

Gender and Medicines In HIV/AIDS, Tuberculosis, and Malaria in Low- and Middle-Income Countries: A Systematic Review

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Problem statement: Medicines are essential tools that improve health in low and middle-income countries, and numerous studies have established their impact in the management of HIV/AIDS, tuberculosis, and malaria. Studies suggest that there are socioeconomic, geographic, institutional, and sectoral differences in medicine access and use, yet few explore gender differences, and no systematic review is available to summarize such differences.

Objectives: To systematically search and summarize literature that describes gender differences in medicine access and use in HIV/AIDS, tuberculosis, and malaria in low- and middle-income countries and to highlight opportunities for further research.

Design: Systematic review of published literature.

Setting and study population: Studies that describe gender differences in the HIV/AIDS, tuberculosis, and malaria population in low- and middle-income countries

Outcome measures: We developed a conceptual framework that highlights six core access domains and three domains of socioeconomic determinants linked to gender and medicines. Key characteristics of each article were abstracted and presented to understand the direction of gender differences by each domain.

Results: We included 126 articles in our final review. The extant literature provides limited evidence about gender-related differences. Existing evidence is characterized by a predominant focus on gender and HIV access to medicines and adherence, a body of research supported primarily by international donors. No clear patterns of difference between men and women in access or adherence emerge from the literature in these areas. Most studies are focused on gender issues in HIV care (n=77), while smaller numbers address TB (n=33) and malaria (n=13). Most studies use a cross-sectional research design (n=54) while some are cohort studies (n=31) and others use qualitative methods (n=30). Very few studies focused on acceptability of treatment (n=4), and household affordability (n=1). More articles were focused on patients in Africa (n=77) and Southeast Asia (n=23) while some focused on patients in the Americas (n=7), the Western Pacific (n=2), and the Eastern Mediterranean (n=1).

Conclusion: We found no clear pattern in gender differences in treatment based on the conceptual framework in our study. The evidence is dominated by gender studies on HIV treatment and such studies are dependent on funds from international donors. Governments in low and middle income countries are encouraged to allocate funds for gender studies on HIV, TB and malaria treatment. Treatment guidelines in each region must be reviewed to integrate a gender perspective. Knowledge and skills are needed around research methods and tools to mainstream gender.

