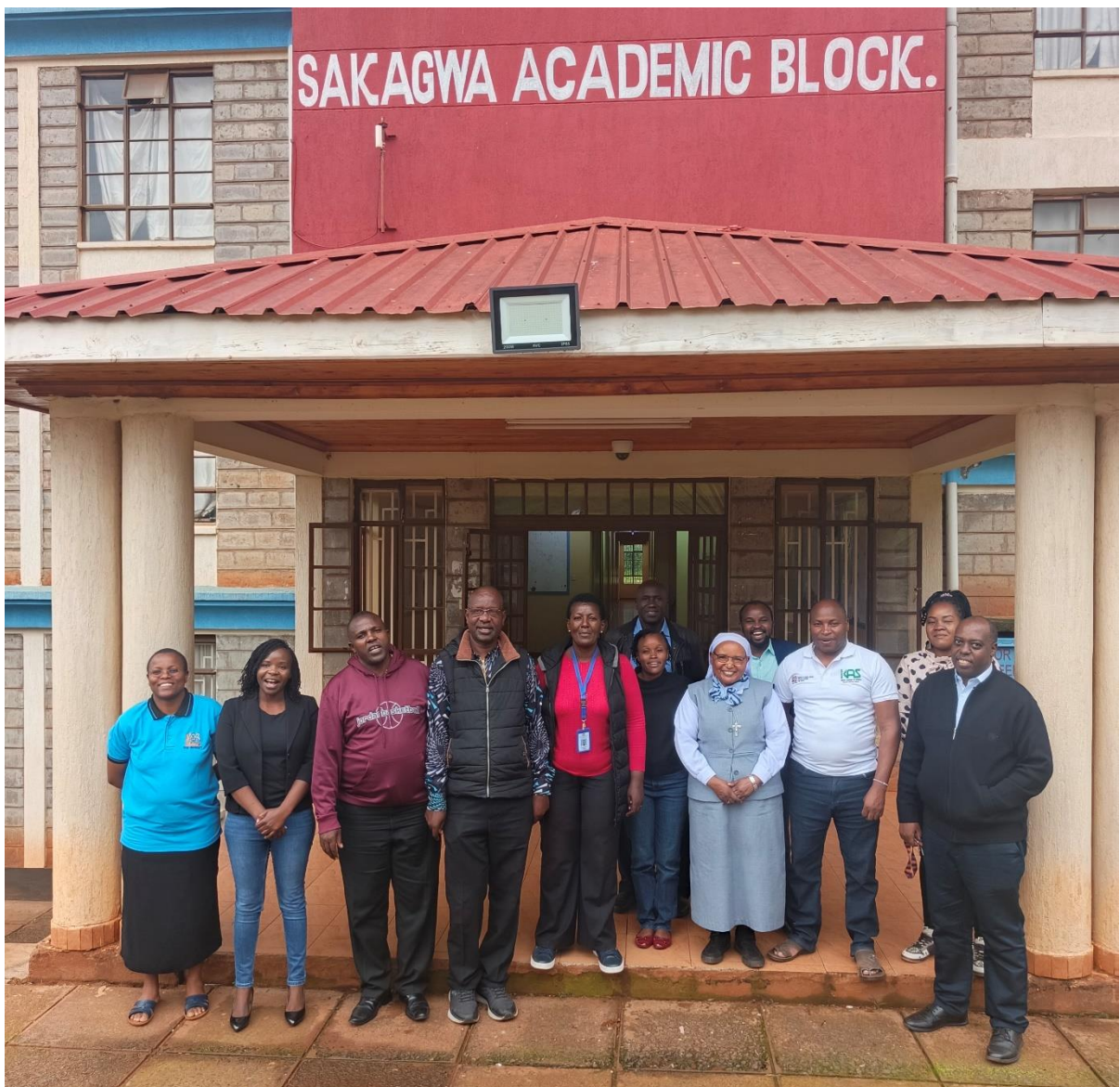




Kisii University, Kenya Workshop Report

July 7-18, 2025





MicroResearch

Resource limited countries bear 25% of the globe's disease burden yet the healthcare professional workforce is less than 1%. Furthermore, these low-income countries obtain only 2% of global research funds. In 2015, the *Sustainable Development Goals* (SDGs) were initiated as a program to build and extend the achievements of the United Nation's *Millennium Development Goals* (MDG) initiative. Encouraging national support for research infrastructure and developing local capacity to address complex health problems, remains a priority of the SDGs.

MicroResearch (www.microresearch.ca) is an innovative strategy aimed at building the capacity of local health care professionals to better address community health care problems by finding local solutions for local problems. 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, the research capacity building workshops have been held in 11 countries with over 1,600 participants. As of January 2025, over 130 locally driven research projects have been funded and launched with 52 completed, with results published in peer reviewed international health journals.

