



NIH OFFICE OF AIDS RESEARCH (OAR)

U.S. Department of Health and Human Services



Sexual Violence and HIV Risk

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Defining intimate partner violence

Violence perpetrated by a current or former boyfriend, cohabiting partner, husband, or date

- **Physical violence**
- **Sexual violence**
- **Stalking and psychological aggression**
- **Control of reproductive or sexual health, finances**
- **Aggressive/coercive tactics**
- **Emotional threats of physical or sexual violence,**

Defining the terms used to discuss sexual violence

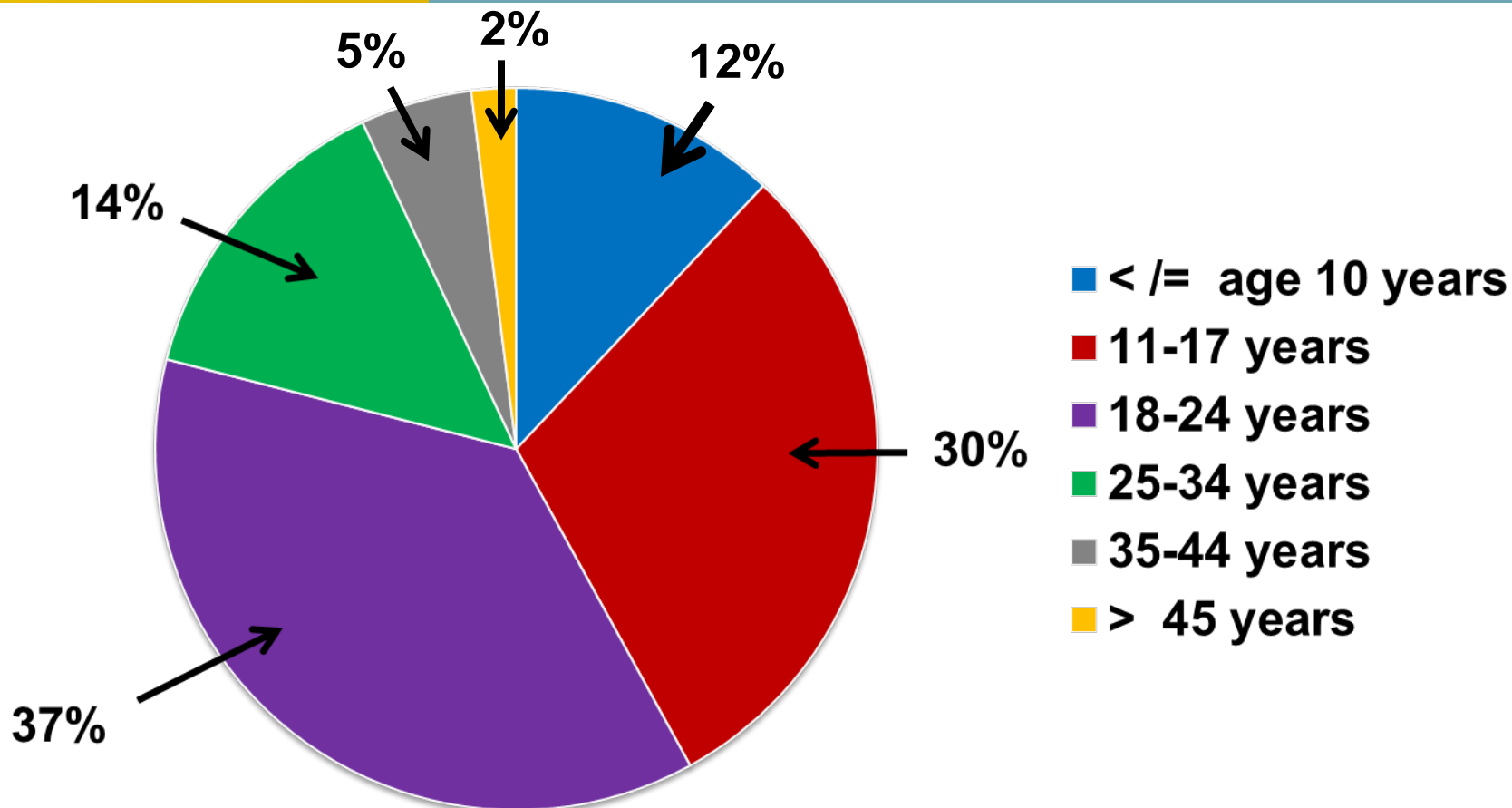
- **Rape**
 - **Complete or unwanted penetration (vaginal, oral, or anal)**
 - Includes penis, objects, fingers
 - Attempted forced penetration
 - Alcohol or drug facilitated penetration
- **Being made to penetrate someone else**
- **Sexual coercion**
 - pressured in a non-physical way, bullying
- **Unwanted sexual contact**
 - touching, kissing in a sexual way, fondling
- **Non-contact unwanted sexual experiences**
 - doesn't involve touching or penetration

