



**Final Report:
MicroResearch Nova Scotia Virtual Workshop
Halifax, Nova Scotia
Sept 13- 24, 2021**



Participants, judges, facilitators, and guests on the final day of the workshop

Building capacity for community focused health research



Introduction and Background

MicroResearch is an innovative research training program for community members that began in 2008 in Africa under the leadership of Noni MacDonald and Bob Bortolussi of IWK Health in Halifax, NS. Since 2016, the African MicroResearch program has been implemented in communities in Nova Scotia.

Rationale for MicroResearch NS

Nova Scotia rates poorly on many health indicators compared to other provinces, and health care funding is becoming increasingly limited. The gaps in knowledge translation, adaptation, and implementation at the community level are widening and there is a need to better align local resources to improve outcomes at the community level. Continuing to deliver health care – preventive, acute, and chronic – as is currently done, will not bring the changes needed to improve local health outcomes and meet the Nova Scotia Health (NSH) priorities. While the business plans at NSH, IWK Health, and the Nova Scotia Dept. of Health and Wellness all encourage strategies and collaboration to address complex health problems, local health problems need community-focused, locally driven, sustainable, culturally and local resource appropriate solutions. Building on this need, MicroResearch NS (MR-NS) aims to develop local community focused research capacity to find solutions to local health problems deemed important by local participants.

“The goal of MicroResearch is to improve health care outcomes with innovative community based research that assures quality and integration of research into the fabric of the local health system and the community”.

MicroResearch NS Program Model

The fundamentals of the MR-NS program include:

Workshops:

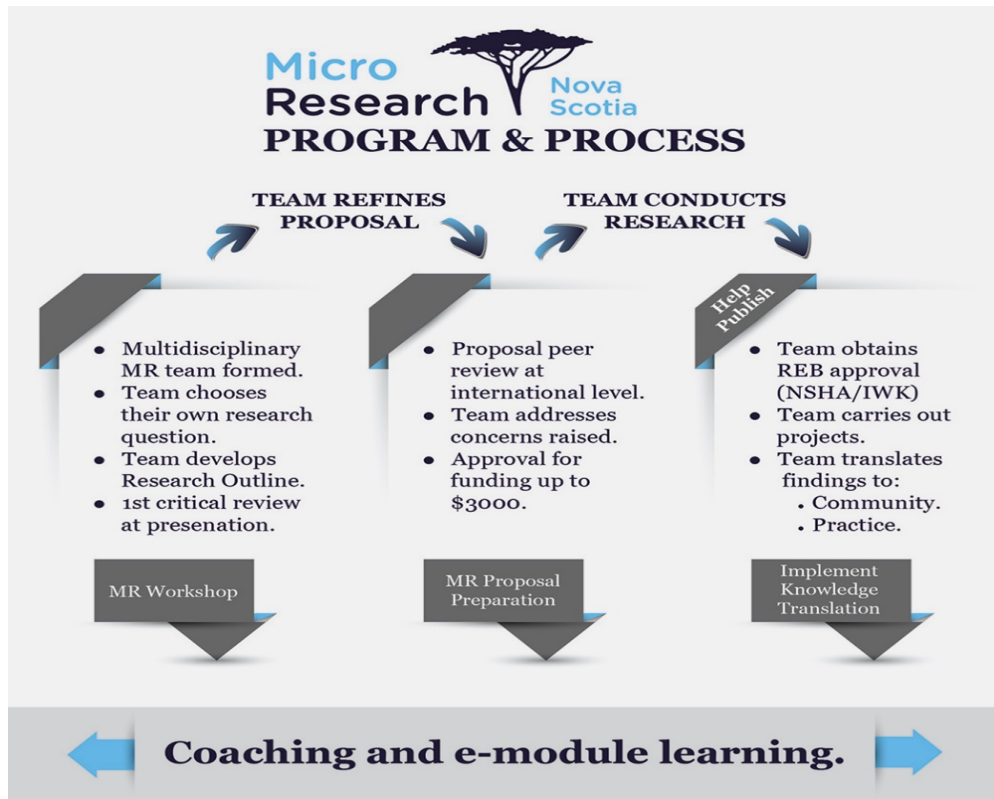
- Training – participants are taught practical and applied community focused research skills over 10 half-days

Proposal Preparation:

- Interdisciplinary collaboration - teams work together to move a research idea to a fundable proposal
- Seed funding - of up to \$3000 to support quality projects

Implementation:

- Project management – teams work together to carry out the community project
- Knowledge sharing – of research outcomes with stakeholders



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

Pivot to Virtual Workshop Format

As of 2020, nine in-person MR-NS workshops had been held in Nova Scotia. However, due to the COVID pandemic with its public health gathering restrictions and added pressures and responsibilities on local health care workers, the planned 2020 in person MR-NS workshops were put on hold. The same COVID pressures also impacted the International MR Workshops. Hence a decision was made collaboratively with partners to explore virtual MR Workshops. Several were held internationally - both regular MR training workshops as well as MR writing workshops – with good success, as measured by attendance, participation, proposal or paper overview outputs, and participant evaluations. Hence the decision was made to try the virtual format in the Canadian setting.

