

HIV and gender-based violence

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HIV & gender-based violence

- Presentation is largely based on work on the Gender & Health Research Unit of the Medical Research Council of South Africa
- **Particularly work with colleagues:** Kristin Dunkle (now of Emory Uni.), Nicola Christofides, Debbie Muirhead (Arum Health), Loveday Penn-Kekana (Centre for Health Policy), Jonathan Levin
- **Funders:** MRC, NIMH, AusAID, UNICEF/Danish Govt., Harry F Guggenheim Foundation
- **Acknowledge:** men & women who participated in the research & their communities, without whose help our work would be impossible

Stepping Stones Study

- **Colleagues on the Stepping Stones Study:** Mzikazi Nduna, Nwabisa Jama, Nelisiwe Khuzwayo, Yandisa Sikweyiya, Khanyisile Bakam & colleagues
- Mary Koss (Uni. Of Arizona), Nata Duvvury (ICRW).
- **Funder:** NIMH
- This is a randomised controlled trial of an HIV prevention behavioural intervention known as Stepping Stones (originally by Alice Welbourn).
- Participants: 1360 men & 1416 women volunteers aged 15-26 yrs were enrolled from 70 villages in rural Eastern Cape province.
- Detailed interviewer-administered questionnaire & HIV testing

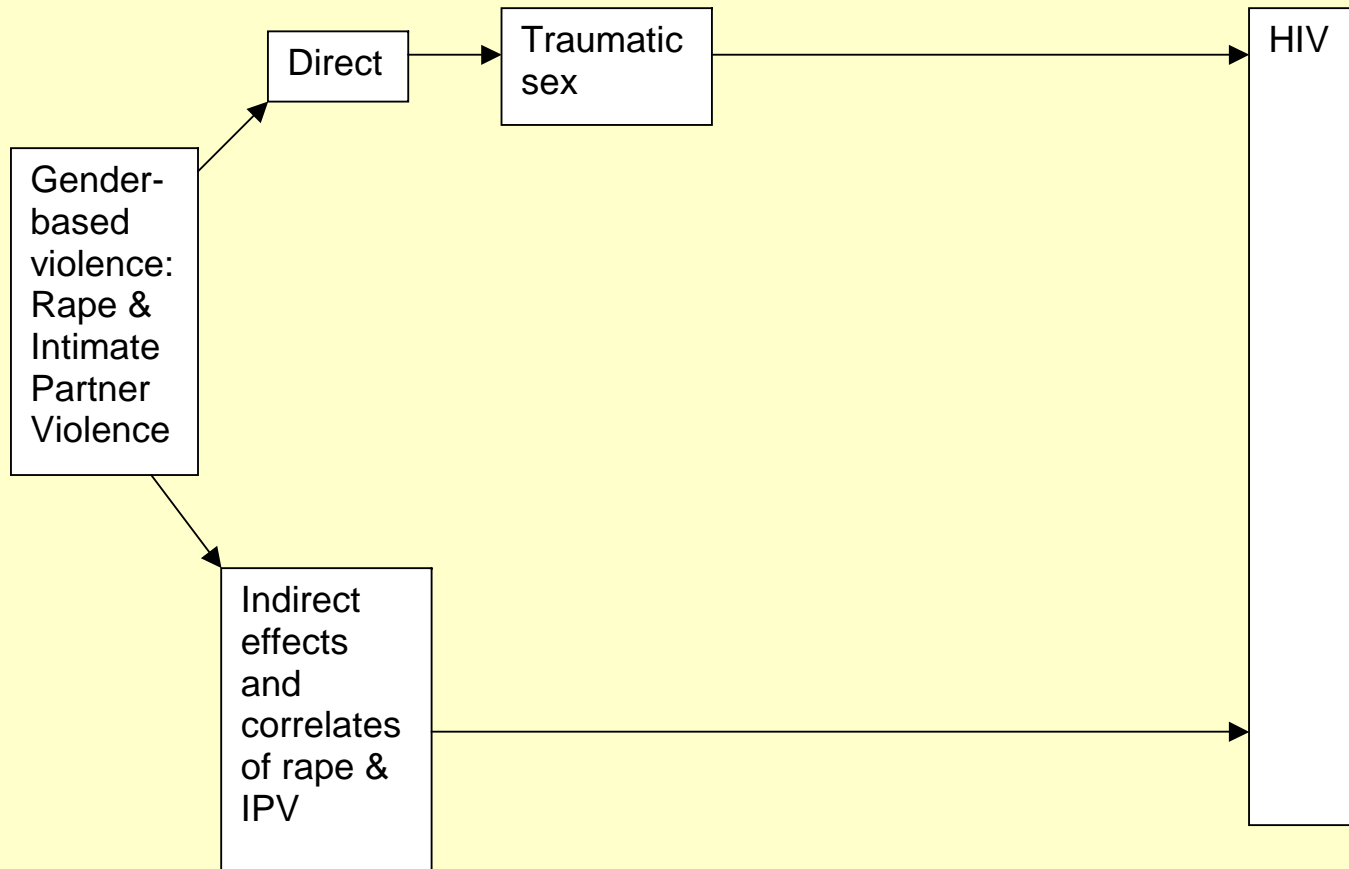
Introduction

- Gender- based violence takes many forms and includes child sex abuse, rape, intimate partner violence (IPV), trafficking, other forms of sexual violence etc..
- It is increasingly recognised as a key factor in the HIV epidemic and sexual violence is often fingered as the key link because of the risk of direct transmission during rape and role of coercion in reducing women's ability to negotiate condom use
- This paper seeks to examine these connections, looking at the evidence and considering the possible pathways through which the most common forms of gender-based violence (rape & IPV) influence HIV risk in circumstances of a generalised HIV epidemic

The dual epidemics: case of South Africa

