



INTERNATIONAL
CENTRE FOR
**ANTIMICROBIAL
RESISTANCE**
SOLUTIONS



REQUEST FOR PROPOSALS

**Strengthening gender equality and social inclusion in LMICs across
the AMR intervention and implementation research continuum**

Issued Date: 10 February 2022

Submission Deadline: March 9 2022

TABLE OF CONTENTS

REQUEST FOR PROPOSALS	1
SECTION 1 – INTRODUCTION	2
1.1. ICARS OVERVIEW.....	2
1.2. IDRC OVERVIEW	3
1.3. PURPOSE OF THIS RFP.....	3
1.4. DOCUMENTS FOR THIS RFP	3
1.5. TARGET DATES FOR THIS RFP	3
SECTION 2 – STATEMENT OF WORK	4
2.1. INTRODUCTION AND PROJECT OVERVIEW	4
2.2. OBJECTIVES	4
2.3. TECHNICAL SCOPE	5
2.4. EXPECTED RESULTS	5
2.5. TIMELINE, BUDGET AND MANAGEMENT ARRANGEMENT	6
SECTION 3 - PROPOSAL EVALUATION.....	7
3.1. ELIGIBILITY AND FUNDING.....	7
3.2. ADDITIONAL REQUIREMENTS	8
3.3. EVALUATION METHODOLOGY.....	8
SECTION 4 - PROPOSAL SUBMISSION	9
4.1. HOW TO APPLY	10
ANNEX 1: EARLY FINDINGS FROM ICARS/IDRC SCOPING ROUNDTABLES:.....	11

SECTION 1 – INTRODUCTION

The purpose of this section is to provide general information about the International Centre for Antimicrobial Resistance Solutions (ICARS), the International Development Research Centre (IDRC) and this Request for Proposals (RFP).

1.1. ICARS Overview

ICARS works to partner with low- and middle-income countries (LMICs) in their efforts to reduce drug-resistant infections. ICARS provides funding to national partners as well as expertise needed to support intervention and implementation research projects across the One Health spectrum. ICARS works in partnership with LMIC ministries and other research institutions to respond to antimicrobial resistance (AMR) challenges identified in country. ICARS does this by co-developing tailored solutions with LMIC governments and researchers, who then implement interventions on the ground, building on AMR National Action Plans through context-specific and cost-effective solutions for sustainable scale-up. As part of this mandate, ICARS also works with researchers, organisations and AMR partners globally to better understand the influence of local social and economic contexts that influence intervention and implementation research projects on AMR. ICARS provides resources and aims to co-develop evidence that support implementation of activities to mitigate AMR and sustain real-world impact. For more details visit: <https://icars-global.org/>.

1.2. IDRC Overview

IDRC was established by an act of Canada’s parliament in 1970 with a mandate “to initiate, encourage, support, and conduct research into the problems of the developing regions of the world and into the means for applying and adapting scientific, technical, and other knowledge to the economic and social advancement of those regions.” A Canadian Crown corporation, IDRC supports leading thinkers who advance knowledge and solve practical development problems. IDRC provide the resources, advice, and training they need to implement and share their solutions with those who need them most. In short, IDRC increases opportunities — and makes a real difference in people’s lives. Working with development partners, IDRC multiplies the impact of investment and brings innovations to more people in more countries around the world. IDRC offers fellowships and awards to nurture a new generation of development leaders. IDRC employs about 375 people at the head office located in Ottawa, Canada and in five (5) regional offices located in New Delhi-India, Montevideo-Uruguay, Amman-Jordan, Nairobi-Kenya, and Dakar-Senegal. IDRC is governed by a board of up to 14 governors, whose chairperson reports to Parliament through the Minister of International Development. For more details visit: www.idrc.ca

IDRC supports the generation of knowledge – including by individuals from diverse genders, communities, histories and experiences – that tackles the systems that perpetuate inequalities. IDRC-supported research in neglected livestock diseases and AMR animal production in the global South addresses important One Health research gaps. IDRC recognizes that the skills and expertise for research and innovation must exist within LMICs for solutions to be sustainable and works directly with researchers in developing regions to respond to critical global priorities.

