Determinants of communication between partners about STD symptoms: implications for partner referral in South Africa

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Abstract

Background

STDs as preventable diseases are a major public health problem in South Africa, both in terms of their effect on quality of life, their economic costs and the fact that STDs as co-factors drive the HIV epidemic. Their widespread occurrence and high prevalence rates are cause for concern. It is argued that the duration of infection increases the probability of harmful sequelae and STD transmission, including HIV, to others. The promotion of seeking health care for STD symptoms at an early stage and partner referral for STD treatment are important strategies in preventing STD transmission to others and re-infection of partners. The cost implications of contact tracing by healthcare workers has resulted in patients being encouraged to refer their partners for STD treatment. This has not always been effective, despite efforts to improve partner referral rates by improved "contact cards" (i.e. a card with a code representing the STD that the patient has been treated for to be given to sexual partners as a way to speed up treatment) and more accessible healthcare services. Other studies have found that the proportion of clients who present with contact cards at STD services ranged from about 2% to 39%, while the proportion of partners who were referred for treatment range from 16% to 30%. Mathews et al. argue that returning contact cards might not be a sensitive enough proxy indicator for partner referral rates.

Partner referrals have been found to be seriously compromised by patients' causal explanations for STDs, as well as by the unequal power of the genders in sexual relationships, which impacts on the patients' ability to communicate about sexual matters. Patients often lack an understanding of the importance of referring their asymptomatic partners for treatment. Women's inability to discuss sexual issues due to their unequal status in sexual relationships might impact on partner referral behaviour. Men have been found to blame the STD on the "outside women" (sexual partners outside the primary relationship) and are therefore less likely to refer these partners. The conflict that could arise from informing a partner about an STD was viewed by men as a reason not to communicate about having a STD.

While the ability to communicate about STDs with sexual partners is an essential prerequisite for referring them for medical treatment, little attention has been paid to understanding this process. This study is aimed at gaining some understanding of the determinants of communication between partners about STD symptoms. In this study, "talking with a partner about STD symptoms" before seeking medical treatment was viewed as an indication of the likelihood of future partner referral behaviour.

Methods

A randomly selected sample of 1 477 patients with STD symptoms was interviewed using a structured questionnaire. Logistic regression analysis was used to identify the determinants of talking to a partner about the present STD.

Results

It was found that patients who had talked with their partner about their current STD symptoms were more likely to be female, be employed, have a tertiary level of education, have had only one sexual partner in the preceding six months, have used condoms, albeit inconsistently during the last six months, and to have thought about abstaining from sex while infected. Those who talked were also more likely to have good knowledge about the effects of STDs and the transmission of STDs in the absence of symptoms, had positive attitudes towards condoms and perceived social support for partner referral.

Conclusion

Improved partner referral through health education interventions needs to focus specifically on a subgroup of patients, e.g. men and the unemployed, and on the improvement of knowledge regarding the consequences of STDs and asymptomatic transmission. Social and partner support for partner referral and perceived self-efficacy in this regard should be encouraged and maintained. In the absence of skills and counselling services to manage the consequences of STD partner referral, this prevention strategy will remain vulnerable.

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INTRODUCTION

STDs as preventable diseases are a major public health problem in South Africa, both in terms of their effect on quality of life, their economic costs and the fact that STDs as co-factors drive the HIV epidemic.[1] Their widespread occurrence and high prevalence rates are cause for concern.[2] It is argued that the duration of infection increases the probability of harmful sequelae and STD transmission, including HIV, to others.[3,4,5] The promotion of seeking health care for STD symptoms at an early stage and partner referral for STD treatment are important strategies in preventing STD transmission to others and re-infection of partners. The cost implications of contact tracing by healthcare workers has resulted in patients being encouraged to refer their partners for STD treatment. This has not always been effective, despite efforts to improve partner referral rates by improved "contact cards" (i.e. a card with a code representing the STD that the patient has been treated for to be given to sexual partners as a way to speed up treatment) and more accessible healthcare services.[6] Other studies have found that the proportion of clients who present with contact cards at STD services ranged from about 2% to 39%, while the proportion of partners who were referred for treatment range from 16% to 30%.[7,8,9] Mathews et al. argue that returning contact cards might not be a sensitive enough proxy indicator for partner referral rates.[10]

