

Strengthening gender equality and social inclusion

in anti-microbial resistance intervention and implementation research

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INTRODUCING THE PROJECT

Co-creating research tools to explore the interplay between antimicrobial resistance and gender

Introduction

Antimicrobial resistance (AMR) has become a major global concern with a devastating impact on people's health and livelihoods.

Gender-related inequalities influence access to and use of antibiotics and, as a result, women, men and gender minorities are differently exposed to and impacted by AMR. Despite this, there is a lack of research exploring these linkages. A new project, led by a team from the Human Sciences Research Council (HSRC) and Jive Media Africa in South Africa, and Mahidol Oxford Tropical Medicine Research Unit (MORU) in Thailand, will develop practical tools for integrating a gender and social inclusion lens in AMR innovation and implementation research. The project aims to work with AMR researchers in low- and middle-income countries (LMICs) in sub-Saharan Africa and South East Asia, to collaboratively create a toolkit.

The rise of antimicrobial resistance

Antimicrobial medicine has [transformed healthcare](#) by providing effective treatment for once-deadly infectious diseases, and by enabling medical breakthroughs such as organ transplants and cancer treatments. However, the emergence of antimicrobial resistance in response to drug selective pressure has [jeopardised gains made against infectious diseases](#) such as HIV, tuberculosis and malaria. Drug-resistant bacterial infections are a leading [cause](#) of death and the [World Health Organisation](#) (WHO) recognises AMR as one of the ten major global health challenges confronting humanity, primarily driven by the inappropriate and overuse of antimicrobials. AMR has a greater impact on LMICs and is widening the gap between developing countries and the developed world.

The financial burden of AMR on households is significant. Prolonged periods of illness can lead to extended hospital admissions and an increased need for expensive treatment. On a country level, AMR significantly burdens healthcare systems and the economy through lost productivity. [Plants and animals](#) are also affected by AMR, causing the agricultural sector, including subsistence farmers, to sustain production losses and damaged livelihoods, which in turn jeopardises food security.

Why gender matters

As the 2013–2016 Ebola virus disease and the SARS-CoV-2 pandemic demonstrated, women and girls are disproportionately affected by infectious disease breakouts. A [2022 study](#) published in *Nature Microbiology* that examined the gender impact of such health crises in Africa found that women were significantly more vulnerable than men to the indirect health, social and economic consequences.

Rising AMR poses a risk to subsistence farmers' livelihoods



Gender inequities that affect women's access to healthcare also tend to be higher in less developed countries where the burden of infectious diseases and [AMR is disproportionately greater](#). Gender often intersects with marginalisation due to other socio-behavioural factors, such as socio-economic status, disability and age, to impact individuals in distinct ways. For this reason, the WHO recommends adopting an [intersectional gender](#) lens to assist researchers and policymakers to better understand the complex, overlapping ways in which social identities impact the development and treatment of infectious diseases. Such a lens helps avoid a 'one-size-fits-all' approach in research, policies and programmes, instead shedding light on the interplay of AMR, gender and other socio-behavioural factors, and how these are also shaped by structural conditions such as economic and other inequalities.

While gender equality is recognised as a priority in the health and development agenda, limited research has explored how gender influences AMR, particularly in LMICs where social, structural and systemic challenges are contributing to the growing burden of AMR. Consequently, there is a lack of resources for AMR researchers in LMICs to draw on when integrating a gender lens into their studies.

A participatory approach to co-creating a gender toolkit

The project team realised early on that the success of the project hinged on developing the toolkit in response to the contexts in which AMR researchers would be using it. To this end, they crafted a consultation process that promotes co-creation through collaborating with end-users – specifically, AMR researchers working in LMIC settings – in appropriate and meaningful ways.

First, expert consultation workshops will provide opportunities for AMR researchers to share their experiences of applying an intersectional gender lens in their projects, including the successes, challenges or barriers they might have encountered in the process. These workshops aim to offer contextually embedded insights into the kind of resources and tools that researchers will find helpful.

Second, the team will work with researchers with expertise in AMR, gender and intersectional frameworks to refine the emerging toolkit. Robert Inglis, director of Jive Media Africa and a member of the facilitation team, describes the co-creation workshop process thus: "Through online facilitated activities, participants will be asked to reflect on how a gender equality and inclusivity lens can be applied at

Past health crises have had a disproportionate impact on women's health and wellbeing



A participatory process provides opportunities for AMR researchers to share insights about the settings in which they conduct their studies



each step in the AMR research and innovation cycle. At each stage participants will be asked to offer ideas which can contribute to shifts in attitudes and norms around gender in AMR research, and ultimately in new behaviours". Participants will also generate ideas about practical, accessible and relevant tools that can be applied across research disciplines and subject areas.

It is anticipated that this participatory process will enhance the extent to which the toolkit aligns with the needs and priorities of researchers in LMICs, resulting in increased uptake and impact. Ultimately, providing AMR researchers with user-friendly, contextually-embedded tools for integrating a gender lens will enable them to further deepen the rigour, innovation and social relevance of their research.

The project is jointly supported by the International Centre for Antimicrobial Resistance Solutions (ICARS) and the International Development Research Centre (IDRC) and implemented by the HSRC in partnership with MORU and Jive Media Africa. The team is led by Dr Ingrid Lynch (PI) and Dr Konosoang Sobane (co-PI) from the HSRC, along with Dr Bhensri Naemiratch from MORU (co-PI). The resources developed as a result of this project will be used in future AMR research supported by IDRC and ICARS and be made widely available to the rest of the research community.

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