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BACKGROUND

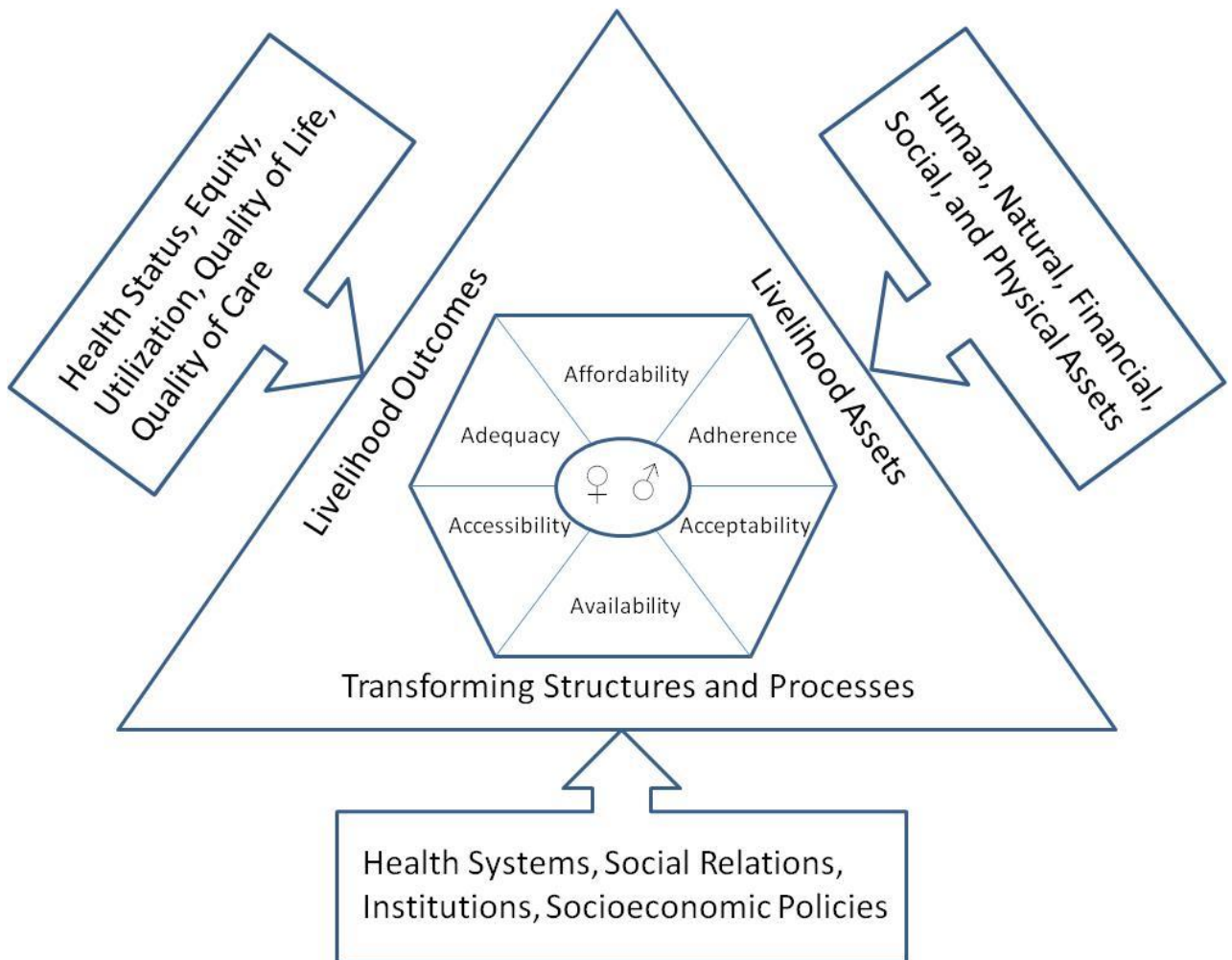
- **Access to essential medicines** is crucial for improving health.
- Studies suggest that there are socioeconomic, geographic, institutional, and sectoral **differences** in medicine access
- However, **gaps exist in our knowledge** about **gender-specific** differences in medicines for HIV, TB, and malaria treatment in low and middle-income countries (LMIC)
- Some evidence suggests that men and women in a number of settings seek and experience care **differently**

STUDY AIMS

- The WHO has called for inclusion of a **gender perspective** in national essential medicines
- To this end, we undertook a **systematic review** of the available evidence on the role of gender in treatment programs targeting HIV, TB, and malaria in LMIC
- Our objectives were to:
 - **characterize and summarize** results from published studies of **gender and medicines**
 - **highlight gaps** in current knowledge and recommend future work

