East African Medical Journal Vol. 88 No. 3 March 2011
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PREVALENCE OF SEROSTATUS DISCLOSURE TO SEXUAL PARTNERS AMONG HIV INFECTED WOMEN IN KISII DISTRICT, WESTERN KENYA

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ABSTRACT

***Objective*: To establish the prevalence and factors that determine serostatus disclosure to sexual partners among HIV infected women.**
***Design*: Hospital-based cross-sectional study.**
***Setting*: Patient's Support Centre (PSC) and Prevention of Mother-To-Child (PMTCT) clinic in Kisii District Hospital, Western Kenya.**
***Subjects*: Three hundred and four seropositive women attending PSC and PMTCT clinics.**
***Results*: The 304 respondents interviewed aged between 18-62 years (mean = 32.4 + 7.5). A large majority (67.8%) had disclosed their serostatus to their sexual partners. Of the 32.2% respondents who had not disclosed a high proportion (68.8%) reported they had no intention of ever disclosing to the partners. The majority (46.9%) of these respondents feared their partners may either abandon them or accuse them of infidelity (20.8%). However, this was seldom realised as reported by most respondents who had disclosed. The length of time the respondents had lived with the sexual partner and knowledge in the benefits of disclosure emerged as significant factors to disclosure (OR= 6.20; 95% CI 2.26-17.3; OR=4.88; 95% CI 2.08-11.44) respectively.**
***Conclusion*: Of the respondents who had not disclosed, a substantial proportion reported no intention of disclosing to the partners highlighting various fears. This was found to be premised on negative depiction as many respondents who had disclosed reported they rarely experienced reprisal from their sexual partners.**

INTRODUCTION

Human Immunodeficiency Virus (HIV) infection is one of the greatest challenges facing public health since 1980's. This is due to its massive spread and lack of effective treatment or preventive vaccine. Women form the vast majority of the 33 million people infected globally. By the end of 2006, 48% of all HIV infected persons worldwide were women, with 59% being in sub-Saharan Africa (1). In Kenya, 8.7% women are infected compared to 5.6% of men (2). Efforts to curb the infection have emphasised the need for HIV serostatus disclosure as an important strategy to prevent and control the HIV pandemic. However, the rate of disclosure is low more so among women. This makes HIV prevention and control targets far from being optimised (3).

Studies conducted in both developed and developing countries among women show a disparity in the rate of disclosure that ranges between 58-100% and 16-84% respectively (4). For instance a study conducted in USA (5) found 92% of HIV seropositive women had disclosed their status to their sexual partners. Elsewhere a study in Tanzania (6) found only 31% of HIV-positive women from a VCT clinic had disclosed their test results to their partners three months after HIV testing. A study conducted in Kenya, (7) found that 68% of HIV positive women enrolled in Mother-To-Child Transmission (MTCT) trial had not disclosed their test results to their sexual partners two months after diagnosis and 76% had no intention of doing so. Low literacy level and lack of employment that result to poor economic status have been cited as some of the factors that may deter most women in Africa from disclosing their HIV serostatus to their sexual partners (8).

The consequences have been low uptake and adherence to anti-retroviral prophylaxis, unsafe sexual

practices and poor psychological health. Prevention of Mother-To-Child Transmission (PMTCT) also becomes difficult for women who fail to disclose their HIV serostatus to their sexual partners (9).

Studies carried out in Kenya are few and are often carried out on antenatal mothers. This leaves the problem of non-disclosure among women poorly understood and efforts in prevention and control of HIV infection among women far from being optimised. This study therefore aims to investigate the rate and determinants of serostatus disclosure to sexual partners among seropositive women in Kenya. Data obtained may be important in guiding the programmes on HIV prevention and control.

MATERIALS AND METHODS

This was a hospital-based cross-sectional study conducted in Kisii district hospital located in Kisii District in Western Kenya. Kisii is a rural district with a population of 352,600 persons. The overall HIV prevalence is 7.4% with women having a higher rate of infection (5.1%) compared to men (3.2%). This has continued to be a big challenge to the district as the pandemic have largely strained the socio-economic sector due to a high number of widows and orphans (10). The hospital is the only tertiary health facility in the district that is government owned and receives medical referrals from surrounding health facilities.

