

Quality of sexually transmitted infections services for female sex workers in Abidjan, Côte d'Ivoire

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Summary

OBJECTIVES To assess the quality of sexually transmitted infections (STI) care in health care facilities in Abidjan attended by female sex workers.

METHODS A cross-sectional study was conducted in June 2000 in the 29 health care facilities and 10 pharmacies, which were reported as points of first encounter for STI care by female sex workers in a previous study on health seeking behaviour. Evaluation components included: (1) checklists of equipment and STI drugs in the facilities; (2) interviews with health care providers and pharmacists; (3) direct observation of the provider/client interaction; (4) exit interviews with women attending with STI or genital problems.

RESULTS Private health care facilities were more expensive, had fewer clients, and had less equipment and medical staff than public facilities, with the exception of the special female sex worker clinic. A total of 60 health care providers and 29 pharmacists were interviewed. There was no difference in their scoring on syndromic approach case studies, with the exception of the nurse assistants, who scored less. Overall scores for correct treatment were lowest for the pharmacists. We observed 513 provider–client interactions, of which 161 related to STIs or genital problems in women. Questions about recent sexual contacts were asked in only 20% and preventive messages were given in only 9% of the cases with STI/genital problems. Of 161 clients interviewed, 44% complained about a long waiting time, and 39% thought the health care provider had adequately explained the problem to them.

CONCLUSIONS The opportunity for improvement of STI case management in health care facilities in Abidjan where female sex workers go for STI care is enormous. Public and private health care facilities should be made more accessible for sex workers, and their services should be upgraded to better respond to the sexual health needs of high risk women.

keywords sexually transmitted infections, female sex workers, quality of care, Africa

Introduction

The provision of treatment for sexually transmitted infections (STI) and the promotion of condoms enhance preventive behaviour and reduce STI/HIV incidence among female sex workers, which in turn has the potential to reduce STI/HIV in the general population (Laga *et al.* 1994; Steen *et al.* 2000). Female sex workers have some specific needs regarding STI case management, preventive messages, and condom promotion. Conventional health care facilities may fail to meet these needs for several reasons including a prejudicial attitude of health care providers and ignorance about sex workers' problems. Specialized health services may offer better opportunities for targeted educational sessions and health promotion,

but they may not cover the whole target population and they may be inaccessible for some sex workers (Nyamuryekung'e *et al.* 1997; Vuylsteke *et al.* 2001).

There is therefore a need to integrate services for female sex workers and other vulnerable women into the primary health care system, which should be accessible for vulnerable women and respond to their sexual health needs.

In Abidjan, Côte d'Ivoire, a clinic for female sex workers has been in operation since 1992 (Ghys *et al.* 2002). This clinic offers free HIV counselling and testing, condom promotion and primary health care services for female sex workers. A population based survey on health seeking behaviour was conducted among female sex workers in Abidjan in 1997 (Vuylsteke *et al.* 2001). The results of that study indicate that despite the presence of the specialized

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clinic, many female sex workers seek care for STI in public and private general health facilities. It is not known whether these services meet the specific needs of female sex workers nor whether they can offer good quality STI case management. The objectives of this study were to assess the quality of STI services in health care facilities in Abidjan where female sex workers seek STI care.

Methods

A cross-sectional study was conducted in June 2000 in the health care facilities and pharmacies, which were reported as the sites where female sex workers first sought STI care in a previous study on health seeking behaviour (Vuylsteke *et al.* 2001). Fourteen research assistants were trained to operate in teams of two per team. After consent was obtained from the manager of the health care facility, an inventory of the available equipment for genital examination and STI drugs was conducted based on a standardized list. Direct observation of the provider/client interaction was undergone by a research assistant according to a standardized checklist during three consecutive working days. If more than one health care provider was attending, one of them was chosen by random selection for observation for the day. On exit, all women who had attended with STIs or genital problems were invited for an interview in a separate room. Another research assistant conducted the interview, using a standardized questionnaire, including questions on clients' understanding of preventive messages and their satisfaction. After completing the 3 observation days, an interview was conducted with three randomly selected, or with all (if three or less) health care providers working in the facility. A standardized questionnaire included questions on STI diagnosis and treatment. At the end of the interview, three case studies were presented to the health care providers, who were asked to select a management option by multiple choice. The answers were scored as follows: 2-points, correct management; 1-point, partly correct; 0-points incorrect management. Correct management was identified according to national (Ministry of Health, Côte d'Ivoire) or international [World Health Organization, Geneva or Centers for Disease Control and Prevention (CDC), Atlanta, USA] guidelines. In pharmacies, an inventory and interviews with pharmacy vendors were conducted using the same methods. Direct observation and client interview were not performed in pharmacies.

