

July 2019  
**MicroResearch**  
Training Graduates &  
Research Projects



*Kabarak University MicroResearch Workshop, Kenya, May 2019*

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*The concept – small locally driven multidisciplinary health research teams developing research projects to improve health outcomes – starts with multidisciplinary research training workshops with hands-on research proposal development.*

*Learning how to ask the questions that will address their problems*

## **Our Values**

**PASSION:** Deeply rooted conviction and energy for everything MicroResearch represents.

**INNOVATION:** Steadfast commitment to improving health in the developing world.

**COLLABORATION:** Working collaboratively in multidisciplinary teams of health and other professionals to deliver on our promise.

**COMPASSION:** Demonstrated identification with humanity through the work of MicroResearch.

**RESPECT:** Commitment to pursue the questions that matter and are identified by the people we serve.

**CULTURE:** Unequivocal pursuit of capacity building, human resource development and a healthy environment.

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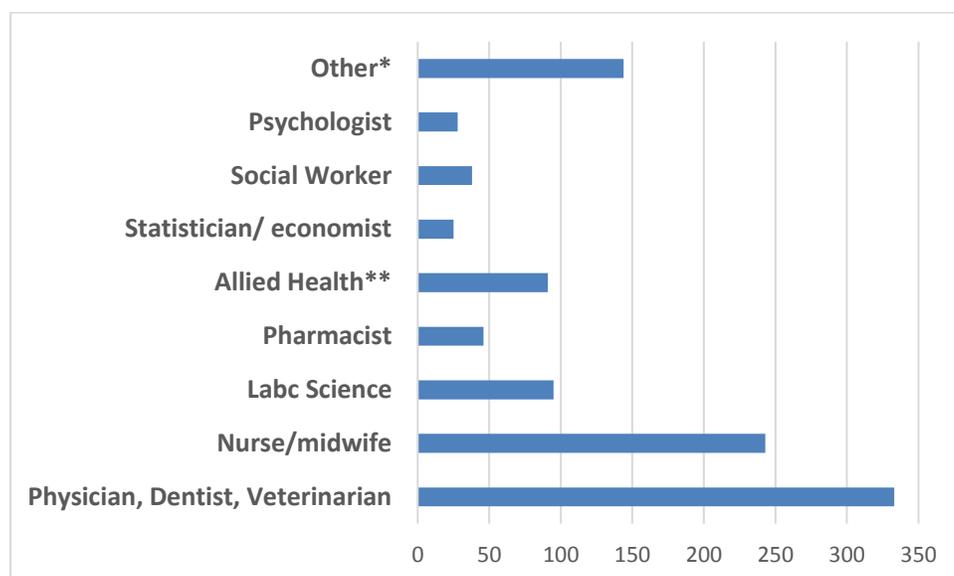
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Since 2008, 45 training workshops have been held in Kenya, Tanzania, Uganda, Malawi, Ethiopia, Rwanda and Nepal resulting in **1066 graduates**

**Female 47.6% (497/1043) MD & Nurse 52.3% (546/1043)**



\*Other: computer sci, ethno-botanist, librarian, accountant, development officer, management secretary, lawyer, engineer

\*\* Allied Health: occupational therapist, dental technologist, nutritionist

**Figure does not include 23 (of 1066) graduates with unstated professions, gender**

### Summary of MicroResearch Training Workshops and Outcomes

Number	2008/9	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019 (July)	Total
Participants	22	48	64	152	105	142	141	93	98	123	77	1066
Workshops <sup>4</sup>	1	2	3	5	4	5	5	4	5	6	4	44
Team Project Developed <sup>1</sup>	3	7	10	20	16	23	22	14	19	32	14	183
Projects submitted to MR <sup>2</sup>	1	8	11	14	13	13	9	18	18	11	7	123
Projects launched <sup>3</sup>	1	3	6	8	9	10	18	18	11	16	1	101
<b>Projects completed as of July 2019</b>												<b>40</b>
<b>Pub Med Journal publication or Book Chapters as of July 2019</b>												<b>37</b>

1. Includes thesis projects developed using the MR process as thesis for KABU 2017-2019; 2. Proposals submitted for international peer review via MicroResearch; 3. Projects launched includes additional 2<sup>nd</sup> projects from new MicroResearch teams; and projects occurring as a direct outcome of MicroResearch- includes KABU MR theses program; 4 Workshops include "Writing Workshops" for previous MR graduates

## MicroResearch Publications

### Published Extended Abstracts, Full Articles and Book Chapters

1. MacDonald NE, Kabakeyenga J. MicroResearch: borrowing from the microfinance experience. *CMAJ*. 2008;179(5):399. DOI: 10.1503/cmaj.081123
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4. Kamuchaki JM, Wobudeya E, Kiguli S, Bortolussi R. Efficacy of glutamine supplementation on the outcome of children admitted with persistent diarrhea in Uganda: A randomized controlled study. *Paediatr Child Health*. 2013;18(1):e1. DOI: 10.1093/pch/18.1.e1
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7. Grant E, Munube D, Lumala P, Sentongo SA, Dodds L, Bortolussi R, MacDonald NE. Neonatal deaths and umbilical cord care practices in Luweero District in Uganda. *Paediatr Child Health*. 2014;19:333. DOI: 10.1093/pch/19.6.333
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9. Bortolussi R, MacDonald NE, Moraca S, Grant E. Assessing healthcare needs and research barriers for community focused interdisciplinary health research capacity building using MicroResearch model in East Africa. *Paediatr Child Health*. 2014;19(6) e39.
10. Mang'Oli P, Theuri, J, Kollmann T, MacDonald NE. Ponseti clubfoot management: our experience with the Steenbeek foot abduction brace. *Paediatr Child Health*. 2014;19:513-5. DOI: 10.1093/pch/19.10.513
11. Kollmann TR, Bortolussi R, MacDonald NE. MicroResearch – Finding sustainable solutions to local health challenges in East Africa. *J Infect*. 2015;71:S97-100. DOI:

10.1016/j.jinf.2015.04.022

12. Mang'Oli P, Kollmann T. Letter to Editor Reply to Matos MA on Ponseti clubfoot management: our experience with the Steenbeek foot abduction brace. *Paediatr Child Health*. 2015;20:148.
13. MacDonald NE, Bortolussi R, Kabakyenga J, Pemba S, Estambale B, Kollmann KHM, Odoi Adome R, Appleton M. MicroResearch: Finding Sustainable Local Health Solutions In East Africa through Small Local Research Studies. In *Optimizing Treatment for Children in the Developing World*. Eds MacLeod S, Hill S, Koren G, Rane A. Adis. Springer International Publishing AG, Switzerland. Chapter 6, pp53-64. 2015.
14. Beinempaka F, Tibanyendera B, Atwine F, Kyomuhangi T, Kabakyenga J, MacDonald NE. Traditional rituals and customs for pregnant women in selected villages in Southwest Uganda. *J Obstet Gynaecol Can*. 2015;37(10):899–900.
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19. Rukundo GZ, Abaasa C, Natukunda PB, Ashabahebwa BH, Allain D. Antenatal services for pregnant teenagers in Mbarara Municipality, Southwestern Uganda: health workers and community leaders' views. *BMC Pregnancy and Childbirth*. 2015; 15:351. DOI: 10.1186/s12884-015-0772-0
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*MicroResearch Workshop at Mildmay Uganda, May 2019*

## Selected Research Projects by MicroResearch Graduates

Title & Project Team Leader	Location	Lay Description
<b>2008 &amp; 2009</b>		
<p>Assessment of activities and impact of community owned resource persons (CORPS) on families and communities in Healthy Child Uganda Bwizibwera Project Area.</p> <p>PTL: Basil Tibanyendera</p> <p>Status:                      ✓Project completed  <b>OUTCOME</b>                      ✓Report generated                      ✓Presentation: to local health authorities &amp; Health Child Uganda</p>	Mbarara, Uganda	<p>This study was designed to assess the activities and impact of the CORPS in the aspect of immunization. It was of the descriptive cross-sectional design, done in six villages in the sub-counties of Kashari and Rwanyamahembe. The sample size was 70 households which were randomly selected. Data were collected using a pretested questionnaire and focus group discussions. From the study findings, respondents had adequate knowledge about activities of the CORPS and they are the main source of information about immunization. However respondents had limited knowledge about immunisable diseases and ages of immunization against such diseases. Generally there has been an increase in the immunization levels among children under 5 years of age in the operational areas of CORPS and hence a considerable reduction in incidences of immunisable diseases among the children in Bwizibwera HCU project area.</p>
<p>Efficacy of Glutamine Supplementation on the outcome of children admitted with persistent diarrhea to Mulago hospital.</p> <p>PTL: Justine Kamuchaki</p> <p>Status:                      ✓Project completed  <b>OUTCOME:</b>                      ✓Published: <b>Paediatrics &amp; Child Health 2013;18(1):e1</b>                      ✓Published: <b>Pediatric Infectious Disease Journal 2013;32(5):573-6</b></p>	Kampala, Uganda	<p>Since persistent diarrhea is a major cause of death in infants in sub-Saharan Africa, 138 infants with persistent diarrhea were randomized to receive either standard treatment or standard treatment with Glutamine supplement. Although glutamine was reported to be beneficial in other studies, no benefit was shown in this prospective study.</p>



Founding MicroResearch Class Mbarara University of Science and Technology 2008; MicroResearch Team 2008; PTL: Basil Tibanyendera – Photo by Beebwa Esther- the team member not in photo

## 2010

<p>The practice of traditional rituals and customs in newborns by mothers in selected villages in Southwest Uganda.</p> <p>PTL: Florence Beinempaka</p> <p>Status:          ✓Project completed</p> <p><b>OUTCOME</b></p> <p>✓Published: <b>Paediatrics &amp; Child Health 2014;19:72.</b></p> <p>✓Published: <b>Journal of Obstetricians and Gynecologists of Canada 2015;37(10): 899-900</b></p> <p>✓Presented to Ministry of Health, Uganda</p>	<p>Mbarara, Uganda</p>	<p>Many Akole traditional birth customs are contrary to World Health Organization recommended newborn health care practices. Health care practitioners need a deeper understanding of these rituals in order to modernize them for better maternal neonatal care. Ignoring them will not eliminate them. Prevention and intervention steps might include providing VHTs with context based education to help them address these practices with pregnant women and with the community combined with protocol development to enhance VHTs recognition of newborns at risk needing close follow up and early referral for formal health care.</p>
<p>Knowledge and Practices of Women Regarding PMTCT in Mwizi Sub-county</p> <p>PTL: Barnabas Atwiine</p> <p>Status:          ✓Project completed</p> <p><b>OUTCOME</b></p> <p>✓Published: <b>International Journal of Infectious Diseases 2013;17:e211-2</b></p> <p>✓Presented to local health authorities &amp; Health Child Uganda</p>	<p>Mbarara, Uganda</p>	<p>90% of the 2.5 million children younger than 15 years living with HIV were infected by their mothers during pregnancy, labour and breastfeeding. 95% of the children live in the Sub-Saharan Africa. It's therefore important that women of child-bearing age (15-49 years) know and practice the methods of preventing transmitting the infection to their children. This research is aimed at finding out what the women in a rural Ugandan sub-county know about the prevention of HIV from infected mothers to their babies. We shall send research assistants to interview a hundred women in this sub-county. Their responses will be analyzed into themes and recommendations will be made to inform policy makers and health educators concerning this subject for rural Ugandan women.</p>



