniel T. arap Moi, and chartered to grant degrees in 2008. Kabarak University sits on the farm of Daniel T. arap Moi, lying about 20 km from the city of Nakuru that in turn lies about 120 km from Nairobi.

Kabarak University has an established, accredited, four-year family medicine residency training program. Questions had been raised within the Department of Family Medicine and Community Care about how to optimize research training for family medicine residents so they would have the skills need to carry on community focused research after graduation. This could lead to benefits for the communities once they are working out in their communities. Any program modifications had to meet the thesis requirements of KABU. Based upon the success of the fall 2016 MicroResearch workshop where teams that included junior family medicine residents came from the 3 affiliated teaching hospitals as well as Egerton University, the MicroResearch principles were integrated into the curriculum for senior family medicine residents as part of FMED 741: Research Methods III: Thesis. The first component of this was the two week long MicroResearch Senior Family Medicine Resident Workshop held at Kabarak University May 15 to 26, 2017.

MicroResearch (<http://microresearch.ca>) is an innovative strategy aimed at building the capacity of local health care professionals to better address these community health care problems by finding local solutions for local problems [MicroResearch: Finding sustainable local health solutions in East Africa through small locally generated and implemented research studies. *Journal of Epidemiology and Global Health*, 2014; 4,185-193 (<http://download.journals.elsevierhealth.com/pdfs/journals/2210-6006/PIIS2210600614000161.pdf>)].



MacDonald NE et al. MicroResearch: Finding sustainable local health solutions in East Africa through small local research studies. *Journal of Epidemiology and Global Health* 2014;4:185-93

The major focus of MicroResearch proposals have been on maternal and child health given the importance of these issues in the Millennium Development Goals and the donor funding to MicroResearch. This has now expanded in the past two years to encompass the Sustainable Development Goals and hence broadened the health focus to cover the age span, not just maternal and child health.

### **Features of MicroResearch at KABU: Focus in Senior Family Medicine Resident Workshop**

As MicroResearch is about local capacity building for community focused research, it is not a cookie cutter program. At each site MicroResearch International works with the site to tailor the program to fit local needs as much as possible, while still ensuring quality and integrity. The impetus for development of this senior family medicine resident training workshop at KABU came from Dr. Bruce Dahlman, Head of the Department of Family Medicine and Community Care, KABU, and Dr Geoffrey Wechuli, Deputy Head and Director of Research Department of Family Medicine and Community Care, KABU.

At KABU, under the site leadership of Dr. Dahlman and Dr. Wechuli, MicroResearch training has been integrated into FMED 741. The features include:

- 1) Focus on developing research and leadership skills of senior family medicine residents and setting the stage for their thesis proposal.
- 2) Each senior family medicine resident lead a small MicroResearch team themselves with one or two assistants: a nurses or other allied health professional none of whom had formal or significant research experience or training prior to this workshop.
- 3) During the workshop, the senior family medicine residents and their assistants from each hospital site selected a theme area for study and then developed a community health research question relevant to their affiliated hospital site within this theme, and then developed a MicroResearch proposal overview during the workshop.
- 4) Following the MicroResearch workshop, the very small MicroResearch teams will develop a full proposal to submit to the MicroResearch Grant Review program for international and African peer review and then be eligible for \$500 US grant funded locally by KABU and the Affiliated Training Hospitals.
- 5) Each small MicroResearch team has a local MicroResearch coach from the affiliated teaching hospital site (see above).
- 6) The senior family medicine resident will each proceed to develop a full thesis on their project.

Thus, the KABU MicroResearch senior family medicine resident research training program meets the thesis requirements and grows both community focused research and leadership skills of the residents. As well, there is a high potential to improve local practice and policy in care through the small MicroResearch projects that will be done forming a solid foundation for continued interest and skills to be able to lead small projects once out in practice.

## **The KABU MicroResearch Senior Family Medicine Residents Workshop**

### **Participants**

Dr. Dahlman and Dr. Wechuli and the Department of Family Medicine and Community Care residency training program worked hard to adjust the MicroResearch program to fit their needs and goals. The five senior family medicine residents were thoughtfully paired with their assistants. These included: 3 nurses, 2 clinical officers, 1 community health education worker and 1 quality officer. The coaches came from the affiliated hospital teaching sites. Two had taken the MicroResearch workshop last fall and are well on their way with their teams on revising their Oct 2016 MicroResearch project post review. The other coaches either took this workshop (Peris Kariuki) or are planning on taking the workshop in the fall of 2017 (Larry Smith).

Thus the total number of participants was 14. (See Appendix 1).

