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Nuptiality and Risk Behaviour in Lusaka and Kampala

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ABSTRACT

This analysis assesses the link between partnership status and the probability of having one or more casual or non-regular sexual relationships in the past 12 months, using data from sample surveys conducted in Kampala and Lusaka in 1989/90 under the auspices of the Global Programme on AIDS. Non-regular sexual relationship was found to be much more common among individuals in relatively informal primary partnerships than among married individuals, and also more common among those with multiple primary partners than among those in monogamous unions. (*Afr J Reprod Health* 2001; 5[1]:83 - 89)

KEY WORDS: Nuptiality, HIV sexual behaviour, Africa, non-regular sex

Introduction

In the late 1980s, epidemiological studies of HIV within broadly defined risk groups such as STD patients, clients of prostitutes, and intravenous drug users showed relatively higher rates of HIV infection in unmarried than in married people. The highest rates were often found among singles, followed by the divorced and the widowed. However more

recent investigations of generalised HIV epi-demics in sub-Saharan Africa have found higher levels of infection in married than unmarried individuals, particularly for men.¹⁻⁵ These associations between HIV infection and marital status were often statistically significant in multivariate analyses, although they did not unanimously go in the same direction.^{3,6,7} Nevertheless, nearly all studies have demonstrated the existence of strong relationships between risk behaviour and marital status.

The sociological argument for examining marital patterns in relation to HIV is that socially prescribed sexual and reproductive behaviour within defined societies can usually be understood in relation to prevailing marriage forms within those societies.⁸⁻¹¹ The prevalence of different types of marriage and cohabitation, the expectations associated with each type and their stability within defined communities may thus shed light on how patterns of sexual behaviour are structured and may contribute to the understanding of the rate of spread of HIV.

It is recognised that in many parts of Africa, marriage is not a discrete event but rather a process that may involve several forms of cohabitation. Many partnerships are characterised by fluidity and may evolve, or dissolve, as socio-economic forces come to bear on them. In East and Southern Africa, traditional polygamy is giving way to informal polygamy or 'outside wives'.^{10,12,13} This form of sexual union often involves separate residence, a significant duration of the relationship, legitimate offspring and a relatively low social status of the female partner who nevertheless receives financial support from the male partner.

Because of the complexity of situations and of the many measurement problems, the association between type of partnership and the probability of concurrent casual sexual contacts has been little studied. One may expect that men and women currently forming a socially recognised unit sanctioned by religion, law or traditional exchanges between relatives (such as bride price) will have less extra-marital sex than those who are in less formalised unions, regardless of their social characteristics. Although it is recognised that the latter may evolve into marriage, it is hypothesised that the current status of a union implies different types of sexual constraints for the partners, not only because of social control but also because of different expectations and obligations associated with their current status. More specifically, it is expected that non-cohabiting regular partnerships are more conducive to casual sex than cohabiting ones. Finally, it is hypothesised that a man with multiple long-term relationships is probably less likely to have casual partners as well. In this paper, these expectations are assessed using data from two surveys conducted in African cities in 1990.

Methods

The study is based on data collected in Lusaka, Zambia, in 1990 and in Kampala, Uganda,

in 1989/90 using a standardised questionnaire on sexual behaviour, as part of a research project supported by the Global Programme on AIDS (GPA) of the WHO. The methodology of the surveys has been described elsewhere.¹⁴ These two surveys used a two-stage clustered probability sample design and face to face interviews with men and women aged 15 - 49 years. In the GPA questionnaire, partnership status was first assessed by the following questions: "Are you married, or have a regular partner, or are you widowed, divorced or separated?" Those married or with a regular partner were further asked: "Do you now have one, or more than one, spouse/regular partner, and if so how many?" A question on cohabitation with the (main) partner then followed. In a later section of the questionnaire, respondents were asked whether they had sexual relations with anyone else in the last 12 months and, if so, with how many. The precise question (for men) was as follows: "Apart from your wife/regular partner, have you had sex with anyone in the last 12 months?"

