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The association of spiritual care providers' activities with family members' satisfaction with care after a death in the ICU

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Abstract

Objective—Spiritual distress is common in the ICU, and spiritual care providers are often called upon to provide care for patients and their families. Our goal was to evaluate the activities spiritual care providers' conduct to support patients and families, and whether those activities are associated with family satisfaction with ICU care.

Design—Prospective cohort study.

Setting—350-bed, 65-ICU bed tertiary care teaching hospital.

Subjects—Spiritual care providers and family members of patients who died in the ICU or within 30 hours of transfer from the ICU.

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Measurements—Spiritual care providers completed surveys reporting their activities. Family members completed validated measures of satisfaction with care and satisfaction with spiritual care. Clustered regression was used to assess the association between activities completed by spiritual care providers and family ratings of care.

Results—Of 494 eligible patients, 275 family members completed surveys (response rate, 56%). Fifty-seven spiritual care providers received surveys relating to 268 patients, completing 285 surveys for 244 patients (response rate, 91%). Spiritual care providers commonly reported activities related to supporting religious and spiritual needs ($\geq 90\%$) and providing support for family feelings (90%). Discussions about the patient's wishes for end-of-life care and a greater number of spiritual care activities performed were both associated with increased overall family satisfaction with ICU care ($p < 0.05$). Discussions about a patient's end-of-life wishes, preparation for a family conference, and total number of activities performed were associated with improved family satisfaction with decision-making in the ICU ($p < 0.05$).

Conclusions—Spiritual care providers engage in a variety of activities with families of ICU patients; several are associated with increased family satisfaction with ICU care in general and decision-making in the ICU specifically. These findings provide insight into spiritual care provider activities and provide guidance for interventions to improve spiritual care delivered to families of critically ill patients.

Keywords

intensive care; critical care; spiritual care; end-of-life care; dying; death; palliative care

INTRODUCTION

An inclusive conceptualization of spirituality is based on an individual's search for meaning and purpose in life.^{1,2} For many patients facing serious illness, spirituality plays a substantial role in coping with prognosis, symptoms, and dying.^{3–6} Despite this endorsement of spirituality's importance, patients report that their physicians often fail to talk with them about their spiritual needs.^{7–10} Importantly, when spiritual care needs are unmet, patients rate their care more poorly¹¹ and medical costs are increased.¹² The Joint Commission has recognized the importance of supporting spiritual needs, including it as a component of their care standards, and attention to spiritual needs has been considered a moral obligation for healthcare institutions.^{13,14}

The importance of spirituality to families has been similarly described.¹⁵ In a survey of primary care outpatients, interest in discussions of spirituality was greatest when anticipating or experiencing the loss of a loved one, suggesting that the death of a family member is a time of substantial spiritual need for family members of critically ill patients.^{9,15} Under these circumstances, a hospital chaplain or spiritual care provider may provide welcomed care in the intensive care unit. Although a visit by a spiritual care provider has been associated with increased family satisfaction with spiritual care,¹⁶ little is known about the specific activities spiritual care providers offer and their associations with ratings of care from the perspective of family members of patients who die in the ICU.

Our specific aims were 2-fold: Aim 1) to describe the frequency of specific activities performed by spiritual care providers for patients who eventually died in the ICU and their family members; and Aim 2) to evaluate the associations between spiritual care providers' activities and family ratings of satisfaction with care. We hypothesized that specific activities performed by spiritual care providers would be associated with higher family satisfaction with ICU care in general and spiritual care specifically. The ultimate goal of this study is to provide insights and guidance for future interventions designed to improve spiritual care for family of critically ill patients.