No fee was charged by KABU for workshop participants. Kabarak University provided room and board at the KABU Guesthouse during the workshop and travel expense for all the participants from the three distant hospitals.

### **Program**

The course was held at KABU from May 15<sup>th</sup> until May 26<sup>th</sup>, 2017. The MicroResearch workshop combined lectures, interactive seminars and daily small group interactive working sessions with local coaches. The schedule is shown in Appendix 2. As the schedule shows, the mornings were devoted to seminars, exercises and reporting back on the progress of the proposal overviews and the afternoons devoted to small team work with each team lead by a Senior Family Medicine resident.

The goal was to have all projects, if each successfully passed the judges' critique on the last workshop day, to be rapidly revised from the proposal overview into full proposals to be submitted for the special June 15, 2016 MicroResearch KABU grant competition.

Daily attendance was 100% except one day when one assistant was unable to attend because of a previous engagement.

On Day 1, Dr. Dahlman, as Head of the Department of Family Medicine and Community Care at KABU, welcomed the senior residents, their assistants and the coaches. He noted that this was a new step for KABU, a most welcome training opportunity to augment the research training skills of senior family medicine residents to better fit their needs when out in practice, yet still meet the thesis requirements and to potentially find solutions for local community health problems relevant to their communities and training hospitals.

The workshop started with development of the research theme for the three sites on Day 1 followed by discussion of the focused research questions on Day 2. The research questions were based on their own experiences and passions (i.e. we're not just community *based* but

community directed). These questions were further developed via the lecture: “*How to develop a research question*”. The senior family medicine residents then vigorously discussed the merits of their questions with their assistants and then selected the one to work on as their workshop proposal. Each small group then presented the list of topics they had considered for the entire class, noting the one selected and the rationale for its selection.

Over the course of the next 8 days of the workshop the senior residents, with their assistant and under the gentle guidance of their coach, refined their research question, found background information and set about developing their methods to answer the question. On day 7, for the senior family medicine residents a session on Introduction to Thesis Writing at KABU by Dr Dahlman was added to facilitate their understanding of the requirements and time lines.

Their proposal overview was presented to the judges’ panel on Day 10 for adjudication.

The final refined questions were:

### **AIC Kijabe Hospital: Theme Palliative Care**

**MR Team 1:** Senior Family Med Resident: Dr. Faith Lelei-Mailu

*How prepared do family members feel they are to provide end of life care for their advanced cancer patients?*

**MR Team 2:** Senior Family Med Resident: Dr. David Mung’ara

*What are the doctors’ knowledge and attitude with regard to in-patient adults’ end of life care? (A study in Kijabe hospital, central Kenya).*

### **PCEA Chogoria Hospital: Theme National Health Insurance**

**MR Team 1:** Senior Family Medicine Resident: Dr. Elijah Yulu

*Does having National Health Insurance Fund coverage affect clinician’s medical decision making in the outpatient and inpatient setting at PCEA Chogoria Hospital, rural Eastern Kenya?*

**MR Team 2:** Senior Family Medicine Resident: Dr. Samuel Agot

*Who are the mothers that deliver at Presbyterian Church of East Africa, Chogoria Mission Hospital in rural Kenya?*

**MR Team 3:** Senior Family Medicine Resident: Dr Boaz Niyinyumva



*Do culture and social norms affect whether or not a patient has health insurance? A study in hospitalized patients from 18 years and above at Chogoria Hospital, Tharaka Nithi County- Eastern Kenya?*

**Tenwek Hospital Theme: Abnormal bleeding**

**MR Team 5:** Senior Family Medicine Resident: Dr. Elijah Terer

*What are the stated reasons for delayed presentations of non-pregnant women 18 yrs. and above with abnormal vaginal bleeding in the two referral hospitals in Bomet county Kenya?*

The team membership and coach are listed in Appendix 3.

**Final Presentations and Judging**

The program for the final Day (Day 10) is outlined in Appendix 4. The highlight of Day10 was the presentations of the six proposals in a 10 minutes overview followed by 15 minutes of comments and questions from the judges and then 10 minutes of constructive suggestions from the other workshop participants on how the proposal might be strengthened. A distinguished group of 4 judges adjudicated each proposal and decided on the best presentation.

1. Dr. Wesley Too MPH PhD

Dean, School of Medicine and Health Sciences

Kabarak University School of Medicine and Health Sciences wtoo@kabarak.ac.ke

2. Dr. Moses Thiga MS PhD

Director, Research Institute

Kabarak University mthiga@kabarak.ac.ke

3. Dr Geoffrey Kamau PhD

Senior lecturer School of Business, Kabarak University

gkamau@kabarak.ac.ke

4. Mr. Chepkutto Willy BSc, MSc PhD candidate

Lecturer Department of Public Health, School of Medicine and Health Sciences,

Kabarak Univeristy chepkutto@gmail.com

The scoring system used took into account MicroResearch principles (see Appendix 5).