*MUST MR Workshop Class 2010*

**Francis O Oriokot, 2010 workshop participant,**  
 speaking on behalf of other MUST workshop participants:

*“A fatal pedagogic error is to throw answers, like stones, at the heads of those, who have yet to ask any questions’ (attributed to Steve Biko). What the Micro-Research Workshop has done is provide the tools to ask questions important to us. Thanks and best wishes.”*

## 2011

<p>The impact of the VHT new born strategy in reducing perinatal deaths in a rural district of Uganda.</p> <p>PTL: Esha Grant</p> <p>Status: ✓Project completed</p> <p><b>OUTCOME</b> ✓Published: <b>Paediatrics &amp; Child Health 2014; 19:333.</b> ✓Presented to Ministry of Health, Uganda</p>	<p>Makerera Uganda</p>	<p>Peri-natal audit is a tool used by health workers to assess the mortality rates during the neonatal period. Our project aims to establish the impact of the Village Health Team newborn strategy which has been launched in Uganda in 2010. The project will conduct community verbal autopsy as baseline in Bamunanika County, Luweero District in Uganda. Thereafter, utilize the Village Health Team members who were trained on essential newborn care to conduct community training of the newborn care package. This group will work with the Village Health Team members, local leaders and in addition Save the Children in Uganda, Saving Newborn Lives team will provide technical and logistic support. Evaluation will be done 12 months later to assess the value of this project in reducing neonatal mortality at community level.</p>
<p>Frequency of malaria resulting in hospital admission among pregnant women and its association with IPT use.</p> <p>PTL: Freddy Eric Kitutu</p> <p>Status: ✓Project completed</p> <p><b>OUTCOME</b> ✓Report to MicroResearch</p>	<p>Makerere Uganda</p>	<p>Malaria is one single disease in Uganda that is responsible for more illness and deaths than any other disease. It affects mainly people with low immunity like pregnant women causing poor health outcomes such as maternal anemia, spontaneous abortions. Malaria also leads to low birth weight, increased risk of anemia in infants which are risk factors for poor infant outcomes such as mental retardation and infant mortality. To prevent malaria during pregnancy, pregnant women are given at least two doses of sulfadoxine/pyrimethamine (SP) as intermittent preventive treatment (IPT). IPT prevents development of malaria and eliminates the parasite from the placenta. However, SP has been withdrawn for routine treatment because of high levels of failure to eradicate the malaria parasite from the patient's blood stream. So, does SP still work for IPT? This study will determine the relationship between the number of hospitalizations due to malaria and the use of IPT in pregnancy.</p>
<p>Healthy Child Uganda survey on Village Health Team Knowledge, Attitudes and Behaviour of VHTs towards their responsibilities in Mbarara District.</p> <p>PTL: Ashaba Scholastic</p> <p>Status: ✓Project completed</p> <p><b>OUTCOME:</b> ✓Published: <b>Paediatrics &amp; Child Health 2012;17:e89</b> ✓Presented to local health authorities and Health Child Uganda</p>	<p>Mbarara, Uganda</p>	<p>The attitudes, knowledge and behaviour of the VHT members may play crucial role in implementation, effectiveness and sustainability of the program. Most studies of community health workers are from south Asia with few having been done in Africa, many of which have assessed community health workers' neonatal programs rather than 'integrated' child health programs. Most large studies have looked at community health workers providing at least some component of curative care (i.e. medicine distribution) while the effectiveness of community health workers serving in a 'health promotion-only' role has not been well established, despite potential cost and sustainability benefits. No such studies have been done in Uganda to evaluate the knowledge, attitudes and behaviour of village health teams towards their work.</p>

### Comments from MR participants 2011:

*“Integration of community engagement in the lectures was great given that communities' effective involvement in projects leads to success. I do believe that what I and other members have achieved will help the improvement of the health standards in this region.”*

<p>The impact of Community Owned Resource Persons on reducing malnutrition among children less than two years in three health Sub Districts in Mbarara and Bushenyi.</p> <p>PTL: Moses Ntaro</p> <p>Status:          ✓Project completed  <b>OUTCOME</b>          ✓Presented to Healthy Child Uganda</p>	<p>Mbarara, Uganda</p>	<p>The research will explore secondary data that was collected on children during the baseline in 2006 and the endline survey in 2009. On addition some data for validation will be collected. The primary purpose of the study is to determine whether the Community Health Volunteer (CHVs) program reduced malnutrition. To achieve this, the researcher will focus on the main activities that were normally conducted by the CHVs and test if there is any statistical relationship. The study will further explore if social demographic factors contributed significantly to the reduction in malnutrition. The data will be further cleaned and new variables created so that various statistical associations can be analysed.</p>
<p>Relationship between socioeconomic status and neonatal sepsis in Mbarara, Uganda.</p> <p>PTL: Tusiimire Jonans</p> <p>Status:          ✓ Project completed  <b>OUTCOME</b>          ✓Presented to Healthy Child Uganda and local health authority</p>	<p>Mbarara, Uganda</p>	<p>Although there is scarcity of documented data in Uganda, a developing country, anecdotal evidence suggests that socioeconomic status of households may be inexplicably linked to the likelihood of a baby getting infection in its first 28 days of life. The general objective of our research is to measure socioeconomic status in households where neonates develop sepsis and compare it with that of households where neonates do not develop sepsis to understand the relationship between socioeconomic status and neonatal sepsis in Mbarara, Uganda. To attain this objective, we will interview mothers of babies admitted with sepsis and of those who do not have sepsis.</p>
<p>Assessing the relationship between social support system and nutrition status among children under 5 years.</p> <p>PTL: Natukwatsa Amon</p> <p>Status:          ✓Project completed  <b>OUTCOME :</b>          ✓Report pending to Healthy Child Uganda</p>	<p>Mbarara, Uganda</p>	<p>The study will be carried out in Kyera parish in South Western Uganda; it will involve a baseline survey to fully achieve all the specified objectives. Data analysis and report writing as well results dissemination. Descriptive studies on the other hand give a representation of a social phenomenon (Neuman, 2006). The two designs are expected to be appropriate for this study due to their ability to generate new insights and to describe in-depth the little-studied relationship between social support system and nutritional status among children under 5 years. A combination of qualitative and quantitative approaches will be adopted during the study. A qualitative approach enjoys a number of merits such as flexibility and ability to generate in-depth information The method will provide an opportunity for participants to directly and interactively 'tell their story' concerning the relationship between social support system and nutritional status of children.</p>

## 2012

<p>Couples HIV counseling and testing: factors influencing its uptake.</p> <p>PTL: Nannozi Victoria</p> <p>Status:          ✓Project completed  <b>OUTCOME:</b>          ✓ Report to MicroResearch          ✓ Published: <b>Global Health Promotion 2016: 24(4): 33-42.</b>          ✓ Published: <b>BMC Public Health 2017; 17:104.</b></p>	<p>Makerere Uganda</p>	<p>The purpose of this research is to identify understand and document the factors that are influencing the uptake of couple HIV counseling and testing in Mukono district in Uganda. This study will enable programs and the district to implement a culturally sensitive program. The information obtained will be shared with the different stakeholders with the intention of developing clear action plans for implementation. These stakeholders will include MOH, Mukono district Local government officials, the partners in HTC and representatives from the community in which the research was carried out.</p>
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<p>Knowledge and current practices of Village Health Teams in early detection and care of young children with malnutrition in Healthy Child Uganda supported communities in Mwizi Sub County, Uganda.</p> <p>PTL: Elizabeth Kemigisha</p> <p>Status:  ✓ Project completed  <b>OUTCOME</b>  ✓ Report to MicroResearch, combined with project in 2014  ✓ Published <b>Can J Public Health 2016; 109: e486-7</b>  ✓ Presented to Healthy Child Uganda and local health authority</p>	<p>Mbarara Uganda</p>	<p>Malnutrition remains a big problem in Uganda affecting 38% of children in South Western Uganda. The Ministry of Health interventions to address this problem together with organizations such as UNICEF, Health Child Uganda is to roll out the Village Health Team (VHT) strategy to manage malnutrition at a community level. We intend to carry out a survey to determine the knowledge and current practices of VHTs members in early detection and care for young children (under 5years) with malnutrition in Mwizi Sub County, in South Western Uganda. According to Mbarara regional referral hospital records this area records highest admissions for severe malnutrition. To do this we shall administer structured questionnaires to selected VHTs in the HCU supported areas and conduct focus group discussions to establish factors contributing to malnutrition in this region. Data will be entered into Epidata and analyzed by Stata software. Qualitative data from FGDs will be transcribed and themes established and analyzed by thematic analysis.</p>
<p>Knowledge, Attitudes and Practices about blood donation in rural communities of Kiruhura District, South Western Uganda.</p> <p>PTL: Natukunda Peace</p> <p>Status:  ✓ Project completed  <b>OUTCOME</b>  ✓ Published <b>Journal of Obstetricians and Gynecologists of Canada 2015; 37(10):903–904</b>  ✓ Presented to local health authority</p>	<p>Mbarara Uganda</p>	<p>Blood transfusion is a vital element of health care system in Uganda. Much (75%) of donated blood is used by children with different conditions and pregnant women with complications of pregnancy and/or child birth. Children with different conditions requiring transfusion use more than a half (50%) of donated blood. Therefore, to reduce maternal and child mortality in Uganda and meet MDGS related to child health and maternal health by 2015, there is an urgent need to ensure a sustained supply of adequate units of safe blood throughout the year. In Uganda, 100% of blood is donated by voluntary non-remunerated blood donors and majority of whom 90% are secondary school students. This indicates that during school holidays, communities become a major source of blood.</p>
<p>Maternal mental health and Malnutrition in children admitted in Mbarara Regional Referral Hospital in South Western Uganda.</p> <p>PTL: Ashaba Scholastic</p> <p>Status:  ✓ Project completed  <b>OUTCOME</b>  ✓ Published <b>BMC Public Health 2015;15:1303</b>  ✓ Presented to local health authority</p>	<p>Mbarara, Uganda</p>	<p>Malnutrition remains one of the most significant child health problems in developing countries with about 53 % of child deaths/y due to underweight. 2011 Uganda Demographic and Health Survey (UDHS) showed that 38 % of the children were stunted and 16 % were underweight. While dietary and environmental factors are known major contributors to children's nutritional status, maternal depression may also contribute since it disrupts the mothers' ability to cope with demands of childcare. This study aimed to determine the association between maternal depression and malnutrition in children aged one to 5 years in southwest Uganda</p>

