Published in final edited form as:

Am J Hosp Palliat Care. 2015 November ; 32(7): 750–757. doi:10.1177/1049909114540318.

Examining Forms of Spiritual Care Provided in the Advanced Cancer Setting

Zachary D. Epstein-Peterson, MD¹, Adam J. Sullivan, BA, MS², Andrea C.ENZINGER, MD^{1,3}, Kelly M. Trevino, PhD⁴, Angelika A. Zollfrank, MDiv⁵, Michael J. Balboni, PhD^{1,3}, Tyler J. VanderWeele, PhD², and Tracy A. Balboni, MD, MPH^{1,3}

¹Harvard Medical School, Harvard University, Boston, MA, USA

²Departments of Biostatistics and Epidemiology, School of Public Health, Harvard University, Boston, MA, USA

³Department of Psychosocial Oncology and Palliative Care, Dana-Farber Cancer Institute, Boston, MA, USA

⁴Department of Psychology, Rowan University, Glassboro, NJ, USA

⁵Massachusetts General Hospital Chaplaincy, Boston, MA, USA

Abstract

Spiritual care (SC) is important to the care of seriously ill patients. Few studies have examined types of SC provided and their perceived impact. This study surveyed patients with advanced cancer (N = 75, response rate [RR] = 73%) and oncology nurses and physicians (N = 339, RR = 63%). Frequency and perceived impact of 8 SC types were assessed. Spiritual care is infrequently provided, with encouraging or affirming beliefs the most common type (20%). Spiritual history taking and chaplaincy referrals comprised 10% and 16%, respectively. Most patients viewed each SC type positively, and SC training predicted provision of many SC types. In conclusion, SC is infrequent, and core elements of SC—spiritual history taking and chaplaincy referrals—represent a minority of SC. Spiritual care training predicts provision of SC, indicting its importance to advancing SC in the clinical setting.

Keywords

spiritual care; end-of-life care; religion; spirituality

Reprints and permission: sagepub.com/journalsPermissions.nav

Corresponding Author: Tracy A. Balboni, MD, MPH, Harvard Medical School, Harvard University, 450 Brookline Avenue, Dana 1101, Boston, MA 02115, USA. tbalboni@lroc.harvard.edu.

This work was presented in part as a poster presentation by ZEP at the 2012 ASCO Annual Meeting, Chicago, IL, USA.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Introduction

For many patients facing a terminal diagnosis, religion and/or spirituality (R/S) play an important role in the experience of illness.¹⁻⁴ A significant and growing body of data suggest that R/S beliefs and practices are particularly relevant to patients' therapy decisions, coping with illness, and quality of life (QoL).^{1,5,6} Spiritual care (SC) can be defined as recognition of patient R/S as part of medical care and attention to R/S needs.⁷ Spiritual care can take many forms, including spiritual history taking, referrals to hospital chaplaincy, and inviting conversation regarding R/S issues, among others.⁸ Indeed, the varying forms of SC provided reflect the diverse R/S beliefs, practices, and needs held by the patients. A majority of patients consider attention to SC from their health care providers to be important,⁹ and receipt of SC has been shown to be associated with better QoL, fewer aggressive medical interventions, and higher satisfaction with care among patients.^{10,11}

These data have led to the inclusion of SC in national palliative care guidelines as a core domain of palliative care.⁷ However, despite compelling evidence and evidence-based guidelines that advocate for SC provision, many patients nevertheless report that SC is infrequently offered by their practitioners.⁹ Possible barriers to SC provision include insufficient time, clinician discomfort with providing SC, and lack of SC training.¹² Significant uncertainty exists concerning the types of SC currently being provided to patients with advanced illness, and which, if any, of these exchanges are perceived to be supportive by patients and providers. Furthermore, few data exist exploring provider characteristics that may influence provision of varying types of SC. Such data could help meaningfully and critically assess current SC practices, thereby informing SC guidelines and training, and ultimately improving patient-centered care.

The Religion and Spirituality in Cancer Care study is a cross-sectional cohort study designed to explore the role of R/S and SC in the setting of advanced cancer from the viewpoints of patients, nurses, and physicians. Here, we seek to elucidate the frequency of specific SC practices of nurses and physicians in their care of patients with advanced cancer, to evaluate the perceived impact of these SC exchanges and to examine provider characteristics predictive of SC provision.

