SHORT REPORT

Health seeking and sexual behaviour in patients with sexually transmitted infections: the importance of traditional healers in Thyolo, Malawi

R Zachariah, W Nkhoma, A D Harries, V Arendt, A Chantulo, M P Spielmann, M P Mbereko, L Buhendwa

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Objectives: To describe health seeking and sexual behaviour including condom use among patients presenting with sexually transmitted infections (STIs) and, to identify sociodemographic and behavioural risk factors associated with "no condom use" during the symptomatic period.

Methods: A cross sectional study of consecutive new STI cases presenting at the district STI clinic in Thyolo, Malawi. They were interviewed by STI counsellors after obtaining informed consent. All patients were treated according to national guidelines.

Results: Out of 498 new STI clients, 53% had taken some form of medication before coming to the STI clinic, the most frequent alternative source being the traditional healer (37%). 46% of all clients reported sex during the symptomatic period (median 14 days), the majority (74%) not using condoms. 90% of all those who had not used condoms resided in villages and had seen only the traditional healer. Significant risk factors associated with "no condom use" included visiting a traditional healer, being female, having less than 8 years of school education, and being resident in villages. Genital ulcer disease (GUD) was the most common STI in males (49%) while in females this comprised 27% of STIs.

Conclusions: These findings, and especially the extremely high GUD prevalence is of particular concern, considering the high national HIV prevalence in Malawi (9%) and the implications for STI and HIV transmission. There is an urgent need to integrate traditional healers in control activities, encourage their role in promoting safer sexual behaviour, and to reorient or even change existing strategies on condom promotion and STI control.

exually transmitted infections (STIs) are known to facilitate the sexual transmission of HIV¹² and effective STI case management is known to reduce the incidence of HIV.³ Malawi has both high HIV and high STI rates. The national HIV prevalence in Malawi is 9%, while among antenatal women the syphilis seroprevalence is estimated at 2–10%.⁴ In 1990, 42% of antenatal clinic attendees were diagnosed with at least one STI and HIV infection rates among patients with STIs range from 53–83%.⁵ STI control in Malawi is therefore of major public health importance.

An important determinant of effective STI control is the health seeking behaviour of people with STIs who may seek care from alternative sources (outside an official STI clinic) such as traditional healers, private clinics, pharmacists, and market vendors.

Traditional healers in particular are well reputed in African rural communities and are often considered to be the most appropriate initial point of contact for help when symptoms of

STIs are thought to be linked to traditional beliefs and related perceptions.⁶

Knowledge about the relative importance of these alternative providers in STI control could encourage better collaboration with some of these groups, encourage early referral for effective antibiotic treatment, and help remove or reduce potential barriers to STI control.

Control of STIs involves not only providing effective and early treatment, but also promoting safe sexual practices by those that are infected. Information on such practices would be useful for assessing and improving existing control activities

The objectives of this study were (a) to describe health seeking and sexual behaviour, including condom use during the symptomatic period among patients presenting with STIs, and (b) to identify sociodemographic and behavioural risk factors associated with "no condom use" during the STI symptomatic period.

METHODS

Study population and data collection

The study was conducted in the main rural public hospital STI facility in Thyolo District, a rural region in southern Malawi.

Consecutive new STI cases presenting during a 4 month period were interviewed after obtaining informed consent. A semistructured questionnaire, which was pretested, was used to gather basic sociodemographic data, as well as information on health seeking and sexual behaviour. Confidentiality was ensured and all patients were diagnosed and managed using national STI guidelines adapted from the syndrome based approach (clinical assessment of signs and symptoms) as recommended by the World Health Organization (WHO).

Reported "no condom use" during sexual encounters in STI symptomatic period was designated as the dependent variable for identifying potential risk associations.

Statistical methods

Analysis was done using the EPI-INFO software (Centre for Disease Control, Atlanta, GA, USA), and the LOGISTIC software. The level of significance was set at p=0.05 and 95% confidence intervals (CI) were used throughout. The measures of risk were determined by crude odds ratio (OR) and adjusted odds ratios (adjusted OR). Odds ratios were adjusted using multivariate logistic regression, and all related p values were based on the likelihood ratio statistic.