<p>The Lived experience of VHT members in the Kinoni Health sub-district South West Uganda.</p> <p>PTL: Clare Kyokushaba</p> <p>Status:          ✓ Project completed</p> <p><b>OUTCOME</b>          ✓ Abstract presented 2017          ✓ Presented 1st International Symposium on Community Health Workers. Kampala, Uganda 2017          ✓ Published: <b>BMC Proceedings 2017 11(Suppl 6): 067</b></p>	<p>Mbarara, Uganda</p>	<p>This project uses random sampling to select 4 villages from the 6 parishes in Kinoni Health sub-district from which purposive sampling of VHTs and local leaders in each of the villages will be done. In-depth interviews will be conducted with the study participants and the interviews will be audio-recorded and transcribed verbatim. Field notes will be taken during the interviews and incorporated into written transcripts. Individual VHT members will be targeted for these interviews and Key informants will be targeted to provide the information on the context in which the VHTs perform their duties. Interviews will be followed by Focus group discussions which will be organized for randomly selected VHTs to provide more information on the commonly arising themes. Four FGDs will be held with a minimum of 8 participants per focus group discussion and we shall have one FGD in each of the selected villages.</p>
<p>Role of income generating activities in motivation and retention of Village Health Teams in the Kinoni health sub-district.</p> <p>PTL: David Tumusiime Katuruba</p> <p>Status:          ✓ Project completed</p> <p><b>OUTCOME</b>          ✓ Report submitted Healthy Child Uganda          ✓ Article in development</p>	<p>Mbarara, Uganda</p>	<p>Village health team mobilization and awareness:          Conduct focus group discussion with the VHTs and Key informant Interviews</p> <ul style="list-style-type: none"> <li>• Data analysis</li> <li>• Report writing</li> <li>• Meeting to discuss the findings</li> <li>• Meeting to prepare the dissemination</li> <li>• Dissemination to the VHTs, community leaders, policy makers, district leaders and other stake holders</li> </ul>
<p>Teenage antenatal services: Availability, accessibility and utilization of teenager friendly antenatal services in Mbarara Municipality, South Western Uganda</p> <p>PTL: Geoffrey Zari Rukundo</p> <p>Status:          ✓ Project completed</p> <p><b>OUTCOME:</b>          ✓ Published: <b>BMC Pregnancy and Childbirth 2015;15(351): 1-5.</b>          ✓ Published: <b>Midwifery 2019; 72: 74-79.</b>          ✓ Presented at MUST</p>		<p>Maternal mortality remains a serious problem in Uganda with concerns about Uganda's ability to achieve the Millenium Goal 5A to decrease maternal mortality rate from 1990 by three quarters by 2015. Female teenagers' sexual and reproductive health in Uganda is worsened by their poor health care seeking behaviour and the limited options for teen friendly care. This is of serious concern as approximately one in four falls pregnant each year and many have difficulty accessing services as there are a multitude of barriers. This MicroResearch group will examine the barriers to care in the municipality of Mbarara in south west Uganda. This cross-sectional qualitative descriptive study will determine the factors which influence the accessibility and utilization of antenatal services by teenagers.</p>



MicroResearch Workshop 2012 University of Nairobi

## Comments from MR participants 2012:

*"You have made it possible for me to meet the people I should have met 5 years ago, who can help me in my research."*

*"I do believe that what I and other members have achieved will help on the improvement of the health standards in this region."*

*"I will share ideas and apply what I learned in my new job."*

## 2013

<p>Use of mobile phones to improve the antenatal care attendance of pregnant women in semi-urban south eastern Tanzania.</p> <p>PTL: Zabron Abel</p> <p>Status:  <input checked="" type="checkbox"/> Project completed  <b>OUTCOME</b>  <input checked="" type="checkbox"/> Report pending</p>	<p>Ifakara, Tanzania</p>	<p>The Maternal and child health has a high priority on the global agenda most prominently underlined in the Millennium Development goals 4 and 5 which address the reduction of Child mortality and improve maternal health respectively. The risk of maternal death is estimated to be 50 times higher in Sub-Saharan Africa compared to developed countries and this inequality is considered the largest discrepancy of all public health statistics. Pregnancy monitoring and detection of complications are the main objectives of antenatal care. WHO recommends the total number of visits for a pregnant woman should be at least 4 visits in developing countries. The project intends to make use of mobile phones to make call reminders to pregnant women to attend the antenatal care at the particular health facilities. This takes advantage of the widespread coverage of mobile phones network, whereby the study area approximately 75% of the population has mobile phone or has access to mobile phone.</p>
<p>Assessment of Knowledge, practices and attitudes on Exclusive Breast Feeding (EBF) among mothers attending Ifakara Reproductive and Child Health Clinic (RCHC).</p> <p>PTL: Janeth Katana Bulemela</p> <p>Status:  <input checked="" type="checkbox"/> Project completed  <b>OUTCOME</b>  <input checked="" type="checkbox"/> Report submitted  <input checked="" type="checkbox"/> Article: submitted</p>	<p>Ifakara, Tanzania</p>	<p>We are to start discussing with the focus groups of 30 people; these are nurses working in women and children clinic , women in villages from 3 different sites and nurses working in hospital where there are delivered women. As well fathers of babies in the working places from 3 different areas where food is handled (preferred food market, hotels and food vendors in streets). A separate mini questionnaire of almost similar questions will be used to question the practice, knowledge and attitudes on breastfeeding of mothers in Ifakara as perceived by these people. Then next step will be to interview consented women of babies of within one year of age and their partners at the RCH clinic about the same issues discussed and particularly what are the men supports. The interview will be guided by the designed questionnaire. Men should not be necessary partners of the interviewed women.</p>
<p>The determinants of partograph use in Mulago Referral Hospital Labour Ward: Health workers perspective.</p> <p>PTL: Patrick Lumala Zimbe</p> <p>Status:  <input checked="" type="checkbox"/> Project completed  <b>OUTCOME</b>  <input checked="" type="checkbox"/> Report submitted  <input checked="" type="checkbox"/> Published <b>BMC Health Services Research 2019;19(107) 1-8.</b></p>	<p>Makerere Uganda</p>	<p>Every year, a high number of mothers lose their lives during child birth in low and middle income countries due to prolonged labour. These deaths could be prevented by careful monitoring of labour guided by use of partograph. This study is set out to determine partograph use and user perspectives of this tool. We plan on obtaining qualitative and quantitative data about the use of partograph and the perception of this tool among health workers. We shall train four research assistants who will administer the questionnaire under close supervision of investigators. The data collection shall run for one month and data shall be compiled at weekly basis which shall be followed by data analysis and report writing. The findings shall be presented to Mulago Hospital and other stakeholders and policy recommendation shall be presented to the ministry of Health in Uganda.</p>

<p>Reasons for and determinants of non-adherence to the UNEPI vaccination schedule among children in Kyabugimbi sub-country.</p> <p>PTL: Barnabas Atwiine</p> <p>Status:          ✓ Project completed  <b>OUTCOME:</b>          ✓ Published <b>Can J Public health 2015; 106: e 564</b>          ✓ Presented to Healthy Child Uganda and local health authority</p>	<p>Mbarara, Uganda</p>	<p>Only 52% of Ugandan children below 5 years of age are fully immunized, the lowest immunization coverage rate in East Africa, and one of the lowest in Africa. This denies children one of the most cost effective methods of disease-prevention and indeed, the country has suffered numerous measles outbreaks in the recent past. No local study has explored the reasons as to why there is low coverage of immunization coverage and the factors associated with failure to complete the immunization schedule, which our study aims at. We shall do this by interviewing primary caregivers of unimmunized and partially immunized children about their reasons and family characteristics.</p>
<p>Factors Associated with Delayed Presentation of Children with Malaria to Kazo Health Centre IV.</p> <p>PTL: Imelda Kemeza</p> <p>Status:          ✓ Project completed  <b>OUTCOME</b>          ✓ Report to MicroResearch          ✓ Article being prepared for publication          ✓ Presented to Healthy Child Uganda and local health authority</p>	<p>Mbarara, Uganda</p>	<p>We shall conduct a cross sectional, descriptive and analytical study on adult care givers from Kazo Health Centre IV, in Kiruhura district whose children below 5years have a positive blood slide or Rapid Diagnostic Test with one or more symptoms of malaria and have consented. We shall interview adult care givers consecutively till 380 respondents whose children meet the inclusion criteria. The interviews will be audio-recorded and transcribed verbatim. Field notes will be taken during the interviews and incorporated into written transcripts. Individual adult care giver will be targeted for these interviews to provide the information on the early and delayed presentation of children below five years with malaria to a health facility. Interviews will be subsequent to a questionnaire on demographic and clinical information associated with malaria.</p>
<p>Knowledge and Perception of Parents/Guardians on Under-Nutrition of Children aged 6 months to 5 years receiving outpatient Services at Mama Lucy District Hospital, Nairobi County.</p> <p>PTL: Edna Ojee</p> <p>Status:          ✓ Project completed  <b>OUTCOME</b>          ✓ Poster presented: Int Ped Association Conference, Vancouver 2017          ✓ Presented Africa Health Agenda Int Conference, Nairobi 2018          ✓ Article being prepared for publication</p>	<p>Nairobi, Kenya</p>	<p>The study seeks to explore the relationship between caregiver knowledge, socioeconomic status and nutritional status of children in the densely populated Eastern area of Nairobi-Kenya's capital city. Caregiver knowledge on nutrition will be assessed using a questionnaire with open and closed ended questions administered by trained interviewers to the caregivers attending outpatient clinic with children in either Kiswahili or English. The questions will cover-source of knowledge on nutrition and diet, feeding practises, food hygiene and illness associated with under-nutrition. These results will then be compared to the children's nutritional status using the international standard acceptable for classifying nutrition status of a child; using the weight and circumference of the left mid upper arm. The outcome of the study will give a basis to advocate for improved health education programs and by extension achieving millennium development goals with reference to child health and maternal health.</p>

**Comments from MR participants 2013:**

*“Small projects are the cornerstone on which research skills are built and wider spectrum of potential researchers reached with excellent outcomes.”*

*“Allocate more resources to support MicroResearch, as this is the only way to go about resolving challenges faced in our communities.”*



*MicroResearch Workshop Graduates and local Facilitators Mbarara, Uganda 2013, Mother and child arriving at clinic, Busheyeni District Uganda*

**2014**

<p>Use of Knowledge Translation principles and exchange to disseminate results of newborn death audits to Luwero District Health Team</p> <p>PTL: Eisha Grant</p> <p>Status: ✓ Project completed</p> <p><b>OUTCOME</b> ✓ Report given to Ministry of Health in Uganda ✓ MOH has changed policy based upon this ✓ Chlorhexidine gel now locally manufactured and distributed in “Mama packs”</p>	<p>Makerera Uganda</p>	<p>The previously completed MR project (2011) showed that cord sepsis is a serious problem causing neonatal deaths in Luwero District. The next step is knowledge translation of these findings. The project will apply qualitative methods through a detailed KT Plan with the following KT goals;</p> <ol style="list-style-type: none"> <li>1. To increase awareness of the problems with traditional cord related practices in Bamunanika Sub- County Luwero District</li> <li>2. To increase interest to support WHO good cord care practices in Bamunanika Sub-county Luwero District</li> <li>3. To promote behavioural change on traditional cord care practices among mothers in Bamunanika Sub County Luwero District</li> </ol>
<p>Knowledge, Attitude and Behaviour Towards use of Insecticide Treated Mosquito Nets among Pregnant women and Children in Isingiro district, South-western Uganda.</p> <p>PTL: Taremwa Ivan Mugisha</p> <p>Status: ✓ Proposal completed</p> <p><b>OUTCOME</b></p>	<p>Mbarara, Uganda</p>	<p>We shall conduct a cross sectional study involving households with pregnant women and children under five from Isingiro district. We shall have free listing interviews consecutively to such households until such a time those common themes have been identified; the interviews will be audio-recorded and transcribed verbatim. To supplement on household interviews, Focus Group Discussions (FGDs) and Key Informant Interviews will be added. Key Informant Interviews will involves a health worker of selected health centres, a local council chairperson, an opinion leader such as religious leader, local council health secretary, drug shop attendant, and the District Health Educator. Focus Group Discussions will involve pregnant women and mothers with children less than 5 years, another for VHTs, and an FGD for men.</p>

