



2021 Eastern Africa MicroResearch Forum Final Report

**Held Virtually
June 23-24, 2021**



***Research Ethics
Research Education
Knowledge Translation
Focus Group Discussions
Research Projects
Forward Planning***

Invited Participants From

Mbarara University of Science and Technology (MUST) and Healthy Maternal
Neonatal Child Health Institute (MNCHI), Mbarara Uganda

University Teaching Hospital of Kigali, Kigali Rwanda

Kabarak University, Nakuru, Kenya

Mildmay Uganda, Entebbe, Uganda

Daystar University, Nairobi, Kenya

University of Malawi, Mangochi, Malawi

St Francis University Hospital, Tanzanian Training Centre for International Health
(TTCIH), Ifakara, Tanzania

Funding and In-kind support for 2021 MicroResearch Forum

Primary funder: Royal College of Physicians and Surgeons of Canada, through its International Development, Aid and Collaboration funding program facilitated by Royal College International.



Others: Academics Without Borders; Local African sites – including Hub site at MUST; IWK Health; Nova Scotia Health; Dalhousie University; Dalhousie Medical Research Foundation

Objectives of the 2021 MicroResearch Forum

The objectives of this two-day Forum were to:

- **Present and share findings from MicroResearch projects** by providing investigators an opportunity to present their projects and discuss implications on local/regional health programs and policies
- **Develop an advocacy and knowledge translation plan** related to the MicroResearch research projects
- **Draft a policy briefing note for stakeholders** based on the Focus Group Discussion on future directions by MicroResearch participants. (This will be used in the 2021 future direction MicroResearch Strategic Thinking plan)
- **Networking:** Facilitate the development of a locally designed and supported virtual collaborative MicroResearch network to support synergistic community focused health research efforts in East Africa
- **Equip participants to return to their local site** with improved knowledge and skills to teach and mentor other researchers by discussion on: (i) Research Ethics, and (ii) Education (fostering a culture of enquire).

Introduction and Background

Poverty, hunger, illiteracy, maternal and child deaths have haunted the social landscape of low income countries for generations. These countries bear 25% of the globe's disease burden but have less than 3% of its healthcare professionals (HCP) and 2% of the research funds. The necessary elements to improve population health in these countries is a cadre of skilled local investigators who understand local health problems and are capable of doing research to find solutions that fit the local culture, context, and resources.

MicroResearch (MR) 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. The program began in 2008 as a collaboration between faculty at Mbarara University of Science and Technology (Jerome Kabakyenga) and Dalhousie University (Robert Bortolussi and Noni MacDonald). Since then, 51 research capacity building and writing workshops have been held in 8 countries with 1,143 participants. More than 120 locally driven research projects have been launched with 48 completed and published in peer-reviewed international health journals. More information on MR can be found on the website: www.microresearch.ca.

The MR Forums allow MicroResearchers to share knowledge gained from their research projects, stimulate network development, and suggest future direction for

MR. The 2021 Forum was supported through a grant from the Royal College of Physicians and Surgeons of Canada. The original 2019 proposal envisioned a face-to-face meeting in East Africa with Canadian and African researchers. Due to COVID-19 and restrictions on travel, the original Forum proposal was redesigned to be done virtually. The revision required the upgrading of internet capacity in Africa and for leadership and coordinating roles to be assumed by African collaborators. The revision was accepted by the Royal College in 2020.

Participants from several eastern Africa MR sites were invited to attend virtually. Selected recent MR project leaders whose research projects/findings fell into the three MR Forum theme areas - Research Ethics, Research Education, and Knowledge Translation - were invited to submit prerecorded presentations (5-minute or 10-minute) to be presented at the Forum. Special invitations were also extended to panelists from the MR sites with expertise in each theme area. Leaders from these local MR sites in eastern Africa were also invited to attend. Partners and Supporters of MR from Canada and other countries were invited as observers. Strategies to engage participants in the virtual format were employed and participation was good. (See full list of presenters, panelists, and guests/observers, Appendix 1)

Forum Program

Due to time differences between eastern Africa and Canada as well as work-related time constraints, after discussion with the MR east African Hub site leaders (MUST) the virtual Forum was scheduled to optimize participation from all sites. (See Appendix 2 for full Forum Program)

