

Mbarara MicroResearch Workshop
Mbarara University of Science and Technology and Healthy Child Uganda
August 12 –August 23, 2013

“Building capacity from a research idea to a finished paper to knowledge translation”

Workshop for Community Based Researchers
held at
Mbarara University of Science and Technology
Hosted by Healthy Child Uganda

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Canadian Paediatric Society

IWK Health Centre

Dalhousie University

MicroResearch

Participants

Personal donations by N. MacDonald

Introduction and Background

The absolute need for capacity building in research was recognized several years ago by African nations. Lack of grant funds for small research projects is a major obstacle to research development in many of these countries. Small projects are the fuel, upon which research skills are honed and a track record is established, a critical factor in any research grant proposal.

MicroResearch, a concept modeled on Micro-Finance, was conceived by Jerome Kabakyenga, Dean of Medicine of Mbarara University of Science and Technology (MUST), Noni MacDonald Professor Pediatrics and Computer Science, Dalhousie University, and Robert Bortolussi in 2008. The initial workshop used educational tools, mentors, seed grant support and peer-to-peer coaching from Canadian and African researchers.

The program at MUST was modified from previous MicroResearch workshops based on feedback from attendees and host institutions and from a MicroResearch Forum, which was held in March 2013. Local experts from MUST and Healthy Child Uganda participated as teachers on sessions dealing with research ethics, knowledge translation, health policy and community engagement.

The goal of the workshop was to enhance skills for:

- grant proposal development and management,
- pitfalls in research and research ethics,
- research manuscript development,
- pitfalls in presentations including abstracts,
- technical report writing,
- knowledge translation and policy development,
- career planning,
- community engagement,
- curriculum vitae development.

The format for the workshop combined lectures and daily small group interdisciplinary, interactive working sessions. Initially, each member of the four small groups (6 per group) developed their own idea for a research question based on their own experience. Each group selected one question to develop into a research proposal as a team during the workshop. The lectures were scheduled to coincide with the participants needs as they moved from formulating an idea to refinement and finally to presentation. HCU collected a registration fee to ensure registrants were serious about attending and to off-set local expenses for the MicroResearch Workshop and program. HCU registration fee was approximately \$20 CAN (50,000 UGS).

The MicroResearch Program

The workshop was held at Acacia Hotel in Mbarara with co-ordination supplied by Healthy Child Uganda (Amon Natukwatsa). Session lectures started at 2:00 PM and were followed by interactive small group discussion and planning (from approximately 4:30-6:30 PM). The workshop ran from August 12 to August 23, 2013.

Participants were recruited through word-of-mouth, personal invitation and by poster (same as last year but fee information added). Twenty-five registrants were accepted with 3 signing up on Day 2

and 1 on Day 3. Participants came from a wide range of disciplines including obstetrics, general medicine, psychology, clinical nursing (clinical care, counseling, education, palliative care), development studies, public health, social work, library science, nutrition, basic science, statistics, information technology, and laboratory technology (**Appendix 1**).

The MicroResearch Training Workshop

Dr. Scholastic Ashaba, opened the MicroResearch Training Workshop on August 12th, 2013 noting that this was the 5th workshop to be held in Mbarara. As in the past year, the majority of the lectures and interactive class work were lead by local MicroResearch faculty; Scholastic Ashaba, Florence Beinempaka, Francis Oriokot and Esther Beebwa with support from Noni MacDonald. Emmanuel Kyagaba provided an excellent guest lecture on research ethics and the specifics at MUST. All teachers coalesced into excellent team teachers and enriched many of the discussions. Interestingly, the participants eagerly jumped in with questions from Day 1- unusual in the experience of Microresearch. The Workshop followed the usual format with lectures linked to daily small group interdisciplinary work noted above.

Four participant groups were formed with 6-7 participants per group (**Appendix 2**). All participants were committed to developing their skills in clinical research, especially research that could improve health outcomes. Daily attendance was 90 to 100%.

