Attention to Inpatients' Religious and Spiritual Concerns: Predictors and Association with Patient Satisfaction

Joshua A. Williams, BS¹, David Meltzer, MD, PhD², Vineet Arora, MD³, Grace Chung³, and Farr A. Curlin, MD³

¹Pritzker School of Medicine, University of Chicago-Pritzker School of Medicine, Chicago, IL, USA; ²Section of Hospital Medicine, Department of Medicine, University of Chicago-Pritzker School of Medicine, Chicago, IL, USA; ³Section of General Internal Medicine, Department of Medicine, University of Chicago-Pritzker School of Medicine, Chicago, IL, USA.

BACKGROUND: Little is known about how often patients desire and experience discussions with hospital personnel regarding R/S (religion and spirituality) or what effects such discussions have on patient satisfaction.

OBJECTIVE, DESIGN AND PARTICIPANTS: We examined data from the University of Chicago Hospitalist Study, which gathers sociodemographic and clinical information from all consenting general internal medicine patients at the University of Chicago Medical Center.

MAIN MEASURES: Primary outcomes were whether or not patients desired to have their religious or spiritual concerns addressed while hospitalized, whether or not anyone talked to them about religious and spiritual issues, and which member of the health care team spoke with them about these issues. Primary predictors were patients' ratings of their religious attendance, their efforts to carry their religious beliefs over into other dealings in life, and their spirituality.

KEY RESULTS: Forty-one percent of inpatients desired a discussion of R/S concerns while hospitalized, but only half of those reported having such a discussion. Overall, 32% of inpatients reported having a discussion of their R/S concerns. Religious patients and those experiencing more severe pain were more likely both to desire and to have discussions of spiritual concerns. Patients who had discussions of R/S concerns were more likely to rate their care at the highest level on four different measures of patient satisfaction, regardless of whether or not they said they had desired such a discussion (odds ratios 1.4–2.2, 95% confidence intervals 1.1–3.0).

CONCLUSIONS: These data suggest that many more inpatients desire conversations about R/S than have them. Health care professionals might improve patients' overall experience with being hospitalized and patient satisfaction by addressing this unmet patient need.

KEY WORDS: patient satisfaction; physician/patient communication; quality of care; religion; spirituality.

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INTRODUCTION

The past 2 decades have witnessed a growing consensus that patients' religious and spiritual concerns often influence their health care decisions. Americans are a highly religious people: 83% report belief in God, 59% attend religious services at least once a month and 73% say they try hard to carry their religious beliefs over into all other dealings in life.^{1,2} Religious and spiritual concerns appear to become especially salient during times of illness, suffering and death.^{3–6} As part of a broader series of movements toward greater patient-centered care, some medical leaders and policy-makers have urged health care systems and providers to give due attention to patients' spiritual concerns. The American Association of Medical Colleges (AAMC) has developed guidelines and educational objectives for courses addressing religion and spirituality (R/S).⁷ The Joint Commission on Accreditation of Healthcare Organizations has affirmed that "Physicians, therapists, nurses, and clinical pastoral staff should receive training on the value of spiritual assessment and the tools that should be used to assess a patient's spirituality," and the Joint Commission "requires organizations to include a spiritual assessment as part of the overall assessment of a patient to determine how the patient's spiritual outlook can affect his or her care, treatment, and services."⁸

It is not clear how often patients desire and experience discussions with hospital personnel regarding R/S, or what effect such discussions have on patient satisfaction. Research suggests that a substantial proportion of patients, though certainly not all, would welcome greater dialogue with their physicians about their religious concerns,^{9–11} particularly during hospitalization or in the face of impending death.^{3,4} Furthermore, in a recent study of patients with advanced cancer, Balboni et al. reported that patients who received spiritual care from their health care team members both had higher well-being scores and received fewer high-cost, life-sustaining medical interventions at the end of life.¹²

In addition, in a large national survey of inpatients, the degree to which staff addressed emotional/spiritual needs was