METHODS

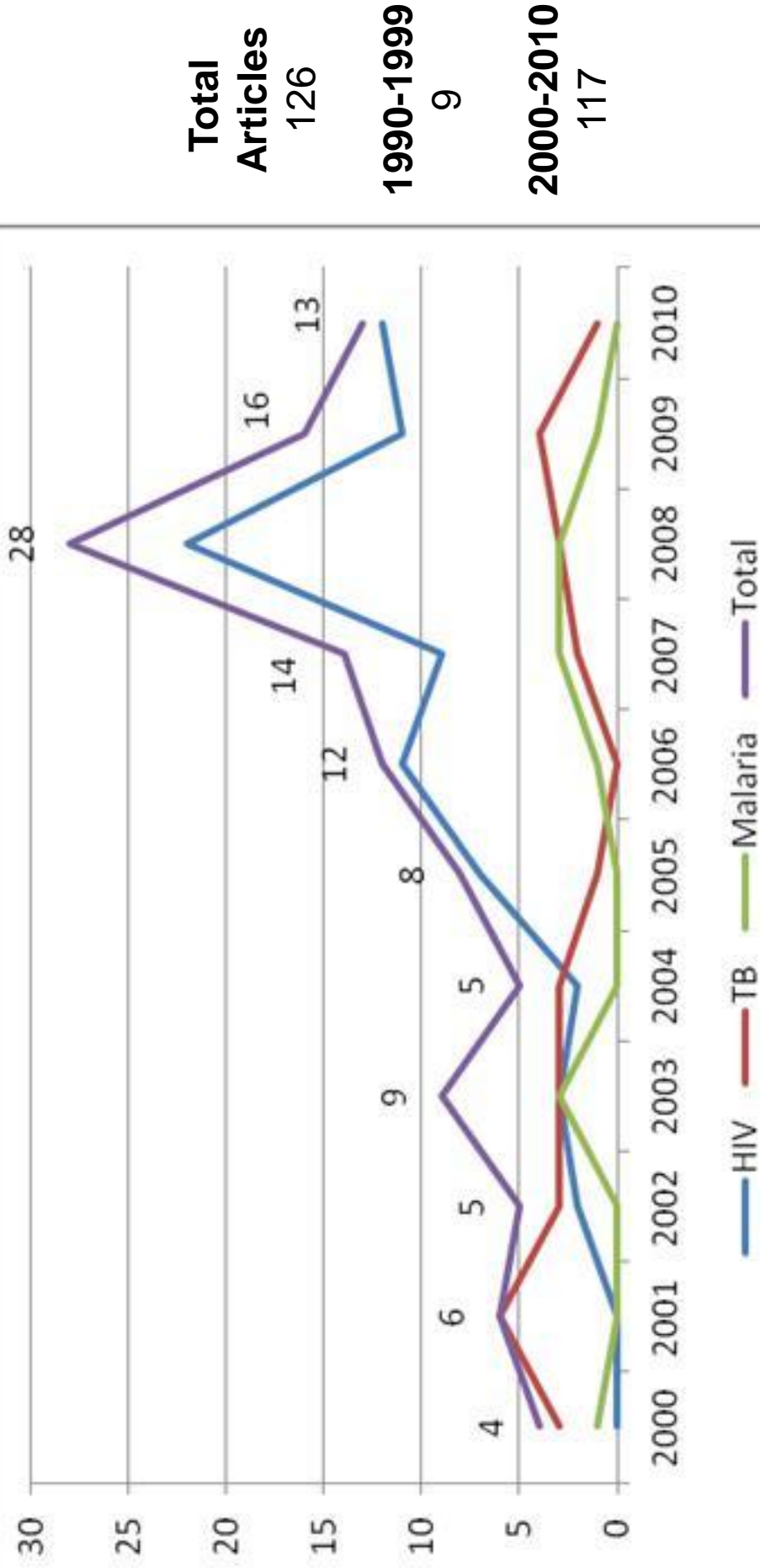
- We first developed a **conceptual framework** to highlight factors linked to gender and medicines:



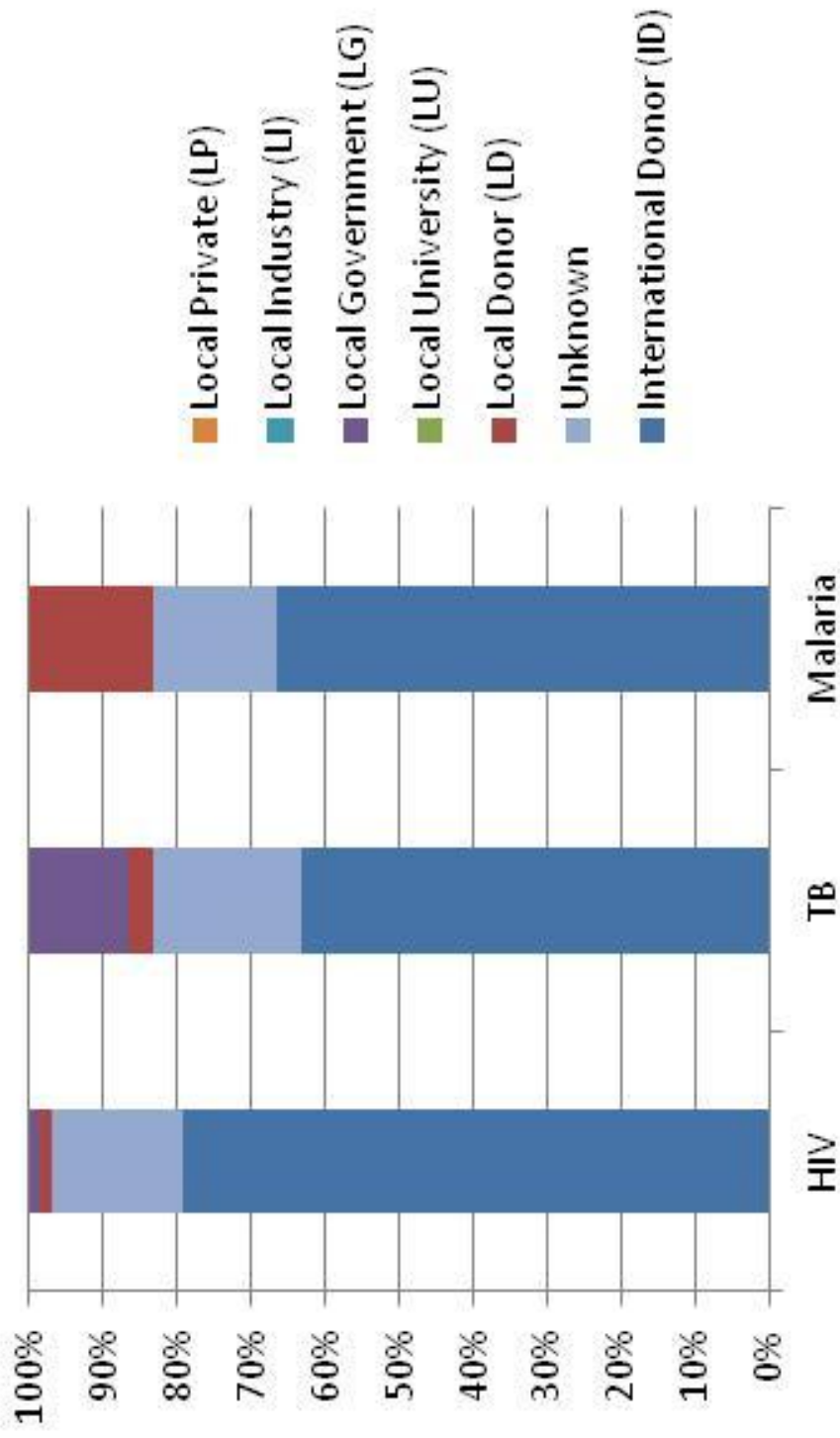
METHODS

- We **searched** 3 citation databases, 3 project specific databases, websites and online archives
- **Included** empirical studies, systematic reviews, policy discussions, and opinion pieces
- Articles published between January 1, **1990** and December 31, **2010**
- We abstracted a **structured set of information** from each article:
 - Research institution
 - Funding source
 - Research design
 - How gender was used as a variable
 - Country and WHO region

