



Southern African HIV Clinicians Society

3rd Biennial Conference

13 - 16 April 2016
Sandton Convention Centre
Johannesburg

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Loss of male partner, sexual risk behavior and HIV/AIDS prevalence – A comparative study involving women in Government-arranged marriages in Northern Nigeria

Southern African HIV Clinicians Society Conference
16 April 2016, Johannesburg

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2016

Outline

- Background information
- Factors that increase women's vulnerability to HIV in Africa
- Study objective and research questions
- Methodology
- Results
- Recommendations
- Conclusion

Background Information

- Study site: Kano city (a Northern-West Nigeria).
- Predominantly Muslim population – culture demands that women mainly stay in-doors, hence are not in any paid employment.
- Kano state HISBAH Sharia Guard reintegrates these women into families by arranging marriages with consenting partners.





Cross-section of women in the Government-arranged program waiting to be tested after a counseling session – majority of these women are young, ages ranging from 10 to 49 years

Kano state

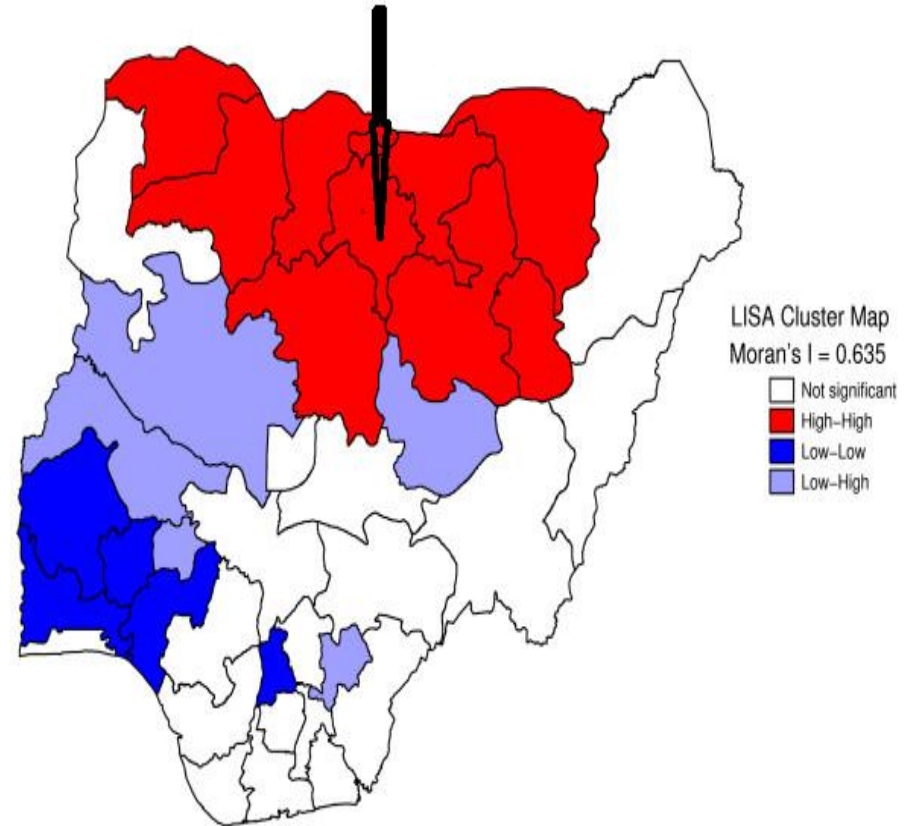
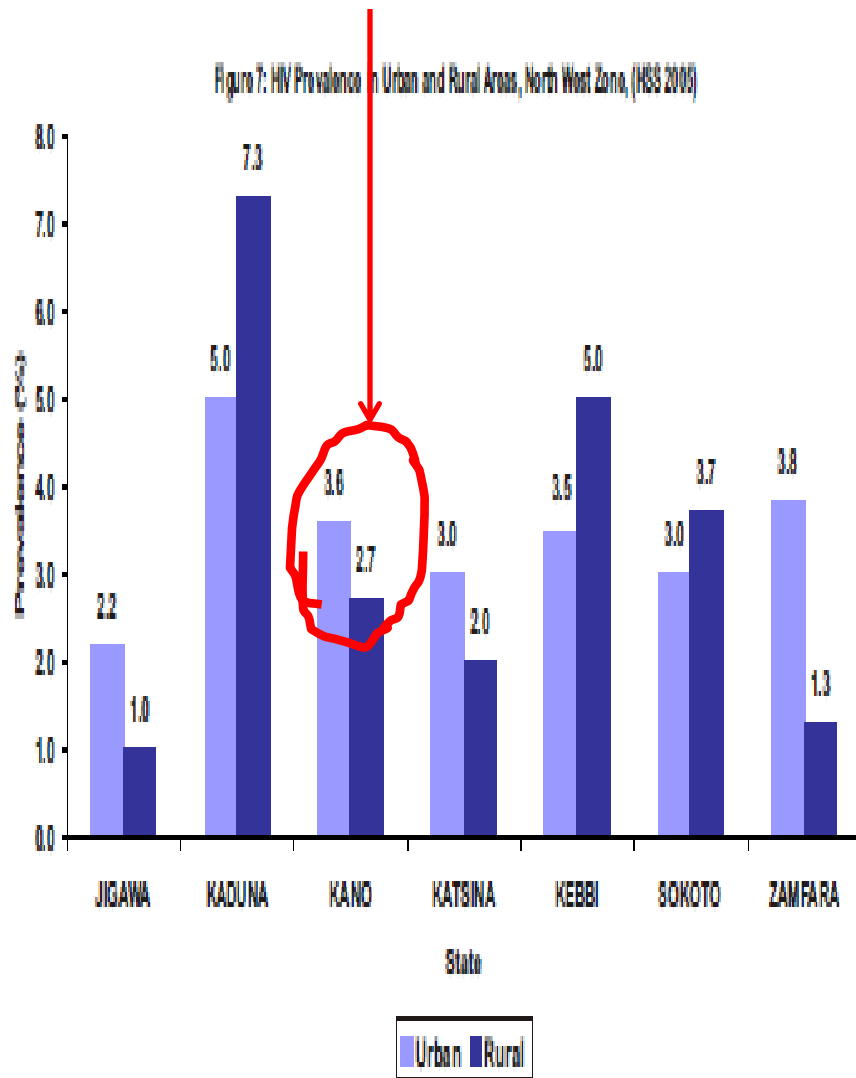
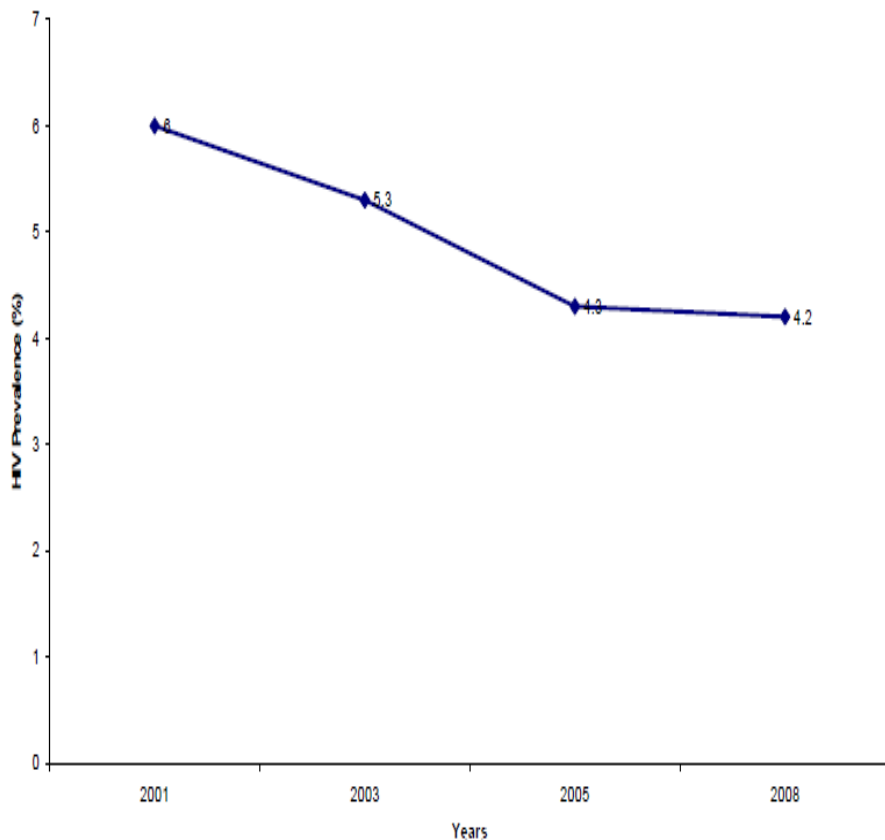


