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Religion and spirituality in the care of patients with HIV : beliefs and practices of providers

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Beliefs and Practices of Providers

Carmil Steron

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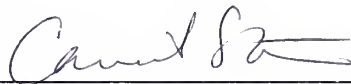
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Religion and Spirituality in the Care of Patients with HIV:
Beliefs and Practices of Providers

A Thesis Submitted to the
Yale University School of Medicine
in Partial Fulfillment of the Requirements for the
Degree of Doctor of Medicine

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ABSTRACT

RELIGION AND SPIRITUALITY IN THE CARE OF PATIENTS WITH HIV: BELIEFS AND PRACTICES OF PROVIDERS.

Carmit Steren, Gerald H. Friedland, Lauris C. Kaldjian, and James F. Jekel. Department of Internal Medicine, Yale University, School of Medicine, New Haven, CT.

The combination of physical and emotional suffering, likelihood of premature death, and personal and social stigma faced by patients infected with HIV (Human Immunodeficiency Virus) underlies a need for discussion of religious or spiritual issues with medical providers. While several investigations have suggested that providers infrequently discuss religion or spirituality with their patients, the extent to which these topics are addressed by providers of patients with HIV has not been reported. A cohort of 74 providers of HIV care was interviewed in order to elucidate religious beliefs and practices as well as attitudes regarding the consideration of patients' spiritual needs in medical care. In addition, data from a survey of patients with HIV were utilized in order to directly compare the religious and spiritual beliefs and practices of providers and patients. Providers differed from patients according to belief in a divine being (77 % vs. 98 %), religious affiliation (77 % vs. 93 %), and daily prayer (31 % vs. 69 %; all $P < 0.005$). Providers who reported conversing with at least one patient about religion or spirituality (87.8 %), including the initial patient interview, estimated discussing these issues with a median of 33 % of their patients. Barriers to these discussions included differences in provider-patient beliefs (28.4 %), viewing religious and spiritual issues as external to the medical paradigm (27 %), and lack of adequate training or knowledge (18.9 %). Education and training that targets these barriers may be effective in improving support for HIV patients with spiritual and religious needs.

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I am indebted to my parents for their tireless support and unconditional love, to my sister, Yael, who never fails to make me laugh, and to Sagi, who is my staunchest supporter and critic. Their endless encouragement fuels my development as a friend, family member, and physician.

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INTRODUCTION

Historical Perspective

The interrelationship between physical health and spiritual well-being has long been recognized in the medical tradition. Although now disparate fields, the practice of medicine developed largely within the context of religion (1). This common origin is likely the result of a fundamental conceptual link; many basic tenets of religion, including those of creation, human dignity, justice, and finitude, form the ethical foundation for medical care (1). Historically, the intersection of health with religion was embraced universally by Christian, Jewish, Muslim, Hindu, Buddhist, and shamanic customs. As such, healing was acknowledged as the natural domain of spiritual leaders. Many well-known physicians, including Moses Maimonides and Avicenna (ibn Sina), served important roles as religious leaders (2).

The divorce of medicine from religion was facilitated, in part, by public acceptance of the newtonian-cartesian division of personhood into mind, body, and spirit (3). The consequence of this division was the creation of a conceptual disparity between disease and illness. While disease relates to biologic processes, illness represents culturally shaped reactions to disease (4). This distinction, coupled with the advent of medical technology, ultimately led to the assignment of spiritual suffering to the church and physical pain with biomedical study to physicians (5,6). Although William Osler, at the turn of the century, recognized the importance of bodily, mental, and spiritual fears in patients confronting death, the medical field retained its narrow biomedical focus until much later in the century (7). In 1977, Engel postulated a well-accepted expansion of the medical paradigm to include both psychological and social elements (8,9). Hiatt later

modified this “biopsychosocial” model to include a spiritual dimension. He envisioned the spirit – that part of the person concerned with meaning – to be an essential determinant of psychologic variables that, in turn, influence physical and social outcomes (3).

Definitions

Although often perceived synonymously, the terms “spirituality” and “religion” are conceptually discrete. Spirituality is frequently defined as the part of a person that is distinct from the mind or body and which exists in an intangible domain (3). Spirituality provides meaning and purpose in life, transcendence, connection with others, and spiritual energy (10). Religion, in contrast, refers to a specific belief system with accepted practices (11). Many Americans experience and express spirituality through religion (10). Because religious involvement is more easily quantified, most scientific endeavors investigate religion rather than spirituality (12).

Trends in Medicine

The role of religion and spirituality in patient care has received, until recently, little attention by the medical profession (12-15). Most empirical data on the relationship between religion and health derives from allied health sciences such as psychology, epidemiology, and sociology (16). In the medical literature, approximately two hundred studies have been published over the last century that examine religious variables (17). Even within family medicine, a field that traditionally promotes holistic care of the

patient, the literature contains a paucity of relevant studies. A systematic review of investigations from 1976 to 1986 in the *Journal of Family Practice* revealed that while 43 percent of studies with any quantified measures examined at least one psychological measure, only 3.5 percent described any religious variables (16).

Over the last decade, the medical community, including both clinicians and educators, has shown increasing interest in the intersection of religion and spirituality with medical care (14,18). The field of psychiatry has formally recognized the importance of religion and spirituality in medicine by creating a new category in the *Diagnostic and Statistic Manual of Mental Disorders* (DSM-IV) which addresses problems of a religious or spiritual nature that are not attributable to a mental disorder (11). The National Institutes of Health has funded research and conferences about the impact of religion on health (14). For several years, the American Association of Medical Colleges has co-sponsored a well-attended annual conference about curricular development addressing religion and spirituality (19). The number of medical schools that have included religious and spiritual issues in their curricula has increased from three to more than forty over the last decade (19,20).

The trend toward the inclusion of religious considerations in medical care has been met with some resistance. Leading medical journals have reviewed available empirical data and have raised questions about the appropriateness of physician involvement (12,14,21). An editorial in the *New England Journal of Medicine*, for example, questions the generalizability of studies documenting patients' interest in discussing religious and spiritual concerns with their physicians. Other studies have criticized the robustness of statistical analysis in studies examining religious or spiritual

variables. A review of studies in the *Journal of Family Practice*, for example, found that the use of descriptive statistics, a less rigorous analytic method, was more frequent in studies with religious measures than in those without religious measures (16). A similar systematic review of two leading psychiatry journals found comparable results when assessing quality of statistical methods. Of the studies examined that did report religious variables, a majority either neglected to formulate hypotheses concerning these measures or failed to describe associations between religious commitment and mental health (22).