This sequence of questions permits the following distinctions: marriage versus regular partnership; monogamous versus multiple concurrent partnerships; cohabitation versus non-cohabitation; and recent experience of sex outside of marriage/regular partnership versus no such experiences. Clearly, these distinctions are multi-dimensional, complex and often subtle and there can be no pretence that they were fully explored in the GPA protocol. The difference between a spouse and a regular partner was left to the respondent and is thus subjective. The distinction between marriage and regular partnership, on the one hand, and more ephemeral sexual relationships was more standardised. Before the relevant questions, interviewers were instructed to read out the following definition: "I am now going to ask you questions about your wife/husband and/or regular partner. By a regular partner, I mean a person with whom you have had sex for more than one year. She/he could be someone with whom you have had sex for less than one year but with whom you intend to continue having sex. She could also be someone you are married to, someone with whom you do not live, or someone who does live in the same house with you." The essence of a regular partner is, thus, stability over time and, by default, non-regular partners are more transient sexual relationships that may or may not be commercial in nature. The analysis is based only on individuals currently in a marriage or regular partnership. The strategy was straightforward. Bivariate relationships between characteristics of the current partnership (together with other demographic and socio-economic characteristics) and the probability of reporting a non-regular partnership in the past 12 months were explored. The Pearson's chi-square test was used to test the association between the respondent's characteristics and whether she/he had a non-regular partner in the last 12 months.

This was followed by multivariate logistic regression to assess the net effect of partnership status on non-regular sex. The non-significant variables were left in the model because the objective was to estimate the effect of each covariate on the probability of non-regular sex, net of other covariates and not to build a parsimonious model that describes the relationship between non-regular sex and respondent's characteristics. Logistic regression

for survey data that took into account the survey design (i.e., cluster samplings) was applied using appropriate software (*Stata 6*, Stat-Corp, 1999).

Results

The denominators in [Table 1](#) provide selected information about the composition of the two samples. In both sites, females were markedly younger than males. Half of all respondents in Kampala were aged 20 - 29 years, whereas the age distribution in Lusaka was more evenly spread. Samples were reasonably well educated: less than 10% had no schooling and over half had received a secondary or higher education. There were more in-migrants in Kampala than Lusaka; 65% of Kampala respondents had lived in the city for less than 10 years, compared with 31% for Lusaka.

Monogamous marriage was the dominant form of partnership. Over 70% of females in both cities classified themselves in this manner. The corresponding proportions of men reporting monogamous marriage were rather lower: 60% in Lusaka and 69% in Kampala. The second most common type of partnership took the form of one regular partner. About 20% of both males and females in Lusaka fell into this category. In Kampala, there is an appreciable difference in the reporting of males and females; whereas 19% of men reported that they had one regular partner, only 6% of females did so. Multiple concurrent partnerships were less common. In Lusaka, 8% reported a spouse and one or more regular partners, and a further 8% reported that they had two or more regular partners (but no spouse). Differences between men and women were relatively minor in Lusaka. In Kampala, 12% reported the concurrence of marriage and regular partnerships. Again, differences between men and women were minor.

Overall, a large majority of both samples co-habited with a spouse or a regular partner: 75% in Lusaka and 82% in Kampala. There was a strong link between partnership status and living arrangements in Lusaka: 96% of married respondents co-habited, compared with only 19% of those who had regular partners but no spouse. The corresponding proportions, 83% and 78%, in Kampala showed little difference in cohabitation between those who declared themselves as married, as opposed to having a regular partner.

[Table 1](#) contains a bivariate analysis of the proportions reporting one or more non-regular sexual relationships in the past 12 months. A wide divergence between men and women is apparent. One-third of men in Lusaka and one-quarter in Kampala reported non-regular partnership compared with 10.5% and 8% of females in the two sites. The probability of having non-regular sex declined monotonically with age except among Lusaka males, where it peaked in the age group 20 - 29 years. Neither education nor duration of residence in the city emerged as significant prediction.

In both cities and for both sexes, partnership status and cohabitation were strong and

statistically significant predictors of non-regular or casual sexual relations. There is a large gulf between the reported behaviour of monogamously married respondents and the other three categories. For instance, men in Lusaka and Kampala with one regular partner were approximately twice more likely to report non-regular sex than those with one wife. For females, this link was more pronounced. Women with one regular partner were about four times as likely to report casual sexual contacts in the last 12 months.