Why do we use the reference “intimate partner” violence?

- **VAW - 64% by intimate partner**
- **Rape (1/5 women in US)**
 - **51.1% by intimate partner**
 - **40.8% by an acquaintance**
 - **91.9% by someone known to the victim**

Age at victim's completed first rape (women)

NISVS CDC, 2014



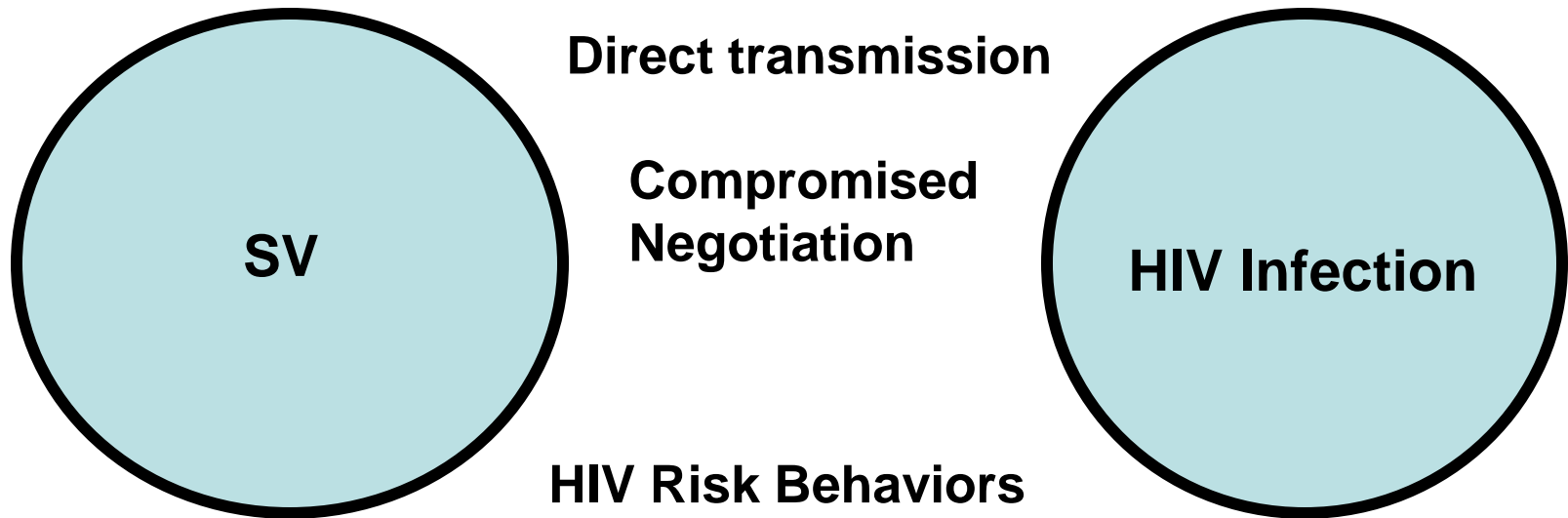
- ~ 80% of women experience first rape by age 25 years
- 42% of women experience first by age 18 years