- HIV: a generalised epidemic; 2003 antenatal seroprevalence is 29.5%
- The main forms of gender-based violence are intimate partner violence and sexual violence (incl. CSA)
- IPV (physical and sexual) reported by women
 - Popn prevalence physical IPV 25% (Jewkes et al 2002)
 - Prev. in focused studies 50% (Dunkle et al 2004); 41.7% (Jewkes unpub.)
- Other sexual violence reported by women
 - One year prev. of 1% in surveys (Jewkes & Abrahams 2002), 5% other rape (Jewkes unpub.)
 - Child rape – 8% < age 15 (Dunkle et al 2004)
 - Forced first sex 14 - 28% (Jewkes 2000; Jewkes unpub,)

Pathways from gender-based violence to increased HIV risk for women



HIV risk of rape

- Depends on:
 - ✓ Probability of rapist having HIV
 - ✓ (probability of woman being uninfected at rape)
 - ✓ Number of rapists
 - ✓ Degree of trauma
 - ✓ Transmission risk per sex act of given degree of trauma

HIV risk of rape

- Case study of South Africa:
 - Probability of rapist having HIV ~ 21%
 - (probability of woman being uninfected at rape) ~20% adults & ~4% <18 yr olds
 - Number of rapists ~ 30% >1 perpetrator
 - Degree of trauma ~ 25% visible, 30% micro, 35% none
 - Age-adjusted transmission risk per sex act ~ 0.12%

HIV risk of traumatic sex in South Africa

- In 2003-4 there were 28 228 adult & 17 597 child (<18 yrs) rapes reported to the South African police
- We estimate that 286 HIV transmissions per year would be caused by these rapes (in the absence of anti-retroviral prophylaxis)

Just in case you are still thinking this is impossible...

- 1360 men from Stepping Stones Study
- Rape perpetration rate against women who were not intimate partners of 16.3%
- HIV prevalence of men (aged 15-26years) who raped was 1.4% and of non-raping men was 2.0%

HIV & rape

- Risks are very important for the individual women involved & compound the violation of rape
- But...
- Do not account for many cases of HIV in the population

- So what is it we know about IPV and its association with HIV prevalence?