The study was determined to be exempt from IRB approval as part of the evaluation of STI programmes. Written informed consent was obtained from all study participants. All interviews and observations were anonymous. Participating clients received additional information on STIs and HIV prevention.

Statistical analysis of the data was carried out using the Intercooled STATA 5.0 statistical package (Stata Corporation, TX, USA). For non-normally distributed data, median and interquartile range (IQR) were used to describe their distribution. Univariate analysis was carried out using Yates' corrected chi-square or Fisher's exact test for comparing proportions.

Results

Sites for STI treatment in Abidjan which were reported by female sex workers during the 1997 study included 13 public and 16 private health care facilities and 10 pharmacies. One private clinic was offering services to female sex workers and their stable partners only, all other health structures were open to the general public. Selected characteristics of the health care facilities are shown in Table 1. Private health care facilities were more expensive but had less equipment and medical staff than public facilities. The workload, in terms of number of clients, was much smaller in private health facilities. The specialized female sex worker clinic offered STI services free-of-charge, was fully equipped, and was staffed by five physicians. This clinic is attended by a median of 500 clients/month, among whom a median of 400 women have STI complaints. The pharmacies were staffed by one to two pharmacists and three to seven pharmacy vendors. Their prices for antibiotics for STI treatment varied greatly, e.g. six to 10 tablets of 500 mg ciprofloxacin cost 5360–9130 CFA; 10 tablets of 100 mg doxycycline 2570–4780 CFA (1 US dollar equals approximately 600 CFA).

A total of 60 health care providers and 29 pharmacists were interviewed. The median number of years of professional experience was 8.5 for physicians, 14.5 for nurses and 9.0 for pharmacists. The selected characteristics and knowledge of STI management of the physicians, nurses, nurse assistants and pharmacists are presented in Table 2. The median score obtained for the case studies was 4 (IQR 3–5) for physicians, 3.5 (IQR 3–6) for nurses, 2 (IQR 2–3) for nurse assistants and 4 (IQR 2–5) for pharmacists. Compared with nurses, the proportion of physicians who judged their own STI knowledge sufficient and named the correct treatment of trichomoniasis was higher. Correct treatment was considered if the correct drug and dosage were named, according to national (Ministry of Health, Côte d'Ivoire) or international (World Health Organization, Geneva or CDC, Atlanta, USA) guidelines. Overall scores for correct treatment recommendations were lowest for the pharmacists. A comparison was made between health care providers (physicians, nurses and nurse assistants) who recently participated in a STI course and those who had not. Compared with the others, providers who

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	Public HCF (N = 13)	Private HCF (N = 15*)
Number of HCF in which STI services are offered	13	13
Number of HCF in which family planning services are offered	9	2
Median price of a consultation (CFA) (STI and other)	1000 (IQR 500–1500)	2000 (IQR 1000–5000)
Median number of physicians	2	1
Median number of nurses	0	1
Median number of consultation rooms	3	1
Equipment and supplies		
Number of HCF which have	13	11
Examination table		
Light source for examination table	11	4
At least three sterile specula	8	4
Laboratory with minimum equipment	10	1
Number of HCF which have		
Posters with STI/HIV prevention messages	9	0
Male condoms present	3	0
Drugs available	11	10
STI kits† available	7	0
Median number of clients/month	450 (IQR 138–683)	44 (IQR 20–90)
Median number of women with STI complaints/month	38 (IQR 19.5–49)	3 (IQR 0–30)

* Excluding the specialized clinic for female sex workers.

† Ministry of Health promoted STI treatment kits, including antibiotic treatment for a specific syndrome, information leaflet and condoms.

IQR, interquartile range; STI, sexually transmitted infections.

participated in a STI course <3 years before did not score better in the syndromic case reports (68.2% *vs.* 67.6%, $P = 0.97$). However, they reported the correct treatment of gonorrhoea more frequently (50% for those who participated *vs.* 13% for those who had not participated, $P = 0.002$), of chlamydial infection (73% *vs.* 26%, $P < 0.001$), of trichomoniasis (50% *vs.* 16%, $P = 0.005$), of chancroid (41% *vs.* 13%, $P = 0.010$), and of syphilis (55% *vs.* 16%, $P = 0.002$). We also compared health care providers who judged their STI knowledge sufficient with those who did not. Compared with the others, providers who judged their STI knowledge sufficient did not score better in the syndromic case reports (73.5% *vs.* 59.1%, $P = 0.26$).