Methods

Study Sample

Enrollment ran between March 2006 and April 2008 for patients and October 2008 through January 2009 for practitioners. Eligibility criteria for patients included diagnosis of advanced, incurable cancer; active receipt of palliative radiotherapy; age 21 years or greater; and adequate stamina to undergo a 45-minute interview. Excluded patients were those who met criteria for delirium or dementia by neurocognitive examination (Short Portable Mental Status Questionnaire) and those not speaking English or Spanish. Patients and practitioners were recruited from the following four Boston (Massachusetts) sites: Beth Israel Deaconess Medical Center, Boston University Medical Center, Brigham and Women's Hospital, and Dana-Farber Cancer Institute. Patient recruitment occurred over 29 recruitment weeks during the patient's study period. Each recruitment week, radiation oncologists at the four

sites were consecutively selected and all of their eligible patients under treatment within that 1-week recruitment period were approached for study participation. To mitigate selection bias, eligible patients were informed, “You do not have to be religious or spiritual to answer these questions. We want to hear from people with all points of view.” All oncology nurses and physicians identified from departmental Web sites at the four study sites were eligible. Clinicians were invited to participate via e-mail containing a link to an online survey. Oncology physicians and nurses were excluded if they indicated that they did not provide care for patients with advanced cancer as part of their clinical practice.

Study Protocol

All research staff underwent a 1-day training session in the study protocol and scripted interview procedure. All participants provided informed consent (implied consent for practitioners given all elements of consent included in the survey) according to the protocols approved by each site’s human subjects committee. Respondents received a US\$10 gift card for their participation. Of the 103 patients approached, 75 participated (response rate [RR] = 73%), with no differences in patient participants versus nonparticipants in age, gender, or race. The most frequent reasons for not participating were “not interested” (n = 8, 32%) and “too busy” (n = 7, 28%). Six patients were too ill to complete the in-person oral interview, yielding 69 (93% of 75) patients. Of the 537 nurses and physicians contacted, 339 responded (RR = 63%; 59% among physicians, 72% among nurses). Eight practitioners indicated not providing care to patients with incurable cancer, and 13 did not finish the questionnaire, yielding 318 respondents (93.8% of 339, 204 physicians and 114 nurses).

Study Measures

Characteristics—Patients’ gender, race/ethnicity, educational level, marital status, age, income level, health insurance status, citizenship, and native language were self-reported. Disease information was acquired from patients’ longitudinal medical records. Karnofsky Performance Status was assessed by physician. Practitioner self-reported demographic information included age, gender, race/ethnicity, field of practice, and years of practice.

Religiousness/spirituality—All participants reported religious affiliation. Religiousness and spirituality were assessed using items from the validated Multidimensional Measure of Religiousness and Spirituality instrument.¹³ For nurses and physicians, religious service attendance was directly elicited, while intrinsic religiosity—the extent to which a provider’s personal R/S influences their clinical practice and patient care—was assessed with a previously developed item.¹⁴

Frequency of SC provision—Patients considered the following eight types of SC (item development outlined previously⁹): R/S history, encouraging R/S activities/beliefs, inviting discussion about R/S issues, inquiry about how patient R/S influences medical decisions, chaplaincy referral, involvement of R/S supporters, patient-initiated prayer, and provider initiation of joint prayer. Patients then noted the specialty of the nurses and/or physicians that had provided any of those forms of SC at any time in the course of their clinician–patient relationship and specified the type of SC. Providers were asked to consider the last three patients who had seen with incurable cancer and to report whether they had ever

provided any of the aforementioned types of SC during the course of their care relationship, and if so, the type of SC that was provided.

Spiritual care impact—Patients who had received SC from nurses or physicians were asked, “How positive or negative was the spiritual care experience for you?” Practitioners who reported providing SC to patients with advanced cancer were asked, “Overall, how positively or negatively did the spiritual care experience affect your relationship with this patient?” Response options were on a 7-point scale: very negative, moderately negative, mildly negative, no effect, mildly positive, moderately positive, and very positive.

Statistical Methodology

Chi-square tests were used to examine demographic information between patients, nurses, and physicians. Frequencies of SC types were compared using Fisher exact test for patients and providers, and chi-square evaluating all SC interactions. To evaluate perceived impact of SC, responses were dichotomized as neutral (“no effect” or “mildly positive”) or positive (“moderately positive” and “very positive”; no SC interactions were rated negatively), and ratings were compared between SC types using chi-square tests. Bivariate and multivariate (MVA) logistic regression analyses were performed to evaluate provider characteristics associated with each type of SC provision. Covariates examined for a possible relationship with SC provision included gender, age (dichotomized to 38 or less vs >38 years, the median age among physicians), race, prior SC training, years of practice, religiousness, spirituality, religious affiliation, intrinsic religiosity, and field of practice. Multivariates included those variables significantly ($P < 0.05$) associated with SC provision in bivariate analyses. Reported P values are 2sided and were considered significant when less than 0.05. Statistical analyses were performed with R (version 2.13.1).

