A Controlled Study of Variation Among Family Physicians in HIV Screening Recommendations

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The results of a study of screening recommendations for human immunodeficiency virus (HIV) by family physicians are reported. Of 209 family practice residents and clinical faculty from the four UCLA-affiliated family practice residency programs surveyed, 110 (53%) responded. Each physician was presented with an identical set of five clinical scenarios and asked to make an HIV screening decision in each case. The physicians were also asked to choose from a list of 11 physician roles the one role that best described why they chose to recommend or not recommend an HIV screening test in each particular scenario. Marked variation was observed among the physicians' HIV screening recommendations. The degree of variation was similar between residents and clinical faculty. The physicians predominantly cited concern for the patient's well-being over concern for the public's well-being in making their HIV screening decisions. Three physician roles, (1) to protect the patient from mental suffering, (2) to protect the unborn from disease, and (3) to optimize the patient's future health care, were the roles most cited when an HIV screening test was recommended. Two physician roles, (1) to protect the patient from mental suffering, and (2) to allocate limited health resources properly, were the roles most cited when an HIV screening test was not recommended. **J Fam Pract 1990; 30:169-173.**

Family physicians often face conflicting personal, social, moral, and legal responsibilities in making decisions regarding patient care. Nowhere has this become more evident than in the issue of human immunodeficiency virus (HIV) screening. Numerous editorials have appeared regarding the issue of HIV testing.[1–7] Few studies,[8] however, have been published describing how or why family physicians actually use the HIV screening tests in their daily practices. In view of the considerable controversy that exists in the literature regarding HIV screening and the lack of information about the actual use of HIV screening tests by family physicians, this study was undertaken to determine whether variation exists among family physicians with regard to their HIV screening recommendations. This study was further designed to test the hypothesis that observed variation could be explained by differences between physicians in role prioritization.

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METHODS

In August and September of 1988 questionnaires were mailed to 209 residents and clinical faculty at the four family practice residency programs affiliated with the University of California, Los Angeles (UCLA): UCLA Medical Center, Santa Monica Hospital, Northridge Hospital, and Ventura Medical Center. To determine whether variation exists among family physicians regarding their HIV screening recommendations, each physician was presented with an identical set of five clinical scenarios in which the decision to recommend or not recommend an HIV screening test was central (Table 1). The physicians were told that they could assume complete confidentiality for both HIV testing and HIV results, and that they could assume 99% sensitivity and specificity for HIV screening tests. The five scenarios were intentionally designed to present the physician with numerous possible physician role conflicts. To study the impact of physician role pri-

TABLE 1. FIVE CLINICAL SCENARIOS (ABBREVIATED VERSIONS) FOR WHICH PHYSICIANS WERE ASKED TO MAKE AN HIV SCREENING DECISION

Scenario 1
- 43-year-old homosexual man
- History of promiscuous homosexual activity
- Not sexually active in the past 1 year
- Aware of safe sex techniques
- Close friends have died of AIDS
- Very fearful of psychological impact of a positive test

Scenario 2
- 24-year-old engaged woman
- HIV screening offered by law with premarital blood tests
- Monogamous for past 1 year
- History of genital herpes
- Unsure if she will have children

Scenario 3
- 35-year-old woman
- A lawyer and a single parent
- Known to you for years as a very anxious patient, requests an AIDS test on her 9-year-old son
- Her son's closest friend (also 9 years old) has hemophilia

Scenario 4
- 52-year-old man
- Married for 31 years
- Denies any history of extramarital sexual relations
- Underwent coronary artery bypass surgery Los Angeles in 1984
- Received blood transfusions during surgery
- He requests an HIV screening test

Scenario 5
- 32-year-old married woman
- Anxious about AIDS
- 6 weeks pregnant
- She and her husband desire a child
- History of intravenous drug use with needle sharing 4 years ago
- Wants her history of intravenous drug use and her fear of AIDS to remain confidential (even from her husband)

oritization on the HIV screening decision, the physicians were asked, first, whether their decision in each scenario was based most on concern for the public's well-being or most on concern for the patient's well-being, and second, to choose from an identical list of 11 physician roles that might likely have an impact on a physician's screening decision (Table 2) the one physician role that best described why they decided to recommend or not recommend an HIV screening test in each scenario. The physicians responded to the questionnaire anonymously.