Day 1 (June 23, 2021)

Opening Comments

Participants were welcomed to the 2021 MR Forum by Associate Professor Charles Tushabomwe-Kazooba, Deputy Vice Chancellor (Finance and Administration) of Mbarara University of Science and Technology (MUST). He began his introduction with a tribute to the vision of MicroResearch and reminded the audience that success in research, as in life, requires a prepared mind, quoting from Abraham Lincoln *"Give me 6 hours to chop down a tree and I will take the first 4 to sharpen the axe..."* He shared with the audience the successful personal journey he and two friends embarked on 20 years earlier: *"Like the way we made it, you will also make it."* He ended with a quote from Paul Arden: *"It's not how good you are, it's how good you want to be."*

Drs. Robert Bortolussi and Noni MacDonald then presented the Forum objectives (see above), schedule, format and funders.

Session 1 – Theme: Research Ethics

Objective: To stimulate discussion on the challenges faced by Research Ethics Committees (REC), its members, and by researchers during the research ethics review process in eastern Africa.

Panel Members: Michael Bowen (Leader REC, Daystar University, Nairobi Kenya), Charles Tushabomwe-Kazooba (Vice Chancellor Finance and Administration, MUST, Mbarara, Uganda) and Gladys Nakalema (Member and Secretary Research Ethics Committee, MUST) and Robert Bortolussi (Chair).

Research Ethics Poll of Forum Participants:

What are the biggest challenges concerning research ethics at your site? N=26*(Choose all that apply)



*Participants selected one or two options. Percent is estimated frequency of each option by the 26 respondents.

Discussion: To lead off discussion, the Chair, Robert Bortolussi, made a 10-minute presentation on the principles of international research ethics; respect for the autonomy of volunteers, beneficence, justice and respect for communities. Research Ethics Committees (REC) play an essential part in this process by guaranteeing decisions are made in the interests of safety for participants and at “arms length” from investigators. He described a recent survey of MicroResearchers on their experiences with RECs. Researchers appreciated the need and the efforts of REC members, but sometimes encountered challenges with the process, time to gain feedback, and the cost of applying to the REC that they incurred.

This was followed by three MR research project presentations with comments and queries from the panel members and other participants (recording available on: https://youtu.be/DT0IXpa3_sk).

MR Project Presentations during Session 1:

1. Jean Pierre Gafaranga (Rwanda): “Cervical cancer screening: Why do not Rwandan women go for cervical cancer screening?” (5 min)
2. Bives Mutume (Uganda): “Factors associated with relapse among patients with severe mental illness at Kampala International University Teaching Hospital Mental health and Psychiatry ward” (5 min)
3. Michael Chifundo Manonga (Malawi): “Exploring adherence to newly introduced oral drugs for TB drug-resistant patients” (5 min)

Members of the panel gave suggestions on what might improve the three project proposals. They then discussed what changes to REC process should be considered to

shorten the time for a decision and to lower the cost to researchers. There was agreement that REC unpaid volunteers work diligently and carefully to meet their responsibilities. Better support for REC staff and education of researchers will be helpful. REC processing of research projects involving minimal risk to participants was discussed. Although all such research entails some degree of risk, streamlining the processes should help both researchers and REC members. But the issue of costs to the researcher for REC processing generated the most debate. The panel agreed that running an REC properly does incur costs. The question therefore was “Who should pay?” Should investigator-initiated research with a goal to improve local health practices bear the same cost as industry sponsored research with a goal of profit to industry? Cost to researchers vary widely in eastern Africa, depending on the site and status of the applicant. Strategies to improve the process so that roadblocks for researchers are minimized were proposed. But more time is needed to formulate proposals to address the challenges and opportunities.

“I think developing countries, we have a long way to go in this. We need a policy document I would be happy working on this document.” (Forum participant from Uganda)

“It’s unfair for a project of \$5m pays same clearance fees as MR = \$1500? This is unethical!!!” (Forum participant from Uganda)

“I believe the majority of MR awards are given to 'starters'. ... To such, it is important to pave away to support this after all the university will benefit from the publication. ... The 'starters' later on are ones to attract big grants that may eventually benefit the university.” (Forum participant from Uganda)

Next Steps: A working group should be formed to review REC practices and policies from other sites regarding time for processing requests and charges to researchers. The task of the working group will be draw up recommendations that may help to address the challenges faced by researchers.