1.3. Purpose of this RFP

The purpose of this joint IDRC-ICARS RFP is to initiate a single project (either through a single institution or a partnership) to: 1) synthesize the current evidence and identify priority knowledge gaps and, 2) develop guidance on how to strengthen a gender lens in AMR intervention and implementation research projects in LMICs. Requirements are described in section 2, the statement of work (“services”).

1.4. Documents for this RFP

The documents listed below form this RFP:

- This RFP document
- Annex 1 – Summary of Roundtables

1.5. Target Dates for this RFP

The following schedule summarizes significant target events for the RFP process. The dates are subject to change at the discretion of ICARS and IDRC and shall not become conditions of any contract which may be entered into by ICARS/IDRC and the selected proponent.

Event	Date
RFP Issue Date	10 February 2022
Deadline for Enquiries	20 February 2022
RFP close date	9 March 2022
Proposal evaluation, selection and notification of (with potential interview)	Week of 21 March 2022
Finalize Contract with successful institution(s) and Project Start Date	Week of 11 April 2022

SECTION 2 – STATEMENT OF WORK

The Statement of Work (“SOW”) is a description of the tasks to be done, results to be achieved, and deliverables to be provided.

2.1. Introduction and Project Overview

Gender equality is an international development priority and cuts across human, animal, and environmental health. There have been limited reviews and studies looking at the interplay between gender and antimicrobial resistance (AMR) in human and animal health, and there is a lack of guidance and best practices to support research teams in incorporating a gender lens in AMR research. This lens is necessary to promote gender equality and support the effectiveness, uptake, and sustainability of real-world solutions.

Defining Gender Equality

Gender equality means equal rights, responsibilities and opportunities for all gender diverse groups. It implies that the interests, needs and priorities of, women, men and all gender diverse groups are taken into consideration, recognizing the diversity of different gender groups.

ICARS and IDRC have initiated a two-stage collaborative process to facilitate research to further understand the intersection of AMR and gender. Both ICARS and IDRC have a global research portfolio, however for this specific work ICARS has a specific interest in sub-Saharan Africa.

In the first stage, which was completed in 2021, IDRC and ICARS organized three scoping roundtable consultations with AMR and gender experts from around the world to identify priority knowledge gaps at the intersection of: 1) AMR prevention and containment in human and animal health and 2) Gender and interconnected socio-behavioral characteristics.

Four key emergent themes with associated knowledge gaps were identified at the round tables:

1. The differential reciprocal effects of gender, AMR, and AMU
2. Structural determinants of gender and inclusivity inequalities in AMR.
3. Biases of AMR research, policy, implementation, and research funding environments (structural or systemic).
4. Translation of gender-transformative research outcomes into interventions (policies, programmes, and practices) for sustainable AMR mitigation.

A summary of the roundtables, themes and individual contributions are included in Annex 1.

This Request for Proposal (RFP) describes the second stage of this collaboration, which intends to strengthen the gender lens in AMR research projects funded within both ICARS and IDRC funded projects.

2.2. Objectives

The project must achieve the below objectives:

1. Identify and prioritize the interconnections between gender and both human and animal health, which have the most potential to impact successful AMR research projects (i.e. innovation, interventions and implementation) and the goal of gender equality.
2. Provide clear guidance on how to strengthen a gender lens within AMR innovation and implementation research projects in LMICs.

2.3. Technical Scope

This project is expected to explore the interconnections between AMR and gender (and interconnected socio-behavioural characteristics), going beyond what exists in the limited literature on the subject. While ICARS and IDRC recognize that AMR is a One Health issue, the scope of this project should consider at minimum human health (including healthcare and community settings) and animal health, including food animal production, subsistence farming, animal rearing, etc (mainly focusing on small and medium scale farming). The integration of additional One Health topics would be considered an added value but is not required.

To reflect ICARS¹ and IDRC portfolios², this project is expected to integrate gender in AMR research all along the intervention-implementation continuum, i.e. from basic research stage, through to proof-of-concept, implementation, and ultimately sustainable uptake and scale up within national contexts in LMICs.