Results

Sample Characteristics

Characteristics of study participants are shown in Table 1. Patients were more likely to self-identify as moderately or very religious than nurses and physicians (56% vs 44% and 36% respectively, $P = .019$). Patients and nurses were more likely to be moderately to very spiritual compared to physicians (37% and 27% vs 19%, $P < .001$). Catholicism was the most common religious affiliation among patients and nurses, whereas physicians most commonly identified as Jewish. The patients surveyed were on average 15 to 20 years older than the physicians and nurses surveyed ($P < .001$).

Frequency of SC Provision

Table 2 reports the relative frequency of SC types among all SC exchanges reported. Overall, the most common form of SC reported was encouraging and affirming beliefs (20% of SC exchanges), while the least common was patient-initiated prayer (2%, $P < .001$). Core elements of SC—spiritual histories and chaplaincy referrals—represented just 26% of the SC encounters reported. Patients reported offer of prayer (26%) as the most common form of SC by nurses, and spiritual history, encouraging beliefs, and inquiring about how faith influences medical decisions (all 19%) as the most common from physicians. Both nurses

and physicians (20% and 25%, respectively) reported encouraging beliefs as the most common form of SC. Table 3 examines SC-type frequency within provider–patient relationships, demonstrating low frequencies of provision of the eight SC types as reported by patients, nurses, and physicians. For example, only 3% of both doctors and nurses reported taking a spiritual history; only 7% of patients reported spiritual history taking from nurses and 4% from physicians. Low rates of chaplaincy referrals were demonstrated as well, with 4% of patients reporting this being done by nurses and 1% by physicians.

Spiritual Care Perception

Perceived impact of SC types as rated by patients, nurses, and physicians is reported in Table 4. No patient or provider reported any SC experience to be negative, and no differences in patient SC perception were observed across SC types. Patients expressed a strong pattern of a positive perceived effect of nurses and physician SC on the patient–clinician relationship, with all 8 types of SC rated at least moderately positive greater than 80% of the time. Likewise, majorities of nurses and physicians reported their SC provision experiences to be moderately to very positive for the patient–clinician relationship, although physician ratings were less positive than those of patients and nurses. Examples of patients’ open-ended comments regarding the impact of various forms of SC experiences are shown in Table 5.

Spiritual Care Predictors

Table 6 displays results from MVA for predictors of SC provision. Prior training in SC strongly predicted many types of SC provision among both physicians and nurses. Notably, R/S characteristics of the practitioners predicted SC provision in both physicians and nurses for many types of SC (odds ratio [OR] 3.22 for nurse religiousness and performing spiritual history taking; OR 3.75 for physician intrinsic religiosity and inquiry into how faith influences patient medical decisions; OR 3.08 for physician Christian religious background and spiritual history taking). Additional predictors for provision of SC types among nurses include age (OR 3.85 for encourage or affirm beliefs) and years of practice (OR 2.98 for inquiring about how faith influences medical decisions).

Discussion

Given national practice guidelines advocating for the provision of SC,^{7,15} we evaluated the frequency of eight forms of SC provided to patients with advanced cancer at four Boston-area academic medical centers as reported by patients, nurses, and physicians. Broadly, we show that, consistently across SC types, these exchanges are infrequent, perceived to be beneficial, and closely associated with training in SC. Our study demonstrated low frequencies of all types of SC as reported by patients with incurable cancer and their nurse/physician care providers. When provided, the most common SC type reported was encouraging R/S beliefs. Core elements of SC—spiritual histories and chaplaincy referrals—together only comprised 26% of SC provided. Provision of all types of SC was rated very favorably by patients, nurses, and physicians. Prior training in SC predicted provision of multiple types of SC by those clinicians, as did practitioner R/S characteristics.

