Primary Care of Patients With Human Immunodeficiency Virus Infection

The Physician's Perspective

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Objective: To examine physicians' perceptions, motivations, and influences on their willingness to care for patients with human immunodeficiency virus (HIV).

Design: Interviews with 30 physicians. Qualitative content and narrative analyses were performed.

Settings: Community-based primary care practices in six moderate-sized cities in the northeastern United States with at least a moderate incidence or prevalence of reported acquired immunodeficiency syndrome cases.

Participants: Thirty community-based primary care physicians who had cared for at least two patients with HIV during the previous 2 years.

Main Outcome Measure: Qualitative study designed to provide rich descriptive data.

Results: Care of patients with HIV was regarded as part of the scope of primary care, and was perceived to be similar to the care of patients with other chronic illnesses. Many physicians were motivated by personal rewards in taking care of patients, intellectual challenge, and desire to serve the underserved. Most believed that practicing physicians have an ethical obligation to care for all patients, regardless of diagnosis. No one "type" of physician could be identified who provides care to patients with HIV.

Conclusions: Primary care physicians can apply their skills in the management of other chronic diseases to the care of patients with HIV. Practicing physicians can find caring for patients with HIV rewarding, stimulating, and enjoyable. Educational programs for physicians need to emphasize psychosocial aspects of HIV care. In addition, physicians need opportunities to recognize and deal effectively with their own emotional responses to the care of patients with HIV.

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As the number of people infected with the human immunodeficiency virus (HIV) increases, and as the epidemic expands beyond the original epicenters,[1] primary care physicians will be asked to assume an increasing role in the outpatient care of patients with HIV.[2-4] However, these physicians may not be ready to meet the projected needs.[4-13] Areas of concern include physicians' lack of information about HIV infection, underrecognition of those at risk, fear of contagion, prejudicial attitudes toward members of high-risk groups, inadequate reimbursement, and discomfort caring for the terminally ill.[3,8,14-35] These, and other issues must be better understood to design effective programs to prepare primary care physicians to provide HIV care.

Previous studies have surveyed large numbers of primary care physicians (most of whom were caring for very few, if any, patients with HIV) by means of questionnaires.[13,20,24,34,36-40] While the findings of these studies have good generalizability and reliability, their validity is limited by the degree to which investigators can know in advance what items to include on the questionnaire and by the degree to which clinicians with little or no HIV-related experience can correctly identify their

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SUBJECTS AND METHODS

This is a qualitative study of in-depth interviews conducted in 1990 with primary care physicians who were currently caring for patients with HIV in six northeastern cities. To understand better the problems from the perspective of those who will be most affected,[41] we incorporated their input into design, hypothesis formation, data analysis, and interpretation. In addition, two of us (R.M.E. and A.L.S.) are primary care physicians who treat people infected with HIV.

SETTINGS

Rochester, NY, the principal site of the study, has a moderate to high prevalence of acquired immunodeficiency syndrome (AIDS) (greater than 20 cases per 100 000 population). Five other sites (Albany, NY; Hartford, Conn; Springfield, Mass; Syracuse, NY; and Binghamton, NY) were selected according to the following criteria: population between 100 000 and 1 000 000 (metropolitan area); at least a moderate incidence or prevalence of reported AIDS cases (prevalence greater than eight cases per 100 000 population, or a 1988 to 1989 annual incidence greater than six cases per 100 000); more than 80 km from a major metropolitan area[42,43]; and proximity to the principal research site to recruit and interview participants.

INTERVIEWEES

Thirty community-based primary care internists and family physicians who were currently involved in caring for patients with HIV were selected as key informants[44] in several ways. First, we asked infectious disease specialists to identify general internists and family physicians who have recently consulted them regarding a patient with an HIV-related problem. We also asked local community AIDS organizations for the names of primary care providers to whom they refer patients. If these efforts did not yield at least six potential interviewees per city (Hartford, Springfield, Binghamton, and Albany), we invited all primary care physicians registered with the local medical society or listed in the local telephone directory to participate. A research assistant attempted to telephone all identified providers to establish that they care for patients with HIV on a regular basis, to gather basic demographic information, and to arrange an interview. To be included in the study, each physician had to have cared for at least two patients with HIV, each for a period of at least 1 month, sometime during the previous 2 years. Whenever possible, we selected community-based physicians who had completed residency without subspecialty training in infectious disease. The physicians were asked to participate in a 45- to 60-minute interview and were compensated $40 for their time.