The Relationship between Spiritual or Religious Commitment and Health

Most investigations that have explored the relationship between religion and medicine have focused on religion as a determinant of health. Numerous studies have demonstrated a positive influence of religious involvement on prevention of and recovery from illness. Religious commitment has been associated with decreased depression (23-25), lower blood pressures (26,27), increased longevity (28-30), reduced cancer rates (31), and hastened or improved recovery from surgery (24,32). Several meta-analyses and systematic reviews have revealed that religious involvement has been more frequently associated with positive mental and physical health outcomes than with neutral or negative outcomes (23,33-35).

Religion likely exerts its influence on health via multiple pathways (36). Proposed mechanisms for the beneficial impact of religion on health include provision of a cognitive framework in which to make sense of illness, a support network to enhance coping, encouragement of practices which may promote relaxation, and discouragement

of unhealthy behaviors (10,35,37). Proponents of a supernatural component to the impact of religious commitment on health often refer to studies on intercessory prayer. For example, one double-blind study of patients in a coronary care unit found that patients who had been prayed for had better outcomes than patients who had not received intercessory prayer (38). The methodology of this study, however, has been subject to frequent criticism.

Coping with Chronic Illness

In addition to its impact on physical and mental health, religious commitment is important in helping patients cope with chronic or terminal illness. Patients who are suffering or confronting death may need to examine themselves spiritually in order to answer difficult questions regarding fundamental values and the meaning of life (5,39). For many of these patients, religion provides a framework with which to understand and cope with their illness (40). A study of women with gynecologic cancer, for example, found that 49 percent of patients had become more religious since their diagnosis, and that 93 percent believed that religious commitment helped sustain their hopes. The authors conclude that it may be appropriate to include a member of the clergy on the health care team (41). With the addition of a category pertaining to religious and spiritual disorders in DSM-IV, its authors note that religious and spiritual changes frequently occur in the setting of a terminal illness and therefore advocate comprehensive treatment (11). Although several recent discussions about the care of dying patients address patients' spiritual and religious needs (42), others neglect this issue entirely (43).

Patient Attitudes

The consideration of religious and spiritual issues in the provision of health care is important given the significant extent of religious belief and practice in the United States. Based on recent Gallup poll surveys, 95 percent of Americans believe in God, 84 percent feel that religion is important in their lives, and 60 percent cite faith as their most important influence. Religious practices are common, with 76 percent of respondents reporting prayer as an important part of daily life and 43 percent attending services within the week prior to survey participation. (44).

Many Americans also view religious and spiritual issues as fundamental to health and the physician-patient relationship. A Time/CNN poll reported that 82 percent of respondents believed in the healing power of prayer (18). In a USA Weekend poll, 79 percent of respondents agreed that spiritual faith could help people recover from illness, injury, or disease. Sixty-three percent agreed that doctors should talk to their patients about spiritual faith (45). Another study found that 29 percent of family practice patients believed that faith healers can help some patients whom physicians could not help. Twenty-one percent of these patients had previously attended a faith healing service (46). A survey of hospital inpatients revealed that 77 percent of respondents believed that physicians should consider patients' spiritual needs, 37 percent wanted their physicians to discuss religious beliefs with them more frequently, and 48 percent wanted their physicians to pray with them (47). Another investigation of hospital inpatients found that 66 percent of respondents would like their physicians to ask whether they have spiritual or religious beliefs that would influence their medical decisions if they become gravely ill. This response was not associated with patients' self-reported level of religiosity.

Moreover, 66 percent of respondents agreed that a physician's inquiry about spiritual or religious beliefs would strengthen their trust in the physician (48).

The Care of Patients with Human Immunodeficiency Virus (HIV)

While many patients would likely profit from the integration of spiritual or religious counseling in their medical treatment, patients with HIV/AIDS (Acquired Immune Deficiency Syndrome) have unique concerns that may enhance their need for such care. Although therapies for HIV have significantly improved in recent years, patients with HIV infection usually are young and were previously healthy. They face a potentially long but invariably fatal illness. Patients with HIV are often subject to misconceptions and fears about its transmission (49). For example, 40.2 percent of participants in a large survey in 2000 agreed that HIV transmission could occur through sharing a glass with an HIV-infected person (50). Furthermore, because HIV may be associated with illicit or disapproved behaviors, patients with HIV frequently suffer both public and personal stigma (49). Nineteen percent of respondents in the above survey agreed that persons who acquired AIDS through sex or drug use "have gotten what they deserve," a statement the authors used as a proxy indicator for stigmatizing attitudes (50). A recent study of inpatients with HIV found that 44 percent felt guilty about their HIV infection, and 26 percent perceived their illness as a form of punishment (51).

The combination of physical and emotional suffering, likelihood of premature death, and personal and social stigma faced by patients with HIV may augment their need for discussions of religious or spiritual issues when compared with other patients with

chronic illness. A hospice-based study found that patients with AIDS received significantly lower scores on a spiritual well-being assessment than other terminally ill patients (52). In discussing the care of patients with terminal illness, the authors of the new DSM-IV category concerning religious and spiritual disorders specify that the treatment of patients with AIDS should attend to their spiritual welfare (11). Other authors explicitly recognize the spiritual needs of patients with HIV by categorizing them as a component of their social needs (53) or by commenting that many faith-based organizations have developed ministries to operate service programs for people with HIV (54).

In addition to serving as a potential source of comfort, patients' religious and spiritual beliefs may influence their medical decision-making. Among hospital inpatients with HIV, there is an association between patients' spiritual beliefs and their end-of-life decisions (51). For example, patients who perceived their illness as a punishment were less likely to have had prior discussions about resuscitation status, while patients who believed in a forgiving God were more likely to have participated in these discussions. Furthermore, patients who prayed daily or had a belief in God that was helpful to them when thinking about death were significantly more likely to have a living will. The authors conclude that some barriers to discussions about death, dying, and end-of-life decisions may include patients' unresolved spiritual issues. They also comment that health-care providers should incorporate patients' spiritual beliefs into their clinical care (51).

The Role of Medical Providers

Most studies examining religious or spiritual issues in medicine focus on the patient rather than the provider. A systematic review of studies addressing religious or spiritual variables in the *Journal of Family Practice* found that 86 percent of the studies pertained to patients, while only 14 percent related to providers. In contrast, of studies reporting nonreligious psychosocial variables, 36 percent pertained to caregivers (16).