Intersection of IPV and HIV

- **$\geq 2X$ national average**
 - **55% of HIV-infected women experienced IPV**
 - **39% experienced childhood sexual abuse**
 - **42% experienced childhood physical abuse**
- **0.5-4% of women experience violence with disclosure of HIV serostatus**
- **4X risk of ART failure in women with recent abuse**

Relationship between SV and HIV



Analyzing sexual violence and HIV risk:

Behavioral effects

- **Low self esteem**
- **Increased sexual partners**
- **Increased risky sexual acts**
- **Unbalanced sexual power dynamic**
- **Increased risk for repeat sexual violence**

Walsh, Oct. 2012



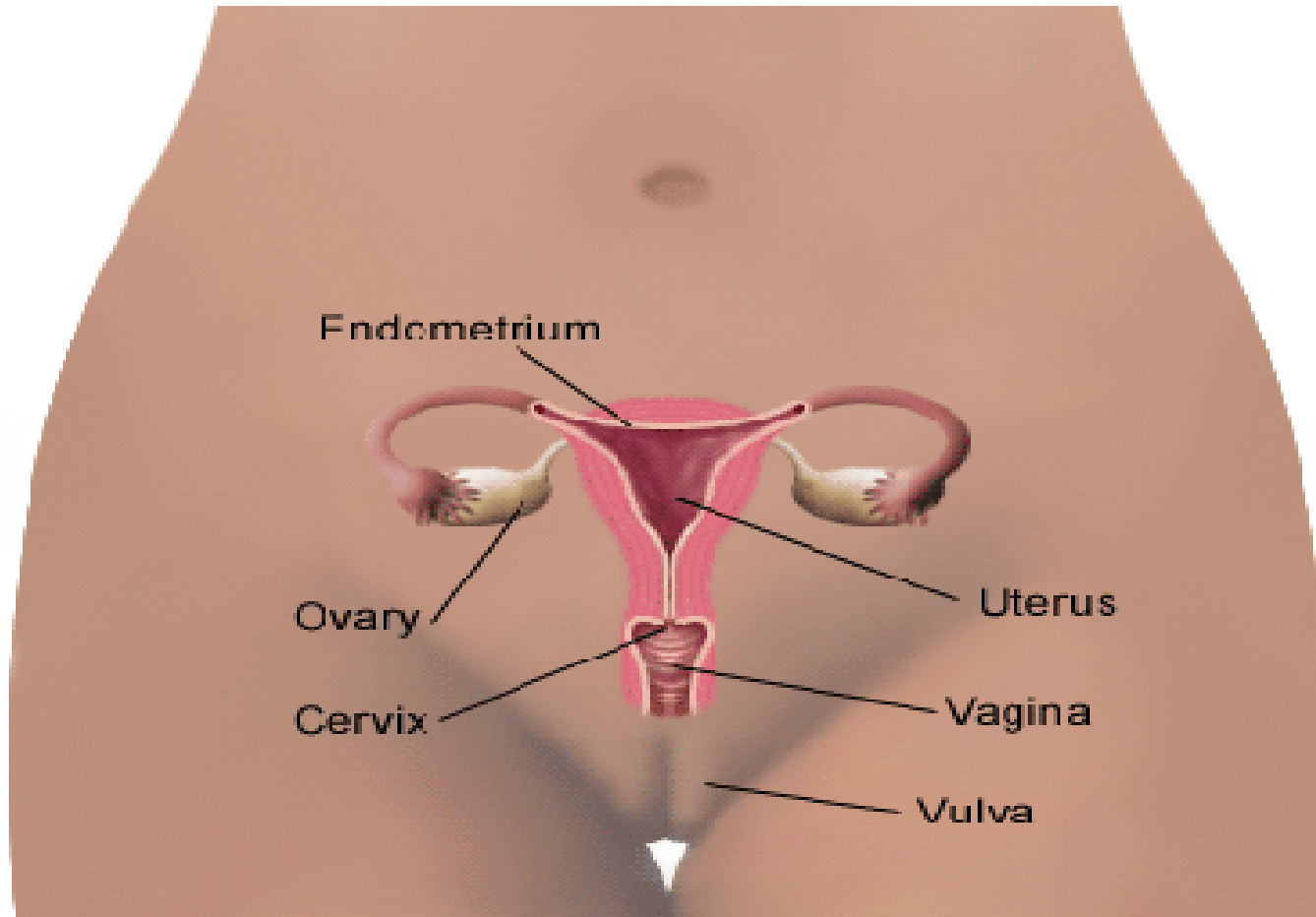
