Data-driven implementation of behaviour change in Antimicrobial Stewardship in Low- and Middle-Income Countries (drive-AMS LMICs)

CROSS-COUNTRY

Project sector
One Health
Humans

Funding partners
Radboudumc, Nijmegen, The Netherlands (150,000 USD)

Timescale
1 January 2023 - 31 December 2025

ICARS funding
300,000 USD

Context

The burden of infectious diseases and spread of antimicrobial resistance (AMR) affects Low- and Middle-Income Countries (LMICs) more severely, with the African region having the highest death rate attributable to AMR.

Problem

Despite limited resources, most LMICs are trying to address AMR in the health sector through evidence-based strategies such as setting up of antimicrobial stewardship programmes (ASP). ASP has three core components:

1. System prerequisites (the BASICs)
2. WHAT the AMS team wants to improve
3. HOW the AMS team will achieve these goals

In existing training programmes, a lot of emphasis is placed on the 'WHAT' of AMS, and little attention is generally paid to the 'HOW' within an ASP: HOW to make sure that professionals comply to the 'WHAT' recommendations.

This usually requires a behaviour change approach, including understanding the determinants of antibiotic use, practical skills on how to implement AMS interventions and sustainably act upon these in an institutionalised way.

There is an identified growing need for ASP implementation-oriented support for AMS programmes for LMICs.

"Addressing AMR requires use of implementation science and innovative models of behaviour change. Our proven approaches to support national capacities focus not just on teaching how, but more importantly, on providing expert support for implementation on the ground."

Programme leads Dr Heiman Wertheim and Dr Jeroen Schouten, Radboudumc

ICARS INTERNATIONAL CENTRE FOR ANTIMICROBIAL RESISTANCE SOLUTIONS

Radboudumc university medical center

drive-AMS

Project overview

The overall aim of the drive-AMS LMICs project is to ensure sustainable and long-term capacity in LMICs for Antimicrobial Stewardship in human health with a One Health perspective and applicability.

The AMS masterclass & SPICE expert consultancy (drive-AMS) is an implementation programme with expert consultancy support through the Specialized Programme on Infectious Disease Care Everywhere (SPICE) expert registry. The goal of drive-AMS LMICs is to guide professionals and policy makers through the process of developing and implementing a successful ASP in their hospital, healthcare system, region, or country.

Drive-AMS LMICs combines knowledge transfer and implementation into one programme to enhance the impact of data-driven training and sustainable AMS implementation, through:

- understanding AMS principles (BASICS, the WHAT);
- delivering 4-day AMS implementation masterclass on the HOW of AMS, and developing AMS intervention;
- providing 6-month post-course expert support (through the SPICE registry) for implementation.

The programme will be adapted to different LMIC contexts, together with experts from recipient countries.

Outcomes

This project aims to provide sustainable solutions through the following outcomes:

- Providing training and teaching tools adapted to LMIC contexts, transposing best practices from resource-rich to resource-constrained settings for AMS;
- Building sustainable in-country capacity for delivery of contextualised courses in AMS, that are accredited, of high quality and affordable for the national economy and circumstances;

Ensuring structured and cost-effective expert support for implementation of AMS by building a registry of existing experts in the country and region in specific areas of AMS (SPICE LMICs registry).

"The Dutch AMS Masterclass & SPICE expert consultancy developed and delivered by Radboudumc is an excellent resource that can assist in changing behaviour and practice in human use of antimicrobials, while helping to help build national capacity for expanding and maintaining AMS programmes."

Dr Mirfin Mpundu
Regional Lead Africa, ICARS

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