The workshop lectures and program schedule are shown in **Appendix 3**. New to the program: an introduction to LinkedIn© where there will be a group site for each team and the abstract exercise, where participants are asked to find at least 20 errors of omission or commission. Due to the room size on week one instead of having the interactive group work exercises on abstract and posters- these were switched with the usual Day 6 program. The participants were reminded that their USB's had additional materials not covered in lectures. As last year, Emmanuel Kyagaba, Past Chair Institutional Review Board, Mbarara University of Science and Technology, presented on Ethics on Day 4, followed by a question and answer session. The Career Planning lecture on Day 8 had also been extensively revised and was tied to the older time management quiz. The combination went very well stimulating much conversation discussion and questions.

As in previous workshops, the major learning was centred on the proposal development in the groups. Many members had not met or worked with each other prior to this workshop. The collaboration started with the selection of the research question from the questions put forward by each group member Day 2. The group was guided by the lecture: "How to develop a research question". The group discussed the merits of each question and selected one to work on as a team to develop a proposal. A spokesperson for each group then presented the topics to the class and noted the one selected by the group and the rationale for its selection (**Appendix 5**). The four topic questions initially selected on the 3rd day of the workshop were:

Group 1: Understanding the factors affecting the nutritional status of children living with HIV/AIDS in Bugamba Sub County, Mbarara District.

Group 2: The impact of maternal socioeconomic status on infant nutritional status and illness in rural South Western Uganda.

Group 3: Can a phone contact prior and after medical referrals improve maternal and prenatal outcomes MRRH?

Group4: What factors contribute to delayed health seeking behaviors' in children with severe malaria reporting to Paediatric ward at Mbarara Regional Referral Hospital?

The series of lectures provided knowledge and skills needed to develop these questions into a rough research proposal including knowledge translation, ethical issues, community engagement and budget development-all core to the MicroResearch concept, for presentation on the final day ,August 23, 2013. Each group worked to shape their proposal over the course of the workshop with the help of a coach; Group 1: Scholastic Ashaba, Group 2: Francis Oriokot, Group 3: Elizabeth Kemigisha, Group 4: Barnabas R. Atwiine as well as with input from Noni MacDonald.

Of note the local facilities provided by HCU/MUST at the Acacia Hotel worked well to support the lecture and small group work in the program. However, the room was too small for the poster and abstractive exercises. After some to-ing and fro-ing, we were moved on the second Monday to the restaurant room for the poster session and this provided enough space for the exercise. Fairly large lecture room space is needed for this course.

Abstract exercise: Noni circulated a poorly written abstract to the four groups. The participants were tasked to identify at least 20 mistakes in that abstract which gave the participants an insight into a good and bad abstract. From here the participants moved to the restaurant where a variety (10) large abstracts were displayed and they were divided into groups of three and to examine each abstract. When they came back to plenary they were asked to identify a well written abstract and list its good attributes. Likewise they were asked to identify a poor abstract and in a similar way to explain what made it bad/poor.

Final Day

On the final afternoon of the workshop each group presented in 10 minutes the overview of their proposal to a panel of 4 judges followed by comments and questions from the judges and the other participants. The four member panel of judges judged each presentation (**Appendix 4**) and suggested how the proposal might be further strengthened. The Panel included: Emmanuel Kyagaba, Dean of Students at Mbarara University of Science and Technology, Gad Ruzaaza, coordinator Community Based Education program at Mbarara University of Science and Technology; Eleanor Turyakira, clinical epidemiologist, Department of Community Health, Mbarara University of Science and Technology and Associate Professor Dr. Samuel Maling, Dean Faculty of Medicine, Mbarara University of Science and Technology.

