Frequency and Thoroughness of STD/HIV Risk Assessment by Physicians in a High-Risk Metropolitan Area

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ABSTRACT

The US Preventive Services Task Force recommends that all primary care physicians assess the sexually transmitted disease/human immunodeficiency virus (STD/HIV) risk of all adolescent and adult patients. To determine whether factors amenable to change through continuing medical education are associated with frequent and thorough STD/HIV risk assessment, a telephone survey of primary care physicians in the Washington, DC metropolitan area was conducted (n = 961). Thirty-seven percent of physicians reported regularly asking new adult patients about their sexual practices; 60% asked new adolescent patients. STD/HIV risk questioning was associated with physicians' confidence in their ability to help prevent HIV, comfort with discussing patients' sexual practices, and perception of a large STD/HIV problem in their practice. These findings suggest that continuing medical education should target improvement in physicians' sexual practice questioning skills. (*Am J Public Health.* 1991;81:1645–1648)

Introduction

Because of recent increases in the number and incidence of sexually transmitted diseases (STDs) and the lethality of human immunodeficiency virus (HIV) infection, improved physician STD/HIV prevention practice is urgent.[1,2] The US Preventive Services Task Force recommends that all primary care clinicians obtain a complete sexual practice and drug-use history from all adolescent and adult patients.[1] Primary care physicians report however, that they infrequently assess the sexual practices of their patients.[3]

Recent studies indicate that discomfort with homosexuality is a barrier to HIV-related care.[3–5] Non-internist, older, male, solo-practice physicians and physicians having no AIDS patients are all reported to have less HIV-related competence.[3–5] Although many barriers to STD/HIV risk assessment cannot be overcome through continuing medical education (CME) (i.e., physician's age or type of practice), CME can potentially decrease barriers caused by lack of knowledge, predisposing attitudes, and skills. In this study, current levels of self-reported primary care physician STD/HIV risk questioning are measured and educationally mutable factors associated with this questioning are identified.

Methods

Baseline data for a demonstration project of physician office-based STD/HIV prevention programs using simulated patients[6] were obtained through telephone interview. The sampling frame was the 1988 American Medical Association (AMA) list of office-based practicing physicians whose mailing addresses were in the Washington DC metropolitan statistical area.

Physicians were eligible for participation in the study if (1) they identified themselves at the time of the interview as being in one of four designated primary care specialties (internal medicine, family practice, general practice, and obstetrics/gynecology), and (2) they delivered at least 1 hour of primary care each week. The overall survey response rate was 60% (N = 961).

All telephone survey questions were closed-ended, with trained interviewers recording responses on precoded forms. In data analysis, variable associations were measured using Pearson product-moment correlation coefficients and forward stepwise multiple linear regression (PROC REG).[7]

Independent Variables

Study physicians were asked about their personal and practice characteristics. They were also asked to rate the magnitude of the STD/HIV problem in their practice. A battery of seven 5-point Likert scale questions (available from the authors) was used to measure physicians' confidence in their ability to assess risk and successfully counsel patients in the prevention of HIV infection (Cronbach alpha = 0.68, range = 7–35, mean = 25.0, SD = 5.00, median = 25). Physicians were also asked about their comfort level when discussing sexual practices with five different types of patients: single women, homosexual women, long-time married patients, homosexual men, and single men. The cronbach A among these items was 0.78. These 3-point item scores were

