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Do patients want their spirituality addressed during their hospital journey; a cross-sectional study at a tertiary care center in Lebanon

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Abstract

Background Spirituality (including religiosity) is a powerful concept in Middle Eastern populations for members of all religious affiliations. This study aims to assess the desire of cancer and critically ill adult inpatients to be asked about their spiritual history, the impact their religious and spiritual beliefs have on their medical decisions, and if such beliefs help them cope with their illnesses.

Methods A questionnaire consisting of demographics and spirituality questions was developed and administered to 100 patients in a cross-sectional study. We performed psychometric analysis of the questionnaire through reliability and validity testing including construct validity using PCA with a Promax rotation to define components/constructs. Analysis was performed to study the association between patient characteristics and outcomes.

Results The scale was shown to be valid and reliable and can be used to assess spiritual needs in our population of critically ill and cancer patients. 45% of patients wanted to be asked about their spirituality, only 4% had discussed it with their medical team. Christian and Muslim patients were equally likely to want their spiritual history taken. Non-Lebanese patients were 4.8 times more equally likely to want their spiritual history taken and twice more likely to believe that their spirituality helps them cope with their illness compared to Lebanese patients ($p < 0.05$). Critical care patients as compared to cancer patients, and patients with a lower number of hospital visits during the past year, were significantly more likely to want to be asked about their spirituality ($p < 0.05$).

Conclusion More structured training of healthcare personnel on addressing spirituality in the cultural context is needed. In our society, advocacy for patients with chronic illness embodies enquiring and addressing their spiritual needs through all the stages of their illness.

Keywords Cancer, Spirituality, Holistic care, Critical care, Lebanon, Validity, Reliability

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Background

Spirituality is defined as dealing with matters that involve the human spirit, which constitutes an individual's mind, feelings, and character [1], including his/her/their search for meaning in life experiences and events. These matters may or may not involve an individual's religiosity and choice of following an organized religion [2]. Spirituality and religion (S/R) may play an important role in an individuals' life and in helping them make complex decisions, specifically those related to their health [3, 4].

Spiritual care, defined as recognizing and responding to the needs of the human spirit when the individual is facing trauma, illness, or sadness, is becoming one of the core aspects of holistic, patient-centered care, particularly in critical care settings and not limited to end of life care. Studies have shown that most patients desire to have conversations about their spiritual concerns with their physicians [5], and that this need does not depend on the patients' level of spirituality [6]. Moreover, the spiritual intervention has been shown to improve physician-patient relationship, as well as physical and mental health outcomes [7].

Most physicians still either do not address the spiritual needs of their patients or the discussion is not well documented [3, 4] Reported barriers of spiritual care provision included lack of time, lack of training, lack of experience, sensitivity of the issue which is sometimes complicated by the intensive care setting, peer-pressure, the lack of conceptualization of spirituality versus religiosity and what is exactly meant by spirituality, and some believed it is a private matter [4, 5, 7–9].

The Joint Commission on Accreditation of Healthcare Organizations strongly recommends that healthcare workers receive training on how to assess a patient's spirituality and should include spiritual assessment as part of the overall patient assessment with suggested questions to be asked [10]. The American College of Critical Care Medicine established recommendations on assessment and incorporation of spiritual needs in the ICU care plan, spiritual care training for doctors and nurses, physician review of interdisciplinary spiritual need assessments, and honoring the requests of patients to pray with them [4]. Recently also, research studies have tried to conceptualize spiritual care provision in the healthcare setting and to clarify the spiritual considerations expected in different populations. Culture affects how patients view spirituality and its role in their health and wellbeing. Views on spirituality vary from country to country, patient to patient, and across age groups and religions [5, 11].

Despite the growing recognition of the importance of spiritual care in healthcare globally, and within the Middle East, there remains a significant gap in understanding the spiritual needs of patients in Lebanon. Lebanon is unique in its demographic composition, with multiple religious sects coexisting in a relatively small geographical area. The country's population includes Christians, Muslims, Druze, and other smaller religious communities. These groups have shared a long history contributing to the country's rich cultural and social fabric. Few studies have investigated S/R in the healthcare setting in Lebanon [11–13] and were mainly addressing the effects of spirituality on mental illnesses and using spirituality to cope during COVID-19. In addition, no tools were developed or validated to assess the need for spirituality during healthcare. In a semi-conservative culture like Lebanon, there seems to be strong ties between religion and spirituality and both exist.