The area of mental health was seen as one that is underserved in eastern Africa and deserving of more attention, raising interest in a potential network.

Session 2 - Theme: Research Education – Growing a Culture of Inquiry

Objectives: To discuss the importance of inquiry and research in the education and day-to day-work of health care professionals in eastern Africa. To foster exchange of ideas on challenges and ways forward to achieve and grow sustainable research education in eastern Africa.

Panel Members: Towela Maleta (Research Manager, Africare, Malawi); Anchilla Banegura (Head of Research and Development of Mildmay Uganda); Jonathan Nthusi, (Head of Family Medicine, Kabarak University, Kenya); Beth Cummings (Chair)

Discussion: The Chair, Beth Cummings, opened the discussion with a brief presentation including a review of the goals of MicroResearch to improve health care capacity by learning how to ask and answer questions that will address local problems through workshops, grants, and mentoring that allows hands on research experience. An overarching goal is to foster critical thinking, teamwork skills, and creativity among participants that will be integrated back to the workplace and foster a culture of inquiry reaching beyond the initial participants. The elements for successful cascade training (also known as “train the trainer”) was presented.

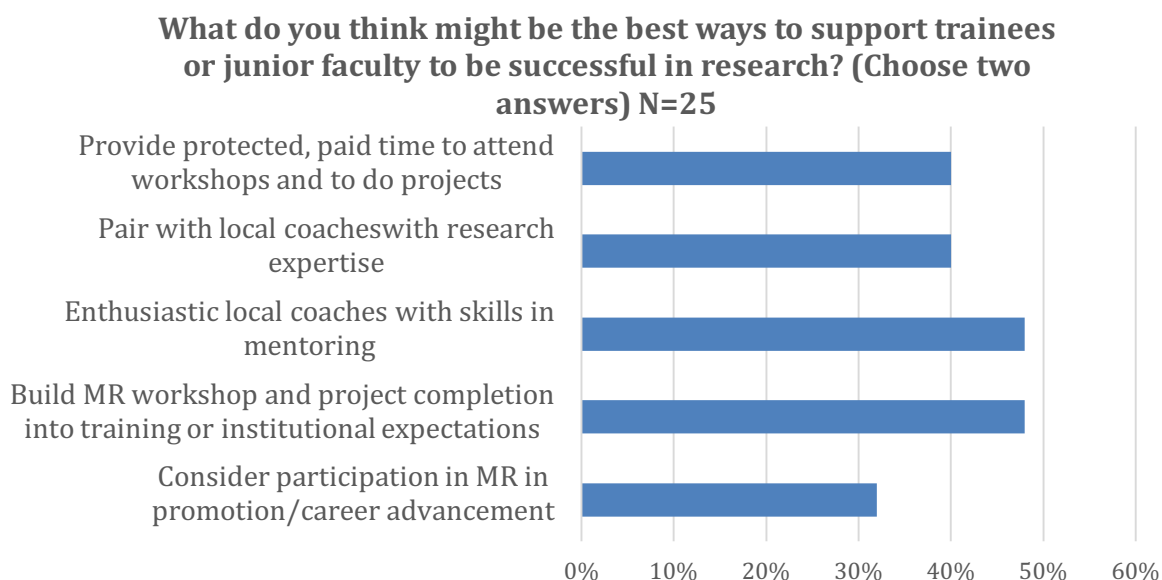
This was followed by three MR presentations with comments and queries from the panel members and other participants (recording available on: https://youtu.be/Df81H_J07Kg).

MR Project Presentations for Session 2:

1. George Mwenye-Phiri (Malawi): Exploring knowledge and practices of Covid 19 preventive measures among secondary school teachers in public schools within Lilongwe City, Malawi
2. Elizabeth Kemigisha (Uganda): Voices of young adolescents in schools regarding the COVID-19 pandemic and prevention measures: A qualitative study in South Western Uganda using a mailbox technique
3. Polyphile Nthihinyurwa (Rwanda): Cascade training for medical residents in Rwanda following a MicroResearch workshop

The area of COVID-19 research was seen as one that is acutely needed at this time in east Africa raising interest in a potential network.