Partner referrals have been found to be seriously compromised by patients' causal explanations for STDs, as well as by the unequal power of the genders in sexual relationships, which impacts on the patients' ability to communicate about sexual matters.[11] Patients often lack an understanding of the importance of referring their asymptomatic partners for treatment. Women's inability to discuss sexual issues due to their unequal status in sexual relationships might impact on partner referral behaviour.[12] Men have been found to blame the STD on the "outside women" (sexual partners outside the primary relationship) and are therefore less likely to refer these partners. The conflict that could arise from informing a partner about an STD was viewed by men as a reason not to communicate about having a STD.[11]

While the ability to communicate about STDs with sexual partners is an essential prerequisite for referring them for medical treatment, little attention has been paid to understanding this process. This study is aimed at gaining some understanding of the determinants of communication between partners about STD symptoms. In this study, "talking with a partner about STD symptoms" before seeking medical treatment was viewed as an indication of the likelihood of future partner referral behaviour.

METHOD

Research design and instrument development

A quantitative cross-sectional study was conducted among patients seeking health care at dedicated STD clinics. A structured, interviewer-administered Xhosa questionnaire was used, based on the findings of a previous study[11] and on Ajzen's theory of planned behaviour (TPB).[13] Both the questions and the statements were developed in the broad categories of bio-demographics, knowledge, beliefs and attitudes towards STDs, as well as beliefs, attitudes and support around referring partners for STD treatment. Questions about the patients' perceived self-efficacy to refer partners for treatment, about whether they talked to their partners about their present STD symptoms before seeking treatment, as well as about their use of condoms and the risk of HIV if condoms were not used, were also included. Additionally, questions were asked about their partner patterns and STD history. The scales that were developed from the items and used as measurements in the study are depicted in Table I.

Participants and data collection

Ethical clearance was obtained from both the HSRC and MRC Ethics Committees for the study. All participants signed an informed consent form after the details of the study had been discussed. Xhosa-speaking men and women seeking STD treatment during 1998 in two STD clinics in Cape Town, South Africa were randomly selected to participate in the study. The eventual sample comprised 1 477 STD patients (98% of the total number of patients approached). Although the data were collected some

Table I: Measurements used for knowledge, beliefs and attitudes regarding STDs and condom use

Measurements	Number of items	α/r*	Minimum/ maximum range	Mean	Standard deviation
Knowledge of sexual transmission of STDs	3	0.49	3-9	8.2	1.2
Knowledge of the effects of STDs on the neonate	3	0.75	3-9	7.9	1.5
Beliefs regarding the cause of STDs	4	0.62	4-12	7.9	2.1
Perceived seriousness of STD symptoms	2	0.44*	2-6	4.3	1.6
Positive beliefs about condoms	6	0.74	6-18	14.3	3.1
Positive attitudes towards condoms	4	0.78	4-12	8.7	2.9
Attitudes re. personal autonomy in condom use	2	0.69*	2-6	5.1	1.5
Attitudes re. personal autonomy in sexual behaviour	2	0.74*	2-6	4.3	1.8
Positive outcome expectancy of refusing sex	4	0.45	4-12	8.9	2.1

*r * - Pearson's inter-correlation coefficient*

time ago, a lack of information on communication between partners about STDs prompted the authors to publish the data.