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highly correlated with reported overall patient satisfaction.¹³ Nevertheless, there has been disagreement about which members of the health care team should ask about and address spiritual concerns. Spiritual care is expected of nurses and is reflected in nursing codes of ethics, nurse education guidelines, and policy documents.¹⁴ Physicians are divided about the appropriateness of inquiring into R/S concerns, though the great majority believes it is appropriate to discuss such concerns when the patient brings them up.¹⁵ Physicians cite personal discomfort, inadequate training, and insufficient time as significant barriers to discussing R/S with their patients.¹⁵⁻¹⁸ In addition, some authors have argued that inquiring about a patient's R/S may be intrusive or even coercive because of the unequal power of physicians in the doctor-patient relationship.^{11,19} Physicians who do not feel comfortable can of course refer to clinical pastoral care professionals, yet data suggest that chaplains are not readily available in many contexts: between 1980 and 2003, only two thirds of US hospitals reported having any chaplaincy services.²⁰

Despite the consensus that religious and spiritual concerns are relevant in clinical settings, no studies to date have examined the prevalence of desires for attention to R/S concerns among hospitalized patients and then followed up post-discharge to determine whether these needs were actually met and by whom. Using unique data collected from patients admitted on the general medicine service of a large, urban, academic medical center, we sought to determine the prevalence and predictors of inpatients' desiring to discuss R/S concerns with health care professionals and actually experiencing such discussions. We also examined how experiencing discussions of R/S concerns is associated with patients' ratings of satisfaction with the care they received while hospitalized. We hypothesized that the majority of patients would desire to discuss R/S with their health care providers, but many fewer would experience such discussions, particularly with physicians. We hypothesized that religious patients, and those with more severe illness, would be more likely to welcome and to experience such discussions, and that those whose desire for R/S discussion were met would be more satisfied with the overall care they received in the hospital.

METHODS

Procedure

The University of Chicago collects clinical and sociodemographic variables on all patients admitted to the general internal medicine service.²¹ Within 24 h of admission, hospitalized patients are asked by a research assistant that is not affiliated with the clinical team if they would consent to being enrolled in the study. They are also told that participation in the survey will not interfere with or delay their care during their hospitalization. The "Inpatient Interview Survey," which is comprised of 37 items, is then administered in person and takes approximately 15 min. Attempts are made to identify proxy respondents for

patients unable to consent to the interview. Participants are asked if they would be willing to participate in a second interview comprised of 55 items, which is administered by telephone 30 days post-discharge.

Key Variables

In January 2006, items were added to the discharge survey to better understand patients' perceptions of their spiritual needs and how these needs are addressed by the health care team. The first item asked, "Some patients would like to discuss religious or spiritual concerns with someone while in the hospital. Was that true for (you/PATIENT)?" (Yes/No). The second asked, "While (you were/PATIENT was) in the hospital, did anyone talk with (you/him/her) about religious or spiritual issues?" (Yes/No), and if the respondent answered yes to this item, we asked "Was it (check all that apply): (a) one of the hospital physicians; (b) a hospital chaplain; (c) a member of (your/his/her) own religious community; (d) someone else."

Key predictors were patients' religious characteristics, measures of health status, and demographic characteristics. Religious attendance was measured on the inpatient survey by response to the question, "How often do/did you/patient attend church, synagogue, or other religious meetings?" Responses are collapsed to $\leq$ once a year, $>$ once a year to a few times a month, and $\geq$ once a week. This item is from the Duke Religion Index (DUREL).²² Intrinsic religiosity, the extent to which religion guides or gives purpose to one's life,¹ was measured by agreement or disagreement with the statement, "I try hard to carry my religious beliefs over into all my other dealings in life." Intrinsic religiosity was classified as low if patients disagreed, moderate if they agreed, and high if they strongly agreed. Spirituality was measured by the question, "To what extent do you consider yourself a spiritual person?" and categorized as low if patients answered "slightly" or "not at all" spiritual, moderate if they answered "moderately" spiritual, and high if they are answered "very" spiritual. The latter two items come from the Brief Multidimensional Measure of Religiousness/Spirituality.²³

Two indicators of health status were included. Self-rated health status was assessed using a question from the Medical Outcomes Study 12-Item Short Form (SF-12), in which patients were asked to rate their own health on a scale from 1 to 100. In addition, Charlson Comorbidity Index scores were calculated from hospital administrative data using a 1-year look back.^{21,24} The Charlson Comorbidity Index is a measure of the severity of comorbid diseases, with higher index scores predicting higher cumulative mortality attributed to comorbid diseases.²⁴ Hospital administrative data provided information on age, race, and length of hospital stay. For simplicity of analysis and presentation, both of these measures were converted to ordered categorical variables.