**Best Presentation Winner:**

The decision on which was the best presentation was most difficult as all the presentations were very well done. The judges were impressed. The Team selected by the judges as giving the best presentation was:

**Chogoria MR Team 1:** Senior Family Medicine Resident: Dr Elijah Yulu



*Does having National Health Insurance Fund coverage affect clinician's medical decision making in the outpatient and inpatient setting at PCEA Chigoria Hospital, rural Eastern Kenya?*

### **Judges' Summary Comments:**

The judges were enthusiastic supporters for all six teams and were impressed by what these very small teams had accomplished so much in such a short time. They recommended that all 6 teams go on to develop a full MicroResearch project proposal in the next week. The judges noted that all six proposals were relevant to their communities and beyond. All projects would benefit from further clarification of the gap and simplification of the methods. Linking them to the SDGs will enhance the importance of the studies. They much emphasized how important each of these questions was to the community but also beyond their communities – for Kenya and likely beyond. They urged the teams to strengthen their proposals and move forward with full proposals.

### **Closing Remarks**

Drs. MacDonald and Dahlman expressed thanks to the judges and teams for their hard work and insights. This 'experiment' for adaptation to fit this new need and set the stage for senior residents thesis worked, albeit needs a few tweaks. Dean Too emphasized how helpful the MicroResearch approach is to engaging in more community relevant questions. He thanked Dr. MacDonald for coming to share this initiative. The Business Faculty is now interested in seeing if it can be adapted for them too and the Director of the Research Institute is keen on the program, especially the knowledge translation emphasis. The fall MR workshop will provide an opportunity for further discussions.

### **Workshop Assessment**

The Pre-Workshop Evaluation results are presented in Appendix 7A, the post-workshop evaluation in 7B and the Team Evaluation in 7C. All three were obtained using structured evaluation forms submitted anonymously by the participants. For the responses see the Appendix.

In brief, the pre survey revealed that half of the participants were research naïve. Most wanted to learn research skills including learning about MicroResearch. Several noted this was an academic requirement.

The post workshop evaluation was very positive with many noting the value of having lectures in the morning and then practical applied group work in the afternoon. A serious concern raised was the lack of consistency of the presence of the local coaches for many teams. The team evaluation reinforced this concern except for Kijabe team where the coach was present for the entire workshop. Several also commented on how small teams were.

### **Outcomes and Recommendations from the 1st MicroResearch Senior Resident Workshop KABU**

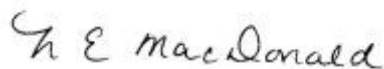
1. If possible try for small teams of 3 not 2 i.e. resident + 2 assistants
2. The style of Kijabe teams, with 2 residents and a total team of 6 (including the coach) who shared in work of both project developments, worked exceptionally well and should

be considered for the future. 3 residents and 3 questions per team is more difficult as a hospital team.

3. The participants noted that it would be helpful to have more opportunities to get feedback from whole class and share their work more often during the workshop. This could be done with some further planning but again would have more benefit from the local coaches being present and experts like Ree'l Street as noted below.
4. Try to ensure that the local coaches for each set of hospital teams can attend for the required 6 days (Wed-Fri then Mon-Wed) in order to better optimize their assistance to the teams.
5. The opportunity for the teams to interact with Ree'l Street was a major asset especially on refining the question and thinking through methods and KT. Would be excellent if she could be present at the Oct workshop and next May. The Kabarak program is very fortunate to have such a qualified local business consultant who understands the issues and the context.
6. Joy Mugambi was particularly effective in 'research to policy' as she gave first hand testimony of the importance of this area and her experience as she taught that lecture. Suggest she be invited again as an external teacher.
7. The confusion about the size of the potential grant opportunities needs to be resolved before the workshop next May. Also need to make clear if MicroResearch KT grants will be available once the projects are done.
8. More local faculty need to take on teaching MicroResearch.
9. Need to explore more local partnerships and collaboration for re-usable equipment so each site can accumulate over time an assortment of tools that can be rented for these small projects. Kijabe Hospital is looking into this for their teams at this workshop.
10. Having reliable internet at the guest house and at the session site would strengthen the opportunity for the teams to more quickly find relevant background information

I would personally like thank the participants for their enthusiasm for MicroResearch and the local faculty who added much value to the program. While some tweaking is needed to further adapt MicroResearch to meet this need, this was a strong step forward.