As background for this project, the outputs from the roundtable exercise are summarized in Annex 1. Project proposals are advised to most strongly consider the first theme that emerged from the roundtables, but may integrate other topics across all themes as relevant.

Applicants should review this annex and consider how their proposed project can help to:

- Deepen the understanding of the priority interconnections between AMR and gender;
- Delineate the systemic and structural biases of AMR research processes/environments and implementation to address such biases; and
- Identify potential actions that can support the translation of gender-transformative research outcomes into interventions for sustainable AMR mitigation within LMIC contexts at local and national levels.

Applicants should describe their proposed methods for achieving the project's objectives within the project proposal. **This research approach will necessarily require qualitative and where appropriate semiquantitative/quantitative methods to deepen the existing evidence base.** This could include but is not limited to expert consultations, stakeholder engagement and consensus gathering to ensure that real-world challenges are considered and to ensure relevance to current research programmes. Methods should also include evidence review and synthesis (not limited to peer-reviewed literature). There should be direct engagement with researchers in sub-Saharan Africa and other LMICs as relevant, and gender balance should be included in engagement methods.

At the end of the project period, the successful team must have developed a guidance document containing recommendations and tools (e.g. checklist / evidence review format, frameworks) that support the inclusion of a gender lens in new and ongoing AMR projects. The deliverables of this project are expected to directly inform IDRC and ICARS activities.

2.4. Expected Results

In the course of the project period, the successful applicant will be required to provide **four deliverables**:

1. **An initial evidence review (after 3 months)**
2. **A final report (this can also be an update to initial evidence review)**
3. **A final external facing guidance document**
4. **A disseminated knowledge translation strategy**

¹ Please see Featured Projects at this webpage for more information: <https://icars-global.org/partner/partnering-with-lmics/>

² More information at: <https://www.idrc.ca/en/initiative/innovet-amr-innovative-veterinary-solutions-antimicrobial-resistance>, and: <https://www.idrc.ca/en/JPIAMR>

Deliverables 1 and 2 should achieve the following results:

- a. Outline the project approach methodologies.
- b. Review the interconnections and evidence gaps between AMR, gender and interrelated socio-behavioural characteristics in the context of human health and animal health as relevant to LMICs.
- c. Prioritise key interconnections and undertake a deeper investigation on these interactions. This should utilize existing gender research frameworks,³ but should investigate examples specific to AMR.
- d. Identify and validate priority research gaps.

Deliverable 3 should achieve the following results:

- a. Build a clear lay-language case for why and how gender responsive and transformative approaches are needed in AMR research to enable sustainable and equitable change;
- b. Describe priority interconnections between gender and AMR research in human, and food animal production systems, for innovation, intervention and implementation research, for an external audience.
- c. Showcase examples of gender sensitive, responsive and/or transformative research in AMR or similar health research areas, and identify barriers and enablers to achieving sustainable impact.
- d. Develop recommendations and tools that can be used by AMR research teams to increase gender inclusiveness in their projects throughout the research process (i.e. research methods, research teams and at the institutional level).

Deliverable 4 should achieve the following results:

- a. Identify and engage key stakeholders and end-users in sub-Saharan Africa and other LMICs in the development of Deliverable 3
- b. Disseminate key findings, recommendations, and takeaways from Deliverable 3 to identified stakeholders.

2.5. Timeline, Budget and Management Arrangement

The proposed project will run for a duration of 9 to 12 months. The project is anticipated to start early **April 2022**, and an end date no later than **31 March 2023**. The final project deliverables must be submitted by the 31st of March 2023.

Project Budget

This project has a maximum budget available of \$150,000 USD. Of this amount, \$100,000 USD is available to the lead institution in sub-Saharan Africa and an additional \$50,000 USD will be made available for partners based elsewhere, with a strong preference for south-east Asia.

Start-up Meeting

A meeting between ICARS, IDRC and the successful project team will take place at the start of the project. The purpose of the meeting will be to ensure that the project team understands the project mandate and background documents provided, agrees lines of communication, and understands ICARS/IDRC expectations for project implementation, timelines and deliverables.

