Innovating for Maternal and Child Health in Africa

Tanzania’s commitment to preventing maternal and newborn deaths has earned new momentum since 2016 in its adoption of a series of policies that recognize that a healthy and informed population, where fewer women are dying while giving life, is the bedrock of development. The country has made appreciable strides in achieving the Millennium Development Goal of reducing under-5 mortality by two-thirds, yet worryingly, trends are reversing with respect to its maternal mortality rate (MMR). According to the Demographic Health Survey 2015-2016 report, there has been a more than 20% increase in the rate of women dying while giving life over the last eight years, from 432/100,000 live births in 2012 to 556/100,000 live births in 2015. Tanzania is also one of the most challenging places in sub-Saharan Africa to be a newborn, ranking among the 10 countries responsible for more than 60% of newborn deaths.

In Tanzania, the initiative is supporting six research teams to conduct a total of 10 large-scale implementation research projects in seven of the country’s 31 regions (Geita, Iringa, Mara, Morogoro, Mtwara, Mwanza, and Singida).

In developing the One Plan II (2016–2020) for Reproductive, Maternal, Newborn, Child, and Adolescent Health, the government has committed domestic resources and solicited investment from the Global Financing Facility (GFF) for a plan that prioritizes unmet needs in critical areas such as adolescent sexual and reproductive health services. Improving access to quality health services for mothers, newborns and children require evidence-informed, goal-oriented health and social policies as well as interventions based on best practices. As a commitment to maternal, newborn and child health (MNCH), Canada’s International Development Research Centre (IDRC) has invested CAN$36 million through the Innovating for Maternal and Child Health in Africa (IMCHA) initiative – a seven-year program (2014-2020) in 11 countries.

Each project is aligned with one or more of the three themes identified as part of the IMCHA initiative: high-impact community-based interventions; quality of care at the facility level; or human resources for health. Collectively, they aim to generate evidence to inform local and national policies and strategies to reduce maternal, newborn and infant mortality at a critical time for Tanzania. The projects draw on collaborative efforts of researchers, local decision-makers, civil society representatives, regional institutions and Canadian partners to ensure that no woman dies while giving life!

To facilitate the translation of knowledge generated from research evidence to influence MNCH policy and programming, the six research teams are working with the Eastern Africa Health Policy Research Organization which is a consortium of three organizations: African Population and Health Research (APHRC) based in Nairobi, Kenya; the East, Central and Southern Africa Health Community (ECSA-HC) based in Arusha, Tanzania, and Partners in Population and Development Africa Regional Office (PPD ARO) based in Kampala, Uganda.

The regions covered by the IMCHA initiative in Tanzania

60% Newborn deaths in Tanzania
One of the main drivers of maternal death in Tanzania and elsewhere is high blood pressure (called pre-eclampsia or eclampsia). Though pre-eclampsia is one of the major causes of maternal deaths in Tanzania, it is widely misunderstood. This delays detection and timely access to critical treatment. In Geita and Singida regions, a research team led by the Ifakara Health Institute in collaboration with Queen’s University at Kingston, Pamoja Tunaweza Women’s Centre Company Limited and Ministry of Health, Community Development, Gender, Elderly and Children are utilizing mobile technology to identify women with these life-threatening problems at the community and health facility levels in order to improve their ability to access timely treatment. In addition, through training health providers using clinical modules and other job aids, this research seeks to detect and treat blood pressure problems earlier. This project also focuses on the better use of health systems data to capture essential information on mothers in order to effectively plan how to target and deliver health services.

Project leaders: Dr. Godfrey Mbaruku (Ifakara Health Institute), Dr. Karen Yeates (Queen’s University), and Decision-maker (Ministry of Health, Community Development, Gender, Elderly, and Children).

In order to reduce the national MMR, it is essential to understand and address the barriers that women confront in accessing essential health services. A research team led by the Dar es Salaam University Institute of Development Studies in collaboration with HealthBridge Foundation of Canada and the Iringa Region Health Department is evaluating key interventions that lift barriers preventing access to services at a community level in Iringa region. Common barriers identified by women include cost and cultural practices; concerns about the quality of maternal health services are also high. This project is committed to building a responsive sustainable approach to address these contextual challenges at the community level.