Sample size was determined by Fisher's *et al*., (1998) method and a sample size of 304 respondents was realised. Respondents were then proportionally sampled from two study units in the hospital namely; Prevention of Mother-To-Child Transmission (PMTCT) clinic (33 respondents) and Patient's Support Centre (PSC) that provided comprehensive medical care for persons with HIV infection (271 respondents). The study population included only women aged 18 years and above, with sexual partner(s) and diagnosed as HIV seropositive at least 30 days before the time of study. Systematic sampling was used to select respondents as they left the study sites and data were collected quantitatively for a period of 16 days. All the respondents affirmed to have received post-test counselling on disclosure at one time of their clinic attendance.

In this study, disclosure meant having told the current sexual partner(s) of HIV seropositive status by the time of the interview. A sexual partner was defined as the present female's male partner(s) whether legitimate or otherwise. Informed verbal consent was first obtained from all the sampled respondents. They were then interviewed by trained research assistants in private rooms by use of a pre-tested structured interviewer's schedule. Each interview session was done in the respondent's language of choice (Gusii, Swahili or English) and lasted approximately 20-30 minutes.

The variables included in the study were; socio-demographic factors and HIV related characteristics of the respondents (age, marital status, level of education, employment status, religion, time since the respondent was HIV diagnosed and the reason that prompted HIV testing). Respondents were also asked the socio-demographic factors and HIV related characteristics of their sexual partners.
Knowledge in relation to disclosure as well as involvement in social support groups were also examined. All the information was written in English. Ethical approval for the study was obtained from both Maseno University research committee and the study hospital. Confidentiality was assured and ensured by keeping the identities of the participants anonymous and the information given confidential to only the study team.

Data collected were entered and analysed by Statistical Application Software (SAS) Univariate, bivariate and multivariate analyses were carried out. Univariate analysis involved summarising the data using tables of frequencies, means, proportions, confidence intervals and standard deviations. Bivariate analysis was then done which explored determinants of disclosure. All the significant variables ($P \leq 0.05$) in this analysis were then entered in to a single model for multivariate analysis and logistic regression test carried out to identify the predictor variables.

RESULTS

Study population: Respondents aged between 18-62 years (mean age 32.4 + 7.5 years). Most of them (79.3%) were married and about a half (48%) were of primary education level. About 61% were unemployed. The mean time since the respondents were HIV diagnosed was 1.6 years and ranged between 1.3 months to 9 years. Slightly above half of the respondents (54.3%) were living with their sexual partners and most of them (53.8%) had lived together for more than seven years. About half of the respondent's sexual partners (52%) had gone for HIV testing of whom 81% had tested seropositive (Table 1).

Table 1
Socio-demographic and HIV related characteristics of the respondents

Variable	No. (%)
Age	
≤ 20 years	6(2.0)
21–30 years	130(42.8)
31-40 years	123(40.4)
41 – 50 years	41(13.5)
51+ years	4(1.3)
Marital status	
Married	241(79.3)
Never married	13(4.3)
Widow	32(10.5)
Divorced/separated	18(5.9)
Level of education	
None	16(5.3)
Primary	146(48.0)
Secondary	104(34.2)
Post secondary	38(12.5)
Employment status	
Employed	118(38.8)
Not employed	186(61.2)
Duration since HIV diagnosed	
<1 year	131(43.1)
1–3 years	151(49.7)
4-7 years	15(4.9)
>7 years	(2.3)
Reason for taking HIV test	
Know serostatus	31(10.2)
Mandatory for medical care	67(22.0)
Frequent ill health	155(51.0)
Sexual partner had tested HIV +ve	36(11.8)
Child was sick	15(5.0)
Duration lived with the sexual partner	
<1 year	23(7.6)
1–3 years	59(19.5)
4–7 years	58(19.1)
>7 years	163(53.8)
Living together with the sexual partner	
Yes	165(54.3)
No	139(45.7)
Sexual partner's serostatus* * n= 158 for this variable	
Positive	128(81.01)
Negative	30(8.99)