<ul style="list-style-type: none"> <li>✓ Report to local health authority and HCU</li> <li>✓ Article: <b>BMC Public Health 2017; 17:794</b></li> </ul>		
<p>Effect of phone call on maternal and foetal outcomes prior and after maternal referrals from Isingiro district: A pilot study</p> <p>PTL: Hamson Kanyesigye</p> <p>Status:</p> <ul style="list-style-type: none"> <li>✓ Project completed</li> </ul> <p><b>OUTCOME</b></p> <ul style="list-style-type: none"> <li>✓ Report to Healthy Child Uganda</li> <li>✓ Published <b>Can J Public Health 2019; 110: 520-522</b></li> <li>✓ Follow up trial in development</li> </ul>	<p>Mbarara, Uganda</p>	<p>Maternal and Neonatal mortality rates remain high in Uganda despite the different interventions with estimates of 438/100000 and 25/1000 live births respectively. The three delay model in the referral system contributes significantly and most of the mothers with poor maternal and fetal outcomes are referrals especially from Isingiro district. Patients are routinely referred by the lower health units without informing Mbarara regional referral hospital and this delays timely interventions due to lack of preparedness leading to the poor maternal and fetal outcomes. We intend to find out if a phone call prior to maternal referral can improve the Labour outcome. We shall avail prepaid phones to some health units and compare the outcomes between the health unit that would have called before referral and those that will refer without informing Mbarara regional referral hospital.</p>
<p>Knowledge and current practices of Village Health Team members in early detection and care for young children in Healthy Child Uganda Supported communities in Kakanju Sub county, Bushenyi district</p> <p>PTL: Elizabeth Kemigisha</p> <p>Status:</p> <ul style="list-style-type: none"> <li>✓ Project completed</li> </ul> <p><b>OUTCOME</b></p> <ul style="list-style-type: none"> <li>✓ Published: <b>Can J Public Health 2016; 109: e486-7</b></li> <li>✓ Presented to Healthy Child Uganda and local health authority</li> </ul>	<p>Mbarara, Uganda</p>	<p>South Western Uganda has high malnutrition rates with over 36% and 3% of children with stunting and severe wasting respectively (UDHS 2011). Locally, Kakanju Sub County in Bushenyi District is significantly affected with 13% of young children with stunted growth. Early recognition of signs of malnutrition in children improves outcomes and severity at presentation. WHO proposes use of Mid Upper Circumference tapes or oedema by community health workers or volunteers to recognise malnutrition (WHO, 2007). Despite the training the VHTs have received, children present late to hospital with advanced signs of malnutrition. The main objective of the study is to determine the current practice of the VHTs in early detection and care for children with acute malnutrition in Kakanju Sub County.</p>
<p>Ponseti clubfoot management: experience with the Steenbeek Foot Abduction Brace.</p> <p>PLT: Paul Mang'oli</p> <p>Status:</p> <ul style="list-style-type: none"> <li>✓ Project completed</li> </ul> <p><b>OUTCOME:</b></p> <ul style="list-style-type: none"> <li>✓ Published: <b>Paediatrics &amp; Child Health 2014;19:513-5.</b></li> <li>✓ Letter to editor reply: <b>Paediatrics &amp; Child Health 2015;20:148</b></li> <li>✓ Presentation: to local health authority and Kijaiibe Hospital</li> </ul>	<p>Nairobi, Kenya</p>	<p>Clubfoot is one of the most common congenital deformities, with an incidence of 1 in 1,000 live births worldwide. In Kenya, about 1,200 babies are born with clubfoot every year. Left untreated, clubfoot leads to painful, disabling deformity, and social stigmatization. Bracing is an integral part of the internationally accepted standard of care - Ponseti method of clubfoot management with compliance with bracing being the key to a successful outcome. This has brought the type of brace under scrutiny, with newer "child friendly" braces recommended over the traditional Dennis Brown brace, which has been blamed for high rates of noncompliance. However, these child friendly braces are expensive and out of reach for most families of affected children in Kenya, and in other developing countries. The Steenbeek Foot Abduction Brace (SFAB) is made locally in Kenya with a cost of less than \$10 US. This cross sectional study of acceptability, tolerability, compliance, complications and outcomes of children using the SFAB for <math>\geq 6</math> months found that this affordable appliance had high efficacy and low complications.</p>

<p>Tuberculosis Drug Resistance and Risk Factors among Presumptive Cases in Oromia Region, Ethiopia</p> <p>PTL: Girma Mulisa</p> <p>Status:</p> <ul style="list-style-type: none"> <li>✓ Received external funding</li> <li>✓ Project completed</li> </ul> <p><b>OUTCOME:</b></p> <ul style="list-style-type: none"> <li>✓ Published: <b>Int J Infect Dis. 2015;39:57-61</b></li> <li>✓ Presented to local health authority Oromia Region</li> </ul>	<p>Addis Ababa, Ethiopia</p>	<p>The study aim was to determine risk factors for multi drug resistant tuberculosis (MDR-TB) in Oromia Region, Ethiopia. Of 439 presumptive MDR-TB cases, 265 had confirmed MTB with 33% (88) MDR-TB. Study patients were relatively young, 65% 18 to 39 years of age. On multi-variant analysis, occupation (being a farmer), known tuberculosis contact history, chronic antacid use for treatment of gastritis during anti-tuberculosis treatment, HIV infection, previous known tuberculosis history and previous tuberculosis treatment outcome were predictors of MDR-TB. MDR- TB was not rare in Oromia Region. Local MDR-TB detection capacity and local epidemiology studies are key for detection and guiding use of sparse resources to optimize MDR-TB control. If TB is suspected, the presence of any of the above factors should alert Oromia region clinicians and public health to be wary of MDR-TB.</p>
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### Comments from MR participant 2014:

*"Two weeks ago I would not have believed how far I could have come. This workshop will help perfect my career as a nurse."*



### 2015

<p>Traditional rituals and customs for pregnant women in selected villages in southwest Uganda</p> <p>PTL: Florence Beinempaka</p> <p>Status:</p> <ul style="list-style-type: none"> <li>✓ Project completed</li> </ul> <p><b>OUTCOME:</b></p> <ul style="list-style-type: none"> <li>✓ Published <b>Journal of Obs and Gyne of Canada 2015; 37(10):899-900.</b></li> <li>✓ Presented to School of Nursing MUST</li> </ul>	<p>Mbarara, Uganda</p>	<p>Uganda has significantly improved its under-five mortality rate; however, maternal mortality is still a problem. Several Ankole maternal traditional pregnancy/ birth customs run contrary to World Health Organization recommended practices such as use of vaginal herbs, home delivery even of adolescents without a skilled birth attendant, and delayed hospital referral when complications arise. Low trust in health care workers and delay in hospital/health facility referral may be due to the observed association with referral and maternal/ neonatal deaths. Health care practitioners need a deep understanding of these rituals in order to modify them for improved maternal care.</p>
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<p>Assessing acceptability of modern energy sources by women of Rentondo Cell, Mbarara District Southwestern Uganda</p> <p>PTL: George Stephen Ochwo</p> <p>Status: ✓ Project underway</p>	<p>Mbarara, Uganda</p>	<p>Household cooking fuel is needed to prepare daily foods. Charcoal has replaced firewood in areas where firewood is hard to find locally. Not only does it emit fewer pollutants, it has higher energy content and is simpler to transport. However, in comparison to clean cooking fuels (liquefied petroleum gas) like kerosene, the efficiency of charcoal stoves is only about 25%, so the overall system efficiency is quite low. Rwentondo Cell, one of the upcoming suburbs of Mbarara Municipality, is characterized by limited access to modern sources of energy for cooking. No study has been carried out in this area to explore the potential for community acceptance of more modern energy sources for cooking. The investigators are proposing to collect data on local perceptions and practices related to cooking fuels.</p>
<p>The role of community health nursing in identifying the health needs of women and children in Katete cell- Mbarara municipality - Uganda</p> <p>PTL: Beebwa Esther</p> <p>Status: ✓ Project data collection completed ✓ Data analysis underway</p>	<p>Mbarara, Uganda</p>	<p>Community health nursing is aimed at promoting and preserving the health of populations in the community. Regrettably, despite much government efforts, Uganda still has high maternal (430/100,000 live births) and infant (76 deaths per 1000 live births) mortality rates. The community has persisted in high rate use of the informal health sector e.g. traditional birth attendants, traditional herbalists and self-medication with over the counter drugs. The low use of the formal health care system and persistence in use of the informal system has contributed to the ongoing poor maternal child health outcomes. To better understand this issue, this project seeks to determine, through qualitative methods, the health needs of women and children residing in a suburb of Mbarara, Uganda, especially this group's lack of attention to health promotion prevention issues.</p>
<p>Prevalence of Ethanol Use Among Pregnant Women in Southwestern Uganda</p> <p>PTL: Lindsay English*</p> <p>Status: ✓ Project completed</p> <p><b>OUTCOME</b> ✓ Published; <b>Journal of Obstetricians and Gynecologists of Canada 2015;37(10):901-902.</b></p> <p>*Project carried under auspices UBC, MR help with publication</p>	<p>Mbarara, Uganda</p>	<p>The prevalence of ethanol use in many Sub-Saharan African countries is high and reported to be increasing among women. The objective of this study was to determine the prevalence and predictors of ethanol use among women delivering at a regional hospital in Southwestern Uganda. Among 606 woman invited to participate, 505 were enrolled. The prevalence of maternal alcohol use during the current pregnancy was 16%. Prior use and the awareness of few alcohol-related harms were the strongest predictors of use during pregnancy. A minority of meconium samples (2%) revealed significant fetal alcohol exposure. Education as a protective factor, along with perceived risk as a risk factor, suggests that educational interventions can assist in efforts to decrease alcohol use during pregnancy in Southwestern Uganda</p>
<p>The Health Status of Children (0-2 years) born to teenage mothers In a Rural Community in Southwestern Uganda</p> <p>PTL: Ndyareeba Eunice</p> <p>Status: ✓ Project complete ✓ Report pending</p>	<p>Mbarara, Uganda</p>	<p>Teenage mothers, especially in Uganda, tend to be neglected by the existing health system, their family and society. Their babies are at increased risk of prematurity, low birth weight, birth asphyxia, still-birth, jaundice and respiratory distress syndrome. However, little is known of the health status of these infants born to teen mothers at after birth and up to 2 years of age. These children likely have higher morbidity and mortality because of physiological risks and the negative effect on the social and economic status of the adolescent mother, and hence the child. The health of children born to teen mothers at between 0 to 2 years has not been well documented in Uganda. The purpose of this study is to learn about the health status of these children and contributing factors in health development of the children born to teenage mothers. This study will help the country to address and improve maternal health, reduce child mortality by determining what factors support and hinder the development of children born to teen mothers.</p>

