

The Role of Gender in Antimicrobial Resistance: Findings from a Scoping Review

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Introduction

Research on infectious diseases, including HIV/AIDS, COVID-19, and Ebola, shows that gender has an impact on vulnerability and exposure to disease, health care access, and health outcomes. For antimicrobial resistance (AMR), **there is limited evidence that systematically assesses the role of gender**, despite emerging evidence demonstrating that different behaviours and actions can drive the prevalence of infections.

This study brings together the **global evidence** showing the **different health outcomes related to AMR that women, men, girls, boys, and gender-diverse populations experience** from prevention to treatment.

This research has important policy implications. While most countries have developed and implemented national action plans (NAPs) on AMR, most NAPs do not address the differences in exposure, health behaviours, access to health care, and health outcomes related to AMR because of gender dynamics.

Findings

Gender dynamics impact health outcomes related to AMR through norms and values, distribution of labour and roles, power dynamics, access to resources, and through policies, laws, and institutions.

This research shows that:

- Harmful gender norms, such as communities valuing boys over girls – can lead to boys having greater access to food and health care, leaving women and girls more vulnerable to infections and limiting treatment options.
- Urinary tract infections (UTIs), multi-drug-resistant tuberculosis (MDR-TB), and sexually transmitted infections (STIs) are often associated with sexual intercourse, promiscuity, uncleanliness, poverty, and unfeminine acts. These factors can deter diagnosis and treatment, especially for women and men who have sex with men.
- Social constructs of masculinity promote risky behaviours, including smoking or tobacco use, drugs, drinking alcohol, and unprotected sex, which are linked to increased exposure to drug-resistant infections (DRIs).
- Sexual violence, which can be a consequence of unequal gender power dynamics rooted in societal norms, may increase women's exposure to STIs, which are increasingly becoming drug-resistant.
- Household responsibilities can create gendered exposure to DRIs. Water fetching and caretaking, responsibilities typically placed on women and girls in low resource settings, can increase their risk of exposure to waterborne DRIs, especially in conditions with poor water, sanitation, and hygiene.
- Large-scale industrial animal husbandry, a typically male-dominated occupation increased the likelihood of male workers' exposure to antibiotics and drug-resistant bacteria. Concurrently, low-paid, labour-intensive farm work increased exposure to antibiotics administered to animals.
- In many LMICs, women are responsible for small-scale domestic farm work and caretakers of sick animals, increasing their exposure to antibiotics and DRIs.
- Limited time and financial resources can hinder access to timely diagnosis and appropriate treatment. Both men and women may resort to self-medication due to cost or time barriers.
- Health-related decisions often rest with men or senior household members. Women frequently rely on informal or low-cost remedies when denied access to household finances. However, women's workforce participation can enhance autonomy and decision-making power.
- Patients who are women can also experience inequitable relationships with their practitioners. Fear of displaying disobedience, lack of respect, or portraying a lack of trust to health care professionals can deter women from having agency in their health care decision-making and could lead to inappropriate antibiotic use.
- Restrictive laws, such as anti-homosexuality laws, gender-blind laws, and other legal frameworks that discriminate based on sex, gender identity, or sexual orientation, can negatively affect access to health care for women, men, and gender-diverse populations.

Recommendations:

- Addressing gender inequalities in AMR health outcomes requires improving the structural and social determinants of health, for example, ending discrimination in legal and policy frameworks, and implementing universal health coverage to promote equal access to health care.
- Involve women, men, and gender-diverse populations at national and sub-national AMR governance structures, technical working groups, and leadership positions within the health system to support the design of strategies to mitigate gendered barriers to access health care.
- Collect, analyse, and use gender-disaggregated data on AMR to inform interventions aiming to promote equitable access to prevention, diagnosis, and treatment for DRIs, especially for women.

Conclusion:

This research highlights the importance of integrating a gender perspective into the design of AMR policies, programs, and interventions. As many countries are in the process of developing and revising their NAPs on AMR, incorporating a gender lens can address these inequities and support improved health care access, and mitigate the spread of AMR.



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