These data are in agreement with previous studies concerning the infrequency of medical team SC provision. For example, in a study of 230 patients with advanced cancer, 72% of patients indicated that their spiritual needs were minimally or not at all supported by their medical team (eg, doctors, nurses, and chaplains).⁶ Notably, our study indicates a low rate of spiritual histories, core element of SC, with fewer than 10% of both physicians and nurses regularly eliciting a spiritual history from patients, and comprising only 10% of all SC exchanges reported. A spiritual history—an assessment of a patient's religious or spiritual background typically done as part of an initial evaluation—represents a key gateway to overall SC provision to patients and for meeting their spiritual needs in accordance with current clinical SC guidelines.⁷ Spiritual histories empower physicians and nurses to advocate for the R/S needs of their patients, such as through chaplaincy referrals, support groups, and more careful navigation of the intersection between R/S and medical decisions, especially in the context of end-of-life (EoL) care.^{5,10,16} Furthermore, the spiritual history, as part of a biopsychosocial–spiritual model of holistic caregiving,¹⁷ has the potential to open a deeper exploration of the patient's personal identity, support community, and coping mechanisms, with prior research suggesting that such exploration has the potential to strengthen the provider–patient relationship.¹⁸

Similarly, this study demonstrates a low rate of another core element of SC provision—chaplaincy referrals, with fewer than 5% of patients with advanced cancer reporting having ever been referred to a chaplain by their nurses and physicians. Commensurate with this infrequency, only 7% and 5% of nurses and physicians, respectively, reported having *ever* referred any of their last three patients with advanced cancer seen in clinic to a chaplain. The potential impact of chaplaincy is manifold, including availing of critical support resources for the patient,⁶ easing emotional and spiritual suffering, helping the patient to find meaning, and achieving peace and reconciliation at EoL.⁴ Although chaplaincy referrals are predicated on the patient having R/S beliefs, practices, or needs that might generate such a referral, this is highly unlikely to solely account for such a low frequency, particularly given the highly endorsed R/S among surveyed patients. The concomitant finding of a very low rate of spiritual histories—a key step in determining the potential need for a chaplaincy referral⁷—is a more likely contributor.

Data from MVAs suggest that practitioners who receive SC training, comprising only 12% to 14% of those surveyed, are more likely to subsequently provide many types of SC than those without training. This conclusion, coupled with previous data regarding the importance of SC,⁹ strongly argues for the inclusion of SC training programs in medical and nursing education and in continuing education for providers across disciplines. Furthermore, our analyses indicate that even for core elements of SC, these interactions were strongly associated with the provider having prior training in SC. Analyses also indicate that the provider's personal R/S identity influences their SC practices, even for fundamental aspects of SC such as spiritual history taking. Such association stands counter to the goal of a patient-centered approach to care that comprehensively addresses patients' needs regardless of provider characteristics. Basic historical elements such as patient R/S background/upbringing, involvement with an R/S community, R/S values and philosophy, and spiritual

supporters can all be helpful in understanding and ultimately addressing patients' R/S needs, irrespective of the beliefs and practices of the provider.

Patients and providers rated all types of SC favorably, with no participant rating any type of SC as negative; these findings correlate with previous studies examining perception of SC provision, none of which examined specific forms of SC. That all forms of SC were consistently rated positively by patients and providers suggests that any inclusion or recognition of patient R/S by providers may benefit the patient and provider–patient relationship. Recently, Phelps and colleagues showed a large majority of patients, nurses, and physicians anticipated that SC provision would benefit patients, although the effect on the relationship between patient and provider was not specifically examined.⁹ Possible reasons for the highly positive perceptions of SC among patients and clinicians include SC facilitating (1) clinicians' better understanding and engagement of patient R/S within the illness experience, including its roles in patient QoL and medical decision making; (2) the patient being seen and upheld as a whole person within their medical care; and (3) better engagement of patient R/S needs through screening and subsequent involvement of spiritual supporters (eg, chaplaincy and R/S community members). Together with data demonstrating the positive impact of SC on patient outcomes^{10,18} and extant professional standards regarding SC,⁷ this study's findings of overwhelmingly positive perceptions of SC encounters among patients and clinicians provide further compelling evidence for its inclusion as part of comprehensive care for patients facing critical and/or life-threatening illness.

