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HIV status disclosure and partner discordance: a public health dilemma

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Keywords

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INTRODUCTION

Before the advent of human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS), illnesses generally fitted into Parsons' sick role model, defined as a form of deviant behaviour in which the patient has motivation to become and remain ill.¹ Ross² noted that for stigma-associated conditions like sexually transmitted diseases, classic models of illness behaviour did not apply. Observed patterns of HIV status disclosure and therefore assumption of the sick role tend to support Ross's view.

Studies conducted on the subject indicate that HIV status disclosure is not a random event. A study on parents' disclosure patterns to their children revealed that mothers disclosed more often to their daughters than their sons. The study further established that disclosure was significantly more common among parents with poor health and stressful life events.³

HIV status disclosure is complicated further by the phenomenon of partner discordance, which makes disclosure to sexual partners much more difficult. In a poster exhibited at the 39th Annual Meeting of the Infectious Disease Society of America, a strong case was made for HIV status disclosure to sexual partners. It was argued that sexual partners of HIV-infected individuals are a population at high risk for HIV acquisition. Any efforts to prevent transmission within that specific population will have a much quicker 'pay-off' than anything that may be done within the general public, and part of these efforts should involve HIV status disclosure to sexual partners.

The current paper reports the results of a study conducted in Houston, Texas, USA on a sample of 80 HIV-positive pregnant women. The study assessed HIV status disclosure patterns, partner's HIV status, patterns of social support breakdown following HIV status disclosure, and patterns of social support breakdown relative to partner's HIV status.

STUDY SETTING

The study was conducted at three prenatal sites. The rationale for using prenatal sites was mainly influenced by the established standard of prenatal care in the USA. All prenatal care attendees are screened for HIV and those testing positive are put on highly active antiretroviral

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therapy (HAART) irrespective of their CD₄ or viral load levels. Having to explain the reason for treatment leads to a significant number of disclosures at this stage.

In addition, HIV-exposed newborns are started on AZT prophylaxis immediately after delivery and are subsequently maintained on co-trimoxazole while undergoing screening for possible HIV infection. Mothers having to explain why the newborns are undergoing a series of tests and treatment often leads to another wave of HIV status disclosure. It was considered useful to know how disclosure under such vulnerable circumstances affected social support structures from sexual partners and other social contacts.

DEFINITIONS

- Partner: The regular sexual liaison that was involved in supporting the study subject during her index pregnancy.
- Other social contacts: Family members (other than the husband) and friends.
- Breakdown in partner social support: Cessation of sexual relationship following HIV status disclosure by the infected partner.
- Breakdown in other social support: This was inferred if the study subject responded that her relationship with any of her family members (other than the husband) and/or friends had got worse following disclosure of her HIV status.
- Partner HIV status discordance: A stable sexual relationship where one partner is HIV positive while the other is HIV negative.

FINDINGS

The study population comprised of women aged between 18 and 40 years. The majority of subjects (77.0%) reported parities of one to three. The gravidity pattern was similar, with the majority of subjects (68.0%) reporting gravidities of one to three. The marital status distribution was bimodal with the majority of subjects (90%) distributed between two categories of never married and married in almost equal proportions (47.5% and 42.5%, respectively). The remaining 10% were either divorcees or widows. Although four ethnic groups (Hispanic, White, Black and Asian or Pacific Islander) were represented in the study population, the majority (67.5%) were from the Black ethnic group. This was in conformity with an emerging trend in the US HIV/AIDS statistics.⁴

The HIV status disclosure rate was high. Of the 77 subjects who responded to the question on status disclosure to partners, 66 had disclosed their status. Similarly, 70 out of the 75 subjects who responded to the question on status disclosure to other social contacts had disclosed their status.

There was a mixed pattern of HIV status discordance among sexual partners. Of the 75 subjects who responded to the question about their partner's HIV status, 40% reported having HIV-negative partners, 24% reported having HIV-positive partners and the remaining 36% reported having partners with unknown HIV status.