³ Projects are encouraged to utilise existing gender and research frameworks, including but not limited to publications available through WHO's TDR. See: Incorporating intersectional gender analysis into research on infectious diseases of poverty: a toolkit for health researchers. Geneva: World Health Organization; 2020. Licence: CC BY-NC-SA 3.0 IGO.

Key Milestones and Monitoring

Projects will be required to submit a workplan and proposed timeline as a part of their project. Successful applicant(s) will be required to develop a detailed workplan in consultation with ICARS and IDRC in the first month of the project. A knowledge translation strategy should be provided within the first three months after the project start date.

The successful project will be required to submit quarterly progress and financial reporting, based on a logic framework. Monthly calls between the successful applicant and funders are expected.

Milestone	Date
Start-up meeting with ICARS & IDRC	Week of April 11, 2022
Submission of workplan draft	By April 20, 2022
Submission of revised workplan	2 May 2022
Submission of evidence review (Deliverable 1) and knowledge translation plan (Deliverable 4)	Week of July 1, 2022
Submission of Deliverable 2 and 3 drafts	Week of April 15, 2023
Submission of a revised version of the final Deliverables and approval by ICARS/IDRC	By March 31, 2023
A virtual webinar/presentation to ICARS/IDRC staff	March 2023

Project Oversight

There will be an Oversight Group providing oversight to the project, with minimum IDRC and ICARS representation.

SECTION 3 - PROPOSAL EVALUATION

3.1. Eligibility and Funding

Proposals may be submitted by a single institution or a partnership of two institutions. **The lead institution must be based in sub-Saharan Africa without exception.** In the case of a partnership, one proposal should be submitted of behalf of all partners.

- If a single sub-Saharan institution is proposed, **there is an available budget of \$100,000 USD**

Projects are highly encouraged to include a partnership with a research institution in south-east Asia.

- If a partnership with a south-east Asian institution is proposed, then **an additional \$50,000 USD will be made available for that institution.**
- Separate contracts and funding disbursements will be provided in the case of a partnership to simplify management arrangements for the successful institution.

Proposals submitted by teams comprising a lead institution in sub-Saharan Africa in partnership with one or more institutions based in LMICs outside of sub-Saharan Africa or Asia will be considered, but applicants are encouraged to contact ICARS/IDRC (see *Enquiries* at the end of RFP for contact information) prior to submitting a proposal to ensure eligibility.

Institutions

Institutions that are eligible to be considered for this RFP include universities or other research institutions (public and private) and non-profit organizations based in LMICs. Profit-making organisations and international organisations (including United Nations Organizations or any international academic/non-profit/for-profit institution) are not eligible as the lead research institution for this project. However, they can be collaborators bringing their own funding or in kind contributions.

The project team can sub-contract subject matter experts (SMEs) from any country, however preference should be given to SMEs based in LMICs. Sub-contracted SMEs from high-income countries must be clearly justified and may not be allocated more than 10% of the budget.

Required Expertise

Research teams should demonstrate:

- Expertise and skills in AMR research with relevance to applied work in human health, animal production;
- Gender research expertise;
- Qualitative research skills, as well as skills for any other methods chosen;
- Ability to carry out literature reviews and evidence synthesis across a broad, sometimes abstract database;
- Ability to deliver high quality outputs;
- Demonstrated project management skills;
- Excellent written communication and ability to compose easily understandable reports for lay audiences.

For any eligibility query, proponents are encouraged to contact IDRC-ICARS-AMRGender@icars-global.org.

3.2. Additional Requirements

The lead organisation must:

1. be a registered legal entity and be willing and able to enter into a contractual agreement, as the Commissioned Organisation, with ICARS or IDRC. The successful institutions will be required to comply with the grant conditions of ICARS or IDRC, depending on the offering institutions.
2. demonstrate diversity in the project team.
3. have submitted a completed application as per the guidance in this RFP. We will be unable to accept incomplete applications and those submitted after the end date.

