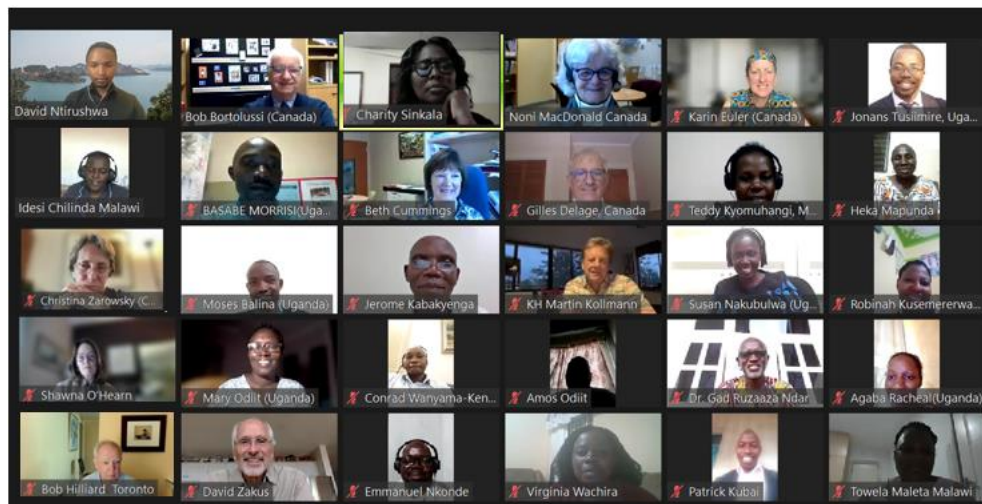




2023 MicroResearch International Forum Final Report

Held Virtually
June 19-21, 2023



Participants, panelists, and presenters at the 5th MicroResearch International Forum

Climate change and its impact on health

The potential impact of universal primary healthcare

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

Kisii University, Kisii, Kenya

Korle-Bu Teaching Hospital, Accra, Ghana

Mildmay Uganda, Entebbe, Uganda

Meru University of Science and Technology, Meru, Kenya

University of Malawi, Mangochi, Malawi

CHUK University Teaching Hospital of Kigali, Kigali, Rwanda

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

Funding and In-kind support for 2022 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 Research and Innovation; Dalhousie University Faculty of Medicine

Objectives of the 2022 MicroResearch Forum

The objectives of this three-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
- **Provide participants with a better understanding of:**
 - i. **Climate change: The impact of the environment on health** - Climate change is changing the world we live in with significant impact on our health and wellbeing.
 - ii. **The potential impact of universal primary healthcare** – Consideration of the challenges that may be expected, the impact on existing human resources and infrastructure, as well as the educational challenges to gear up to this new model.
- Collect feedback on the future of MicroResearch through the redevelopment of the **Vision, Mission, Guiding Principles, and Strategic Pillars**

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) tries to address these inequities through 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 MR Forums allow MicroResearchers to share knowledge gained from their research projects, stimulate network development, and suggest future directions for MR. The 2023 Forum was supported through a grant from the Royal College of Physicians and Surgeons of Canada. Like the previous two Forums in 2021 and 2022, this event was conducted virtually. The virtual format has been successful and well-received.

Participants from several eastern Africa MR sites were invited to register for the virtual Forum through a personal invitation, the MR WhatsApp group and social media. A call for abstracts was put out for MR team leaders to submit pre-recorded presentations of their work (5- or 10-minute) to be presented at the Forum. Special invitations were extended to researchers from MR Africa sites and from Canada with expertise in each theme area to act as keynote presenters, panelists, and guests. The chat function on Zoom was used to engage participants in the virtual format and participation exceeded previous MR Virtual Forums.

Forum Overview

A total of 114 people joined as participants, presenters, and panelists over the three days, with many attending all 3 days. Participants joined from Uganda, Kenya, Malawi, Tanzania, Rwanda, Ghana, Somalia, India, and Canada.

Due to time differences between eastern Africa and Canada as well as work-related time constraints, the virtual Forum was scheduled to optimize participation from all sites.

Day 1 (June 19, 2023)

Opening Comments:

The first day of the Forum opened with a moment of silence to express solidarity with Uganda in the aftermath of a rebel attack which killed over 40 children in a school in Southwestern Uganda on June 18. Following this acknowledgement, an overview of the Forum objectives, format and schedule was presented by Dr. Bob Bortolussi.