Figure 1: Local Indicator of Spatial Association (LISA) cluster map for Nigeria women age of initiation sexual intercourse. Arrow indicates the area where study was conducted.

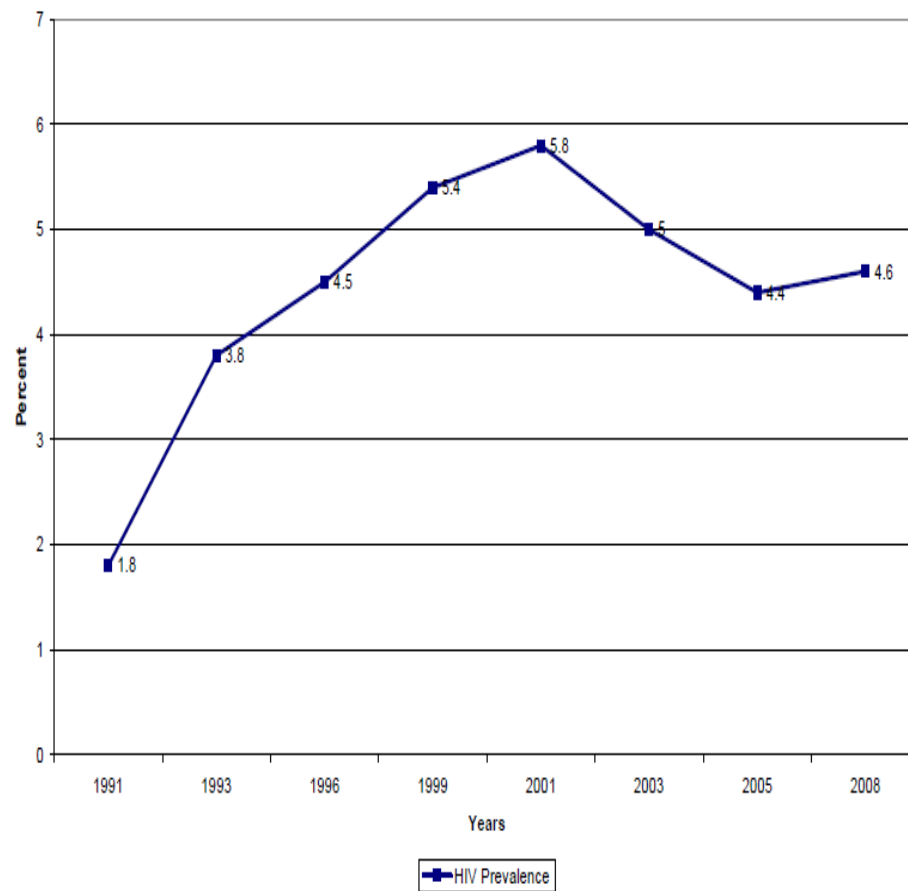
Comparison of HIV Prevalence among young women & general population

FIGURE 5. HIV Prevalence among young women aged 15-24 in Nigeria, 2008



Source: ANC Sentinel Surveys, FMOH

FIGURE 2. Trend In HIV & Prevalence Over Time In Nigeria (1991-2008)