Physicians gave informed consent to participate in the study. The nature of the project was explained and they were assured of complete confidentiality and anonymity.

INTERVIEW FORMAT AND CONTENT

Interviews were held in person in physicians' offices or in their homes. The interviews were audiotaped for subsequent transcription.

We interviewed each physician for 45 to 90 minutes. The focus of the interview was to assess the nature of the physician's experience in caring for patients with HIV, including the physician's motivations, experiences, fears, prejudicial attitudes, and strategies for overcoming difficulties in HIV-related care. We also solicited stories from the physicians as examples of their experience.

The first two thirds of the interview consisted of general open-ended questions, with prompts for more elaboration or detail. Any areas that had not been discussed after 30 or 40 minutes were then introduced by the interviewer. This allowed us to find out what issues emerged spontaneously from the informant, as well as to explore those issues that we had identified in advance.

The interviews were conducted either by R.M.E. (16 interviews) or M.C. (14 interviews). In addition, each interviewer also conducted three practice interviews, which were videotaped and critiqued for content and process. The interview content underwent small revisions after reviewing the data from the first five interviews, and again after 18 interviews were completed. In particular, in the later interviews, we sought more clarification about how physicians deal with their fear of contagion, and population-specific

own needs. We chose a different research strategy; we conducted in-depth interviews with primary care physicians, in areas outside the epicenters of the epidemic, who are involved in HIV care. Our hope was that, in exploring their attitudes, motivations, experiences, and strategies for overcoming difficulties, we might gain new insights as to how more physicians might be encouraged and prepared to follow their lead.

This report focuses on physicians' motivations to care for patients with HIV and their perceptions of HIV care. Future reports will describe barriers to providing this care and strategies used to overcome these difficulties.

RESULTS

DEMOGRAPHIC DATA

We contacted 209 physicians' offices, first by letter, then by telephone, to invite their participation in the study. One hundred fourteen physicians did not respond to telephone messages. An additional 63 did not meet eligibility criteria. In Hartford, no nonspecialty-trained community physicians met the inclusion criteria, so we selected a resident involved in HIV outpatient care, a residency faculty member, and two infectious disease specialists who pro-

motivations to care for patients with HIV. The latter 12 interviews included additional areas of focus, but were not otherwise different from the first set.

DATA ANALYSIS AND INTERPRETATION

Demographic and other quantitative data were entered on a microcomputer and descriptive statistics were calculated.

Interviews were analyzed by a research team consisting of a family physician (R.M.E.), a general internist (A.L.S.), a medical student with a background in anthropology (M.C.), a research assistant with a background in anthropology (S.R.), a medical sociologist with experience in qualitative methods (R.F.), and a quantitatively oriented social science researcher (C.S.). The first five interviews were used to develop coding categories. Four of the researchers (R.M.E., A.L.S., S.R., and M.C.) reviewed these transcripts and independently listed the important themes addressed. These individual lists were then consolidated into one using a consensus-building process. The consolidated list included some of the themes reflected in our a priori hypotheses as well as some that emerged during the interviews. Twelve major themes were identified. These themes became the basis of an interview summary form that was used to abstract interview content of the rest of the analysis. In this article, we report on two themes: physicians' motivations to care for patients with HIV, and similarities and differences between the care of patients with HIV and those with other chronic diseases.

After the first 18 interviews were completed and transcribed, two investigators listened to and read each one, and independently completed a summary form. Under each heading on the summary form, the investigators abstracted the ideas pertaining to that theme and noted line numbers of relevant quotes and stories from the transcript. The summary forms were then consolidated onto one form by a third reviewer. After the first 18 summary forms were compiled in this manner, the research team categorized further the responses pertaining to each theme. Each investigator was given a set of the 18 interviewees' abstracted responses to a given theme and instructed to classify them independently. The group then compared their individual classification schemes and arrived at a common scheme by consensus. Each abstracted response was assigned by the research team to appropriate categories, and the number of responses within each category were then tabulated. We also catalogued new ideas, opinions, and methodologic issues that emerged during the analysis. As new hypotheses arose, they were confirmed or refuted in the process of further data collection.