These relationships were re-assessed in [Table 2](#) by multivariate logistic regression. Because of the small number of respondents with no schooling, this category was collapsed into the primary school category. In Kampala, very few respondents reported two or more concurrent regular partnerships and accordingly they were removed from the analysis. Finally, the cohabitation variable for the Lusaka sample was omitted because of its very close association with partnership status.

Strong and statistically significant net effects of partnership status were evident. Compared with individuals who reported to have been monogamously married, those with one regular partner were more likely to have experienced a non-regular or casual relationship in the recent past. Odds ratios are higher for females than for males in both sites. In Lusaka, those in multiple regular partnerships are also much more likely to report casual sex than the monogamously married. The same result was obtained for females in Kampala but not for males. Cohabitation was also a predictor of non-regular sex in Kampala. Non-cohabitants were about three times more likely to have had non-regular relationships than those who cohabited were.

Discussion

This analysis demonstrates that there is a strong link between the nature of primary sexual partnerships and the probability of additional sexual relationships of a more ephemeral nature. Regular partnerships of a relatively informal character (regular partner versus marriage) were clearly conducive to casual sex among both men and women in Kampala. This divide in sexual behaviour was very pronounced despite statistical controls for cohabitation, age and education. In Lusaka, there were also statistically significant effects of partnership status but these were less strong in Kampala despite the fact that cohabitation was nearly universal for married couples but rare for those who defined their union as regular partnership in that site. In the Ugandan society, informal unions without payment of bride wealth have been shown to carry a low status and they exert fewer constraints on sexual behaviour than formal legal marriage.¹⁶ In Rwanda, another strong patrilineal society, Lindan et al¹ have shown that women in informal unions were nearly twice more likely to be HIV infected than married women. In contrast, in Lusaka, where the norms of matrimonial societies still prevail, women have more sexual freedom, cohabitation is less common and marriage plays a less crucial role.¹²

A second important finding is the observation that the type of partnership is much more closely connected to casual sex than individual socio--demographic characteristics. In these populations, neither level of schooling nor length of residence in the city was significantly related to non-regular sex. Age, however, was a significant predictor, except among Lusaka males. The association of age with reported casual sex has already been shown in many African societies.¹⁷

Thirdly, in Lusaka and among women in Kampala, levels of risky sexual activity were found to be lower among those in monogamous than in polygamous relationships. This is surprising. One would expect multiple regular partnerships to be protective against the health risks of casual relationships, but this expectation is rebutted in this study. What may be happening is that these urban settings encourage the practice of "deuxieme bureau" or "outside wives", where men do not take on the obligations that are traditionally attached to polygamous marriage. Couples continue to seek other sexual partners for economic necessity or for prestige. Studies in Uganda and Tanzania have also shown that HIV infection was more common in polygamously married people than among the monogamously married.^{6,18}

Clearly, the typological definitions used in this analysis are not all mutually exclusive and complementary. Hence, they require refinement in order to capture an adequate characterisation of the type of partnership.^{15,19,20} With these categories in mind, the need to understand the social determinants of entry into different types of relationships becomes self-evident. Further exploration should include characteristics such as the type of descent system, the economic value of bride wealth, the role of labour migration, views on fertility and child rearing, and the associated patterns of extra-marital relationships.

The vast majority of studies have already shown elevated levels of risk behaviour among singles, followed by the separated and divorced and then by the widowed. However, those with the most risky sexual networks also reported more condom use. This implies that the risks of HIV/STD transmission are particularly high where non-commercial multiple partnerships are formed. Little condom use in regular partnerships and somewhat more, though still insufficient condom use with casual partners, has also been found in many other studies.^{16,21}

Based on the insights provided by mathematical modelling,²² the following, perhaps somewhat simple conclusion, may be drawn: If the rate of sexual partner change rather than the frequency of intercourse per partnership remains the most important factor in the spread of HIV in areas with low prevalence and assortative mixing, then single people are likely to contribute more to the HIV epidemic than married ones. Conversely, in areas with currently high HIV prevalence, which is the case in Lusaka and Kampala, people who are living in informal unions with one or more regular partners should be equally important targets of intervention programs. In Lusaka, prevention efforts should target

more married men with additional regular partners than in Kampala where couples in informal unions should receive more attention than married couples.