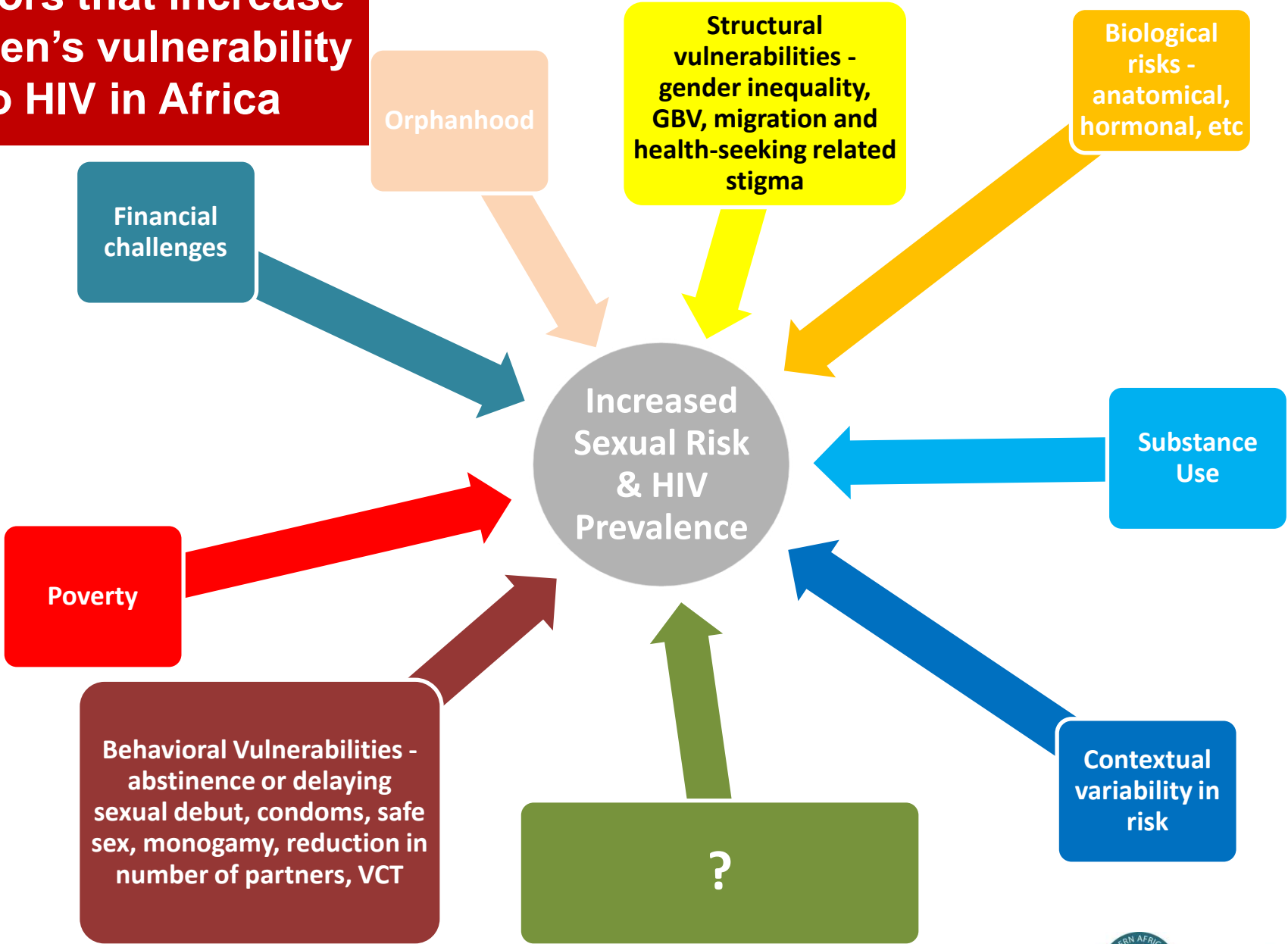
Background Information...2

- In Nigeria, contextual factors contributing to the HIV epidemic comprise of poverty, child marriage, gender-based violence, masculinity and femininity norms, disabilities, harmful traditional rites as well as human right, legal and political factors (FMOH, 2006).
- Nigeria ranks 47th poorest country in the world; has 70% of its population living below the poverty line, Gini index of 43.7; and unemployment rate of 23.9% (CIA, 2012).
- Loss of household head and effect on HIV behavior is poorly understood, but have often been associated with financial challenges and poverty for many women.

Comparative HIV Picture

HIV Picture	Nigeria	South Africa
Population	182.9million(NPopC, 2009)	51.77-million (Census 2011)
Life Expectancy	53.02(CIA, 2015)	62.34(CIA, 2015)
HIV Prevalence	3.4%(NARHS, 2012)	18.92(CIA, 2014)
Est. HIV-related deaths	174,300(CIA, 2015)	138,400(CIA, 2015)
Est. No of PLHIV	3.4 million(NARHS, 2012)	6.8 million(CIA, 2015)
Drivers of the Epidemic	High illiteracy, high rates of Sexually Transmitted Infections (STIs) in vulnerable groups, poverty, low condom use and general lack of perceived personal risk (NACA, 2011)	Sexual orientation, increasing age at first marriage, education, economic status, vertical transmission of HIV from mother to child (SANAC, 2011),

Factors that increase women's vulnerability to HIV in Africa



Nigerian Picture

Vulnerability Factors	
Poverty (Gini index)	43.7%; 47th poorest country
Age of sexual debut	17.7 yrs for women and 20 yrs for men (NDHS 2013)
Awareness of the female condom	4%(NARHS 2012)
Awareness of the male condom	73% (NARHS 2012)
Age at first marriage	Almost half (49%) of women age 25-49 married by age 18, and 61% by age 20
Polygyny	67 % married women report no other wives, 33% husbands have more than one wife, while less than 1% do not know if their husbands have other wives
Orphanhood	One quarter under age 18 not living with both parents, One in 10 not living with either parent, 6% under age 18 are orphaned (that is, one or both parents are dead).
Gender-Based Violence (GBV)	28 percent of all women have experienced physical violence since age 15

Study Objective:

- To compare the sexual risk behaviour, and HIV/AIDS prevalence among women who have lost their male partners to that of the general population of women.

Research Questions:

- Is loss of male partners a predictor of higher HIV risk behavior among women of who have lost their male partners, compared to those in the general population, after controlling for other risk predictors?
- Does loss of male partners result in increased HIV prevalence among women?

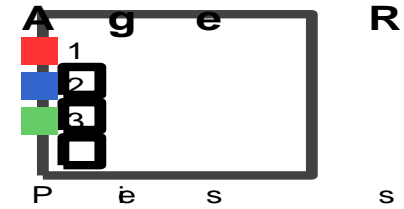
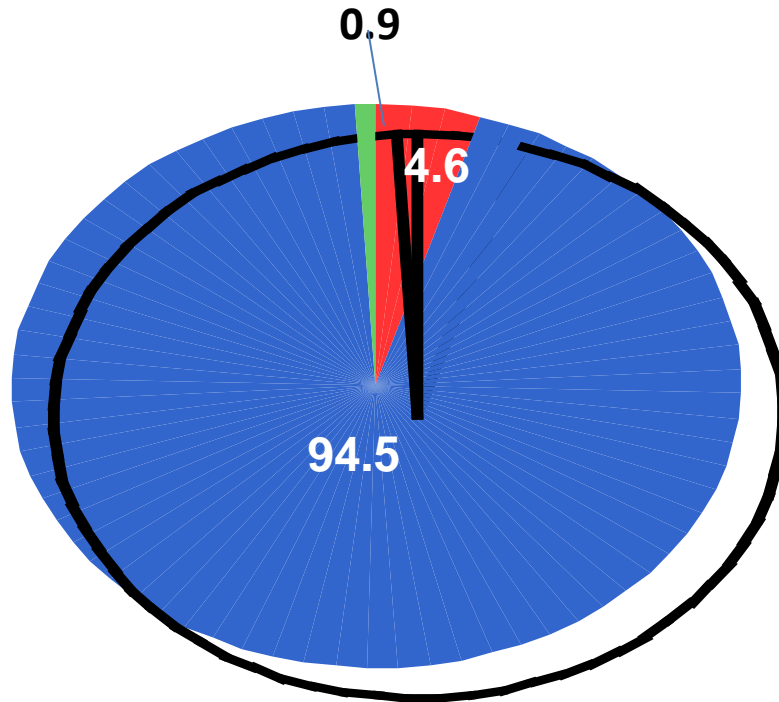
Method