Evidence of HIV serostatus and IPV associations

- Data is all from cross-sectional research so far (Stepping Stones will have longitudinal data eventually) but the patterns are similar:
 - Rwanda, women in stable relationships interviewed 2 years into a trial
 - HIV+ women were more likely to report physical & sexual IPV (van der Straten 1998)
 - Tanzania, study of n=245 women having VCT
 - HIV+ women <30 yrs were more likely to report IPV than HIV- women & HIV+ women >30
 - (Maman et al 2002)

Associations between IPV and increased HIV risk in South African pregnant women

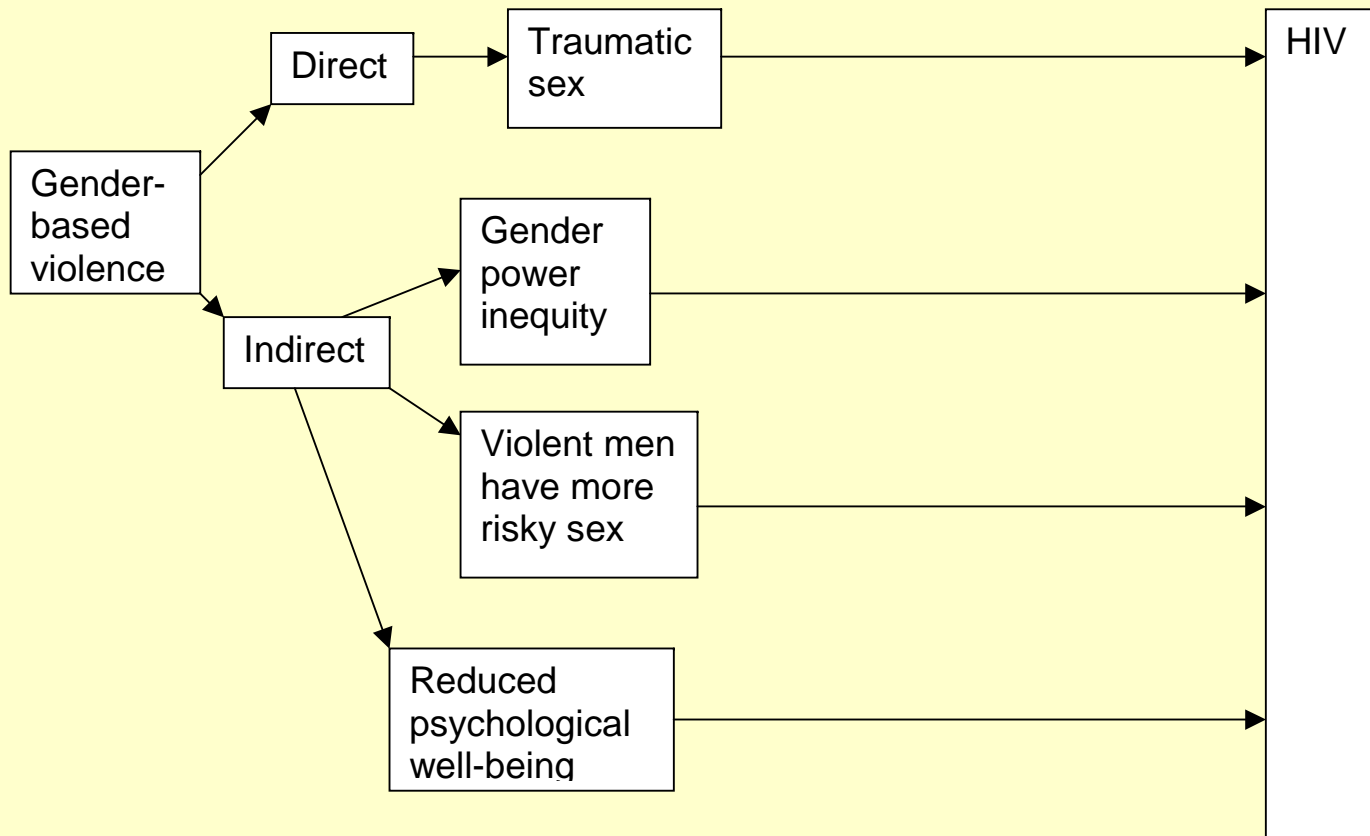
(Dunkle et al Lancet 2004)

- Study of n=1366 pregnant women in Soweto attending antenatal care and having VCT
- >1 episode physical &/or sexual intimate partner violence OR 1.48 (95%CI 1.15-1.89)
- High levels of male control (on Sexual Relationship Power Scale) OR 1.52 (95%CI 1.1.3-2.04)
- Assoc. with HIV after adjustment for age, current relationship status & women's risk behaviours

What about child sex abuse & forced first sex?