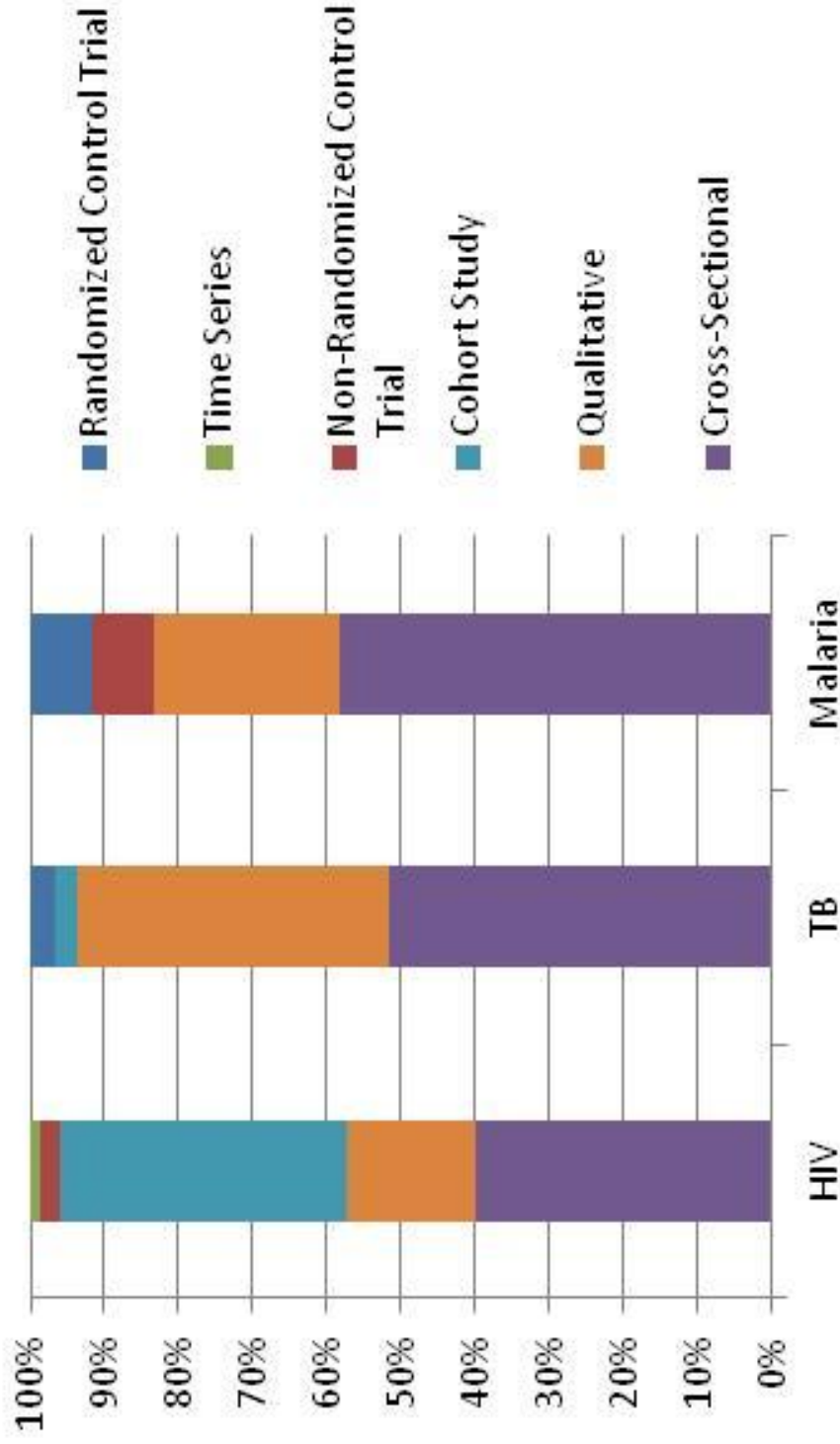
Most studies on gender and medicines for HIV, TB, and malaria were published after 2000



