

# Self-Disclosure of HIV Serostatus in Recently Diagnosed Patients with HIV in South Africa

BO Olley<sup>1,2</sup>, S Seedat<sup>1</sup>, and DJ Stein<sup>1</sup>

## ABSTRACT

Failure of people living with HIV/AIDS to disclose their HIV serostatus can place their sexual partners at risk. The current study examined HIV serostatus disclosure and its relationship to risky sexual behaviours in 69 sexually active, heterosexual, married (62%) or cohabiting (38%) patients recently diagnosed as HIV positive. Results show that 78% had not disclosed their HIV serostatus to their sexual partners and 46% had no knowledge of their sexual partner's serostatus. Compared to those who disclosed their serostatus, those who did not disclose were more likely to be male ( $\chi^2 = 7.02, p = 0.00$ ), to have not used a condom during their last sexual encounter ( $\chi^2 = 29.64, p = 0.000$ ), to have used alcohol heavily before sex ( $\chi^2 = 6.79, p = 0.00$ ), to have multiple sexual partners ( $t = 3.01, p = 0.05$ ), and to have engaged more frequently in sexual intercourse in the six months preceding the study ( $t = 8.21, p = 0.00$ ). Logistic regression analysis show that being in a married relationship (OR = 0.86, 95% CI = 0.65, 1.15), being male (OR = 1.48, 95% CI = 0.24, 1.99), having more than two multiple partners (OR = 2.03, 95% CI = 1.11, 3.68) and non-use of condom at last sex (OR = 1.53, 95% CI = 0.83, 1.88) were significantly associated with non-disclosure of HIV serostatus. Preventive strategies among HIV-positive patients should place emphasis on the management of self-disclosure and its importance in safe sexual behaviour. (*Afr J Reprod Health* 2004; 8[2]: 71–76)

## RÉSUMÉ

Auto-révélation de la situation sérologique du VIH chez les patients récemment diagnostiqués comme ayant le VIH en Afrique du Sud. L'incapacité des gens vivant avec le VIH/SIDA de révéler leur situation sérologique du VIH peut mettre leurs partenaires sexuels en péril. Cette présente étude a examiné la révélation de la situation sérologique et son rapport avec le comportement sexuel à risque chez 69 patients sexuellement actifs, hétérosexuels, mariés (62%) ou qui cohabitent (38%) récemment diagnostiqués comme étant VIH positifs. Les résultats ont montré que 78% n'ont pas révélé leur situation sérologique du VIH à leurs partenaires. Par rapport à ceux qui ont révélé leur situation sérologique, ceux qui ne l'ont pas avaient plus la possibilité d'être des mâles ( $\chi^2 = 7,02, p = 0,00$ ), de ne pas avoir utilisé un préservatif au cours de leur dernier rapport sexuel ( $\chi^2 = 29,64, p = 0,00$ ), d'avoir bu trop d'alcool avant d'avoir un rapport sexuel ( $\chi^2 = 6,79, p = 0,00$ ), d'avoir des partenaires sexuels multiples ( $t = 3,01, p = 0,05$ ) et d'être engagés plus fréquemment dans des rapports sexuels dans les six mois qui ont précédé l'étude ( $t = 8,21, p = 0,00$ ). L'analyse de la régression logistique a montré qu'étant dans un rapport conjugal (OR = 0,86, 95% CI = 0,24, 0,99), ayant plus de deux partenaires multiples (OR = 1,53, 95% CI = 0,31, 0,88) ont été liés de manière significative à l'incapacité de révéler la situation sérologique du VIH. Les stratégies préventives chez les patients séropositifs devraient mettre l'accent sur la conduite à tenir devant l'auto-révélation et son importance dans le comportement sexuel sans risque. (*Rev Afr Santé Reprod* 2004; 8[2]: 71–76)

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KEY WORDS: Self disclosure, heterosexual couple, HIV/AIDS patients

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<sup>1</sup>MRC Unit on Anxiety Disorders, Department of Psychiatry, University of Stellenbosch, Cape-Town, South Africa. <sup>2</sup>Department of Psychology, Faculty of the Social Sciences, University of Ibadan, Ibadan, Nigeria.

Correspondence: Dr. B.O. Olley, Department of Psychology, Faculty of the Social Sciences, University of Ibadan, Nigeria.

