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Sexually transmitted infection care in Pakistan: The providers perspective

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Abstract

Objective: To explore the healthcare providers' perspectives in the management of sexually transmitted infections.

Methods: The mixed-method qualitative study done in 2008 involved 51 general practitioners and specialists who are known among peers for managing sexually transmitted infections. Interviews were conducted using semi-structured instruments and recruitment was kept open within each provider type until specific themes were saturated. Providers were interviewed from 5 cities in Pakistan.

Results: Each type of provider was usually found dealing with a specific population sub-group. Nearly all providers were practising personal empiricism, rarely following any standardised guidelines. Testing for asymptomatic infections such as human immunodeficiency virus, syphilis or anal infections was rare as was counselling or partner management.

Conclusion: Encounters with patients suffering from sexually transmitted infections seem to be missed opportunities to control community based transmission of such infections. Implementation research is needed to better understand how to induce healthcare providers to better manage these infections, test for asymptomatic infections and advise partner management.

Keywords: Sexually transmitted infections, HIV, Healthcare provider. (JPMA 62: 941; 2012)

Introduction

Sexually transmitted infections (STIs) have re-emerged as a new public health threat in Pakistan against the backdrop of HIV prevalence. STIs facilitate HIV-1 transmission¹⁻⁴ and their sequelae contribute significantly to the morbidity and mortality in the population.^{5,6} STIs are more common than the attention paid to them. A 2008 study conducted in six urban cities of Pakistan found a prevalence of 4.4% for at least one of the five STIs among men from the general population.⁷ Higher rates of infections — 60% among Hijras and 36% among male sex workers — have been found among members of at-risk groups.⁸

Effective control of STIs depends on both public health and individual factors. Public health programmes must understand how, by whom and where STI care is sought, and ensure that the care provided is appropriate. The private sector delivers 84% of medical care in Pakistan.⁹ STI care-seeking appears to be similarly distributed and is provided by medical and non-medical practitioners, including traditional healers, homeopaths, quacks and some specialised STI NGO clinics.^{7,10,11} Despite the fact that STI care is predominantly provided in the private sector, most STI management and training resources by the government or donors remain largely focused on public-sector providers.¹² Finally, regardless of who provides the care, there is little monitoring of the quality of care, prevention counselling, condom promotion, treatment of partners to reduce the spread of STIs, and referral for complicated or resistant cases.¹⁰⁻¹³

Timely healthcare seeking by individuals and appropriate case management reduce the duration of infectivity in sexually active individuals and are, therefore, important determinants of STI control.¹⁴⁻¹⁶ In Pakistan, as in many other low-income countries, case management for STIs is usually sub-optimal due to rampant personal empiricism and inappropriate practices.¹⁷⁻²⁰ The situation is exacerbated by the absence of STI surveillance, resulting in the lack of data to accurately estimate the burden of STIs, detect incident cases or monitor patterns, follow up treatment outcomes or establish programmes to detect asymptomatic cases - leading to many missed opportunities for effective case management and prevention.¹⁰

In this study, we examined how STI care was delivered by health providers in Pakistan's public and private sectors. The objectives was to explore, from a public health programme perspective, the practice patterns of different providers and the gaps in case management that can be targeted through future standardised training and management protocols to reduce STI transmission in communities.

Subjects and Methods

In early 2008, the National AIDS Control Programme and the World Health Organisation (WHO) initiated a revision of the National STI Management Guidelines to make them more consistent. The revision process was preceded by a qualitative study to better understand aspects and quality of care being provided for STIs so that the new guidelines may be relevant and practicable in the local context.

We employed a mixed-method study design that included both in-depth interviews and focus group discussions.²¹ Detailed semi-structured interviews were conducted with 51 medical practitioners and specialists in both the public and private sectors. The providers were asked about the demographics of their clients, practice environment of their facilities, their knowledge of and adherence to any STI guidelines (national, WHO or any other STI protocol), medicines they prescribed for common STIs, and their general case management practices. The providers were encouraged to freely discuss any additional details that they felt were important to their practices.