Many authors note that, in general, religious and spiritual issues are infrequently addressed by medical providers (6,10,47,55). A study of family physicians' found that almost all respondents considered spiritual well-being to be an important health component. However, most of these providers reported infrequent discussions of spiritual issues with patients and infrequent referrals of hospitalized patients to chaplains. Lack of time (71 %) and training (59 %) were key barriers to spiritual assessment (56).

A small number of studies have investigated the role of providers' beliefs in their consideration of patients' religious and spiritual needs. Several studies have documented increased attention to religious and spiritual issues by providers with greater religious involvement. One small study of religiously devout physicians, for example, found that most participants frequently addressed religious issues and agreed that physicians should be aware of the religious beliefs of their patients. Sixty-seven percent of physicians in this study reported praying aloud with at least one patient or family member (57).

Another survey examining referrals for spiritual counseling by family practice providers found that physicians who reported a greater degree of religiosity had a small increased tendency to refer. Referrals were also more common among providers who had been in practice for over 15 years (58). In a separate study, presence or absence of religious

affiliation had no association with rate of religious inquiry, but providers who spent two or more hours weekly in formal religious activity had the highest rates of inquiry (59). The extent to which religious and spiritual issues are addressed by providers of patients with HIV/AIDS has not been reported.

STATEMENT OF PURPOSE AND HYPOTHESIS

Through interviews of medical providers of patients with HIV, this study aims to:

1. Characterize providers according to demographics, religious and spiritual convictions and practices, and beliefs about death and dying.
2. Compare providers of HIV care with HIV-positive patients by the above attributes by utilizing data collected by Kaldjian et al. in their investigation of patients with HIV.
3. Describe views on and participation in discussions about religion and spirituality as well as death, dying, and end-of-life directives.
4. Investigate predictors of participation in above discussions.

Preliminary hypotheses include:

1. Providers of HIV care have a decreased prevalence of religious and spiritual beliefs and practices when compared with Americans in general and patients with HIV in particular.
2. Discussions about religion and spirituality between providers and patients are infrequent and perceived as external to medical care.
3. Providers with greater religious or spiritual beliefs or practices are more likely to discuss religious and spiritual issues with their patients.

METHODS

Test Instrument

An investigator-administered interview questionnaire was created for use with medical providers of patients with HIV disease. The instrument encompassed over one-hundred questions grouped into five broad categories concerning demography, religious beliefs and practices, perceptions about the spiritual beliefs and needs of patients, patient referrals for spiritual counseling, and prior discussions with patients about religion, spirituality, death, and dying. Questions regarding religious convictions and practices were adopted directly from the survey utilized by Kaldjian et al. in their study of patients with HIV (51) for later comparison of provider and patient responses. The test measure, which included dichotomous and categorical variables, Likert scales, and narrative responses, was fashioned such that responses could be electronically coded and analyzed for statistical meaning.

Following approval by the Yale University Human Investigations Committee, the questionnaire underwent pilot testing with five providers in the Oncology Department at Yale-New Haven Hospital (YNHH). Oncologists represent a suitable pilot cohort because many of their patients, like patients with HIV disease, have a life-threatening disease and are confronting end-of-life decisions. The questionnaire was altered in accordance with qualitative suggestions and comments received from the pilot subjects immediately following each interview.

Sample Description

Subjects were eligible for inclusion in the study if they were medical providers of patients with HIV disease in Connecticut. The volunteer, convenience sample comprised attending physicians specializing in infectious disease, nurses from HIV clinics or from the designated HIV/AIDS floor at YNHH, physician assistants from the AIDS program at YNHH, infectious disease fellows at YNHH, and residents and medical students who had completed a minimum of four weeks of training on the HIV/AIDS floor at YNHH. Names and contact information were obtained via the Yale University AIDS Program Office and the Connecticut Infectious Disease Society membership list. Subjects were contacted by telephone and invited to participate following a brief description of the study purpose and required commitment. With approval, an interview time and place was established at the convenience of the subject.

Data Collection

All interviews were conducted by the same investigator (C.S.) during three time periods: September-October 1999, December 1999, and December 2000. Informed consent was obtained at the start of each interview. Subjects were reminded that they could decline to answer any questions throughout the interview. They were also advised to restrict their responses, when appropriate, only to the patients with HIV disease under their care, rather than their patient pool in general. The interviewer read each question directly from the questionnaire and recorded answers either by circling the corresponding response on the data sheet or, in the case of open-ended questions, by transcribing a paraphrased response. If necessary, questions were repeated and occasionally rephrased on subject request. Each interview took approximately one hour to complete.

Statistical Analysis

Subject responses were entered into a database using Epi-Info (Centers for Disease Control, Atlanta, Georgia). Categorical, ordinal and continuous variables were entered directly, while narrative responses were grouped according to subject and then recorded categorically. Analysis was conducted using Epi-Info and, when necessary, the Statistical Analysis System (SAS Institute, Cary, North Carolina). For analysis, Likert scales were collapsed into “agree” and “disagree” categories in order to enable comparison to dichotomous patient responses from the Kaldjian et al. study. Unless otherwise indicated, P values are reported as standard Pearson two-tailed results. An α level of 0.05 was utilized to determine statistical significance.

RESULTS

Characteristics of Providers

Sample Population

Of the 90 providers contacted for participation in the study, 83 agreed to take part (92.2 %). Scheduling conflicts resulted in a final pool of 74 subjects. Although an explanation for refusal to participate was not formally elicited, most providers volunteered lack of sufficient time as justification. The sample population included 27 infectious disease specialists (36.5 %), 6 fellows training in infectious disease (8.1 %), 13 internal medicine residents (17.6 %) and 15 medical students (20.3 %) who had completed a rotation on an HIV/AIDS unit, and 9 nurses (12.2 %) and 4 physician assistants (PAs, 5.4 %) who care in part or exclusively for HIV-positive patients. Collectively, providers had cared for patients with HIV over a range of 1-20 years (median 6.5). In that time, they reported working with 3-10,000 patients (median = 175, interquartile range = 20-400).

Demographics

Providers were characterized according to age, race, gender, religious affiliation, and strength of religious and spiritual conviction. The mean age of providers was 37.6 years (range 24-62, median 38.5). Men constituted 52.7 % of the study population. Racial distribution revealed a preponderance of Caucasian providers (77.0 %) and a small minority of Hispanic and African American providers (4.1 %; Table 1). Although almost all providers were raised within a specific religion, only 77.0 % identified with one at the time of the interview. A wide range of religious affiliations was reported (Table 2).

Providers were significantly more likely to characterize themselves as more spiritual than religious on a five-point scale (mean unit difference = 0.61, $t=5.07$, $P=0.0001$).