MicroResearch Process

The MicroResearch process advances in three phases: (i) Training Workshops are the first phase in the process. (ii) Teams formed during the workshops are then able refine and improve their research ideas for a grant submission to MicroResearch and review by an international panel of research experts from Canada and Africa. Once the research teams have responded to the reviewer recommendations with changes to their proposal, approval is given on scientific merit. (iii) Teams are then able to submit their proposal to their local Research Ethics Committee (REC or IRB) for approval and carry out their research. They are also encouraged to bring their findings back to the community through a Knowledge Translation plan. This report outlines the Research Training Workshop held virtually at Kisii University from July 7-18, 2025. This workshop was held in tandem with the MicroResearch site Meru University of Science and Technology (MUST), Kenya. See a separate report for details on the planning and organization of the MUST site.

Workshop Objectives and Organizers

The class comprised of 19 participants from Kisii University in Kisii, Kenya with coaches and co-teachers from Kenya and Canada.

This workshop involved 2 teams. Participants were recruited by word of mouth from Kisii University.



The key objectives for the participants of the MR Virtual Workshop:

- to develop skills needed for community focused research,
- to develop skills to work in a multidisciplinary group and to become a team, and to write a successful community focused research proposal overview

Organizers

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Workshop Partners

This workshops and projects emerging as a result are supported by partners including:

- Dalhousie Medical School, Dalhousie University (Volunteer teachers)
- IWK Health (Volunteer teachers)
- MicroResearch private donors
- Kisii University

Workshop Planning and Recruitment

A virtual Train-the-Trainer meeting was held on July 3 and 4, 2025 to discuss scheduling and assignments with teachers, co-teachers, coaches and organizers of the workshop. The objective of these sessions was to familiarize everyone involved with the goals and objectives of the workshop and the various co-teaching tasks. Local expertise would be required during presentations on literature searches (librarian) research ethics, community engagement and health policy. In addition, two local judges were recruited for the final day assessment of presentations. A list of participants for the workshop was also reviewed to ensure appropriate gender balance and mix of professional backgrounds.

Participants were recruited through word-of-mouth at Kisii University. The 19 participants included a wide range of disciplines and professions including lecturers, post-graduate students, and healthcare workers.

The pre-workshop questionnaire was completed by 16 of the 19 participants (84%). As shown in the Pre-Workshop evaluation, 10 participants had previous research experience: 2 as study participants, 1 as a research assistant, 3 as site investigators and 4 as principal investigator. Participants indicated the top things they wanted to get out of the workshop were improving research skills and grant writing skills, networking, and helping to drive community change.



Workshop

The ten-day workshop combined lectures and daily small group interdisciplinary, interactive working sessions. Many of the lectures, support materials and toolkits were recently updated and refreshed in 2025 to include new slides on using the internet, principles in clinical research challenges in research, ethics, knowledge translation, budget, research to policy, and how to get published. Session lectures began at 2:00pm local time. Session lectures were followed by group work sessions with the coaches. The lectures, exercises, and group work over the nine days led the participants step-by-step through the development of a research proposal overview. Participants moved from formulating an idea to the development of the research question, to the selection of methods to fit the questions taking into account the budget available and the formulation of the overview of a knowledge translation plan and determination of what communities to engage, when and how. Daily workshop attendance ranged from 90% to 100%.

Team Research Proposals

As in previous workshops, the major educational component was centred on the proposal overview development in the interdisciplinary groups. There was a significant amount of content on Day 1 to orientate and allow participants to develop their own ideas into a research question based on their own experiences. On Day 2, the collaboration began when participants were divided into five groups. Working in breakout rooms, the groups then discussed each member's question and applied the FINER criteria (discussed during the lecture on Day 2) and selected the "best" one to develop into a research proposal throughout the rest of the workshop. On Day 3, a spokesperson for each group presented the topics to the class and noted the question selected by the group and the rationale for its selection. The questions selected on Day 3 were:

- **Group 1** - *What is the Impact of Geriatric Loneliness on Longevity: A study on Social Isolation, Mental Health, and Life Expectancy Among Older Adults in Kisii County?*
- **Group 2** - *What are the multifaceted vulnerabilities of cancer survivors in Kisii County, Kenya?*

A discussion followed each group's presentation, with emphasis on importance of narrowing and refining each question.

The series of lectures that followed provided knowledge and skills needed to develop these questions into research proposal overviews. All the lectures included core elements to the MR concept, which were essential in preparation for the presentation on the final day.



Throughout the workshop, each group became a team, working together on their proposals, guided by their coach.

Final Day of the Workshop

On the final day of the workshop, each team presented the overview of their proposal in a ten-minute presentation to a panel of four local experts. The review panel, along with the two Canadian facilitators, adjudicated each team's presentation and suggested how the proposals might be further strengthened.