ANALYSIS

The data analysis was based on the 1 477 STD patients who presented with STD symptoms. Frequencies were calculated for all items. To assess the determinants of communication about STD symptoms and the predictive power of the variables, a forward stepwise logistic regression analysis (PROC LOGISTIC) was conducted, with talking with a partner about the present STD as the dependent variable. The following co-variables were included as independent variables: sex, age, education, employment status, previous STD, knowledge about STD risk for HIV and about STD prevention and cure, perceived support for referring a partner, as well as the nine measurements related to knowledge, beliefs and attitudes regarding STDs, condom use and sexual behaviour. In the model tested, the predictors as a set reliably distinguished between the two groups ($X^2 = 48$, df 9, $p = 0.0001$) and the Hosmer and Lemeshow Goodness-of-Fit Test indicated that the model fit was good ($X^2 = 4$, df 8, $p = 0.88$).

FINDINGS

Description of the respondents

The socio-demographic characteristics of the patients in the study are depicted in Table II. The majority of the clinic attendees were male (78%), possibly due to the higher prevalence of asymptomatic infections found in women.[1] Although not depicted in Table II, only 1.8% had no education and a small group of the respondents (8%) had a tertiary education. The majority of the respondents (58%) were unemployed (not depicted in Table II); this is not a reflection of the national unemployment figures, which are around 36%.[14]

Determinants of communication with a partner about the present STD symptoms

The majority of the respondents (69%) indicated that they had talked to their partners about their present STD. In addition, 53% of the patients said that they had talked to their partners about the use of condoms and 52% said they had talked about the risk of HIV if condoms were not used. More than half of the respondents (52%) reported having had an STD previously. Of those respondents, 45% had had it once, 33% had had it twice and 22% had had it three times or more in the previous 12 months. Slightly more than half of the respondents (57%) reported having had two or more partners in the previous six months. Contrary to expectation, the majority of the respondents (86%) thought that they would be able to talk to their partners and friends about their STDs.

The final model fitted into the stepwise logistic regression analysis identified several determinants for talking to a partner about STD symptoms (see Table III). The analysis indicated that those respondents who had talked to their partners were more likely to be female and employed, with a tertiary level of education. In comparison to those patients who had not talked about their STD, the patients who had talked to their partners were about twice as likely to indicate that they had had only one sexual partner in the previous six months. They were also more likely to have indicated that they had used condoms during the previous six months and had thought about abstaining from sex while infected with the STD. Knowledge about STDs seemed to impact on STD communication. The patients who had talked were more likely to have a good knowledge about the effects of STDs on the neonate and about STD asymptomatic transmission, and were also more inclined to have positive beliefs about the use of condoms. In addition, they were also more likely to believe that their best friends would refer their partners to the clinic for STD treatment and that they would not be blamed by their partners for the STD should they refer them for treatment.

DISCUSSION

While the data were collected some time ago and the findings cannot be generalised to the wider population of STD patients, relevant guidelines for practice can be formulated about communication between partners, a neglected topic in STD research. The data suggest opportunities for interventions directed at improving communication between partners as a way to facilitate partner referral. Most respondents expressed high self-efficacy in their ability to talk about STD symptoms and to refer their partners for STD treatment, and also perceived social support for these behaviours. However, the need for patients to respond in a socially desirable way might have played a significant role in their responses. Nevertheless, difficulties do exist around talking about STDs, as reflected in current STD referral practices.1,10

The significant demographic variables suggest that specific groups will need particular attention in efforts to motivate partner referral behaviour. These groups include those who have

Table II: Socio-demographic characteristics of the sample (N=1474*)

Age	Sex	Education				Total
		Primary and less	*Junior secondary*	*Senior secondary*	*Tertiary*	
20 and younger	Male	23	72	73	6	174
	Female	4	46	57	8	115
21-25	Male	86	144	178	52	460
	Female	6	33	66	21	126
26-35	Male	99	163	107	21	390
	Female	9	30	27	3	69
36+	Male	59	52	16	2	129
	Female	4	5	2	0	11

*Patients with missing values were omitted.