## Introduction

It would seem ethical for individuals infected with HIV to notify their sexual partners of their serostatus.<sup>1,7</sup> Furthermore, disclosure of HIV serostatus can help in promoting safe sex, reducing the transmission of/or re-infection with HIV.<sup>5,6,8,9</sup> Nevertheless, there are many reasons that such self-disclosure may not occur; these include stigmatisation, isolation or abandonment, lack of social support, separation or divorce, and even prosecution.<sup>10</sup>

Indeed, data indicate that HIV-positive patients do not always disclose their serostatus and, in fact, may be ignorant of their sex partners' serostatus. Perry et al<sup>2</sup>, for example, found that almost one third of HIV-seropositive men and women had not disclosed their HIV serostatus to past or present sexual partners. Stein et al<sup>3</sup> found that 40% of sexually active men and women living with HIV in a community sample had not disclosed their serostatus to all their sexual partners. Similarly, in a community sample, Kalichman and Nachimson<sup>4</sup> found that 41% of HIV-positive persons had not disclosed their HIV serostatus to their sexual partners. In a study involving 206 HIV+ men of mixed sexual orientation<sup>5</sup>, 48% had not disclosed their serostatus to their sexual partners. Consistent with these findings, a recent report<sup>6</sup> of 105 HIV+ men showed that 47% did not disclose their seropositive status to their at-risk partners.

A number of these studies have also documented that many people with HIV have sex with partners who are HIV-negative or of unknown serostatus.<sup>5,6</sup> Kalichman<sup>12</sup> found that 42% of HIV+ men and 42% of HIV+ women reported at least one instance of unprotected sex during a six-month period, frequently with partners with unknown or seronegative HIV status. Similarly, among 48 respondents, Ciesla et al<sup>13</sup> reported that 31.1% of HIV+ patients reported unprotected vaginal or anal intercourse with a partner of negative or unknown HIV status.

Being married or having a long-term

relationship has been reported to be protective of infection as well as transmitting the HIV virus; available data are however contradictory. For example, while one study reported increased risky sexual behaviour in HIV-positive patients who were married and in long-term relationships<sup>9</sup>, another study found that unprotected sexual intercourse was more frequent in unmarried individuals, those in casual relationships, and where partners were ignorant of each other's serological status.<sup>12</sup> In one study<sup>11</sup>, 14% of male and 7% of female HIV-positive couples did not use a condom in their last sexual encounter.

There are relatively few studies on disclosure of HIV serostatus and unsafe sexual behaviours among HIV+ individuals in sub-Saharan Africa. Most studies to date have originated in the United States and have been conducted among homosexual or bisexual white men.<sup>5,6,9,12,14</sup> In sub-Saharan African countries, where the primary mode of transmission is heterosexual contact and where rates of infection and transmission of HIV are increasing daily among married persons, it is useful to document levels of disclosure among heterosexual HIV-positive individuals. For example, of all persons in South Africa infected with HIV/AIDS, the proportion of married heterosexual couples who are infected has cumulatively increased from 5% of the infected population in 1999 to 12% at the end of 2002.<sup>15</sup>

In the present report, we examined retrospectively: (i) the level of self-disclosure of HIV serostatus, and (ii) the prevalence of unprotected sex among heterosexual patients who were married or cohabiting. In addition, we examined the socio-demographic correlates of self-disclosure in these patients.

## Methods

### Procedure

The study was approved by the ethics committee of the University of Stellenbosch, Cape Town. All consecutive HIV/AIDS patients who were on follow-up management were approached and

included in the study. Patients were first seen by their treating physician and thereafter interviewed by a trained researcher. Included in the interview were assessments of sexual behaviour in the six months preceding the interviews and a questionnaire on socio-demographic characteristics.

### Participants/Setting

The study sample consisted of 69 patients (27 males and 42 females) recently diagnosed with HIV (mean duration of diagnosis = 7.12 months, SD = 2.8). Patients were recruited from the outpatient infectious diseases clinic of the Department of Internal Medicine and Infectious Disease, Tygerberg Hospital, Cape Town, South Africa. Inclusion criteria were: age 18 years and above, recently diagnosed (< 1 year) HIV infection, no neurological or cognitive disorder, and willingness to give written informed consent. The hospital is one of two major tertiary health facilities in the Western Cape and receives referrals from surrounding community health centres as well as medical and obstetric/gynaecology clinics at Tygerberg Hospital.