The Group deemed by the judges to have made the best presentation and who answered the questions most competently was Group Four: *Determinants of delayed presentation of children with malaria to Kazo Health Centre.*

Judge's General Comments

All teams were congratulated on their good presentations, and staying to the time limit that was required. Each group succeeded in engaging the audience through their excitement and

enthusiasm for the topic they chose. The relevance of each topic justified their passion for the effort. The judges endorsed that all of the teams should prepare a grant proposal for November 2013 or May 2014 MicroResearch Grant Competition. The judges noted that most of the budgets had more than 50% for personnel- a high amount for a MicroResearch project. All groups must do a careful literature search to make sure there is no duplication. The quality of the four projects was impressive especially given the time frame for development of these presentations. (Specific comments for each group **Appendix 5**)

Workshop Evaluation

Participants were invited to complete a questionnaire to evaluate the workshop. In brief they much appreciated the MicroResearch concept and training. All aspects were deemed useful and several commented on the helpfulness of the group work and the support from the coaches. (Evaluation Report **Appendix 6**)

Recommendations

1. Consideration be given to deciding on a more regular timing for the MicroResearch training workshops to make planning and co-ordination simpler.
2. The MicroResearch leaders at MUST work with Bishop Stuart University and Kampala International University to try to get more follow up on projects and more interest in MicroResearch. A meeting with the respective leadership is planned.
3. Ensure that the space allocated for MicroResearch is large enough to accommodate the needs for the interactive sessions e.g. poster exercise and not so noisy on the final day for presentations.
4. Having a venue with a backup generator was very helpful when power failures occurred
5. The revamped Lecture on Career Development combined with the inclusion of the old time management quiz worked well.
6. The addition of a non medical judge to the panel was again helpful
7. Trimming several lectures will allow more time for discussion
8. Requests for background on sample size calculations came from several attendees. This might be considered for a new module development
9. Team teaching was especially successful in this course. Combined with the exceptional mix of participants, this lead to many informative discussions. Team teaching and participant diversity should be encouraged
10. The cost of the course was not seen as a barrier by the participants and should be continued.
11. The blue and white MicroResearch bags were welcomed and used. Consideration should be given to continuing this practice
12. The four coaches were strong. Each was a previous MR course attendees, all were physicians and three were also previous grant awardees. This enhanced understanding of the MR groups needs. All should be encouraged to participate again next year.

Respectfully submitted by Noni E. MacDonald MD, FRCPC, FCAHS

List of Appendices:

1. Micro Research: MacDonald, N. and Kabakyenga, J. (2008). MicroResearch: borrowing from the micro finance model. CMAJ;179:399
2. Recruitment Poster
3. List of participants, backgrounds and email addresses
4. List of small groups with coach and emails
5. Program Outline
6. Topics and Questions explored by each group
7. Scoring System for Proposal presentation
8. Workshop Evaluations
9. Judges Comments Each group

Appendix 1: CMAJ article

CMAJ

EDITORIAL

FRANÇAIS À LA PAGE SUIVANTE

Microresearch: borrowing from the microfinance experience

Who is at risk of severe head injuries in the hospital in Mbarara, and what are the outcomes? Why do some mothers in rural western Uganda seek care early for babies with severe diarrhea while others delay until the babies are in shock? These are 2 of the many vital applied health research questions raised by Ugandan health faculty members at a recent multidisciplinary research training workshop in Mbarara. Participants refined their questions, developed appropriate methodology and discussed the potential for this research to affect local health programs. But after days of hard work, a more worrisome question arose: Where will the money come from to undertake these small studies?

The lack of research capacity and access to local research funds has precluded the development of quality-of-care research using the "plan, do, study, act" approach common in industrialized countries. Local health faculty members are best placed to identify high-priority problems, help assemble local resources to study and solve problems and, most importantly, push local stakeholders into action. Motivation for change would be high, given that the community would live with the benefits or on-going failures. Local research would also foster a culture of inquiry that would permeate the local health care system.

The scarcity of funding for locally applied research persists despite the dramatic increases in research dollars being spent in the developing world. The Bill and Melinda Gates Foundation, governments of developed countries and the World Health Organization have all invested millions of dollars in research on disease-specific health problems in developing countries, including tuberculosis, malaria and HIV/AIDS. Although this has led to important advances in health care, most projects are conceived, designed and managed by researchers from developed countries and offer little opportunity for local health faculty members to increase their research capacity. Even the Special Programme for Research and Training in Tropical Diseases (www.who.int/tdr/), which offers small grants to researchers in developing countries, does not accept applications beyond those related to infectious diseases. Furthermore, the program is run from a distance and local health faculty members are not involved in selecting the most relevant research projects.