Salient quotes and stories were noted by the investigators as they listened to the audiotapes and reviewed the transcripts, and were later sorted by theme. They were chosen for inclusion in the text to indicate the range and scope of responses, and to provide "thick description"[45] to enrich and generalize the findings.

RELIABILITY CHECKS

We used a number of strategies to maximize the trustworthiness of the data collection process and analysis, consistent with standard procedures for qualitative content and narrative analysis.[44,46-54] First, to assess the consistency of physicians' responses, we explored topics of special interest more than once during the interview with a variety of questioning styles.[44] Second, at several points during the analysis, investigators performed independent categorizations and ratings, and then combined these in a consensus-building process.

Third, we performed a negative case analysis for all hypotheses that we generated.[44,46] For example, to test the soundness of a hypothesis that physicians' willingness to care for patients with HIV was related to tolerant attitudes toward homosexuals, we looked for instances of physicians who harbored strong prejudicial attitudes toward homosexuals, yet who care for patients with HIV nonetheless. Hypotheses were successively revised to accommodate the exceptions, while preserving the unique and valuable information from the "outliers."

Fourth, we presented the results of this analysis to the respondents for their comments by means of a questionnaire on which they indicated their agreement or disagreement with 180 items that reflected the results of our analysis. This information was used to refine the hypotheses further. Fifth, some of the ratings and categorizations were reviewed by an outside auditor with a background in medical anthropology.

vide ongoing primary care to patients with HIV. Of the 32 eligible physicians who agreed to participate, 30 could be scheduled.

Demographic data regarding the interviewees are summarized in **Table 1**. Physicians were predominantly men working in urban group practices. Most had cared for more than two but fewer than 20 patients with HIV in the previous 2 years. The majority of their infected patients were homosexual men (mean±SD, 55.8%±33.0%), 27.7%±30.4% were injection drug users, 22.9%±25.0% were women, and 0.5%±2.0% were children.

MOTIVATION TO CARE FOR HIV-INFECTED PEOPLE

Many of the physicians' comments addressed more than one theme for caring for HIV-infected patients.

Ethical Responsibility

Twenty-three physicians (77%) said that HIV is part of the scope of primary care, and that primary care physicians have an ethical responsibility to provide care for HIV-infected individuals. A typical response was that it

would be immoral not to. Dr 14 shared this sense of responsibility, but qualified it with a fear of becoming overwhelmed by too many patients with HIV:

I don't see how can anybody refuse. . . . Where are they going to go? Who's going to take care of them? . . . [However], until we have more physicians here, I don't want to market [caring for patients with HIV] as a big thing that we do. [We] are willing to accept it as part of our practice, but nobody wants to do that kind of work solely.

In some cases, ethical responsibility to care for patients with HIV prevailed despite significant ambivalence. Dr 5, who said earlier in the interview that he would rather not care for HIV-infected patients if he could avoid it, still saw it as part of his responsibility as a physician:

I would take another [patient] if I had to. I hope I don't get one, but I would accept one because I can no longer get rid of them. I feel that . . . I have some self-respect.

Personal Rewards

Eighteen physicians (60%) were motivated by personal satisfaction and patient gratitude to provide care to a population that otherwise is complex and potentially time-consuming. Dr 18 found special personal rewards in taking care of patients with HIV:

[HIV-infected patients] are grateful for the care that they get. They don't expect it. And when they get it, they're very grateful. [In contrast], so much of medicine has become consumer-orientated. [Patients] treat you as if you're the delicatessen counter clerk at the supermarket. I get as much from [HIV-infected patients] as they do from me, if not more. They have taught me how to be more caring, less cynical, and funnier.

Rewarding experiences with HIV-infected patients made several physicians more open to caring for these patients in the future. Dr 10 describes a particularly satisfying and deep personal relationship:

There was a fellow whom I started seeing shortly after going into practice. . . . A guy in his 30s had *Pneumocystis* the previous spring and decided to relocate here. . . . We became friends over the next 2 or 3 years that he was under my care. A very sensitive guy. Very open with me and helped me understand what he was going through. [He] got very sick about 6 months after he became my patient and had to be hospitalized, . . . [and] came exceedingly close to death. . . . I got to know his family as well. Over the last year of his life, I saw him at home numerous times. He died a year ago in November. I think about him a lot. I drive by where he lived almost every day and it's hard to go by there without thinking about him. I miss him. He became a friend.