We observed 513 client–provider contacts, of whom 161 related to STIs or genital problems in women, who were not necessarily female sex workers. The median duration of a client provider contact was 9 min (IQR 5–15), and for women with STI/genital problems it was 13 min (IQR 9–18). Selected indicators of STI management in women as measured by direct observations of health care provider–client encounters are presented in Table 3. Among female clients presenting with genital symptoms, questions about

recent sexual contacts were asked in only 20% and preventive messages were given in only 9% of the cases.

Selected indicators of STI management in women with genital complaints as reported by interviewed clients are presented in Table 4. Of the 161 female clients invited, only three refused the interview. Most clients were happy with the clinic and with the attitude of the health care provider, and would return to the same place for the next health problem. Of all clients interviewed, 44% complained about a long waiting time, and 39% thought the health care provider had adequately explained the problem to them.

Discussion

Our study showed a rather poor quality of STI services in health care facilities and pharmacies in Abidjan, which were mentioned as points of first encounter by female sex workers. About a quarter (24%) of female sex workers indicated private clinics as their preferred service provider for STI during a previous study (Vuylsteke *et al.* 2001). However, this study showed that these private health care facilities were generally small, poorly equipped, and more

Table 1 Characteristics of health care facilities (HCF) which were indicated by female sex workers in Abidjan as where they first sought STI care

B. Vuylsteke *et al.* **Quality of STI care for female sex workers in Abidjan, Côte d'Ivoire****Table 2** Characteristics and knowledge of sexually transmitted infections (STI) management of health care providers and pharmacists as reported in interviews

	Physicians (N = 32, %)	Nurses (N = 12, %)	Nurse assistants (N = 16, %)	Pharmacists (N = 29, %)
Participated in STI course	62.5	75.0	31.2	17.2
Participated in STI course (≤3 years ago)	43.7	41.7	18.7	10.3
STI handbook, including STI case management or algorithms available	28.1	16.7	21.7	3.4
Judges STI knowledge sufficient	78.1	50.0	18.7	62.1
Reported STI management for women				
Asks questions about sexual contacts	71.9	75.0	50.0	55.2
Performs gynaecological examination	84.4	58.3	31.2	–
Asks for laboratory tests*	75.0	25.0	6.2	–
Score ≥3/6-points in case studies on syndromic management†	76.7	81.8	40.0	72.4
Reported correct treatment for				
Gonorrhoea	28.1	25.0	25.0	10.3
Chlamydial infection	59.3	33.3	18.7	0.0
Trichomoniasis*	43.7	8.3	12.5	6.9
Genital <i>Candida</i> infection	28.1	8.3	25.0	6.9
Chancroid	18.7	33.3	25.0	10.3
Syphilis	37.2	16.7	25.0	3.4
Reported preventive messages given to STI clients				
Advice on condom use	75.0	83.3	68.7	55.2
Preventive messages on STI/HIV	31.2	16.7	12.5	10.3

* Chi-square test comparing physicians and nurses, $P < 0.05$.† Chi-square test comparing nurse assistants with others, all $P < 0.05$.

expensive than public ones. Studies from other countries have also shown that a high proportion of clients prefer to use private-for-profit providers despite higher fees than the official charges in the public sector and serious deficiencies in technical quality (Brugha & Zwi 1998). Private providers often offer services which are perceived by users to be more attractive. The reasons are many and have been attributed mostly to issues of acceptability, including greater ease of access, shorter waiting periods, longer or more flexible opening hours, better availability of staff and drugs, more sensitive health worker–client attitudes, and greater confidentiality in dealing with health problems such as STI which carry social stigma.

Prices of STI drugs were rather high in this study; they are overall high in Côte d'Ivoire. Most drugs are imported by foreign pharmaceutical companies and laboratories from Europe, mainly from France. A generic drug policy has been introduced in the country about 10 years ago, but preponderance of professional and commercial interests in the formulation of health policies, including supplies of

pharmaceutical products, have led to poor access to generic and cheap drugs (Brunet-Jaillet 1997, World Bank Report).