MATERIALS AND METHODS

Design and sample

Data for this study were collected as part of a “before-after” trial evaluating the effect of a multidisciplinary quality improvement intervention to improve palliative and end-of-life care in the ICU.¹⁷ The intervention consisted of clinician education (e.g., provision of grand rounds, interactive workshops), local champions (e.g., identification and training of ICU clinician-leaders), academic detailing (e.g. meeting one-on-one with ICU directors), audit and feedback (e.g., sharing of ICU-specific family satisfaction questionnaire data with clinicians, managers and administrators), and system support (e.g. provision of order forms, communication aids). The intervention activities were extended to all members of the interdisciplinary team (e.g., physicians, nurses, spiritual care workers, social workers).

Between August 2003 and October 2005, eligible patients were identified from a 350-bed Level 1 Trauma center with 65 ICU beds in Seattle, Washington, that has had a Department of Spiritual Care since 1978. At the time of this study, there were over 50 spiritual care providers involved with ICU patients and their families. The majority of these were interns in their first year of Clinical Pastoral Education, a nationally accredited program of education for ministry. The Clinical Pastoral Education Program is an accredited form of pastoral education for seminarians, clergy, and laity that utilizes an action/reflection model of learning under supervision. Students develop both professional pastoral identity and pastoral expertise. An accredited unit includes a minimum of 300 hours of clinical practice and 100 hours of group learning and supervision. The core methodology of the program involves individualized learning contracts, clinical practice, didactic resources, individual and group supervision, and reflection that integrate theory, practice, and personal history.

Spiritual care providers routinely screened the ICUs Monday through Friday to identify patients or families who might benefit from spiritual care and also accepted referrals from clinicians. Our current analysis includes patients who died before ($n = 122$) and after ($n = 122$) the intervention and for whom we obtained spiritual care provider questionnaires.

Eligibility/Recruitment Procedures

Patients—We identified consecutive eligible patients from the hospital admission, discharge, and transfer logs. Patients over the age of 18 were eligible if they died in an ICU or within 30 hours of transfer from an ICU to another hospital location. We excluded

patients with ICU stays shorter than 6 hours to ensure that spiritual care providers were likely to have had an opportunity to become involved in care.

Family members—Approximately one month after a patient's death, family questionnaires were mailed to addresses obtained from the patient's medical record. Included in the packet were a cover letter, a consent form, a stamped return envelope, and a ten-dollar incentive payment. The cover letter asked that the family member or friend most involved in the patient's care complete the questionnaire. Reminders included a postcard sent at one week after the initial mailing to all potential subjects and a second packet sent to non-respondents at four to six weeks after the initial mailing.

Spiritual care providers—Within 48 hours of an eligible patient's death, a self-report questionnaire was distributed to spiritual care providers who had been identified as associated with that patient by chart review. In some cases, this included more than one spiritual care provider. The questionnaire included items related to the quantity, types, and quality of spiritual care provided to the patient and family. To enhance response rates, 2 additional reminders were provided (i.e., postcard reminder/thank you at 1 week to all providers, additional questionnaire delivery at 3–4 weeks to non-respondents). Spiritual care providers were informed that questionnaire results were confidential and that results would not be presented in any way that allowed individuals to be identified. The Institutional Review Board at the University of Washington approved all study procedures and materials.

Spiritual Care Measures

The spiritual care providers' questionnaire was initially developed by the Harborview/University of Washington End-of-Life Care Research Program for completion by nurses^{18,19} and was adapted for spiritual care providers with the input of supervisors from this department. Spiritual care providers answered 14 questions about specific activities that they or other department members may have conducted to support the families with whom they were working. A composite score was created as the sum of all endorsed items for the activity types included for analysis. The survey also included demographic items to describe the characteristics of spiritual care providers (i.e., age, sex, race/ethnicity, education, years of ICU experience). The spiritual care provider activities questionnaire is available online (<http://depts.washington.edu/eolcare>).