- Cross-sectional structured review of six months records of women in the Govt-arranged marriage program, compared to that among general population of women.
- Purposive sampling technique.
- Quantitative study.
- Population: 1,359 widows and 2,625 controls randomly selected from general population of women within the same geographic area.
- Participants are spread across all the 44 Local Government Areas (LGA) of the state.

Method...2

- Tools were the National HTC register and client-intake forms - both standardized M&E tools for tracking HTC activities in Nigeria.
- Study limitation is the convenient assignment of subjects into groups which may potentially reduce the statistical inferences and ability to generalize findings.
- Control group were selected from HTC outreach carried out in the same geographic location, so as to reduce the chances of selection bias.

Results



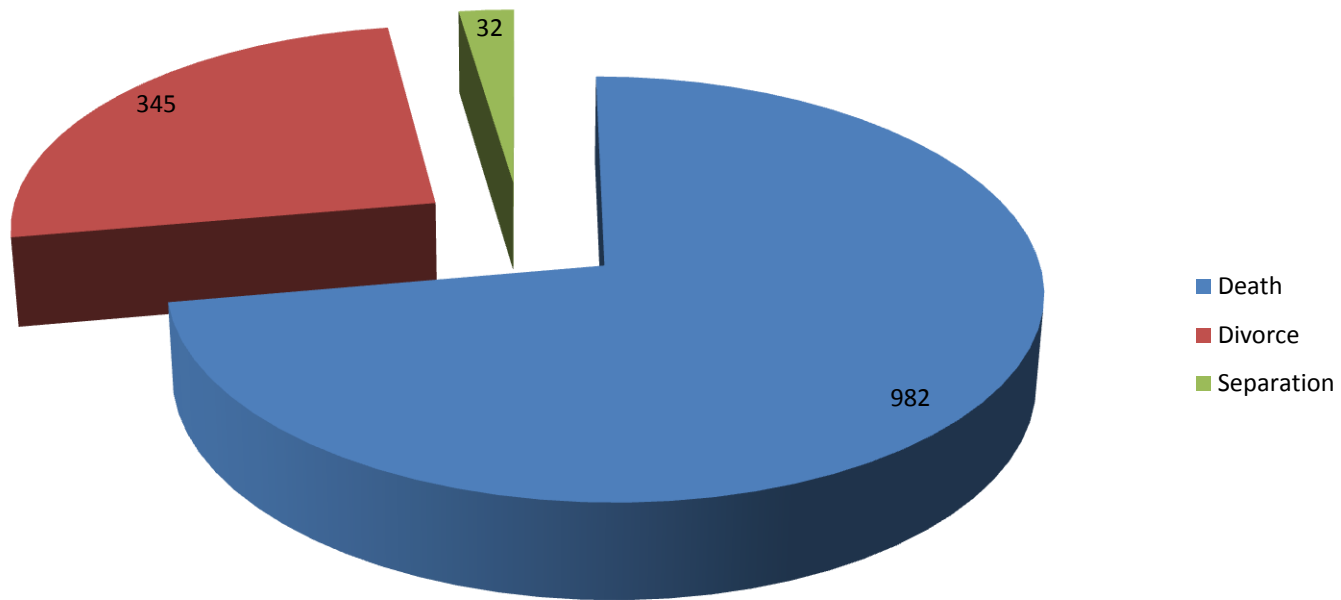
Participants' Age Range

1 – >13 years

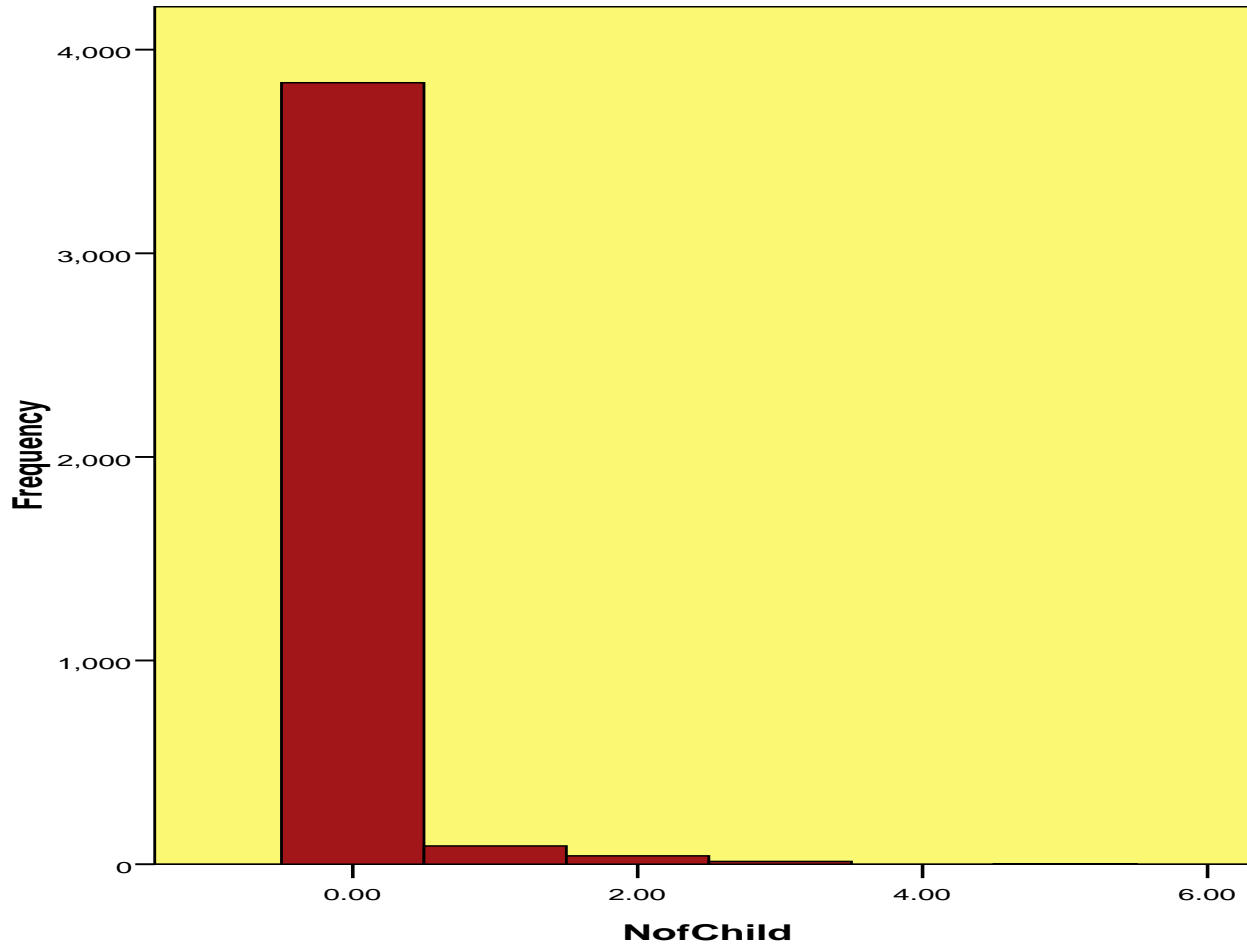
2 – 15 -49 years

3 – 50 – 70 years

Causes of Partner Loss



Result...2



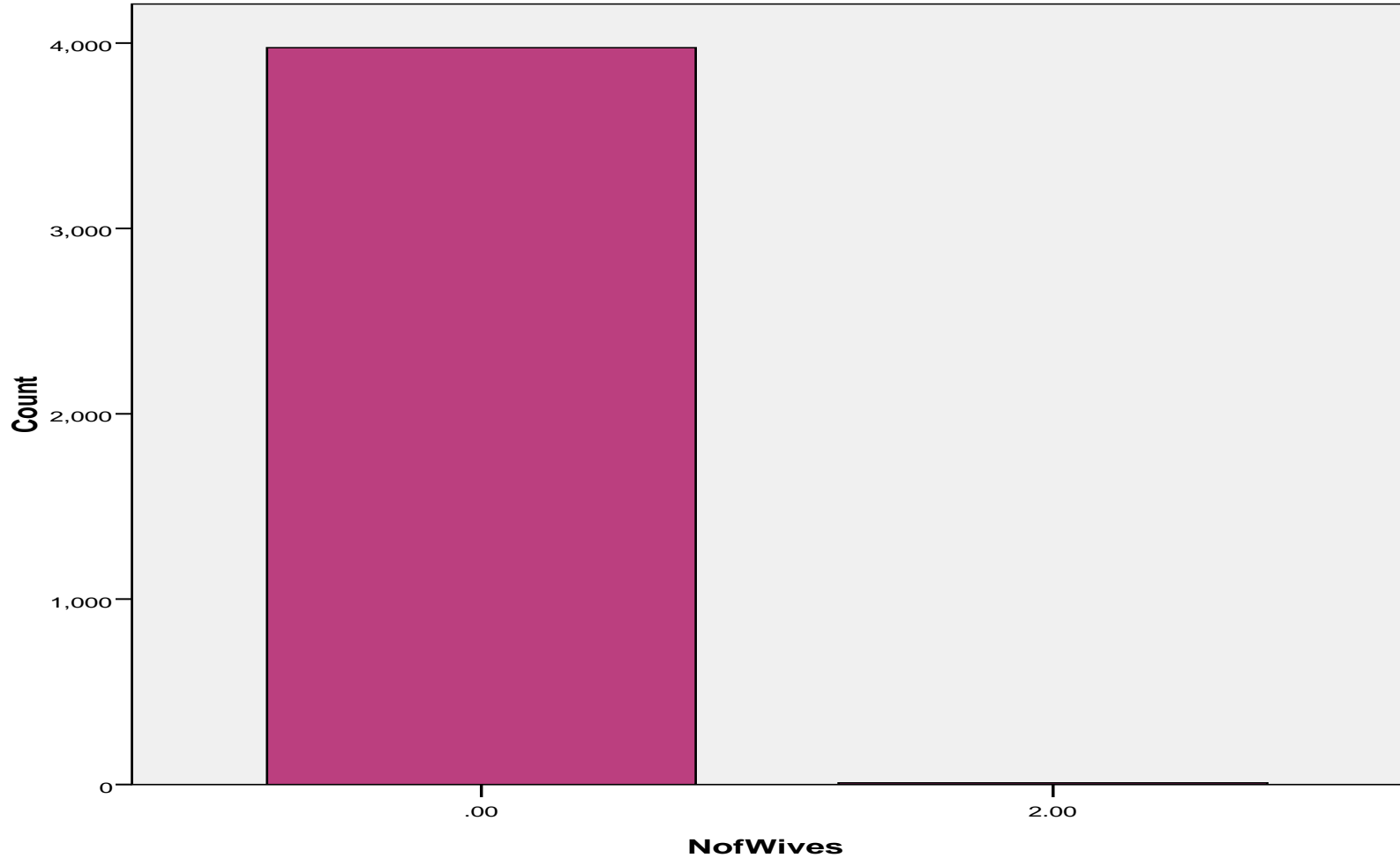
Mean =0.06
Std. Dev. =0.324
N =3,984

Number of children by women