To enhance capacity and find funding for locally applied research in developing countries, a new model is needed. Such a model might be found in the bold microfinance concept of the 2006 Nobel Peace Prize winner, Muhammad Yunus, who revolutionized financial opportunities for the poor in many developing countries.¹ An analogous approach could revolutionize research opportunities in such settings. Let's call it "microresearch."

Borrowing from microfinance principles, a microresearch model would offer grants of about \$3000 to those who normally have no access to research funding opportunities. Only immediately relevant, local, applied health research questions

would be eligible. Multidisciplinary groups of local faculty members would set the research priorities, assist in developing and reviewing grant applications, and assess the progress and outcomes of each project. Research networks could evolve, allowing local research groups to share new knowledge and develop best practices. Repayment of monetary loans is a measure of success in microfinance; the parallel in microresearch would be improvement in the health of communities, as assessed by community members. This approach would reward both the researchers and the communities.

Barriers, such as insufficient baseline local research knowledge and the capacity to do research, could be addressed by providing online access to clinical research education opportunities, such as those developed through the Canadian Child Health Clinician Scientist Program (www.cchcsp.ca). To ensure a high rate of success in research, prominent clinical and health services researchers worldwide could volunteer time to mentor a microresearch group.

A dedicated start-up fund of \$20–\$30 million, distributed among developing countries and managed by local universities, is needed. Bureaucracy must be kept to a minimum, and the major focus kept on the outcomes, including enhanced research capacity, answers to local research questions and regional health improvements. As with microfinance, the spinoffs for microresearch would likely be dramatic, with improved health reaching areas of the world where the need is greatest.

Making microresearch a reality will require champions to get the movement underway, perhaps as pilot projects in 2 or 3 countries. We need to persuade governments, nongovernmental organizations and volunteers to step up with the necessary financial and mentoring support. The developing world is waiting.

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Section Editor, Public Health

CMAJ

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REFERENCE

1. Gangemi J. Nobel winner Yunus: microcredit missionary. *Bus Week* 2005 Dec 26. Available: www.businessweek.com/magazine/content/05_52/0396024.htm (accessed 2008 Jul 24).

Appendix 2: Recruitment Poster

Clinical Research Training Workshop:

12th -23rd August 2013

Mbarara University of Science and Technology (MUST).



This Micro-research workshop will provide training and opportunities to do community based research. Especially research to improve health for mothers and children.

- Encourage collaboration,
- Provide mentors in Canada and East Africa
- Permit an exchange of ideas, strategies and knowledge local community needs,

Who is eligible to attend?

- Academic faculty staff in any clinical training program, such as nursing, pharmacy, social work, medicine etc. are encouraged.
- Trainees in clinical areas who would like to become researchers will be considered.

What will be expected from you ?

The workshop will take half a day every day for 2 weeks (12th -23rd August 2013)

What will you get?

- Excellent training on research
- Outstanding teachers:
 - Dr Noni MacDonald Journal Editor. Canada
 - Dr Robert Bortolussi Award winning Canadian researcher
- Course material on memory stick
- Certificate
- Opportunity to do your own research of up to \$2,000
- Ongoing support to do research through mentors, collaborators, research funding opportunities.

Learn secrets to successful clinical research projects

- How to do clinical research
- How to publish results
- How to write a Grant

"Modeled after the microfinance concept, Micro-research will provide small grants, training and mentoring to clinical researchers to ensure the researchers are successful in Uganda."

How to apply?

Contact: Research Coordinator, Healthy Child Uganda. Project offices, Red Cross premises, Mbarara.