### Measures

#### Socio-demographic variables

A brief questionnaire was used to collect information on age, gender, marital status, home language, years of education, and employment status. Similarly, clinical information such as CD4 and CD8 counts and HIV disease stage were recorded.

As a measure of disclosure, the patients were asked to indicate whether they had revealed their HIV status to their husband/wife or sexual partner (if not married but living with a partner in the past six months preceding the study).

#### Sexual risk behaviours questionnaire

This 20-item interviewer rating measure was adapted from the work of Kelly et al.<sup>16</sup> and McKinnon et al.<sup>17</sup> Participants were asked about their sexual activities in both the preceding month and in the six months preceding the study.

Questions asked included: "Have you used a condom at last sex?" "Have you had sex with a partner who used intravenous drugs?" "Have you had sex after heavy use of alcohol or other drugs?" "Have you had sex with a partner known to you for less than one day?"

#### Negative life events scale

This was adapted<sup>18</sup> from a scale developed by Swartz, Elk, Teggins, et al.<sup>19</sup> It is a 42-item clinician-administered checklist that inquires about the number of life events (positive and negative) occurring during the past six months as well as the degree of stress (impact, 0–2 score). Two measures were derived: the number of events and degree of impact, with higher scores on impact signifying greater stress.

#### Coping behaviours

Coping behaviours, that is, specific styles used by HIV positive patients to deal with the stress associated with living with HIV, was assessed with the abridged version of Cope called the Brief COPE.<sup>20</sup> Brief COPE is a 14-scale questionnaire spanning active coping, planning, positive reframing, acceptance, humour, turning to religion, venting of emotions, mental disengagement, denial, substance use, behavioural disengagement, and emotional support. Each item is rated on a four-point Likert scale: '1' = I did not do this at all to '4' = I did this a lot to the activities in the past three months.

### Statistical Analyses

Chi-square tests for categorical variables or Student's t-tests for continuous variables were used to compare differences in socio-demographic characteristics, risky sexual behaviours and clinical characteristics of heterosexual couples who had not disclosed or who had disclosed their serostatus to their sexual partners. Multiple logistic regression analysis was then used to assess which factors were independently related to HIV serostatus non-disclosure/disclosure among heterosexual couples. Data were analysed with

SPSS software version 10.

## Results

Table 1 presents data on the 69 sexually active heterosexual patients living with HIV/AIDS. Forty three (62%) of them were married, while twenty six (38%) were cohabiting. Seventy eight per cent had not disclosed their HIV serostatus to their sex partners and 46% had no knowledge of their sex partner's HIV serostatus. The other 54% knew about their sex partner's serostatus; all of these were positive for HIV. Relatively few (64%) of these patients remembered having received counselling for HIV/AIDS. Compared to those who did disclose their serostatus to their sex partners, those who did not disclose were significantly more likely to be male ( $\chi^2 = 7.02$ ,  $p = 0.00$ ), to have used alcohol heavily before sex ( $\chi^2 = 6.79$ ,  $p = 0.00$ ), to have had multiple sex

partners ( $t = 3.01$ ,  $p = 0.05$ ), to have engaged in more frequent sexual intercourse in the six months preceding the study ( $t = 8.21$ ,  $p = 0.00$ ), and not to have used a condom during their last sexual encounter ( $\chi^2 = 29.64$ ,  $p = 0.000$ ). Further result showed that 38 (88%) of the married patients had not disclosed their serostatus to a spouse, while 16 (62%) of the cohabiting patients had not disclosed their serostatus to their sex partners.

## Logistic Regression

Table 2 presents the predictors of self-disclosure. While adjusting for the other variables, results from logistic regression showed that being in a married relationship (OR = 0.86, 95% CI = 0.65, 1.15), being male (OR = 1.48, 95% CI = 0.24, 1.99), having multiple partners (i.e., more than two) (OR = 2.03, 95% CI = 1.11, 3.68), and non-usage of condom at last sex (OR = 1.53, 95% CI = 0.83, 1.88) were significantly associated with

Table 1 Socio-Demographic and Clinical Characteristics of HIV+ Heterosexual Couples who had and who had not Disclosed their HIV Status in South Africa