Respectfully submitted by,



Noni E. MacDonald  
MD, MSc, FRCPC, FCAHS

**Appendices:**

1. List of senior family medicine residents and their assistants professional backgrounds, sites and email addresses
2. Program Outline: full day two-week workshop
3. Topics and Questions raised by the small teams
4. Outline of final day's program
5. Scoring System used by the Judges
6. Specific comments for each Team
7. Course Evaluations Pre and Post + Team Evaluation

## Appendix 1: MicroResearch Senior Family Medicine Research Training Workshop Participants Kabarak University, May 2017

Name	Gender	Profession	Email
<b>Chogoria Hospital</b>			
Dr. Samuel Agot	M	Fam Med Resident*	samuelagot73@gmail.com
Dr. Boaz Niyinyumva	M	Fam Med Resident*	boazsis@gmail.com
Dr. Elijah Yulu	M	Fam Med Resident*	elijahyulu@gmail.com
Mr. Millan Ochieng Otieno	M	Quality officer**	millanochiengotieno@gmail.com
Mr. Kenneth Kiogara	M	Clinical officer**	kiogorajohnk@gmail.com
Ms. Juliana Mruttu	F	Nursing instructor**	julianamruttu@yahoo.com
<b>Kijabe Hospital</b>			
Dr. Faith Lelei-Mailu	F	Fam Med Resident*	faithlelei@gmail.com
Dr. David Mung'ara	M	Fam Med Resident*	davidmungara@gmail.com
Ms. Nenkai Michelle N. Nthumba	F	Comm. Health Education**	nenkaimichelle@gmail.com
Ms. Carol Mwangi	F	Nurse Research officer**	research.kh@gmail.com
<b>Tenwek Hospital</b>			
Dr. Elijah Terer	M	Fam Med Resident*	eliemiterer70@gmail.com
Mr. Stephen Mogambi	M	Nurse anaesthetist**	moshnoicsteve@yahoo.com
Mr. Pascal Kisanya	M	Clinical officer**	pascalkisanya@gmail.com

\*Fam Med resident – small team leader    \*\* Assistant

## Appendix 2: Program Outline

### Kabarak University

MICRORESEARCH TRAINING WORKSHOP, Kabarak, Kenya

May 15- 26, 2017

*Initials: see facilitators and lecturers section of this report.*

#### **Day 1 (Monday, May 15, 9 AM-4PM)**

- Welcome and introduction of faculty and participants –BD
- Introduction to the Course and Objectives- NM
- Introduction to the Web program- BD
- Defining the research question- NM

*Team activity: Each hospital group challenged to identify a research theme followed by discussion to select final theme and then prepare a rationale to present to the class on Day 2*

*Home work: Each participant to think of a research question that fits theme.*

#### **Day 2 (Tuesday, May 16, (9:00- 4pm)**

- Principles of Clinical Research-Toolkit 1 – Qualitative Research- JM
- Pitfalls in Research- DC

*Team activity: chose one of the questions based upon FINER criteria to develop and refine into a research project.*

#### **Day 3 (Wednesday, May 17, 9:00-4pm) NB break for chapel at 11:30am**

- Each Team Presented the Research Questions reviewed, the one selected and why chosen with discussion by all workshop participants- and NM
- Research Toolkit 2 Quantitative Research-DC
- MR Proposal Overview getting started- NM

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

#### **Day 4 (Thursday Oct 18, 9:00 to 4 pm)**

- Research Toolkit 3 Sampling and basic statistics- NM
- Community Engagement- NM and class
- Exercise: participants reflections on community engagement for their chosen research questions and comments for other participants

*Team activity: Continue development of background materials, work on methods*

**Day 5** (Friday, Oct 18, 9:00-4:00pm)

- What editors are looking for: How to get published- NM
- Basic and Local Ethics- SOM
- Exercise: participants reflections on ethical issues arising from their projects

*Team activity: Refine proposal, name budget officer, begin development of budget, start, develop content for slides for background, further work on methods. Develop background, research question PPT slides*

**Day 6** (Monday, May 22, 9:00 –4:00 pm)

- Writing a report – PH
- Poster and Oral presentations– PH
- Poster exercise- all participants

*Team activity: Refine proposal, development of budget, work on slides for background, further work on methods.*

**Day 7** (Tuesday, May 23, 8:30 -4:00pm)

- Introduction to thesis writing at KABU - BD
- Knowledge translation- JB
- Moving research into policy- JM
- Exercise: KT discussion each project
- 