Table 1. Distribution of study population by race/ethnicity

Race/Ethnicity	N	(%)
Caucasian	57	(77.0)
Asian	8	(10.8)
Indian	3	(4.1)
African American	2	(2.7)
Hispanic	1	(1.4)
Other	3	(4.1)
Total	74	(100.0)

Table 2. Distribution of study population by religious affiliation

Religious Affiliation	N	(%)
Protestant	21	(28.4)
Catholic	13	(17.6)
Jewish	14	(18.9)
Muslim	4	(5.4)
Other	5	(6.8)
No affiliation	17	(23.0)
Total	74	(100.0)

Religious Beliefs and Practices

Religious beliefs and practices are summarized in Table 3. Most providers (77.0 %) reported belief in a divine being. Of these providers, 77.2 % agreed that they had a personal relationship with God (59.5 % of total). Almost all providers who believed in a divine being felt at peace with God (91.2 %, 70.3 % of total). While most providers occasionally engaged in religious practices, fewer than half did so regularly. 35.1 % attended worship services weekly or monthly, 31.1 % prayed daily, and 23.0 % read the bible and/or religious scriptures daily or weekly.

Few providers reported that working with patients with HIV had changed their beliefs about God (10.8 %) or their practice of religion (9.5 %). Almost one-half of

providers who believe in God agreed that God can cure their patients with HIV (47.4 %, 36.5 % of total), although only a small minority felt that God would (8.8 %, 6.8 % of total).

Table 3. Religious beliefs and practices of study population

Belief/Practice	N	(%)
Believe in God	57	(77.0)
Believe in personal relationship with God ^{A,B}	44	(77.2)
Believe career choice was influenced by belief in God ^{A,B}	21	(36.8)
Believe in a spiritual force other than God	4	(5.6)
Attend religious services	48	(64.9)
Attend religious services monthly or weekly	26	(35.1)
Pray	57	(77.0)
Pray daily	23	(31.1)
Read bible	45	(60.8)
Read bible daily or weekly	17	(23.0)

^A Results pooled from respondents who strongly and weakly agreed

^B Percent calculated using respondents who believe in God as denominator

Beliefs about Death and Dying

Although one-half of providers expressed a fear of death, most providers who believed in God agreed that their belief was helpful when thinking about death (Table 4). Over one-half of providers reported a belief in life after death. Almost one-third of providers agreed that working with patients with HIV had changed their beliefs about death (29.7 %), while 63.7 % affirmed that it had changed their beliefs about what is important in life.

Table 4. Providers' beliefs about death and dying

Belief	Strongly/weakly agree	
	N	(%)
Fear death ^A	38	(51.3)
Belief in God helpful when thinking about death ^{A,B}	50	(87.7)
Believe in life after death	41	(55.4)
Working with patients with HIV changed:		
Beliefs about death ^A	22	(29.7)
Beliefs about what is important in life ^A	47	(63.5)

^A Results pooled from respondents who strongly and weakly agreed

^B Percent calculated using respondents who believe in God as denominator

Comparison of Providers and Patients

Demographics

The data collected by Kaldjian et al. was utilized in order to compare the religious and spiritual beliefs and practices of HIV-positive patients with those of medical providers who care for patients with HIV. Gender distribution was similar for providers (52.7 % male) and patients (60 % male), as was mean age (37.6 and 36.7 years, respectively). Patients and providers varied widely in their ethnic identities. While a majority of providers described themselves as Caucasian, most patients identified themselves as African American (Table 5). Significantly more patients than providers affirmed affiliation with a particular religion. Both providers and patients were most likely to be Christian. Identification with the Protestant religion was significantly more

common among patients, while identification with the Jewish religion was more common among providers. A difference in affiliation with Catholic or Muslim religions was not detected (Table 6).

Table 5. Comparison of racial/ethnic identification between patients and providers

Race/Ethnicity	Providers		Patients ^A		P
	N	(%)	N	(%)	
Caucasian	57	(77.0)	22	(24.4)	<0.005
African American	2	(2.7)	55	(61.1)	<0.005
Hispanic	1	(1.4)	12	(13.3)	<0.005 ^B
Asian	8	(10.8)	0	(0.0)	<0.005 ^B
Other	6	(8.2)	1	(1.1)	
Total	74	(100.0)	90	(100.0)	

^A Patient data obtained from Kaldjian et al., 1998 (52)

^B Fisher 2-tailed P value

Table 6. Comparison of religious affiliation between patients and providers

Religious Affiliation	Providers		Patients ^A		P
	N	(%)	N	(%)	
Protestant	21	(28.4)	56	(62.2)	<0.005
Catholic	13	(17.6)	25	(27.8)	0.123
Jewish	14	(18.9)	0	(0.0)	<0.005
Muslim	4	(5.4)	3	(3.3)	0.702
Other	5	(6.8)	0	(0.0)	
No affiliation	17	(23.0)	6	(6.7)	<0.005
Total	74	(100.0)	90	(100.0)	

^A Patient data obtained from Kaldjian et al., 1998 (52)

Religious and Spiritual Beliefs

A comparison of the religious and spiritual beliefs of patients and providers is summarized in Table 7. Significantly more patients than providers reported belief in a divine being. However, of subjects who did believe in divine being, providers were significantly more likely than patients to agree that they were at peace with God. Patients, in contrast, were more likely to believe that God sometimes punishes them. No difference in frequency of engagement in religious practices was detected between patients and providers with the exception of daily prayer; patients were more than twice as likely as providers to pray daily. Providers were significantly more likely than patients to report having a purpose in life and a fear of death.