The providers were identified by government health officials and NGOs working on HIV/STI prevention as those that saw the most cases of STIs. Types of providers interviewed included STI specialists (dermatologists, urologists and gynaecologists), general practitioners in the public and private sectors, and practitioners in NGO-based clinics. Interviews were conducted during January and February 2008 in Islamabad, Rawalpindi, Lahore, Karachi, Quetta and Peshawar. Interviews were continued until several interviews in a row from the same kind of provider started yielding repetitive answers.^{22,23} Since we had apriori decided to interview each of the types of providers in each of the city, many providers were interviewed even when saturation had been achieved with the same type of provider in another city. Thus, many more interviews were conducted than would have been warranted if the study had been done in only one city. Since very few providers reported seeing women patients, an iterative²¹ decision was made to conduct one focus group discussion with female sex workers (FSWs) to see where they sought care from health professionals. Interviews were conducted in the local language (Urdu) at the site where the providers delivered STI care services, and lasted approximately 30-45 minutes each. Verbal consent of the care providers was obtained prior to the initiation of the interview. No ethical oversight was sought for the study since information about any individual was not gathered.

All responses were transcribed by the interviewers throughout the interview. Relevant information was then summarised by provider type, volume of STI cases, quality of care, and overall practice patterns. All transcriptions were assessed for major themes.

Results

Practice patterns differed across the types of providers, but were similar for each provider type from various cities (Table).

As far as public sector STI providers for male clients are concerned, there were usually 1-2 designated facilities in each of the cities and were staffed by dermatologists, urologists or medical practitioners. Facilities specifically established to provide STI care received low volumes of cases per day — ranging between <2-5 patients. Dermatologists, who see over a hundred total patients a day - mostly for dermatological ailments, report seeing approximately 1-3 STI cases daily. Urologists, who mostly see complicated cases referred by other healthcare providers, may see up to 10 STI cases daily - far higher than any other provider. Most patients who visited these care-providers were predominantly clients of sex workers or, less often, men reporting non-commercial casual sex encounters. These providers did not report seeing members of high-risk groups.

The quality of care provided varied considerably between facilities. Most providers practised personal empiricism i.e. following their own protocols for treatment with diverse medications, dosages and treatment durations. Nearly all were unaware of the actual contents of published STI Management Guidelines (National or WHO) and feel uncertain of their utility and efficacy as a reason for not using them. These providers saw STI patients on a one-off basis without any medical records or systematic follow-up; hence they had no information on recurrent STIs or treatment failures among their clients. Even though most providers strongly expressed a preference for laboratory-based diagnosis of STIs, they hardly ever called for such tests, citing patient affordability issues, and a lack of reliable laboratories or timely return of results to support clinical decision-making. When tests were sent, they were the traditional smears and cultures. Very few providers tested for syphilis, let alone practising routine testing of all STI patients

for syphilis, thus raising concerns for missing asymptomatic cases. Additionally, most of these providers were not performing anal examinations and did not report anal STIs. Public-sector facilities/providers rarely stocked medicines and those that did, carried penicillin and macrolides and usually ended up giving out prescriptions for medicines. Finally, almost no public facility stocked or dispensed condoms or had enough space/privacy to effectively counsel clients on behavioural risk reduction.

Women from the general population generally visit public-sector gynaecologists, who reported that approximately a quarter of their patients had vaginal discharge. However, they seldom reported having seen any other STI symptoms such as ulcers, dyspareunia etc. Hardly any provider interviewed reported routinely testing for STIs (i.e. syphilis or HIV) or performing anal examinations as part of STI workup; nor did they see anal STIs in their practice. Medical records were not maintained by the providers, nor was any risk profile for the women undertaken. For suspected STI cases, some of the providers reported using STI management guidelines from the Royal College (UK) while a vast majority prescribed commonly available antibiotics based on personal empiricism. Partner treatment was never discussed or administered.