This, in addition to the diversity described above, influence patients' spiritual needs and preferences, the relationship between religion and spirituality, as well as patients' willingness to discuss these topics with healthcare providers. Existing tools developed in other contexts might not be applicable to our setting and don't adequately capture the nuances of spirituality within the Lebanese population. Cultural sensitivities call for the need for culturally tailored approaches to spiritual care. This research provides insight from this spiritually particular community with several religious affiliations. It aims to address this research gap by developing and validating a culturally appropriate scale for assessing spiritual needs, and by examining the spiritual experiences and preferences of critically ill and cancer patients in Lebanon."

Thus, the objectives of the study were:

1. To develop and psychometrically assess the properties of the developed scale in Lebanese patients through examining its factor structure and internal consistency.
2. To measure Lebanese patients needs for spiritual care, including religious and existential dimensions, during hospitalization and critical illness, and assess whether or not critically-ill and cancer patients at AUBMC, a tertiary care hospital in Lebanon, wish to be asked about their spirituality by their healthcare practitioners.

Methods

Aim

Building on the above and the fact that studying spiritual needs requires culturally appropriate and valid instruments, the purpose of our study was to assess whether or not critically-ill and cancer patients at the American University of Beirut Medical Center (AUBMC) a tertiary care hospital in Beirut, Lebanon, wish to be asked about their spirituality by their healthcare practitioners and incorporate it in their medical history. We also aimed to

investigate the influence of these patients' spiritual beliefs on their medical decisions and on coping with their illness.

Design

The study is a cross-sectional study. The population consisted of 100 adult critical-care and cancer patients admitted for treatment at AUBMC between February and April 2017. The patients approached were all those admitted during the above period to the Adult ICU (medical/surgical), Cardiac ICU, Respiratory ICU, and the adult oncology center.

Inclusion criteria

Males or females, ages 18 years or above, of any nationality, and who were deemed medically competent by their physicians. The medical student approached eligible patients to participate in the study. Based on the capacity form (Appendix 1), we ensured that the patient fully understood the study and gave his/her informed consent to participate. Out of the 107 eligible patients approached 7 refused to participate.

Exclusion criteria

Patients who were intubated, comatose or incapable of making autonomous decisions and pediatric and adolescent patients (< 18 years) since the study is intended to be on adult patients.

Questionnaire

The designed questionnaire was a self-filled form, which takes around 10–15 min to complete. It contains sociodemographic questions that address patients' characteristics such as age, gender, religion, marital status, educational level, employment status, monthly household income and insurance coverage. Other questions address the influence of patients' religious/spiritual beliefs on coping with their illnesses, decision-making when it comes to their health and treatment and on the physician-patient relationship. Additionally, patients were asked whether they have ever discussed their religious/spiritual beliefs with any of the medical staff, and if they want their spiritual history to be taken by someone from the medical team. The questionnaire items were based on studies fulfilling the same objective and performed on similar populations and settings. The studies we used were: The study by Ehman et al. (1999) on the influence of religious beliefs and practices on illness decisions and outcomes [14], by Palmer et al. (2021) on patient-physician relationship and recommendations for physicians [15], and by Balboni et al. (2011) on the patient-physician prayer in the context of terminal cancer [16]. The final items were generated while trying to minimize the overlap with similar constructs of mental health and they were restricted to spirituality and the need of patients for spiritual care [17]. The main questions were built on a Likert scale of four points with Strongly Agree, Agree, Disagree and Strongly Disagree. The developed questionnaire was translated to Arabic and back translated and compared to the original version by professional translators. The translated version was pilot tested on a sample of 10 volunteer Lebanese patients to check for confusion about any of the items and to make sure the questions are well read and understood. Respondents had no changes to the questionnaire. The questionnaire was then validated through face and content validity by expert review. To evaluate construct validity, a principal component analysis (PCA), with a Promax rotation was performed which allowed us to define the components/constructs of the questionnaire in the domain of R/S needs. We formulated our questionnaire from previous qualitative data and not from established scales in the literature and we added items that were related to our setting. Principal Component Analysis (PCA) was chosen to reduce the dimensionality of the questionnaire data and create component scores for later analysis. While Exploratory Factor Analysis (EFA) is commonly used to identify latent factors, PCA was deemed appropriate for this stage of the research, as the goal was to summarize the variance of the measured variables. Given that the two components, 'inclusion of spiritual beliefs' and 'importance of spirituality,' were expected to be related, Promax rotation with Kaiser normalization was employed. Promax, an oblique rotation, allows for correlated components, which was deemed more appropriate than Varimax, an orthogonal rotation that forces components to be uncorrelated.