DHHS/NIH/OAR

Sexual violence (SV) and HIV risk in women and girls: the *tipping point*

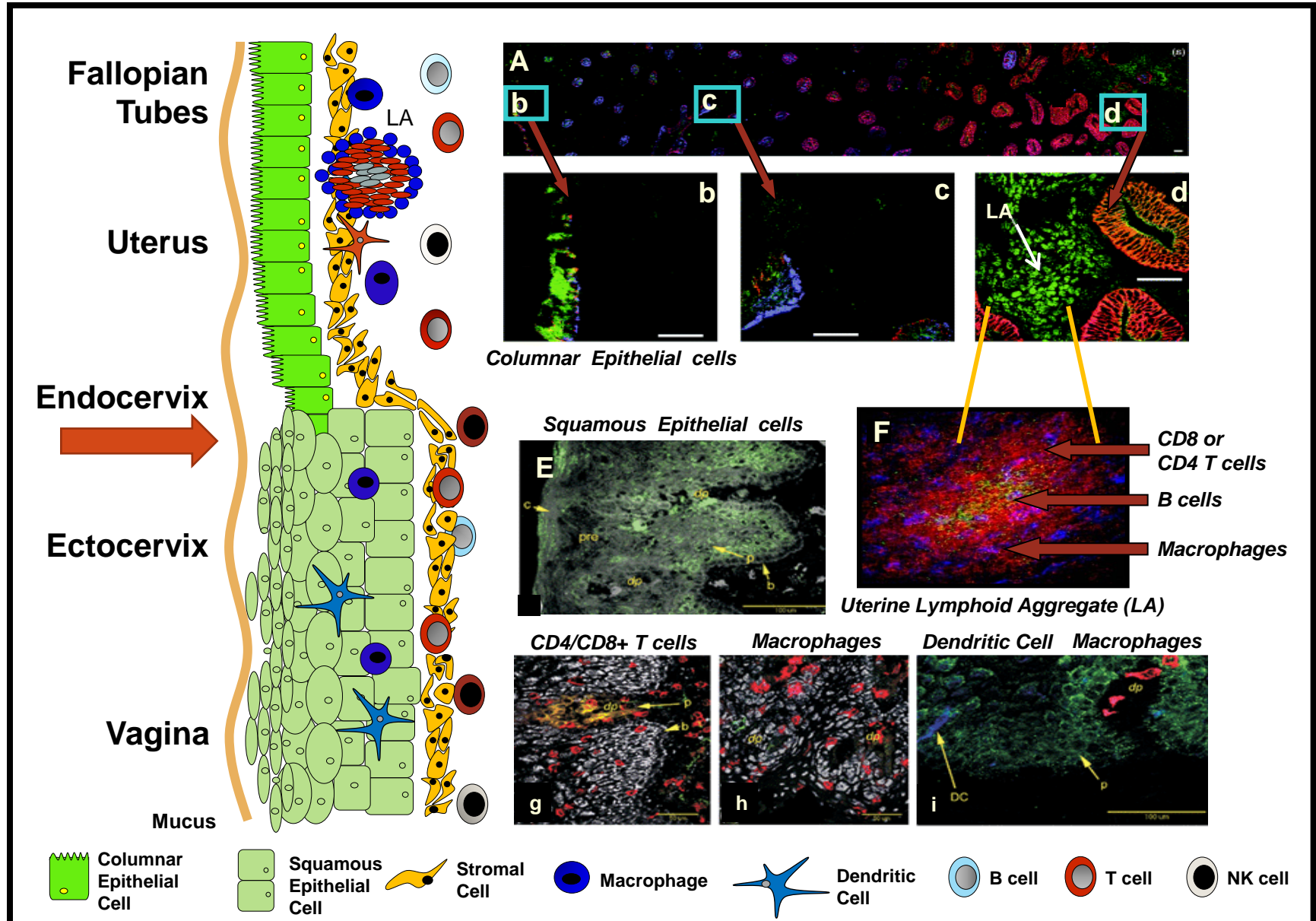
1. **HIV and Women's biological risk -- Office of AIDS Research Advisory Council (April 2012)**
2. **White House Women and Girls HIV/AIDS Awareness Day: *Sexual Violence and HIV in Women and Girls* March 2012**
3. **OAR, Social Science Research Council, UNAIDS sponsored *Sexual Violence and HIV Risk* meeting April, 2012 (Greentree I)**
 - Outlining and modeling SV and biomedical HIV risk
 - Defining a research agenda
5. **Priority in Trans-NIH Plan for HIV-Related Research (since 2012)**
6. **White House Task Force on VAW and HIV**