Finally, the following is a quote from one of two physicians who reported feeling inspired by their patients' spiritual growth:

Dr 18: They may be deteriorating physically, but they're evolving spiritually. It gives me the humility to be at the side of people who are still in the throes, and also the confidence that there is a way out of their dilemma.

Intellectual Challenge

Seventeen physicians (57%) found the medical or psychosocial issues in HIV care to be intellectually interesting, challenging, and "kept them going." Dr 18 reported a sense of freedom in treating a disease about which so little is known:

I'm doing it because it's really interesting . . . . It's an opportunity to be on the front line of a disease which we don't know anything about. It is wonderful to be in an area of medicine where the imagination can let go. . . . There is nothing engraved in stone on this disease.

Altruism

Nine physicians (30%) saw their role as serving society's needs, and serving the underserved. These physicians located their practices in high-risk areas, contacting AIDS organizations or otherwise making public their willingness to care for HIV-infected people. Two physicians said that the biopsychosocial perspective of generalists puts them in a better position to provide HIV care than specialists.

Dr 14: I always wanted to help the indigent. . . . [HIV is] one of the illnesses of this community . . . and these people have to be taken care of.

Dr 17 identified himself as always having been for the underdog and "HIV is just the new underdog." Dr 18 also articulated this view:

You become involved with patients' problems because you're the only one that they can talk to. The ones that are evicted. The ones that are arrested. The ones that are thrown out of their insurance companies or fired from their jobs or discriminated against and thrown out of their families. They turn to you.

In contrast, nine physicians (30%) reported that they did not actively seek out patients with HIV; these patients came to them through patient referrals, through inheriting patients from former colleagues, as unassigned patients through the emergency department, and because there was nowhere to send them.

Identification With Patients

Although we did not ask physicians specifically about their own sexual orientation or history of drug use, one (3%) volunteered that he is homosexual and that this has strongly influenced him to provide care to patients with HIV.

Two (7%) other physicians mentioned personal or family histories of substance abuse as part of their reasons for taking an interest in HIV.

Population-Specific Motivations

Late in the analysis (after reviewing the last set of interviews), we observed that several physicians believed that there were significantly different issues in taking care of homosexual men as opposed to intravenous drug users. Almost all of them believed that rewards were fewer among the injection drug-using population, that this was a much more difficult population to treat, and, consequently, their motivation to treat this group was much lower.

Dr 18: I've had more of a problem dealing with the IV drug users . . . only because as a group of patients, they generally are more self-destructive and . . . more noncompliant. You know, it's very hard for me to make a commitment to a patient if they're going to be noncompliant. And I've gotten to the point now where I'll tell people if they're not going to want to help themselves, I don't want to help. . . . I don't want to be their doctor."

SIMILARITIES AND DIFFERENCES BETWEEN HIV AND OTHER CHRONIC DISEASES SEEN IN PRIMARY CARE

Nineteen physicians (63%) spontaneously stated that they regarded care of patients with HIV to be no different from the care of those with other chronic diseases. The similarities that these physicians identified between the care of HIV-infected patients and patients with other chronic diseases are listed in **Table 2**. Most commonly, physicians compared HIV with diabetes (eight interviewees), hypertension (seven interviewees), cancer (six interviewees), or heart disease (four interviewees). These primary care physicians consider HIV disease part of their field of knowledge.

Dr 8: A lot of the management of HIV disease is just like treating hypertension. But of course you can make treating hypertension a very complex issue also if you wanted.

Dr 16 emphasized that HIV-infected patients are not treated differently than other patients in his practice:

It's hard for me to say, "How do you treat your AIDS patients," because they really aren't treated any differently than any of my other patients here. They're not handled differently. Everybody's records are kept very confidential. . . . AIDS is a disease just like coronary artery disease is a disease, different type of cancers are disease, and vascular disease is a disease, and I think it's wrong to make it special. . . .

Dr 15 described how he used consultants in the management of HIV in the same way that he used consultants to help manage complications of other chronic diseases:

Do primary care doctors, whenever their patients get angina, refer them to a cardiologist? Of course not. They take care of angina. If you're not taking care of angina, as a primary care physician, you're in the wrong field. To me it's really no different [with HIV-infected patients]. It's when the illness becomes more advanced, be it coronary heart disease or hyperthyroidism or HIV, that's when they should get help, not right away.