Finally, we used questions from the Picker-Commonwealth patient satisfaction survey^{25,26} to assess patient satisfaction regarding the care patients received during their hospitalization. The first item asked, "How satisfied (were

you/was PATIENT) with the care received from (your/his/her) doctors, during (your/his/her) hospital stay?" (extremely satisfied/somewhat satisfied/somewhat dissatisfied/extremely dissatisfied). The second item asked, "Did (you/PATIENT) have confidence and trust in the doctors treating (you/him/her)?" (yes, always/yes, sometimes/no/don't know). The third item asked, "How would (you/PATIENT) rate the overall coordination and teamwork among the doctors and nurses who cared for (you/PATIENT) during (your/his/her) hospital stay?" (excellent/very good/good/fair/poor/don't know). The last item asked, "Overall, how would (you/PATIENT) rate the care you received at the hospital?" (excellent/very good/good/fair/poor/don't know).

Statistical Analysis

After generating descriptive statistics, we used chi-square tests to examine bivariate associations between each criterion measure and both desiring and experiencing a discussion of R/S concerns. We then used multivariate logistic regression to determine whether associations remained significant after controlling for covariates (multivariable models included all variables listed in the first column of Table 3). We repeated these analyses post hoc for the outcome of having an unmet desire for discussion. We then conducted parallel analyses to measure unadjusted and adjusted associations between having a discussion or R/S issues and each of the four measures of patient satisfaction. All statistical analyses were performed using Stata/SE10.0 (Stata Corp., College Station, TX). This study was approved by the University of Chicago Institutional Review Board.

RESULTS

Study Participants

Between January 2006 and June 2009, 11,620 patients were approached to be enrolled in the study; 1,671 declined to participate, and 6,808 were enrolled but did not complete the post-discharge questions regarding discussions of spiritual concerns. The present study focuses on the 3,141 patients who answered at least one of questions about desiring and/or having a discussion regarding R/S issues. Their characteristics are listed in Table 1.

Discussions of Spiritual Issues in the Hospital

Forty-one percent of patients (n=1,135) reported that they would have liked to discuss religious or spiritual concerns with someone while in the hospital, and 32% (n=889) indicated that some such discussion did occur. Among the latter, 8% (n=70) spoke with a physician, 61% (n=541) spoke with a chaplain, 12% (n=109) spoke with a member of their own religious community, and 12% (n=107) spoke with someone else. As shown in Table 2, patients who desired discussions of spiritual

Table 1. Patient Characteristics (N=3,141*)

Demographic characteristics	
Age, mean years (SD)	56.2 (19.7)
Sex, n (%)	
Men	1,214 (39)
Women	1,925 (61)
Race/ethnicity, n (%)	
White	629 (20)
Black/African-American	2,292 (73)
Other	205 (7)
Married, n (%)	
Yes	904 (29)
No	2,219 (71)
Education level	
No high school degree	661 (22)
High school degree	940 (31)
Some college or junior college	860 (28)
College or post-graduate degree	600 (20)
Measures of health status	
Length of stay, n (%)	
<2 days	525 (17)
2–3 days	1,056 (34)
4–5 days	695 (22)
≥6 days	865 (28)
Charlson Comorbidity Index, n (%)	
0	1,132 (36)
1	549 (17)
2	525 (17)
3	460 (15)
4+	475 (15)
Self-reported health (0–100), n (%)	
<40	620 (20)
40–54	926 (29)
55–75	869 (28)
>75	726 (23)
Pain during hospital stay, n (%)	
None	1,062 (34)
Mild	376 (12)
Moderate	675 (22)
Severe	974 (32)
Religious characteristics	
Attendance at religious services	
≤ Once a year	876 (29)
> Once/year to a few times/month	1,064 (36)
≥ Once a week	1,048 (35)
Intrinsic religiosity, n (%)	
Low	436 (15)
Moderate	1,052 (36)
High	1,469 (50)
Spirituality, n (%)	
Low	598 (20)
Moderate	1,223 (41)
High	1,196 (40)

