Assessing Implementation Fidelity of Malawi's Antimicrobial Resistance Policy: A Cross-sectional Qualitative Study

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Background

Antimicrobial resistance (AMR) is a growing threat to global health, especially in low- and middle-income countries like Malawi. In line with the WHO Global Action Plan, Malawi adopted its National AMR Strategy (2017–2022), emphasizing a One Health approach that integrates the human, animal, and environmental sectors through five strategic pillars. While the strategy sets ambitious goals, little is known about how effectively these policies are implemented. Evaluating implementation fidelity helps reveal gaps, enhance coordination, and inform targeted AMR interventions in Malawi.

Learning Objectives

1. Qualitative methods - Assess implementation of Malawi's National AMR Strategy
2. Strengthen understanding of AMR policy coordination and the One Health framework
3. Develop skills in ethical research, stakeholder engagement, and cross-cultural collaboration

Picture of Kunmin Kim, Dr.Lubanga, Dr. Nyirenda at Malawi

Population/Setting

- Location**:** Lilongwe, Malawi
- Total Participants**:** 21 (12 KII, 9 IDI)
- KII (Key Informant Interviews): Policymakers, program managers (Ministry of Health, AMR Committee); included key contributors to the National AMR Strategy (2017–2022) and upcoming 2025–2030 plan
- IDI (In-Depth Interviews): Clinicians, pharmacists, veterinary officers, environmental health practitioners Sectors **:** Human, animal, environment

Figure 1: Five Pillars of Malawi's National AMR Strategy (2017–2022).
The national AMR framework is structured around five strategic pillars under a One Health approach.

KII Affiliations and Perceived Pillar

Interview ID	Affiliation (Pillar Focus)	Most Successful Pillar	Most Lagging Pillar
KII-01	Surveillance	Surveillance	Finance
KII-02	Surveillance	Surveillance	Finance
KII-03	Coordination	Awareness	Finance
KII-04	Coordination	Awareness	Finance
KII-05	Pharmacy / IPC	IPC	Finance
KII-06	IPC	Surveillance	Finance
KII-07	Cross-sector Coordination	Surveillance	Finance
KII-08	Fleming Fund Coordination	Surveillance	Finance
KII-09	Surveillance	Awareness	IPC
KII-10	AMRCC Coordination	Surveillance	IPC
KII-11	AMR Oversight	Surveillance	Finance
KII-12	Surveillance	Use Antimicrobials	Finance

IDI Affiliations and Perceived Pillar

Interview ID	Affiliation (Pillar Focus)	Most Successful Pillar	Most Lagging Pillar
IDI-01	Research	Surveillance	Use of Anti microbials
IDI-02	Nutrition and Health Officer	Surveillance	Use of Anti microbials
IDI-03	Medical Health Officer	Awareness	IPC
IDI-04	Lab Coordinator	Awareness	IPC
IDI-05	Coordinator for Hospital	Surveillance	Finance
IDI-06	Coordinator	Surveillance	Finance
IDI-07	Water Microbiologist	Surveillance	Awareness
IDI-08	Lab Scientist	Surveillance	Awareness
IDI-09	Lab Manager	Surveillance	Awareness

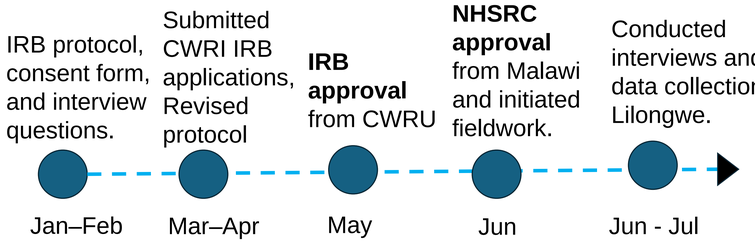

Figure 2 (Left): Timeline of Practicum and Field Activities (Jan–Jul 2025) illustrating the sequential steps from protocol development and multi-stage IRB approvals to field preparation and data collection in Malawi.

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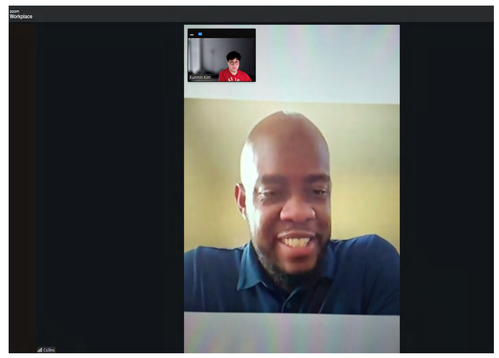
Deliverables

1. Ethical approvals from Case Western Reserve University (IRB) and the Malawi National Health Sciences Research Committee (NHSRC)
2. Policy review: Malawi National AMR documents
3. Interview Questions
4. Presentation of preliminary findings to AMRCC (Antimicrobial Resistance Coordinating Committee) in Malawi



Lessons Learned

- International ethics review requires careful planning and coordination
- Cross sector collaboration remains uneven within the One Health approach
- Conducting field interviews demanded cultural sensitivity and adaptability
- NVivo analysis strengthened my qualitative research and data management skills
- Sustainable domestic funding and government ownership are essential for AMR program

Public Health Implications

- Strengthening AMR policy implementation requires coordination across One Health.
- Qualitative research training builds skills to apply evidence in practice.
- Presented preliminary findings to the AMRCC, contributing to national discussions for the 2025–2030 AMR Plan.

Acknowledgements

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