Notable limitations of this study include that the population consists of individuals residing in the Northeastern United States, a region with lower rates of R/S compared to national averages,¹⁹ thus making underestimation of SC provision possible. Analyses of relationships between variables within our data involved multiple testing and hence should be considered exploratory. Another limitation specific to our mode of measurement of SC provision is limited recall on the part of providers and patients for these interactions. Additionally, we examined only patients with advanced cancer and their oncology care providers, limiting the applicability of these findings to other care or disease settings. Future research investigating SC practices and perceptions in the context of other life-threatening illnesses such as neurodegenerative conditions or advanced heart failure is needed. Additionally, similar data gathered from different geographic regions within the United States and other countries would be informative given the significant R/S heterogeneity that exists across cultural and geographic boundaries. Finally, data linking specific SC practices with patient outcomes would also help guide SC training and standards.

Conclusion

Despite evidence demonstrating the importance of SC and the presence of SC within palliative care guidelines, clinicians infrequently provide SC to patients with advanced cancer. Of SC provided, core SC elements, spiritual histories, and referrals to chaplaincy represent the minority of SC being provided. Although prior training in SC strongly predicted multiple types of SC provision, fewer than 15% of practitioners have received

such training. Collectively, these data argue for increasing access to holistic patient-centered SC training for health care professionals.

Acknowledgments

Funding

The authors disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: American Society of Clinical Oncology Young Investigator Award and Career Development Award (TAB), John Templeton Foundation Award (TJV), Healthcare Chaplaincy Award (TAB, AAZ, TJV, and MJB), and University of Chicago Program in Religion and Medicine Faculty Scholars Award (MJB).

References

1. Alcorn SR, Balboni MJ, Prigerson HG, et al. "If God wanted me yesterday, I wouldn't be here today": religious and spiritual themes in patients' experiences of advanced cancer. *J Palliat Med*. 2010; 13(5):581–588. [PubMed: 20408763]
2. Roberts JA, Brown D, Elkins T, Larson DB. Factors influencing views of patients with gynecologic cancer about end-of-life decisions. *Am J Obstet Gynecol*. 1997; 176(1 pt 1):166–172. [PubMed: 9024108]
3. Koenig HG. Religious attitudes and practices of hospitalized medically ill older adults. *Int J Geriatr Psychiatry*. 1998; 13(4):213–224. [PubMed: 9646148]
4. Steinhauser KE, Christakis NA, Clipp EC, McNeilly M, McIntyre L, Tulsky JA. Factors considered important at the end of life by patients, family, physicians, and other care providers. *JAMA*. 2000; 284(19):2476–2482. [PubMed: 11074777]
5. Silvestri GA, Knittig S, Zoller JS, Nietert PJ. Importance of faith on medical decisions regarding cancer care. *J Clin Oncol*. 2003; 21(7):1379–1382. [PubMed: 12663730]
6. Balboni TA, Vanderwerker LC, Block SD, et al. Religiousness and spiritual support among advanced cancer patients and associations with end-of-life treatment preferences and quality of life. *J Clin Oncol*. 2007; 25(5):555–560. [PubMed: 17290065]
7. Puchalski C, Ferrell B, Virani R, et al. Improving the quality of spiritual care as a dimension of palliative care: the report of the Consensus Conference. *J Palliat Med*. 2009; 12(10):885–904. [PubMed: 19807235]
8. Hanson LC, Dobbs D, Usher BM, Williams S, Rawlings J, Daaleman TP. Providers and types of spiritual care during serious illness. *J Palliat Med*. 2008; 11(6):907–914. [PubMed: 18715183]
9. Balboni MJ, Sullivan A, Amobi A, et al. Why is spiritual care infrequent at the end of life? Spiritual care perceptions among patients, nurses, and physicians and the role of training. *J Clin Oncol*. 2013; 31(4):461–467. [PubMed: 23248245]
10. Balboni TA, Paulk ME, Balboni MJ, et al. Provision of spiritual care to patients with advanced cancer: associations with medical care and quality of life near death. *J Clin Oncol*. 2010; 28(3):445–452. [PubMed: 20008625]
11. Astrow AB, Wexler A, Texeira K, He MK, Sulmasy DP. Is failure to meet spiritual needs associated with cancer patients' perceptions of quality of care and their satisfaction with care? *J Clin Oncol*. 2007; 25(36):5753–5757. [PubMed: 18089871]
12. Chibnall JT, Bennett ML, Videen SD, Duckro PN, Miller DK. Identifying barriers to psychosocial spiritual care at the end of life: a physician group study. *Am J Hosp Palliat Care*. 2004; 21(6):419–426. [PubMed: 15612233]
13. Fetzer Institute / National Institute on Aging Working Group. Multidimensional Measurement of Religiousness/Spirituality for Use in Health Research: A Report of the Fetzer Institute/National Institute on Aging Working Group. 1st ed.. Kalamazoo, MI: Fetzer Institute/National Institute on Aging Working Group; 1999.
14. Curlin FA, Lantos JD, Roach CJ, Sellergren SA, Chin MH. Religious characteristics of U.S. physicians: a national survey. *J Gen Intern Med*. 2005; 20(7):629–634. [PubMed: 16050858]