Table 7. Comparison of religious/spiritual beliefs of patients and providers

Belief/Practice	Providers		Patients ^A		P
	N	%	N	%	
Believe in God	57	(77.0)	88	(97.7)	<0.005
Believe in personal relationship with God ^{B,C}	44	(77.2)	76	(86.4)	0.153 ^D
At peace with God ^{B,C}	52	(91.2)	68	(77.3)	0.030
Believe God sometimes punishes them ^{B,C}	13	(29.5)	43	(47.8)	<0.005
Attend religious services monthly or weekly	26	(35.1)	40	(44.4)	0.226 ^D
Pray daily	23	(31.1)	62	(68.9)	<0.005
Read bible daily or weekly	17	(23.0)	23	(25.6)	0.702 ^D
Have a purpose in life ^C	70	(94.5)	64	(71.1)	<0.005
Believe in life after death ^C	41	(55.4)	57	(63.3)	0.303 ^D
Fear death ^C	38	(51.3)	30	(33.3)	0.020

^A Patient data obtained from Kaldjian et al., 1998 (52)

^B Percent calculated using respondents who believe in God as denominator

^C Results pooled from respondents who strongly and weakly agreed

^D P > 0.05; no detected difference between groups

The Provider-Patient Relationship

Discussions about Death, Dying, and End-of-Life Directives

Most providers (81.1 %) estimated that over half of patients with HIV would find discussing death or dying with their physician to be important. In addition, many believed that all patients with HIV should have a living will (75.7 %). Despite their support of the importance of these issues, only 28.4 % of providers reported discussing death, dying, or end-of-life directives with over half of their patients. Moreover, of providers who had engaged in these discussions, 12.1 % limited the discussion to end-of-life directives. The percent of patients that providers estimated would find discussing death or dying with their physician to be important (mean 77.8 %) was significantly higher than the percent of patients with whom providers had actually discussed these issues (mean 42.8 %); (observed mean difference = 34.7 %, paired $t = 7.63$, $P = 0.0001$).

All providers agreed that their patients with HIV should feel free to ask them their questions about death and dying. Providers who initiated discussions about death, dying, or end-of-life directives at least once (78.4 %) did so at various times during the course of their relationship with the patient. Over one-half of providers reported initiating this discussion only when death appeared imminent.

Table 8. Views and discussions about death, dying, and end-of-life directives

Belief/Practice	%	
Believe that all patients with HIV should have a living will ^A	N = 56	75.7
Percent of patients that providers estimate would find discussing death and dying to be important	mean	77.8
	median	85.0
	IQ ^B range	70-100
Discussed death, dying, or end-of-life directives with at least one patient with HIV	N = 66	89.2
Discussed only end-of-life directives ^C	N = 8	12.1
Percent of patients with whom providers estimate they discussed death or dying ^C	mean	42.8
	median	34
	IQ range	15-75
Choose to initiate discussions about death, dying, or end-of-life directives at following time:		
Early in relationship	N = 12	20.7
When death is imminent	N = 32	55.2
Believe that their patients with HIV should feel free to ask them their questions about death or dying ^A	N = 74	100.0

^A Pooled respondents who strongly and weakly agreed

^B IQ = interquartile

^C For providers who had discussed death/dying with at least one patient

Discussions about Religion and Spirituality

Many providers (41.9 %) confirmed that religion or spirituality had been addressed as a part of their medical training, but most agreed that the coverage was minimal. Of the above providers, only 5 (16.1 %, 6.8 % of total) described participation in a course dedicated at least in part to religious or spiritual issues. Thirteen providers (41.9 %, 17.6 % of total) had received one or two lectures dedicated to religious or spiritual issues in the context of another class, while 11 (35.5 %, 14.9 % of total) explained that the topic had been discussed tangentially in the course of their medical education.

Almost all providers (96.8 %) thought that religious or spiritual beliefs influence their patients' end-of-life decisions (Table 9). However, only 33.5 % estimated that over one-half of patients with HIV would find discussing religion and spirituality with their physician to be important. Although many providers (87.8 %) reported at least one prior discussion about religion or spirituality with an HIV patient, including questions asked in an initial interview, only 18.9 % had discussed these issues with more than half of their patients. Over two-thirds of providers in this study had never inquired about religious or spiritual issues in an initial patient interview. Providers who had addressed these issues in the initial interview did so with a range of 5-100 % of their patients (mean 51.3 %). As with discussions about death and dying, the percent of patients that providers estimated would find discussing religion or spirituality with their physician to be important (mean 51.5 %) was significantly higher than the percent of patients with whom providers had actually discussed these issues (mean 37.8 %); (observed mean difference = 14.5 %, paired $t=3.13$, $P=0.0026$).

When asked to suggest possible barriers to discussions about religious and spiritual issues between patients with HIV and their medical providers, 27.0 % volunteered that religion and spirituality were outside the medical paradigm, 28.4 % suggested differences in beliefs between patients and providers or lack of any belief, and 18.9 % proposed lack of training or knowledge. 29.7 % of providers agreed that they would be more likely to discuss religion or spirituality with a patient if they shared similar beliefs, while 54.0 % agreed that they would be more likely to discuss religion or spirituality with a patient if they were knowledgeable about his or her religion.

Table 9. Views and discussions about religion and spirituality

Belief/Practice	(%)	
Believe that religious or spiritual beliefs influence their patients' end-of-life decisions ^A	N = 71	(95.9)
Discussed religion or spirituality with at least one patient with HIV (including questions asked in an initial interview)	N = 65	(87.8)
Discussed religion or spirituality with over one-half of their patients with HIV	N = 14	(18.9)
Have asked questions about religion or spirituality to at least one HIV patient in the initial interview	N = 22	(29.7)
For above, % of patients to whom providers asked questions about religion or spirituality in the initial interview	mean	51.3
	median	50.0
	IQ range	20-80
Agree that they would be more likely to initiate discussions about religion or spirituality with patients if their beliefs were similar ^A	N = 22	(29.7)
Agree that they would be more likely to initiate discussions about religion or spirituality with patients if they were knowledgeable about their religion ^A	N = 40	(54.0)
Choose to initiate discussions about religion or spirituality, excluding the initial interview, at the following time:		
In the context of a discussion about death, dying, or end-of-life Directives	N = 10	(21.7)
Early in the provider-patient relationship	N = 1	(2.2)
On observation that the patient is suffering or has other emotional issues	N = 11	(23.9)

^A Pooled respondents who strongly and weakly agreed

Differences in Discussing Death/Dying and Religion/Spirituality

Although almost all providers agreed that patients' religious and spiritual beliefs influence their end-of-life decisions (Table 9), providers differentially approached discussions about death and dying and religion and spirituality (Table 10). Providers were significantly more likely to think that patients would find it important to discuss death and dying with their physicians than to discuss religion and spirituality. In addition, although providers discussed both issues with an equal percentage of their patient populations, they were significantly less likely to initiate the discussions about religion and spirituality.

