

Examining Constructs of Women's HIV "Risk" in the Context of PrEP

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US Women and PrEP Working Group Webinar

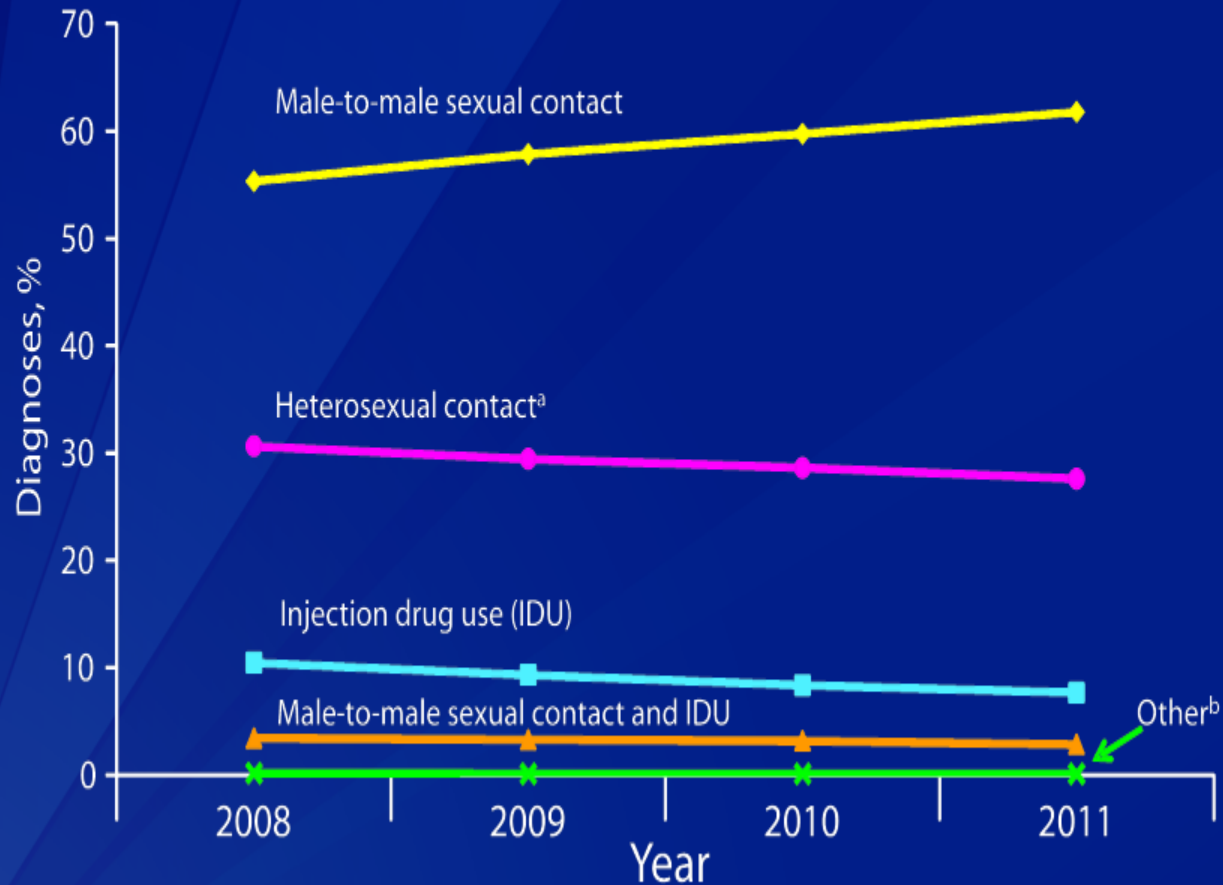
December 9, 2013

PrEP Approved for Adults “At High Risk” of HIV

- “Today, the U.S. Food and Drug Administration approved Truvada (emtricitabine/tenofovir disoproxil fumarate), the first drug approved to reduce the risk of HIV infection in uninfected individuals who are **at high risk** of HIV infection and who may engage in sexual activity with HIV-infected partners. Truvada, taken daily, is to be used for pre-exposure prophylaxis (PrEP) in combination with safer sex practices to reduce the risk of sexually-acquired HIV infection in adults at high risk.” (*FDA Press Release, July 16, 2012; available at: <http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm312210.htm>*)
- “In all populations, PrEP use 1) is contraindicated in persons with unknown or positive HIV status or with an estimated creatinine clearance <60 mL/min, 2) should be targeted to adults **at very high risk** for HIV acquisition, 3) should be delivered as part of a comprehensive set of prevention services, and 4) should be accompanied by quarterly monitoring of HIV status, pregnancy status, side effects, medication adherence, and risk behaviors, as outlined in previous interim guidance.” (*CDC MMWR June 14, 2013 62(23):462-465*)