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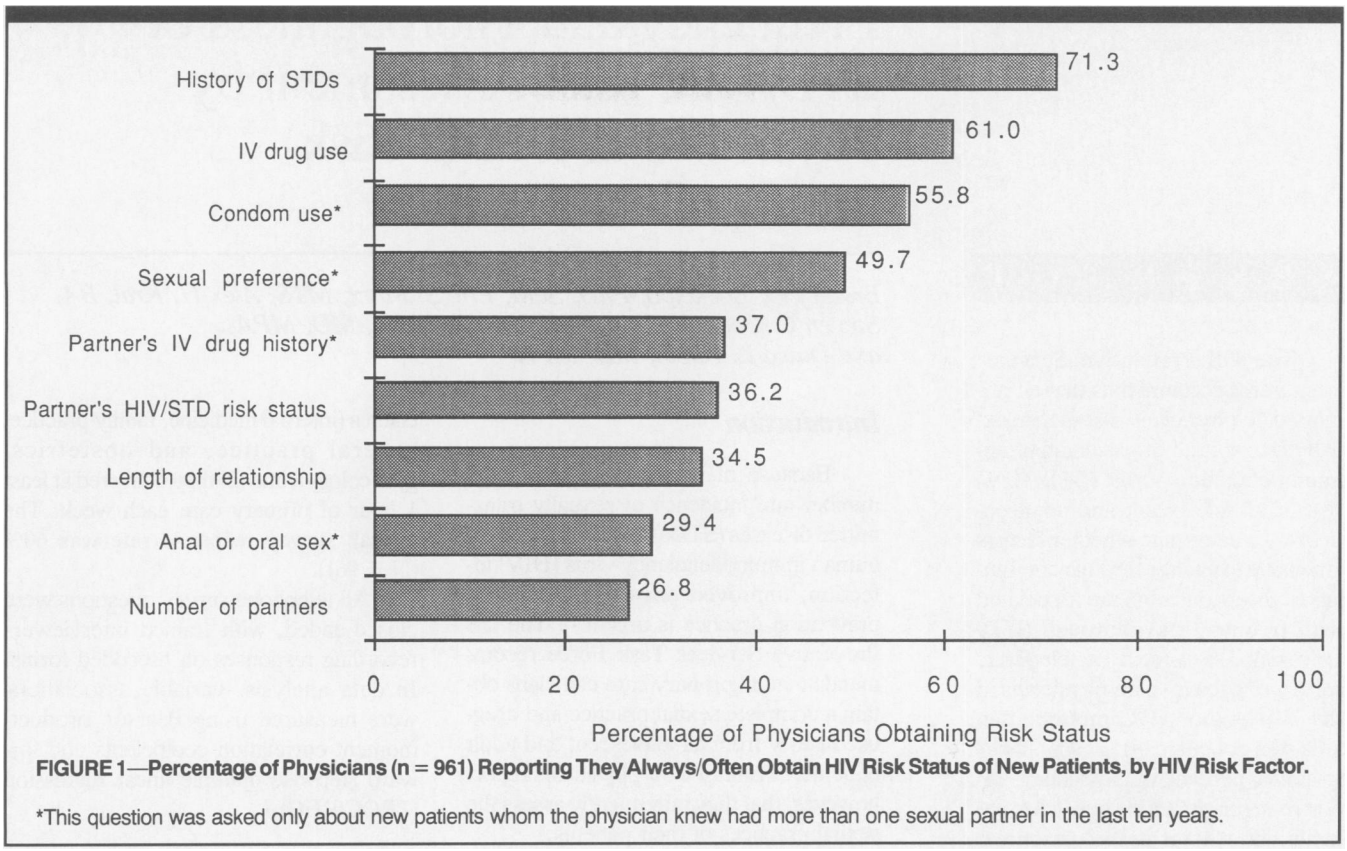

FIGURE 1—Percentage of Physicians (n = 961) Reporting They Always/Often Obtain HIV Risk Status of New Patients, by HIV Risk Factor.

*This question was asked only about new patients whom the physician knew had more than one sexual partner in the last ten years.

totaled and divided by 5 to create an overall Discomfort Scale. For obstetricians/gynecologists the scale excluded questions regarding male patients and total scores were divided by 3. Because the Discomfort Scale scores were skewed, they were categorized into levels of high, moderate, and low discomfort.

Dependent Variables

Physician STD/HIV risk questioning, the major outcome variable, was measured by asking physicians how often they ask new patients during initial general health examinations about nine sexual STD/HIV risk factors on a 5-point scale (Never-Always) (Figure 1). A summative scale of these items formed the STD/HIV Risk Questioning Scale (SRQ) (Cronbach alpha = 0.85, range = 9–45, mean = 28.46, SD = 7.75, median = 28). Frequency of asking 12 different types of patients about their sexual practices or changes in sexual practices was also obtained (Figure 2) on a 5-point scale (Never-Always).

Results

Characteristics of the Study Population

Study physicians were predominantly White (72%), male (80%), board certified in their primary care specialty (74%), and graduates of US medical schools (76%). Their average age was 47 years (SD = 10.61) and 48% were in solo practice. Sixty-five percent had diagnosed an HIV-positive patient. Information from the AMA indicated small but significant differences between study participants and nonparticipants on two of five variables: gender and practice organization (i.e., solo, partnership, group).

Physician STD/HIV Risk Questioning

During initial general health examinations of new patients, the majority of physicians reported regularly ("always" or "often") asking about history of STDs (71%) (Figure 1). Fewer physicians reported regularly asking about other STD/HIV risk factors such as condom use (56%), sexual preference (50%), anal or oral sex (29%), or number of partners (27%).

The percentage of physicians who reported regularly questioning patients about sexual practices varied widely by patient type (Figure 2). Thirty-seven percent of primary care physicians reported regularly asking their new adult patients about their sexual practices; 60% asked their new adolescent patients. The majority of physicians reported regularly asking about sexual practices of patients in traditional HIV risk groups—homosexual men (87%) and IV drug users (81%)—and patients who asked them about AIDS (92%).