Tel: 0382277645
0703 408 848

Appendix 3: MicroResearch Workshop Participants Contact Information and Area of Specialty

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Appendix 4: Small Groups and their Coaches

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Appendix 5: Program Outline

Building Capacity from a Research Idea to a Finished Article/Report to Knowledge Translation

Mbarara University of Science and Technology and Healthy Child Uganda
August 12 – 23, 2013

Week One

Day 1 (Monday 2-5pm)

- Welcome and introduction of faculty and participants – SA,NM
- Introduction to the Workshop and Objectives-SA
- Introduction to the Web program- EB,NM
- Defining the research question- NM

Group activity: Each course participant challenged to identify a research question from their own experience.

Day 2 (Tuesday 2-6 pm)

- Principles of Clinical Research-SA
- Pitfalls in Research- FB, NM
- Getting started on writing a proposal FO

Group activity: The group selects one of the proposals to develop and refine into a research project.

Day 3 (Wednesday 2-6 pm)

- What editors are looking for-EB, NM
- Group Reports – question selected and why- Chair NM

Group activity: Refine proposal; introduction group to their coach

Day 4 (Thursday 2-6pm)

- How a manuscript is reviewed including galley proofs - SA
- Basics and Local Research Ethics – EK

Group activity: Refine proposal

Day 5 (Friday 2-6 pm)

- Grant proposal review - SA
- Writing a report FO, NM

Group activity: Refine proposal

Week Two

Day 6 (Monday 2-6pm)

- Writing an Abstract Exercise** –SA, FB
- Oral and Poster exercise** -FO

Group activity: Refine proposal

Day 7 (Tuesday 2-6 pm)

- Principles of Knowledge- Translation -FO, NM
- Moving Research into Policy**- FB NM

Group activity: Refine proposal

Day 8 (Wednesday 2-6pm)

- Community Engagement –EB
- Career Planning FB

Group activity: Refine proposal

Day 9 (Thursday 2-6pm)

- Career Documentation FO

Group activity: “Polish” proposal for presentation.

Day 10 (Friday 2-5 pm)

- Each Small Groups Presents their research proposal

Group Activity: Awards and Graduation Ceremony

Small Group Research Sessions: Those participating in the program will be divided into groups. Each group will remain together throughout the workshop as they develop, refine and complete their research proposal. These sessions will be facilitated to help them focus the research proposal and develop their plan.

Each group gives a 10 minute research presentation at the end of the workshop (Day 10).

** means interactive seminar

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Appendix 6: Initial Project Topics

(Group's Selected Question in **bold**)

Group 1

- **Understanding the factors affecting the nutritional status of children living with HIV/AIDS in Bugamba Sub county, Mbarara**
- Understanding the challenges to provision of pain management for children with cancer and HIV in health units within Mbarara Municipality.
- Relationship between diet, financial standing of families and child health.
- How decision making affects health seeking behavior in families in Rugando Sub county.
- Factors contributing to lack of male involvement in improving utilization of family planning services in Bugamba sub county, Rwampara, Mbarara district.
- Factors affecting women's willingness to attend antenatal care services in Rwampara county, Mbarara district.

Group 2

- Assessing the impact of Volunteer health care workers in identifying response to obstetric emergencies in rural South Western Uganda.
- Assessing the knowledge of mothers on infant feeding practices in rural Uganda.
- Factors that influence the high incidence of infant malnutrition in Mwizi sub-county, Mbarara District.
- Determine the relationship between nutritional status and maternal resources for child care for Children <5years in Isingiro District.
- Factors that influence male involvement in ANC in Mbarara Municipality.
- **Assessing the impact of Women groups in improving child nutrition- The impact of maternal socioeconomic status on infant nutritional status and illness in rural South Western Uganda.**

Group 3

- **Can a phone contact prior and after medical referrals improve maternal and prenatal outcomes MRRH?**
- What are the knowledge, attitudes and practices towards safe medical male circumcision among the youths in MRRH?
- Why are there many under five mortality in Masha Isingiro District?
- Does the level of education of mothers affect the nutrition status of children?
- What can be the interventions to stop dangers of traditional theurapetical surgical practices in children HCH?
- What are the knowledge, attitudes and practices towards sanitation and safe water practices in people of Buhweju District?