Research Education Poll of Forum Participants:



Four questions were posed to the panel about the benefits, challenges and ways to address challenges of MR-style research education, ways to foster communities of scholars or research networks and how to implement effective cascade training. MR was seen as having very positive effects on individuals and participating institutions

injecting enthusiasm, willingness to ask questions, and a desire to make change. Institutions need to see research as a resource in which to invest. MR was cited as a valuable and safe space to learn end-to-end research skills. The multidisciplinary approach was seen as important in breaking down silos. Challenges include time to participate in research once HCPs are on the job and a theme that emerged was that starting this training early in undergraduate programs would be beneficial. Discussion regarding the design of such programs occurred with challenges of aligning different training programs cited. There was discussion of having two modes of training, one for students and one for HCPs in practice. Creation of communities of scholars was seen as valuable and there was enthusiasm for Polyphile Nthihinyurwa's presentation (see above) of how he took his MR workshop experience and used the presentations and tools to the Obstetrics and Gynecology residents at his institution (an example of cascade training in action). Jonathan Nthusi summed up the session well by stating that MR is the seed that will grow to have reach beyond what we may design: *"The interaction we have had are the seed that will grow their roots and impact on others and the cycle will continue. ...the problems we have globally can be solved if everyone has a mentality of inquiry for new solutions."*

"Microresearch as a component in the curricula hasn't been easy. research is individual for the academic award. it remains a personal uptake." (Forum participant from Uganda)

Next Steps: A working group will be formed to make more detailed recommendations about integrating MR training into undergraduate and postgraduate HCP training.

Day 2 (June 24, 2021)

Session 3 – Focus Group Discussion: Future Directions for MicroResearch – African Perspectives

Selected participants were invited to take part in a Focus Group Discussion (FGD) led by Dr. Schola Ashaba on the morning of June 24th. The participants were chosen to provide a range of perspectives (both senior and novice) and countries of eastern Africa. Twelve participants joined virtually from Malawi, Uganda, Rwanda and Tanzania (see Appendix 3).

The discussion was recorded and will be analyzed through a qualitative process to provide insights for strategic thinking for the future direction of MicroResearch at an international meeting planned in November 2021

The three areas that were explored in the FGD:

1. How do you envisage your (as a MR graduate) contribution to the evolution of MR – i.e. new directions and growth?
2. What would make MicroResearch so attractive that you would want to become more involved?
3. What new directions or initiatives should MicroResearch consider?

Participants are noted in Appendix 3 and most come from Uganda, however, others joined from Rwanda, Malawi and Tanzania. The FDG was recorded, will be transcribed, verified, and analyzed for recurring themes.

Session 4 - Theme: Knowledge Translation

Objectives: To stimulate discussion on the challenges faced by MicroResearchers in knowledge translation and foster exchange of ideas on challenges and ways to move knowledge translation education and enterprise forward in order to improve impact of project research.

Panel Members: Isha Grant (Ministry of Health, Uganda); Taremwa Ivan Mugisha (Senior Laboratory Technologist at Mbarara Regional Referral Hospital, Uganda); Lisine Tuyisenge (Senior pediatrician at University Teaching Hospital of Kigali and Chair of Rwanda Paediatric Association, Rwanda); Teddy Kyomuhangi (Program Manager for Healthy Child Uganda and Director of the MicroResearch African Hub, Uganda); and Noni MacDonald (Chair).

Discussion: The Chair, Noni MacDonald, began the discussion by summarizing major KT issues, including the importance of KT if local health is to improve, the complexity of KT, and the necessity of a plan in order to ensure transfer to project findings fit with different target groups using adjusting tools and actors to fit those audiences.

This was followed by five MR presentations with comments and queries from the panel members and other participants (recording available on: https://youtu.be/Df81H_J07Kg).