The sample size was chosen assuming the following:

- Maximum variability ($p = 0.6$) based on rough approximation from the literature review.
- A confidence interval of 95% (z).
- A precision level of 0.05 (d).
- A non-response rate of 20%.

According to the following calculations:

$n = (z)^{2} * p * q/(d)^{2} = (1.95)^{2} * 0.6 * 0.4/(0.05^{2}) = 365.$

The sample size was 100 participants due to time constraints and project timeline.

The internal consistency reliability of the questionnaire was checked using Cronbach Alpha which was calculated for the Likert scale variables and the dichotomized variables separately (Appendix 2).

Data collection

After receiving the approval of IRB and the unit directors, we started data collection. As mentioned above, the competent patients were approached. At each department, the physicians available introduced us to the patients and

we distributed the questionnaires along with the consent form (refer to Appendix). It contains the purpose of the study and ensures voluntary participation. The consent, as agreed with IRB, was oral and did not require patients' signatures on the form provided or anywhere else. Some of the patients preferred to fill out the survey themselves, while others requested that we read the questions to them and record their answers. Additionally, some patients preferred to fill the English form while others preferred the Arabic one. Surveys were collected once filled.

Statistical analysis

Data was analyzed using SPSS version 23 (Released IBM Corp.2014). Descriptive statistics were calculated for all variables and expressed as frequencies and percentages. We used frequency tables to describe the demographics of the sample. We defined three outcomes in the questionnaire that were relevant to our study population: (1) whether patients want their spiritual history to be taken by the medical team; (2) whether patients' spiritual beliefs impact their medical decision-making; and (3) whether patients' spiritual beliefs are important in helping them cope with their illness. The outcomes were dichotomized, whereby "Strongly Agree" and "Agree" were unified into one category labeled "Agree." Similarly, "Disagree" and "Strongly Disagree" were also unified into "Disagree." We identified independent variables including individual-related variables: age, sex, religion, marital status, number of children, nationality, permanent residence, and socioeconomic characteristics: educational level, occupation, income sufficiency, health insurance status. We tested if there is an association between each of the three outcomes and the following variables: age (below 65 or above 65), nationality (Lebanese or non-Lebanese), governorate (Beirut or outside Beirut), educational level (degree or no degree), socioeconomic status (making ends meet or not making ends meet), reason for admission (cancer or critical care) and number of hospital visits in the past year (first visit, between 2 and 9, or 10+). We ran Chi-square tests to evaluate if there is any significant relationship between each outcome and each of the variables. We reported the percentage of patients from each variable who agreed and disagreed with each outcome. We also ran Binary Logistic Regression to see if there is a relationship between non-binary variables and our binary outcomes. We then calculated the odds ratios, p-values, and 95% confidence intervals. Multivariate logistic regression was done to control confounding factors on the three outcomes of the study.

Ethical considerations

The study was reviewed and approved by the Institutional Review Board of the American University of Beirut Medical Center. The directors of the above units were informed of the study and their approval was taken before approaching patients for data collection.

Respect of individual autonomy

Participation in this study was voluntary. Participants were informed about their right to omit questions and to stop filling the questionnaire at any point with no consequence. Additionally, the consent form was given to the participant to read. Thus there is no coercion which ensures the autonomy of the participant.

Justice

Anyone that fulfilled the inclusion criteria had the right to be included in the study. There was no discrimination based on color, gender, religion, socio-economic status, political affiliations, or cultural affiliations.

Confidentiality

Participants were not asked to provide their names or any other personal identifier which ensured the confidentiality of the information.