*N counts vary somewhat due to partial non-response. Except where indicated, 'not apply' and 'do not know' responses are counted as missing. Percentages do not all sum to 100 because of rounding error

issues, and those who had them, did not entirely overlap. In fact, half (561/1,135) of the patients who desired a discussion did not have one (this group represents 20% of patients overall), and one in four (315/1,633) patients who did not desire a discussion had one anyway (11% of patients overall). Table 3 displays the likelihood (percentage) and odds of having wanted to discuss religious or spiritual concerns, and actually having discussed such concerns, stratified by patient characteristics. Marital status and length of hospital stay were not significantly associated with either outcome and were excluded from the table.

Table 2. Patients' Desire for Discussion of Religious or Spiritual Concerns, by Whether Such Discussions Occurred

Had discussion of religious or spiritual concerns	Desired discussion of religious or spiritual concerns		
	Yes	No	Total
Yes	Desired, discussed 574 (21%)	Not desired, discussed 315 (11%)	889 (32%)
No	Desired, not discussed 561 (20%)	Not desired, not discussed 1,318 (48%)	1,879 (68%)
Total	1,135 (41%)	1,633 (59%)	2,768 (100%)

Predictors of Wanting to Discuss R/S Concerns

In adjusted analyses, desiring a discussion of R/S concerns was significantly associated with being 61–70 years old (OR, 95% CI=1.5, 1.1–2.1 compared to ≤ 40 years), having less education (ORs 0.6–0.7, 95% CIs 0.5–0.9 comparing those with at least a high school degree to those without), having experienced severe pain (OR, 95% CI=1.3, 1.0–1.6 compared to no pain), and being more religious or spiritual by any of the three measures.

Predictors of Having Discussed R/S Concerns

Having discussed R/S concerns with someone in the hospital was associated with age (compared to age ≤ 40 years, OR, 95% CI = 1.4, 1.0–1.9 for 51–60 years; 1.5, 1.1–2.1 for 61–70 years; and 1.4, 1.1–1.9 for >80 years), race (OR, 95% CI=0.7, 0.5–0.8 for blacks compared to whites), having less education (e.g. OR, 95% CI=0.7, 0.6–1.0 for college degree compared to no high school degree), having experienced severe pain (OR, 95% CI=1.5, 1.2–1.8 compared to no pain), having a Charlson Comorbidity score of 1 (OR, 95% CI=1.3, 1.0–1.6 compared to 0), and having higher intrinsic religiosity (ORs 1.4–1.5, 95% CIs 1.0–2.0 for moderate and high religiosity compared to low).

Table 4 displays the likelihood of having an unmet desire for discussing religious and spiritual concerns, stratified by patient characteristics. Patients who were more intrinsically religious or spiritual were also more likely to have an *unmet* desire for discussion (OR, 95% CI=1.7, 1.0–2.7 for high religiosity compared to low and moderate; ORs 1.6–1.8, 95% CIs 1.1–2.8 for moderate and high spirituality compared to low).

Discussions of Spiritual Concerns and Patient Satisfaction With Care

Table 5 presents the associations between whether patients' spiritual concerns were discussed and each of four different measures of patients' satisfaction with the care they received in the hospital. These analyses are further stratified by whether or not the patient had desired such a discussion.

After adjustment for other covariates, patients who reported having discussed spiritual issues with someone while in the hospital were significantly more likely to give superior ratings on all four satisfaction measures, regardless of whether or not they had desired such a discussion (odds ratios ranged from 1.4 to 2.2, 95% confidence intervals 1.1–3.0).

In a final post-hoc analysis, we found that the discipline (physician, chaplain, religious community, other) of the person with whom the patient discussed R/S issues was not significantly associated with ratings of satisfaction on any of the four measures ($p>0.2$ for all).

DISCUSSION

Among inpatients at a large urban medical center, 41% desired a discussion of R/S concerns while hospitalized, and only half of those (and 32% of inpatients overall) reported having such a discussion. Importantly, those who discussed their spiritual concerns were more likely to have very positive assessments of their inpatient stay.