(Emphasis added in both quotes)

Diagnoses of HIV Infection among Adults and Adolescents, by Transmission Category, 2008–2011—United States and 6 Dependent Areas



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays and missing transmission category, but not for incomplete reporting.

^a Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.

^b Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.



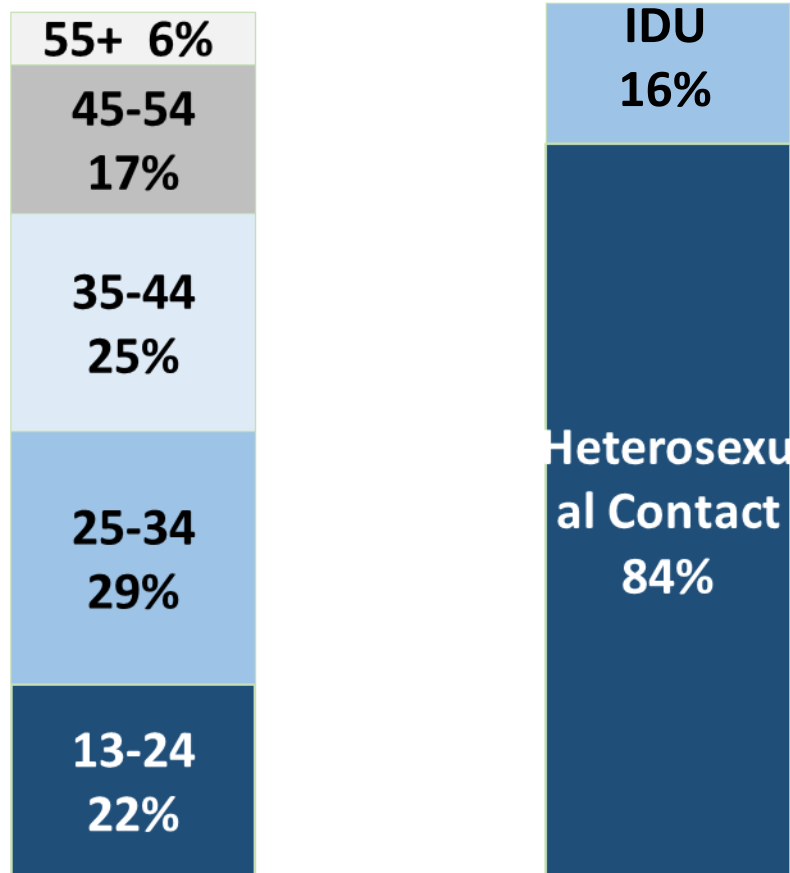
HIV Transmission Risk (CDC July 2012)

Estimated Per-Act Probability of Acquiring HIV from an Infected Source, by Exposure Act^a

Type of Exposure	Risk per 10,000 Exposures
Parenteral	
Blood Transfusion	9,000 ^b
Needle-sharing during injection drug use	67 ^c
Percutaneous (needle-stick)	30 ^d
Sexual	
Receptive anal intercourse	50 ^{e, f}
Receptive penile-vaginal intercourse	10 ^{e, f, g}
Insertive anal intercourse	6.5 ^{e, f}
Insertive penile-vaginal intercourse	5 ^{e, f}
Receptive oral intercourse	low ^{e, i}
Insertive oral intercourse	low ^{e, i}
Other^h	
Biting	negligible ^j
Spitting	negligible
Throwing body fluids (including semen or saliva)	negligible
Sharing sex toys	negligible

Half of New Infections Among Women Among Those Under Age 35; Most Due to Heterosexual Transmission

New HIV Infections Among Women by Age and Transmission Category, 2010



NOTE: HIV data are estimates for adults/adolescents aged 13 and older and do not include U.S. dependent areas.