Legal compliance and knowledge translation

The successful institutions will be required to comply with the grant conditions, including organisational policies, of the offering institution. ICARS policies including the code of ethics & professional conduct and the anti-bribery, fraud and corruption policy, are publicly available on the following website: <https://icars-global.org/icars-policies/>. The ICARS grant agreement template can be requested by email: IDRC-ICARS-AMRGender@icars-global.org.

Following the ambitions of open science, researchers involved in this project must ensure that science and society can be made aware of the information about the project as early as possible in the research process. This should be detailed in a knowledge translation strategy. Funders of this work may be available to support translation and are committed to open access.

3.3. Evaluation Methodology

Proposals will be reviewed based on the following criteria.

1. Fit to the scope of the RFP

The application:

- Delivers approaches that supports the key objectives and results required
- Demonstrates a robust logic that clearly links research questions, methodologies, activities, outputs and outcomes

2. Clarity and focused approach

The application:

- Has a feasible and clearly defined approach to understand the interconnections between AMR and gender issues to produce quality guidance
- Has a strong methodology to deepen the understanding of the interlinkages of AMR and gender in the defined context
- Provides a justified budget aligned to the scale and scope of the proposed project

3. Competence and strength, including equity and diversity of the research collaboration

The application:

- Clearly promotes intersectoral partnerships and processes between researchers
- Positions gender and AMR central to the research approach
- Demonstrates skills/expertise/experience/ location of the team that are relevant to the proposed scope and activities
- Demonstrates ability to manage the funds and produce required deliverables in compliance with the grant conditions, including ethical guidelines, standards and principles
- Has considered potential solutions to address the gaps that emerge – both barriers and best practices (positive and negative)

SECTION 4 - PROPOSAL SUBMISSION

Proposals should be organized and submitted in accordance with the instructions in this section.

Proposal Format

Proposals should be no more than 10 pages, without annexes. Elaborate or unnecessary voluminous proposals are not recommended. Proposals must be submitted in English and have a font style and size that is easy to read. Proposals should include:

A cover letter, including:

- The primary contact person with respect to this RFP: the individual's name, address, phone number and email address.
- Contact persons at partner applicant institutions

The body of the proposal including (not exceeding 10 pages):

1. Proposal Summary (no more than half a page)
2. Project Background, Problem and Rationale
3. Proposed Aim and Objectives
4. Methodologies
5. Proposed Knowledge Translation Approach
6. Expected Outcomes, Outputs and Activities
7. Risk Management
8. Project Management and Team Composition
9. Team Expertise and Relevant Projects Undertaken

Annexes

- a) Budget in USD, with a detailed breakdown including the following categories at minimum:
 - i. Salaries and Fees (including estimated number of billable days to complete the work and rates for project team members)
 - ii. Travel and Subsistence
 - iii. Project activities

- iv. Dissemination costs, including all costs related to knowledge translation and dissemination
 - v. Indirect costs (e.g. Audit⁴, Overhead⁵, etc).
- b) CVs of team members (max 5 pages per CV)

4.1. How to apply

All applications must be submitted in a PDF format in English through the project email address IDRC-ICARS-AMRGender@icars-global.org by **9 March 2022**.

Enquiries

Any enquiries related to the Call, application process or budgeting requirements should be sent by e-mail to IDRC-ICARS-AMRGender@icars-global.org

All enquiries should be received by **20th February, 2022** in order to ensure a response prior to the application deadline.

For more information contact IDRC-ICARS-AMRGender@icars-global.org

⁴

ICARS Audit Guidelines are available at: <https://icars-global.org/wp-content/uploads/2021/05/Appendix-4.2-Audit-Instructions.docx.pdf>

⁵ Overhead is calculated as a fixed percentage of direct costs. Institutions eligible to receive overhead are research institutions, universities and non-profit organisations based in LMICs. The maximum overhead rate is 15 %, but if a research institution, university or non-profit organisation has an actual overhead/indirect cost rate that is lower than the maximum rate then that rate should be used.

ANNEX 1: EARLY FINDINGS FROM ICARS/IDRC SCOPING ROUNDTABLES:

**Exploring research gaps at the intersection of gender and antimicrobial
resistance (AMR) interventions across human and animal health in lower-
middle-income countries**



DISCLAIMER

The views represented in this annexed report synthesizes the views and opinions of individuals participating in the roundtable discussions, and does not necessarily align with ICARS or IDRC positions or viewpoints.