MicroResearch NS Program Accreditation

The MR-NS virtual workshop received accreditation from Dalhousie University Continuing Professional Development, Faculty of Medicine for 40 Category 1 RCPS / CCFM credits. Continuing Professional Development credits can also be garnered by other health professional participants for their continuing education.

MicroResearch NS – September Virtual Workshop

Workshop Facilitators and Coaches

All faculty who facilitated this workshop had research experience and most had MicroResearch teaching experience.

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Participants

Building on past experience with recruitment, workshop participants were recruited through personal emails, referrals, and invitations to NSH and IWK health workers, Dalhousie University (particularly the Faculty of Medicine, Faculty of Health, and Faculty of Computer Science), and Immigrant Services Association of Nova Scotia through the International Medical Graduates program. Potential participants from a pre-planned 2020 workshop in Bridgewater were also invited albeit declined due to conflicting pressing responsibilities with COVID. Plans were also made to have participants attend virtually from Correctional Facilities in Newfoundland and Labrador, coordinated by Rosemary Ricciardelli of Memorial University.

Tentatively, 16 participants were due to attend, but the Corrections team from NL had to pull out due to lack of ability to obtain shift coverage. However, the supervising warden is keen to see them participate at the next MR-NS virtual workshop in 2022.

The final participant count was eight, all from the Halifax area with backgrounds in pharmacy, medicine, and computer science. Four were international medical graduates with links to ISANS. Daily attendance was >90%. Due to the number of attendees and with input from the participants, only one group was formed but with two coaches (Rose Ricciardelli and Finlay Maguire).

Pre-Workshop Assessment

Six of the eight participants filled in the form virtually. The most common reason participants gave for attending the workshop was a variation on: to learn about research/MicroResearch, to meet new people/network and learn other skills. All respondents indicated an interest in community health research, although only 50% had past research experience in any discipline.

Workshop Logistics

All the workshop sessions were held virtually via Zoom with the opportunity following each lecture session for questions and comments either virtually or via the chat function. Each of the sessions were recorded and posted as an unlisted YouTube video by MR-NS Coordinator, Kelly Hunter. The group-work portion of each session was also held via Zoom.

Participants were given access to all the workshop materials, including PowerPoint presentations, supplementary documents, and research toolkits ahead of the workshop via Google Docs. During in-person workshops, these resources are typically shared through USB drives.

Workshop Format

The MicroResearch-NS workshops combined interactive seminars, exercises and daily small group interdisciplinary, project development sessions supported by local site coaches.

Participants were placed into one group on Day 2 with good spread of background and expertise. One group was chosen as there were only 8 participants.

The daily attendance was very good with 7 out of 8 or 8 out of 8 daily. The virtual format allowed several participants with conflicting clinical responsibilities to easily pop in and out of the sessions. The groups rapidly became a team with excellent daily discourse and regular sharing by email and catch up conversations for those who had to miss a class or had to come late because of conflicting commitments.

Workshop Program Overview:

Having the half-day sessions start at noon and run until 4:00pm worked very well. The virtual program included short breaks in between to limit fatigue.

On Day 2, each participant vigorously discussed the merits of their individual research topic. One area was selected, shaped into a question, and then refined for proposal overview development throughout the workshop. All questions expressed deep commitment to helping to make a difference in the health of this community. Several of the questions were related to a similar topic area.

On Day 3, a team spokesperson presented the list of topics to the coaches and facilitators and the team discussed why the final selection was made.

Research Question:

“How do youth living in Halifax Regional Municipality interact with mental health resources, and what barriers do they identify in their access to those resources?”

The rest of the workshop was devoted to refining their research questions and developing the proposal overviews including background, methods, budget, knowledge translation, and next steps etc. all with the help of the two MR coaches. Other presentations focused on report writing, manuscript development, creating posters and abstracts as well as how to create a research PPT for the final day.

Final Day: Team Research Proposal Overview Presentation and Judging

The refined research aims/ question presented by the team on the last day of the workshop for adjudication was:

Refined Question: What hinders youth in grade 11 and 12 from accessing currently available mental health supports and resources?