- These are less readily visible because they are so closely related to later risks of IPV
- Stepping Stones women
- Coerced sex before age 15 strongly predicts reporting >1 episode of physical &/or sexual IPV OR 7.70 (95%CI 4.10-14.46 p<0.0001)
- Soweto Study (Dunkle et al 2004)
- Both forced first sex and CSA strongly predicted IPV victimisation

Pathways from gender-based violence to increased HIV risk for women



Gender power inequity

- There is evidence to support the argument that there is more condom use in more equitable relationships
 - Stepping Stones Study women reporting less controlling relationships (Relationship Control Scale, high= more equitable) were much more likely to have correctly used a condom on last sex (adjusted OR from logistic regression model)
 - OR 1.33 (95%CI 1.17-1.52, $p < 0.0001$)
 - We also found this for men in their logistic regression model
 - OR 1.27 (95%CI 1.11- 1.50, $p < 0.0001$)
- Pettifor et al (2004) reported same finding in women from a South African national youth survey of 7000+ young men & women

Gender power inequity

- Ability to refuse sex when not wanted:
- Stepping Stones study proves some evidence that women who have less power in their relationship are less able to determine the timing (as well as the conditions) of sex (see later)

- Do sexually violent men and those physically violent towards their intimate partners have more risky sex?

Evidence from the literature

- **North American literature on rape perpetration:**
- Having multiple sex partners is causally related to raping (Malamuth et al 1991 & 1995; Knight & Sims-Knight 2003)
- Men in delinquent youth gangs develop ideas of hostility towards women, have peer pressure to have sex and ideas of 'successful' masculinity linked to sexual conquest of women. Rape becomes a strategy in conquest of women as well as a recreation of hostile men in gangs.
- **Developing countries:** Martin et al (2000) – in India, men who are violent to their wives are more likely to have a STD
- Abrahams et al (2004) South African men who are sexually violent to wives/girlfriends have more sexual partners

Multiple perpetrator rape of non-partners and risky sex

Logistic regression model of factors associated with having ever done gang rape (prevalence 14%) for n=1360 South African men, adjusted for age

	OR	95% CI	P value
Membership of 1+ clubs	1.61	1.03 2.50	0.035
Mother had any high school edn.	1.96	1.27 3.03	0.002
Resistance to peer pressure	0.83	0.70 0.99	0.034
Ever a gang member	2.01	1.19 3.40	0.009
Drug use score	1.29	1.03 1.59	0.027
Transactional sex	1.77	1.21 2.60	0.004
5+ lifetime consensual partners	2.58	1.74 3.81	<0.0001
Ever physical IPV	1.87	1.31 2.66	0.001

Perpetration of IPV by Stepping Stones Study men and risky sex

Perpetration of IPV reported by men and risk behaviours
adjusted ORs (95%CI)

Behavior	Physical Only	Physical & sexual
3+ partners past yr	1.59 (1.17, 2.16)	8.30 (3.89, 17.7)
Khwapheni past yr	1.37 (1.04, 1.79)	4.89 (2.49, 9.62)
Once-off partner past yr	1.70 (1.22, 2.37)	6.71 (3.75, 12.0)
Any casual partner ever	1.46 (1.05, 2.04)	10.7 (3.18, 36.2)

What do we learn from the Stepping
Stones Study about women
experiencing IPV and HIV risk?

Logistic regression model of factors associated with HIV in women in the Stepping Stones Study at baseline (prevalence 12%)

	OR	95%	CI	P value
Age in years	1.42	1.28	1.58	<0.0001
Last sex <3 months ago	3.33	1.87	5.94	<0.0001
3+ partners in past year	2.39	1.48	3.85	<0.0001
Partner educated to school leaving or beyond	1.91	1.30	2.78	0.001
Partner 3+ years older	1.69	1.16	2.48	0.007
>1 episode of physical &/or sexual IPV	1.16	0.78	1.73	0.45

- OK
- But...
- What are the risk factors for the HIV risk factors?