Project Leaders: Dr. Stephen Maluka (Dar es Salaam University - IDS), Dr. Sian Fitzgerald (HealthBridge Foundation), and Decision-maker (Iringa Region Health Department).
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1. **Mara Region**

Lifting barriers to accessing life-saving health services and addressing unmet needs for contraception can help reduce maternal deaths from preventable causes, especially in rural areas. In Mara region, just half of the expectant mothers have access to a skilled birth attendant and related life-saving interventions. A research team based at Shirati District Hospital in collaboration with Bruyère Research Institute and Mara Region Health Department is implementing critical interventions to address access barriers in the community and at health centers. The research is scaling-up distribution of proven low-cost interventions in birth kits given to mothers in late pregnancy, to help prevent maternal and newborn deaths. The project also seeks to strengthen community services, including triage for mothers and subsidized transportation for pregnant women to facilitate access to emergency services. Other interventions being tested include capacity-strengthening for community health workers and nurses for respectful care and providing family planning information and services to adolescents and women in rural areas, including through the use of mobile health applications.

**Project Leaders:** Dr. Bwire Chirangi (Shirati District Hospital), Dr. Gail Webber (Bruyère Research Institute) and Decision-maker (Mara Region Health Department).

2. **Morogoro Region**

Just one in 10 of Tanzania’s health centers provides life-saving emergency delivery care for mothers (Comprehensive Emergency Obstetric and Newborn Care - CEmONC). This means many women and newborns die during childbirth from preventable complications. A research team led by Tanzanian Training Centre for International Health (TTCIH) in collaboration with Morogoro Regional Hospital and Dalhousie University, Canada, is addressing gaps in health service delivery by training providers in life-saving interventions in emergency obstetric care as well as costing related inputs to provide such services. Wider adoption of these costed best practices, supported by e-learning, improved in-service education and coaching and mentoring could help Tanzania achieve its goal of increasing to 100% the number of hospitals providing CEmONC. Further, the research team aims to provide sustainable structures by strengthening the leadership and management skills of health facilities’ managers. They are being trained to identify gaps, manage and allocate human and financial resources.

**Project Leaders:** Dr. Angelo Nyamtema (TTCIH), Dr. John C. LeBlanc (Dalhousie University) and Decision-maker (Morogoro Regional Hospital).

“Lifting barriers to accessing life-saving health services can help reduce maternal deaths from preventable causes.”
In Tanzania, 98% of women visit a health facility during their pregnancy, but many do not attend the at least four World Health Organization-recommended antenatal (ANC) visits that include regular blood pressure checks to identify signs of pre-eclampsia. Poor quality of service is a documented reason for the lack of compliance with ANC visits. **Addressing gaps that ensure mothers get the care that they need** is the focus of a research project conducted in Mtwara by another team from the Ifakara Health Institute in collaboration with Canada’s SickKids Centre for Global Health and Mtwara Region Health Department. Best practices being tested through these interventions to improve standards of care include training, mentoring and coaching of mid-level health service managers and setting standards for measuring performance gaps. This research is also incorporating a community-driven component to ensure that the services are accessed. Furthermore, the project is developing and testing an electronic tool to measure the quality of care and standardize the information, enabling decision-makers to improve maternal and newborn health care in the region.

**Project Leaders:** Dr. Fatuma Manzi (Ifakara Health Institute), Dr. Zulfiqar Bhutta (SickKids Center for Global Health), and Decision-maker (Mtwara Region Health Department).

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**Mtwara Region**

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**Mwanza Region**

Cascading emergency obstetric care to community level fills a critical gap in access to skilled birth attendants. Skilled attendance at birth is at 64% and much lower in the Lake Zone area. In Mwanza, a research team led by the Catholic University of Health and Allied Sciences (CUHAS) in collaboration with University of Calgary and Mwanza Region Health Department is learning what it takes to accelerate Basic and Emergency Obstetrical and Newborn Care (BEmONC) district-wide by addressing critical challenges in health service delivery, including the specific needs of adolescent mothers. Best practices in scaling-up care for mothers during pregnancy and delivery could achieve a 70% coverage rate of skilled birth attendance through BEmONC. This research team is also assessing and addressing how gender norms prevent access to quality care. In rural areas, they further seek to integrate reproductive health needs of women into ongoing efforts by community health workers and health service providers.

**Project Leaders:** Dr. Dismas Matovelo (CUHAS), Dr. Jenn Brenner (University of Calgary), and Decision-maker (Mwanza Region Health Department).

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**Key Summary**

Supporting the Tanzanian government to realize its commitments as articulated in the One Plan II strategy requires investment in a complement of tested and proven interventions across the spectrum of maternal, newborn and child health care.

Through these research projects, the IMCHA initiative is contributing to addressing critical gaps for evidence-informed policy and programmatic decision-making. The research projects also highlight affordable, feasible, and scalable primary healthcare interventions to improve maternal and child health delivery and outcomes in Tanzania.

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