

Frequency and Correlates of Concurrent Sexual Partnerships in Khayelitsha, South Africa

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Background

Concurrent sexual partnerships (those that overlap in time) can increase an individual's risk of HIV infection. Data show that concurrent partnerships are common in southern Africa and could be an important driver of the epidemics there.

Frequency of concurrency among individuals in marriage/regular partnerships during the last partnership

Overall: 16.9 % Men: 20.8 % Women: 13.3 %

Results

- Women engaged in concurrency significantly less than men (OR=0.50).
- Individuals who reported that their partners had concurrent partners, were significantly more likely to report concurrent partners, regardless of religiosity (OR=7.79 and OR=6.88).
- Individuals who reported that their partners did not have concurrent partners and were highly religious were significantly less likely to report concurrency (OR=0.28)
- Individuals who co-reside are less likely to report concurrency compared to those who do not co-reside (OR=0.37).
- There were NO significant correlations between concurrency and the following variables: age, education level, monthly income, religion, or condom use.

Odds ratios, 95% confidence intervals and p-values for the final model

Variable Description	Multivariate		
	OR	(95% CI)	p value
Sex			
Men	1.00		
Women	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		
-2 log likelihood	-135.382		
Area under the ROC Curve	0.8401		
Hosmer-Lemeshow Goodness-of-fit (p-value)	0.6893		

Implications

The findings provide evidence for the need to focus prevention on partner reduction efforts or sexual exclusivity – so-called “Be Faithful” messages - among target populations and suggest which target populations are particularly at risk. Religious or faith communities could play an important role in message dissemination efforts, though other efforts must be made to reach those higher-risk individuals outside of faith communities.

Methodology

Data from 410 Black respondents (aged 16-72) from the Khayelitsha Panel Survey who were in regular or married partnerships were analyzed. The survey was conducted in 2005 and is representative of the Black population. Selected characteristics of the sample population are in Table 1. Univariate and multivariate logistic regression with main effects and interactions were conducted.

Study Population Characteristics	
Sex	
Men	47 %
Women	53 %
Median Age	37 years
Education Level	
0-8	35 %
9-12	65 %
Monthly Income (R)	
0	37 %
1- 1600	40 %
1600 +	23 %
Co-Reside w/ Partner	
Yes	63 %
No	37 %
Religion	
Mainline Christian	52 %
African, Zion, Indep.	31 %
Other	10 %
No Religion	7 %

Discussion

Although men engage in concurrent partnerships more than women, a significant minority of women do have concurrent partners. Thereby allowing a large and potentially robust sexual network to exist, which could allow the sustained transmission of HIV. Knowledge of a partner's concurrency and religiosity both strongly associated with engaging in concurrency. Focus group data from a sub-sample of this population suggests that individuals who know that their partners are not sexually exclusive are more likely to have other partnerships and engage in higher risk behaviors. Other motivations of concurrency include sexual frustration with one (main partner) and material/ financial exchange or gain.

