

USAID MEDICINES, TECHNOLOGIES, AND PHARMACEUTICAL SERVICES (MTaPS) PROGRAM

Improved Access. Improved Services. Better Health Outcomes.

Approaches and Tools for Strengthening Pharmaceutical Systems

Sex and Gender Considerations for Strengthening Pharmaceutical Systems

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The importance of sex and gender in pharmaceutical systems

- **Sex** (biological) is a medical term and defines individuals by chromosomal, hormonal, and anatomical characteristics.
- **Gender** (social) is based on a person's gender identity, which is an internal, deeply felt sense of being a man or woman or something other or in between, which may or may not correspond with the sex an individual was assigned at birth.
- Sex (biological) and gender (social) differences have numerous important implications in national pharmaceutical systems.

Example:

- Adverse drug reactions differ both by sex (metabolism/excretion) and by gender (risks/exposure)



Approaches and tools MTaPS has been using to strengthen gender considerations

Critical question: “What are the sex and/or gender differences that might create poor outcomes?”

Specific approaches:

- Conducting sex and gender analyses to better understand sex and gender differences and making the results available for country use
- Advocating for the collection and use of sex- and gender-disaggregated data
- Reviewing government documents to ensure inclusion of sex and gender considerations and sex-disaggregated data aspects

Analyze, understand, and address sex and gender in the pharmaceutical system, striving for the highest possible standard of health for all people.

Illustration: Supply chain

Gender norms and imbalances in power dynamics between men and women are often reflected in health systems and institutions. Use of sex-disaggregated data can help to:

- Avoid shortages and stock-outs resulting from sex-dependent pharmacokinetic impacts not being considered
 - Example: Ventilator sedation stock-outs during the pandemic, because males and females metabolize medicines differently
- Ensure that planning accounts for everyone in the population, including women and sexual and gender minorities



Illustration: Emerging infectious diseases

- Women make up nearly three-quarters of health care and social services front-line workers.
- Most available personal protective equipment (PPE) is designed for men, leaving women with poorly fitted equipment that can leave them vulnerable.
- Gender influences place of work and job type:
 - May place individuals at risk for emerging infectious
 - Example: Individuals may be at risk of avian influenza if they care for chicken, ducks, or other backyard birds



Understanding how sex and gender influence disease is key to effective infection prevention and control and containment of infectious diseases.

Illustration: Pharmacovigilance

- Adverse drug reactions differ by sex and gender.
- Certain individuals may be more vulnerable to harm from medical products.
 - Pregnant individuals and their infants are at risk for medication-related harm.



Approaches and tools MTaPS has been using to strengthen gender considerations

Governance: Policies that do not address the impacts of sex and gender increase risk for the most disadvantaged.

- Zika policy: Individuals should not get pregnant; did not account for lack of access to reproductive health products and services
- Policies perpetuate inequities by not addressing discrimination, such as access to care by sexual and gender minorities.



Case study: Strengthening sex and gender considerations at the Philippine Department of Health



Conducted a PSS-specific gender analysis that examined the role of sex and gender in procurement and supply chain management and pharmacovigilance of family planning and tuberculosis programs.

Recommendations:

- ✔ **Report sex-disaggregated data:** Analysis and use of gender and sex-disaggregated data improves supply chain management, helping to ensure gender equity.
- ✔ **Regulations, rules, and guidelines updated:** The government integrated findings from the analysis into its Updated Gender Equality and Women's Empowerment Plan 2019-2025.
- ✔ **New e-learning materials:** Two learning modules on sex and gender now available.

How can you apply these approaches and tools?

- **A Checklist for Gender Considerations for Pharmaceutical Systems** (Overseas Strategic Consulting, Ltd.): This checklist aims to guide pharmaceutical system managers and implementers to assess how gender relates to their program goals and objectives.
- **Taking Sex and Gender into Account in Emerging Infectious Disease Programmes: An Analytical Framework** (WHO, 2011): This WHO framework demonstrates the roles of sex and gender in emerging diseases and can be used as a practical tool to incorporate a gender perspective into emerging disease programs.
- **Guidance Note and Checklist for Tackling Gender-Related Barriers to Equitable COVID-19 Vaccine Deployment** (WHO, 2021): This checklist provides practical actions to ensure gender equality and equity in COVID-19 vaccine deployment



Additional resources

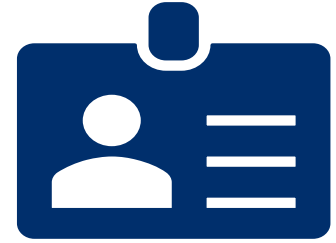
- **We Can Only Fix What We Know About – Why Sex-Disaggregated Data in Pharmaceutical Systems is Crucial** (April 2022)
- **Tackling Antimicrobial Resistance (AMR) Together Working Paper 5.0: Enhancing the focus on gender and equity** (WHO, 2018)
- **Creating Sex/Gender-Responsive Health Supply Chains: COVID-19 Reminds Us Again** (December 2021)
- **How Sex and Gender Impact Antimicrobial Resistance Risk** (July 2021)
- **Sex differences in pharmacokinetics and pharmacodynamics** (Soldin & Mattison, 2009)
- **Gender Differences in Antibiotic Prescribing in the Community: A Systematic Review and Meta-Analysis** (Schröder et al., 2016)
- **The Importance of Being Gender Responsive for COVID-19 Vaccine Introduction: Build It Right or They Won't Come** (October 2021)
- **Point Prevalence Survey of Antibiotic Use Across 13 Hospitals in Uganda** (February 2022)

e-Learning Resources

- **Pharmaceutical Systems Strengthening 101** (available in **English** and in **French**): This course introduces learners to the basic principles of PSS, including how address pharmaceutical system problems advances universal health coverage; combats antimicrobial resistance, HIV and AIDS, malaria, tuberculosis, and other public health threats; and promotes maternal and child health.



Who to contact



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