RESULTS

Physician Characteristics

Of the 110 (53%) physicians responding to the questionnaire, 46% were residents with an average age of 29 years,

TABLE 2. PHYSICIANS WERE ASKED TO CHOOSE THE ONE ROLE WHICH BEST DESCRIBED THE BASIS FOR THEIR HIV SCREENING DECISION

Role	Description
1	To protect patient from mental suffering
2	To protect the unborn from disease
3	To protect the public from communicable disease
4	To diagnose the existence of disease
5	To grant patient's requests when reasonable
6	To preserve harmonious marital relations of patients
7	To allocate limited health funds properly
8	To optimize future health care based on HIV status
9	To define the AIDS epidemic in your practice
10	To modify behavior of a responsible patient
11	To protect yourself and staff from HIV infection

and 54% were clinical faculty with an average age of 43 years. Sixty percent of those responding were primarily affiliated with the UCLA residency program; 13%, 12%, and 15% were primarily affiliated with the Santa Monica, Northridge, and Ventura programs, respectively. The physicians reported an average of 2.6 (±6.5 SD) known patients with acquired immune deficiency syndrome (AIDS) among their own practice patients, with a range of 0 to 50 AIDS patients.

HIV Screening Recommendations

Figure 1 displays the HIV screening recommendation results for each scenario according to residents and clinical faculty. General agreement occurred among the physicians regarding the HIV screening recommendations only in scenarios 4 and 5. Considerable variation was noted among the physicians in their HIV screening recommendations for scenarios 1, 2, and 3. The degree of variation among the residents was similar to that seen among the clinical faculty.

Public vs Patient

Figure 2 represents how the physicians responded when asked whether their HIV screening recommendations were based most on concern for the public's well-being or most on concern for the patient's well-being. The physicians predominantly cited concern for the patient's well-being as the basis for their HIV screening decision.

Physician Role Prioritization

The physicians cited various roles for each scenario as the basis for making the HIV screening decision (Table 3). Physician roles 1, 2, 7, and 8 (Table 2) were most cited by physicians. Table 4 shows the single most cited physician

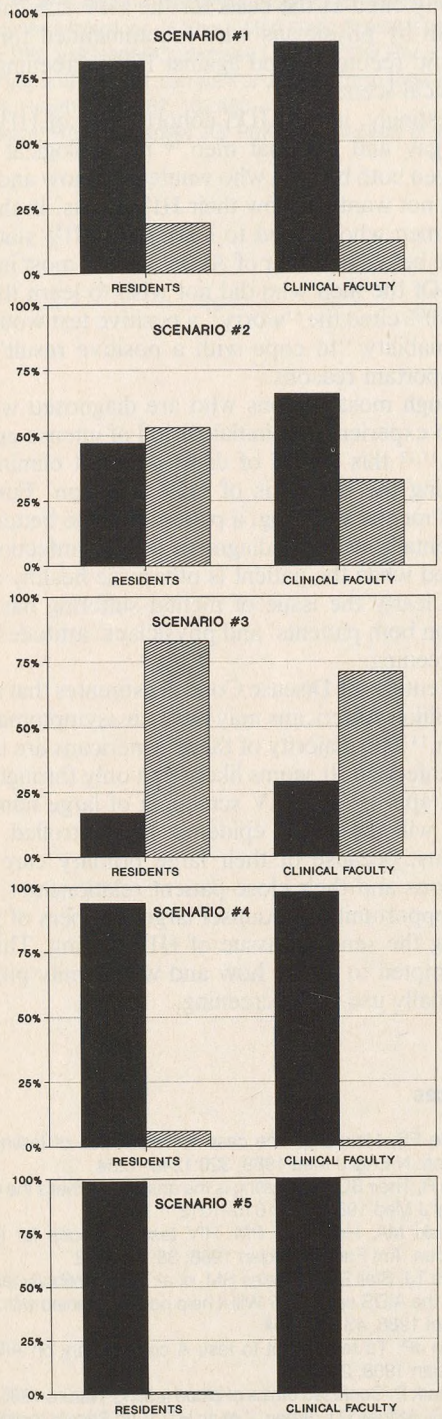

Figure 1. HIV screening recommendation results for five scenarios. Recommended test is depicted by solid bar; not recommended test by hatched bars.

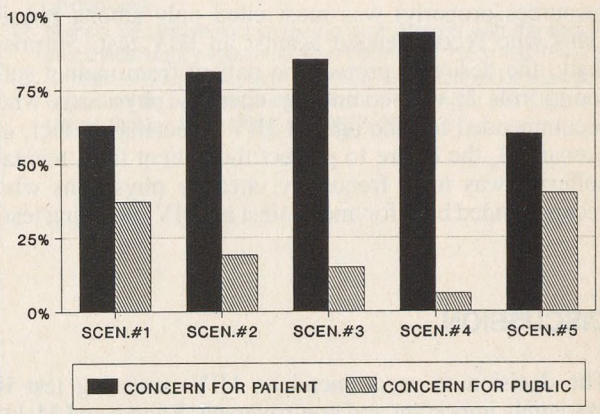

Figure 2. Concern for the patient or concern for the public? How physicians based their HIV screening decisions.