The local review panel included:

- Dr. Justus Aungo, Lecturer- Sociology and Development, University of Nairobi
- Dr. Annet Magolo, Lecturer- Education, Kisii University
- Dr. Grace Gakii, Lecturer- Mathematics, Meru University of Science and Technology
- Dr. Virginia Wachira, Lecturer- Business, Meru University of Science and Technology

Final Team Questions:

- 1. What is the relationship between loneliness, social isolation, and mental health challenges among the elderly population aged 60 years and above in Marani Ward, Kisii County?***
- 2. Intersectional vulnerabilities and barriers among breast cancer survivors aged 30 and above in Kitutu Chache South Sub-County, Kenya***

Review Panels General Comments

All the teams presented interesting and innovative proposals that are relevant to the local community. The presentations were clear and showed the passions that each team felt about their ideas. The teams and their coaches deserve to be congratulated for what they have achieved during the 2-week workshop and all teams are invited to apply for a MicroResearch Grant in November.

Each team will need to consider what is feasible considering MicroResearch's funding limit and the time available. One of the first steps should be to review the Conceptual Framework of the proposal, to refine the key question they want to answer. All teams need to limit their project to make it more feasible, usually requiring a single primary objective (with one or two secondary objectives) and a simple research design. For a quantitative study, decide on the best dependent and independent variables and for a qualitative study, the approach that will be followed, e.g. ethnographic, grounded theory, etc. This will lead to strengthening and refining the methods that are used. Each team will need to do a complete review of the literature once the focus of their project has been finalized. As an international audience will be reading and reviewing the proposals, be sure to define key terms and provide detail



on the local context.

Workshop Evaluation

An assessment of the workshop by participants as well as how well their team functioned was obtained using structured evaluation forms submitted with 19/19 (100%) of participants completing the form.

Overall, the workshop was highly regarded by participants and the virtual program was well accepted, although several people would have preferred an in-person workshop, and for the length to be extended.

“The 2 weeks are so intensive especially as regards the concurrent daily active learning and the homework (passive). Consider unpacking to 3 weeks training if possible.”

Lectures that participants indicated were particularly helpful included Knowledge Translation, and Poster & Oral Presentation. Overall, respondents indicated that the lectures and workshop content helped to “demystify” research and provided participants with the tools needed to help create positive changes in their communities:

“I will apply the knowledge and skills gained to develop context-specific, community-based research proposals that address local health challenges. I also plan to share these insights with colleagues and use them to mentor others interested in conducting impactful, ethical research.”

Most participants responded in their evaluation that working as a team enhanced their research and the workshop experience stimulated their interest in research. Several indicated potential challenges in continuing to work as a team, including difficulties in getting enough participants, and time constraints, however, mentorship, access to experts, and funding could help overcome these issues.

“Our group is composed of committed and diverse members with complementary skills in research, community engagement, and health-related knowledge. We collaborate well, communicate effectively, and are motivated to address the research question. With continued mentorship and logistical support, we are confident in our ability to carry out the project successfully.”



Recommendations and Comments

1. Coach and Teacher Training and Communication:

- Train-the-trainer sessions with participation of coaches, teachers, facilitators and co-teachers should be scheduled early to allow time for any correction, 2 to 3 days in advance of workshop is not adequate.
- The dialogue and discussion between the coaches and visiting teachers was well received. Discussions on project development on Day 3, Day 5, and Day 6 helped teams refine their plans. Full participation of coaches should be encouraged. Consider a breakout room, private discussion of coaches, and facilitators on Day 5 to reinforce changes and progress.

2. Program Observations and Suggested Changes

- **Lecture [2A]** presentation on qualitative methods and challenges was well received. Dialogue between teaching staff and participants was encouraged through examples, “What should you do ...? How can you deal with this ...?”
 - Consider developing a video to illustrate how to code, theme analysis etc. and place in Toolkits to be used as a reference in future.
 - Some slides need more African content (Note: Lecture 2A Slide 18 -24 have been updated).
- **Lecture [8A]** The “Report Writing” lecture was shortened to incorporate: (i) policy brief report development and (ii) “2-Page Report” using S-bar format. Both had new report formats and added tools for future presentations.
- **Final Day:**
 - A timekeeper signaled a 1-minute warning to presenters. This worked well.
 - The four judges made useful and constructive comments after each presentation. Some extra time should be allowed for comments from other experts in attendance.
 - Encourage as many of the team members to engage in discussion as possible
 - Consider a Career Planning discussion with involvement of local leaders.
 - The local site should recruit the final day panelists in advance.
- **Future considerations:**
 - This workshop in Kisii was held in tandem with the workshop in Meru. The lectures were taught online together with the teamwork and coaching held separately at the sites. This worked well with positive assessments in the post workshop evaluations. This might stand as a template for how to effectively and efficiently run workshops in tandem.
 - Of note at both sites the site leader was in attendance throughout, and the IT systems were prechecked and well supported. Both helped ensure the workshop went smoothly from a technical and educational viewpoint.
 - More thought is needed to see how more questions could be stimulated and also to see how networking across sites might evolve.



- Future virtual workshops should be modeled after this hybrid model which is currently under development.

Acknowledgements

We would like to extend our thanks to the local site for providing administrative and organizational support. As well to the local volunteer coaches and co-teachers for their continued involvement in MicroResearch. Thank you to the panelists for their valuable feedback and constructive critiques on the final day of the workshop. Finally, we thank the participants for their engagement throughout the ten days.

Respectfully submitted,

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