Other physicians believed that it was impossible to exclude HIV from one's practice.

Dr 9: I was trying to figure out what was going on with [a 66-year-old patient]. I didn't know that he was HIV positive. . . . It was interesting that this man who presented with anemia, weight loss, and some vague complaints [had AIDS]. I was thinking more of colon cancer. . . . He's an example of how you can't just ignore [HIV] if you're going to do primary care.

Table 1. Characteristics of Respondents

Demographics	No. (%) of Respondents
Age, y (mean, 39.5 y)	
26-35	6 (20)
36-45	18 (60)
46-55	4 (13)
56-65	2 (7)
>65	0
Sex	
M	25 (83)
F	5 (17)
Specialty	
Family medicine	10 (33)
General internal medicine	18 (60)
Subspecialty training	
Infectious disease	2 (7)
Other	0
Location of practice	
Urban	21 (70)
Suburban	9 (30)
Rural	0
Type of practice	
Solo	8 (27)
Group	22 (73)
Health maintenance organization	1 (3)
Community health center	8 (27)
Hospital clinic	5 (17)
Private office	16 (53)
Academic affiliation	12 (40)
No academic affiliation	18 (60)
No. of patients with human immunodeficiency virus in the previous 2 y	
2	8 (27)
3-10	7 (23)
11-20	5 (17)
>20	10 (33)
Duration of caring for patients, y	
2	6 (20)
3-5	16 (53)
>5	8 (27)

Table 2. Similarities Between Caring for Patients With Human Immunodeficiency Virus and Those With Other Chronic Diseases—Physicians' Perspectives

Patients need to be educated and active in the management of their disease.
Physicians need to provide ongoing psychological support to patients and their families.
Physicians commonly deal with patients' loss of independence, institutionalization, and premature death.
Like other chronic diseases, there is no cure.
Surveillance for complications in their early stages can prevent further morbidity.
Physicians need to recognize and respond quickly to medical crises.
Physicians need to manage multisystem complications, complex medication regimens, and multiple specialists.
There are protocols and algorithms to guide biomedical care.

Table 3 lists some ways in which these physicians regarded HIV as unique or different from other chronic diseases. Most of these had little to do with the biomedical aspects of management. Rather, they mostly pertained to the psychological impact of the disease on patients, physicians, and their families; physicians' fear of contagion; complex social and ethical issues; prejudicial attitudes; and physicians' discomfort dealing with sexuality and drug use. Below are some illustrative quotes:

Dr 7: [This patient] is a challenge. He is a fund of information . . . [about] HIV. He makes a lot of phone calls to CDC, to drug companies, and to friends. He has challenged me to be current . . . , to sift through his misconceptions, . . . and for us to mutually find what's right, [which often is] time-consuming.

Dr 13: Sexual histories are still difficult to ask, and [with this patient], I should have been more blatant. I don't ask everyone, "What's your sexual preference?" . . . If this man . . . wasn't a homosexual, how would he have responded? It was definitely not to his benefit not to have asked. And, he didn't bat an eye when we talked about it [later]. [It was] all my own anxiety. . . .

Dr 14: I have an HIV-positive patient who has [cervical] carcinoma in situ, . . . and she's got recurrent lesions now. She really needs a hysterectomy and I can't find a physician in this community who will do it. . . .

Dr 24: I've got a patient who's a schoolteacher who is terrified that he's going to be the first local celebrity because he's had thousands of kids as his students. He has had AIDS for a year and a half now, and he hasn't even told his parents. He's only told one other person in the world besides me; . . . We talked about someday having to tell his mother, and how uncomfortable I would be if he was no longer capable of telling his mom, but his mom needed to know that he was dying.

Many physicians reported being inadequately prepared in medical school and residency to deal with the issues described above. However, most physicians qualified their comments, similar to Dr 10. Fear of contagion and barriers to care within the health care system will be discussed in detail in future articles.

FOLLOW-UP QUESTIONNAIRE

Twenty-two physicians (73.3%) returned the follow-up questionnaire. One physician was on maternity leave, one had moved out of the country, and two refused. The remaining four did not return their questionnaires despite two written reminders and two telephone calls.

We considered a mean score of greater than 3.5 or less than 2.5 on a 5-point Likert scale, or that the concern in question had been shared by more than half of the physicians, to be a potentially significant response. Selected results are shown in **Table 4**.