Characteristic	Men				Women			
	Had not disclosed (n = 25)		Had disclosed (n = 2)		Had not disclosed (n = 29)		Had disclosed (n = 13)	
	M	SD	M	SD	M	SD	M	SD
Age (years)	32.2	2.4	31.8	1.8	29.4	3.5	28.1	1.9
Duration of HIV (months)	6.2	1.2	5.3	1.0	6.7	1.7	6.9	2.0
Years of education	10.2	3.1	9.4	2.1	9.2	2.5	9.6	2.9
No. of sex in past 6 months	104	29.8	78	12.9	87	14.9	56	9.1
No. of multiple partners	7	1.5	2.1	1.4	4	2.0	0	0
No. of negative life events	4	1.0	5.3	1.9	8	3.1	5.1	1.3
CD4 count	515	238.3	509	267.8	792	371.3	671	231
CD8 count	865	410	819	461.7	927	417.5	964	419
	n	%	n	%	n	%	n	%
Language								
Afrikaans speaking	13	52	1	50	15	52	2	15.4
Xhosa	10	40	1	50	14	48	10	77
Zulu	2	8	0	0	0	0	1	7.6
Unemployment	16	64	1	50	23	79.3	9	69
Disease status								
Asymptomatic	17	68	2	100	19	66	7	54
Symptomatic	8	32	0	0	10	34	6	46
Knowledge of partner's HIV	7	28	2	100	12	41	11	85
Use of heavy alcohol before sex	15	60	0	100	11	38	1	7.6
Marital status								
Married	19	76	0	50	19	66	5	38
Cohabiting	6	24	2	50	10	34	8	62
Condom use in last sex	7	28	2	100	8	28	9	69

Table 2 Logistic Regression of the Predictors of Non-Disclosure of HIV Serostatus among Heterosexual Partners

Independent variable	Adjusted OR	95% CI	p value
Being married	0.86	0.65, 1.15	0.05
Male	1.48	0.24, 1.99	0.04
Female	0.87	0.46, 1.62	0.6
Multiple partners			
< 2	0.87	0.40, 1.90	0.7
> 3	2.03	1.11, 3.68	0.02
Condom use	1.53	0.31, 1.88	0.01

non-disclosure of HIV serostatus.

### Discussion

The results of this study provide significant findings worth considering in the implementation of preventive measures aimed at individuals infected with HIV/AIDS. Primarily, it was found that a substantial majority of heterosexual married and cohabiting men and women recently diagnosed with HIV/AIDS did not disclose their HIV serostatus and did not have knowledge of their sex partner's serostatus. These findings are consistent with previous reports,<sup>2-6</sup> and underscore the need for more effective interventions to prevent worsening of the AIDS epidemic. In particular, it would seem important to focus interventions on helping patients and communities to increase the extent to which self-disclosure is made. Such interventions may include helping patients to alleviate the fear of negative consequences if they self-disclose their serostatus, and working with communities to destigmatise HIV/AIDS.

Contrary to earlier findings,<sup>4,14</sup> where no gender differences in disclosure of serostatus to sexual partners were observed, the present study shows that compared to women, men are significantly more likely not to disclose their serostatus to their partners. These results are consistent with the imbalance in sexual power that is often present in the developing world, and suggest that a particular focus is needed to help

men with the process of self-disclosure.

Consistent with previous reports,<sup>4,6</sup> we found that among individual patients who did not disclose their serostatus to sex partners, there tended to be a higher likelihood of unsafe sexual practices including non-use of condom in their last sex, heavy alcohol use before sex, multiple sex partners, and increase in the number of sexual intercourse.

One worrying finding from this study is that only 44 (64%) of the subjects remembered having received counselling for HIV/AIDS. This figure is low given that all HIV-positive patients are required to receive counselling about safe sexual practices on notification of their HIV status. Presumably, subjects did not regard the communication of information about their serological status as "counselling". There is therefore a need to enhance this aspect of clinical practice. Perhaps the need for self-disclosure was discussed but at a time or in a way that meant that it was not remembered or acted upon.

In the absence of previous work examining coping styles and self-disclosure, this study investigated differences in the coping styles of patients who disclosed versus those who did not disclose. The results reveal no differences between the two groups. The number and impact of negative life events on HIV-infected individuals six months prior to study were also not associated with self-disclosure. It is possible that self-disclosure reflects a range of social factors and is not simply a product of individual

psychological differences.

The results here should however be interpreted with caution. First, the sample was a convenient and highly selective one that cannot necessarily be generalised to other groups living with HIV/AIDS. The study was also limited in that it relied on self-report and obtained only limited detail about what was self-disclosed and when. Most patients in this study were not on antiretroviral therapies, and the introduction of these medications to South Africa may well lead to a change in disclosure patterns.