SUMMARY OF ROUNDTABLE BACKGROUND AND PROCESS

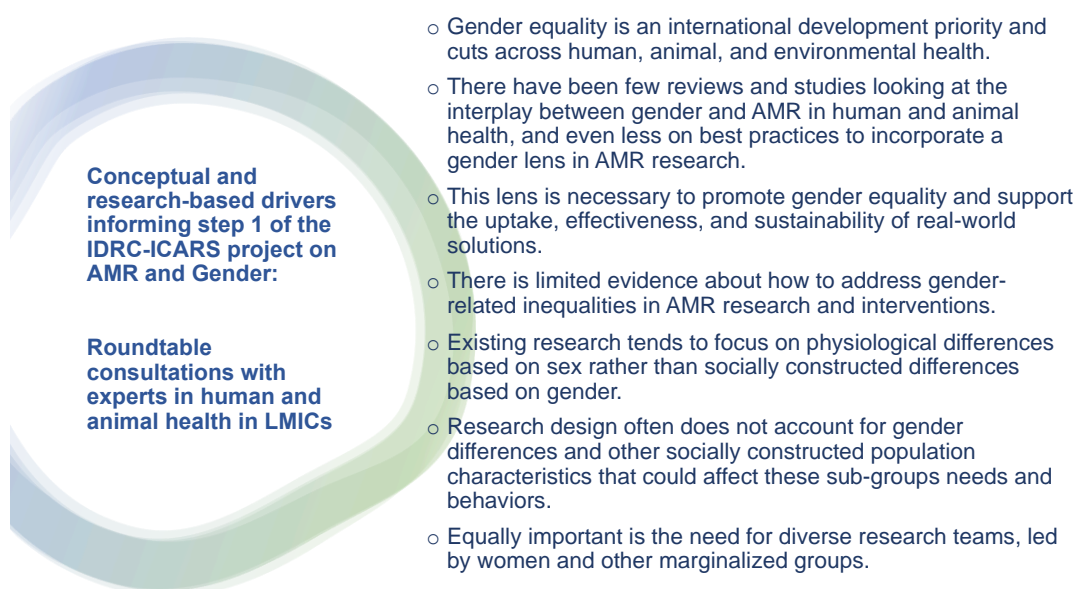
Gender equality is an international development priority and cuts across human, animal, and environmental health. There have been few reviews and studies looking at the interplay between gender and antimicrobial resistance (AMR) in human and animal health, and even less on best practices to incorporate a gender lens in AMR research. This lens is necessary to promote gender equality and support the uptake, effectiveness, and sustainability of real-world solutions. The importance of this is highlighted by some key comments from participants in the roundtables.

“I can’t believe it’s taken all this time to focus on gender in AMR”

“When AMR interventions focus on gender, we will see people centred approach and effective implementation”

In 2021, IDRC and ICARS initiated a series of three scoping virtual roundtable consultations with experts from around the globe. These consultations intended to identify priority knowledge gaps relating to gender and inclusivity in AMR prevention and containment in human and animal health in low-middle-income-countries (LMICs). This consultation process was rationalized by the drivers outlined in Figure 1. The aim of the roundtable consultations was therefore to identify knowledge gaps at the intersection of (1) AMR prevention and containment in human and animal health and (2) gender and interconnected socio-behavioral characteristics. IDRC and ICARS gratefully thank the 31 roundtable participants for sharing their time and expertise in generating ideas about the possible knowledge gaps at the interface between gender and antimicrobial resistance (AMR) in human and animal health.

FIGURE 1 CONCEPTUAL AND RESEARCH-BASED DRIVERS INFORMING THE ROUNDTABLE CONSULTATION ¹⁻⁹



Thirty-one (25 women and 6 men) experts from 20 countries (12 LMICs and 8 high income countries) participated in one of three three-hour virtual roundtables. Participation was by invitation. Over half (58%) of the participants have expertise in human health and AMR and 32% in animal health and AMR, with gender expertise evenly spread across both fields.