role in each scenario according to physicians who did or did not recommend an HIV screening test. Again physician roles 1, 2, 7, and 8 were most cited. Interestingly, physician roles 2 and 8 (to protect the unborn from disease and to optimize the patient's future health care) were most cited only among those physicians who recommended an

TABLE 3. PERCENTAGE OF FREQUENCY OF PHYSICIAN ROLES CITED AS THE BASIS FOR THE HIV SCREENING DECISION

Scenario	Physician Roles										
	1	2	3	4	5	6	7	8	9	10	11
1	12	1	18	9	5	1	1	40	0	14	0
2	17	32	3	7	4	5	19	13	0	0	0
3	42	0	0	3	10	0	25	3	0	18	0
4	45	0	6	14	11	2	1	20	0	2	0
5	12	54	6	11	4	1	1	11	0	1	0

TABLE 4. THE MOST FREQUENTLY CITED PHYSICIAN ROLE IN EACH SCENARIO ACCORDING TO THE HIV SCREENING RECOMMENDATION

Scenario	HIV Test Recommended	HIV Test Not Recommended
1	8	1
2	2	7
3	1	1
4	1	1
5	2	7

ROLE 1—To protect the patient from mental suffering.
ROLE 2—To protect the unborn from disease.
ROLE 7—To allocate limited health funds properly.
ROLE 8—To optimize the patient's future care.

HIV test, and physician role 7 (to allocate limited health resources properly) was most cited only among physicians who recommended against an HIV test. Surprisingly, the desire to protect the patient from mental suffering (role 1) was commonly cited by physicians who recommended for and against HIV screening. In fact, in scenario 3, the desire to protect the patient from mental suffering was most frequently cited by physicians who recommended both for and against an HIV screening test.

DISCUSSION

The decision to recommend an HIV screening test is extremely important and controversial. Rhame and Maki[1] in their recent editorial in the *New England Journal of Medicine* argue that physicians should vigorously recommend HIV testing "to all US adults under the age of 60 regardless of their reported risk history." Rhame and Maki suggest that beyond simply reducing the transmission of HIV infection, there are additional public health benefits to be gained from wider HIV screening, and there are significant direct health benefits to persons infected with HIV who learn of their infection early in its course. Weiss and Their,[2] in an earlier editorial in the same journal, however, argue that just because the HIV test is a good one (false-positive rate 0.0007% in a low prevalence group, according to Burke et al[9]), there are not yet strong proven reasons for broad screening beyond testing for blood and tissue donation. The belief that infected persons will change their behaviors upon learning of their positive HIV status has not yet been established. Further, Weiss and Their[2] in their 1988 article point out that early treatment of asymptomatic patients has not yet been proven to halt the progression of the disease. Two studies, however, currently underway by the AIDS Clinical Trial Group (ACTG), are designed to determine whether asymptomatic patients will benefit from early treatment with zidovudine (formerly called azidothymidine [AZT]).

In view of the numerous editorial opinions regarding the issue of HIV screening, it is not surprising that when HIV screening recommendations by family physicians are examined, variation is observed. Surprising, however, are the family physicians' concerns and attitudes when making the HIV screening decision. Despite Rhame and Maki's excellent arguments regarding the public health benefits of HIV screening, family physicians in this study were predominantly concerned with the direct effects of HIV screening on their patient's rather than the public's well-being. This finding is likely a product of the historically close and established relationships between family physicians and their patients. In this study the physician's interest in protecting the patient from mental suffering was commonly cited as the basis for the HIV screening decision both by physicians who recommended for and by those who recommended against HIV screening in several clinical scenarios.

Interestingly, in an AIDS cohort study of HIV testing among gay and bisexual men,[10] psychological reasons were given both by men who wanted to know and by men who did not want to know their HIV status. In that study 13% of men who wished to learn their HIV status cited "to cope better with fear of AIDS" as the most important reason. Of the men who did not wish to learn their HIV status, 30% cited the "worry" a positive test would cause or the inability "to cope with a positive result" as the most important reasons.

Although most persons who are diagnosed with HIV infection experience an initial period of intense emotional distress,[11,12] this period of distress is not eliminated by postponing the diagnosis of HIV infection. Further, in terms of mental suffering, a patient may be better able to cope mentally with the diagnosis of HIV infection if it is diagnosed while the patient is otherwise healthy and vigorous. Clearly the issue of mental suffering has a great impact on both patients' and physicians' attitudes toward HIV screening.

The Centers for Disease Control estimates that as many as 1.5 million Americans may have an asymptomatic HIV infection.[13] The majority of these Americans are unaware of their infection. It seems likely that only through education and appropriate HIV screening of large numbers of patients will the AIDS epidemic be controlled. Family physicians, because of their large primary care patient populations and their close patient relationships, have a unique opportunity to counsel large numbers of patients regarding the sensitive issue of HIV testing. This study has attempted to define how and why family physicians may actually use HIV screening.

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