


Dangerous Liaisons: Concurrent Sexual Partnerships and the South African HIV/AIDS Epidemic

Takemi Fellows Seminar
April 29, 2008

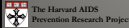
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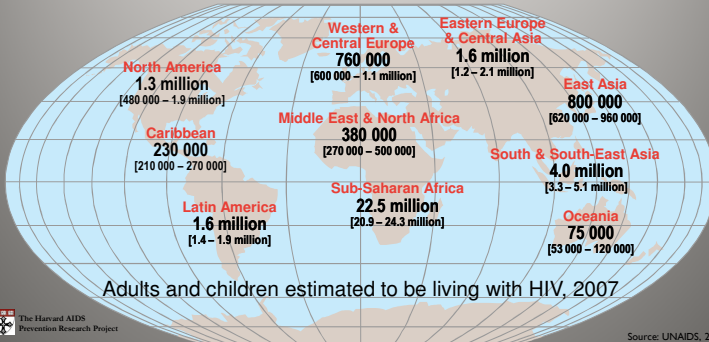
Presentation Overview

- Background
- Evidence behind concurrency
- Concurrency in South Africa – preliminary study findings
- Implications and Conclusions



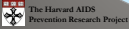
The starting point...

What contributes to the heterogeneity in HIV prevalence around the world?



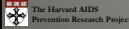
Adults and children estimated to be living with HIV, 2007

Source: UNAIDS, 2007



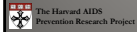
Explanatory Risk Factors

- Poverty? Income inequality?
- Education?
- Levels of ART, prevention programs, etc.?
- Political Will?
- Male Circumcision?
- Rates of STDs?
- Sexual Behaviors?



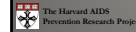
Dimensions of Sexual Behavior

- Number of sex partners
- Type of sex partners
 - regular
 - casual
 - commercial
- Type of sex: anal or vaginal; dry, rough, etc.
- Protected versus unprotected sex
- Frequency of sex
- Timing or spacing of partnerships – serial or concurrent



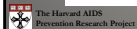
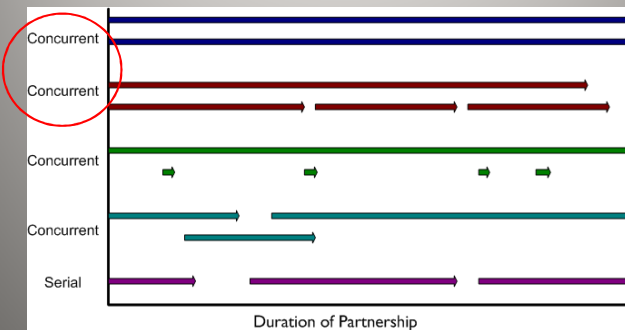
“The participants identified as the key drivers of the epidemic in southern Africa: multiple and concurrent partnerships by men and women with low consistent condom use, and in the context of low levels of male circumcision.”

- SADC Expert Think Tank Meeting on HIV Prevention 2006 -



Concurrency

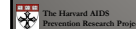
refers to the timing of relationships, specifically the overlapping of two or more sexual partnerships



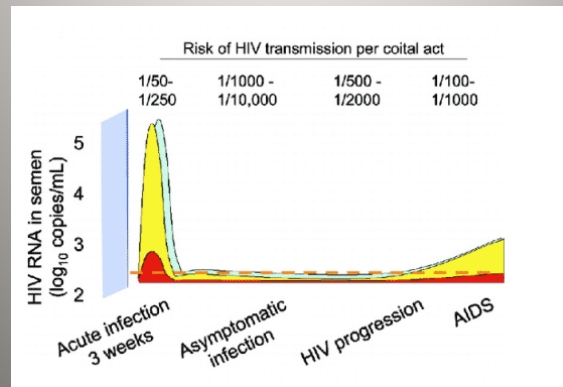
Adapted from: S. Leclerc-Madala, Presentation on 11 December 2007
“Setting a New Agenda for HIV Prevention”, Johannesburg, South Africa