The virtual roundtable methodology adopted a structured brainstorm idea-generation approach, which is used for participatory planning and decision making in diverse settings. The evaluation of the process was overall very positive, with good engagement, the ability to freely express ideas, and the generation of sufficient content to meet the aim of the roundtables.

Roundtable discussions were each guided by two questions aimed to stimulate participants to reflect on the linkages between AMR and gender, and to apply a gender lens to AMR interventions in human and animal health for better AMR mitigation outcomes (Figure 2).



FIGURE 2 ROUNDTABLE STIMULUS QUESTIONS

SUMMARY OF INITIAL ROUNDTABLE OUTPUTS

FIGURE 3 ANCHORING CONCEPT AND EMERGENT THEMES

Four broad knowledge gap themes emerged, which were anchored in a common concept of differential impact of gender and AMR (Figure 3).

The following analysis shows that addressing differential impacts requires a **deeper and evidence-based understanding** of how structural gender and intersecting identity factors impact AMR mitigation (theme 1), of how structural gender and social identity determinants interact to drive differential impacts (theme 2), uncovering, and changing the systemic and structural gender biases of institutions (e.g. research, policy, implementation, and funding environments) to ensure that “best evidence speaks to everyone” (theme 3), and translating gender-transformative research outcomes into usable knowledge for implementation and sustainability (theme 4). In this text, direct quotes from roundtable participants are indicated by quotation marks and are italicized.

Differential impacts of gender and AMR

The differential reciprocal effects of gender, AMR and AMU

Research directions for a deeper understanding of the structural determinants of gender and inclusivity inequalities in AMR for evidence-based solutions

The systemic and structural biases of AMR research, policy, implementation and research funding environments

Translation of gender-transformative research outcomes into usable knowledge for AMR implementation and sustainability

Theme 1: The differential reciprocal effects of gender, AMR, and AMU

This theme deals with the “what” element of gender and AMR, with the key notion being reciprocal dynamic of AMR/AMU and gender. This means AMR/AMU affects gender, and vice versa. This was reported across human and animal health domains and requires research to understand the dynamics in more detail and identify how each variable interacts and the nature of this interaction. For example, different ways that the relationship between gender and AMR/AMU could vary are shown some participant contributions: “ *The different decision-making roles for male and females can affect access to information and resources, knowledge and awareness of (and thus vulnerability to AMR).* It

was also stated that *“Gender acts as a catalyst in bring out health outcomes, exposure to risks and health seeking behaviours.”*

This can also be broken down into sub-themes as reported in the roundtables, for specific AMR-related issues such as;

- Access to antimicrobials (e.g. *“gender inequality in access to effective antimicrobials”, “different decision-making roles for men and women can affect access”*);
- Differential exposure to pathogens related to physiological differences (*“Biological and physiological needs of men and women are different, some pathogens predominantly affect women e.g., GBS”, “women as clients in maternity settings - exposure to pathogens such as K. pneumoniae”*);
- Increased AMR exposure and vulnerability related to social roles such as household family care, food production and livestock responsibilities (*“Women are the primary caregivers in families and animals”, “Women and girls are care givers of the sick and may have exposure to AMR at health facilities”, “Women are vegetable growers & cooks. AMR comes up via /in raw veggies”*).

Theme 2: Structural determinants of gender and inclusivity inequalities in AMR.

This theme aims to understand the “how” of the structural links between gender and AMR in human and animal health. A nuanced approach is needed to understand and explore the social construct of gender and notions of the meaning of inclusivity. This means to go beyond gender as biology/sex differences or as a social construct, and **shift from a focus on individual decision making towards understanding structural factors**. Similarly, vulnerability, marginalization and inclusivity across all gender and sexual orientation dimensions need to be more deeply understood in an AMR context.