The highlight on the final day of the workshop was the oral presentation describing the team’s proposal overview to answer their research question. The presentations included a 10-minute overview of the team’s research proposal followed by comments and questions

from the judges and audience and then constructive suggestions from the other final day attendees on how the proposal might be strengthened.

Judges

Three distinguished judges were invited to adjudicate the presentations:

- Jill Hatchette PhD Psychology, Consulting Scientist, Leader for Education and Ethics, Research Services, IWK Health
- Linda Dodds (retired) PhD Epidemiology, Former head PERU, Former Interim VP Research Services, IWK Health
- Shawna O’Hearn MSc Occupational Therapy, PhD candidate, Director Global Health Office, Faculty of Medicine, Dalhousie University

The judges listened to the presentation, asked questions, and deliberated on whether the project could go forward to be developed into a full MR-NS grant proposal. Their evaluation and scoring system was based on MicroResearch principles.

Judges’ Comments

The judges were very impressed by the importance of the research question to the community and to Nova Scotia and felt it was a particularly timely issue. The proposal was considered novel, compelling and delivered with great passion. Also evident was the personal involvement of all members of the team, each person had a role to play and answered questions about the project.

The team was given the green light to go ahead for full proposal development. The judges then offered specific constructive criticisms to both teams post adjudication for strengthening the proposals.

Workshop Assessment

An assessment of the workshop by participants was obtained using structured evaluation forms submitted anonymously. Seven of eight eligible participants completed the final participant evaluation form. The workshop was well received and highly valued, particularly the emphasis on group work and the simplicity of the lectures.

Team Evaluation

From the viewpoint of the coaches and facilitator the group worked well together. In the team evaluation, which seven of eight participants completed, respondents indicated how respectful team members were of each others opinions and how collaboratively they worked. Potential issues that may need to be addressed going forward include how to overcome certain barriers in studying a vulnerable population and the likelihood of managing busy schedules and competing commitments among the team.

Outcomes and Recommendations

Administrative Considerations:

1. This virtual MR NS workshop worked and the time chosen worked well. The timing of the workshop to start at noon did not seem to be a barrier and this led to less pressure for finishing. Five minute breaks were given between lectures and the team work was done with the coaches by Zoom each day. The format, because the class size was limited, meant participants were actively engaged and asked questions throughout the sessions and discussions did ensue.
2. High level discussion is needed to consider the value and implications of using the virtual format as Zoom worked well. This does allow participants to not be on site and has the potential to broaden the participant reach of MR-NS, which was mentioned by the participants on the final day. However, this does require each to have a computer and good internet access. A few participants suggested offering “blended” format, that includes primarily virtual sessions to allow for some flexibility, but also the opportunity to meet in-person a few times. This may further improve the team-building aspect.
3. The optimal size for an online virtual team where participants do not know each other needs further consideration. The eight participants with two coaches worked well here. Having the team introduce themselves to each other on Day 2 putting forward their skill sets rather than just their discipline proved to be very helpful.
4. Having two coaches with very different backgrounds for this large team also worked well. The participants indicated the benefits of having two coaches with different sets of expertise in helping them to refine their research question.
5. This program had nine guest lecturers. This was very helpful as having one facilitator do two lectures in a row is demanding. However, this did mean there was some overlap in presentation because guest teachers were unsure of what had been covered in the previous sessions. In the end, this may actually have been of added value as the repeated concepts did seem to be taken in well.

Educational Considerations:

1. Review if storing educational materials via Google Docs is enough and review if an improved website will decrease the need for USBs.
2. Reassess 2A (Principles of Clinical Research) and 3A (Research Design and Quantitative Research Methods) to see if overlap can be a little more streamlined.
3. Determine if an interim evaluation on Day 5 regarding the virtual format might be helpful, especially if there are two teams.
4. There is even more need for a MR-NS Forum as this team’s topic has potential connections to other projects. This will require specific funding and planning.

5. Review the post-workshop evaluation form to ensure includes all needed components for accreditation.

Acknowledgements:

The MicroResearch NS team would like to express our gratitude:

To the eight participants for their time, energy and the passion they put into the development of their proposal overview. And for doing this using a virtual format

To Finlay Maguire and Rosemary Ricciardelli for their excellent coaching

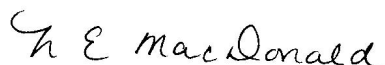
To Research Services at IWK and NSH, Dalhousie University Faculty of Medicine, Dalhousie Medical Research Foundation, and Dalhousie University for supporting MicroResearch.

To the QEII Health Centre Foundation for the promise to provide funding to the team if they are successful with their full MR proposal application.

To Kelly Hunter for her superb support for the infrastructure for this workshop in the face of COVID and other issues.

To the judges and guest teachers for giving so generously of their time and talents.

Respectfully submitted by



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