<p>Determining the prevalence of polyparasitism and association with anaemia in febrile under-five children at a health facility in Chikwawa, Malawi.</p> <p>PTL: Jomo Hector Chilenga Banda</p> <p>Status:          ✓ Project completed  <b>OUTCOME</b>          ✓ Report submitted to MicroResearch          ✓ Article being prepared for publication</p>	<p>Blantyre, Malawi</p>	<p>Neglected tropical disease (NTD) affect the poorest people in sub Saharan including Malawi where soil transmitted helminths, schistosomiasis and malaria are endemic in mainly the lakeshore and lower Shire areas. Co-infection with all these parasites increases the risk of anemia and its complications. A lot of studies and interventions target school children and adults. Pre-school aged school children (PSAC) have been a neglected population. Screening for these conditions is not usually done in most health facilities in Malawi. This study will investigate febrile children under 5 years old with suspected malaria for urinary schistosomiasis, hookworm infection, Ascaris spp infection and malaria. The study will be done at Chikhwawa District Hospital in Malawi. Although a rapid malaria test is part of routine care, stool and urine samples will be taken which are not.</p>
<p>The contribution to mothers' health by village health team promotion practices: A case study of Kyabugimbi subcounty Bushenyi District.</p> <p>PTL: Teddy Kyomuhangi</p> <p>Status:          ✓ Project completed  <b>OUTCOME</b>          ✓ Published: <b>Can J Public Health 2015; 106: e 565</b></p>	<p>Mbarara, Uganda</p>	<p>Maternal mortality in sub-Saharan Africa and South Asia accounts for 86% of the maternal mortality rate in the world. In Uganda, a community health worker strategy, Village Health Teams (VHTs), was introduced in 2001 to help address maternal/ child mortality challenges. VHTs are an equivalent of Health Centre I – responsible for the health of community members at the household level. VHTs serve as a community's initial point of contact for health and social services, as well as helping to build social capital and understanding of basic health services and lifestyle choices. As of 2014, over 170,000 VHTs have been trained and deployed across Uganda. The purpose of this study was to explore the contribution of VHTs' health promotion practices to maternal health in south west Uganda.</p>



*MicroResearch Workshop, St. Francis Hospital, Nsambya, Uganda 2015*

**Comments from MR participants 2015:**

*"I will recommend this initiative to include more institutions specially those institutions which just started and have no experiences on research, no mentors."*

## 2016

<p>Assessment of the outcomes of perinatal asphyxia and determinant factors among asphyxiated neonates within the 1st 28 days of life at Yekati-12 Hospital Medical College, Addis Ababa, Ethiopia, 2016.</p> <p>PTL: Yimer Seid</p> <p>Status: ✓ Transferred and ongoing follow up by Ethio Canada</p>	<p>Addis Ababa, Ethiopia</p>	<p>The aim of this research is to identify the contribution of medically indicated preterm birth to neonatal outcomes and assessing factors determine immediate preterm outcomes through comparing magnitude of spontaneous and medically indicated preterm birth, comparing immediate outcomes of spontaneous and medically indicated preterm birth and recommend possible intervention way to reduce high neonatal death in tertiary Hospitals of Addis Ababa. Comparative cross sectional study design will be used to identify contribution medically indicated preterm birth to the immediate neonatal out comes, identify magnitude of spontaneous and medically indicated preterm birth and assess associated factors determine immediate outcomes of preterm birth.</p>
<p>Men's Knowledge and involvement on Obstetric Danger Signs, Birth Preparedness and Complication Readiness in Burayu, Oromia, Ethiopia, 2016.</p> <p>PTL: Nebiyou Wendwessen</p> <p>Status: ✓ Transferred and ongoing follow up by Ethio Canada</p>	<p>Addis Ababa, Ethiopia</p>	<p>Male involvement in obstetrics care is an important strategy in reducing preventable maternal morbidity and mortality especially in developing countries where male as head of the household is the one who makes decision on financial, health and other family issues. Different studies showed that male involvement in maternal health is key to ensuring considerable reduction in maternal mortality. This study aims at assessing men's knowledge on obstetric danger signs and their involvement in Birth Preparedness and Complication Readiness (BP/CR) in Burayu city administration in Ethiopia.</p>
<p>Practice and associated factors towards skin to skin contact immediately after birth of health professionals in Addis Ababa</p> <p>PTL: Yemisrach Mekonnen</p> <p>Status: ✓ Transferred and ongoing follow up by Ethio Canada</p>	<p>Addis Ababa, Ethiopia</p>	<p>In Ethiopia the prevalence of neonatal hypothermia is around 53%, which is a huge number contributing for the high neonatal morbidity and mortality rates in our country. Skin to skin contact is a simple and cost effective method for improving post-delivery care especially for prevention of hypothermia. But how it is really practiced in our country is a question. This study will assess the actual practice of skin to skin contact among birth attending health workers in Addis Ababa health facilities and it will help to identify if there is a knowledge gap in the area. The finding from this study can be also used as input for further research, policy making or developing a strategy to improve our care during delivery. This study will assess practice and associated factors for Skin to Skin Contact immediately after birth among health professionals in public health delivery facilities in Addis Ababa, Ethiopia.</p>
<p>Factors associated with singleton neonatal low birth weight at St. Paul's hospital millennium medical college</p> <p>PTL: Mehret Yalew</p> <p>Status: ✓ Transferred and ongoing follow up by Ethio Canada</p>	<p>Addis Ababa, Ethiopia</p>	<p>Low birth weight (LBW) is considered a major factor affecting neonatal morbidity and mortality. Half of all perinatal and one third of all infant deaths are directly or indirectly related to LBW. It leads to inhibited growth, cognitive development and also associated with chronic diseases later in life. LBW is a sensitive indicator of the socioeconomic conditions and indirectly measures the health of the mother and the child. Etiology of LBW is multifactorial, a complex with demographic, nutritional, reproductive and socio-economic factors each potentially playing a role. This study will assess factors associated with neonatal low birth weight for babies being born at St Paul's Hospital Millennium Medical College in Addis Ababa over a one year prospective study.</p>

**Comment from MR participant 2016:**

*"I will now foster continued questioning within our institutions and community to develop pertinent research questions and find the answers."*

<p>A comparative study on spontaneous and medically indicated preterm birth and factors associated with preterm birth outcomes in Addis Ababa's Yekafit 12 and St. Paul Hospital Millennium Medical College</p> <p>PTL: Samuel Muluye Welelaw</p> <p>Status: ✓ Transferred and ongoing follow up by Ethio Canada</p>	<p>Addis Ababa, Ethiopia</p>	<p>In Ethiopia over 320,000 premature babies are born every year and 24,400 children under five die due to direct preterm complications. The aim of this research is to identify the contribution of medically indicated preterm birth to neonatal outcomes and assessing factors that determine immediate preterm outcomes through comparing magnitude of spontaneous and medically indicated preterm birth, comparing immediate outcomes of spontaneous and medically indicated preterm birth and recommend possible intervention ways to reduce high neonatal death in tertiary Hospitals of Addis Ababa.</p>
<p>Cervical cancer screening uptake: a case study of Sheema district, rural south western Uganda</p> <p>PTL: David Ayebare Santson</p> <p>Status: ✓ Project complete ✓ Writing abstract</p>	<p>Mbarara, Uganda</p>	<p>Cervical Cancer screening is a preventive measure to mitigate maternal morbidity and mortality among women due to cervical cancer. Cervical Cancer screening is poorly implemented in rural communities of sub-Saharan Africa. This continues to threaten lives of most women. On the other hand, cervical cancer is one of commonest cancers among women in Uganda. In Sheema district, cervical cancer screening is done occasionally at health centres and very few women attend. The objective of this study is to investigate the factors influencing cervical cancer screening programmes in Sheema district South- Western Uganda. FGDS and KIIS with community members both male and females, Health workers and VHTS in (3) sub-counties of Sheema town council, Shuuku and Kitagata.</p>



Left: Workshop participants and teachers, Centre Hospitalier Kigali, Kigali Rwanda, 2016; Right: participants, teachers and judges, Gertrude's Children's Hospital, Nairobi Kenya, 2016

<p>The Knowledge and Practice of Honey Use on Infants' Health (0-12 Months), Baringo South Sub County, (Central Rift Valley), Kenya</p> <p>PTL: Ronald Omenge</p> <p>Status: ✓ Project underway</p>	<p>Kabarak Univ., Kenya</p>	<p>Honey is known to be unsafe for children younger than one year because of the risk of botulism. Because use in infants is unsafe the project study aims to explore the knowledge levels of mothers and their practices on honey use on their infants' health in Baringo South Sub County Community, a major honey producing area in Kenya. The authors have 4 specific aims: To determine the knowledge of mothers on honey use on infant's health; To establish the common socio-cultural practices on honey use on infants' health; To identify the common ailments that honey is used for on infants; Identify the common ailments that honey is used for among children less 1 year. They will use a mixed method design focused on collecting, analyzing, and mixing both quantitative and qualitative data in a ethnographic cross sectional design.</p>
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<p>Assessment of antimicrobial resistance in a rural mission hospital in central Kenya.</p> <p>PTL: Jason Brotherton</p> <p>Status:  ✓ Project approved  ✓ Obtaining ethics approval</p>	<p>Kabarak Univ., Kenya</p>	<p>AMR is a growing, global concern, well recognized and highlighted by the World Health Organization. Antimicrobial prescribing practices are a major contributor to the development of AMR. Of the many factors that contribute to AMR, monitoring prescribing practices is the primary way that medical professionals can slow this phenomenon (antimicrobial stewardship). In addition to tracking antimicrobial prescription practices, monitoring AMR at the local level is critical. Local AMR can be documented by creating an antibiogram. The antibiogram graphically represents each bacteria's level of resistance to available antibiotics. The WHO has noted that the preparation of an antibiogram at the local level can help in clinical decision-making, design infection control interventions, and antimicrobial-resistance containment strategies. Little is known about local AMR and antimicrobial prescription in rural settings in Africa including Kenya. Thus, the aim of this study is to assess antimicrobial resistance in a rural mission hospital in central Kenya by measuring its antibiotic prescriptions per encounter and creating an antibiogram for hospital use.</p>
<p>Silent therapies amongst diabetics at AIC Kijabe Hospital, Kenya</p> <p>PTL: Vincent Lamuka</p> <p>Status:  ✓ Project underway</p>	<p>Kabarak Univ., Kenya</p>	<p>WHO estimated in 2014 that about 422 million people worldwide had diabetes with a mortality of approximately 1.5 million annually. Most of these deaths occur in developing countries; especially in Africa region which has the highest proportion of undiagnosed diabetes: where over two thirds (66.7%) of people with diabetes are unaware they have the disease. Treatment of Type 2 diabetes, the most common type, involves conventional drugs, however, several studies have noted that use of complementary and alternative (CAM) is prevalent among the diabetic patients. People use silent therapy (CAM) primarily to improve their health and well-being or to relieve symptoms associated with chronic illnesses or to avoid the side effects of conventional treatments. Therefore, the use of CAM is silently used by diabetic patients to achieve therapeutic benefits. It has been argued that the use of CAMs in general is on upward trend worldwide and its use in diabetes has increased significantly with a prevalence of 30%-57% in some studies.</p>
<p>Community perceptions of self-poisoning in the youth between 15-25 years in Bomet County, Kenya and evaluation for possible interventions</p> <p>PTL: Mourine Melenia</p> <p>Status:  ✓ Project underway</p>	<p>Kabarak Univ., Kenya</p>	<p>In Kenya organophosphate ingestion is the drug of choice suicide, accounting for 91.5% of suicides in a study in 2015. A study at a hospital in Bomet County, Kenya revealed that 5% of all emergency department admissions at their institution were from intentional poisoning with pesticides. Bomet County is rural, and small-scale farming is a dominant feature of the local economy, making access to pesticides relatively easy. Records from the county's two major hospitals over the past three years show a steady increase in the number of cases of self-poisoning among 15-25 year-olds. This rising rate of self-poisoning, especially in youth populations, requires urgent attention. There is a lack of research regarding individuals' perceptions of what community-based interventions might be most effective. This research project aims to ascertain other locally informed solutions, identified from within the community, that could add to the efficacy of potential policy-based interventions and contribute to lasting change.</p>