Private-sector general practitioners (GPs) largely encountered and managed most of the STIs — average 5 -10 clients/day. Their clients included male sex workers, clients of sex workers, and occasionally women with STIs. In interviewing the general practitioners, it appeared that a few providers in any given locality became identified as the providers of STI care by patients, who then approached them for STI complaints.

These providers variably followed STI syndromic management guidelines received from pharmaceutical companies or practised personal empiricism. One provider related routinely treating all male urethral discharge patients with a combination of 11 pills, injections and creams,

Table: Outline of Provider Practices.

Provider	Public sector STI Clinic	Public sector Urologists	Public sector Gynecologists	Private practice General Practitioners	NGO Clinics
Average Daily STI Patients Seen	2-3	8-10	<1	2-3	1-3
Clinical Care Pattern	Personal empiricism*	Personal empiricism	Personal empiricism	Personal empiricism	Syndromic
Laboratory Facilities Used	Occasionally	Occasionally	Occasionally	Occasionally	No
HIV Testing Available/ Used	Occasionally	No	No	Occasionally (to commercial laboratories)	Often
Syphilis Testing Available	Occasionally	No	Rarely	Occasionally (to commercial laboratories)	
Occasionally					
Medicines Available	Sometimes	No	No	Often	Often
Injections Given	Rarely	No	No	Often	Never
Communication With Government Surveillance System	Occasionally	No	Rarely	No	Sometimes

* A few facilities have varying levels of laboratory support available.
STI: Sexually Transmitted Infection. HIV: Human Immunodeficiency Virus.

including those that are used to treating bacterial vaginosis. The providers usually spent about 5 minutes or less per patient in sub-optimal privacy settings and provided limited counselling. For example, citing space and time constraints, the GPs reported frequently seeing multiple STI patients (or STI patients with others) in the room at the same time. These providers generally saw follow-up patients albeit without any formal medical record or tracking system, and most dispensed medications and administered injections in their clinics.

Almost all NGOs providing HIV prevention services to male and female sex workers also provided STI care via fixed site primary health clinics that served the sex workers along with general members from neighbouring communities. In such clinics 10-30% of the ailments seen were STIs, with <1-5 STI patients seen per day - very few of these being female sex workers.

Care-providers at these clinics usually followed some published guidelines for STI care management (usually some adaptation of WHO protocols); had adequate supplies of STI medicines; and consistently provided counselling and condoms. However, routine testing for STIs was not undertaken, including syphilis testing, and patients were referred to public-sector facilities for further follow-up or HIV testing.

The focus group discussion with female sex workers (FSWs) revealed that they were generally reluctant to seek formal care for genital symptoms; most of them reported self-treatment or followed peer advice/remedies and continued sexual activity even while symptomatic. When care was sought, it was often from lady health visitors (who also provided abortions) and NGO providers. They felt reluctant to report anal symptoms to the providers — or to the peers.

Discussion

The study found that STI care is provided by a variety of providers and specific population groups seek STI care from specific providers. Most providers see low volumes of STI patients and women - particularly sex workers — with STIs are seldom seen by any type of provider. This may reflect socio-cultural taboos and gender factors in a conservative society that limit the mobility of women and often leads to delay in health-seeking, particularly for STIs;²⁴ or may reflect a truly low prevalence of sexual infections among women.¹⁰ We also found that the majority of STI providers, GPs and specialists, lacked appropriate knowledge to diagnose and treat STIs according to internationally standardised criteria. These and the absence of counselling or partner management will likely have serious implications for control of STIs in Pakistan.

Counselling for safer behaviours, including partner reduction and condom use, provision of condoms and

selected STI tests (i.e. syphilis and HIV) among current STI patients, represent the mainstay of public health STI control efforts.²⁰ These practices are almost universally absent among the providers in Pakistan, who never counsel their patients about the use of condoms, safe sex or limiting sexual partners. Indeed, the majority of the respondents cited incorrect drugs, durations or dosages, saw most STI patients only once and usually for less than 5 minutes per encounter. Moreover, consistent with previous observations,^{25,26} our study showed that despite emphasis on STI guidelines and considerable resources allocated for STI medicines, clinics and training in the public sector, STI diagnosis and management is widely based on personal empiricism by the GPs and the specialists alike. Such sub-optimal care at the patient's first point of contact with the healthcare system can prolong the duration of infectivity and transmission, and can lead to drug resistance as was the case in China where poorly trained or unlicensed practitioners provided diagnoses and treatment desired or requested by patients.²⁷

