

Treating Asymptomatic Sexually Transmitted Diseases at Anonymous HIV Counseling and Testing Sites

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THE AWARENESS THAT HIV transmission is facilitated by the presence of other sexually transmitted diseases (STDs) has helped focus public HIV prevention efforts for the past several years. However, a persistent reservoir of asymptomatic STDs could stymie these efforts, and the National Institute of Medicine has reported on the dangers of the “hidden epidemics” of undiagnosed STDs.¹ A recent population-based household survey in Baltimore confirmed the seriousness of this concern when it showed that almost 1 in 12 (7.9%) young adults aged 18 to 35 had untreated genitourinary *Neisseria gonorrhoea* (PNG), *Chlamydia trachomatis* (CT) infection, or both.² Furthermore, “nearly all” these infected individuals were asymptomatic. Innovative and cost-effective strategies to diagnose and treat asymptomatic infections, which would otherwise go undetected and persist, are needed.

In her comprehensive review, Wasserheit reported that both gonorrhea and chlamydia significantly increase transmission of HIV.³ Among gay men, gonorrhea was associated with a 1.5-fold increase in HIV infection in 2 prospective studies reviewed in that article, and chlamydia was shown prospectively to increase HIV seroconversion among women.³ In response to a wealth of this kind of information about STDs and enhanced transmission of HIV, in 1998, the Centers for Disease Control and Prevention published a recommendation to enhance HIV prevention through early detection and treatment of STDs.⁴

We report on a strategy of detecting and treating asymptomatic STDs in a group at high risk of infection in San Francisco. The innovations we are reporting on are several: first, offering anonymous STD screening through our existing counseling and testing sites; providing treatment under a protocol jointly developed with the San Francisco Department of Public Health, STD Prevention and Control Services; and providing routine “partner therapy” in which clients with known and identifiable partners are given medication to take home to treat their partner.

The University of California–San Francisco AIDS Health Project (San Francisco’s largest anonymous HIV counseling, testing, and referral program) incorporated these innovations in the fall of 1999. On gaining approval for offering anonymous STD

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screening from the State STD Director and our local health officer, we implemented anonymous screening in our busy HIV counseling and testing sites. During 2001, we offered screening to asymptomatic clients with behavioral risk factors for infection (men and women of any age who reported vaginal, anal, or oral sex with more than 1 partner in the past year were offered CT screening; men and women of any age who reported performing fellatio on more than 1 partner in the past year were offered PNG screening) at 2 clinic sites using nucleic acid amplification testing of urine specimens for CT and pharyngeal swab specimens for PNG.⁵ Clients were allowed to request or refuse any or all screening tests offered. Those who denied behavioral risk (as defined previously) but still requested 1 or both tests were assumed to be at undisclosed risk and thus were provided with both CT and PNG screening. Clients who confirmed any symptoms suggestive of STD (chancre or lesion, dysuria, purulent or malodorous discharge, pharyngitis) at the time of HIV testing were not screened; rather, they were referred to the local public STD clinic. Under protocol developed jointly with the county STD Prevention and Control Services, we trained a phlebotomist to provide on-site treatment and offer take-home partner therapy. Genitourinary and rectal screening for gonorrhea were not offered as a result of previously documented low prevalence and lack of availability of clinical staff to conduct rectal specimen collection, respectively.

In 2001, we screened 4808 clients for CT and PNG; 215 individuals (4.5% point prevalence) had one or both infections (see Table 1). Asymptomatic CT was identified in 89 (2.2%) of 4022 testers and asymptomatic PNG was identified in 128 (3.1%) of 4072 testers. The presence of untreated PNG was particularly high among men who have sex with men (MSM) with 124 (4.7%) cases among 2615 testers. Eleven (1.5%) cases of CT were found in 750 women. Clients in our study aged 21 to 25 years had the highest point prevalence of both PNG (11.2%) and CT (6.8%).

Acceptance of STD screening among 5592 HIV-testing clients was high (72% accepted screening for CT, 73% for PNG) and did not vary significantly by gender or sexual orientation. The majority of clients testing positive for either CT or PNG returned for their results (97%), accepted treatment for themselves (92%), and accepted treatment to offer their sexual partners (58%).