Women's anatomy (coronal)



Mucosal Immune System in the Female Reproductive Tract



Research on genital tract factors that can influence HIV risk in women

- **Sex and Semen** (Sharkey 2012, Herold 2012)
 - Increased inflammatory cytokines
 - Increase in immune targets
 - ? Disruption of epithelial barrier
 - Enhanced transport of viral particles to submucosa
 - Altered vaginal microbiota
 - Interference with innate defense (pH, ? Antimicrobial peptides)
- **Vaginal microflora (including STIs)**
 - Protection (lactobacillus)
 - Inflammation (BV, STIs)
 - pH
- **Hormones**
 - Endogenous- immune factor changes with age, menstrual cycle, pregnancy (window of vulnerability (Wira, Fahey 2011))
 - Exogenous – Depot medroxyprogesterone acetate?



Future research to better understand SV and HIV risk

- **Understanding genital tract biology immune function**
 - **Defining immune factor interactions that influence HIV risk along the genital tract**
 - **Understanding what influences immune factor interactions**
- **How does recent or remote tissue damage from SV affect current and future HIV risk?**
- **How can we analyze integrated behavioral and biological risk for HIV after SV?**



NIH research efforts on the biology of SV and HIV

- **CFAR supplements funded in 2013 (OAR, NIAID)**
 1. **The immune effects of sexual violence and associated HIV risk**
 2. **Intimate partner violence and heightened HIV susceptibility: does stress-associated immune dysfunction play a role?**
 3. **Characteristics of the female genital tract after sexual violence and HIV risk**
 4. **Sexual violence, physical outcomes, and physiologic responses among HIV-1 seronegative women participating in the Mombasa cohort**
- **RFAs to study the mucosal immune environment**
- **Meeting to include discussions on ethics and research in this area**
- **Inclusion of SV questions in research studies**
- **Individual grants**



Additional Information

- www.NIH.gov
 - Trans- NIH Plan for HIV-Related Research
 - CFAR supplements
 - RFA's
- www.CDC.gov
 - National intimate partner and sexual violence survey (NISVS)
 - Intersection on IPV and HIV in women
- www.WHO.net
 - International data

