What's gender got to do with it?

Results from the GEAR up consortium systematic review on gender and equity in AMR in LMICs

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Introducing the GEAR up Consortium

The GEAR up consortium (Gender Equity within Antimicrobial Resistance) was set up to support Fleming Fund country grantees to mainstream gender and equity within routine AMR systems and structures.

GEAR up is led out of Liverpool School of Tropical Medicine in partnership with LVCT Health, Kenya; Centre for Sexual Health and HIV AIDS Research, Zimbabwe; University of Health and Allied Sciences, Ghana; HERD international, Nepal, James P Grant School of Public Health, Bangladesh and Pamoja Communications.

We aim to increase awareness, and contribute to the knowledge, on structural inequities driving and shaping the AMR response through:

- Mainstreaming gender and equity considerations into existing surveillance structures
- Informing National Action Plans on equity and AMR
- Conducting and supporting empirical research in some Fleming Fund countries
- Developing specific case studies, tools and resources
- Building communities of practice to support global knowledge sharing and inspire action

Interested in gender, equity and AMR?

Join our GEAR up community of practice! Email gear.up.amr@gmail.com to register your interest.

Background on gender, equity and antimicrobial resistance

Antimicrobial resistance is a critical public health concern, but its burden is not distributed equally.

Drivers of AMR are highly context-dependent and are heavily influenced by the social determinants of health such as gender, age, ethnicity, education and refugee status.

An intersectional understanding of health inequity highlights how different social determinants of health intersect to drive diverse and complex health inequities through (for example) influencing susceptibility and exposure to infection, risk of becoming ill and barriers to accessing healthcare and health information.

Improved public health outcomes are possible using an intersectional lens in disease prevention and control, but these have had limited use in AMR, and particularly in LMIC settings.

DEFINITIONS

Gender

The socially constructed roles, behaviours, activities, attributes and opportunities that any society assigns to men and women, boys and girls, transgender people and people with non-binary identities, and which shape their relationships and interactions within hierarchies of power. Gender varies from society to society and can change over time. Gender as a power relation shapes risk of disease, access and use of health services and disease experience and is a key social determinant of health.

Sex

Biological aspects of bodies that categorises males, females and intersex people or those who have differences of sex development and may differ from a person's gender identity. Sex can affect susceptibility to infection, pathophysiology, immune responses, clinical presentation, disease severity, and response to treatment and vaccination. Sex and gender are often intertwined, with gender commonly being a socialised aspect of sex. Therefore, sex disaggregated data can be valuable as a first step in gender analysis, providing that sex and gender are not conflated.

Social determinants of health

The social, economic, environmental and political factors that drive the patterns of health inequities. These include income, social protection, education, job security, working conditions, food (in)security, housing, the environment, early childhood development, social inclusion, discrimination, conflict and access to affordable health services, among other factors such as race, gender, ethnicity, age, sexuality, class and disability.

Intersectionality

Intersectionality focuses on the ways in which different axes of power, inequity and marginalisation intersect and interact in dynamic ways to create unique and specific experiences and processes of marginalisation, including gender, race, ethnicity, age, disability, Indigenous identity, refugee status and class. The concept of intersectionality emerged from black feminist theory and was coined by Kimberlé Crenshaw. Intersectional inquiry can be applied to health to understand how the intersection of systems of power and marginalisation interact to impact healthcare access and health outcomes.