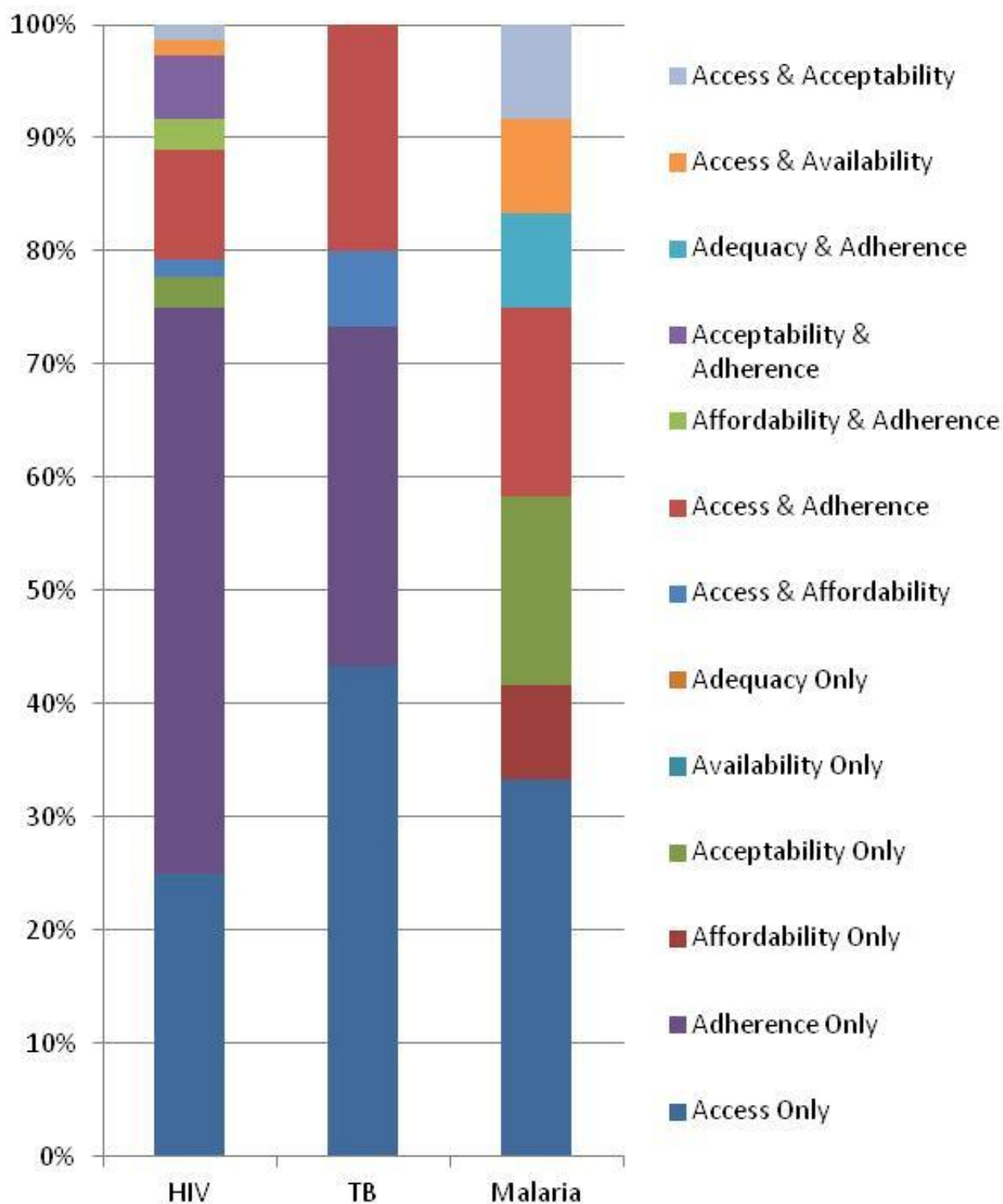
Most gender studies in HIV, TB, and malaria were funded by international donor agencies



Most studies used a cross-sectional research design to analyze data on gender and medicines