There is a major concern that asymptotically infected people constitute a substantive reservoir of STI infections with risks of subsequent STI transmission.^{10,11,20,27,28} Asymptomatic STIs, such as anal gonorrhoea and chlamydia, HIV and syphilis, may largely go undetected in the population when the providers do not follow appropriate treatment guidelines and miss out on performing physical examinations, particularly anal examinations, and seldom test for either syphilis or HIV among patients presenting for STIs.

The lack of privacy during patient encounters makes it difficult to establish the necessary rapport to effectively communicate such sensitive information to the patient. For these reasons, it is important that future strategies must look to encourage the providers, both in the public and private sectors, not to miss the window of opportunity provided by an STI symptom visit and to follow standardised counselling and syndromic management protocols in their routine practice.

Finally, we observed that specific providers treat specific population sub-groups. This interesting care-seeking practice may be an opportunity to effectively target groups at higher risk for STIs via specific types of providers.

Since the providers were identified in a formal setup (public-sector or contact with NGOs), informal providers such as traditional healers and others who together constitute approximately 10% of the STI care-providers, were not interviewed.¹¹ However, our study describes a fairly detailed picture of STI practices by major provider types. Another limitation may be that while conducting the interviews, no further questions were asked once repetitive responses were obtained from the providers as is consistent with the RARE methodology that was followed.^{22,23,29} It is possible, though

less likely, that this may have prevented the providers from recalling relevant details resulting in deficient details. Hence, it is recommended that further studies shall explore how provider choices and attitudes shape the quality of care that is provided for STIs.

Conclusion

Care provision for STIs in Pakistan is fraught with mistreatment, lack of counselling, follow-up or testing for asymptomatic infections. More targetted efforts are needed to effectively control STIs, including HIV. The recently disseminated Syndromic Management Guidelines should be supported with some sort of provider incentives for adherence.