Family-assessed outcome measures

Families' satisfaction with care was assessed with the Family Satisfaction in the ICU (FS-ICU) questionnaire.²⁰ This questionnaire has been validated using a subset of 24 out of the 34 items that families completed.²¹ The validated scoring includes: 1) a total score (FS-ICU) averaged across 24 items; 2) a Satisfaction with Care (FS-Care) subscale averaged across 14 items; and 3) a Satisfaction with Decision-Making (FS-Decision-Making) score averaged across 10 items.²¹ An additional question, "How well did the ICU staff meet your spiritual/religious needs," is part of the longer FS-ICU questionnaire, but is not part of the 24 items that contribute to the FS-ICU total or subscale scores. For these analyses, it was evaluated as a separate outcome. Family members' demographic information was also collected and included age, sex, race/ethnicity, education level and relationship to patient.

Analysis

For the analyses of the self-reported spiritual care providers' activities, Aim 1, we used descriptive statistics (i.e., frequencies, means, standard deviations) based on the full sample of spiritual care provider questionnaires in which we included more than one questionnaire per patient, if available.

For the analyses of associations between spiritual care providers' self-reported activities and family outcomes (Aim 2) we used robust, clustered regression models that accommodated the skewed distributions of the satisfaction scales (FS-ICU total, FS-Care, FS-Decision-Making) and accounted for the correlated data that resulted from spiritual care providers providing surveys for multiple patients; these clustered models relaxed the assumption of independence in observations and provided appropriate standard errors by which to test the proposed associations. For the single item assessing satisfaction with spiritual care services for which the assumption of equal intervals between response options was less likely to be valid, we used ordinal logistic regression.

For Aim 2 analyses, we first created a reduced sample of spiritual care provider questionnaires (n=244) in which each patient had only one spiritual care provider questionnaire. This was necessary in order to avoid cross-clustering for 32 patients who had 2 or more spiritual care provider questionnaires. The selection of surveys to retain was guided by the following principles, in the following order of priority: 1) to maximize the number of spiritual care providers represented; 2) to retain surveys with the most complete data; and 3) to balance the number of surveys included per spiritual care provider. We then excluded activities that were very frequent ($\geq 90\%$) (i.e., actively addressed spiritual or religious needs, discussed spiritual or religious needs, discussed family members' feelings) or were likely to be relevant to only a subset of patients and families (i.e., addressing cultural needs, discussing intra-family disagreements) with the rationale that these activities were unlikely to provide sufficient variability to allow reliable regression analysis. This resulted in the retention of seven activities and a summary score of the total number of activities as predictor variables.

Potential confounders included: family characteristics (i.e., age, sex, race/ethnicity, education level), patient characteristics (i.e., age, sex, marital status), and spiritual care provider characteristics (i.e., age, sex, race/ethnicity, years of ICU experience). Years of ICU experience was categorized into <1 , 1–5, or >5 years of ICU experience. An individualized adjusted model was generated for each activity, outcome, and set of covariates. Covariates were included in each adjusted model if the change in the β -coefficient was greater than or equal to 20% after inclusion of the covariate, relative to the unadjusted model. We chose 20% because of the relatively large number of models examined. Intervention status was included in all adjusted models. Due to the number of tests of association, the analyses were considered hypothesis generating and we selected a p value of ≤ 0.05 to signify statistical significance without adjusting for multiple comparisons.

RESULTS

Sample

Patients—587 eligible patients were identified during the study period. Most patients were white (77%), male (66%), and never married/partnered, widowed or divorced (57%). Mean age at time of death was 62 years, and a third of deaths were due to trauma (33%); mean length of hospital stay and ICU stay were 9.3 and 6.3 days, respectively. Patients with documented spiritual care visits had significantly longer ICU lengths of stay and lower educational achievement ($p<0.05$); they did not vary on any of the other measured variables (Table 1).

Family respondents—494 family members were contacted to complete surveys; 275 returned a survey (56%; Figure 1). The majority of family respondents were white (82%), female (66%) and had some post-high school education. Many (45%) were spouses of the patients. As with patients, the only statistically significant family characteristic that was associated with a documented spiritual care visit was a lower level of educational achievement (Table 2). There were 118 patients for whom a family member and a spiritual care provider completed a survey and for whom there was a spiritual care visit documented ($n=64$ pre-intervention; 54 post-intervention.)