Logistic regression model of factors associated with women having sex < 3 months ago in the Stepping Stones Study at baseline

	OR	95%	CI	P value
Communication skills scale	0.87	0.76	1.00	0.045
Relationship control scale	0.86	0.75	0.99	0.038
Transactional sex with a casual partner	1.87	1.03	3.41	0.04
Intimate partner violence:				
None	1.00			
Physical	1.46	1.05	2.03	0.024
Sexual	1.15	0.63	2.11	0.645
Physical & sexual	2.73	1.58	4.73	<0.0001

Logistic regression model of factors associated with women having 3+ partners in the Stepping Stones Study at baseline

	OR	95%	CI	P value
Childhood trauma scale	1.41	1.20	1.67	<0.0001
Peer pressure resistance scale	0.74	0.62	0.88	0.001
Duration of sexual activity (years)	1.24	1.14	1.35	<0.001
Intimate partner violence:				
None	1.00			
Physical	0.82	0.49	1.38	0.478
Sexual	1.94	0.91	4.14	0.092
Physical & sexual	3.55	2.19	5.75	<0.0001

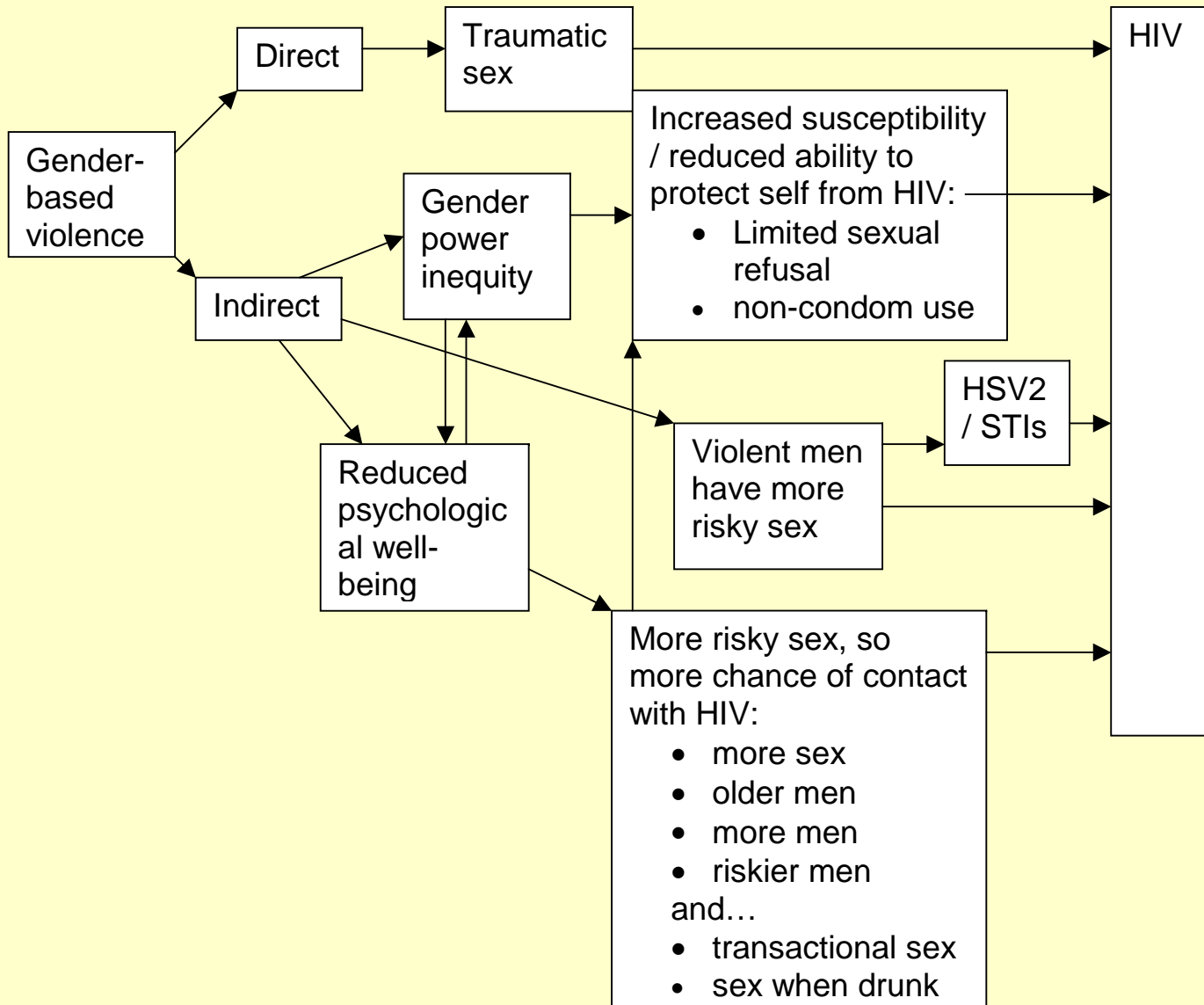
Logistic regression model of factors associated with women having a partner educated to school leaving in the Stepping Stones Study at baseline