The World Health Organization developed two prevention indicators (PIs) for measuring the quality of STI care, known as PI6 and PI7 (UNAIDS/WHO 1999). PI6 measures the proportion of clients presenting themselves with symptoms of an STI, who are diagnosed and treated appropriately. We have used knowledge of correct treatment by health care providers as a proxy for PI6. In reality, the PI6 may be lower, as correct knowledge does not always imply correct application of this knowledge. In this study, knowledge of correct treatment of selected STIs was very low in almost all settings. Similar results were found in a multicentre study in six countries in West Africa (Bitera *et al.* 2002). In our study, health care providers who received a recent STI training course scored significantly better than health care providers who did not, except for the syndromic management case studies. This underscores the importance of training, ongoing supervision and re-inforcement after training, as has been demonstrated in

B. Vuylsteke *et al.* **Quality of STI care for female sex workers in Abidjan, Côte d'Ivoire****Table 3** Selected indicators of sexually transmitted infections (STI) management for women as measured by direct observations of health care provider–client encounters ($N = 161$) in health care facilities

Observed during the observation	%
Questions asked in client interview about	
Symptoms	98.1
Onset of symptoms	88.8
Date of last menses	85.1
Recent sexual contacts	19.9
Number of sexual partners	12.4
Steps performed during the medical examination	
Examination steps explained to client	26.1
Inspection of genital area	69.6
Gloves used for the examination	88.8
Bimanual examination performed	84.5
Speculum examination performed	51.5
Laboratory specimen taken	4.3
Action taken	
Referral to laboratory	24.2
Drugs given	6.8
Drugs prescribed	81.4
Referral to other health structure	11.8
Follow-up appointment given	61.5
Information given to the client, on	
Diagnosis	50.9
How to take the treatment*	61.6
Risk behaviour reduction	10.6
Prevention of STI/HIV	8.7
Condom use	8.7
Partner referral and/or treatment	11.8

* If drugs were given or prescribed ($n = 138$).

Table 4 Selected indicators of sexually transmitted infections (STI) management in women with genital complains as measured by client interviews ($N = 158$)

Clients reporting	%
Convenient opening hours	81.0
A friendly reception	98.7
Long waiting time before being attended	43.7
Given the opportunity to explain their problem	95.0
The health care provider was really listening	99.4
The HCP fully explained the problem to them	39.2
The HCP fully explained how to take the drugs*	47.0
Condom messages received	10.1
Preventive STI/HIV messages received	2.5
Partner referral or treatment messages received	12.0
Price of the consultation was too high	12.3
Intention to attend same HCF when next health problem	94.3

HCP, health care provider.

* If drugs were prescribed or given ($n = 132$).

multiple intervention programmes. In Rwanda for instance, nurses were able to correctly apply the syndromic STI management guidelines with adequate post-training

supervision, and a high degree of clinical improvement was achieved (Steen *et al.* 1998).

The PI7 measures the proportion of clients who receive basic counselling about condoms and partner notification. In a multicentre study performed in six countries in West Africa, this indicator was 15% (Bitera *et al.* 2002). In our study, we measured this indicator by direct observation of client–provider contacts as well as by client interviews. Client interviews have the advantage of providing information on what the client has learned as opposed to what the provider has said (Saidel *et al.* 1998). This indicator was very low in our study. In many cultures, there is still a stigma about STIs and health care providers may be reluctant to take a sexual history or to counsel a female client on STI prevention. Female sex workers have specific needs regarding safe sex counselling, preventive messages, and condom negotiation skills. These aspects should be included and underscored during a STI training course.

Specialized health services such as the confidential clinic in Abidjan may offer better opportunities for high risk women, including more targeted educational sessions and health promotion, than general health services. However, coverage may be a problem and up scaling of existing services is badly needed. In Côte d'Ivoire for instance, the CDC (Atlanta, USA) funded GAP project is replicating the model of the confidential clinic all over the country. Specialized services for female sex workers are currently being offered in San Pedro, a port city, in Yopougon, a remote district in Abidjan, and new sites in other cities have been planned.

We included pharmacies in our study, because many female sex workers reported a pharmacy as their preferred service provider during the health seeking behaviour study (Vuylsteke *et al.* 2001). However, knowledge of correct STI treatment was found to be very low by pharmacists and/or pharmacy vendors. Whether training of pharmacists will effectively contribute to the control of STIs in female sex workers remains unanswered. Syndromic case management of STIs in women or female sex workers may be difficult in pharmacies, because of the poor predictive value of symptoms and signs (Garcia *et al.* 1998). A clinical examination is not possible in most cases, because of the lack of privacy and equipment for an examination (Somsé *et al.* 2000).

In conclusion, the opportunity of improvement for STI case management in health care facilities in Abidjan where female sex workers go for STI care is enormous. Public and private health care facilities should be made more accessible for sex workers, and their services should be upgraded to better respond to the sexual health needs of this population and other vulnerable women. First of all, the

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experience of the sex worker clinic in Abidjan should serve as a model for up scaling services for sex workers in the country. In addition, the clinic should also serve as a training centre for staff of health care facilities in Abidjan where female sex workers most often go.

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