<p>Cascade from enrollment into care to viral suppression, women enrolled into the option B+ in a large HIV program in Uganda: Describing factor associated with lost-to- follow up and virologic outcomes and understanding barriers to retention</p> <p>PTL: Paul Gonza</p> <p>Status:  ✓ Project underway  ✓ Preliminary results shared with Mildmay Hospital team</p>	<p>Makerere, Uganda</p>	<p>Although 97% of HIV+ mothers were started on appropriate ARV, only 56% are retained after 6 months. The applicants will describe factors associated with retention and lost to follow-up for mothers enrolled in Option B+ among HIV+ mothers in a rural community of Uganda. They will use quantitative methods to describe demographic features and viral suppression and determine the rates of retention and loss to follow-up of these mothers at 6, 12, and 18 months postnatally. They will use qualitative methods to identify factors associated with loss to follow-up and virological outcomes of these mothers. Understanding loss to follow-up is a critical issue for success of Option B+ and the 90-90-90 goals. Imperfect adherence to ARV therapy will drive the development of resistance. This is already an issue in many clinics in Uganda with large numbers of patients failing therapy requiring second line and third line therapy that is much more expensive.</p>
<p>Factors Affecting Nutritional Status Among Children Aged 1-5 Years In Buhweju District, South Western Uganda</p> <p>PTL: Abaasa Catherine</p> <p>Status:  ✓ Project complete  ✓ Working on manuscript</p>	<p>MUST, Uganda</p>	<p>Despite Western Uganda having excellent growing conditions, and often being referred to as "the food basket" of the country, it has persistently registered the highest levels of childhood malnutrition especially stunting e.g. malnutrition in Buhweju District among the under-5y 55.6% vs 47.8% for entire Western region. In Uganda, between 35-40% of deaths in under-five year olds are attributable to malnutrition. There is need to build a holistic picture of the factors responsible for these high levels of childhood malnutrition in order to guide the effective policies and interventions. This research project in Buhweju District will to interview caregivers of children 1 to 5 years of age using a structured questionnaire to examine factors that may be contributing to malnutrition. Key informant interviews will also be conducted with all health workers directly involved in child care programs. The research team hypothesize that knowing the factors leading to malnutrition, could lead to policy and program changes that could significantly improve nutritional status of children living Buhweju south western Uganda.</p>
<p>Impact of Routine Screening for Hepatitis B Viral Infection in Pregnancy in a resource Limited setting.</p> <p>PTL: Anthony Makhoba</p> <p>Status:  ✓ Project underway</p>	<p>Nsambya, Uganda</p>	<p>Hepatitis B is a major disease of serious global public health proportion which is preventable with safe and effective vaccine. Perinatal transmission contributes to the acute disease burden and may progress to chronic hepatitis B infection hence placing these children at risk of liver cirrhosis and hepatocellular carcinoma. This is an observational cohort study to determine the knowledge of pregnant women in this setting with regards to hepatitis B. This research is aimed at screening pregnant mothers attending Antenatal Care at St. Francis Hospital Nsambya for Hepatitis B viral infection. The authors plan to identify and refer (Internal) patients who are positive for evaluation for treatment and follow up. They will also follow outcomes of the delivery, Hepatitis B specific interventions given to the New-born at birth and subsequently.</p>



Workshop Participants, Tanzanian Training Centre for International Health, Ifakara, Tanzania 2016

## Comments from MR Participants 2016:

*"I have never been taught in this way before- have a lecture with examples and discussion followed by use what I just learned in group work. This really worked for me."*

*"We can make an impact on the health of our communities with MicroResearch. This was so relevant and useful."*

*"You don't have to be Superman to do research – research that is important to our communities."*

## 2017

<p>Challenges to Complimentary Feeding among Children below 2 Years in Gweri Sub-county Soroti District in Uganda</p> <p>PTL: Tumuhimbise Manasseh</p> <p>Status:  <input checked="" type="checkbox"/> Project complete  <input checked="" type="checkbox"/> Manuscript being</p>	<p>MUST Uganda</p>	<p>Soroti district is one of the many parts of Uganda that suffer from acute food shortage. This impacts on the availability of foods for complimentary feeding of infants i.e. the period between 6 months and 2 years when foods in addition to breast feeding are given. Dietary intake in addition to breast milk has the largest impact on growth and development children in this age period- a critical time for brain development. This study seeks to understand how mothers cope with complimentary feeding needs for their young children in times of food shortages.</p>
<p>Assessing sexual practices and contraceptive use among adolescents 15-19 years in a refugee settlement in Uganda</p> <p>PTL: Elizabeth Kemigisha</p> <p>Status:  <input checked="" type="checkbox"/> Project completed  <input checked="" type="checkbox"/> Published <b>Reproductive Health 2019;16(35)</b></p>	<p>MUST Uganda</p>	<p>Many girls in African countries face significant barriers to accessing sexual and reproductive health (SRH) services and obtaining contraceptives. Access to SRH services is especially challenging for young women and girls affected by disasters and conflicts who are living in refugee camps or dispersed across host countries. In addition, adolescent girls are an overlooked group within conflict-affected populations and their SRH needs are often neglected. Taking into account paucity of information on refugee girls SRH across African continent, collecting and analysing data is crucial to identifying gaps and developing effective interventions for this population group. The overall objective of this study is to identify SRH needs of adolescent girls and their access to existing SRH services in selected refugee communities in Uganda via quantitative survey. This questionnaire will be administered to 250 young refugee girls' age 15-19 years.</p>
<p>Factors Contributing to Return Visits Within 72 Hours To The Emergency Departments of the Nairobi Hospital.</p> <p>PTL: Jackson Mutisya</p> <p>Status:  <input checked="" type="checkbox"/> Project underway</p>	<p>Nairobi Hospital, Kenya</p>	<p>The factors that contribute to return visits within 72 hours to Nairobi Hospital are not know. The applicants plan to do a cross-sectional, descriptive, qualitative and quantitative study over a 3-month period at the Emergency Department (ED) of the Nairobi Hospital. They hope to identify causes for the early return visits to the ED. With this knowledge, they hope to inform the hospital management and propose possible intervention to help improve the situation.</p>
<p>Effect of awareness of the National Health Insurance Fund on its uptake among Microenterprises In Kijabe Ward; Sequential embedded design</p> <p>PTL: Iyah Amy Akim</p>	<p>KABU, Kenya</p>	<p>The health sector in Kenya is largely funded by out of pocket (OOP) spending especially among low income families. OOP healthcare spending impoverishes many households. Health care insurance could help minimize household OOP healthcare spending. Kenya has three main forms of health insurance schemes: the private health insurance companies which cover mostly the upper and middle income families, the national hospital insurance fund (NHIF) which covers those in formal employment and the community based health insurances which cover a small population of those in the informal sector. The informal sector therefore largely remains uncovered by any form of health insurance. NHIF has recently extended its coverage to</p>

<p>Status: Provisional approval</p>		<p>involve the informal sector, however, NHIF uptake still remains very low. Local studies have indicated lack of awareness as a major contributor to the low uptake of NHIF. Our study aims at assessing the effect of raising awareness of NHIF on its uptake among microenterprises in Kijabe Ward. We will also assess the sustainability of NHIF uptake, the perceived barriers to its uptake and the preferred healthcare financing options of the local community.</p>
<p>Perceived Factors Influencing Adherence to Standard Operating Procedures among Laboratory Personnel in Bomet County, Kenya</p> <p>PTL: Sifora Fanta Chaleabo</p> <p>Status: ✓ Project underway</p>	<p>KABU, Kenya</p>	<p>Laboratory medicine plays a critical role in global health care to help medical professionals make their clinical diagnoses and support care. Multiple studies have demonstrated high rates of laboratory data error in East African laboratories. Adherence to Standard Operating Procedures (SOPs) has been shown to be crucial to ensuring laboratory data quality. However, recent studies have demonstrated decreased SOP adherence in Kenyan Health facilities correlating with poor laboratory data quality. This study seeks to determine perceived factors among laboratory personnel that influence adherence to SOPs in the public health facilities in Bomet County, Kenya.</p>
<p>Exploring the causes of delayed discharge process at the Nairobi Hospital, Kenya</p> <p>PTL: Nebert Kiguhe Mchidi</p> <p>Status: ✓ Project underway</p>	<p>Nairobi Hospital, Kenya</p>	<p>Delayed discharge can be a costly problem for patients and for the hospital. We would like to find out what the discharge process at the Nairobi Hospital is like, identify bottlenecks and opportunities for more efficient discharge process.</p>
<p>To determine the predisposing factors of vitamin d deficiency in children under the age of 5 years seeking health services at the Nairobi hospital.</p> <p>PTL: Malilu Horatius Musembi</p> <p>Status: ✓ Provisional approval</p>	<p>Nairobi Hospital, Kenya</p>	<p>Despite Kenya being a tropical country with plenty of sunshine, many children still suffer deficiency of vitamin D. In a study undertaken in a private hospital in Nairobi, children with chest infections like pneumonia often also had vitamin D deficiency. National Diet and Nutrition survey conducted in UK, reported that 8% of children who participated in the study had less than the required vitamin D levels. Anecdotally it was observed that at The Nairobi Hospital Pediatric Unit, some of the children admitted with lower respiratory infections had Vitamin D deficiency as well. The goal of this study is determine the predisposing factors to Vit D deficiency in children under 5 years seeking hospital services at Nairobi Hospital, a private hospital in Kenya.</p>



*MicroResearch Workshop participants, with Dr. Geoffrey Wechulli teaching KABU, 2017; and MicroResearch Workshop team at Chitwan Medical College, Nepal 2017*

## Comments from MR participants 2017:

*"MicroResearch was eye opening and I am positive that it will change my life."*

*"MicroResearch can change attitudes and perceptions."*

*"With colleagues at MicroResearch, I hope we can identify problems convert this into proposals, apply for funding and carry out research and implement findings."*

*"I will continue involving others to come up with research proposals whose findings benefit local communities in their innovations and simplicity."*

*"My knowledge after this workshop will be extremely helpful in my future scientific research in constructing the research and knowledge translation as well."*

*"I'll apply these skills in my research project and transfer it to my students and colleagues."*