Dimensions of Concurrency

- Length of time of partnership overlap or gap length between partnerships
- Type of partner
 - Regular, spousal
 - Casual
 - Commercial
- Number of partners
- Extent of concurrency in wider society – among men and women (networking)



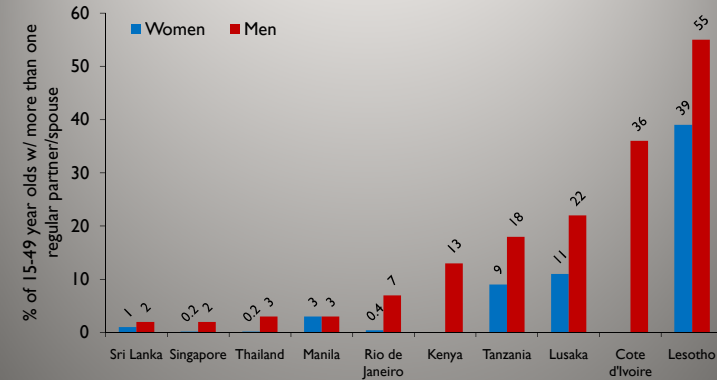
Concurrency and HIV: Biological Plausibility



The Harvard AIDS Prevention Research Project

Source: Cohen, M. S. and C. D. Pletcher (2005). Amplified HIV Transmission and New Approaches to HIV Prevention. *Journal of Infectious Diseases*, 191: 1391-1393.

“Concurrency” Globally – 1990s



The Harvard AIDS Prevention Research Project

Source: Carabell, M., *Sexual Behaviour, in Sexual Behaviour and AIDS in the Developing World*, J.G. Cleland and B. Ferry, Editors, 1995, Taylor & Francis, World Health Organization, London.

Concurrent Partnerships in Rural South Africa - 1995

- Abstract: “Forty per cent of sexually active men had more than one concurrent sexual partner”
- Results: “40% of sexually active men had more than one sexual partner [in the past 3 months]”
- (Definition of concurrency: more than one sexual partner in past 3 months)

The Harvard AIDS Prevention Research Project

Source: Colvin, M., et al., HIV infection and asymptomatic sexually transmitted infections in a rural South African community. *Int J STD AIDS*, 1998, 9(9): p. 548-50.

Concurrent Partnerships in Uganda, 1994

Partnerships identified as ongoing on the day of the interview

# of Ongoing Partnerships	Men	Women
0	32.3	26.7
1	53.2	71.9
2	12.4	1.1
3	2.0	0.2

- Low levels of concurrency, particularly among women – after incidence had declined; However:
- 16% of all women reported concurrency at any point during the last 3 partnerships
- 25% of women w/ at least 2 lifetime partners reported concurrency

The Harvard AIDS Prevention Research Project

Source: Morris, M. and M. Kretzschmar, A microsimulation study of the effect of concurrent partnerships on the spread of HIV in Uganda. *Mathematical Population Studies*, 2000, 4(2): p. 109.

Concurrent Partnerships in Botswana - 2003

Those more likely to report concurrency:

- Men
- Youth (age < 25)
- Non-religious people
- Have norms that support MCP
- Low self-efficacy to be exclusive to one partner

Sexual behaviors of respondents who had sex in the last 12 months, n=546		%
Concurrent Partnerships		
Had sex w/ someone else while in a sexual relationship w/ a partner from the last 12 months		23.0
Reported being in two or more concurrent partnerships at the time of survey		7.7
Multiple Partnerships		
Had more than 1 sexual partner in the last 12 months (concurrently or serially)		23.8
Reported multiple and concurrent partnerships		18.6

Source: Carter, M.W., et al., 'A Bull Cannot be Contained in a Single Kraal': Concurrent Sexual Partnerships in Botswana. *AIDS Behav.* 2007. 11(6): p. 822-830.