15. Davidson JE, Powers K, Hedayat KM, et al. Clinical practice guidelines for support of the family in the patient-centered intensive care unit: American college of critical care medicine task force 2004–2005. *Crit Care Med*. 2007; 35(2):605–622. [PubMed: 17205007]
16. Phelps AC, Maciejewski PK, Nilsson M, et al. Religious coping and use of intensive life-prolonging care near death in patients with advanced cancer. *JAMA*. 2009; 301(11):1140–1147. [PubMed: 19293414]
17. Sulmasy DP. A biopsychosocial-spiritual model for the care of patients at the end of life. *Gerontologist*. 2002; 42(spec no 3):24–33. [PubMed: 12415130]
18. Kristeller JL, Rhodes M, Cripe LD, Sheets V. Oncologist assisted spiritual intervention study (OASIS): patient acceptability and initial evidence of effects. *Int J Psychiatry Med*. 2005; 35(4): 329–347. [PubMed: 16673834]
19. Pew Forum on Religious and Public Life: U.S. Religious Landscape Survey. 2008 <http://religions.pewforum.org/maps>.

Table 1Sample Characteristics of Patients With Advanced Cancer, Oncology Nurses, and Oncology Physicians.^a

	Patients, N = 68	Nurses, N = 114	Physicians, N = 204	<i>pb</i>
Female gender, n (%)	32 (46)	116 (98)	88 (42)	<.001
Age, M (SD)	61 (11.9)	46 (9.1)	41 (9.8)	<.001
Race/ethnicity, n (%) ^{c,d}				
White	57 (85)	108 (94)	154 (77)	
Black	8 (10)	2 (2)	4 (2)	
Asian, Indian, Pacific Islander	1 (1)	2 (2)	35 (17)	
Hispanic	1 (1)	1 (1)	3 (2)	
Other	1 (1)	1 (1)	5 (2)	<.001
Field of oncology, n (%)	NA			
Medical oncology		90 (79)	113 (54)	
Radiation oncology		13 (11)	46 (22)	
Surgical oncology		7 (6)	34 (16)	
Palliative care		4 (4)	16 (8)	<.001
Years in practice, n (%) ^c	NA			
Resident or fellow		—	67 (33)	
1–5 years		24 (21)	38 (17)	
6–10 years		24 (21)	35 (17)	
11–15 years		14 (12)	23 (11)	
16–20 years		11 (10)	20 (10)	
21+ years		41 (36)	26 (12)	<.001
Education, M (SD)	15 (3)	NA	NA	NA
Religiousness, n (%) ^{c,e}				
Not at all religious	13 (19)	29 (26)	62 (31)	
Slightly religious	17 (25)	33 (30)	66 (33)	
Moderately religious	25 (37)	43 (38)	54 (27)	
Very religious	13 (19)	7 (6)	17 (9)	.019
Spirituality, n (%) ^{c,e}				
Not at all spiritual	5 (7)	6 (5)	30 (15)	
Slightly spiritual	14 (21)	18 (16)	57 (29)	
Moderately spiritual	24 (35)	58 (52)	75 (38)	
Very spiritual	25 (37)	30 (27)	37 (19)	<.001
Religious tradition, n (%) ^c				
Catholic	32 (47)	70 (61)	47 (24)	
Protestant	22 (32)	17 (15)	45 (23)	
Jewish	5 (7)	6 (5)	51 (26)	
Muslim	1 (1)	0 (0)	2 (1)	
Hindu	0 (0)	2 (2)	11 (6)	
Buddhist	2 (3)	0 (0)	3 (2)	

	Patients, N = 68	Nurses, N = 114	Physicians, N = 204	<i>p^b</i>
No religious tradition	2 (3)	6 (5)	22 (11)	
Other	4 (6)	11 (10)	18 (9)	<.001

Abbreviations: NA, not assessed; SD, standard deviation; ANOVA, analysis of variance.

^aN = 386.

^b*P* values based on chi-square test for categorical data. Age based on *F* statistic from ANOVA.