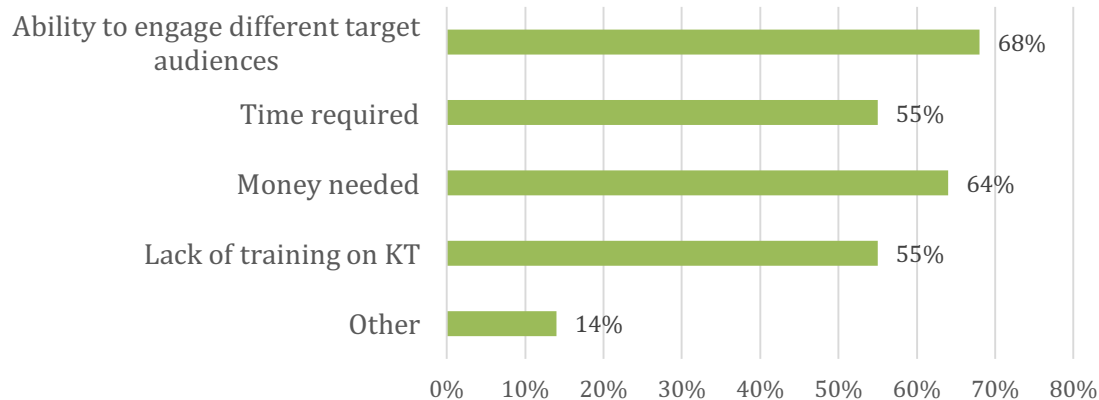
MR Project Presentations for Session 3:

1. Sifora Fanta Chaleabo (Kenya): "Lab SOPs: Perceived factors influencing adherence to standard operating procedures among laboratory personnel"
2. Calorine Natuhwera (Uganda): "Knowledge, experiences, challenges faced by adolescents with disabilities in handling menstruation and forms of support by caregivers in Mbarara District, Uganda"
3. Elizabeth Kemigisha (Uganda): "Evaluation of a short menstrual hygiene training among adolescent girls in Nakivale refugee settlement"
4. Catherine Abaasa (Uganda): "Healthcare providers' and caregivers' perspectives on malnutrition of children aged 0-59 months"
5. Janeth Bulemala (Tanzania): "Exclusive Breastfeeding: Assessment of attitudes among mothers attending Ifakara Reproductive & Child Clinic"

The project presentations were well-received. Two areas of research - menstrual hygiene and malnutrition - raised interest about the potential for networks across sites in these two areas. Dr. Isha Grant noted that the findings from the two studies in Uganda merited presentation to Uganda MOH sections. She will help facilitate this.

Knowledge Translation Poll:

What are the biggest obstacles for KT for your research?
(Choose all that apply) N=22



This stimulated a lively discussion with contributions from the panelists as well as many participants both in person and in a number of chat comments:

“For knowledge translation to succeed at different levels is to include the gate keepers during the initiation to completion of research. At least with the different projects that ended up in policy included key people like policy makers, district management team (both technical and political), religious leaders, cultural leaders” (Forum participant from Uganda)

“KT requires a good analyses of stakeholder interest. The institutions we work in need to be seen as stakeholders of high importance and should be prioritized in the KT package so that they may give us the time required.” (Forum participant from Malawi)

“What is the role of research directorate in our respective institutions? they have a bigger voice than individual MR teams” (Forum participant from Uganda)

There was definite interest and reported need for more KT training beyond what is given in the traditional MR workshop: *“KT should be well structured and planned for including guidance on its application using the different theories, models and frameworks. This can be achieved through a KT training.”* (Forum participant from Uganda)

Three options were briefly explored regarding expanding KT training:

1. For the traditional MR workshop – move the introduction sections on what is MicroResearch and developing the research question to take place several weeks before the workshop to allow time to engage with the community and ensure the questions are important to the community.
2. To develop a “consult a MR expert” service where KT experts, statisticians, qualitative methods experts etc. could be consulted virtually for help as full proposals are being developed and/or data analyzed.
3. Hold separate short KT workshops to help teams “flesh out” their KT plan after their project is completed.

Overall this KT theme session was well received with several noting even more time for discussion would have been appreciated given how interesting and pertinent the topics presented were across the region.