Fisher's exact test was used for testing the hypothesis that 'There is no difference between HIV status disclosure and breakdown in social support structures'. Testing was conducted in two stages: HIV status disclosure to partners vs partner's social support breakdown, and HIV status disclosure to other social contacts vs other social support structure breakdown. The decision to separate partner's social support from other social contacts' support was made deliberately in cognizance of the fact that HIV is primarily a sexual problem. Whereas family members and friends can offer other forms of support almost interchangeably, sexual partners meet a specific

need for which they may not be easily substituted. The test results were significant for the partner component ($P=0.003$) but not for the other social contacts component ($P=0.374$).

Fisher's exact test was also used to test the relationship between partner's HIV status and breakdown in partner's social support. The results were statistically significant with a P value <0.0005 suggesting that there was a relationship between partner's HIV status and breakdown in partner's social support (Table 1).

DISCUSSION

Several findings in this study have public health implications. The high disclosure rates were suggestive of minimal stigma in the study population. Although there may be other explanations, it could be argued that provision of healthcare services is one way of countering stigma, given that the study was conducted in a healthcare delivery setting. The pervasive HIV-related stigma that exists in developing countries could be attributed to unavailability of HIV treatment and care.

A partner HIV status discordance rate of 40% was significant. A South African study of 168 HIV-infected male miners and their female partners reported a discordance rate of 21%.⁵ The disparity in discordance rates between a population in the USA where HAART is near universally accessible and a population in South Africa where treatment is relatively limited can be attributed to the lowered HIV transmissibility associated with HAART. The disparity suggests that antiretroviral therapy is a major component of HIV prevention.

The results on partner HIV status disclosure and breakdown in social support were counter-intuitive. The logical expectation was that partners who were already HIV infected would tend to remain in their relationships and continue offering social support, whereas those who were HIV negative or of unknown HIV status would break their relationships. The actual finding was that 70% (19 out of 27) of partners of unknown HIV status continued to offer support to their HIV-positive partners, whereas 83% (15 out of 18) of HIV-positive partners broke their relationships. These findings suggest that the decision to either remain in or break a relationship following HIV status disclosure by a partner is multifactorial and is not necessarily guided by logic. There is need for qualitative studies to be conducted on this subject with a view to determining the underlying factors.

The fact that HIV status disclosure to partners was associated with breakdown in social support, complicated by the unpredictable breakdown pattern, poses a dilemma for public health practitioners. Should the emphasis be on confidentiality or encouraging HIV status disclosure? The study findings suggest that emphasizing confidentiality may safeguard social support structures, but at the risk of discordant partners being infected under our watch. Conversely, encouraging disclosure may prevent infection among discordant couples but at the expense of social support.

Perhaps the emphasis should shift to shared confidentiality, such that in situations where individuals are in stable sexual relationships, counselling and testing should be given a couple approach. Such an approach would significantly reduce the burden on the initially diagnosed partner having to undergo the stress of disclosure with the uncertainties it portends.

STUDY LIMITATIONS

The limitations of this study were as follows. Firstly, a convenience sampling method was used, leading to an inherent selection bias. Secondly, the sample size was small; as a result, one cell in the table for Fisher's exact test had less than five individuals. Finally, the study

targeted a specific population (prenatal care attendees) so the findings may not be generalized to other populations.

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Table 1

Partner's human immunodeficiency virus (HIV) status and breakdown in support from sexual partners

Partner's HIV status	Breakdown in support from partners		Total
	No breakdown (0)	Breakdown (1)	
Negative (0)	6	24	30
	20	80	100
Positive (1)	3	15	18
	16.67	83.33	100.0
Unknown (2)	19	8	27
	70.37	29.63	100.0
Total	28	47	75
	37.33	62.67	100.0
<i>P</i> value	0.000		