Further clarity is needed for the use of terms to describe identity groups, *“for example not to conflate gender identity with gender (social construct) and sex, while interconnected, they are not the same.”* Clarity is also needed to explore the role of women as actors and victims in the AMR discourse, for example *“women have a key role to play as actors in mitigation while women are vulnerable as victims in being blamed for AM misuse and vulnerable to high levels of exposure environmentally.”*

Theme 3: Biases of AMR research, policy, implementation, and research funding environments (structural or systemic).

Gendered institutional structures influence the AMR research and policy narrative and prioritization of research agendas, but must include the input of women and other marginalized voices. Some comments included that *“Bio-medical research and product development is critically important, but so too is a nuanced understanding of the interface between biomedical innovations/solutions and people of different identities and contexts”*. Participants felt that the AMR researcher landscape is dominated by *“experts who are bio-medical &/or white/HIC &/or men”* and there is *“under-representation of women in basic research”*. There was also *“high(est) value of positivist and quantitative approaches”* and a *“lack of value placed on gender analysis/ social science”*.

Research is needed into systemic change required at institutional levels as well as at the level of research paradigms. This could target mechanisms that result in the exclusion of women and marginalized groups from education, decision making, funding, opportunity, and participation across all levels of research, policy and implementation. It was suggested to change funding practices, and promote qualitative, critical, and participatory research models in research and implementation.

Theme 4: Translation of gender-transformative research outcomes into interventions (policies, programmes, and practices) for sustainable AMR mitigation.

This research theme places gender transformation at its core. It goes further to emphasize gaps in gender informed evidence and a deep gendered dimension for measurement (e.g. in surveillance). The deliberate positioning of gender as a change driver in research and action should yield a gender

transformed implementation to sustainably impact AMR and AMU and mitigate unintended impacts. Through improved inclusion, both research outputs and interventions will be more transferable and relatable. AMR containment approaches must include the perspectives of decision-makers, professionals (human and animal health), communities in understanding the social and gendered dynamics of AMR and gender in and across human and animal health.

BIBLIOGRAPHY

1. ReAct. (2020). *Scoping the significance of gender for antibiotic resistance*.
2. WHO. (2018). *Tackling Antimicrobial resistance (AMR) together. Enhancing the focus on gender and equity*. Geneva, Switzerland.
3. Benavides, J. A., Streicker, D. G., Gonzales, M. S., Rojas-Paniagua, E., & Shiva, C. (2021). Knowledge and use of antibiotics among low-income small-scale farmers of Peru. *Preventive Veterinary Medicine*, 189. doi:10.1016/j.prevetmed.2021.105287
4. Williams, A., Lyeo, J. S., Geffros, S., & Mouriopoulos, A. (2021). The integration of sex and gender considerations in health policymaking: a scoping review. *International Journal for Equity in Health*, 20(1), 69. doi:10.1186/s12939-021-01411-8
5. Sato, S., Gygax, P. M., Randall, J., & Schmid Mast, M. (2021). The leaky pipeline in research grant peer review and funding decisions: challenges and future directions. *Higher Education. Springer Science and Business Media B.V.* doi:10.1007/s10734-020-00626-y LK - <https://ukzn.on.worldcat.org/oclc/8678995407>
6. Hossain, A., Hossain, S. A., Fatema, A. N., Wahab, A., Alam, M. M., Islam, M. N., ... Ahsan, G. U. (2020). Age and gender-specific antibiotic resistance patterns among Bangladeshi patients with urinary tract infection caused by *Escherichia coli*. *Heliyon*, 6(6). doi:10.1016/j.heliyon.2020.e04161
7. Mulema, A. A., Kinati, W., Lemma, M., Mekonnen, M., Alemu, B. G., Elias, B., ... Wieland, B. (2020). Clapping with Two Hands: Transforming Gender Relations and Zoonotic Disease Risks through Community Conversations in Rural Ethiopia. *Human Ecology*, 48(6). doi:10.1007/s10745-020-00184-y
8. McKune, S., Serra, R., & Touré, A. (2021). Gender and intersectional analysis of livestock vaccine value chains in Kaffrine, Senegal. *PLoS ONE*, 16(7 July). doi:10.1371/journal.pone.0252045
9. World Economic Forum. (2021). *Global Gender Gap Report 2021*. Geneva, Switzerland.