## 2018

<p>Application for knowledge translation (KT) grant for a MicroResearch project: knowledge, attitude and behaviour towards the use of insecticide treated mosquito nets among pregnant women and children in rural southwestern Uganda</p> <p>PTL: Taremwa Ivan Mugisha</p> <p>Status:  <input checked="" type="checkbox"/> KT project complete  <input checked="" type="checkbox"/> Manuscript underway</p>	<p>MUST, Mbarara, Uganda</p>	<p>The burden of malaria in Uganda remains unacceptably high, especially among children and pregnant women. To prevent malaria related complications, household possession and use of Insecticide Treated mosquito Nets (ITNs) has become a common practice in the country. In our MR study, we explored knowledge, attitude, and behavior towards the use of ITNs as a nightly malaria prevention strategy among pregnant women and children under five years of age in Isingiro district, Southwestern Uganda. We found a possession-utilization gap, and this requires engagement of all stakeholders in the malaria prevention campaigns using ITNs through: a) government's concerted effort to ensure universal access of right fit ITNs, b) end-user directed health education to emphasize positive attributes of ITN use, c) telling the ITN success stories to improve on the usage. This KT plan will work on this latter aspect.</p>
<p>Analysis of emotional intelligence (EI) among undergraduate students of various disciplines in Chitwan District, Nepal</p> <p>PTL: Alisha Joshi</p> <p>Status:  <input checked="" type="checkbox"/> Provisional Approval</p>	<p>Chitwan Medical College, Nepal</p>	<p>Some experts have noted that 80% of success at work depends on emotional intelligence, while only 20% dependent on Intelligence Quotient. In our educational institutions and all developing countries the emphasis is on academic intelligence rather than emotional intelligence. This study's focus is on importance of emotional intelligence and how emotional intelligence helps in building self-esteem, overall work performance, academic performances, in undergraduate students including medical and non-medical students of Chitwan district.</p>



MicroResearch Workshop Class CHUK with teachers, coaches and judges. Kigali, Rwanda 2018.

### Comments from MR participants 2018:

*"MicroResearch ignited the dead researcher within me, and I am sure amongst all of us. This is the first time I could think of problems outside my discipline. It feels so great."*

*"Very encouraging workshop. I did not have interest in research but since then got to know it is something useable, I am very curious."*

*"The course is excellent and highly needed in all resource-constrained settings."*

*"Change the name please! This is a big course not a micro course."*

<p>Suspected pneumonia in young children in south western Uganda: healthcare seeking habits amongst their caregivers.</p> <p>PTL: Muwanga Silas</p> <p>Status: ✓ Provisional Approval</p>	<p>MUST Mbarara, Uganda</p>	<p>Acute respiratory infections (ARIs) are among the leading causes of child morbidity and mortality of children under five years throughout the world. Lower respiratory tract infections (LRTIs) are the most severe in developing countries. Pneumonia, a severe LRTI was responsible for 15% of all deaths among children under-five in sub Saharan Africa in 2015 and most of these deaths were concentrated in a few countries including Uganda. Cough, fast and/or difficulty in breathing due to a problem in the chest are clinically recognized as signs of childhood pneumonia. Caretakers play a critical role in recognizing pneumonia symptoms, danger signs and in immediately seeking appropriate care for their sick children. There is limited information about care seeking behaviors of care givers of children under five suspected with pneumonia in Mbarara district and specifically in Mbarara Municipality. Therefore, it is against this background that this study will establish the care seeking behaviors of caregivers of children under five years suspected with pneumonia in Mbarara Municipality.</p>
<p>Exploring knowledge, experiences and challenges in handling menstruation among adolescents with disabilities, a qualitative study.</p> <p>PTL: Natuhwera Calorine</p> <p>Status: ✓ Full approval ✓ Obtaining ethics approval</p>	<p>MUST Mbarara, Uganda</p>	<p>According to the Uganda census 2014, the prevalence for disabilities was 13% for any disability and 5.6% for any two domains of disabilities. Menstrual health hygiene and management for persons with disabilities is not frequently reported, yet these pose unique challenges to this sub population. This project focuses on menstrual health of persons with disabilities. The main objective of this study is to explore menstruation challenges among the highly vulnerable yet neglected groups in research such as adolescent girls those living with physical disabilities. As part of this project, we shall provide information on menstrual hygiene management and also counselling to enable girls with disabilities to realize their potential.</p>

<p>Prevalance and risk factors of self-medication among breast feeding mothers in Mbarara municipality</p> <p>PTL: Katusiime Beatrice</p> <p>Status:  ✓ Full Approval  ✓ Obtaining ethics approval</p>	<p>MUST Mbarara, Uganda</p>	<p>Self-medication can be detrimental to the health of the mother and child. This has been identified as a common public health problem worldwide. In Uganda minor illnesses like fevers, abdominal upsets, cough, pains, common cold, etc. may stimulate breast feeding mothers to practice self-medication. The availability of the small drug shops in Mbarara makes access to over the counter drugs easy and without prescriptions. This may put children at risk. This study seeks to understand mother's experiences with self-medication, reasons why they self-medicate and if they have experienced any problems with self-medication.</p>
<p>Psychosocial Challenges among Caregivers of Children with disabilities in South Western Uganda</p> <p>PTL: Mutatina Robens</p> <p>Status:  ✓ Provisional Approval</p>	<p>MUST Mbarara, Uganda</p>	<p>Globally about 15 % of the world's population have significant disabilities. Caregivers for children with disabilities (CwDs) play a vital role in providing support for them through their lifetime. In Uganda the Person with Disabilities Act of 2006, provides a comprehensive legal protection for persons with disabilities by eliminating all discrimination and supporting equalization of opportunities. This act aims to provide relief to those living with disabilities but fails to consider the needs of those providing care such as CwDs. The purpose of this study is to determine the psychosocial challenges faced by caregivers of CWDs through interviews with CwDs recruited from the Organised Useful Rehabilitation Services (OURS); the only centre for disabilities in South West Uganda.</p>
<p>Adolescents' welfare during their caregivers' imprisonment of Kakanju Subcounty and Bushenyi Central Division, South Western Uganda.</p> <p>PTL: Akampwera Phionah</p> <p>Status:  ✓ Provisional Approval</p>	<p>MUST Mbarara, Uganda</p>	<p>Care givers' imprisonment remains a major threat to adolescents' health and welfare worldwide. Millions of adolescents have been affected by caregiver imprisonment worldwide, particularly those from the most disadvantaged and vulnerable communities. By virtue of their age, adolescents are not well established socially and are too disadvantaged to cope with stress of social rejection, stigmatization, and difficulty to associate with their peers among others. Thus increased care givers' imprisonment exposes these adolescents to unhealthy wellbeing and other various effects which this study seeks to explore within the setting of Kakanju parish in Bushenyi district, Uganda.</p>
<p>Perceptions of women with NCDs on birth control and pre-pregnancy counselling in Rwanda.</p> <p>PTL: Juvenal Nambaje</p> <p>Status:  ✓ Provisional Approval</p>	<p>CHUK Kigali, Rwanda</p>	<p>The World Health Organization (WHO) encourages countries to reduce maternal and neonatal deaths. A lot of efforts have been made by the ministry of health of Rwanda to reduce maternal deaths. Chronic diseases exert a highly negative impact on maternal and neonatal outcomes. The aim of our study is to understand the perceptions of women with chronic diseases on birth control and pre-conception counselling in Rwanda. Our team made of internal medicine doctors, internal medicine nurses, a laboratory scientist and a midwife, hopes that this study will help to understand the barriers that those women are facing in terms of getting family planning methods and advices before getting pregnant. Results from this study will provide an evidence base to influence policies in order to decrease the burden imposed by chronic diseases in child-bearing age women in the region.</p>
<p>Why do Rwandan women not go for cervical cancer screening?</p> <p>PTL: Felix Manirakiza</p> <p>Status:  ✓ Full Approval  ✓ Obtaining ethics approval</p>	<p>CHUK Kigali, Rwanda</p>	<p>Rwanda, a LMIC, has a population of 11 million with 2.72 million women aged 15 years and older who are at risk of developing cervical cancer. Cervical cancer is the most commonly diagnosed female cancer in Rwanda. Rwanda is the first African country to initiate a national –wide program to eradicate cervical cancer through vaccination against HPV. Rwanda has introduced low-cost methods for cervical cancer screening including visual inspection of cervix with acetic acid (VIA) and HPV-DNA test for women aged 35 or above with a repeat</p>

		<p>screening at 7 years for those with a negative results. Unfortunately, the screening rate had been low and the possible reasons are not known. Therefore, this team asks Why do not Rwandan women go for cervical cancer screening? The study aims to find out the barriers for Rwandan women to use the cervical cancer screening program.</p>
<p>How do Rwandan women and men attending antenatal care want to learn about family planning.</p> <p>PTL: Timothee Shahidi Twahirwa</p> <p>Status: ✓ Provisional Approval</p>	<p>CHUK Kigali, Rwanda</p>	<p>Worldwide, the use of family planning (FP) is estimated at 57.4% and 28% in Africa. Current data show that family planning alone has a direct impact on decreasing the global maternal mortality by 30% and neonatal mortality by 10% each year. In addition, when well used within the first twelve months following childbirth it reduces the risk of unwanted pregnancy outcome, preterm birth and low birth weight. Data regarding Rwanda show a slight increase in FP users from 45 to 48% from 2012 to 2015 respectively and more than 99% of the Rwandan population has information about FP. However, the percentage of FP users exceed more than half in some provinces while in others is still lower e.g. Northern Province 60.8% FP use while Western province 47.1%. Whether the community would prefer a specific mode of education and conviction towards FP methods, especially in middle and low income countries (MLIC), has not been documented. This study will explore how do Rwandan women and men attending antenatal care want to learn about family planning</p>
<p>CT scan request in management of paediatric head injury at Kigali University Teaching Hospital Emergency Department, Rwanda</p> <p>PTL: Mbanjumucyo Gabin</p> <p>Status: ✓ Provisional approval</p>	<p>CHUK Kigali, Rwanda</p>	<p>CT scan is the reference standard for diagnosis of Traumatic brain injury. With the increase of CT Scan use with increased radiation exposure which is becoming a heavy public health burden. CT Scan use in pediatric is still controversial and with most pediatric injuries being mild not needing neurosurgical intervention. Clinical decision rules have been developed to reduce radiation exposure to the pediatric population. Three clinical decision rules are widely used, PECARN, CATCH, and CHALICE. Pediatric emergency care applied research network (PECARN) is validated and preferred in low resource settings. There is no standard protocol of CT scan request at Kigali University Teaching hospital (CHUK). This study aims at assessing if CT scan requests in pediatric head injury at are following PECARN rules. To our knowledge no similar study has been done in Rwanda and the region.</p>

### Comments from MR participants 2018

*"Kindly MR founders think of a sister training for purposes of multidisciplinary and sustainability beyond health."*

*"Endeavour to engage and create more awareness of this workshop. It is very important as it touches lives by research."*

*"I highly appreciate the skills I have learned and now I can apply to my career and promote research studies and teach others."*