^cCategories missing <2% of responses. Category percentages not adding to 100 are due to rounding.

^dRefused to answer: 1 patient, 2 nurses, and 5 physicians.

^ePatients were the most likely to rate themselves as “moderately” or “very” religious and spiritual (53%), in contrast to nurses and physicians (38% and 32%, respectively, *P* < .001). Nurses were the most likely to rate themselves as moderately or very spiritual and “not at all” or “slightly” religious (42%) in contrast to patients and physicians (19% and 25%, respectively, *P* < .001). Physicians were the most likely to rate themselves as not at all or slightly religious and spiritual (39%), in contrast to patients and nurses (25% and 17%, respectively, *P* < .001).

Table 2
Proportional Frequency of Spiritual Care Types, of All Reported Spiritual Care Exchanges.^a

Type of spiritual care	Nurse provision of SC, %		Physician provision of SC, %		All, N (%)
	Pt reported	Nurse reported	Pt reported	Physician reported	
Spiritual history	14	9	19	13	99 (10)
Encourage/affirm beliefs	20	20	19	25	200 (20)
Asked about spiritual issues	17	14	13	12	119 (12)
Inquiry about how faith influences patient medical decisions	9	17	19	15	141 (14)
Chaplaincy referral	9	19	6	18	159 (16)
Asked about spiritual supporters	6	13	13	9	94 (10)
Patient-initiated prayer	0	2	0	2	17 (2)
Clinician offer of prayer	26	5	13	6	60 (6)
Total spiritual care exchanges	35	377	16	461	979
<i>p</i> ^b	.02	<.001	.77	<.001	<.001

Abbreviations: SC, Spiritual care; Pt, patient.

^a N = 979.

^b All P values compare relative frequency across SC types.

Table 3

Frequency of Spiritual Care Types, Among All Patient–Provider Relationships.

Type of spiritual care ^a	Nurse provision of SC, %		Physician provision of SC, %	
	Pt reported ^b	Nurse reported ^c	Pt reported ^b	Physician reported ^c
Spiritual history	7	3	4	3
Encourage/affirm beliefs	10	8	4	6
Asked about spiritual issues	9	5	3	3
Inquiry about how faith influences patient medical decisions	4	6	4	4
Chaplaincy referral	4	7	1	5
Asked about spiritual supporters	3	5	3	3
Patient-initiated prayer	0	1	0	1
Clinician offer of prayer	13	2	3	2
<i>pd</i>	.002	.19	.44	.63

Abbreviations: SC, spiritual care; Pt, patient.

^aSpiritual care example items posed to patients include: (1) spiritual history—“Asking patients about their religious or spiritual background to be aware of whether or not it is important to them.” (2) Encouraging/affirming beliefs—“Encouraging patients in their spiritual activities or beliefs that are helpful to them.” (3) Asking about spiritual issues—“Asking questions that invite patients to talk about spiritual matters if they want to.” (4) Inquired about how faith influences patient medical decisions—“For patients who are religious or spiritual, asking if there are ways their faith affects how they make decisions about treatment.” (5) Chaplaincy referral—“For patients who may want to talk about spiritual matters, asking if they would like to speak with a chaplain.” (6) Asked about spiritual supporters—“If patients have religious or spiritual supports that are important, asking if they would like those spiritual supporters to be included in their care in some way.” (7) Patient-initiated prayer—“If a patient asks for prayer, the doctor or nurse praying with the patient.” (8) Practitioner offer of prayer—“A religious/spiritual doctor or nurse offering prayer for a patient.”

^bPercentage of patients, for example, 4% of patients reported spiritual history taking by their physician, 7% by their nurse; N = 75 patients.

^cPercentage of practitioner–provider relationships in which each type of spiritual care was ever performed, assessed among the last 3 patients with incurable cancer seen by the practitioner in clinic; hence, each provider has 3 possible provider–patient relationships assessed: for nurses, N = 114 participants × 3 relationships = 342 total nurse–patient relationships; for physicians, N = 204 physicians × 3 relationships = 612 total physician–patient relationships.

^dAll P values compare relative frequency across SC types.