Group 4

- What are the factors that contribute to lost to follow up cases in paediatric HIV clinic?
- Would a campaign for HIV testing among teenagers help to reduce on the high HIV child mortality rates?
- What is the prevalence and risk factors of septic abortion among teenagers attending Gynaecology clinics?
- Does empowering Diabetes type I clients improve on the use of treatment management services?
- **What factors contribute to delayed health seeking behaviors' in children with severe malaria reporting to Paediatric ward at Mbarara Regional Referral Hospital?**
- Does community sensitization impact on cultural practices and attitude of men towards improving *coupling* for antenatal services?

Appendix 7: Judges Scoring System

Judges Scoring System					
	Points	Group 1	Group 2	Group 3	Group 4
Feasibility: eg. Topic, time, budget	35				
Importance and Relevance: to local community, Africa and beyond	35				
Addresses Millennium Goal 4 or 5	10				
Novelty	10				
Evidence multidisciplinary team participation	10				
Total Points	100				
Comments					

Appendix 8: Workshop Evaluation

Scores and Comments N= 24 of 25 (96%)

Score: 1=low to 5=excellent or agree strongly

a. How would you rate this workshop?

Mean= 4.9 1=0, 2=0, 3=0, 4=3, 5=21, n=24

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

Mean= 4.5 1=0, 2=1, 3=2, 4=5, 5=16, n=24

c. Did it stimulate your interest in research?

Mean= 4.8 1=0, 2=0, 3=1, 4=4, 5= 19, n=24

d. Would you recommend it to a colleague?

Mean= 4.9 1=0, 2=0, 3=0, 4=2, 5=22, n=24

1. Why did you come to the workshop?

Learn about research methods, how to write article and get it published (x2)

Gain knowledge and skills in research (x17)

To advance my professional career

To learn what MicroResearch is about (x2)

Get learn how to better formulate research questions

To learn how to refine my research question

To learn how to improve my research writing skills

To learn more about grant writing

2. What was most helpful in the workshop?

The presentations, the memory sticks with all the power points (x2)

Research principles

How to write an abstract (x5)

Everything (x5)

Skills in research, teamwork and interpersonal skills (x2)

Being energized to do scientific and community research

The discussions taught me that one can never be poor as long as one has a positive and moves forward- yes we can do our own research

KT, ethics, CV and abstract

Process of writing a proposal from formulating then refining the question to developing the proposal outline for presentation

Developing a proposal, skills in proposal writing

Interactive discussions

Presentations were very good, easy to understand, facilitators were so good

Write a proposal and KT

Presentations were motivational

The facilitators were resourceful and knowledgeable

Now I can formulate a research question, write an abstract and a report with more confidence

Community engagement
Research principles
The explanations to help me understand each topic
Team work and daily tasks to develop the proposal

3. What might be changed?

nothing (x11)
'love' for my personal career (? Not understood)
consider handouts so easier to take notes
all day instead on two weeks half days
some presentations should be more practical
make course 3 weeks long ; 4 weeks long (x2)
have course in morning not afternoon
make even more of the lectures interactive
have some presenters more oriented to slides before present
would be good to form a journal club for updates
take more participants
introduce this concept to MUST institutes
maybe should pay more

4. What lectures were most helpful?

defining research question (x5)
finer concept
pitfalls (x2)
what editors want (x2)
abstract (x9)
KT (x5)
poster presentations (x2)
almost all/everything (x7)
Especially where we had to evaluate ourselves
community engagement (x5)
principles of clinical research
CV (x2)
each lecture had a special offer in a line with research
ethics, especially the discussion
IMRaD (x3)
guide for mentors and mentees (x1)
developing a career

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

None (x21)
Add on one sample size
Some presenters seemed to be learning too as they went
None, the timing of each lecture is appropriate too.

6. How will you use what you have learned?

I would like to make a MicroResearch group where I work so we can do MicroResearch and publish what we learn

It will help in my research proposal writing – including this MicroResearch proposal

I want to do this work, find the answer to questions and even publish

I am already starting to think of other MicroResearch questions

To teach my colleagues about MicroResearch

I will put into practice what I have learned. I want to excel at MicroResearch

I am going to start thinking and writing on other MicroResearch questions. I will apply what

I have learned in writing new grants. I want to become a better researcher

It will help me a lot in my post graduate research

I want to improve my research ideas, perform more research, aim at publishing and will emphasize KT in any research set up.