The official opening of the 2023 Forum, began with welcoming remarks by MicroResearch co-founder, Dr. Jerome Kabakyenga from Mbarara University of Science and Technology, Uganda. Dr. Kabakyenga is one of the three co-founders of MicroResearch, along with Drs. Bob Bortolussi and Noni MacDonald. Dr. Kabakyenga's opening address emphasized how far MicroResearch has come in the past 15 years since being introduced at Mbarara University of Science and Technology in 2008. As it is celebrating its 15th anniversary, MicroResearch is looking forward to a future of growth and continued engagement:

"I think we are at the stage where MicroResearch is entering a new phase, whereby we are starting the process of handing it over to the young and energetic people who will take it to a different level" – Dr. Jerome Kabakyenga

Session 1 – Theme: Climate change: The impact of the environment on health

Objective: To discuss impacts of climate change on global health and well-being and the role of community based research in addressing these concerns.

MicroResearch Project Presentations:

To lead off the session, MR teams presented both completed projects (10-minute presentations) and ongoing projects (5-minute presentations).

- Catherine Abaasa (Uganda): "Community perceptions and practices on quality and safety of drinking water in Mbarara City, Southwestern Uganda"
- Sserunkuuma Jonathan (Uganda) "Readiness of health facilities to diagnose, manage and prevent the Ebola epidemic along Border districts in Southwestern Uganda"
- Paundi Kulanga (Malawi) "Factors associated with COVID 19 related stigma among health care workers: "a case of Mangochi, Malawi"
- Simon Chima (Malawi): "Exploring knowledge and practices of COVID-19 preventive measures among secondary school teachers in public schools within Lilongwe City, Malawi"
- Nabwire Rebecca Williams (Uganda): "Experiences of patients with sickle cell disease and their caregivers at Bundibugyo General Hospital"
- Isaac Omwenga (Kenya): "Factors contributing to the widespread use of marijuana (cannabis sativa) among college students in Meru County"

After these presentations, two speakers gave short presentations on the intersection between climate change and health.

Dr. Ronald Twongyirwe from Uganda began with a look at the African perspective. His presentation provided an overview of the climate change science and outlined the evident links between health and the changing climate, using African specific examples such as the impact of droughts and of flooding and its impact on agriculture, the economy, food security, and malnutrition. He concluded his presentation with a discussion of some action that African countries have taken in addressing climate change and its impact on health.

Dr. David Zakus reinforced Dr. Twongyirwe's comments with Canadian examples, such as the recent wildfires across the country. Working through how climate change directly and indirectly impacts health, one example in particular sparked interest among the participants. Dr. Zakus's connection between mental health and the climate crisis fostered comments in the chat about the need to further explore these connections, with one participant from Tanzania providing the local example of rice farmers suffering from mental health issues when their crops are impacted from flooding. Finally, while discussing the failed mitigation efforts of the international community to address climate change, Dr. Zakus emphasized the need for more community-led research on this topic.

The speakers then took part in a panel discussion, chaired by Catherine Abaasa from Mbarara University of Science and Technology in Uganda. In this discussion, the speakers grappled with actions that need to be taken at the government, industrial, community, and individual levels.

This conversation generated a lot of questions and discussion in the chat, with participants seconding the importance of addressing these concerns and providing examples within their own context:

"Climate change is gradual and progressive and so are its effects and can be seen. Its easy to feel attempts to reverse it are not adequate enough to reverse so it may feel a little unattainable an frustrating. Are there small indicators of success that may inspire some behavior change." (Participant from Malawi)

MicroResearch Vision, Mission & Guiding Principles – the way forward

As MicroResearch is celebrating its 15th anniversary, it seemed appropriate to revisit the program's Mission, Vision, and Values and determine if changes should be considered. Bob Bortolussi and Noni MacDonald presented why a review was needed at this time. Thus, they invited three strong supporters of MicroResearch - Shawna O'Hearn (Canada), Martin Kollmann (Kenya), and Teddy Kyomuhangi (Uganda) - to review the mission statements to see if they still reflected MicroResearch's overarching values and vision.

The Virtual Forum offered them an opportunity to present their initial thoughts and suggested changes to the wider MicroResearch community. They presented a draft version of the Vision, Mission, and Guiding Principles, and a plan to move forward. Forum attendees were invited to complete an online survey to provide feedback. They also invited people to volunteer to join them and take on the next stage of planning.

Day 2: June 20, 2023

Session 2 - Theme: The potential impact of universal primary healthcare

Objectives: To discuss the challenges on existing human resources and infrastructure, as well as explore the educational challenges to gear up to a new universal healthcare model.

