

Post-COVID-19 Research Priorities for Strengthening Health Systems in Sub-Saharan Africa

The policy brief was based on work done by a group of scientists from the African Forum for Research and Education in Health (AFREhealth)

Issue

The COVID-19 pandemic aftermath in Sub-Saharan Africa (SSA) has exposed vulnerabilities and disparities in health systems. Despite challenges, increased investments and innovative approaches have emerged. To prepare for future pandemics, identifying post-pandemic research priorities is crucial at the very minimum for fortifying health systems in SSA by providing guidance and stimulating investments in the priority areas for appropriate action.

Background

The global disruption caused by the pandemic revealed vulnerabilities and inequalities within health systems, particularly in SSA. While challenges in achieving equitable distribution of vaccines, diagnostics and protective supplies persist, commendable outcomes include increased investments, innovative service delivery models, and enhanced health workforce training. However, a cohesive and well-coordinated research agenda is necessary to fortify future pandemic responses in SSA. The African Forum for Research and Education in Health (AFREhealth) has proactively taken measures to discern and prioritize health-related research objectives to ensure SSA's resilience in responding to potential threats from future pandemics¹.

Goal

The goal was to identify post-pandemic research priorities whose results will inform policy and action for optimizing SSA's health systems for preparedness and responsiveness to future pandemic threats.

Target Audience

This policy brief is tailored for policymakers, scientists, researchers, funders, and other stakeholders with a vested interest in health initiatives within Sub-Saharan Africa (SSA) and research pertaining to pandemic response.

Methodology

A modified Delphi process involving researchers from AFREhealth and the broader community was designed. The process included steps such as identifying the research domain/question, literature search, topic generation, conducting anonymous rounds, providing feedback, and summarizing findings.

Results:

Below, the study team has outlined four prioritized research themes along with examples of corresponding key research questions and proposed methods aimed at addressing each question.

Theme 1: Digital Tools for Health Workforce Enhancement:

Research Questions:

- What are the perceived barriers to adopting digital tools post-pandemic for enhancing the health workforce in SSA?
- To what extent do digital tools for learning improve healthcare service delivery and patient outcomes?
- How do health workers perceive the role of digital health education and training in SSA post-pandemic?

Methods:

- Mixed methods approach involving educators and policymakers; implementation science/intervention studies.
- Observational study using digital tools for assessing educational competencies.
- Qualitative study with health educators, curriculum developers, and policymakers.

Theme 2: Genomic Surveillance Systems and Bioinformatics Research:

Research Questions:

- What are the current barriers and facilitators to implementing genomic surveillance systems and bioinformatics research in SSA for pandemic response capacity?
- How can collaborative efforts in SSA optimize genomic surveillance systems and bioinformatics research?
- How was genomic surveillance data integrated into public health responses during COVID and other epidemics in SSA?

Methods:

- Comprehensive mixed-methods approach.
- Qualitative research design focusing on case studies of successful collaborations.
- Qualitative study with key stakeholder interviews.



Photo depicting social distancing during the COVID-19 pandemic.

Theme 3. Assessing Health System Resiliency:

Research Questions:

- How did the COVID-19 response impact clinical care for non-communicable diseases (NCDs) and HIV in SSA, and what were the influencing factors?
- What health system absorption, adaptations, transformation and innovations during the COVID-19 response can enhance resiliency for managing diseases like NCDs and HIV in the future?

Methods:

- Quantitative analysis of healthcare facilities and databases to assess changes in NCD and HIV clinical care during the COVID-19 response.
- Qualitative research design, including key informant interviews with administrators, to gain insights into strategies employed for continuity of care and health system resiliency.

Theme 4. Ensuring Ethical Responses to Future Pandemic Threats:

Research Questions:

- What are the key ethical challenges in distribution and access to vaccines, diagnostics and protective supplies for new pandemic threats in SSA, and how can equitable distribution be ensured?
- How do healthcare providers and policymakers perceive and navigate ethical issues related to resource allocation during pandemic threats?
- What ethical implications and challenges are associated with implementing risky interventions in response to new pandemic threats in SSA?

Methods:

- Mixed-methods approach, including quantitative assessment of vaccine access efforts during COVID-19.
- Qualitative research design to explore perspectives on ethical dilemmas and challenges faced in

ensuring equitable vaccine distribution and access.

- Combination of systematic literature review and case studies to gather data on ethical considerations surrounding risky interventions.

Policy Action

In the wake of the COVID-19 pandemic, delineating and prioritizing research agendas is pivotal for bolstering SSA's health systems against potential future pandemics. As part of epidemics/pandemic preparedness SSA countries and stakeholders should consider investing resources to address the above research questions whose findings will inform policy and action for achieving health systems resilience. The research priorities strategically focus on integrating digital health tools, advancing genomic surveillance capabilities, fortifying health system resilience, and developing ethical response strategies. Addressing these focal points aims to enhance preparedness and promote equitable access to health services in SSA, establishing a robust foundation for safeguarding public health

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