Spiritual care provider respondents—Three hundred and eighteen questionnaires representing 268 patients were sent to 57 spiritual care providers (Figure 2). Two hundred and forty-four patients had at least one questionnaire returned from at least one of 49 spiritual care providers, yielding a patient-based response rate of 91% (244/268) and a spiritual care provider participation rate of 86% (49/57). The mean number of surveys distributed to these 57 providers was 5.6 (median=2, range= 1–36). The mean number completed was 5.0 (median =2, range = 0–34). The majority of the spiritual care providers were female (60%) and non-Hispanic white (76%). Although more than half were serving as interns in the Spiritual Care department and had therefore had little prior experience as spiritual care providers in the ICU (< 1 year, $n= 40\%$), they represented an older group of individuals (mean age, 42) with significant advanced degree training (46%).

Aim 1: Frequency of spiritual care provider activities

On average, spiritual care providers reported engaging in a large number of activities with ICU patients' family members: 102 (39%) received 10 or more of the 14 potential activities. Only 13 families (5%) were provided none of the activities. The mean and median number of activities per patient in which spiritual care providers engaged was eight. Actively addressing (92%) and discussing (92%) spiritual or religious needs were common. Discussions related to family members' feelings (90%) and patient values (79%) were also common, as was reminiscing about the patient (80%). Discussions about (28%) and actively addressing cultural needs (27%) were less common, as were discussions regarding intra-family disagreements about plan of care (20%; Table 3).

Aim 2: Specific spiritual care provider activities and family outcomes

The specific activity, “discussed patient’s wishes for end-of-life care”, as well as the total number of activities were significantly associated with both higher total FS-ICU and higher FS-Decision-Making scores. Higher FS-Decision-Making scores were also significantly associated with the activity, “prepared the family for a family conference”. The item, “reminisced with the family about the patient”, was associated with higher families’ assessment of satisfaction with having spiritual needs met in the ICU. None of the spiritual provider activities were associated with the FS-ICU-Care subscale (Table 4).

DISCUSSION

Our study of spiritual care providers is the first study to demonstrate the number and variety of activities that they report completing while providing support for families of critically ill patients. The family-completed questionnaires suggest several of these activities are associated with higher family satisfaction with care. In our sample, we found that both families’ and patients’ education levels were related to provision of spiritual care, with those with less education being more likely to have had a documented spiritual care visit. Two large studies, one nationally representative and one in the South, found that individuals with less education are more likely to self-designate as religious,^{22,23} and therefore our findings may represent appropriate targeting of spiritual care for those who desire it.

We found that the total number of activities performed was associated with higher scores on the FS-ICU, a general and validated measure of satisfaction with care in the ICU. This is consistent with prior studies in which the provision of spiritual support was associated with higher quality-of-life scores near the time of death.^{10,24} One novel feature of our study is that it relates to care provided to families of patients who died in the ICU; most prior studies of spiritual care have been conducted among outpatients in oncology or palliative care clinics.²⁵ The finding that 70% of primary care patients would like to discuss spiritual matters with their healthcare team if their family member were to die indicates that spiritual care is needed in support of families of patients at high risk of death.¹⁵

In a prospective multisite study, cancer patients whose religious and spiritual care needs were poorly met by clinic staff were more likely to die in an ICU, indicating that attention to spiritual care may affect choices for intensive care at the end of life²⁴. We detected a significant association between the occurrence of discussions of patients’ wishes for end-of-life care and higher overall assessments of the ICU experience. It may be the case that, for family members, the opportunity to give voice to the patient’s wishes and have this acknowledged by a spiritual care provider provides some support. Similarly, the association between reminiscing about the patient and satisfaction with spiritual care supports the importance of patient-focused and family-centered approaches in which the patient is seen as an important and unique person with individual values, beliefs and history. For family members, the opportunity for a spiritual care provider to learn about their loved one as an individual may be of particular value.