Rate of disclosure: Respondents were asked whether they had disclosed their HIV serostatus to their sexual partners by the time of study. Further enquiries were made on how long it took to disclose among the respondents who reported to have disclosed. A significant proportion [(67.8%) 206] reported to have disclosed. Out of this proportion, nearly three quarters [(72.8%) 150] had disclosed in less than seven days following diagnosis, while 16% (33) disclosed 30 days after they were HIV diagnosed. Of the 32.2% (98) who had not disclosed, 68.8% (67) said they had no intention of ever disclosing.

What determined disclosure: The effect of socio-demographic and HIV related characteristics of the respondents was studied against disclosure (Table 2). The study found a significance association between disclosure and the duration of living together. Respondents who had lived with the partner for more than seven years were 6.2 times [OR 6.2; 95% CI: 2.26-17.3] more likely to disclose than those who had lived together for less than one year (P = 0.001). Similarly, the nature of living mattered. Respondents who were living together with the sexual partner were 1.83 times more likely [OR 1.83; 95% CI: 1.07-3.12] to disclose compared to those not living together (P = 0.001).

Reasons for disclosure: Most of the respondents (26.2%) felt disclosure was a collective liability between a woman and her sexual partner and therefore felt compelled to disclose while 24.3 and 20.9% respectively disclosed to either challenge their partners to get HIV tested or with an anticipation of getting social support. Upon further probe on how the partner reacted upon disclosure, most respondents (75.7%) reported their partners had supported them. Only 2.4 and 2.9% respectively said either their partners chased them away or they usually maltreat them.

Reasons for non disclosure: Of the respondents (32.2%) who had not disclosed, the majority, (68.8%) said they had no intention of ever disclosing their status to their sexual partners. The larger proportion reported fears of being abandoned (46.9%), accused of infidelity (20.8%), being chased out or being beaten (14.6%).

Knowledge: On analysis of knowledge against disclosure, the study established that; knowing the benefits associated with disclosure was likely to influence disclosure. Respondents who knew the benefits of disclosing HIV seropositive status to sexual partners (90.1%) were 4.88 times more likely [OR 4.88; 95% CI: 2.08-11.44] to disclose as compared to those who said they did not know any benefit (P = 0.000).

HIV related characteristics of the sexual partner: The study further looked at HIV related characteristics of the respondent's sexual partner to find out whether they determined disclosure. The analysis showed that; respondents whose sexual partners had tested HIV seropositive were 2.98 times more likely [OR 2.98; 95% CI: 1.07-8.36] to disclose than those whose sexual partners had tested seronegative (P = 0.009).

Social support groups: Involvement in social support groups was lastly assessed to establish whether there was any relationship with disclosure. The results were that social support groups indeed determined disclosure. Respondents who were members of social support groups were 3.28 times more likely [OR 3.28; 95% CI: 1.14-9.47] to disclose to their sexual partners than those not in social support groups (P = 0.009).

Table 2

Statistically significant variables associated with disclosure at multivariate analysis

Variable	OR	95% CI	P-value
Living together with the sexual partner	1.83	1.07-3.12	0.001
More than 7 years living with the sexual partner	6.20	2.26-17.3	0.001
Knowledge on disclosure benefits	4.88	2.08-11.44	0.000
Sexual partner's seropositive status	2.98	1.07-8.36	0.009
Being a member of social support groups	3.28	1.14-9.47	0.040

DISCUSSION

The rate of serostatus disclosure to sexual partners among HIV infected women in this study was high compared to non-disclosure. Most respondents disclosed in less than seven days after HIV diagnosis. An important aspect however is respondents who reported not to have disclosed and had no intention of ever disclosing for they remain a continuous source of infection to their sexual partners and / or at risk of HIV re-infection. A high proportion of the respondents who had not disclosed alleged that, disclosure was a risky endeavor and as such they feared being abandoned, accused of infidelity, withdrawal of economic support, being chased away or being beaten by their sexual partners. Similar studies (11,12) conducted in other African countries produced the same findings.