Results

We approached 107 patients; seven declined to participate in the study. A total of 100 patients completed the survey (response rate was 93.4%). Most patients were males (62%), married (83%), and had completed an educational degree (84%). 51% were employed, and 62% were of socioeconomic status that allowed them to cover their medical expenses. Sample characteristics are presented in Table 1 (a & b).

Reliability

Cronbach's alpha reliability for the Likert scale variables of the questionnaire is 0.830. When the variables were dichotomized Cronbach alpha was 0.790.

Validity

A principal component analysis was performed that showed the presence of an underlying structure composed of two components. The PCA was suitable for Promax with Kaiser normalization rotation. The component correlation matrix (Table 2) confirms the presence of correlations between the components. The two components accounted for 60.29% of the variance, and every factorial item had a value > 0.40. After Promax with Kaiser normalization rotation, Principal component 1 included five items related to 'inclusion of spiritual beliefs in the medical information', principal component 2 included three items related to 'the importance of spirituality for the patient'. The structure matrix and the pattern matrix showed the same items for the same components (Table 2).

Table 1 (a) sociodemographic characteristics of the sample population (*N* = 100). (b) spiritual beliefs of the sample population (*N* = 100)

Demographics		Percentage
a. Sociodemographic characteristics of the sample population (*N* = 100)		
Age	Below 65	55
	Above 65	45
Gender	Male	62
	Female	38
Marital status	Single	17
	Married	83
Educational level	Degree	84
	No degree	16
Socioeconomic Status	Not enough to cover expenses	38
	Enough to cover expenses	62
Employment	Employed	51
	Unemployed	49
Religion	Muslims	72
	Christians	19
	Druze	4
	Unspecified	5
Insurance	Private insurance	57
	No private insurance	43
Nationality	Lebanese	84
	Not Lebanese	16
Governorates	Beirut	53
	Outside Beirut	47
Hospital visits this year	First visit	24
	1–9 visits	45
	10 + visits	31
b. Spiritual beliefs of the sample population (*N* = 100)		
Do you pray?	Yes	80
Do you wish to have your spiritual history taken	Yes	44
Have you ever discussed your spiritual beliefs with your doctor or healthcare professional	Yes	4
Do you think there is a difference between religion and spirituality	Yes	62

Table 2 Correlation between the items and components of the spiritual needs questionnaire

Item	Component	
	Do you want your spiritual beliefs to be included in your healthcare	Importance of Spirituality
You like your Spiritual/Religious beliefs to be considered in your healthcare treatment	0.879	
Your Spiritual/Religious beliefs impact your decision making when it comes to your health	0.738	
You like the medical staff to be aware of your Spiritual/Religious beliefs when making medical decisions	0.908	
You believe that taking your Spiritual/Religious beliefs into consideration strengthens the relation between you and your doctor	0.811	
It matters to you if your doctor is a spiritual/religious person	0.401	
You consider yourself a believer		0.760
You believe your Spiritual/Religious beliefs are important in coping with your illness		0.740
Your Spiritual/Religious beliefs changed since the onset of your illness		0.777

Extraction Method: Principal Component Analysis. Rotation Method: Promax with Kaiser Normalization

a. Rotation converged in 3 iterations

Post-hoc power analysis

Retrospective power analysis was done to determine the power of the obtained results with the current sample size of 100, alpha = 0.05, and an effect size of 0.2 (to detect small differences) and 1 degree of freedom. It was found to be 0.62. To achieve a power of 0.8 (80%) with an effect size of 0.2, an alpha level of 0.05, and 1 degree of freedom, we would need a sample size of approximately 157.

Bivariate analysis

Patients want their spiritual history to be taken

The non-Lebanese patients were significantly more likely to want to be asked about their spiritual history compared to the Lebanese (4.87 [1.45–16.4]). Critical care patients were four times more likely to want to be asked about their spiritual history than cancer patients (4.01 [1.74–9.30]). Patients who visited the hospital more than ten times in the past year were 5 times less likely to want to be asked about their spiritual history compared to first-time patients (0.21 [0.07–0.65]).

Patients' spiritual beliefs impact their medical decisions

Patients residing in Beirut were around 3 times more likely to believe that their spirituality impacts their medical decisions, compared to those residing outside Beirut (2.78 [1.23–6.31]).