The FS-ICU is composed of two subscales, one representing satisfaction with the ways in which care has been delivered, and the other measuring satisfaction with the ways in which

care decisions were made.²¹ In contrast to the decision-making subscale and the total score, the FS-Care subscale was not significantly associated with spiritual care provider activities. This may be due, in part, to the kinds of items that are part of the FS-Care subscale; many assess the quality of care received from doctors and nurses and these may not be influenced by the activities that spiritual care providers are able to provide. However, the significant associations between spiritual care activities and higher satisfaction with ICU decision-making may suggest that one important function of spiritual care relates to comfort with and confidence in difficult decisions. This finding also supports the hypothesis that family members' experience of decision-making depends on factors beyond the provision of information, also including spiritual and emotional support.²⁶⁻²⁸ This hypothesis is consistent with prior studies, including one in which discussions of spiritual needs during family conferences were associated with greater satisfaction with decision-making.²⁹ Similarly, in a study of 48 family members of patients who had died in an ICU, 23 (48%) respondents spontaneously mentioned spirituality as reassuring at the time of end-of-life decision-making.³⁰

Surrogate decision-making by family members may play an important role in the psychological distress experienced by family members after a patient dies in the ICU. For example, family members who adopt passive decision-making roles exhibit greater degrees of depression and anxiety,³¹ and those whose desired decision-making role is discordant from actual decision-making role bear a greater burden of future depression and PTSD.³² The majority of patients who die in the ICU do so after a decision to withhold or withdraw life-sustaining therapy³³ and this decision-making comes with a heavy emotional and psychological cost.³⁴ Our findings, as well as those of others,^{29,30} suggest that good spiritual care may be one important opportunity to support family members through this decision-making process.

Our study has several limitations. First, it was conducted in a single center, and the results may not generalize to all ICU patients and families. Washington State has a less religious population than many other areas of the USA³⁵ and the impact of spiritual care may vary regionally. Furthermore, at the time our study was conducted, a large chaplaincy training program was in place. This resulted in, on average, less experienced spiritual care providers than may practice in other ICUs, as well as provision of spiritual care to a large proportion of families. Despite the limitation of a single-center study, our findings provide insights into the potential role of spiritual care. Second, this is an observational study, and as such causation cannot be inferred. Furthermore, spiritual care provider questionnaire items such as "actively addressed cultural needs" and "discussed intra-family disagreements" cannot be adequately addressed in an observational study, since such needs were not prospectively assessed and would only be "addressed" for cultural minorities or families with conflict. Third, we do not know how the effects of activities may have varied depending on families' spiritual needs, as we do not have indications of whether the spiritual care providers' visits were requested and by whom they were requested. Although the spiritual care provider program is designed to meet the spiritual needs of a diverse community, offering culturally-sensitive emotional and spiritual support to patients, families and staff, regardless of religious, faith or spiritual tradition, families may have been reluctant to engage or accept spiritual care providers' services if they felt that their own religious traditions may not be

addressed. In addition, we have no information on interactions with spiritual care practitioners who were not affiliated with the hospital, such as those representing the patients' usual church, synagogue, or mosque. Finally, due to the number of comparisons we conducted, our findings must be considered exploratory and future studies are needed to confirm them.

Our findings suggest that spiritual care providers' conversations with families about the patient as an individual, with specific reference to his or her wishes for end-of-life care, may be particularly useful for families. Spiritual care providers' activities were most strongly associated with satisfaction with families' decision-making in the ICU, which may indicate improved comfort with difficult decisions when family members feel supported by a spiritual care provider. Our results provide some direction for future studies testing interventions to improve spiritual care for family of critically ill patients; they also suggest that interventions designed to improve the delivery of spiritual care in the ICU may be associated with improvements in family members' satisfaction with decision-making.

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Figure 1.
Flow diagram for family members.

Figure 2.
Flow diagram for spiritual care providers.