Associations with STD/HIV Risk Questioning

SRQ scores were positively associated with several "immutable" characteristics of physicians and their practices in bivariate and multivariate analyses (Table 1) including being a foreign medical school graduate ($r = .12$, $p \leq .0002$), being female ($r = .12$, $p \leq .0003$), and having had four or more HIV-positive patients ($r = .10$, $p \leq .002$).

SRQ scores were also positively associated with "potentially mutable" characteristics of physicians in bivariate and multivariate analyses (Table 1) including perceiving STD/HIV infection to be a big problem in one's practice ($r = .23$, $p \leq .0001$), being comfortable when discussing sexual practices with patients ($r = .24$, $p \leq .0001$), and having greater STD/HIV prevention confidence ($r = .29$, $p \leq .0001$).

Discussion

This study indicates that in one of the highest STD/HIV incidence areas in the country, metropolitan Washington, DC, primary care physician STD/HIV risk assessment rates are slightly higher than those recently reported in other high-risk urban areas for Los Angeles,[8,9] but are well

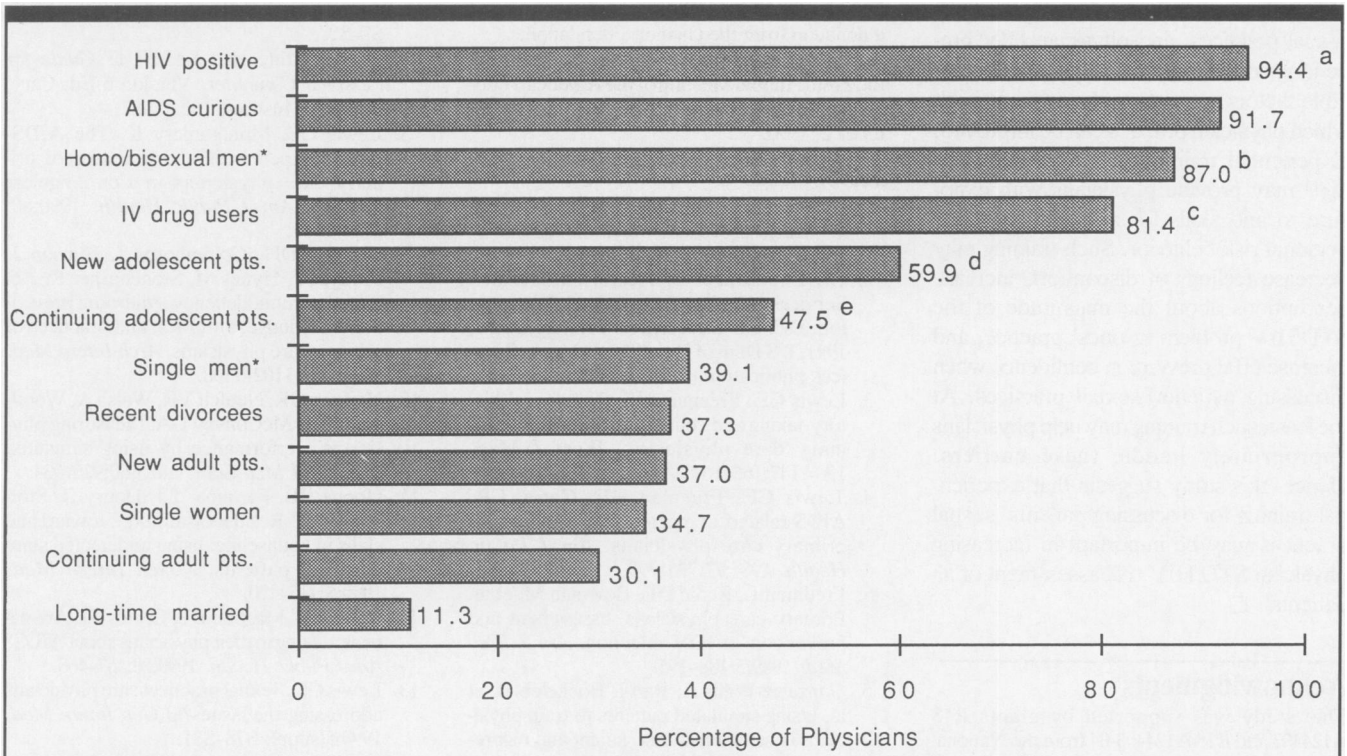

FIGURE 2—Percentage of Physicians (n = 961) Reporting They Always/Often Ask Patients About Their Sexual Practices, by Patient Category.

*OB/GYNs not asked, n = 693
a. 204 physicians stated they do not have this type of patient.
b. 47 physicians stated they do not have this type of patient.
c. 240 physicians stated they do not have this type of patient.
d. 67 physicians stated they do not have this type of patient.
e. 74 physicians stated they do not have this type of patient.