Multiple Partnerships & the Importance of Interviewing Technique: Swaziland

Percent reporting 1, 2, 3 partners in the last 3 months – 2006 (Ngudzeni ADP)

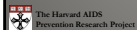
Percent reporting more than one partner in the last 12 months (2006-07 Swaziland DHS):

	1	2	3	
Male	42.2	32.9	11.8	= 44.7 • Males: 22.9
Female	36.3	58.8	2.9	= 61.7 • Females: 2.3

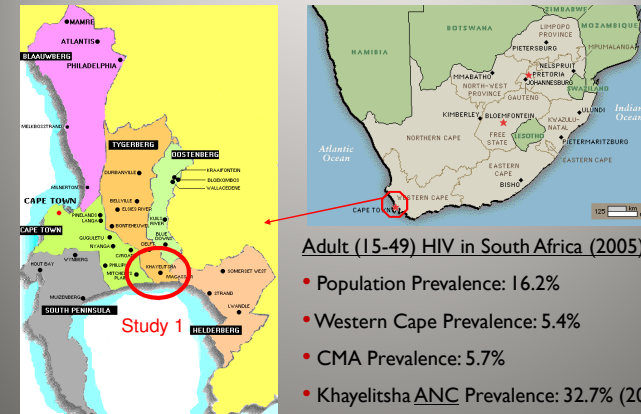
Sources: James, V. and R. Matikanya (2006). Protective Factors: A Case Study for Ngudzeni ADP (Swaziland). World Vision Australia/Swaziland; Central Statistical Office [Swaziland] and ORC Macro (Unpublished). Swaziland Demographic and Health Survey, 2006-2007. Calverton, Maryland, Central Statistical Office and ORC Macro.



CONCURRENCY IN SOUTH AFRICA



South Africa



Adult (15-49) HIV in South Africa (2005)

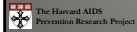
- Population Prevalence: 16.2%
- Western Cape Prevalence: 5.4%
- CMA Prevalence: 5.7%
- Khayelitsha ANC Prevalence: 32.7% (2006)

Source: Western Cape Provincial Department of Health (2006). HIV Prevalence in the Western Cape: Results of the 2006 HIV Antenatal Provincial and Area Surveys. Cape Town.



Khayelitsha Township

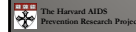
- Khayelitsha population: 339 000 (est. 2006)
- Predominantly Black African
 - 36% of Black African population of Cape Metropolitan Area live in Khayelitsha
- 51% unemployment rate
- 72% of households live under “poverty”-level



Source: Information and Knowledge Management Department (2005). A Population Profile of Khayelitsha. Cape Town, Statistics South Africa.

KPS Study Details

- Aims
 - To estimate the frequency of concurrency
 - To understand characteristics associated with engaging in concurrent partnerships
- What are the correlates of engaging in a concurrent partnership? Or who are the people engaged in concurrency?



KPS Study Details

- Sexual history data from Khayelitsha Panel Survey (KPS) in 2005
- Representative adult (18+) Black population
- n=536; sexually active & last sexual partner was spouse/regular partner n=410;
- Multivariate logistic regression analysis

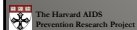


Table 1. Univariate analyses.

Variable Description	Univariate			
	%	OR	(95% CI)	p value
Total (n=410)	16.8	N/A	N/A	N/A
Sex				
Male	20.8	1.00		
Female	13.3	0.58	0.35 0.98	0.04
Age				
Education				
Monthly Income (in Rand)				
Religion				
Religiosity				
Low	25.2	1.00		
High	11.5	0.39	0.23 0.65	0.00
Community Involvement				
Spouse/ Regular Partner's Concurrency Status				
Partner did not have concurrent partners	8.5	1.00		
Partner did have concurrent partners	53.3	12.28	6.80 22.20	0.00
Co-Residence with Spouse/ Regular Partner				
Condom Use with Spouse/ Regular Partner				



Multivariate Results – Model 3

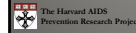
Table 2. Odds ratios, 95% confidence intervals and p-values from multivariate analyses (FINAL MODEL ONLY).