Our finding that only 41% of patients wanted to discuss religious or spiritual concerns with someone while in the hospital is comparable to a prior study of family medicine inpatients in which 37% said they wanted to discuss their R/S beliefs with physicians more frequently.²⁷ We expected the percentage to be somewhat higher given that our patient population included a large percentage of patients who were women and Black/African-American,^{3,27–29} both of which are associated with higher levels of R/S belief. The relatively low percentage may reflect other factors particular to the patients found in this one medical institution. Of those patients who indicated that they did have a R/S discussion with someone during the hospitalization, the discussion usually occurred with a hospital chaplain. Only 8% reported having discussed R/S concerns with a physician. This is comparable to a previous study of family medicine inpatients where 12% reported that physicians had discussed their religious beliefs with them.²⁷ The generally low prevalence of physicians discussing R/S with patients stands in contrast to surveys indicating that physicians believe they should be aware of patients' spirituality (84.5% of physicians at teaching hospitals in Monroe's study).³⁰ While physicians can become aware of these R/S needs by reading a chaplain's chart note, or talking with the patient's friends and family, this may not adequately replace face to face conversations about R/S matters. Our study indicates that, according to patients, there is ample room for physicians and other health care professionals to engage them in conversations about R/S concerns. Moreover, with only a third of patients reporting a discussion of their R/S concerns, it would seem that the Joint Commission's goal that all patients receive a spiritual assessment is far from being attained and that there is room for further training of clinicians.^{4,8}

While it is intuitive that religious and spiritual patients would be more likely to desire and to engage in conversations about R/S concerns, it is perhaps not as obvious why patients in severe pain would be more likely to desire and to have conversations about R/S. Perhaps these patients have more advanced disease, and as a result are thinking more

Table 3. Percentage of Patients Who Would Have Liked to Discuss Religious or Spiritual Concerns, and the Percentage Who Did Discuss Such Concerns, Stratified by Patient Characteristics

	Desired discussion			Did discuss		
	Bivariate		Multivariate [†]	Bivariate		Multivariate [†]
	%	p (χ ²)	OR (95%CI)	%	p (χ ²)	OR (95%CI)
Patient characteristics (N*)						
Sex						
Men (1,158)	28	0.008	1.0 (Referent)	42	0.503	1.0 (Referent)
Women (1,850)	33		1.1 (0.9–1.3)	40		0.9 (0.7–1.0)
Age in years						
≤40 (528)	23	0.001	1.0 (Referent)	33	0.008	1.0 (Referent)
41–50 (327)	29		1.0 (0.7–1.4)	42		1.3 (1.0–1.9)
51–60 (373)	30		1.1 (0.8–1.5)	42		1.4 (1.0–1.9) [‡]
61–70 (293)	35		1.5 (1.1–2.1) [‡]	43		1.5 (1.1–2.1) [‡]
71–80 (315)	30		1.1 (0.8–1.6)	41		1.3 (0.9–1.8)
>80 (1,173)	34		1.3 (1.0–1.7)	43		1.4 (1.1–1.9) [‡]
Race/ethnicity						
White (609)	24	0.003	1.0 (Referent)	46	0.009	1.0 (Referent)
Black/African-American (2,189)	28		1.0 (0.8–1.2)	39		0.7 (0.5–0.8) [‡]
Other (197)	30		1.5 (1.0–2.2) [‡]	45		1.0 (0.7–1.5)
Education level						
No high school degree (627)	38	0.000	1.0 (Referent)	43	0.015	1.0 (Referent)
High school degree (901)	29		0.7 (0.6–0.9) [‡]	41		0.9 (0.7–1.2)
Some college (832)	27		0.6 (0.5–0.8) [‡]	39		0.8 (0.6–1.0) [‡]
College or post-graduate degree (575)	29		0.6 (0.4–0.9) [‡]	39		0.7 (0.6–1.0) [‡]
Health characteristics						
Charlson Comorbidity Index						
0 (1,095)	28	0.065	1.0 (Referent)	37	.039	1.0 (Referent)
1 (527)	34		1.2 (1.0–1.6)	43		1.3 (1.0–1.6) [‡]
2 (497)	33		1.2 (0.9–1.6)	43		1.3 (1.0–1.6)
3 (425)	32		1.1 (0.8–1.4)	43		1.2 (0.9–1.5)
4+ (465)	32		1.1 (0.8–1.4)	44		1.3 (1.0–1.6)
Self-reported rating of health (0–100)						
<40 (589)	34	0.091	1.0 (Referent)	46	0.058	1.0 (Referent)
40–54 (890)	28		1.1 (0.9–1.5)	41		1.3 (1.0–1.6)
55–75 (834)	30		0.8 (0.7–1.1)	39		1.0 (0.8–1.3)
>75 (696)	32		0.9 (0.7–1.2)	39		1.0 (0.8–1.3)
Severity of pain						
None (1,008)	29	0.115	1.0 (Referent)	37	.000	1.0 (Referent)
Mild (360)	29		1.1 (0.8–1.4)	39		1.1 (0.8–1.4)
Moderate (645)	31		1.2 (0.9–1.5)	39		1.1 (0.9–1.5)
Severe (946)	34		1.3 (1.0–1.6) [‡]	47		1.5 (1.2–1.8) [‡]
Religious characteristics						
Attendance at religious services						
≤ Once a year (834)	23	0.000	1.0 (Referent)	39	0.229	1.0 (Referent)
> Once/year to a few times/month (1,020)	31		1.3 (1.0–1.6) [‡]	42		1.1 (0.9–1.4)
≥ Once a week (1,007)	37		1.5 (1.2–2.0) [‡]	43		1.1 (0.9–1.4)
Intrinsic religiosity						
Low (419)	16	0.000	1.0 (Referent)	35	0.004	1.0 (Referent)
Moderate (1,013)	29		2.2 (1.6–3.1) [‡]	40		1.4 (1.0–1.8) [‡]
High (1,401)	37		2.0 (1.4–2.7) [‡]	44		1.5 (1.1–2.0) [‡]
Self-rated spirituality						
Low (118)	21	0.000	1.0 (Referent)	40	0.050	1.0 (Referent)
Moderate (333)	28		1.6 (1.2–2.2) [‡]	39		1.0 (0.8–1.3)
High (447)	39		1.2 (1.2–2.2) [‡]	44		0.8 (0.6–1.1)