Table 10. Differences in discussions about religion/spirituality and death/dying/end-of-life directives

Providers' Views and Practices	Death, Dying, and Directives	Religion and Spirituality	Difference
% of patients that providers estimate would find discussing this issue with their physician to be important	mean 77.8 % median 85 % range ^A 70-100 %	mean 51.5 % median 50 % range ^A 25-78 %	
% of patients with whom providers have discussed this issue ^B	mean 42.8 % median 34 % range ^A 15-75 %	mean 37.8 % median 33 % range ^A 10-50 %	mean 6.3 % paired t = 1.33 P = 0.188
Provider initiates discussions about this issue more often than his or her patients ^B	N = 36 (54.5 %)	N = 23 (35.4 %)	P = 0.028

^A All ranges expressed as interquartile ranges

^B Includes only providers who have had at least one discussion

Referrals for Spiritual Counseling

Providers generally agreed that spiritual counseling should be available for patients with HIV and that they would feel comfortable asking their patients if they would like such counseling (Table 11). Approximately two-third of providers have referred at least one patient with HIV for spiritual counseling. Providers were most likely to name religious figures as the appropriate individuals to provide spiritual counseling for patients. Only five respondents named medical providers such as nurses or doctors.

Table 11. Referrals for spiritual counseling

Belief/Practice	%	
Believe spiritual counseling should be available for patients with HIV ^A	N = 74	100.0
Would feel comfortable asking their patients with HIV if they would like spiritual counseling ^A	N = 66	89.2
Have referred at least one patient with HIV for spiritual counseling	N = 50	67.6
Percent of patients referred by above providers	mean	17.2
	median	13.0
	IQ range	6-23
Have worked at least once in conjunction with a hospital chaplain in the care of a patient with HIV	N = 35	47.3
Cited the following as the appropriate person/people to provide spiritual counseling: ^B		
Chaplain	N = 47	63.5
Patient's own religious leader	N = 38	51.4
Anyone of patient's request	N = 13	17.6
Social worker	N = 5	6.8
Doctor	N = 4	5.4
Nurse	N = 1	1.4

^A Pooled respondents who strongly and weakly agreed

^B Respondents were permitted to volunteer more than one response

Prayer

Although over one-third of providers (34.2 %) thought that their patients who pray frequently would like to pray with them, most have never prayed with their HIV-positive patients. The most common reasons volunteered for not praying with patients are listed in Table 12. Many providers who prayed with patients did so secondary to patient request.

Table 12. Prayer with patients

Belief/Practice	%	
Prayed with at least one patient	N = 13	17.6
Prayed because patient(s) asked (% of above)	N = 5	38.5
Percent of patients with whom providers prayed	mean	9.9
	median	3.0
	IQ range	1-5
Reasons volunteered for not praying:		
Not my role	N = 11	18.0
Never been asked	N = 16	26.2
Discomfort	N = 10	16.4
I don't pray	N = 10	16.4

Associations and Sub-Group Analyses

Discussions about Death, Dying, and End-of-Life Directives

Of the providers who had never discussed death, dying, or end-of-life directives with their HIV-positive patients (N = 8), almost all were medical students (N = 7, 87.5 %). Only 53.3 % of the medical students interviewed reported engaging in this

discussion with a patient with HIV, compared with 98.3 % of all other providers (OR = 0.02, Fisher exact P = 0.00003).

For providers who had engaged in at least one discussion, the percent of patients with whom they reported having this conversation was associated with their position (Table 13) and belief in life after death. Attending physicians estimated discussing death, dying, and end-of-life directives with a greater percent of their patients when compared with other providers (mean 55.5 %); fellows provided the lowest percent estimate (mean = 17.2 %). Providers who reported a belief in life after death were more likely to report a lower percent estimate (mean = 35.7 %) than providers who do not share this belief (54.8 %); (ANOVA F = 5.915, P = 0.018). No association was detected between this outcome and providers' gender, religious affiliation, belief in a divine being, self-reported religiosity, or fear of death.

Table 13. Percent of patients with whom providers have discussed either death and dying or religion and spirituality as a function of position

Position	Death/Dying/End-of-Life Directives			Religion and Spirituality		
	N ^A	IQ Range ^B	Mean	N ^A	IQ Range ^B	Mean
Attendings	27	25-80 %	55.5 %	26	10-50 %	35.1%
Fellows	6	8-20 %	17.2 %	6	5-50 %	21.7 %
Residents	12	10-67.5 %	41.9 %	11	5-20 %	11.9 %
Nurses/PAs	13	20-50 %	39.2 %	13	33-90 %	58.5 %
Medical Students	8	17-36.5 %	25.9 %	9	40-80 %	58.3 %
ANOVA	F = 3.275 P = 0.017			F = 5.734 P = 0.0006		

^A N reflects the number of providers who reported discussing the above topics with at least one patient with HIV

^B IQ range = interquartile range

Discussions about Religion and Spirituality

The majority of providers who denied discussing religion or spirituality with their HIV-positive patients (N = 9) were medical students (N = 6, 66.7 %). Only 60.0 % of the medical students interviewed reported engaging in this discussion with at least one patient with HIV, compared with 94.9 % of all other providers (OR = 0.08, Fisher exact P = 0.0016). Belief in a divine being (OR = 3.20; P = 0.102) and affiliation with Christianity (OR = 6.95; P = 0.061) were both positively associated with an increased likelihood to have engaged in this discussion, although neither of these findings was statistically significant.

Providers who had engaged in at least one discussion about religious or spiritual issues were asked to estimate the percent of their patients with whom they have had this conversation. Percents provided were associated with several provider variables. Medical students, nurses, and PAs provided the highest percent estimates, while residents and fellows provided the lowest estimates (Table 13). Female providers reported discussing religious and spiritual issues with a greater percent of their patients (mean = 46.5 %) than did male providers (mean = 29.9 %; ANOVA, F = 4.473, P = 0.038). In addition, providers who agreed that they had specifically chosen to work with patients with HIV provided a significantly higher percent estimate (mean = 45.8 %) than providers who did not (mean = 25.9 %; ANOVA, F = 6.412, P = 0.0138). No association was detected between this outcome and providers' religious affiliation, belief in a divine being, self-reported religiosity, religious practices (prayer or attendance at religious services), or prior training in religious or spiritual issues.

Referrals for Spiritual Counseling and Prayer with Patients

In addition to its association with discussions about issues surrounding death or dying and religion or spirituality, provider position was associated with both referrals for spiritual counseling and prayer with patients. Attendings (74.1 %), residents (84.6 %), PAs (100.0 %), and nurses (77.8 %) were significantly more likely to have referred at least one patient with HIV for spiritual counseling than were fellows (33.3 %) and medical students (40.0 %; $X^2 = 11.62$, $P = 0.0007$). Attendings (25.9 %), residents (15.4 %), PAs (25.0 %), and nurses (22.2 %) were also more likely to have prayed with at least one patient with HIV when compared with fellows (0.0 %) and medical students (6.7 %), although this finding was not statistically significant ($P = 0.068$). There was also an increased tendency for providers that reported any religious affiliation ($OR = 4.27$, $P = 0.149$) and who affiliated with the Protestant and Jewish religions ($OR = 9.63$, Fisher exact $P=0.019$) to have prayed with at least one patient. Only the latter finding was statistically significant. Tendency to pray was not associated with providers' gender or religious practices (prayer or attendance at religious services).