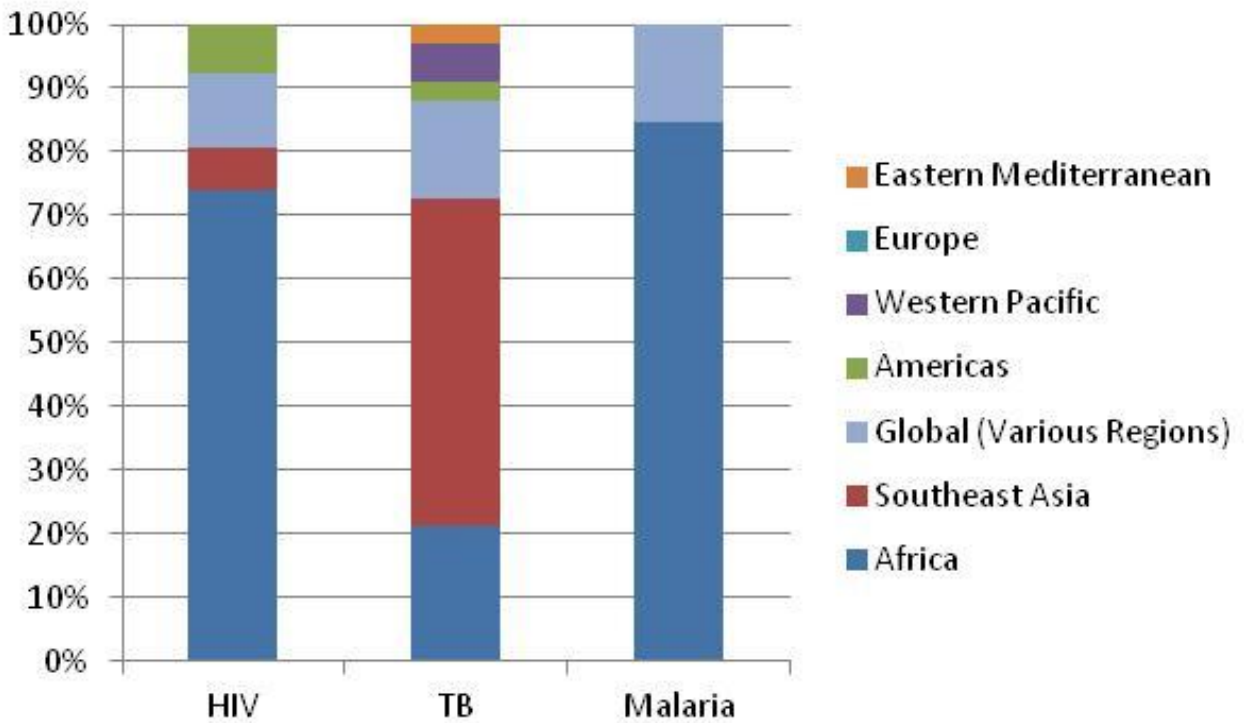


Most gender studies focus on access or adherence, and very few on affordability or acceptability



RESULTS

Most gender studies focus on HIV, TB and malaria treatment in Africa & Southeast Asia



There are no clear gender differences in access & adherence

Empirical Studies Only

	Men > Women	Women > Men	Men = Women
Access	6	5	5
Adherence	4	10	21

SUMMARY

- The literature provides **limited evidence** about gender-related differences
- Evidence is characterized by a predominant focus on **gender and HIV access to medicines and adherence**
- In few instances is relevant research funded by **local universities and governments**
- More is known about gender and medicine in **Sub-Saharan Africa** than in any other region

SUMMARY

- Research on gender and medicines would benefit from **greater conceptual and statistical sophistication**
- More **analytic study designs** and more complex statistical methods will be required to expand the evidence
- Most articles addressed gender issues in **access and adherence** to medicines
- Surprisingly, only a few articles reported on **gender differences in affordability** of treatment

POLICY IMPLICATIONS

- Governments in LMIC are encouraged to **allocate funds** for gender studies on HIV, TB and malaria treatment
- **More work** is required in the Americas, Western Pacific and the Eastern Mediterranean
- **Treatment guidelines** in each region must be reviewed to integrate a gender perspective
- **Knowledge and skills** are needed around research methods and tools to mainstream gender