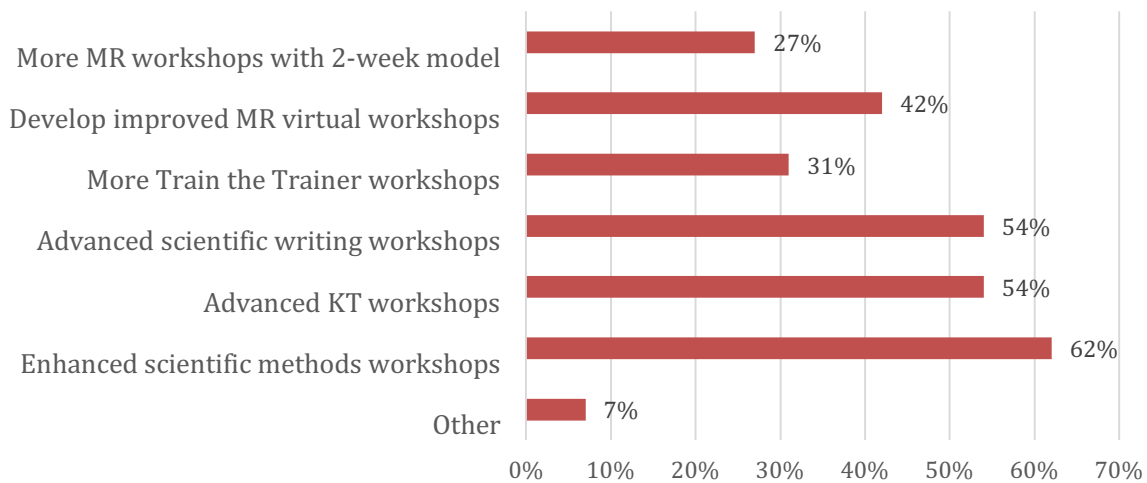
Next Steps: Nurture the development of the two proposed networks – menstrual hygiene and also on malnutrition. Develop a Knowledge Translation Working Group charged with determining: How to offer more training for KT that meets the needs of the researchers.

Session 5: Open Discussion and Debate

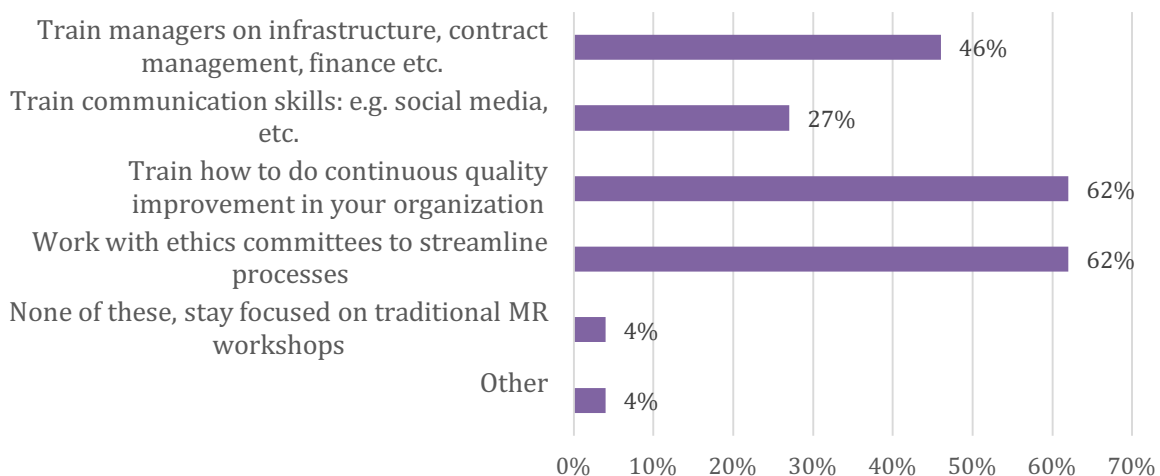
Recording: <https://youtu.be/uirigmS-gug>

Final Discussion Polls:

What workshops should MR focus on over the next 3-4 years? (Choose all that apply) N=26



What else should MR try to achieve over the next 3-4 years? (Choose all that apply) N=26



A very lively discussion ensued about potential next steps for MicroResearch- a keen interest in expanding and growing MicroResearch. From the Forum presentations, several suggested networks in linked interest areas (mental health, menstrual hygiene, malnutrition and COVID-related research) would help researchers to further grow as well as share their learnings. As well there was support for the formation of working groups to develop input for the November Strategic Thinking meeting in the areas of Research Ethics, Research Education, and Knowledge Translation. There was much appreciation for the Forum and a desire for more MR Forums to take place on a regular basis.

"This has really been very informative forum. Hearing from different experiences is a good learning process. Thank you to all the presenters and panelists for the fantastic ideas."