Variable Description	Multivariate		
	OR	95% CI	p value
Sex			
Male	1.00		
Female	0.50	0.25 1.00	0.05
Interaction: Religiosity & Partner's Concurrency			
Low Religiosity/No Partner Concurrency	1.00		
High Religiosity/Yes Partner Concurrency	7.79	3.09 19.61	0.00
High Religiosity/No Partner Concurrency	0.28	0.12 0.68	0.01
Low Religiosity/Yes Partner Concurrency	6.88	2.91 16.31	0.00
Interaction: Co-residence & Community Involvement			
No Coresidence/ Low Community	1.00		
Coresidence/High Community	0.90	0.41 1.94	0.78
Coresidence/Low Community	0.37	0.15 0.95	0.04
No Coresidence/High Community	0.49	0.18 1.30	0.15
N	401		
Area under the ROC Curve	0.8401		



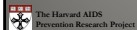
Key Findings

- Frequency of concurrency (among people in regular/spousal partnerships): **16.8%**
- Men are more likely than women to report concurrent partnerships
- Age, **income**, education, religion, co-residence, condom use are not significantly correlated with concurrency in multivariate models



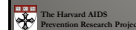
Key Findings (cont.)

- Knowing that your partner has concurrent partners is highly and significantly correlated with reporting your own concurrency
 - Among individuals who report that their partners do not have concurrent partners, religiosity is highly protective
 - Among individuals who report that their partners have concurrent partners, religiosity is slightly protective



Study 2: Social, Cultural and Economic Elements of Concurrency

- 6 Focus group discussions (sampled from KPS respondents)
- Segmented by age (25-29, 30-34) and gender
- Semi-structured
- Analysis based on grounded theory



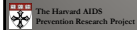
High levels of concurrency

- High levels of concurrency reported among both females and males:

It's quite common. It's common to see it around. One day you see this face and the next day you see another girl. Playboys.
(Black Male, 30-34yrs old)

I'd say 75% [have concurrent partners] and I'd give the women 45%-50%.
(Black Male, 30-34yrs old)

Honestly people no longer have only one partner. Usually one will have a main partner and then side-partners for different reasons each.
(Black Female, 30-34yrs old)



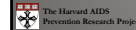
Male Motivations

- Perceptions of the male “role” and masculinity:

It's greed... It's just being a man... It's just not being satisfied with your partner and you wishing to taste other women outside.
(Black Male 30-34)

- Sexual Dissatisfaction:

You find that days go by with you ever having any sex [with your main partner]... So you eventually find someone else who is willing to fulfill your sexual needs.
(Black Male 30-34)

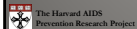


Female Motivations

- Material Exchange:

She going to see her Roll-On that lives in Site B. That man will buy her train tickets. The other man will give her groceries money. The other will give her spending money. It's just greed and lack of satisfaction.
(Black Male 30-34)

Maybe he had money. I know that whenever I see him, he will give me money even though I know I don't love him.
(Black Female, 25-29)

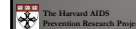


Religion/Religiosity

- As a deterrent to concurrent partners...but with limitations:

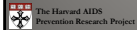
“Born Again” Christian Woman: So you're saying cheating is a way of relieving stress? (all laugh) No, I'm serious. I don't see the need for a married person to go out and cheat!
Woman 2: *But it happens. You see not everyone is a born-again Christian...*

Being born-again would take-away the virus. Through Jesus the virus can go...I mean, not everyone gets cured through Jesus – it all depends on God's judgment.
(Black Female, 30-34)



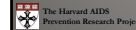
Summary of Qualitative Findings

- Much higher prevalence of concurrency suggested compared to quantitative studies
- Men and women agree about the motivations driving the opposite sex to have multiple/concurrent partners
- Men primarily motivated by masculinity “factors”
- Women primarily motivated by material gain



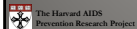
Implications & Conclusions

- Research
 - Need for a standardized AND operational definition of concurrency
 - Importance of interviewing methodology and improving techniques for eliciting more accurate self-report responses on sexual histories
 - Importance of qualitative data to verify and help interpret quantitative findings



Implications & Conclusions (cont.)

- Programming
 - Sexual behavior as an important factor AND target of prevention intervention
 - Importance of “B” component – sexual exclusivity, possibly promoting relationship “gaps”
 - Potentially important role of religiosity in promoting values-based prevention (w/ caveats)
 - Programming will need to completely shift a cultural “norm” and way of thinking about partnerships



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