DISCUSSION

In this study, religious and spiritual beliefs and practices among a sample of providers of HIV care in Connecticut were assessed with an in-person questionnaire. The development of this project followed a survey of the spiritual and religious characteristics of patients with HIV disease in New Haven (51). That survey revealed broad and deep spiritual and religious feelings in the patient population and subsequently called into question the nature of such beliefs among their providers of care. The present study was designed to characterize the spiritual lives of providers and to enable a direct comparison of beliefs and practices between those providers and their patients with HIV. Additionally, this study provides an initial survey of providers' attitudes and current practices as they relate to the integration of spiritual issues into patient care. Several findings emerged that may have important implications for improving the ability of providers to attend to their patients' spiritual needs.

The results of this study indicate that, although many providers discuss religious or spiritual issues with their HIV-positive patients, few do so consistently. The providers who reported conversing with at least one patient about religion or spirituality (87.8 %), including questions asked in an initial patient interview, estimated discussing these issues with only one-third of their patients (median 33 %). It is likely, therefore, that many providers in this study have neglected the spiritual needs of at least some of their patients. Given the findings of Kaldjian et al. which suggest that, in patients with HIV, unresolved spiritual concerns may impede discussions about advanced directives (51), this deficit in care is particularly concerning.

Context

Although medicine and religion were intertwined historically, the advent of rigorous scientific investigation and technological advance, coupled with the philosophic division of mind and body, facilitated the severance of biomedical disease from spiritual suffering. Despite the persistence of this division for over a century, the role of religion in medicine recently has received renewed interest within the medical community.

Discussions about this interrelationship focus on two primary issues. The first, which has dominated in the medical literature, is the impact of religion on health. In numerous studies, religious beliefs and practices have been shown to correlate positively with physical and mental health, both in illness prevention and recovery. Several of these studies have been criticized, with most concerns centered on confounding factors, study design, and robustness of statistical methodology.

The second consideration in the relationship between medicine and religion concerns the importance of religion in serving as a source of comfort and guidance to patients, especially in the face of chronic or terminal illness. As several studies have demonstrated, many patients welcome physician inquiry about spiritual concerns and needs. This interest in religion is not surprising given the high prevalence of religious belief and involvement in the United States. Although some authors challenge the rationale of providing a specific intervention simply because patients request it (14), most authors and educators agree that there is a need to re-incorporate the spiritual dimension into patient care.

While many patients are likely to benefit from consideration of their religious or spiritual needs, patients infected with HIV have unique concerns that may augment their

need for such care. Patients with HIV frequently confront physical and emotional suffering, the likelihood of premature death, and personal and social stigma.

Furthermore, the religious and spiritual beliefs of patients with HIV have been shown to impact their decisions regarding end-of-life care (51).

Addressing Barriers to Care

Despite considerable evidence for the importance of spiritual and religious issues in patient coping and medical decision-making, little is known about impediments to the provision of spiritual care by medical providers. Providers may inadequately address issues of a religious or spiritual nature for numerous reasons, including lack of training, insufficient time, and disparities in belief systems. Providers may also perceive that they are not the appropriate individuals to provide this care or that religious and spiritual issues are unimportant or irrelevant to medical practice. Several of these conceptions are consistent with beliefs that foster physician avoidance of other psychosocial aspects of health care (9). This study provides an initial assessment of some barriers to discussions about religious and spiritual issues between patients with HIV and their medical providers.

The providers in this study overwhelmingly agreed that patients' religious and spiritual beliefs influence their end-of-life decisions (96.8 %). Despite their recognition of the interrelationship of these issues, providers felt that more patients wished to discuss death and dying, rather than religion and spirituality, with their physician. This tendency may stem from multiple false assumptions that can impede discussions about spiritual needs. Providers may feel that patients have fewer concerns about religious and spiritual

issues than they do about death and dying, or they may believe that patients do not perceive their medical providers as the appropriate individuals with whom to discuss their religious or spiritual beliefs. Neither of these beliefs is likely to be accurate, however, since the patients interviewed by Kaldjian et al. were equally likely to find discussing death and dying (56 %) and spiritual needs (53 %) with their physician to be important (51). Moreover, numerous studies have found that most patients welcome physician inquiry about religious issues (18,45,47,48). Therefore, while providers may view religious and spiritual issues as external to the traditional medical paradigm, they should be aware that their patients are unlikely to share this perception.

An additional barrier to discussions about religion and spirituality involves disparities in the beliefs of providers and their patients. When compared with data collected by Kaldjian et al. in their investigation of patients with HIV (51), the results of this study clearly demonstrate differences in the demographic composition and religious involvement of medical providers and patients with HIV. Providers were significantly less likely than patients to report belief in a divine being, religious affiliation, and daily prayer. These results support findings of another study that examined disparities in the beliefs of family physicians and their patients (59). Over one-quarter of providers (28.4 %) in this study proposed differences in beliefs between patients and providers as a barrier to conversations about religious or spiritual issues. A similar percentage of respondents (29.7 %) agreed that they would be more likely to discuss religion or spirituality with a patient if they shared similar beliefs.

Many respondents in this study (18.9 %) confirmed that lack of sufficient training was also an important factor in the failure of providers to address religious and spiritual

issues when caring for patients. Fifty-four percent of providers agreed that they would be more likely to discuss religion and spirituality with a patient if they were knowledgeable about his or her religion. Surprisingly, a comparison in this study of providers who reported that religious and spiritual issues had been addressed in their medical training with those who had not received such training failed to reveal an increased rate of discussion about religious and spiritual issues. This outcome suggests that the training received by respondents may have been insufficient to effect behavioral change.

Practical guidelines for the incorporation of religious and spiritual issues in medical care are becoming increasingly available given the recent resurgence of interest in this topic. Several publications propose specific techniques and questions that providers may use in order to better communicate with patients about religious or spiritual issues. One review of the role of spiritual issues in pediatric care provides suggestions to facilitate cross-cultural discussions of religious and spiritual traditions in clinical encounters (2). The differences in demography and beliefs between providers and patients found in this and other studies suggest that it may be particularly important to incorporate suggestions of this nature into medical education.