These results strongly support the common-sense notion that STD screening would be successful in a population self-identified

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TABLE 1. Anonymous Sexually Transmitted Disease Testing at an Anonymous HIV Counseling, Testing, and Referral Program: Uptake, Infections Detected, and Treatment Provided*

	No. of Clients (%)			
	Total	Heterosexual Men	Gay/Bisexual Men	Women
Clients of HIV counseling, testing and referral program	5592	1157 (20.7%)	3371 (60.3%)	1064 (19.0%)
Chlamydia trachomatis (CT) screening [†]				
Accepted CT screening	4022 (72%)	892 (77%)	2380 (71%)	750 (70%)
CT cases detected	89 (2.2%)	13 (1.5%)	65 (2.7%)	11 (1.5%)
CT cases who returned for result	85 (96%)	11 (85%)	63 (97%)	11 (100%)
Received result, accepted treatment	78 (92%)	9 (82%)	59 (94%)	10 (91%)
Received result, accepted partner therapy	49 (58%)	7 (64%)	35 (56%)	7 (64%)
Pharyngeal Neisseria gonorrhoea (PNG) screening [‡]				
Accepted PNG screening	4072 (73%)	687 (59%)	2615 (78%)	770 (72%)
PNG cases detected	128 (3.1%)	3 (0.4%)	124 (4.7%)	1 (0.1%)
PNG cases who returned for result	125 (98%)	3 (100%)	121 (98%)	1 (100%)
Received result, accepted treatment	115 (92%)	3 (100%)	111 (92%)	1 (100%)
Received result, accepted partner therapy	67 (58%)	2 (67%)	65 (53%)	0 (0%)

*University of California–San Francisco AIDS Health Project, San Francisco, January through December 2001.

[†]Men and women of any age who reported vaginal, anal, or oral sex with more than 1 partner in the past year were offered CT screening.

[‡]Men and women of any age who reported performing fellatio on more than 1 partner in the past year were offered PNG screening.

as at risk for HIV infection. Not only did we find significant numbers of asymptomatic cases of disease among our clients, we also showed that clients in our test sites readily embraced the idea of screening for CT and PNG. Furthermore, the majority of those testing positive for CT or PNG returned for their results (97%) and more than 9 of 10 were happy to accept treatment for themselves (92%) when they returned for their results. Although only 58% accepted “partner packs,” anecdotal reports from our counselors suggest that the primary reason for refusing was because clients felt they would not be able to specifically identify their recent partners.

Prior research published in this journal has concluded that STD screening at HIV counseling and testing sites is feasible but might not be cost-effective without targeting high-yield subpopulations.⁶ We concur and arrived at the protocol presented here only after fine-tuning our screening approach. Thus, we initially screened all clients with self-reported risk and, after reviewing this data in 2002, concluded that the prevalence of both CT and PNG (1.5% and 0.4%, respectively) among our heterosexual male clients was too low to indicate continued screening of this subpopulation. Although similar prevalence was seen among female clients (1.5% and 0.1%, respectively), as a result of the significant sequelae of undetected CT among young women, we have extended the CT screening program to all women 25 years of age and under who report multiple partners. We have continued to screen gay and bisexual men for both CT and PNG, because detected prevalence of these diagnoses (2.7% and 4.7%) exceed the 2% ceiling above which the CDC recommends routine screening for high-risk subpopulations.⁷

Since the introduction of anonymous HIV testing and counseling programs in 1985, the public has increasingly used these services. The number of tests performed has risen from 79,000 in 1985 to more than 2,000,000 annually between 1989 and 1995.^{8,9} Our results suggest that other HIV counseling and testing programs should consider adding targeted STD screening and treatment to the services offered. We identified and subsequently treated a significant number of asymptomatic STDs that would likely have remained undetected and untreated (as would have the infections in the sexual partners of these clients) without our program.

As a result of the known association of STD infection and HIV transmission^{10,11} and the growing evidence of the large reservoir of undetected STD in the population, targeted STD screening and treatment should be considered as an adjunct prevention service at anonymous HIV testing sites.

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