Table 4

Perceived Impact of Spiritual Care Experiences: Proportions Viewed as Moderately to Very Positive for the Patient/Patient–Practitioner Relationship.^{a,b}

Type of SC	Nurse provision of SC, %		Physician provision of SC, %	
	Rating by Pt (N = 20) ^c	Rating by nurse (N = 117) ^d	Rating by Pt (N = 10) ^c	Rating by physician (N = 161) ^d
Spiritual history	80	76	100	52
Encourage/affirm beliefs	100	70	100	52
Asked about spiritual issues	100	74	100	58
Inquiry about how faith influences patient medical decisions	100	74	100	60
Chaplaincy referral	100	75	100	52
Asked about spiritual supporters	100	72	100	60
Patient-initiated prayer	NR	100	NR	62
Clinician offer of prayer	100	82	100	83
<i>P</i>	.74	.31	1.0	.10

Abbreviations: SC, spiritual care; Pt, patient; NR, none reported.

^a N values refer to number of spiritual care exchanges rated by patients, nurses, and physicians.

^b Percentage rated as moderately or very positive; other response categories were mildly positive, neutral, mildly negative, moderately negative, and very negative. No spiritual care experiences were rated as negative.

^c Spiritual care ratings by patients versus by nurses ($P = .21$); spiritual care ratings by patients versus by physicians ($P = .02$).

^d Spiritual care ratings by nurses versus by physicians, $P < .001$.

Table 5Representative Patient Responses Regarding the Impact of Each Form of Spiritual Care.^a

Spiritual care type	Patient comment on the impact of the SC experience
Spiritual history	"Nurse ...helped me find peace of mind; trust in God"
Encourage/affirm beliefs	"Because we were able to connect in a way that is important to me"
Asked about spiritual issues	"Created positive relational connection"
Inquiry about how faith influences patient medical decisions	"Made me feel cared for; nurse realized that there was something else important beside pills"
Chaplaincy referral	"The nurse and chaplain were very nice; pleasant and encouraging; said things to help me not get depressed"
Asked about spiritual supporters	"Made me feel cared for personally"
Patient-initiated prayer	NR
Clinician offer of prayer	"I was taken back at first by her request to pray for me, but I was not bothered; something I've never encountered before but found it very positive; I liked that she took that risk"

Abbreviation: NR, none reported.

^aTotal number of responses = 27.

Table 6Significant Predictors of Spiritual Care Type Provision (Expressed as Odds Ratios^d).

Predictors	Provider	Type of spiritual care ^b							
		1	2	3	4	5	6	7	8
Age >38 years	Nurse	1.28	2.32	0.93	3.85^c	1.12	1.49	1.08	2.14
	Physician	0.72	0.90	0.69	1.04	0.62	1.35	0.34	1.17
SC training	Nurse	2.00	11.1^c	2.17	8.33^c	0.89	2.86	0.93	0.47
	Physician	4.83^d	2.43	5.87^d	5.21^d	5.80^d	5.97^c	3.21	1.51
Religiousness	Nurse	3.22	1.23	1.15	1.29	0.63	1.01	1.25	1.28
	Physician	0.79	1.33	0.68	1.07	0.80	1.17	0.35	3.36
Spirituality	Nurse	4.73	4.17	3.81	7.98^c	4.17	4.87	NE	3.99
	Physician	3.14^c	4.63^d	2.62	7.50^d	1.95	3.88^c	4.02	NE
Intrinsic religiosity	Nurse	4.20	2.45	1.33	3.00^c	0.75	1.65	1.57	2.30
	Physician	2.60	3.81^d	1.70	3.75	1.97	2.71^d	1.47	5.56^c
>10 years practiced	Nurse	1.25	0.93	1.06	2.98	0.83	1.04	0.72	1.96
	Physician	0.44	0.58	0.36	0.64	0.50	1.32	1.00	1.26
Female gender	Nurse	NE	NE	NE	NE	NE	NE	NE	NE
	Physician	3.70^d	1.96	1.56	2.38	1.61	1.56	1.39	1.59
Christian tradition	Nurse	1.29	2.46	4.06	1.94	2.69	1.52	–	4.22
	Physician	3.08^c	1.65	1.48	2.16	1.43	3.42^c	2.39	13.66^d

Abbreviations: NE, not estimable; SC, spiritual care.

^a Boldface values indicate $P < 0.05$.^b Types of spiritual care: 1—spiritual history; 2—encourage/affirm beliefs; 3—asked about spiritual issues; 4—inquiry about how faith influences patient medical decisions; 5—chaplaincy referral; 6—asked about spiritual supporters; 7—patient-initiated prayer; and 8—clinician offer of prayer.^c $P < 0.01$.^d $P < 0.001$.