References

- Fleming DT, Wasserheit JN. From epidemiological synergy to public health policy and practice: the contribution of other sexually transmitted diseases to sexual transmission of HIV infection. *Sex Transm Infect* 1999; 75: 3-17.
- World Health Organization. WHO Global strategy for the prevention and control of sexually transmitted infections: 2006-2015. Breaking the chain of transmission; 2007.
- Manhart LE, Holmes KK. Randomized controlled trials of individual-level, population-level, and multilevel interventions for preventing sexually transmitted infections: what has worked? *J Infect Dis* 2005;191 Suppl 1:S7-24.
- Wasserheit JN. Epidemiological synergy. Interrelationships between human immunodeficiency virus infection and other sexually transmitted diseases. *Sex Transm Dis* 1992; 19: 61-77.
- Berkowitz GS, Papiernik E. Epidemiology of preterm birth. *Epidemiol Rev* 1993; 15: 414-43.
- Temmerman M, Lopita MI, Sanghvi HC, Sinei SK, Plummer FA, Piot P. The role of maternal syphilis, gonorrhoea and HIV-1 infections in spontaneous abortion. *Int J STD AIDS* 1992; 3: 418-22.
- National AIDS Control Programme, Population Council of Pakistan. Study of Sexually Transmitted Infections: Survey of the Bridging Population, 2007.
- National AIDS Control Programme, The Family Health International, The Pakistan Medical & Research Council. The National Study of Sexual and Reproductive Tract Infections; 2004.
- Federal Bureau of Statistics of Pakistan. Pakistan Social and Living Standards Measurement; 2008.
- Khan AA, Khan A. The HIV epidemic in Pakistan. *J Pak Med Assoc* 2010; 60: 300-7.
- Khan AA, Naghma-e-Rehan, Qayyum K, Khan A. Care seeking for STI symptoms in Pakistan. *J Pak Med Assoc* 2009; 59: 628-30.
- The National AIDS Control Programme of Pakistan. PC-1 of the National and Provincial AIDS Control Programmes 2008-13; 2008.
- National AIDS Control Programme. The STI Prevalence Study of Pakistan; 2001.
- Fonck K, Mwai C, Rakwar J, Kirui P, Ndinya-Achola JO, Temmerman M. Healthcare-seeking behavior and sexual behavior of patients with sexually transmitted diseases in Nairobi, Kenya. *Sex Transm Dis* 2001; 28: 367-71.
- Moses S, Ngugi EN, Bradley JE, Nieru EK, Ehridge G, Mua E, et al. Health care-seeking behavior related to the transmission of sexually transmitted diseases in Kenya. *Am J Public Health* 1994; 84: 1947-51.
- Mayaud P, Mosha F, Todd J, Baliea R, Mgara J, West B, et al. Improved treatment services significantly reduce the prevalence of sexually transmitted diseases in rural Tanzania: results of a randomized controlled trial. *AIDS* 1997; 11: 1873-80.
- Khandwalla HE, Luby S, Rahman S. Knowledge, attitudes, and practices regarding sexually transmitted infections among general practitioners and medical specialists in Karachi, Pakistan. *Sex Transm Infect* 2000; 76: 383-5.
- Voeten HA, Otido JM, O'hara HB, Kuperus AG, Borsboom GJ, Ndinya-Achola JO, et al. Quality of sexually transmitted disease case management in Nairobi, Kenya: a comparison among different types of healthcare facilities. *Sex Transm Dis* 2001; 28: 633-42.
- Sihavong A, Lundborg CS, Syhakhang L, Vernby A, Panyanouvang A, Marions L, et al. Health providers' competence in the management of reproductive tract infections in Vientiane, Lao People's Democratic Republic. *Int J STD AIDS* 2007; 18: 774-81.
- Mayaud P, Mabey D. Approaches to the control of sexually transmitted infections in developing countries: old problems and modern challenges. *Sex Transm Infect* 2004; 80: 174-82.
- Kuper A, Lingard L, Levinson W. Critically appraising qualitative research. *BMJ* 2008; 337: a1035.
- Needle RH, Trotter RT 2nd, Singer M, Bates C, Page JB, Metzger D, et al. Rapid assessment of the HIV/AIDS crisis in racial and ethnic minority communities: an approach for timely community interventions. *Am J Public Health* 2003; 93: 970-9.
- Trotter II RT, Needle RH, Goosby E, Bates C, Singer M. A Methodological Model for Rapid Assessment, Response and Evaluation: The RARE Program in Public Health. *Field Methods* 2001; 13: 137-59.
- Ahmed SM, Adams AM, Chowdhury M, Bhuiya A. Gender, socioeconomic development and health-seeking behaviour in Bangladesh. *Soc Sci Med* 2000; 51: 361-71.
- Rehan N. Profile of men suffering from sexually transmitted infections in Pakistan. *J Pak Med Assoc* 2006; 56: S60-5.
- Hussain MF, Khanani MR, Siddiqui SE, Manzar N, Raza S, Qamar S. Knowledge, attitudes & practices (KAP) of general practitioners (GPs) regarding sexually transmitted diseases (STDs) and HIV/AIDS in Karachi, Pakistan. *J Pak Med Assoc* 2011; 61: 202-5.
- Choi KH, Zheng X, Zhou H, Chen W, Mandel J. Treatment delay and reliance on private physicians among patients with sexually transmitted diseases in China. *Int J STD AIDS* 1999; 10: 309-15.
- Lan PT, Mogren I, Phuc HD, Stalsby LC. Knowledge and practice among healthcare providers in rural Vietnam regarding sexually transmitted infections. *Sex Transm Dis* 2009; 36: 452-8.
- Bates CJ, Singer M, Needle R, Trotter RT. The RARE model of rapid HIV risk assessment. *J Health Care Poor Underserved* 2007; 18: 16-33.