TABLE 1—Multiple Linear Regression Model of Physician STD/HIV Risk Questioning Predictors[a]

Predictor Variable	Beta[c]	Standard Error	*t*	*P*
Intercept	—	—	—	—
Foreign medical school graduate	2.24	0.60	3.73	.0002
Female	1.44	0.60	2.40	.02
Four or more HIV-positive patients	0.79	0.32	2.46	.01
Uncomfortable discussing sex with patients[b]	−1.82	0.32	5.61	.0001
Perceives STD/HIV as a big problem	0.87	0.21	4.19	.0001
HIV prevention confidence[b]	0.32	0.05	6.17	.0001

Note. $R^2 = 0.17$, $F = 28.12$, $df = 6$, $P < .0001$.
[a]Total physician sample = 961; regression physician sample = 849.
[b]Multiple item scaled score.
[c]Unstandardized regression coefficient

below the rates called for by the Public Health Service's Year 2000 objectives.[2] Although the majority of physicians reported regularly asking new patients about their history of STDs during initial general health examinations, less than half of physicians regularly asked about sexual preference, and less than one third of physicians regularly asked about anal or oral sexual practices or number of sexual partners. These risk assessment rates may even be inflated given that physician self-reported practice has been observed to be greater than observed practice.[9–11]

Whether or not a physician reported asking patients about their sexual practices varied widely by patient type. While a majority of study physicians reported regularly asking about the sexual practices of patients in traditional HIV risk groups—homosexual or bisexual men and IV drug users—they infrequently reported regularly assessing the sexual practices of other patients, including single men and women. Therefore, many physicians reported obtaining information about sexual practices only if they already knew a patient was in a high-risk group. If the patient does not bring up the topic of AIDS[12] or his or her high risk STD/HIV status, it appears unlikely that the physician will address the patient's sexual risk of STD/HIV infection.

Three educationally immutable variables were weakly associated with more STD/HIV risk questioning in this study: being a female physician, having cared for four or more HIV-positive patients, and being a foreign-trained physician. These associations are not particularly useful in designing effective CME programs. Three educationally mutable variables were more strongly associated with STD/HIV risk questioning: physician perception that STD/HIV is a big problem in their practice; physician comfort with discussing various

patients', not just homosexual patients',[3] sexual practices; and physician HIV prevention confidence. These potentially mutable factors suggest mechanisms through which physician practice can be improved. Experiential training in sexual questioning[13] may provide physicians with exposure to and skills for assessing patients' personal risk behavior. Such training may decrease feelings of discomfort, increase perceptions about the magnitude of the STD/HIV problem in ones' practice, and increase HIV prevention confidence when discussing patients' sexual practices. At the least, such training may help physicians appropriately handle these barriers. Hence, this study suggests that experiential training for discussing patients' sexual practices may be important in increasing physician STD/HIV risk assessment of all patients. □

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Changes in AIDS Case Reporting after Hospital Site Visits

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ABSTRACT

In an effort to improve AIDS case reporting, site visits (meetings with hospital staff to encourage reporting) were made to all Philadelphia hospitals. Comparisons of hospitals visited during a 7-week period with hospitals not visited during that period indicated that the site visits were followed by a marked increase in case reports. No similar increase was observed at the comparison hospitals. The increased reporting was accompanied by an increased lag time from diagnosis to report, suggesting that the additional reports at visited hospitals were the result of the identification of previously missed cases rather than a speedup of reporting. Cases reported after the visits were more likely to have white-collar occupations or private medical insurance than were those reported before the visits. (*Am J Public Health.* 1991;81:1648–1650)

Introduction

It is well documented that acquired immunodeficiency syndrome (AIDS) case reporting is incomplete,[1–3] and that many unreported cases can be identified through reviews of death certificates,[4–7] hospital discharge records,[8–10] and outpatient records.[11] In Oregon, a state with relatively few AIDS cases, Modesett recently demonstrated that AIDS case reporting was improved by reminders to hospitals and physicians in addition to reviews of hospital discharges and death certificates.[12]

We sought to determine whether reminders to hospitals also improved AIDS case reporting in a large city with many AIDS cases, and (if such reminders increased AIDS case reporting) to determine whether they did so by bringing to immediate attention cases that might otherwise have been reported in the future or by bringing to attention cases that were previously missed. We differentiated between these two possibilities by examining the lag time from diagnosis to report. In the first situation the lag time should decrease after the reminders (because cases were being reported sooner rather than later). In the second situation the lag time should remain constant or increase (because a new population of cases or a backlog of unreported cases was coming to light).

Methods

In August 1989, Philadelphia's commissioner of health wrote to each of the city's 46 hospitals requesting that the

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