Table presents characteristics significantly associated (at $p < 0.05$) with one or both criterion variables

*N counts vary slightly by analysis due to partial non-response

†Odds ratios (95% confidence intervals) from multivariate logistic regression, after adjustment for sex, age, race/ethnicity, marital status, education level, self-rated health score, and religious characteristics

‡ $p < 0.05$

about life and death questions that religion and spirituality often address. Alternatively, patients may cope with uncontrolled pain by drawing on religious and spiritual resources.³¹

Patient race, age, and gender were all associated with having discussed R/S issues with someone while hospitalized. Blacks/African-Americans were slightly less likely to

report having had discussion of spiritual concerns, indicating that racial and ethnic disparities in health care may include disparities in spiritual care. Women and older patients were more likely to discuss R/S concerns, a finding consistent with Johnson's report that women and older people have stronger spiritual beliefs.²⁸ Although these associations are intriguing, they do not seem large enough to warrant singling out any of

Table 4. Likelihood of Having an Unmet Desire for Discussion of Spiritual Concerns, Stratified by Patient Characteristics

	Bivariate		Multivariate*	
	%	p (X ²)	OR (95% CI)	
Patient characteristics				
Gender (n)				
Male (1,060)	10	0.015	1.0	(Referent)
Female (1,707)	13		1.3	(1.0–1.7)
Attendance at religious services (n)				
≤ Once a year (758)	9	0.002	1.0	(Referent)
> Once/year to a few times/month (933)	10		1.0	(0.7–1.5)
≥ Once a week (940)	14		1.3	(0.9–1.9)
Intrinsic religiosity (n)				
Low (380)	6	0.001	1.0	(Referent)
Moderate (930)	12		1.4	(0.8–2.4)
High (1,296)	13		1.7	(1.0–2.7)†
Spirituality (n)				
Low (528)	7	0.000	1.0	(Referent)
Moderate (1,071)	12		1.8	(1.1–2.8)†
High (1,064)	14		1.6	(1.1–2.5)†

Table presents only those patient characteristics that were significantly associated (at $p < 0.05$) in bivariate analysis. N counts vary because of partial non-response

*Odds ratios (95% confidence intervals) from multivariate logistic regression, after adjustment for sex and religious characteristics

† $p < 0.05$

these categories from broader efforts to address patient's R/S concerns.