*Team activity: Refine proposal- make KT slide, start on PPT, select “orator”, further refinements to methods, develop methods slides.*

**Day 8** (Wednesday, May 24, 9:00-4:00) NB break for chapel at 11:30am

- Writing an abstract-NM
- Abstract exercise- all participants
- Writing a Micro Research grant-NM

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

**Day 9** (Thursday, May 25, 9:00-4:00 pm)

- Career Planning, Time Management and Career Documentation-NM

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

**Day 10** (Friday, May 26, 8:00-1:30pm)

- Each Senior Family Resident Team Presents their research proposal
- Group Activity: Awards and Graduation Ceremony*

### Appendix 3: MicroResearch Teams, Themes Questions and Coaches

#### AIC Kijabe Hospital Theme Palliative Care

**Coach:** Dr Peris Kariuki and Dr Peter Halestrap

**List serve:** faithlelei@gmail.com; davidmungara@gmail.com;  
nenkaimichnthumba@gmail.com; nenkaimichelle@gmail.com; researcher.kh@gmail.com

Princ.ksn@kijabe.net ; KijabePC.FamMed@kabarak.ac.ke

#### Questions:

**MR Team 1:** Senior Family Med Resident: Dr. Faith Lelei Mailu

How prepared do family members feel they are to provide end of life care for their advanced cancer patients?

**MR Team 2:** Senior Family Med Resident: Dr. David Mung'ara

What are the doctors' knowledge and attitude with regard to in-patient adults' end of life care? (A study in Kijabe hospital, central Kenya).

#### Team:

Dr. Faith Lelei Mailu	F	FMED resident	faithlelei@gmail.com
Dr. David Mung'ara	M	FMED resident	davidmungara@gmail.com
Michelle Nthumba	F	PHd Student	nenkaimichnthumba@gmail.com nenkaimichelle@gmail.com
Caroline Mwangi	F	Research Nurse	researcher.kh@gmail.com

#### PCEA Chogoria Hospital: Theme National Health Insurance

**Coach:** Dr Jason Brotherton, Dr Larry Smith

**List serve:** elijahyulu@gmail.com; millanochiengotieno@gmail.com;  
samuelagot73@gmail.com; julianamruttu@yahoo.com; boazsis@gmail.com;  
kiogorajohnk@gmail.com

jb042107@gmail.com; ChogoriaPC.FamMed@kabarak.ac.ke

**Questions:**

**MR Team 1:** Senior Family Medicine Resident: Dr Elijah Yulu

*Does having National Health Insurance Fund coverage affect clinician's medical decision making in the outpatient and inpatient setting at PCEA Chogoria Hospital, rural Eastern Kenya?*

**MR Team 2:** Senior Family Medicine Resident: Dr Samuel Agot

*Who are the mothers that deliver at Presbyterian Church of East Africa, Chogoria Mission Hospital in rural Kenya?*

**MR Team 3:** Senior Family Medicine Resident: Dr Boaz Niyinyumva

*Do culture and social norms affect whether or not a patient has health insurance? A study in hospitalized patients from 18 years and above at Chogoria hospital, Tharaka Nithi County-upper Eastern Kenya?*

**Chogoria Team:**

Dr. Samuel Agot	M	Fam Med Resident	samuelagot73@gmail.co
Dr. Boaz Niyinyumva	M	Fam Med Resident	boazsis@gmail.com
Dr. Elijah Yulu	M	Fam Med Resident	elijahyulu@gmail.com
Mr. Millan Ochieng Otieno	M	Quality officer	millanochiengotieno@gmail.com
Mr. Kenneth Kiogara	M	Clinical officer	kiogorajohnk@gmail.com
Ms. Juliana Mruttu	F	Nursing instructor	julianamruttu@yahoo.com

**Tenwek Hospital Theme Abnormal bleeding**

**Coaches:** Dr Ely Horn, Dr Dino Cagnale

**List serve:** [eliemiterer70@gmail.com](mailto:eliemiterer70@gmail.com); [moshnoicsteve@yahoo.com](mailto:moshnoicsteve@yahoo.com) ; [pascalkisanya@gmail.com](mailto:pascalkisanya@gmail.com)

[elijhorn@gmail.com](mailto:elijhorn@gmail.com); [TenwekPC.FamMed@kabarak.ac.ke](mailto:TenwekPC.FamMed@kabarak.ac.ke)

**MR Team:** Senior Family Medicine Resident: Dr. Elijah Terer



*What are the stated reasons for delayed presentations of non-pregnant women 18 yrs. and above with abnormal vaginal bleeding in two referral hospitals in Bomet county Kenya?*

