

# Notice of Special Interest: HIV and Women

Elizabeth Barr, Ph.D., Office of Research on Women's Health

October 18, 2023



# Notice of Special Interest: HIV and Women

**Concept Clearance:** New Limited Competition

**Title:** Notice of Special Interest: HIV and Women

**Objective/Purpose:** To highlight interest in receiving research grant applications focused on HIV and women

**Funds Available and Anticipated Number of Awards:** Contingent upon NIH appropriations and ICO partnership

**Award Project Period:** Determined by mechanism

# Global statistics: Women and HIV in 2021

- 54% (~20 million) of all people with HIV are women
- Adolescent girls and young women (15-24 yrs): 2X more likely to live with HIV than male peers in sub-Saharan Africa (where there are 4900 new HIV diagnoses weekly)
- 35% women with HIV experienced IPV and are 1.5X more likely to acquire HIV
- 20% of transgender women were living with HIV
- Transgender women have 14X higher risk of acquiring HIV
- PrEP is underutilized by women for whom it is indicated
- Women with HIV are aging, and aging women remain at risk of acquiring HIV



## Sources:

UNAIDS Global HIV & AIDS statistics – Fact Sheet.

<https://www.who.int/data/gho/data/themes/hiv-aids>

Hodges-Mameletzis et. al. Pre-Exposure Prophylaxis for HIV Prevention in Women: Current Status and Future Directions. *Drugs*. 2019 Aug;79(12):1263-1276.

Stutterheim SE et. al. The worldwide burden of HIV in transgender individuals: An updated systematic review and meta-analysis. *PLoS One*. 2021 Dec 1;16(12):e0260063.



# US statistics: Women and HIV in 2021

- 23% (258,000) of people with HIV in the U.S. are women
- Women aged 25 to 34 had the highest number of new HIV diagnoses; new diagnoses among women 55 and older increased 7% from 2015-2019
- In 2020, 20% of new HIV diagnoses were in women (18% cisgender; 2% transgender)
- In 2019, Black and African American women accounted for 13% of the population and 54% of new HIV diagnoses
- Only 10% of U.S. women who could benefit from PrEP were prescribed PrEP in 2019

## Sources:

<https://www.cdc.gov/hiv/library/reports/hiv-surveillance/vol-33/index.html>

<https://www.cdc.gov/hiv/group/gender/women/prep-coverage.html>

<https://www.cdc.gov/media/releases/2021/p0414-trans-HIV.html>



# Maternal Morbidity & Mortality with HIV

**Globally, 81% of the 1.3M pregnant people living with HIV received ART**

**Estimating maternal mortality in PWH is complicated:**

- In 2017 WHO estimates **1.22%** of maternal deaths are HIV-related
- Varies by region and is affected by fluctuating policies

**What we do know:**

- Breastfeeding/chestfeeding is complicated by HIV status
- HIV is associated with an increased risk of comorbidities that compound the risk of death during pregnancy



Sources:

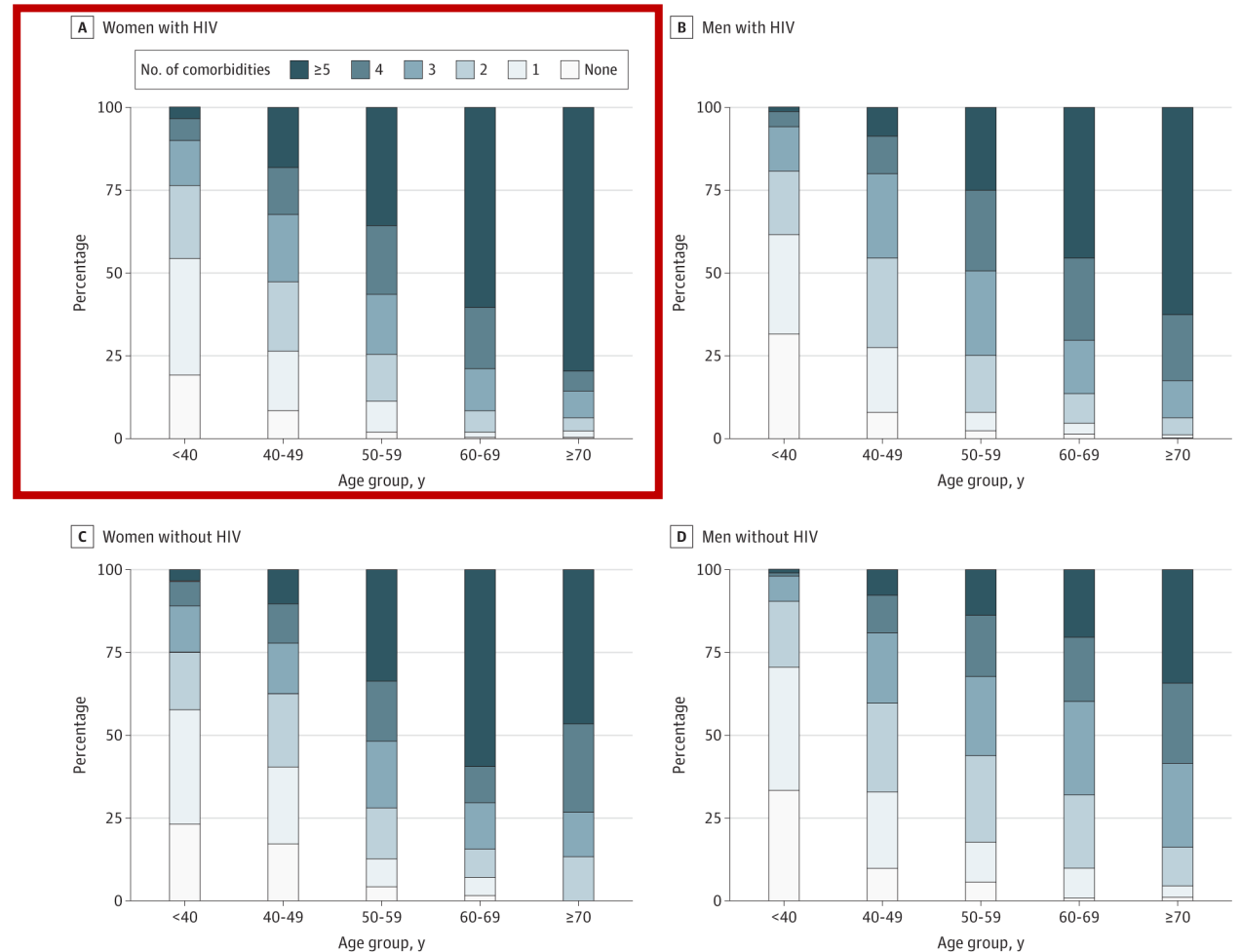
Trends in Maternal Mortality: 2000 to 2017. Estimates by WHO, UNICEF, UNFPA, World Bank Group and the United Nations Population Division  
Calvert C, Ronsmans C. The contribution of HIV to pregnancy-related mortality: a systematic review and meta-analysis. AIDS. 2013 Jun 19;27(10):1631-9.  
<https://www.unaids.org/en/keywords/pmtct>