I will use it in my daily life experiences. Whatever I acquired in this workshop cuts across all and does not just relate to research.

I will teach my students how to develop better research proposals and to do better studies. I will create community based programs for my students that open their eyes on the effect of research and what impact it can have both on them and on the community.

By sharing with other team members what we have learned here through journal clubs and presenting.

Complete our proposal and gain the grant, then IRB approval.

I will start writing proposals (x2)

To write productive proposals and to help my colleagues increase their research knowledge and skills

I hope to become a MicroResearch mentor and help others

Will enable me to develop grants

Continue participating in research

Engage the community on how to use the available resources

Engage community on practices for well being and livelihood

To continue writing more proposals but better ones now to help our generation

Teach my colleagues in the clinic about community engagement

I will also now try to be better organized

Other comments:

I have spent 5 years in a research organization but have not acquired the skills like I did in this course ...thank you

Already recommending this course to my co-workers and my friends for next year

To improve on community research is to find what is most important

Add in sample size lecture (x3)

Great experience

Kindly allow more participants because so many applicants are yearning for this training

Wish course could be extended and a diploma awarded

Some facilitators did not always understand the points, good to have others explain some

First room was too small – we were so squeezed

Thank you for organizing such an enriching course which has basically widened my knowledge of research

Thank you for all you have given us. I really appreciate research much more. It was not an area I was interested in when I started university but my interest has been built and now I can encourage students to pursue research and they can make great change.

Please do twice yearly training (x2)

Increase the grants at least for post graduate proposals

Thank you very much for showing me I can do research

It really has been great to attend this training and I appreciate the organizers for all their efforts towards making this training a success

I have enjoyed and learnt a lot in this course. Wonderful- it has been my dream to do research. God bless you and do this again and always evaluate our performance so we can do better and better

Include even more on KT

It was such a great learning experience. Am happy to have been given the chance to attend. I feel so proud and will share my knowledge with my colleagues. Thanks to MicroResearch I am sure to become a better researcher

Thank you for facilitating well. It has been interesting to bridge the gap I have been having in research.

Appendix 9: Judges Comments

Group 1 Factors contributing to malnutrition in children with HIV/AIDS in South west Uganda

Do sample size calculations and determine feasibility.

Do through literature search to avoid duplicating any previous study.

Consider whether having a cohort of well nourished for comparison may make the study more interesting

Explain well your methods for eligibility, recruitment, including how will address privacy etc

Think about how you might determine options for addressing some of the factors.

Group 2 Social Support Systems (SSS) and Nutritional Status of Young Children in a Rural Community in Masha Sub County

Consider other measurements for malnutrition –need to justify choice and note rationale and limitations

Personnel is very high in the budget – how much can be done by the team?

Consider sequential methods- qualitative the quantitative

Consider comparative study to find if there are differences in two areas.

Suggest consult Amon at HCU on which areas are likely to be most useful so further explore rather than duplicate.

Are there children with the same SSS factors who are doing well – what went right in those circumstances?

Group 3 Maternal referrals: Can a phone call prior and after improve maternal-fetal outcomes?

Document the time delays at present between arrival and intervention for background

Definition of delay and current delay according to MOH

Will be important to include your data collection questionnaire in the proposal appendix so reviewers can see what capturing at referring centres and final centre.

Highly original idea. Will be interesting to see if becomes taken up by other sites even before study ends!

Jerome Kabakyenga's thesis may be helpful.

Group 4 Determinants of delayed presentation of children with malaria to Kazo health centre.

Need to be clear on definition of determinants vs associated factors.

Consider looking a delay and well as not delay – if not enough resources make this clear i.e rationale for why choices in methodology.

Ensure feedback to include VHT

MUST/HCU MicroResearch Training Graduation photo