Gender and equity analysis

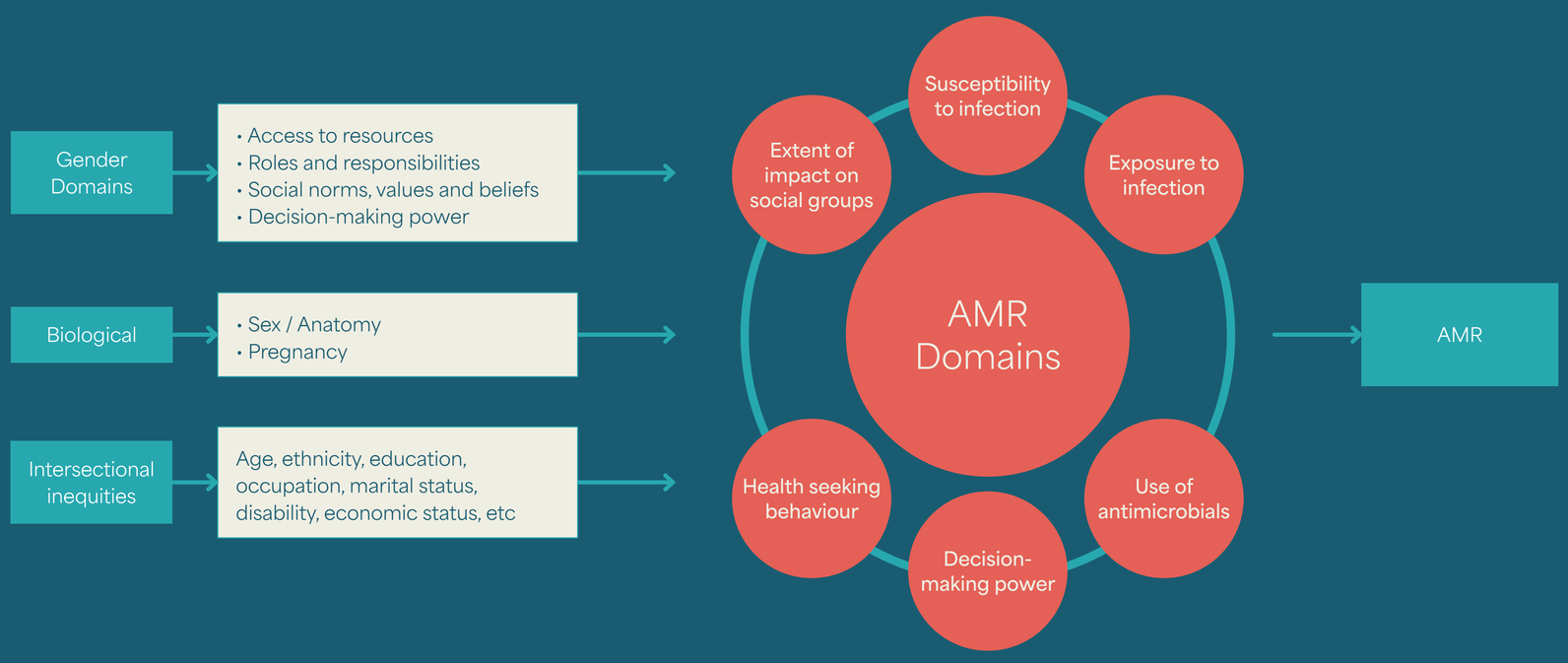
Broadly, gender analysis seeks to identify how gender norms, beliefs, roles, time allocation, division of labour, access to resources, and rules and decision making constitute gender power relations that lead to different experiences within health systems and can be further retrenched or reversed by health systems and interventions. This involves understanding the lives of women, men, non-binary and transgender people, their differing needs and experiences within health systems, the causes and consequences of these differences, and how policies, programmes and other interventions can be transformative of the inequitable relations that cause harm.

Methods

We conducted a systematic scoping review of the state of knowledge on gender, equity and AMR, with a focus on lower- and middle-income countries (LMICs), including peer reviewed and grey literature published in the last ten years. We carried out database searches in Web of Science, Scopus, Pubmed and Google Scholar for research on gender, equity and AMR in LMICs, and identified further articles through snowballing from references of included articles and iterative, targeted searches in Google Scholar and grey literature sources such as WHO, UN and Fleming Fund.

Results

We reviewed n=129 papers, which revealed a complex picture.



Susceptibility may be influenced by sex – for example via UTIs or pregnancy but also through social determinants. For example, malnutrition is influenced by poverty and geography, which intersect with gender norms where in some cultures, boy children will be favoured in situations where there is not enough food.

Exposure is influenced through drivers such as access to WASH but is also linked to occupation, which is often gendered. Gendered norms surrounding women's caring roles or role in animal husbandry increase exposure – as opposed to men who may be more likely to work in slaughterhouses, for example.

Antibiotic use is influenced by socio-economic status, location and gender among other factors. The cost of diagnostics and doctors remain high for those without health insurance or living in informality. In many settings antibiotics are accessed through informal healthcare providers, which are misused and poor quality. This can also be gendered as men tend to have greater purchasing power, or **decision-making power**, to obtain antibiotics without prescription.

The impact of AMR can be stigmatising, leading to exclusion from families and communities. This acts as a barrier for seeking diagnosis and treatment. There can be particular stigma towards women relating to impacts on fertility and ability to care for others.

Next steps for gender and equity in AMR:

Key gaps & opportunities

→ Data on the burden of AMR disaggregated by sex, gender and other social variables such as age, occupation, ethnicity, geographical location, disability and education are limited across contexts. Data disaggregated by equity related indicators is a critical first step.

⚠ Caution is required when interpreting disaggregated data that is collected at facility level, as inequitable barriers to health seeking mean that data will likely be biased.

→ Qualitative, contextual research into the underlying structural drivers of the inequitable burden of AMR, including social and gender norms, is particularly absent. There is a need to build on sex and gender disaggregated data to understand and address norms, power and privilege that underlie the statistical data and inform AMR interventions. Programmatic effectiveness and sustainability may be compromised without this understanding, and inequities reinforced.

→ There is a need for a coordinated, multi-sectoral response across AMR that considers structural drivers of AMR and integrates an equity lens into national action plans.

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