Table III: Logistic regression analysis of the determinants of communication with partner about present STD (N=1 457)

Independent variable*	Parameter estimates (Beta values)	Standard error	X^2 Df 1	P-value	Unit**	Odds ratio	95% Confidence intervals	
							lower limit	upper limit
Sex	-0.6907	0.1887	12.3975	0.0003	1	0.501	0.367	0.684
Education	-0.6525	0.2635	6.1333	0.0133	1	0.521	0.338	0.803
Employed	0.3571	0.1313	7.4038	0.0065	1	1.429	1.152	1.774
Sex partner(s) in previous six months	0.7053	0.1589	19.7895	0.0001	1	2.024	1.559	2.629
Condom use in previous six months	0.3720	0.1376	7.3058	0.0069	1	1.451	1.157	1.819
Thought about abstinence	0.2639	0.1331	3.9314	0.0474	1	1.302	1.046	1.621
Knowledge about effects of STDs on the neonate	0.0923	0.0396	5.4335	0.0198	3	1.319	1.085	1.604
Positive beliefs about condoms	0.0385	0.0207	3.4806	0.0621	6	1.260	1.028	1.545
Pass on STDs only when one has symptoms	-.04318	0.2390	3.2638	0.0708	1	0.649	0.438	0.962
Best friends don't refer their partners for treatment	-0.3028	0.1357	4.9806	0.0256	1	0.739	0.591	0.923
Will be blamed for STD when referring partner	-0.4814	0.1525	9.9688	0.0016	1	0.618	0.481	0.794

*Sex (Male = 1, Female = 0); Education (lower than tertiary = 1, tertiary = 0); Employed (Yes = 1, No = 0); Number of sex partners in previous six months (One = 1, Two+ = 0); Condom use in previous six months (Yes = 1, No = 0); Thought about abstinence while infected with STDs (Yes = 1, No = 0); Knowledge of STD effects on the neonate (higher knowledge = high score, lower knowledge = low score); Beliefs about condoms (positive beliefs = high score, negative beliefs = low score); Pass on STDs only when one has symptoms (Yes = 1; No = 0); Best friends don't refer their partners for treatment (Yes = 1, No = 0); Will be blamed for STD when referring your partner (Yes = 1, No = 0).
**To make the scales of the predictors comparable, the odds ratios (and confidence intervals) are determined in terms of ti units, where ti is the number of items in the factor i.

less than a tertiary level of education, are unemployed and are young men. It is important to note that the majority of STD patients (59%) were 25 years and younger, while 90% were younger than 36 years. This age distribution is also reflected in the relatively young age distribution of HIV-infected people in South Africa.[15] Young men in particular should be a major target group for interventions directed at the early diagnosis, treatment and prevention of STDs.

The unequal gender-power relationships between men and women in Southern Africa have often been cited as reasons for women's inability to talk about sexual matters and to negotiate safer sex with their partners.1,11,12 However, the women in the study were more likely than the men to talk about their present STDs with their partners. Their talking is possibly motivated by their awareness that their male partners have "outside" sexual partners.11 The lack of communication by males about STD symptoms in multi-partner relationships might be out of fear of potential conflict or blame for the STD, the inability to locate partners, or a lack of caring.11 As multiple partners facilitate the re-infection and transmission of STDs, partner reduction should be an essential element in STD health education. While the consequences of STD partner referral for the intimate relationship, namely that of conflict and distrust, are obvious, the development of skills and strategies to manage these consequences is hugely neglected in STD health education and needs consideration.

The fact that patients who had used condoms in the previous six months were also more likely to have talked to their partners about their STDs suggest some communication competence. A reciprocal reinforcement might occur when a repertoire of preventative behaviours exists, i.e. condom use and partner referral. While condom use remains an important preventative strategy, abstinence from sex while infected as another strategy to prevent STD transmission seems feasible when patients are well informed about STD transmission and the consequences of STDs.

In the absence of population diagnostic screening services to detect asymptomatic STDs at clinics, reliance on patients to talk to their partners and to refer them for STD treatment will continue.1 In health education efforts, health workers should pay special attention to patients who are least likely to refer their partners for treatment. However, in the absence of communication and relationship skills development and accessible counselling for couples, partner referral as an STD preventative strategy remains vulnerable.

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