SOURCES: CDC, *HIV Surveillance Supplemental Report*, 17(4), December 2012. U.S. Census Bureau, 2010 Population Estimates.

Anal Intercourse (AI)

- AI understudied in heterosexual populations
- In developed countries, transmission probability for URAI is estimated at 1.4%, or about 18 times the risk for receptive vaginal intercourse.
- Up to 20% and more of selected populations in America, Africa, and elsewhere have ever engaged in AI (forced or consensual).
- One-third of US women in national probability sample survey 2002-2003 reported ever having AI.
- Condom use is often lower in heterosexual AI than in VI.
- Some studies show women are coerced or forced to have anal sex by their partners and in the context of transactional sex.
- In cases of sexual assault, reports of forced anal penetration range between 13% and 22.5%.
- Rates of AI may also be higher among women with most extreme forms of FGM/cutting (which may make VI difficult or painful).

[Multiple sources. See J Klot, J Auerbach, F Veronese et al. ARHR 2013; 28(11) and A Adimora, C Ramirez, J Auerbach et al. AIDS 2013; 63:S168-

Intimate Partner Violence and Risk of HIV Infection: A Systematic Review and Meta-analysis

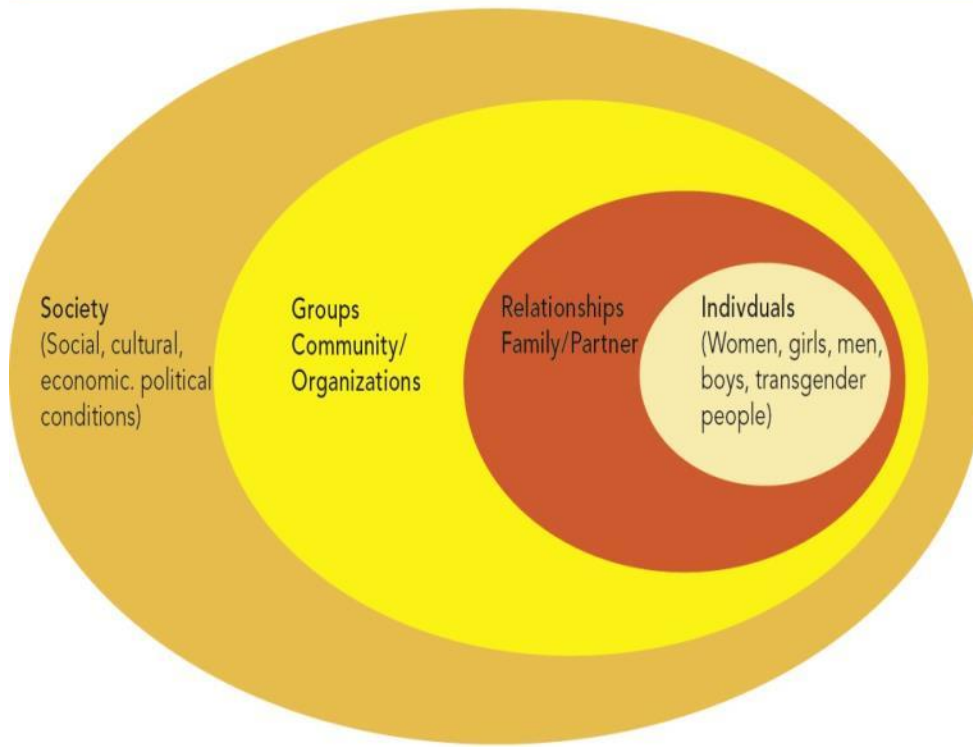
Summary of Conclusions:

- Prospective research from South Africa suggest gender inequality & exposure to physical and/or sexual IPV is associated with incident HIV infection aIRR=1.51 (1.04-2.21)
- Prospective research from India find exposure to sexual IPV associated with incident STI infection aOR=3.00 (1.20-7.50)
- Meta-analyses of higher quality cross-sectional studies also suggest increased HIV risk :
 - physically violent partners (OR=1.45, 1.22-1.73, I²=0%, p=0.73)
 - physical & sexually violent partners (OR=1.66, 1.17-2.34, I²=48.9%, p=0.14)

[Source: K Davries, et al. Presented by Charlotte Watts at Greentree Meeting, March 2012]

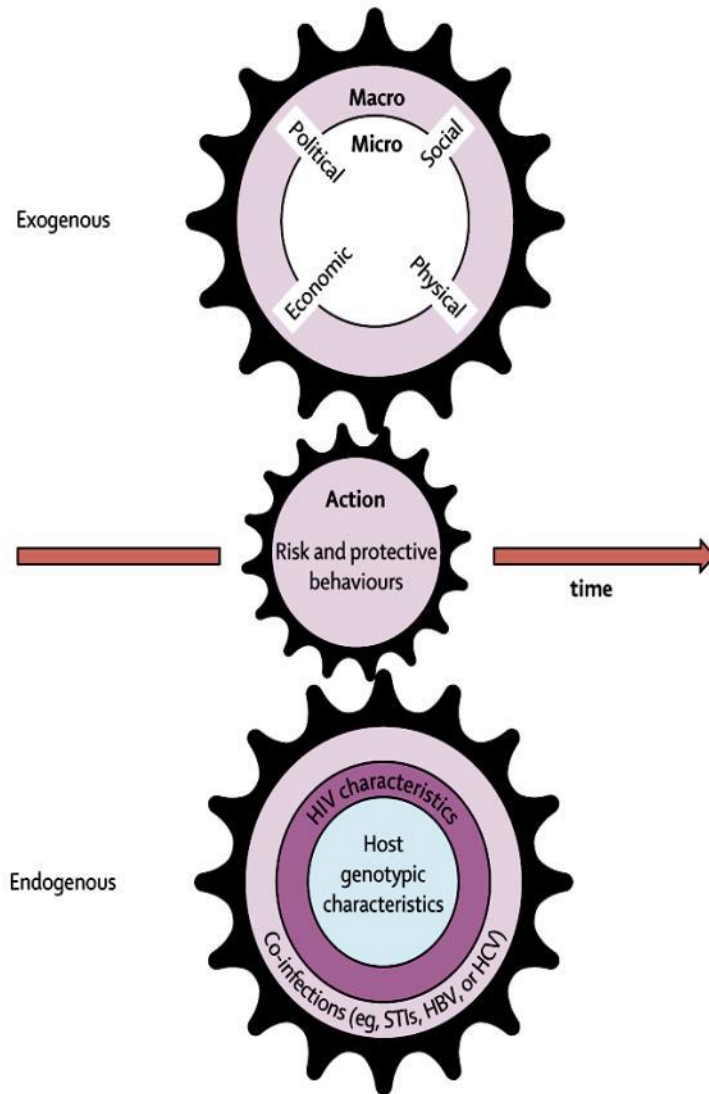
Individuals in Context: Relational, Institutional, Social/Cultural

Figure 5: A Social Ecological Framework - individual action is shaped by immediate life conditions, including relationships, community and occupational groups and organizations, and by broader societal factors



Source: UNAIDS (2010) Combination prevention...