COMMENT

Our most striking findings are that the primary care physicians believed that HIV is not very different from other chronic diseases, and that they regarded HIV care as satisfying and rewarding. These attitudes prevailed despite the fact that these physicians were a heterogeneous group, with a wide variety of motivations to care for patients with HIV.

Most of the physicians believed that it would be unethical not to care for HIV-infected patients. Among physicians who have chosen to care for patients with HIV, these are not surprising results. However, in surveys of randomly selected physicians, others have found similar results.[22,55-57]

HIV shares many features of other chronic diseases seen in primary care, such as hypertension, diabetes, and cancer, and may even carry a better prognosis.[58] Al-

Table 3. Differences Between Caring for Patients With Human Immunodeficiency Virus (HIV) and Those With Other Chronic Diseases—Physicians' Perspectives

Biomedical issues
Frequent new developments in treatment
Risk of transmission of infection to health care personnel
Primary care physicians' opportunity for greater primary responsibility for advanced HIV disease compared with other advanced chronic diseases
Patient activism and interest in new treatments can challenge physicians to keep current on research literature
Psychosocial issues
Greater emotional intensity for physicians
Need to address patients' sexual practices
Physicians' dislike and distrust of intravenous drug users
Physicians' unfamiliarity and discomfort with homosexual culture and life-style
Social stigmatization of patients, and for physicians who care for them
Ethical issues—confidentiality and partner notification
Political and media attention have made HIV "special"
Administrative and financial issues
More bureaucratic regulations and paperwork
Inadequate referral and support services

though HIV was not perceived to be more medically complex than other common chronic diseases, some physicians who are inexperienced with HIV may share a misperception that HIV requires vast amounts of new knowledge and skills, and well-informed patients may challenge physicians to explore research literature that they would not do otherwise.

Many physicians in this study commented on the rewarding relationships that they formed with HIV-infected patients and their families. This phenomenon is not unique to the care of patients with HIV; gratifying relationships between physicians and patients are markers for professional satisfaction among physicians.[59] Furthermore, motivation research using self-determination theory[60] has shown a clear association between internal motivating factors, such as personal satisfaction, and incorporation of new behaviors. Thus, it would be expected that those for whom HIV care has positive meanings—that is, those who experience a sense of relatedness to others, excitement, challenge, and interest in the care of patients with HIV—would maintain their involvement in HIV care compared with those who care for patients with HIV solely out of a sense of obligation to societal expectations. In this regard, there is reason for concern about physicians' willingness to care for HIV-infected injection drug users, given that injection drug users were regarded as more difficult to care for and the personal rewards fewer.

Among health care professionals, discomfort and prejudicial attitudes are common toward homosexuals[16,29,32,35,61-63] and people with AIDS.[21,28,29] Never-married men are more likely to care for HIV-positive patients,[64] and there are anecdotal reports that a high percentage of physicians who care for patients with HIV are homosexual (Michael King, MD, written communication, September 1992). Heterosexual physicians are more likely to have concerns about occupational contagion and about the emotional aspects of caring for patients with HIV than homosexual physicians.[56] Accordingly, we had presumed that there would be a greater number of physicians who had a special reason for caring for patients with HIV, such as identification with patients because of the physician's own sexual orientation or history of drug use.

However, only three physicians (10%) disclosed that their own homosexuality or history of substance abuse had influenced their involvement with HIV-infected patients. Furthermore, we could identify no one "type" of physician who cares for patients with HIV. Physicians had practices in a variety of settings, were of a variety of ages, had a variety of reasons for caring for HIV-infected patients, saw a variety of number and types of HIV-infected patients, and identified a wide variety of rewards and difficulties in caring for this population. This information may be useful in addressing the fear of "stigmatization-by-association" that may accompany physicians' decisions to care for patients with HIV.