Patients who had religious and spiritual discussions during their hospitalization were more likely to give a positive assessment of their care. This was true even for patients who did not initially desire a discussion of their religious or spiritual issues. These findings are consistent with but also augment the findings of Clark et al., whose analysis of the 2001 Press Ganey National Inpatient data ($n = 1,732,562$) demonstrated that there is a high association between the "degree to which staff addressed emotional/spiritual needs" and "overall patient satisfaction."¹³ (Clark also reported that emotional and spiritual needs ranked second on the National Inpatient Priority Index from 1998–2001.¹³) Clark combined emotional and spiritual needs, noting, "those needs directly

involved a range of emotions experienced during hospitalization, including search for meaning, transcendence, desire to maintain formal religious practices, alleviating fear and loneliness, and the presence of God."¹³ In contrast, our measure focused specifically on talking to patients about religious and spiritual issues, suggesting that for many patients it may not be enough to address emotional concerns without specifically asking about R/S issues.

Another possible explanation for these patients' high ratings of satisfaction is that reporting having had R/S discussions is a proxy for greater overall coordination of care or for more comprehensive, multidisciplinary care. It may also reflect better communication among all members of the health care team.

This study has limitations. The study population was large, but necessarily excluded numerous patients who declined to participate or did not complete all aspects of the study. Discussions of R/S issues are known only by patient self-report. Chart reviews or direct observations would help provide a fuller account of what sorts of discussions actually took place. Social desirability bias can affect survey responses, especially with survey items addressing satisfaction ratings. We are not able to assess causality, and can only infer associations. Drawing patients from a single medical center limits our ability to generalize the findings to other patient populations.

CONCLUSION

These data suggest that many more inpatients desire conversations about religious and spiritual concerns than actually experience such conversations. Patients who desire such conversations tend to be more religious and/or spiritual, to have less education, and to have experienced severe pain. Moreover, patients who discussed their R/S concerns during their inpatient stay reported higher levels of satisfaction with the medical care they received, even when they did not actively seek a discussion of their R/S concerns. As such, the study suggests that physicians, nurses, health care organizations,

Table 5. Associations Between Having Discussed Spiritual Concerns with Someone in the Hospital and Highly Rating the Care Received, Stratified by Whether or Not a Discussion Was Wanted

	Extremely satisfied with doctors' care		Always had confidence and trust in doctors		Coordination & teamwork among doctors and nurses was excellent		Would rate overall care received at hospital as excellent	
	Multivariate*		%	Multivariate*		%	Multivariate*	
	%	OR (95% CI)		OR (95% CI)	%	OR (95% CI)	%	OR (95% CI)
Wanted discussion								
Not discussed (312)	63†	1.0 (Referent)	77†	1.0 (Referent)	55†	1.0 (Referent)	59†	1.0 (Referent)
Discussed (570)	71	1.4 (1.1–2.0)†	84	1.7 (1.2–2.5)†	72	2.2 (1.6–3.0)†	69	1.6 (1.2–2.2)
Did not want discussion								
Not Discussed (1,298)	63†	1.0 (Referent)	78†	1.0 (Referent)	57†	1.0 (Referent)	60†	1.0 (Referent)
Discussed (558)	77	1.9 (1.5–2.4)†	86	1.7 (1.3–2.2)	67	1.5 (1.2–1.9)†	72	1.7 (1.4–2.1)†

Table presents only those patient characteristics that were significantly associated (at $p < 0.05$) in univariate analysis

N counts vary because of partial non-response

*Odds ratios (95% confidence intervals) from multivariate logistic regression, after adjustment for age, marital status, education level, self-rated health score, and severity of pain

† $p < 0.05$

and pastoral care departments may address an unmet need and simultaneously improve patient satisfaction by talking to patients about R/S concerns in the inpatient setting.

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Corresponding Author: Joshua A. Williams, BS; Pritzker School of Medicine, University of Chicago-Pritzker School of Medicine, 924 East 57th Street, Chicago, IL 60637, USA (e-mail: joshuawilliams@uchicago.edu).

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