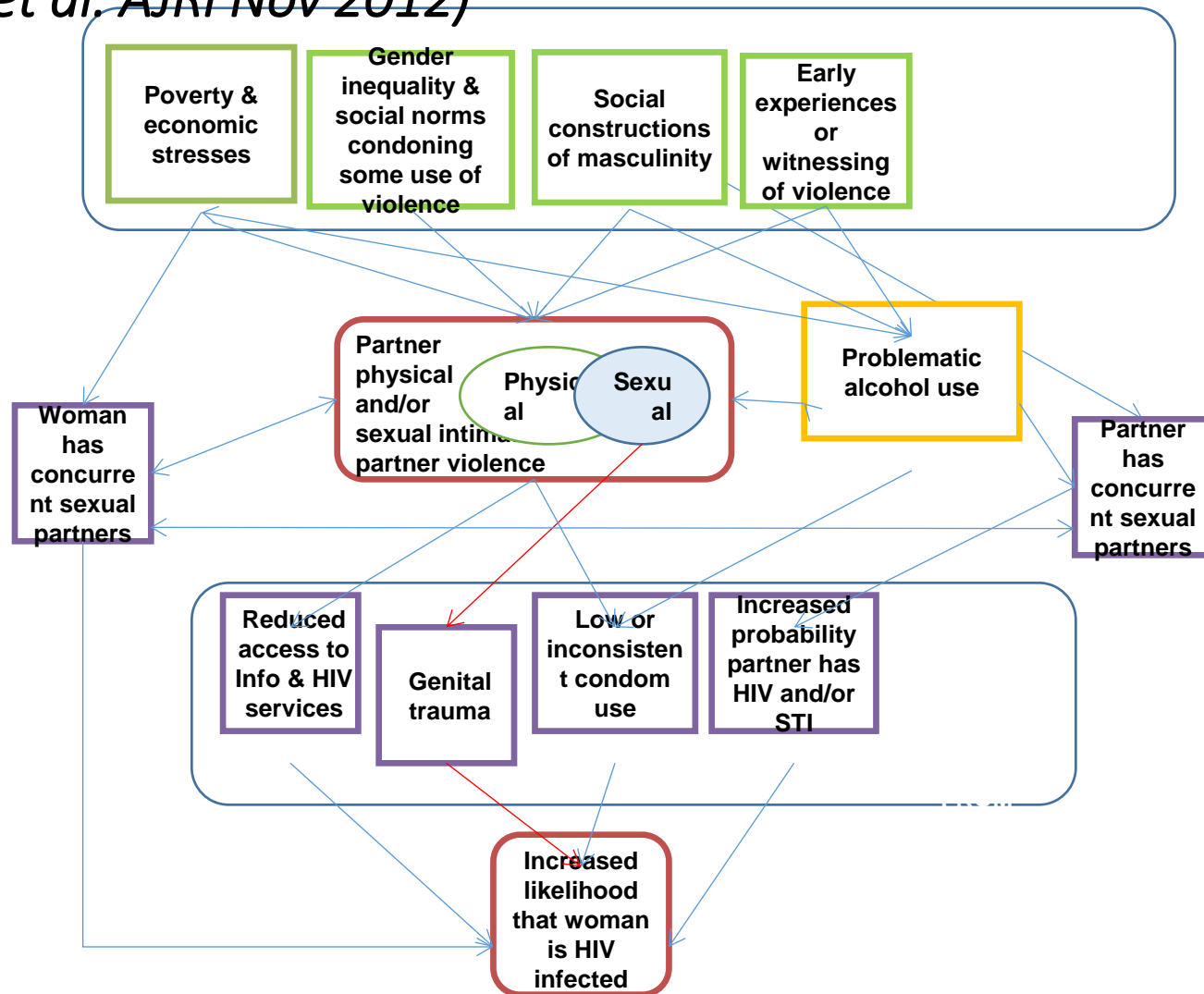
The HIV Risk Environment



- *Levels:*
 - Macro
 - Micro
- *Types:*
 - Physical
 - Social
 - Economic
 - Policy

Pathways of Association: IPV and Women's Risk of HIV Infection

(from C. Watts, Greentree Meeting 2012;
See Klot et al. AJRI Nov 2012)



Acknowledgements

- Jennifer Kates, Kaiser Family Foundation
- Jennifer Klot, Social Science Research Foundation
- Steffanie Strathdee, University of California, San Diego
- Charlotte Watts, London School of Hygiene & Tropical Medicine

THANK YOU!