Table 4. Selected Questionnaire Results*

	Is This an Important Problem?†	Has This Affected You?, %‡
Barriers to care		
Taking care of substance abusers is difficult.	4.27	81
Health care providers lack training in treatment of addictions.	4.10	65
Intravenous drug users are manipulative and untrustworthy.	3.61	61
Physicians need to gain experience during residency in the treatment of HIV.	4.47	59
Health care practitioners need to recognize that in treating intravenous drug users with AIDS, you are really trying to treat two diseases instead of one.	4.13	57
Intravenous drug users are needy and individual physicians cannot provide all their health care needs without help.	3.85	55
HIV is no more complex than other chronic diseases.	3.57	36
Physicians and other health care workers are intimidated by the thought of caring for patients with HIV.	3.85	25
Recommendations and strategies	Is This Helpful?†	
1. Primary care physicians have an ethical obligation to treat patients with HIV.	4.39	
2. Stronger commitment to teach about HIV in medical school and residency.	4.09	

*HIV indicates human immunodeficiency virus, and AIDS, acquired immunodeficiency syndrome.

†Mean scores were determined on a 5-point Likert scale, where 1 indicated not important (or not helpful) and 5, very important (or very helpful).

‡Percentage of participants responding affirmatively.

Although HIV shares many features of other chronic diseases, it is a disease that affects stigmatized populations. Care of the HIV-infected patient requires sensitivity and skill to deal with complex social and ethical issues. The death of young adults, who may be of similar age to their physicians, can be emotionally difficult for physicians.[65] None of these issues is unique to HIV, but HIV creates a unique constellation of such issues. Physicians have inadequate training in dealing with psychosocial issues, especially those that pertain to HIV disease,[12,18,19,31,66,67] and the physicians reported a need to address these issues in greater depth. These issues, more than lack of biomedical knowledge, will pose major obstacles of the care of HIV-infected individuals.

LIMITATIONS OF THE STUDY

Our intent was to explore a few issues in depth, to challenge previously held beliefs (including our own), to generate hypotheses, and to formulate new questions. This is not a random sampling of physicians; rather we selected

"key informants"[44] who were likely to give us useful perspectives. Interviews were open-ended, and, consequently, there was more elaboration of certain themes in some interviews than in others. The frequency of responses to specific issues are not meant for statistical comparison, but rather to indicate the scope and depth of views that were represented. In some cities, slightly different recruitment strategies inclusion criteria had to be used because of a dearth or excess of physicians providing care to patients with HIV. The transferability of these findings to other settings will hopefully be enhanced by the use of descriptive material and quotes.

Very few women were interviewed, and we could not compare the responses of men with those of women concerning the care of HIV-infected patients. Issues about sexuality might be addressed differently, and that might influence motivations to care for this patient population. We also could not compare responses from internists and family physicians.

Our study did not permit us to compare physicians who are caring for HIV-infected patients with those who are not. This was intentional, so as to provide a rich description of those who are currently providing HIV care. Future studies might address physicians who do not or who will not care for patients with HIV. Finally, because the results are presented as detailed descriptions of individual physician's attitudes and concerns, this format did not permit us to find statistical associations between different areas of concern. To have done so would have required the use of a standardized questionnaire, which would have sacrificed the depth that makes this study unique.

IMPLICATIONS

In contrast to earlier studies that point to reasons why physicians are reluctant to care for HIV-infected patients,[13,28,56] we have focused on those factors that motivate and enable physicians to care for these patients. Our findings suggest several avenues to increase primary care physicians' involvement with HIV care.

First, this study suggests that primary care physicians are able to apply their skills in management of other chronic diseases to the care of patients with HIV; biomedical aspects of HIV care need not be overwhelming. Succinct and appropriate information on primary care management of HIV, more hands-on experience with outpatient HIV care during medical school and residency, and more role models in the community will make HIV care seem less intimidating and more familiar.[12,67,68]

Second, communication of the personal rewards to physicians for doing this work, rather than sensationalizing the negative aspects of caring for patients with HIV, might encourage others to begin to care for this patient population. Similarly, with an identified need for more primary care physicians to care for HIV-infected patients, training programs might take advantage of the fact that practicing physicians can find caring for HIV-infected patients rewarding, stimulating, and enjoyable.

Third, the unique difficulties in providing care to HIV-infected patients were related to discomfort or lack of skills to deal with potent psychosocial issues, such as sexuality and drug use, as well as physicians' own, often powerful, emotional distress. Most programs on HIV disease for primary care physicians have focused on biomedical management issues; in the future, educational programs should also emphasize development of skills in taking sexual histories, promoting behavior change, and discussing end-of-life issues with patients and their families. More training for practicing physicians in the office management of substance abuse could help. In addition, physicians need opportunities to recognize and deal effectively with their own emotional responses to the care of patients with HIV.

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