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Result...3



Number of wives by husband

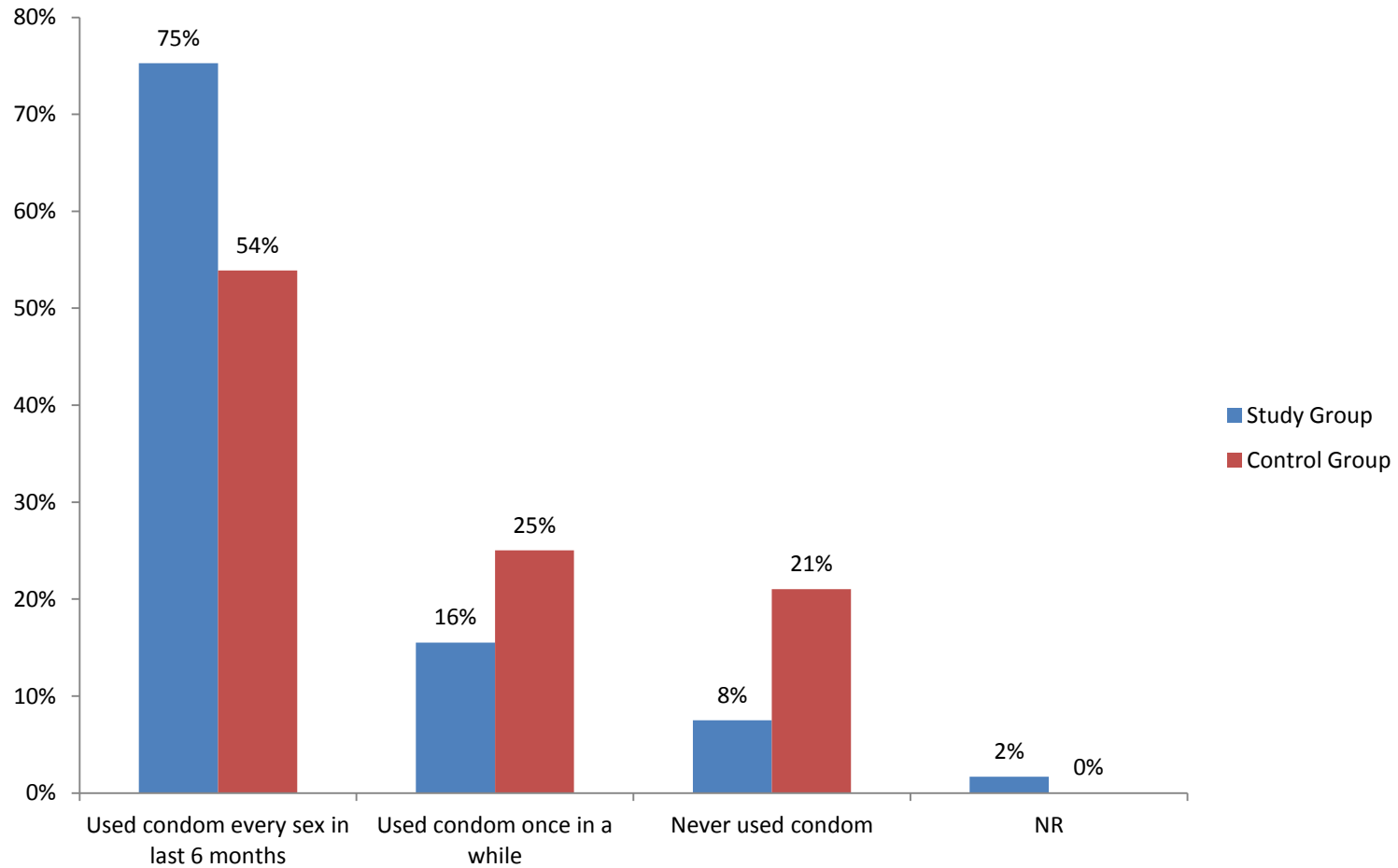
Sexual Risk Factors & HIV

Variables	% of Women who have lost their partners (N = 1359)	% of Women in general population from community outreach (N=2625)	Chi Square	P value
Pregnancy at time of test (HCG Test)			.27	.60
Yes	.6	.4		
No	99.4	99.6		
Blood Transfusion			93.45	<.01
Yes	17.7	7.6		
No	82.3	92.4		
Regular Sexual Intercourse			265.21	<.01
Yes	1.0	15.4		
No	99.0	84.6		
Unprotected Casual Sex			1.04	.31
Yes	1.8	2.3		
No	98.2	97.7		
Unprotected Regular Sex			3.58	.06
Yes	27.9	30.8		
No	72.1	69.2		

Sexual Risk Factors & HIV...2

Variables	% of Women who have lost their partners (N = 1359)	% of Women in general population from community outreach (N=2625)	Chi Square	P value
Admitted having more than one sexual partner			.00	.99
Yes	1.0	1.1		
No	99.0	98.9		
History of STI			.27	.60
Yes	2.0	1.8		
No	98.0	98.2		
HIV Result			1.07	.30
Positive	1.4	1.0		
Negative	98.6	99.0		

Percentage condom Use



Result...4

Variable	B	SE	Wald Statistic	Odds Ratio	<i>p</i> value
<i>Loss of Male Partner</i>	-4.45	.148	900.31	.012	<.01

Relationship Between Loss of male partner and HIV Result

Note. $R^2 = .000$ (N = 1359)