MicroResearch Project Presentations:

The second day of the forum began with MicroResearch project presentations. As on Day one, this included both completed (10-minute presentations) and ongoing (5-minute presentations) projects.

- Felistas Chiundira (Malawi): Experiences of caregivers on healthcare and psychosocial services available for Cerebral Palsy children in Mangochi district, Malawi”
- Peter Malipa (Malawi): “Investigating Knowledge and Determinants of Birth Preparedness among Pregnant Women in Mangochi District”
- Robinah Kusemererwa (Uganda): “Building hope through finding a partner among the single HIV infected persons at Mbarara Regional Referral Hospital”
- Emmanuel Nkonde (Malawi): “Factors associated with utilization of intrauterine contraceptive devices (IUCD) among women of child bearing age seeking family planning services at Mangochi District Hospital”
- Raymond Otim (Uganda): “Acceptability of sickle cell trait screening among adolescents aged 15 to 19 years in Lira District, Northern Uganda”
- Samuel Njeru (Kenya): “Individual Birth Plan (IBP) knowledge among Pregnant Women in Igembe Central Sub-County, Meru County”

After the presentations, the session keynote speakers made their presentations on the potential of universal primary healthcare.

Dr. Gad Ruzaaza from Mbarara University of Science and Technology, Uganda presented the African perspective and the challenges and successes they have had in implementing universal primary health care. He emphasized the role of village health teams in providing essential services to underserved populations. However, inadequate resources and funding have proved to be barriers in delivering programming, further exacerbated by the strain that the COVID pandemic has put on the health sector. Despite barriers and challenges, Dr. Ruzaaza sees hope in community-based partnerships and creating collaborative, multidisciplinary networks.

Dr. Tim Holland, a primary care physician from Dalhousie University’s Faculty of Medicine, then presented from a Canadian perspective, outlining the history of universal healthcare in Canada and the successes and challenges it has faced. While many of the successes and benefits are clear, including improved health outcomes across the population and reduced costs in the long-term, the challenges and barriers remain. The examples Dr. Holland focused on were funding, difficulties in coordination and collaboration, workforce planning, and political pushback. Despite these obstacles, the benefits of universal primary healthcare are paramount and worth investing in.

Panel Chair: Dr. Jonans Tusiimire (Uganda)

Panel Members: Dr. David Ntirushwa (Rwanda), Dr. Patrick Kinyua Kubai (Kenya), Dr. Idesi Chilinda (Malawi), Dr. Tim Holland (Canada), Dr. Christina Zarowsky (Canada), Dr. Karin Euler (Canada)

Discussion: Dr. Jonans Tusiimire led the panelists in a lively discussion based on the two presentations. With a mix of panelists coming from different African countries, as well as Canada, the perspectives and outlooks shared were varied. One specific point touched on the issue of how to make primary healthcare accessible to all in a feasible and sustainable manner. Suggested tactics included building knowledge and training to ensure workforce is available, expanding role of community health workers, consider how innovations such as AI and telemedicine are used, and doing outreach within communities. Although challenges were acknowledged, the overall emphasis was on the importance of overcoming barriers in offering universal primary healthcare.

“There’s a lot of TALK about “Community and People centred” approaches now but in my experience talking about them is not putting communities and persons affected in the driver seat (where they belong).” (Participant from Kenya)

“UHC and people centred care also means attending to and caring for and engaging staff and health workers. And we have good examples of intervention which empowered health workers and simultaneously facilitated community engagement and dialogue with much less defensiveness all around.” (Panelist from Canada)

Day 3 – June 21, 2023

Objectives:

The Day 3 session began with a Grand Rounds presentation by University of Calgary’s Dr. Jenn Brenner, hosted by the Department of Pediatrics at Dalhousie University in Halifax. The presentation was available to Forum participants through a separate Zoom link. Dr. Brenner’s presentation was on:

“Reimagining Global Health Partnerships: Reflecting on two decades”.

Dr. Brenner reviewed her experiences on developing partnerships involving African and Canadian institutions and lessons learned over the years. She also reflected on concepts of “global health” and “partnership” through a post-pandemic and equity-oriented lens.

Following Dr. Brenner’s presentation, Forum participants were invited to an “Open Discussion”. This offered a chance to highlight items from the previous two days and dig a bit deeper on issues.

