

Optimisation of antimicrobial use in BSIs and UTIs in various health sector settings in Zambia



ZAMBIA



Project sector
Humans



Project partners
Ministry of Health

University of Zambia
Teaching Hospital

Zambia National
Public Health
Institute



Timescale
1 February 2022 -
31 January 2025



ICARS funding
550,000 USD

Context

Zambia is a landlocked country in Southern Central Africa, with a population of about 18.3 million people. It has a centralised government and healthcare is provided by the government, faith-based organisations and the private sector.

Zambia faces similar challenges to many other LMICs, such as weak health systems and chronic stock-outs of diagnostics and medicines including antibiotics. It depends on almost 100% importation of its medical and diagnostic needs.

Problem

Antimicrobial resistance (AMR) is a global concern which poses a serious risk to public health. In clinical practice worldwide and Zambia in particular, urinary tract infections (UTIs) and bloodstream infections (BSIs) are clinical syndromes associated with indiscriminate use of antibiotics leading to antibiotic resistance (ABR). The consequences of ABR include:

- prolonged hospitalisation
- mortality
- increased healthcare costs

This is made worse with institutions that do not have antimicrobial stewardship programmes.



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Project overview

This project aims to improve the appropriate use of antibiotics for BSIs and UTIs by 20% among prescribers across the continuum care within 2 years, by introducing an antimicrobial stewardship programme in selected Zambian healthcare facilities. BSIs and UTIs will be used as proxies along the continuum of care.

"This project is timely in Zambia as we seek to develop evidence-based treatment guidelines for common syndromes we struggle with, claiming many lives and causing more morbidities."

Professor Lloyd Mulenga, University of Zambia

Outcomes

Successful implementation of this project should lead to strengthened antimicrobial stewardship programmes in participating health facilities in Zambia including:

- evidence-based management of UTIs and BSIs
- increased compliance to treatment guidelines
- appropriate antimicrobial usage: drug choice, dose, route, duration, dosing frequency in BSIs and UTIs
- reduction in antibiotic use
- education in both healthcare delivery cost and utilisation cost
- sustainable AMS programs at all levels of healthcare