The Multivariate Relationship Between Loss of male partner, Blood transfusion, Reg. sex. intercourse, Casual unprot. Sex, Regular unprot Sex, At least one sex partner, Age range of Participants and HIV Result

Note. R² = 0.029 (N = 3984)

Variable	B	SE	Wald Statistics	Odds Ratio	p value
<i>Loss of Male Partner</i>	-.047	.331	.021	.95	.89
<i>Blood transfusion</i>	3.78	.76	23.29	39.56	<.01
<i>Regular Sexual Intercourse</i>	19.13	706.35	.001	.00008	.98
<i>Casual Unprotected Sex</i>	2.63	.43	37.75	13.91	<.01
<i>Regular Unprotected Sex</i>	.66	.35	3.60	1.94	.06
<i>One Sex Partner</i>	.42	.72	.35	.65	.55
<i>Age range</i>	.05	.73	.005	1.05	.94

Conclusion

- Study suggests that within the cultural context, women who had lost their male partners were more prone to increased sexual risk behaviour and HIV transmission.
- After controlling for other likely risk factors, loss of male partner becomes an insignificant predictor of HIV transmission.
- Casual unprotected sex remains a major predictor of HIV risk among women of reproductive age group.

Recommendations

- There is a need to understand how social and cultural factors relate to loss of male partners, and their influence on women's sexual risk behaviour in Nigeria.
- Encourage programs targeted at reorienting and educating women who have lost their partners, especially in low resource settings.

References

Central Intelligence Agency, CIA (2012). The World Factbook. People and Society: HIV/AIDS - Adult prevalence rate.

Retrieved from: <https://www.cia.gov/library/publications/download/>.

Central Intelligence Agency, CIA (2015). The World Factbook. People and Society: HIV/AIDS - Adult prevalence rate.

Retrieved from: <https://www.cia.gov/library/publications/download/>.

Federal Ministry of Health, FMOHa (2006). 2005 National HIV/Syphilis Sero-prevalence Sentinel Survey. Retrieved

from:

http://naca.gov.ng/component/option,com_docman/task,cat_view/gid,38/dir,DESC/order,name/Itemid,268/limit,5/limitstart,10/lang,en/

Federal Ministry of Health [Nigeria] (2013). National HIV & AIDS and Reproductive Health Survey, 2012 (NARHS Plus).

Federal Ministry of Health Abuja, Nigeria

National Agency for Control of AIDS (2011). Fact Sheet: Update on the HIV/AIDS Epidemic and Response In Nigeria.

South African National AIDS Council (2011). The HIV epidemic in South Africa: What do we know and how has it changed?



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