Dr. Beth Cummings chaired the discussion, concluding the Forum with an open dialogue around key takeaways from the Forum, the role of MicroResearch and a vision for a future. Participants weighed in on themes they think should be explored and some key takeaways from this Forum:

“In my opinion, the world especially on aspects of health is growing at a very fast level of which Africa is somewhat lagging behind. A lot of information bridging and helping us (Africans) identify and utilize the local resources would be very helpful. Also we all need to be cultural sensitive to be able to navigate through some cultural barriers.” (Participant from Uganda)

“I have been able to realize and learn about the universality of challenges that we all face across the globe. To know that we are all affected by climate change (though differently) was an epiphany for me.” (Participant from Uganda)

Closing Remarks:

Ahead of the closing remarks, Dr. Bob Bortolussi announced the winners of the prizes for best presentations.

Closing remarks were made by representatives from two sites. This included MicroResearch’s Hub site Mbarara University of Science and Technology, which Hub leader Teddy Kyomuhangi spoke on behalf of. Teddy noted the excellent turnout at the Forum and participation across Africa. She also provided an update on the digital storytelling initiative arising from the 2022 Forum and efforts to develop a digital storytelling workshop. Teddy finished her remarks by encouraging people to continue to be involved in MicroResearch through the various networks and social media and highlighting how MicroResearch has grown throughout the last 15 years.

Finally, Dr. Peter Gutwa from MicroResearch’s newest site Kisii University in Kenya, made several closing remarks. In his statement, Dr. Gutwa expressed his site’s enthusiasm in becoming involved in MicroResearch and collaborating with new partners to help grow research at Kisii University and beyond.

“So as we move forward, we expect to have more capacity building, especially from you [MicroResearch].because you have been in the field for a long time and we want to tap into this so that we don’t only impact Western Kenya, we impact the whole of Kenya and even [...] the other parts of Africa.” Dr. Peter Gutwa

Forum Evaluation

An online evaluation was completed by 37 of the Forum participants, all of whom were either project presenters or observers. The Forum was well-received by all, with respondents rating it as either “Excellent” (62.2%) or “Good” (37.8%).

In terms of suggestions for future Forums, respondents indicated that they would like to see more participant engagement, such as through a Q&A with presenters after each MR project presentation, more opportunity to speak up during the panels, or having breakout room discussions.

Final Thoughts and Recommendations

Planning:

1. Have opportunities for site leaders to meet face to face in the planning stages to allow for more coordinated efforts. This will also help push forward the MR Networks that have come out of the Forums.

Technical:

1. Consider having a photo and brief bio of panelists and presenters available for participants.
2. Although most recorded presentations were of high quality, the audio was an issue on a few. Suggest ensuring each presenter uses a headset during their presentation. A small payment can be provided for presenters who lack this, or the local site

could help provide the proper AV equipment and IT support (i.e. local site have IT Toolkits available for MR participants).

Forum structure:

1. Consider holding a hybrid virtual and in-person Forum, with in-person events organized at the various sites
2. Include more opportunities for participants to interact and participate. This could be done through breakout room discussions.
3. Allow time for a brief Q&A after each project presentation.
4. Have additional educational components related to research like at previous Forums, this could be done through a mini-session providing a refresher on content covered at MR Research Training Workshops.

Next steps:

Both thematic sessions initiated a lot of interest among Forum attendees, indicating a need for MR “Networks” dedicated to these topics. Specifically, the conversation around climate change sparked interest in how to incorporate large and complex topics like climate change into smaller, community-driven research projects, as well as discussion on implementing more research on the intersection between the climate crisis and mental health. Further, the session on universal primary healthcare reflected the need to use community focused research to further consider how to overcome barriers and challenges in providing quality, primary healthcare to all.

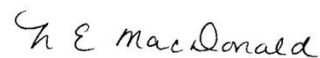
As MicroResearch looks to the future, a revision of the Mission, Vision, and Guiding Principles will help guide the program forward. This will require participation and feedback from all those involved. Committees will be meeting to further discuss these changes in the coming months.

A heartfelt thanks from MR International to all who helped plan the 2023 Virtual MR Forum, the panelists, presenters, and the participants.

Report respectfully submitted by



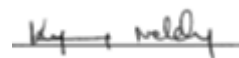
Robert Bortolussi
MicroResearch International
Dalhousie University



Noni MacDonald
MicroResearch International
Dalhousie University



Kelly Hunter
Executive Director
MicroResearch International



Teddy Kyomuhangi
Program Manager
Healthy Child Uganda