The extent to which providers are willing to integrate such recommendations into their care is unknown. Many respondents in this study expressed the belief that religious and spiritual issues fall outside the realm of traditional medical inquiry. Although they all agreed that spiritual counseling should be available for patients with HIV, only a small minority (6.8 %) named medical caregivers as the appropriate individuals to supply that counseling. Instead, most respondents felt that it should be provided by the hospital chaplain or by patients' own religious leaders. Given this belief, integrating spiritual

counseling into patient care by providing patients with referrals for spiritual counseling may represent a suitable solution for providers who feel uncomfortable rendering this service themselves. Some AIDS programs have incorporated chaplains directly into the care team to facilitate the provision of this service. Almost all respondents (89.2 %) agreed that they would feel comfortable asking their patients if they would like spiritual counseling.

In discussing the role of religion and spirituality in patient care, some authors advocate for routine inquiry about patients' religious backgrounds, current beliefs, and spiritual practices as part of the initial patient interview or at health maintenance examinations (10,13). This assessment allows the provider to determine which patients are interested in or require spiritual counseling. Depending on their comfort level, providers may then discuss these issues with patients or refer them for counseling. In this study, however, fewer than one-third of providers had ever addressed religious or spiritual issues in the initial patient interview or early in the provider-patient relationship. Those providers who had asked questions in the initial interview did so with a range of 5-100 % of their patients (median 50 %). In addition, providers reported discussing religious or spiritual issues with only 37.8 % (mean) of their patients. Thus, despite respondents' self-reported comfort in asking patients whether they desire spiritual counseling, data suggest that they do not consistently achieve this goal.

Ultimately, providers may not assume responsibility for attending to their patients' religious and spiritual needs without the incorporation of this topic into medical education. Recently, increasing numbers of medical schools have integrated courses on religion and spirituality into their curricula. Many of these courses review major

religious traditions and teach students to perform a spiritual assessment when taking a patient history (20). The goal of this teaching should be not only to strengthen students' commitment to caring for suffering patients (60), but also to equip students with the practical skills necessary to incorporate this knowledge into their clinical care. In addition, since providers do not consistently inquire about their patients' spiritual needs, students may also suffer from a paucity of role models during the course of their clinical education. Contending with this concern should be a goal of medical educators.

Subgroup Analyses

Subgroup analyses in this study revealed several important results. Male and female providers demonstrated a disparity in rates of inquiry about religious and spiritual issues. Female providers reported discussing religious and spiritual issues with 46.5 % (mean) of their patients, while male providers had these discussions with 29.9 % (mean) of their patients ($P = 0.038$). This inequality was seen within each provider group, although the differences within groups were not significant, likely secondary to small sample size. This finding is consistent with the results of a recent study of patient-physician communication in HIV disease, which found that female providers were more likely to provide higher quality communication about HIV-specific issues including sexual conduct and substance abuse (61). The willingness of female providers to discuss both HIV-specific and spiritual topics may suggest an increased comfort level for female providers in discussing sensitive or psychosocial issues.

Differences in the rates of inquiry about religious or spiritual issues were also detected among different groups of providers. For example, attending physicians and

residents reported discussing death, dying, and advanced directives with a greater percent of their patients, while medical students, nurses, and PAs reported more frequent discussions about religion and spirituality. In addition, almost all providers who had never discussed religion and spirituality or death and dying with their patients were medical students. One explanation for this finding is that students have cared for fewer patients with HIV than have other provider groups. Alternatively, some students may have experienced discomfort in addressing these issues. No group of providers, however, consistently discussed either issue with their patients.

Limitations

This study had several limitations which merit consideration when interpreting its results. Use of a convenience sample renders this study subject to selection bias. Since subjects were informed that this study was related to religion and spirituality, individuals who are more interested in or committed to these issues may have had an increased rate of participation. Consequently, the results of this study may underestimate the discrepancy in religious beliefs and practices of providers and of patients. In addition, since all participants were recruited in Connecticut, the results may not be generalizable to providers of patients with HIV who practice in other areas.

Employment of a questionnaire that has not been previously analyzed for precision or accuracy introduces another source of bias. This bias was minimized by reviewing the questionnaire with an experienced statistician and by pilot testing. Consistency in delivery was facilitated by use of a single interviewer. Furthermore, adoption of questions pertaining to religious and spiritual commitment from the

questionnaire utilized by Kaldjian et al. (51) allowed for a direct comparison of providers and patients.

Both subgroup analyses and associations were limited by small sample size. For example, this study failed to demonstrate associations between providers' religious beliefs or practices and their rates of inquiry about religious or spiritual issues. Given several small studies that have demonstrated increased attention to religious and spiritual issues by providers with greater religious involvement, these results are surprising. Future investigation employing a larger sample size is necessary in order to determine whether degree of religious commitment predicts attention to patients' spiritual needs. In addition, although the results of this study elucidate some differences between subgroups, the study design does not allow for interpretation of these results. Further research is necessary in order to explore the cause of these differences.

Conclusions and Future Directions

In summary, although the providers in this study care for patients who are especially vulnerable to spiritual suffering, they infrequently discuss religious or spiritual issues with their patients. Although differences between provider groups were elicited, no group of medical providers consistently addressed patients' religious or spiritual needs. Failure to address these issues most commonly stemmed from differences in beliefs between patients and providers, from lack of adequate training, and from the perception that religious or spiritual issues fall outside the medical paradigm.

This study suggests several directions for improving patient-provider communication about religious and spiritual issues. Future investigations that elucidate

the ways in which female providers of HIV care communicate with their patients may influence training efforts. Understanding why nurses, PAs, and medical students address religion and spirituality with a greater percent of their patients than do other provider groups similarly may inform training. Additional research is also necessary to clarify whether providers' level of religious commitment is related to their rate of inquiry about religious or spiritual issues. If such an association is convincingly demonstrated, educational efforts may need to target providers with less religious involvement.

Providers who feel comfortable discussing religious and spiritual issues should be made aware that most patients welcome this inquiry. Those providers who are uncomfortable with these discussions may screen patients for spiritual needs and refer appropriately for counseling. Finally, addressing the barriers reported in this study may help to improve the rate and quality of inquiry into religious and spiritual issues. While narrowing the gap between providers' and patients' beliefs is not possible, education may effectively target the other barriers reported. Educational efforts should be made across all provider groups. Enhanced education and training may provide the knowledge and practical skills necessary to address patients' spiritual needs. Finally, the assimilation of religious and spiritual issues into medical education and practice may challenge the fallacy that they are peripheral to medicine and restore their place in a more holistic paradigm of patient care.

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