**Team**

Dr. Elijah Terer	M	Fam Med Resident	<a href="mailto:eliemiterer70@gmail.com">eliemiterer70@gmail.com</a>
Mr. Stephen Mogambi	M	Nurse anaesthetist	<a href="mailto:moshnoicsteve@yahoo.com">moshnoicsteve@yahoo.com</a>
Mr. Pascal Kisanya	M	Clinical officer	<a href="mailto:pascalkisanya@gmail.com">pascalkisanya@gmail.com</a>

## **Appendix 4 Outline of Day 10 (Final Day) Program**

**Date: May 26, 2017**

<b>Time</b>	<b>Activity</b>
7:30-8:00	Hospital team photos; loading PPT
8:00-8:15	Orientation of the judges
8:15- 12:45	Presentation by teams
12:45 -1:00	Judges decision in camera
1:00 to 1: 15	Judges remarks and report
1:15 to 1:30	Presentation of certificates, class photo
1:30 to 1:45	Closing remarks Dr. Dahlman and Dean Too

## **Appendix 5: Judges Scoring System**

Relevance: to local & the wider community (*25 points*)

Feasibility: time, budget (*25 points*)

Methods (*20 points*)

Other (*10 points each*)

- Importance to Africa
- Novelty
- Team participation

Comments

## **Appendix 6: Summary of Judges Comments for Each Group**

### **Specific Comments**

#### **AIC Kijabe Hospital**

MR Team 1: Senior Resident

MR Team 2: Senior Resident

#### **PCEA Chogoria Hospital**

MR Team 3: Senior Resident

MR Team 4: Senior Resident

MR Team 5: Senior Resident

#### **Tenwek Hospital**

MR Team 6: Senior Resident

### **General comments for all teams from Noni MacDonald**

1. Congratulations
2. IRB submission should only happen AFTER you have scientific approval from MicroResearch. However, if you have concerns that consent and ethics approval may be complicated, please take time to speak to a member of the ethics committee in advance.
3. Remember when you apply for the grant, try to address all of these valuable comments from the judges and the other suggestions you were given on Friday after the presentations.
4. Remember the international peer reviewers will NOT know how the health care system in Kenya is organized. If this is important in your proposal, then add a summary page in the Appendix to the MicroResearch grant application and then a brief reference in the background or methods or KT where it will help.
5. Remember KT. Take care to make this section well done in the MR application. It is your sales pitch for the value of the project.
6. Please ensure that you provide the local context for the question; why is the question relevant for the team, what are the local data/ concerns?

## **Appendix 7A: Workshop Pre Evaluation to do**

Anonymous Workshop Evaluation 14/14 responses, 100%

### **Pre-Workshop Evaluations MicroResearch KABU 2017**

#### **1. Why did you enroll in this MicroResearch Workshop/Program?**

To become a pro in research – if possible

To learn to do clinically relevant research X3

Requirement of Kabarak Fam Med program X4

To improve my research capacityX2

Interested in research

Gain knowledge in research so I can assist my students with their research projects

Enable me to participate in research program at my hospital

Encouraged to do this

To refresh my skills and carry out a research project

#### **2. What are the top 3 things you want to get out of this Program?**

Learn how to write a publishable paper X4

Get better at research

Know how to do sustainable research

To come up with a good relevant research question X6

Learn effective methods to do research X4

Develop a culture to continue doing research

How to write a proposal

How to present research

Identifying area of need

Report presentation

How to come up with good research topics X2

Application of research to clinical setups

Importance of MicroResearch in ever changing needs of customers

How to formulate a good hypothesis

How to identify gaps

How to collect and analyze and interpret data collected

To become competent I doing research

How to manage/assist in research programs

How to be able to conduct easily research

How to help others with research

Learn more about clinical research methods X2

To acquire new knowledge and technology in MicroResearch

To come up with a project

**3. Do you have experience in health research?**

Yes:  No:

**If Yes, in what role(s) have you been involved? -  $\checkmark$  all that apply**

- a) research study participant: =5
- b) research study assistant: =1
- c) research study site investigator: =1
- d) research study principal investigator: =1
- e) Other – please specify:

**4. Can you commit the time required to complete the workshop? (May 15 to May 26 )**

• Yes:

**5. What would prevent you from completing the workshop?**

Concern about my baby during workshop

None X 7

Some serious illness or emergency X5

Exams

**6. What do you hope to learn?**

How to carry out health /medical research

How to do successful research affordably

To write high quality publishable research for journal X2

Learn community based research

How to be an effective /efficient researcher X2

How to do research that fits sites

MicroResearch format/program X2

To carry out a research project

What is research

Gain the needed skills for research

Everything offered in the program

Research techniques

As much as I can to conduct research and to help others doing research

Formalizing a proper research question

Learn research methods

Learn how to be a good clinical researcher

Principle of qualitative and quantitative research

**7. How are you related to the provision of health services?**

**Specify**

- a) Work now or worked in past in the delivery of health services (hospital, clinic, office practice etc)= 12
- b) Volunteer now or in recent past in health services =2
- c) Work or volunteer from community based organization (CBO) or nongovernmental organization (NGO) focused on health. Please specify:=1
- d) Other relationship, please specify:
- e) No relationship

**8. In the past 12 months have you and/or your family used health services ?**

- a) governmental health services =5
- b) private for profit health services =1
- c) private not for profit health services=11
- d) traditional health services
- e) other specify

**9. Do you perceive any bias or coercion associated with your participation in the MicroResearch workshop?**

Kenyans are poor/not well motivated to do research /write/publish/read more /do research – imp to do this workshop

No X 13



## Appendix 7B: Workshop Post Evaluation\

Anonymous Workshop Evaluation 14/14 responses, 100%

Score: 1=low to 5=excellent

Number respondents (n), mean score indicated in bold

### Section I

a) How would you rate this workshop?

1(0), 2(0), 3(0) 4 (4), **5 (10) = 4.71**

b) Did it raise research issues you had not considered before?

1 (0), 2 (0), 3 (1=3.5), 4 (2), **5 (11)= 4.75**

c) Did it stimulate your interest in research?

1 (0), 2 (0), 3 (0), 4 (4), **5 (10)= 4.71**

d) Would you recommend it to a colleague?

1 (0), 2 (0), 3 (0), 4 (0), **5 (14)=5.00**

### Section II

#### 1. Why did you come to the workshop?

To get a better understanding of research and how I can apply in my community

Part of my academic program X2

Acquire new knowledge in researchX5

How to do genuine research

Learn about MicroResearch X2

Recommended by the college and was invited

To be able to participate in research competently

Learn how to do research that makes a difference

Sharpen my research skills in conducting research

To help me learn “ how to “ in research

Help in writing my thesis

To acquire a MR certificate and acquire the knowledge so I can implement my duties more effectively

Sent by my hospital

#### 2. What was most helpful in the workshop?

The aspect of lectures in the morning and practical work in the afternoon was a good way to implement what learned X7

I liked that the afternoon assignments were broken down into manageable sections so not overwhelming

The process of how to do MicroResearch

Available coaches

Mentoring by coaches and facilitators

IMRaD concept

Impressed by the style of teaching or training by the tutors

All the examples in the teaching

I see it is possible to do research

Learned about team work

How to come up with a research question

The practical group sessions with our coach- had same coach all way through

How to identify predatory /fraudulent meetings and publishers

Process of quantitative and qualitative research methods

Team work and tasks required to accomplish – makes it very memorable

### **3. What might be changed?**

Nothing X6

Decrease requirements for grant approval

Have one consistent coach per group- each coach brings ideas- some delay progress

Be with coach from beginning to last day

More presentation of group work so can learn form each other

Electricity cut offs was an issue

Sometimes the co teaching interrupted the flow

Make the workshop 3 weeks so can come up with better proposal

Would like more class discussion – less lecture but this would take more time to cover the material

Maybe add more time and practice on presentations and getting papers reviewed

A few lecturers were too fast – but Prof Noni helped to make clear

### **4. What lecture(s) was (were) most helpful?**

All X6

KTX2

Quantitative research

Getting published X3

Tool kits

Background information

Abstract X3

Methods X2

Basics of research ethics X2

Career planning X2

Defining a research question and pitfalls X2

Writing a report

All relevant and helpful

Oral and poster presentation X2

Time management X2

Community engagement

**5. What lecture(s) topic could be shortened or dropped?**

NoneX14

All a timely fit

**6. How will you use what you learned?**

Make it simpler for my students to do research

I hope to help Burundian students (medical) to do research from their undergraduate program to help communities

I am starting my thesis

Will teach other clinicians how to do this

Be able to translate knowledge in addressing community needs

To write my own research project as I advance for my degree

MR we do will be useful for policy making, to design and improve guidelines

Will help me teach others and will do more research

To translate knowledge to my colleagues and continue with MR to bring impact in the community

Work on my research project

Assist /teach others in my hospital to ask questions

Will put what I learned into practice , to encourage research where I work

Encourage colleagues to see that research is something we can incorporate into the day to day