## 2019

<p>Factors that influence false tooth extraction among children below two years in Isingiro, southwestern Uganda.</p> <p>PTL: Elizabeth Najjingo</p> <p>Status ✓ Provisional approval</p>	<p>MUST, Mbarara, Uganda</p>	<p>False tooth extraction, the removal of deciduous primary canine tooth buds among infants below 2 years of age, has been practiced amongst communities in East Africa, Ethiopia and Sudan for over six decades. During dentation, the gum swells and un-erupted canine gums look paler than other parts of the jaw ridge; which is believed by some societies to be the cause of fever, vomiting, diarrhoea and other problems for child. This procedure, done in the community by traditional healers involves unsterile sharpened implements that may include bicycle spokes, needles, knives or finger nails etc. it can put the child at risk of acquiring blood borne infections including HIV and Hepatitis B and the bleeding may lead to death from shock and anaemia as well as sepsis and tetanus infections.</p> <p>This study will determine the factors that influence false tooth extraction in Isingiro, southwestern Uganda</p>
<p>Factors associated with non-adherence to medications among Adolescents with common mental disorders at Mbarara Regional Referral Hospital</p> <p>PTL: Gideon Robert Odendi</p> <p>Status ✓ Provisional approval</p>	<p>MUST, Mbarara, Uganda</p>	<p>Mental health problems can affect at any age. Ten to twenty percent of youth in the world are affected by mental health problems, with the majority in low resourced countries, like Uganda. Failure to adhere to prescribed medicines can result in delayed response, reoccurrence of symptoms, and increased cost of overall treatment. The questions as proposed in this project: [1] What is the prevalence of non-adherence to medications among adolescents with common mental disorders at Mbarara Regional Referral Hospital? [2] What factors are associated with non-adherence?</p>
<p>Prevalence of obesity and associated factors among primary school going children in Mbarara Municipality, Southwestern Uganda</p> <p>PTL: Timothy Nduhukire</p> <p>Status ✓ Provisional approval</p>	<p>MUST, Mbarara, Uganda</p>	<p>Obesity is an increasing recognized health problem that now ranks as the fifth leading global risk for mortality. The International Obesity Task Force estimates that about 155 million school-going children globally, are either overweight or obese. Healthy weights and lifestyles have a significant impact on current and future health, including both metabolic and mental health. There is need to provide data on the prevalence of obesity so that policy makers are aware of the burden of obesity and its associated factors. Not much data is available in Uganda. This study seeks to obtain local obesity data among primary school going children in Mbarara Municipality, South Western Uganda and also examine factors that are associated with obesity in this setting.</p>
<p>Factors associated with domestic violence in Buhweju District</p> <p>PTL: Atukunda Prudence Noowe and Mugabi Pafura</p> <p>Status ✓ Provisional approval</p>	<p>MUST, Mbarara, Uganda</p>	<p>In Uganda reported domestic violence has increased from 38% in 2014 to 57% in 2016, despite laws and policies to protect victims and survivors. The team will review government of Uganda policies, laws and key reports on domestic violence from the police, the community development department and the ministry of health etc. They will then do a descriptive cross sectional study to collect primary data in 2 sub-counties of Buhweju district in Uganda where reported domestic violence is high. Findings will be presented to national organizations, including the relevant ministries such as the Ministry of Health, the Ministry of Gender and others.</p>
<p>Knowledge, attitude, and practice regarding human papilloma Virus (HPV) vaccination among school going adolescent girls of</p>	<p>Chitwan Medical College, Nepal</p>	<p>Cervical cancer is the second most common cancer in the world and leading cancer in developing country like Nepal. Screening for cervical cancer is available which includes Pap smear, visualization with acetic acid and HPV DNA. Since 80% of cervical cancer is caused by HPV virus, rate of cervical carcinoma can be prevented if vaccination is given for adolescent females aged 9-</p>

<p>Bharatpur and Hetauda municipalities of Nepal</p> <p>PTL: Prekshya Singh and K.C. Soni</p> <p>Status ✓ Provisional approval</p>		<p>13, before sexual exposure. However, there are barriers for HPV vaccination in Nepal, such as; lack of awareness, myths and fear of side effects. Cost, and access to the vaccine are additional barriers. Understanding the level of knowledge, attitude and practice regarding HPV vaccine is important in Nepal, where major burden of cancer is cervical carcinoma. The researchers plan a cross sectional study involving girls between 13 and 19 years of age in two municipal schools near Chitwan and Hetauda districts. Data collected by questionnaire and focus groups will be used to improve immunization programs.</p>
<p>Oral Cancer: Knowledge, attitudes and practice among the dental practitioners in Chitwan district, Nepal</p> <p>PTL: Smriti Narayan Thakur</p> <p>Status ✓ Under Peer review</p>	<p>Chitwan Medical College, Nepal</p>	<p>Oral cancer is common having almost 500,000 new cases and 130,000 deaths annually worldwide. In Nepal most cases are diagnosed late resulting in high a mortality rate. The opportunity for early diagnosis largely depends on dentists to recognize signs and refer patients for treatment. This study will try to assess the knowledge, attitude and practice of dental practitioners on oral cancer and early detection in Chitwan District of Nepal. The researchers will conduct a cross sectional study using a questionnaire sent to all dental practitioners of Chitwan district. The goal of the study is to identify educational needs and training interventions to enhance preventive measures among dental professionals, which may lead to reduced mortality and morbidity from oral cancer.</p>
<p>Knowledge, Attitude and Practice Regarding Cervical Cancer and Its Screening among Women in Madi, Chitwan</p> <p>PTL: Kalpana Sharma</p> <p>Status ✓ Provisional approval</p>	<p>Chitwan Medical College, Nepal</p>	<p>Cervical cancer ranks as the leading cancer of females in Nepal. Death from the cervical cancer can be minimized through multi-disciplinary comprehensive interventions across the life course including community education, social mobilization, vaccination, screening and treatment. Most cervical cancer deaths in Nepal could be avoided if known effective interventions were available to all women and implemented, including immunizing adolescent girls against human papilloma virus (HPV) and cervical screening and treatment of pre-cancerous lesions. Even those these care modalities are available, Nepalese women have low knowledge and up take of screening. Therefore, this study aims to determine the knowledge, attitude and practice regarding cervical cancer and its screening among women of this area of Nepal. These findings will then be used to plan needed intervention programs targeting women at risk for cervical cancer.</p>

### Comments from MR participants 2019

*"The course demystifies research and puts it in a way that's useful to the lowest classes of the community."*

*"Africa is a continent where research is needed. I hope to see this workshop in more African countries. The demand is high, please keep on coming."*

*"My mind is opened up and I can [...] confidently carry out research. Thanks very much."*

## Kabarak University MicroResearch Based Thesis Program

**May 2017**

	<b>Program</b>	<b>Proposed Thesis Topic</b>
Mung'ara David	Fam Med	<i>What are the doctors' knowledge and attitude with regard to in-patient adults' end of life care? (A study in Kijabe hospital, central Kenya).</i>
Boaz Niyinyumva	Fam Med	<i>Do culture and social norms affect whether or not a patient has health insurance? A study in hospitalized patients from 18 years and above at Chogoria Hospital, Tharaka Nithi County- Eastern Kenya?</i>
Elijah Yulu	Fam Med	<i>Does having National Health Insurance Fund coverage affect clinician's medical decision making in the outpatient and inpatient setting at PCEA Chogoria Hospital, rural Eastern Kenya?</i>
Faith Lelei-Mailu	Fam Med	<i>How prepared do family members feel they are to provide end of life care for their advanced cancer patients?</i>
Terer, Elijah	Fam Med	<i>What are the stated reasons for delayed presentations of non-pregnant women 18 yrs. and above with abnormal vaginal bleeding in the two referral hospitals in Bomet county Kenya?</i>

**May 2018**

	<b>Program</b>	<b>Proposed Thesis Topic</b>
Mourine Melenia	Fam Med	What methods are commonly used to procure illegal abortion and how are the accessed by women in Bomet County?
Sarah Kiptinness	Fam Med	How effective is universal screening compared to selective risk factor-based screening for gestational diabetes at Kijabe Hospital?
Hillary Kositany	Fam Med	What are the reasons for the timing of first antenatal visit among women at Temek Hospital?
Bramwel Wekesa	Fam Med	1a. What is the adequacy of informed consent for elective cesarean section for women presenting at Kijabe Hospital? B. What are women's views towards the informed consent process at Kijabe Hospital?
Musa Saruti	Fam Med	What are health care providers reasons for prescribing antibiotics for upper respiratory tract infections to children less than 5 years in out patient clinics in Chuka and Chogoria Hospitals?
Gad Igiraneza	Fam Med	What are the Opinions and understanding of vasectomy among married men in Chogoria, Tharaka Nithi County Kenya?
Joy Sinkeet	Fam Med	What are the healthcare seeking behaviours of female sex workers in Bomet county, a rural read in South Rift part of Kenya?
Caroline Chepngeno	Nutrition	What are the risk factors of metabolic syndrome among university staff?
Dominic Kiprotich	Nutrition	How many diabetic patients attending diabetic clinic at Nakuru level 5 Hospital receive nutrition counselling and translate it to actual practice?
Eddah Chepkoton	Nutrition	What is the prevalence of overweight and obesity and nutritional status among rural middle-aged women and the association with some socio-demographic factors in Rongai Sub-county, Nakuru County?
Everlyne Malanda	Nutrition	What it's the prevalence of maternal obesity and child under nutrition in low resource urban setting in Nakuru county?
Winnie Moimet	Nutrition	What are the dietary practices of hypertensive patients attending Nakuru level 5 Hospital?



Participants at Kabarak Workshop May 2019

### May 2019

	<b>Program</b>	<b>Proposed Thesis Topic</b>
Nourine Chepkemoi	Nutrition	Dietary intake and Nutritional Status of adults with Pulmonary Tuberculosis and HIV co-infection in Kericho County Hospitals
Jane Kilonzi	Nutrition	To assess the nutritional knowledge levels of mothers on recommended child feeding practices in Moi Teaching Referral Hospital
Sifora Chaleabo	Fam Med	What are the factors that affect adherence to Standard Operating Procedures among laboratory personnel, in Bomet county Kenya?
Belyse Arakaza	Fam Med	What is the knowledge, attitudes and self-reported cervical cancer screening practices among female clinicians in Kiambu county?
Amy Akim	Fam Med	What is the prevalence and factors associated with burnout among Family Medicine residents in Kenya?
Faith Kimutai	Nutrition	What is the double burden of malnutrition among the under 5 school going children in Ainamoi subcounty Kericho county?

2019

**1<sup>st</sup> MicroResearch Scientific Writing Workshop Report  
June 2019, MUST, Uganda**

Supported by Maternal Newborn Child Health Institute, Mbarara University of Science Technology (MUST), Catholic University of Health Allied Sciences (CUHAS), University of Calgary, and Dalhousie University

Institution	Number	Gender F/M	Participants	1st Draft Manuscripts prepared
MUST	9	5/4	Researchers and Coordinators	5
CUHAS	11	4/7	Researchers and Coordinators	4
U of Calgary	3	2/1	Student Interns	N/A

Each team from MUST and CUHAS had data from one or two projects which formed the background to develop a draft manuscript

Teaching faculty from Dalhousie University (Noni MacDonald and Shawna O'Hearn)



*MicroResearch Scientific Writing Workshop, MUST Uganda, June 2019*

# Micro Research Africa / Asia



We thank the following for their support

**Primary Partners:**



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