



## MUCHAP Annual Report 2022-2023: Advancing Population Health and Research Excellence

### **Abstract:**

This annual report summarizes the activities and achievements of the Makerere University Centre for Health and Population Research (MUCHAP) from July 2022 to June 2023. Our endeavors, conducted within the Iganga-Mayuge Health and Demographic Surveillance Site (IMHDSS), aim to drive research excellence and promote public health in the region. The report provides a comprehensive overview of our research initiatives, community engagements, collaborations, and notable achievements that have shaped the past year.

### **Introduction:**

MUCHAP, a recognized leader in health and population research, continues its unwavering commitment to improving population health outcomes within the Iganga-Mayuge district in Uganda. This annual report serves as a testament to our dedication and resilience in the face of evolving challenges, as we strive to better understand and address the healthcare needs of our community.

### **Update Round 22: Monitoring Population Dynamics**

The IMHDSS 22nd update round commenced in May 2023, reaffirming our commitment to monitor and understand population dynamics. Covering a cohort of 95,000 individuals from 17,500 households across 65 villages, our team has made substantial progress, with a notable percentage of households visited as of the end of August 2023. This data is invaluable for informed decision-making and resource allocation in public health and social services.

### **Adolescent Health (ARISE) Survey:**

Building on the baseline study conducted in January 2022, our

'ARISE' end-line survey investigates the reproductive lifestyle, substance use, and nutrition practices of 1,200 adolescents aged 10-19 in Iganga and Mayuge districts. The survey also includes measurements of body weight, height, and hemoglobin levels. These findings provide critical insights into the health and well-being of our region's youth.

### **Emerald Quantitative Study:**

Targeting 5,000 women of reproductive age in our surveillance area, the Emerald Quantitative Study assesses healthcare capacity, with a specific focus on disability and rehabilitation. Data collection commenced in May 2023 and is expected to conclude by the end of September. This research is essential for improving healthcare services, especially for vulnerable populations.

### **Mental Health Screening and WHO Rehabilitation:**

Our commitment to mental health is evident in ongoing screening efforts and the piloting of a back pain screening tool. These initiatives address the often-overlooked mental health needs within our community, ensuring a holistic approach to well-being.

### **Verbal Autopsy:**

In the past year, we conducted approximately 700 verbal autopsy interviews, employing standardized methods to ascertain the causes of death. These insights provide essential data for healthcare planning and resource allocation.

### **Minimally Invasive Tissue Sampling (MITS) Project:**

Our three-year MITS project, launched in March 2023, is a pioneering endeavor that seeks to improve the determination of causes of under-5



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mortality and stillbirths. By utilizing MITS, laboratory diagnostics, verbal autopsy, and clinical data, we are working to shed light on these critical health issues within our region.

### **Citizen Science Project:**

In response to the global need for real-time outbreak data, our Citizen Science Project embraces public participation in scientific research. Interviews conducted in May and June 2023 within the IMHDSS further our understanding of pandemic preparedness and response.

### **Electronic Morbidity Surveillance:**

Our longitudinal study continues to monitor morbidity patterns, trends, and disease prevalence within the Iganga district. This initiative is a vital component of our public health efforts.

### **Excess Mortality Study:**

Supported by the Bill & Melinda Gates Foundation, our Excess Mortality Study delves into all-cause and cause-specific mortality rates and trends, especially in the context of the COVID-19 pandemic. By leveraging population-based data, we contribute to the global understanding of pandemic impact.

### **Collaborations:**

MUCHAP's dedication to research excellence is underscored by our collaborations. We partnered with the National Identification Registration Authority (NIRA) to improve death registration processes, further enhancing our region's civil registration and vital statistics. MUCHAP in collaboration with MakBRC is establishing a community research laboratory building on the efforts MUCHAP started with the help of Pfizer international funding that built the centre premises with a laboratory. We actively engaged in workshops and

conferences, strengthening our research capacity and promoting data sharing across African cohorts.

### **Community Engagements:**

Our commitment to community health extends to medical camps, team-building retreats, and scout training sessions. These initiatives enable us to bridge the gap between research and practice while fostering partnerships with the communities we serve.

### **Achievements:**

Notably, we published a paper in the BMC journal titled "Factors associated with caretakers' knowledge, attitude, and practices in the management of pneumonia for children aged five years and below in rural Uganda," underscoring our commitment to knowledge dissemination. Our medical camp in June 2023 provided free healthcare services to approximately 272 community members, reinforcing our dedication to community well-being.

### **Conclusion:**

As we reflect on the accomplishments of the past year, MUCHAP remains steadfast in its mission to advance public health and research excellence. Our commitment to improving the health and well-being of the communities we serve drives us forward. We express our gratitude to our dedicated team, collaborators, and stakeholders for their unwavering support. Together, we continue to make a meaningful impact in the field of health and population research.

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