

Minimizing HIV transmission among HIV-discordant couples in resource-limited settings who choose to conceive

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Outline

- Heterosexual HIV transmission and intended pregnancy in resource-limited settings
- A harm reduction approach:
 - minimizing HIV transmission in the context of reproductive goals
- Supported strategies to minimize transmission
- Research into an expanded role for ART
- Recommendations

People living with HIV continue to have children

- Studies show that many men and women with HIV want to have children
- Most new HIV infections occur in women of child-bearing age within stable relationships
- Pregnancies associated with younger age, fewer children, prior infant death, fertility desire
- ART availability may increase fertility desire
- Current HIV prevention strategies do not account for fertility goals

Importance of family planning

- Maternal health
 - High peripartum mortality rates
 - Unsafe abortion
 - Women with fewer children have increased economic opportunity
- Pediatric health
 - High infant mortality rates
 - Sufficient birth spacing important to infant survival
 - Babies of mothers with HIV: IUGR, preterm delivery, HIV
 - Orphans
- High population growth rates exacerbate poverty and strain infrastructure

Reasons to have children

- Social
 - Partners, Family
 - HIV and stigma
 - No models of voluntary childlessness
- Economic
 - Children as resource
 - Maintaining relationships
- Cultural
 - Value placed on fertility
- Desire for “normal life”

A more nuanced approach to prevention

- Prevention strategies that recognize and account for fertility desire
- A harm reduction approach
 - Encourage elimination of risk when possible
 - Accept that for some risk behavior will persist
 - Offer strategies to manage risk and reduce exposure to harm

Goals of a harm reduction reproductive counseling strategy

1. Help individuals and couples to understand risks and make informed decisions about having children
2. Manage transmission risk with behavioral and biomedical interventions
 - Horizontal transmission
 - Vertical transmission
3. Link at risk individuals and couples to testing, care, ongoing prevention counseling

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Strategies to minimize peri-conception HIV transmission

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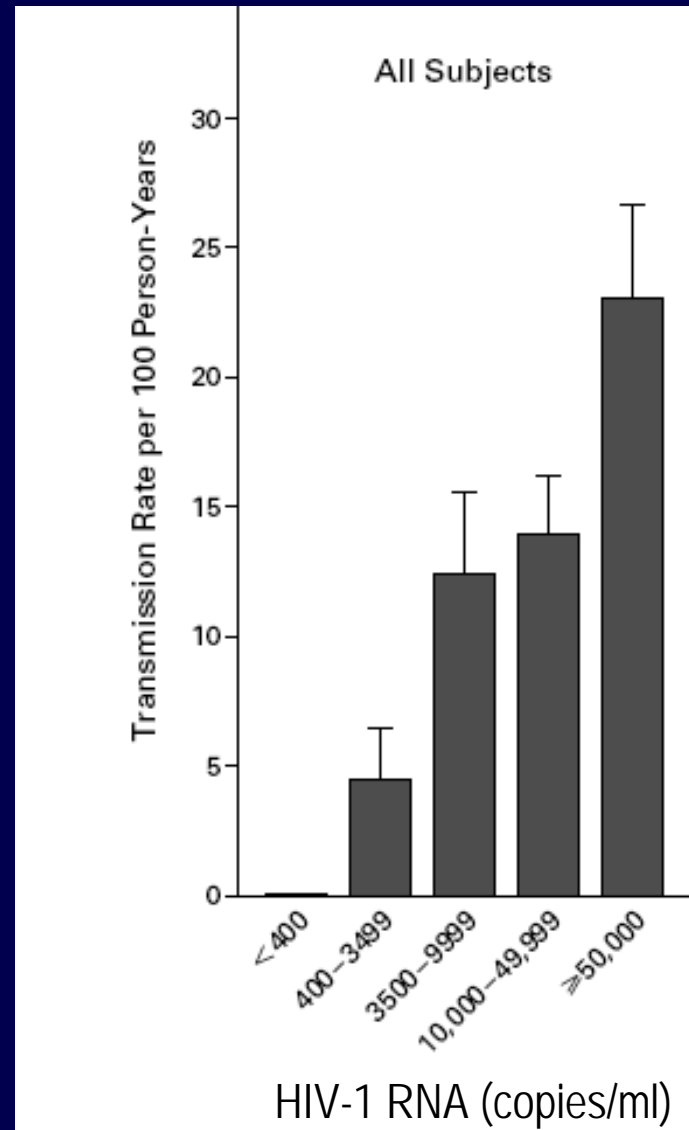
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HIV transmission rate and viral load



Behavioral modification plus suppressed VL

- Retrospective review of 62 serodiscordant couples
 - 40 HIV-positive men, 22 HIV-positive women
- Pre-treatment for STI's, timed conception counseling
- All on ART with VL < 500 for 6 months

- 76 pregnancies, 68 healthy births
- 0 adult seroconversions

Suppressive ART strategies

CD4 count	Long-term	
<350	Indicated	
350-500	Consider (ongoing trials)	
>500	?	

Suppressive ART strategies

CD4 count	Long-term	Short-course
<350	Indicated	No
350-500	Consider (ongoing trials)	<ul style="list-style-type: none">• May benefit negative partner• No clear benefit to positive partner
>500	?	<ul style="list-style-type: none">• Adherence, resistance

Harm reduction strategy: concerns

- Risk Compensation
 - Increased risk behavior will blunt effect of any prevention strategy
 - Some reassurance
 - Phase II PrEP trial, vaccine trials, PEP studies, microbicide trials
- Infrastructure
 - 31% of those in low and middle-income countries who need ART access treatment
 - 11% of HIV-positive pregnant women receive ARVs

Summary

- People with HIV want to have children
- Desired conception puts seronegative individuals at risk for HIV infection
- Harm reduction approach manages transmission in setting of ongoing risk
 1. Communicate risks and facilitate informed decision
 2. Behavioral, biomedical strategies to minimize risk
 - Circumcision, artificial insemination
 - Evaluation and treatment for STI's
 - Intercourse timed to ovulation
 - ART-suppressed viral load
 - Potential role for earlier initiation and/or short-course ART
 3. Linkage to and retention in care

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