	OR	95%	CI	P value
Age in years	1.25	1.16	1.35	<0.0001
Socio-economic status scale	1.19	1.08	1.31	<0.0001
Attitudes to gender scale (high=liberal)	1.44	1.27	1.64	0.001
Involvement in 1 + clubs/societies	0.77	0.60	0.99	0.041
Duration of sexual activity (years)	1.24	1.14	1.35	<0.001
Intimate partner violence:				
None	1.00			
Physical	1.52	1.14	2.03	0.005
Sexual	0.83	0.46	1.51	0.55
Physical & sexual	1.99	1.35	2.92	<0.0001

Logistic regression model of factors associated with women having a **partner 3+ years older** in the Stepping Stones Study at baseline

	OR	95%	CI	P value
Age in years	0.84	0.76	0.92	<0.0001
Fears and thoughts about HIV scale	1.03	1.00	1.06	0.021
Ever been pregnant	1.90	1.38	2.62	<0.0001
Duration of sexual activity (years)	1.22	1.13	1.32	<0.0001
>1 episode of physical &/or sexual IPV	1.33	1.02	1.74	0.036

Pathways from gender-based violence to increased HIV risk for women



HIV & gender-based violence: are South African findings generalisable?

- In considering generalisability, it is important to acknowledge:
 - differences between countries in the distribution of forms of gender-based violence
 - differences in the social dynamics surrounding HIV risk behaviours and the distribution of HIV in the population
 - peculiarities arising from age of study populations
- These influence the generalisability of our South African findings to other settings
- Challenge is to add to our body of knowledge from other settings!

Conclusions

- There is good evidence to support the importance of GBV in HIV risk
- Indirect transmission related to experiences of IPV is probably the most important route in this respect
- We need:
 - Rape and IPV perpetration by men to be addressed in the context of sexual risk reduction
 - Interventions to reduce gender-based violence as part of a programme of interventions on HIV risk factors
 - Support services that are accessible for women
- We need to develop and evaluate gender-based violence interventions and models of appropriate support services for developing countries

HIV and gender-based violence

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Gender-based violence is increasingly recognised as a key factor in the HIV epidemic. Sexual violence is often suggested to be the key source of the increased risk. In South Africa, research on pregnant women in Soweto has highlighted the importance of physical and sexual intimate partner violence and gender inequity in general in HIV risk. A further study has shown intimate partner violence to be associated with increased likelihood of a woman having all the risk factors for HIV (as well as HIV itself). There is evidence to support both direct and indirect pathways through which gender-based violence increases the risk of HIV in South Africa. In this paper we present evidence to argue that the direct route via rape is probably not the most important. The indirect routes probably are more important. Greater gender inequity reducing women's ability to refuse unwanted sex and ensure condom use. Violence influences sexual behaviour and so increases the likelihood of risky sex. There is also evidence to suggest that male violence practices are closely linked to male sexual risk taking and so violence men are at greater risk of HIV and HIV co-factors such as genital herpes.