RESULTS

Characteristics of the study population

A total of 498 new STI clients who were diagnosed with an STI participated in the study (median age 25 years). The majority of patients (79%) came from villages, were married (62%) with a mean educational level of 6 years in school. Patients

Table 1 Health seeking and sexual behaviour in patients presenting with sexually transmitted infections

Variable	Males (%)	Females	Total (%)
Total	248	250	498
Previous medication	132(53)	130(52)	262(53)
Modern (ampicillin, cotrimoxazole, etc)	50(38)	43(33)	93(35)
Traditional (herbs, roots, etc)	48(36)	49(38)	97(37)
Both	34(26)	38(29)	72(28)
Source of previous medication (n=262)			
Private health facilities	26(20)	29(22)	55(21)
Drug vendors/pharmacy	24(18)	38(11)	62(24)
Traditional healers	48(36)	49(38)	97(37)
Several of the above	34(26)	14(11)	48(18)
Median duration of STI symptoms (days)	14	11	14
Sex during symptomatic period = yes	97(42)	134(58)	231(46)
With same partner	67(69)	124(93)	191(83)
With different partners	30(31)	10(7)	40(17)
Condom use during sex in symptomatic period (n=231)			
Always	3(3)	2(2)	5(2)
Intermittent/sometimes	34(35)	22(16)	56(24)
No condom use	60(62)	110(82)	170(74)
Reasons for "no condom use" (n=170)			
Sex with steady partner or spouse	32(53)	84(76)	116(68)
Refusal by partner	2(3)	11(10)	13(8)
Condom not available	15(25)	8(7)	23(14)
Reduces pleasure	4(7)	3(3)	7(4)
Religious reasons/did not know	7(12)	4(4)	11(6)

Table 2 Selected sociodemographic and behavioural risk factors associated with "no condom use" in STI patients reporting sex during the symptomatic period (n=231)

	Condom			p Value
Variables	No (%)	OR	*Adjusted OR (0.95 CI)	
Sex				
Male	60/97 (62)	1	1	
Female	110/134 (82)	2.8	2.5 (1.1-6.2)	0.04
Age				
<20 years	146/198 (74)	0.9	0.9 (0.3-2.4)	0.78
>20 years	24/33 (73)	1	1	
Marital status				
Single/divorced/widowed	33/54 (61)	1	1	
Married	137/177 (77)	2.2	1.5 (0.6-3.3)	0.36
Education				
<8 years	154/196 (79)	4.4	2.6 (1.1-6.2)	0.03
>8 years	16/35 (46)	1	1	
Residence				
Semiurban towns	21/46 (46)	1	1	
Villages	149/185 (81)	4.9	4.0 (1.9-8.5)	< 0.001
Occupation				
Farmers	90/105 (86)	3.5	1.3 (0.5-3.2)	0.63
Non-farmers	80/126 (64)	1	1	
Partners				
Same partner	144/191 (75)	1.7	0.9 (0.4-2.2)	0.82
Different partner	26/40 (65)	1	1	
Previous medication				
Traditional medicine alone	41/45 (91)	4.5	4.1 (1.3-12.9)	0.01
Other sources	129/186 (69)	1	1	

included farmers (38%), unskilled employees (36%), skilled employees (3%), business people (14%), and students (9%).

In male patients genital ulcer disease (GUD) was the most common STI (49%), followed by urethral discharge (42%). In female patients, abnormal vaginal discharge with or without dysuria was the most common (50%), followed by genital ulcer disease (27%), and pelvic inflammatory disease (18%).

Health seeking and sexual behaviour

The median reported time with STI symptoms before coming to the STI clinic was 14 days (range 2 days to 4 years), with

53% of all patients having taken some form of medication before coming to the clinic. The most frequent single source of medication was the traditional healer (37%) (table 1).

The majority of STI clients (83%) who had seen a traditional healer resided in villages, and 90% of these patients had an educational level of less than 8 years in school. In all, 46% of patients with an STI had reported having sex during the symptomatic period, the majority (74%) had not used condoms (table 1). Ninety per cent of all those who had not used condoms during sexual encounters resided in villages and had seen only the traditional healer.

Key messages

In a rural district in Malawi:

- (1) Alternative care providers, particularly traditional healers, have an important role in STI control. Traditional healers should be integrated in STI control activities and their role in promoting safer sexual behaviour should be encouraged.
- (2) The majority of STI clients who report sex during the symptomatic period have engaged in "unprotected sex," indicating the need to reorient (or even change) existing strategies on condom promotion.
- (3) The prevalence of genital ulcer disease (GUD) is extremely high (49% in males and 27% in females). The implication of this particular finding on transmission of HIV, merits that the national AIDS control programme develops a specific focus for decreasing the incidence and prevalence of GUDs.

The main reasons for no condom use during sex in the symptomatic period are shown in table 1.

Risk factors associated with "no condom use"

Significant risk factors associated with "no condom use" while having sex in the symptomatic period include having visited a traditional healer, being female, having had less than 8 years of school education, and being resident in villages (table 2).

DISCUSSION

This study shows that 53% of all STI patients had first sought care at an alternative source, the majority with the traditional healer. GUD rates in STI clients is extremely high and 74% of clients engaged in unprotected sex while symptomatic. Having unprotected sex was significantly associated with visiting the traditional healer, being female, being resident in villages, and having had less than 8 years of school education.