Will be more active in research activities in my hospital

I will use n my day to day work and will use to teach others

Will teach to others and use knowledge to do more research so we can solve community problems

Present at various meetings

**Other comments.**

Awesome experience and very timely

Looking forward to implement what I read

I would like to be a good researcher and keep practicing

I hope I will make very good use of the knowledge you have given me and reach it to others

By better mapping my time I will be able to accomplish more

I am grateful to Prof Noni- her time, her openness. She delivered all of her presentations in a remarkable manner

Thank you for engaging out own Kenyans in the lectures

## 7C: MicroResearch NS Team Evaluation by Each Team Member

Given teams are small, all answers are grouped by hospital

Team #  Kijabe

### 1. Please State the Research Question:

- a) What are doctors' knowledge and attitudes towards in-patient end-of-life care in Kijabe hospital?
- b) How prepared are family members to provide end-of-life care for a family member in the community?

### 2. What can support/enable your team to successfully address this question?

Funding- grants to cover study expenses X3  
Access to journals  
Administration from hospital  
Information from head palliative care – can help us with both questions  
We are a team and we will manage  
Supervisors and coach very helpful  
Expect/ hope for support form palliative care team X2  
Availability of coach to offer support and guidance

### 3. What are the difficulties you see in being able to successfully carry out this project?

- a) getting doctors together for focus group X3  
lack support from palliative care team might hamper us- but hope to engage
- b) accessing patients in their homes in the community  
getting translations that is high quality from interpreters  
data collection in the home setting and focus groups may be hard

Optimize trust all will go well, don't for see difficult at moment  
Maybe time constraints due to other responsibilities X2

### 4. How confident are you as a team to address these barriers?

Scale 1=low to 5=high

### 5. How would you rate the degree to which you worked as a team?

Scale 1=low to 5=high

**6. Do you have additional comments about your group's ability to function as a 'team'?**

At first had a communication problem and some time discrepancies. Overcame these issues and worked better. Some members were better listeners than others.  
Overcame this.

Now function well as a team , each person listened to and now mutual respect

Prior planning on how to carry out study and work forward were critical

**Team #** Tenwek \_\_\_\_\_

**1. Please State the Research Question:**

What are the stated reasons for delayed presentation of non-pregnant women 18 years and above with abnormal vaginal bleeding in two local referral hospitals?

**2. What can support/enable your team to successfully address this question?**

Work hand in hand with the OB/Gyn team at Tenwek  
Community and hospital administration involvement  
When we continue to work as a team

**3. What are the difficulties you see in being able to successfully carry out this project?**

Time at work and doing research project  
Having trained res staff research assistants to be constantly in OPD especially to help collect the data  
Need a female team member  
Need a coach  
We need to work closely with our coach but not with us most of time

**4. How confident are you as a team to address these barriers?**

Scale 1=low to 5=high

4.0

**5. How would you rate the degree to which you worked as a team?**

Scale 1=low to 5=high

5.0

**6. Do you have additional comments about your group's ability to function as a "team"?**

Need a permanent team coach  
I am happy with team

**Team #\_\_Chogoria \_\_**

**1. Please State the Research Questions:**

- a) Does NHIF subscription affect clinicians' decision making
- b) Who are the mothers who deliver at Chogoria Mission Hospital ?
- c) Do cultural and social norms affect whether or not a patient has health insurance .  
A study in hospitalized patients > 18 yes and above in Chogoria hospital?

**2. What can support/enable your team to successfully address this question?**

- a) team working with local NHIF offices and with clinicians  
financial support to meet the reusable and on reusable project costs  
team work and support by management and faculty
- b) collaboration with the labour related specialists at Chogoria  
  
Get go ahead form hospital  
Will do sequential qualitative ( key informant interviews then quantitative  
research ( survey)
- c) an anthropologist would be helpful

**3. What are the difficulties you see in being able to successfully carry out this project?**

- a) frequent changes in coaches  
time management as one of team is busy and occupied – alone in Sept
- b) no difficulties expected
- c) forming questions related to culture that will prompt patient to respond to the  
study well

**4. How confident are you as a team to address these barriers?**

Scale 1=low to 5=high

**5. How would you rate the degree to which you worked as a team?**

Scale 1=low to 5=high

**6. Do you have additional comments about your group's ability to function as a "team"?**

Since this project leads towards a thesis , important that the resident be the PI or at least named first

Doing this as equals is a challenge as to whom it belongs

Our team has demonstrated team work and commitment to the project

By God's grace and continued collaboration we should work well as a team being divided into 3 small groups made us not gain full benefit of team



MicroResearch Workshop Class May 2017, Kabarak University, Kenya