Table 1**Patient Characteristics (n=587)**

Characteristic	All Patients (n=587)	No spiritual care visit (n=220)	Spiritual care visit (n=367)	P *
Female, % (n)	33.9 (199)	30.5 (67)	36.0 (132)	.172
Non-Hispanic white, % (n)	77.3 (454)	79.1 (174)	76.3 (280)	.433
Marital status % (n)				.141
Married/domestic partnership	43.1 (248)	37.3 (81)	46.6 (167)	
Divorced/separated	22.8 (131)	25.8 (56)	20.9 (75)	
Never partnered	18.1 (104)	18.4 (40)	17.9 (64)	
Widowed	16.0 (92)	18.4 (40)	14.5 (52)	
Underlying cause of death, % (n)				.203
Trauma	32.9 (193)	29.5 (65)	34.9 (128)	
Cancer	5.1 (30)	5.5 (12)	4.9 (18)	
Other condition	62 (364)	65.0 (143)	60.2 (221)	
Education, % (n)				.039**
<= Eighth grade	9.0 (50)	8.7 (18)	15.5 (32)	
Some high school	12.1 (67)	9.7 (20)	13.5 (47)	
High school/GED	39.2 (217)	35.0 (72)	41.7 (145)	
Some college	22.2 (123)	25.2 (52)	20.4 (71)	
College	12.6 (70)	16.0 (33)	10.6 (37)	
Graduate school	4.9 (27)	5.3 (11)	4.6 (16)	
Age at death, mean (SD) years	61.7 (17.6)	63.5 (17.6)	60.6 (17.5)	.054
Length of final hospital stay, mean (SD) days	9.3 (11.1)	8.3 (9.8)	9.9 (11.7)	.071
Length of final ICU stay, mean (SD) days	6.3 (8.1)	5.3 (7.5)	7.1 (8.4)	.007

* P-value for tests of differences between patient characteristics for those without a spiritual care visit vs. patients with a spiritual care visit

** Less education associated with greater frequency of documented spiritual care

Table 2

Family Respondent Characteristics (n=275)

Characteristic	All Family Respondents (n=275)	No documented spiritual care visit (n=94)	Spiritual care visit documented (n=181)	P*
Female, % (n)	65.8 (179)	67.7 (63)	64.8 (116)	.682
Non-Hispanic white, % (n)	81.9 (222)	84.8 (78)	80.4 (144)	.380
Age, mean (SD) years	56.4 (13.8)	56.5 (12.8)	56.3 (14.3)	.946
Education, median		some post-high school education	some post-high school education	.003 **
Relationship to patient, % (n)				.081
Spouse or partner	44.9 (123)	37.6 (35)	48.6 (88)	
Child of patient	26.6 (73)	29.0 (27)	25.4 (46)	
Parent of patient	10.6 (29)	12.9 (12)	9.4 (17)	
Sibling	10.6 (29)	10.8 (10)	10.5 (19)	
Other relative or close friend	5.5 (15)	7.5 (7)	4.4 (8)	
Lived with patient, % (n)	57.7 (157)	51.6 (48)	60.9 (109)	.142
Years of association with patient, mean (SD)	38.6 (15.8)	40.6 (14.9)	37.6 (16.1)	.124

* P-value for tests of differences between family characteristics of those without a documented spiritual care visit vs. those with a documented spiritual care visit

** Less education associated with greater frequency of documented spiritual care

Table 3

Spiritual Care Providers' Self-Reported Activities*

Activity	# Valid Responses	% Endorsed
Actively addressed spiritual/religious needs	285	92.3
Discussed spiritual/religious needs	284	91.5
Discussed family members' feelings	281	90.4
Reminiscenced about patient	282	79.8
Discussed patient's values	281	79.4
Supported family decisions regarding care	282	73.8
Encouraged talking to and touching the patient	280	61.8
Assured family that patient would be kept comfortable	276	55.1
Discussed patient's wishes for end-of-life care	282	45.4
Located private place for intra-family discussion	279	31.9
Discussed cultural needs	285	28.4
Prepared family for conference	281	27.0
Actively addressed cultural needs	281	26.7
Discussed intra-family disagreements about plan of care	281	20.3

* Activities were reported from 285 questionnaires representing 244 patients.