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Table 1 Percentage of Respondents Reporting Non-Regular Sex in the last 12 Months, by Locality

	<i>Lusaka</i>				<i>Kampala</i>			
	Male		Female		Male		Female	
	n	%	n	%	n	%	n	%
Total	667	33.0	751	10.5	337	26.4	321	8.4
<i>Age</i>								
15–19	36	36.1	132	24.2	9	66.7	41	14.6
20–29	165	49.7	390	9.7	143	31.5	180	9.4
30–39	276	33.7	175	5.1	112	25.0	74	4.0
40+	190	16.8	54	0.0	73	13.7	26	3.9
	$p < 0.001$		$p < 0.001$		$p = 0.001$		$p = 0.184$	
<i>Schooling</i>								
No education	48	16.7	92	7.6	14	14.3	21	9.5
primary	186	32.8	301	11.0	134	27.6	156	10.9
Secondary+	433	34.9	358	11.9	189	26.5	144	5.6
	$p = 0.039$		$p = 0.624$		$p = 0.560$		$p = 0.245$	
<i>Duration of residence in locality (years)</i>								
0–9	191	35.1	255	11.8	197	25.9	233	8.6
10–24	248	33.9	253	9.5	111	27.9	74	8.0
25+	228	30.3	243	10.3	29	24.1	14	7.1
	$p = 0.540$		$p = 0.697$		$p = 0.889$		$p = 0.977$	
<i>Partnership</i>								
One marital partner	400	20.0	527	5.1	234	18.4	251	4.4
One regular partner	131	36.6	135	19.3	65	41.5	18	22.0
Married & 1+ regular partner(s)	64	65.6	43	20.9	30	40.0	46	23.9
2+ regular partners	72	69.4	46	37.0	8	87.5	6	16.7
	$p < 0.001$		$p < 0.001$		$p < 0.001$		$p < 0.001$	
<i>Living in the same house</i>								
Yes	495	26.7	566	6.2	269	21.6	272	5.5
No	172	51.2	185	23.8	68	45.6	49	24.5
	$p < 0.001$		$p < 0.001$		$p < 0.001$		$p < 0.001$	

Table 2 *Multivariate Logistic Regression of Non-Regular Sex in the last 12 Months, by Locality*

	Lusaka				Kampala			
	Male		Female		Male		Female	
	OR	95% C. I.	OR	95% C. I.	OR	95% C.I.	OR	95% C. I.
<i>Age group (years)</i>								
15–19 ^a	1.00		1.00		1.00		1.00	
20–29	1.64	(0.74–3.65)	0.46	(0.26–0.82)	0.33	(0.07–1.66)	0.56	(0.19–1.68)
30–39	1.12	(0.49–2.57)	0.30	(0.13–0.73)	0.17	(0.03–0.89)	0.14	(0.03–0.72)
40+	0.44	(0.18–1.09)			0.08	(0.01–0.43)	0.12	(0.01–1.27)
<i>Schooling</i>								
None or primary ^a	1.00		1.00		1.00		1.00	
Secondary+	0.99	(0.67–1.46)	0.78	(0.47–1.31)	1.07	(0.61–1.87)	0.37	(0.13–1.01)
<i>Duration of residence in locality (years)</i>								
0–9 ^a	1.00		1.00		1.00		1.00	
10–24	1.27	(0.81–1.98)	0.86	(0.47–1.59)	1.55	(0.83–2.89)	1.41	(0.45–4.42)
25+	1.04	(0.65–1.65)	0.75	(0.40–1.37)	1.47	(0.50–4.33)	1.32	(0.14–12.82)
<i>Partnership</i>								
One marital partner ^a	1.00		1.00		1.00		1.00	
One regular partner	1.72	(1.04–2.86)	3.11	(1.64–5.92)	4.38	(2.27–8.47)	8.82	(2.14–36.38)
Married & 1+ regular partner(s)	7.69	(4.26–13.88)	5.32	(2.27–12.48)	1.39	(0.56–3.41)	4.71	(1.59–13.93)
2+ regular partners	6.93	(3.82–12.55)	7.98	(3.74–17.00)				
<i>Living in the same house</i>								
Yes ^a			1.00		1.00			
No			2.66	(1.40–5.06)	3.34	(1.16–9.66)		

Bold typeface indicates significant effects at $p < 0.05$

^aReference category