# Aging and multimorbidity for Women with HIV

- Chronic conditions and multiple chronic conditions are more common among women than men (with or w/o HIV)
- Sex and gender differences in the prevalence and clinical presentation of chronic conditions have been documented in people with HIV and people without HIV
- Symptoms of disease experienced by women are often different from men

Distribution of Prevalent Non-AIDS Comorbidity (NACM) Burden by HIV Serostatus, Sex, and Age Group



# NIH OAR-ORWH HIV and Women Signature Program

## Program Objectives

- Promote health and well-being for all women with or impacted by HIV
- Support career development for women in HIV research

## Strategies

- NIH OAR and ORWH Collaboration
- Increase information dissemination and NIH-wide collaboration
  - HIV & Women Working Group
  - NIH HIV & Women Website
  - External Engagements – listening sessions, workshops and symposia
- Formulate strategic priorities and opportunities



# Despite Significant Progress Women Continue to Face Unique Challenges in HIV

## Biological Considerations

- Multimorbidity more common in women with HIV
- Sex differences in disease symptoms
- Pregnancy in PWH linked to 2-10X increased risk of maternal mortality
- Exogenous hormone therapy
- Menopause & aging



## Social and Structural Considerations

- Intersectional stigma
- Interpersonal and gender-based violence
- Unique mental health burden for women with HIV
- Gender affirming care
- Suboptimal representation in clinical; cure-related research



# Despite Significant Progress Women Continue to Face Unique Challenges in HIV

JAMA Network | **Open**™ 

---

Original Investigation | Infectious Diseases


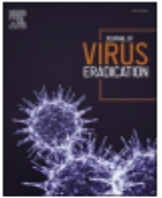
## Aging-Related Comorbidity Burden Among Women and Men With or At-Risk for HIV in the US, 2008-2019

Lauren F. Collins, MD, MSc; Frank J. Palella Jr, MD; C. Christina Mehta, PhD; JaNae Holloway, MSPH; Valentina Stosor, MD; Jordan E. Lake, MD; Todd T. Brown, MD, PhD; Elizabeth F. Topper, PhD; Susanna Naggie, MD; Kathryn Anastos, MD; Tonya N. Taylor, PhD; Seble Kassaye, MD; Audrey L. French, MD; Adaora A. Adimora, MD; Margaret A. Fischl, MD; Mirjam-Colette Kempf, PhD; Susan L. Koletar, MD; Phyllis C. Tien, MD; Ighovwerha Oforokun, MD; Anandi N. Sheth, MD, MSc

## Social and Structural Considerations


- Intersectional stigma
  - Interpersonal and gender-based violence
  - Unique mental health burden for
- Pregnancy in PWH linked to 2-10X increased risk of maternal mortality
  - Exogenous hormone therapy
  - Menopause & aging

Contents lists available at [ScienceDirect](#)

 **Journal of Virus Eradication** 

journal homepage: [www.sciencedirect.com/journal/journal-of-virus-eradication](http://www.sciencedirect.com/journal/journal-of-virus-eradication)

---

Bringing social context into global biomedical HIV cure-related research:  
An urgent call to action 

Annie Miall <sup>a,1</sup>, Rio McLellan <sup>a,1</sup>, Krista Dong <sup>b,c,d</sup>, Thumbi Ndung'u <sup>c,e,f,g</sup>, Parya Saberi <sup>h</sup>,  
John A. Saucedo <sup>h</sup>, Karine Dubé <sup>i,\*</sup>

# Concept Clearance: Notice of Special Interest: Women and HIV

- Areas of focus:
  - Research and training grants
  - High priority topics identified through literature review, external engagements, Request for Information, portfolio analysis
- Intersectional approaches encouraged
- Multi-IC partnership
  - Wide interest across NIH



# Examples of priority topics

- Community-led research
- HIV, pregnancy, lactation, postpartum
- Early childhood consequences of HIV exposure
- HIV and aging, menopause
- Intersection of HIV and comorbidities, multimorbidity, polypharmacy
- Implementation Science – treatment, prevention, maternal morbidity and mortality
- Interdisciplinary approaches – BSSR, data science
- Gender-affirming and trauma-informed HIV care and research
- Sex and gender influences in treatment, prevention and cure-related research



# Thank you, and Questions?