Table 4

Results of multivariate regression analyses*, testing associations between spiritual care provider's activities and family members' ratings of satisfaction

Linear regression used for FS-ICU, FS-Care, and FS-Decision-Making. Ordered logistic regression used for Spiritual care needs met.

	FS-ICU Total Score				Spiritual care needs met in ICU (single item)					
	N (116)	β (SE)	t	p	95% CI	N (106)	β (SE)	z	p	95% CI
Spiritual Care Provider's Activities										
Reminiscenced about the patient	114	5.036 (2.636)	1.91	0.065	-0.334, 10.406	105	.8216 (0.386)	2.13	0.033	0.065, 1.578
Discussed patient's values	114	4.585 (2.869)	1.60	0.120	-1.260, 10.429	105	0.616 (0.390)	1.58	0.114	-0.148, 1.380
Supported decisions regarding care	114	5.133 (3.068)	1.67	0.104	-1.116, 11.382	103	0.418 (0.379)	0.110	0.270	-0.325, 1.162
Encouraged talking to and touching patient	111	-2.281 (3.231)	-0.71	0.486	-8.879, 4.317	97	-0.438 (0.437)	-1.00	0.316	-1.294, 0.418
Assured family that patient would be comfortable	111	4.041 (2.689)	1.50	0.143	-1.436, 9.518	96	0.143 (0.352)	0.41	0.684	-0.546, 0.833
Discussed patient's wishes for end-of-life care	114	7.598 (2.566)	2.96	0.006	2.371, 12.824	100	0.844 (0.441)	1.91	0.056	-0.021, 1.709
Prepared the family for conference	112	5.165 (2.788)	1.85	0.073	-0.521, 10.850	96	0.868 (0.473)	1.84	0.066	-0.059, 1.796
Total number of activities performed	116	1.231 (.592)	2.08	0.046	0.024, 2.437	106	0.139 (0.073)	1.90	0.058	-0.005, 0.282
	FS-ICU: Care domain				FS-ICU: Decision-making domain					
	N (117)	β (SE)	t	p	95% CI	N (116)	β (SE)	t	p	95% CI
Spiritual Care Provider's Activities										
Reminiscenced about the patient	115	4.381 (2.944)	1.49	0.147	-1.616, 10.378	111	3.648 (3.443)	1.06	0.298	-3.383, 10.680
Discussed patient's values	115	6.180 (3.444)	1.79	0.082	-0.834, 13.195	111	3.102 (3.665)	0.85	0.404	-4.382, 10.586
Supported decisions regarding care	111	4.586 (2.992)	1.53	0.136	-1.524, 10.696	114	6.298 (4.174)	1.51	0.141	-2.203, 14.800
Encouraged talking to and touching patient	108	-1.857 (2.718)	-0.68	0.500	-7.408, 3.694	108	-4.964 (4.002)	-1.24	0.224	-13.137, 3.210
Assured family that patient would be comfortable	108	3.157 (2.756)	1.15	0.261	-2.471, 8.785	111	4.654 (3.600)	1.29	0.205	-2.678, 11.987
Discussed patient's wishes for end-of-life care	114	4.113 (2.338)	1.76	0.088	-0.649, 8.875	114	11.723 (3.323)	3.53	0.001	4.955, 18.492
Prepared the family for conference	108	2.973 (2.864)	1.04	0.308	-2.885, 8.831	112	7.630 (2.282)	2.32	0.027	0.936, 14.323
Total number of activities performed	117	1.047 (0.573)	1.83	0.077	-0.120, 2.213	116	1.575 (0.762)	2.07	0.047	0.022, 3.128

* Potential covariates retained if altered β coefficient by >20%, for each specific activity, outcome, and covariate; intervention status was retained in all models