MR Virtual Forum participant from Uganda

"Thanks much to MR Excellent team and the workshop"

MR Virtual Forum participant from Tanzania

Forum Evaluation

The Forum evaluation was completed by 35 participants (See Appendix 4 for the evaluation results). Of note, despite competing demands on participant time because of COVID; 33% were doctors or nurses and 41% were allied health professionals. The Forum was rated as good to excellent by 94% (66% rated excellent). Several noted that MicroResearch should hold regular virtual MR Forums so research can be shared and networking facilitated. Participants identified a number of highlights, including the KT session, the use of polls, and the opportunity to meet and contribute beyond their own MR site. Many suggested ways they would use what they had learned during the Forum, including looking more into research ethics principles and placing more emphasis on KT. Several noted they would like to expand MR sites and carry MR education principles further. Several problems with internet connections during the Forum were mentioned including; unstable internet, low volume on some PowerPoint presentation recordings, and the lack of time for Q&A. Some ideas for the future were mentioned such as the potential for breakout sessions MR Forums.

Closing Remarks:

Dr. Jerome Kabakyenga (Director of MNCHI and co-founder of MicroResearch) gave the concluding remarks on behalf of Mbarara University of Science and Technology (MUST) and the participants. He thanked all involved for their active participation: *"This was a very successful Forum in spite of the challenges of the COVID pandemic"*. He reflected on the remarkable progress that MicroResearch has contributed to in Uganda over the past 13 years: health challenges have been identified, solutions found, and new leaders in the health sector have emerged. He called on all Forum participants to "carry the flag" in this journey.

Final Thoughts and Recommendations

Situational

The 2021 Forum coincided with a significant upswing in COVID 19 cases and disruption to usual activity in eastern Africa through lockdowns. Because of this some planned presenters could not participate due to personal or family illness or increased work intensity due to the pandemic. Despite these challenges there was excellent participation and some participants juggled emergency meetings with workshop attendance showing their dedication to MR in the face of these challenges. In addition, one of the six original objectives of the proposed Forum- to include "Writing Skills" workshop was omitted. Because it would have required 2-3 extra days it was deemed impractical to be included.

Technical

1. Pre-recorded PPT were seen as a benefit, as pre-recorded meant local internet issues at the time did not preclude or slow presentations. However, sound quality was occasionally poor – having more IT support at sites would help.
2. There should be brief bios for each panelist and presenters made available to participants ahead of time.
3. Real time Polls of participants worked well and were much appreciated, as was the opportunity for comments in the chat to be monitored and noted aloud for key observations and queries.
4. The virtual Focus Group Discussion (FGD) Session worked well and will provide valuable insights for future planning. This exercise should be considered for future virtual forums. The analysis and summary of the FGD should eventually be published as a supplement to the Forum Report.
5. Internet stability issues did plague some participants, but overall did not seem to preclude significant participation.

Networks

Four topic areas were raised for development of a network for ongoing dialogue:

- a) Menstrual hygiene
- b) Malnutrition
- c) Mental health
- d) COVID- 19 related research

Working Groups

Three working groups were proposed to refine and complete recommendations:

- a) Research Ethics
- b) Research Education
- c) Knowledge Translation

Other Considerations for Workshops and Forums

- 1) Revise traditional MR Workshop to offer pre workshop virtual sessions on what is MR and how to ask a research question. These sessions could be held

- a few weeks prior to the workshop, to allow participants to consider their research question before the workshop.
- 2) Consider holding virtual MR Forums regularly with presentations and panels – future session topics may include publishing, grant writing, REC preparation, Knowledge Translation, and cascade training.
 - 3) Consider breakout topic groups in a Forum – and possibly have “working group” and “network” meetings.

A heartfelt thanks from MR International to all who supported the 2021 Virtual MR Forum planning and to the panelists, presenters and the participants who undertook this despite COVID-19 pressures.

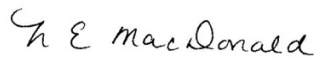
A special thanks to Teddy Kyomuhangi for her dedication before and during the event. Without her help the Forum would not have been as successful as it was.

*“Thanks so much for this wonderful event. I have learnt a lot.”
MR Virtual Forum participant from Uganda*

Report respectfully submitted by



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