Among the respondents who had disclosed, majority

reported they were aggravated to do so since they knew their partners were also seropositive thus perceiving the reactions of the partner less formidable. Others said they disclosed for they felt the partner was to blame for their HIV infection while a smaller proportion disclosed to either prompt their partners to undertake a HIV test or with an anticipation of getting social support.

These results are consistent with findings of a study (13), which found higher disclosure rates between seropositive couples as compared to serodiscordant ones. Disclosure among most study subjects in the study was meant to elicit various forms of support.

This study found disclosure advancing with the duration the respondent had lived with the sexual partner and also with the nature of living. The longer the respondent had lived with the partner, the higher there was a probability of disclosing. This was also the case of those partners who were living together. It is probable these two types of respondents could have grown to be confidants with their partners or they may have opted to tell someone for emotional and social support and the sexual partner happened to be in their precincts. Alternatively, the respondents could have been impelled to disclose in the interest of taking HIV drugs or attending medical treatment. They may have also felt less likely to be accused of infidelity resulting to less fear to reprisal upon disclosure. This observation alluded with another study (14) where women who had stayed with their partners for more than two years were more likely to disclose than those who had stayed together for a shorter period of time. However, a similar study (15) did not find this relationship.

When those who had disclosed were asked their partner's reaction after they told them their serostatus, majority reported their partners were supporting them and only a few said their partners had either chased them away or had beaten them. This indicates that, the anticipated fears the respondents had on disclosing to their sexual partners were seldom realised. It is possible then, respondents who had not disclosed perceived the risk of negative outcome more immense than it actually was.

There was a correlation between knowledge and disclosure as respondents who knew the benefits associated with disclosure were more likely to disclose compared to those who did not know. This was in spite of of the level of education. A study (16) stated that, poor or lack of knowledge on the benefits associated with disclosure often results to underestimation of disclosure as a strategy to curb HIV spread. This may have been the case among the respondents who had not disclosed in this study. Although there were counselling sessions on disclosure to sexual partner(s), conducted at the study sites with every new client, these sessions were not consistent and there were no follow ups. Most clients may have thus down played the significance of disclosure or the new HIV experience may have impaired their perception.

A higher rate of disclosure among respondents who were involved in social support groups highlights the significance of such groups. Respondents who were members of social support groups said they had no worries about social isolation, stigmatisation and rejection thus these factors may have enhanced disclosure. An earlier study (14) conducted in Tanzania also found more disclosure rates among HIV infected women who were in self-help groups.

In conclusion non disclosure was found to be premised on negative depiction as many respondents who had disclosed said they rarely experienced reprisal from their sexual partners. However, it is pertinent to note most of the respondents who disclosed had seropositive partners and this may have enhanced their disclosure.

Recommendation: The proportion of respondents who had not disclosed and had no intention of disclosing to their sexual partners cannot be downplayed hence this study recommends a need to create forums for HIV seropositive persons at medical setups so as to share experiences that may be relevant to those who had not disclosed. An intensive campaign that promotes HIV testing and counselling between sexual partners may also be used to overcome the upheavals of non disclosure. These may not only intensify interventional measures that address non-disclosure among sexual partners, but may also subsequently uphold HIV prevention and control efforts.

Limitations: The prevalence and factors that determined disclosure in this study may not be extrapolated among all HIV infected women since respondents in this study were recruited at publicly funded hospital mandated to provide free services. It is therefore more likely that they were predominantly of low socio-economic status with a different approach to issues of disclosure.

ACKNOWLEDGEMENTS

To the research assistants and Kisii District Hospital staff for their cooperation during data collection, study participants for providing the research team with all the information they required.

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