Since over half of all STI clients, had first received medication at a source outside the official STI clinic, these different sources could be targeted to improve STI management and reduce delays in effective treatment.9

The traditional healer was found to be the most important single source of alternative care. Visiting a traditional healer for care was also found to be a risk factor associated with "no condom use," indicating that condom promotion is not effectively encouraged by this group.

In Malawi, traditional healers are generally reputed as being sympathetic, more confidential, and easily accessible. Considering their importance as an alternative care provider, and the potential part they could play in encouraging safer sexual behaviour, it would be important to integrate them in control activities and ensure condom availability (to clients) at their sites.

The national tuberculosis control programme in Malawi conducts training sessions with traditional healers from around the country, and encourages early referral of tuberculosis suspects. Training on STIs and HIV infection could be linked with such an existing initiative, and might be one way of also encouraging earlier referral (by healers) for antibiotic treatment.

The extremely high GUD rates in our rural setting although alarming, is similar to a study in Lilongwe where 67% of all STI clients had GUD.10 These figures also compare with other southern African countries worst affected by HIV infection, where the proportion of men and women with STI who had genital ulcers was in the ranges 45-68% and 13-68%, respectively.11 However, the implication of this particular finding on transmission of HIV merits that the national AIDS

control programme develops a specific focus for decreasing the incidence and prevalence of GUDs.

Mass awareness campaigns that are adapted for the less literate,12 increased condom availability in rural areas, and promoting the female condom that could facilitate independent and assertive behaviour on safer sex by women are all measures to be considered.

The findings of this study will be useful for reorienting, or even changing, existing strategies in STI and HIV control in the district.

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CONTRIBUTORS

RZ and MPS were involved with the study design, training on data collection, supervision, data entry and analysis, as well as writing the initial paper and repeated versions; WN, ADH, and VA contributed to improving the study design and analytic methods, editing the manuscript, and improving its intellectual content, as well as seeking ethical approval; AC, MPM, and LB contributed to questionaire design, training, field implementation, and editing the manuscript.

Authors' affiliations

R Zachariah, M P Spielmann, L Buhendwa, Médecins Sans Frontières, Luxembourg, Thyolo District, Malawi

W Nkhoma, National AIDS Control Program, Ministry of Health and Population, Malawi

A D Harries, National TB Control Program/DFID technical adviser,

V Arendt, Department of Tropical and Infectious Diseases, Luxembourg A Chantulo, M P Mbereko, STI Services, Thyolo District, Ministry of Health and Population, Malawi

Correspondence to: Dr R Zachariah, Head of Mission (Mission Malawi), Médecins sans Frontières-Luxembourg, 70 rue de Gasperich, L-1617, Luxembourg; msflblantyre@malawi.net

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REFERENCES

- 1 Clottey C, Dalabetta G. Sexually transmitted diseases and human immunodeficiency virus, epidemiologic synergy? Infect Dis Clin North Am 1993;7:95-102
- 2 Cameron DW, Simonsen JN, D'Costa LJ, et al. Female to male transmission of human immunodeficiency virus type 1: risk factors for seroconversion in men. Lancet 1989;**2**:403-7.
- 3 Grosskurth H, Mosha F, Todd J, et al. Impact of improved treatment of sexually transmitted diseases on HIV infection in rural Tanzania. Randomized controlled trial. Lancet 1995;346:530-6
- 4 National AIDS Control Programme of Malawi. HIV/Syphilis seroprevalence in antenatal clinic attenders. Sentinal Surveillance Report. NACP, PO Box 30622, Lilongwe 3 1999.
- 5 Kristensen JK. The prevalence of symptomatic sexually transmitted diseases and human immunodeficiency virus infection in outpatients in Lilongwe, Malawi. *Genitourin Med* 1990;**66**:244–6.
- 6 Green EC. Sexually transmitted disease, ethnomedecine and health
- 7 WHO Study Group. Management of patients with sexually transmitted diseases. WHO Tech Rep Ser 1991:No 810.
 8 Dallal GE. LOGISTIC: a logistic regression program for the IBM PC". The American Statistician 422, 272.
- 9 Moses S, Ngugi EN, Bradley JE, et al. Health care-seeking behaviour related to the transmission of sexually transmitted diseases in Kenya. Am Public Health 1994;**84**:1891–3.
- 10 Kristensen JK. The prevalence of symptomatic sexually transmitted diseases and human immunodeficiency virus infection in outpatients in Lilongwe, Malawi. *Genitourin Med* 1990;**66**:244–6.
- 11 O'Farrell N. Targeted interventions required against genital ulcers in African countries worst affected by HIV infection. Bull World Health Organ 2001;79:569-77.
- 12 Fonck K, Mwai C, Rakwar J, et al. Healthcare-seeking behaviour and sexual behaviour of patients with sexually transmitted diseases in Nairobi, Kenya. Sex Transm Dis 2001;28:367-71.