Finally, the data in this study were cross-sectional, with resulting limitations in inferring causation from the associations found. Nevertheless, these data emphasise the extent to which lack of self-disclosure of HIV serostatus remains an important issue, and on the need for focusing additional attention on this issue.

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## REFERENCES

- Centers for Disease Control and Prevention. HIV counseling and testing services from public and private providers – United States, 1990. *Morb Mort Wkly Rep* 1992; 41: 743–752.
- Perry SW, Card CAL, Moffatt M, Ashma T, Fishman B and Jacobsberg LB. Self-disclosure of HIV infection to sexual partners after repeated counseling. *AIDS Edu Prev* 1994; 6: 403–411.
- Stein MD, Freedberg KA, Sullivan LM, Savetsysky JM, Levenson SM, Hingson R and Samet JH. Sexual Ethics: Disclosure of HIV-positive Status to partners. *Arch Inter Med* 2003; 158(9): 253–257.
- Kalichman SC and Nachimson D. Psychological and social factors associated with high risk sexual behaviour among people living with HIV/AIDS. *AIDS Care* 1999.
- Marks G and Crepaz N. HIV-positive men's sexual practices in the context of self-disclosure of HIV status. *J Acq Imm Def Synd* 2001; 27: 79–85.
- Crepaz N and Marks G. Serostatus disclosure, sexual communication and safer sex in HIV-positive men. *AIDS Care* 2003; 15(3): 379–387.
- Wein M. Duty to warn. *JAMA* 1989; 261: 1355–1360.
- De Rosa CJ and Marks G. Preventive counseling of HIV-positive men and self-disclosure of serostatus to sex partners; new opportunities for prevention. *Health Psychol* 1998; 17: 224–231.
- Kalichman SC, Kelly JA and Rompa D. Continued high-risk sex among HIV-seropositive gay and bisexual men seeking HIV prevention services. *Health Psychol* 1997; 16: 369–373.
- Simoni JM, Mason HRC, Marks G, Ruiz MS, Reed D and Richardson JL. Women's self-disclosure of HIV infection: rates, reasons and reactions. *J Consul Clin Psychol* 1995; 63(3): 474–478.
- Kennedy CA, Skurnick J, Wan J, Quattrone G, Sheffet A, Quinones M, Wang W and Louria D. Psychological distress, drug and alcohol use as correlates of condom use in HIV-serodiscordant heterosexual couples. *AIDS* 1993; 7: 1493–1499.
- Kalichman S.C. Psychological and social correlates of high risk sexual behaviour among men and women living with HIV/AIDS. *AIDS Care* 1999; 11(4): 415–428.
- Ciesla JA, Roberts JE and Hewitt RG. Adult attachment and high-risk sexual behaviour among HIV-positive patients: preliminary findings. *J App Soc Psychol* (In press).
- Marks G, Richardson JL and Maldonado N. Self-disclosure of HIV Infection to sexual partners. *Am J Pub Health* 1991; 81(10): 1321–1322.
- Abdool-Kareem Q and Abdool-Kareem S. *Epidemiology of HIV in South Africa*. [www.healthnet.org.za](http://www.healthnet.org.za) Durban: South Africa Medical Research Council, 2002.
- Kelly JA, Murphy DA, Bahr R, Brasfield TL, Davis DR, Hauth AC, Morgan MG, Stevenson LY and Eilers MK. AIDS/HIV risk behaviour among the chronic mentally ill. *Am J Psych* 1992; 149(7): 886–889.
- Mckinnon K, Cournos F, Meyer-Bahlburg HFL, Guido JR, Caraballo LR, Margoshes ES, Herman R, Gruen RS and Exner TM. Reliability of sexual behaviour interviews with psychiatric patients. *Am J Psych* 1993; 150(6): 972–974.
- Kaminer DK, Stein DJ, Mbanga I and Zungu-Dirwayi N. The Truth and Reconciliation Commission in South Africa: relations to psychiatric status and forgiveness among survivors of human rights abuse. *Br J Psych* 2001; 178: 373–377.
- Swartz Elk R, Teggin AF and Gills LS. Life events in Xhosa, Cape Town. *J Psychos Res* 1983; 27(3): 223–231.
- Carver CS. You want to measure coping but your protocol's too long: consider the brief COPE. *Int J Behav Med* 1997; 4(1): 92–100.

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