Spirituality is important in coping with illness

Non-Lebanese patients were twice more likely to believe that their spirituality helps them cope with their illness compared to Lebanese (0.43 [0.09–2.04]). Patients with no degree were twice as likely to believe that their spirituality helps them cope with their illness (0.43 [0.09–2.04]).

Table 3 shows the associations between patients' demographic variables and our selected outcomes.

Among the participating patients, 80% reported engaging in prayer. Of those who pray, 40% expressed a desire for their physicians to participate in prayer with them (Fig. 1).

Table 3 Association between patients' demographic variables, diagnosis, and their spirituality scores

		Patients want their spiritual history to be taken		Spirituality impacts medical decisions		Spirituality is important in coping with illness	
		Agree / %	OR [95%CI]	Agree / %	OR [95%CI]	Agree / %	OR [95%CI]
Age	Below 65 / Above 65	40 / 51.1	0.63 [0.26–1.51]	45.5 / 44.4	1.04 [0.47–2.30]	76.4 / 77.8	0.92 [0.36–2.36]
Nationality	Lebanese/ Non-Lebanese	38.1 / 75	4.87* [1.45–16.4]	41.7 / 62.5	0.43 [0.14–1.29]	75 / 87.5	0.43 [0.09–2.04]
Governorate	Beirut / Outside Beirut	52.8/ 34	0.46 [0.21–1.03]	56.6 / 31.9	2.78* [1.23–6.31]	73.6 / 80.9	0.66 [0.26–1.70]
Educational Level	Degree / No Degree	42.9 / 56.3	1.71 [0.58–5.04]	45.2 / 43.8	1.06 [0.36–3.12]	75 / 87.5	0.43 [0.09–2.04]
Socioeconomic Status	Not Enough to cover expenses / enough to cover expenses	50 / 40.3	0. 86 [0.38–1.93]	52.6 / 40.3	1.64 [0.73–3.71]	81.6 / 74.2	1.54 [0.57–4.18]
Reason for Admission	Cancer / Critical Care	30.4 / 63.6	4.01* [1.74–9.30]	44.6 / 45.5	0.97 [0.44–2.14]	82.1 / 70.5	1.93 [0.75–4.95]
Number of Hospital Visits in past year	First visit	66.7		45.8		66.7	
	1–9 visits	44.4	0.40 [0.14–1.12]	48.9	0.89 [0.33–2.39]	84.4	0.37 [0.11–1.19]
	10 or more	29	0.21 [0.07–0.65]	38.7	1.34 [0.46–3.95]	74.2	0.70 [0.22–2.24]

*Statistically significant association

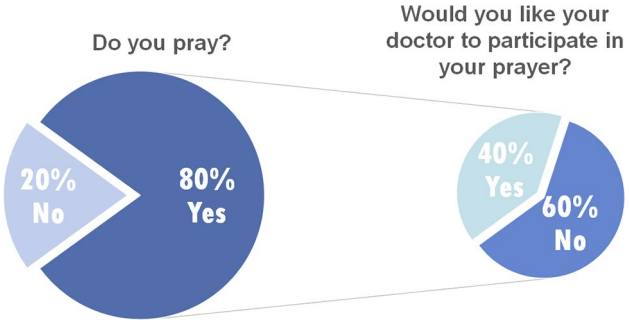

Fig. 1 Patient prayer prevalence and the desire for physician participation in prayer based on the 80% of patients who reported praying

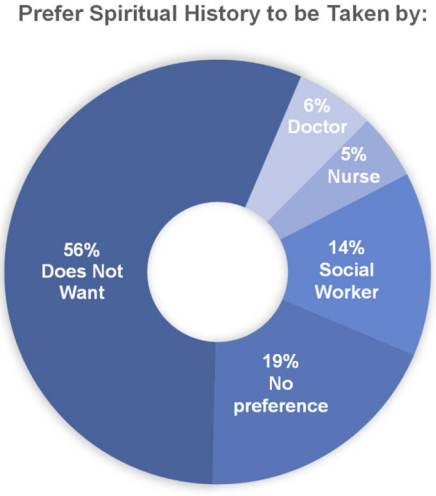

Fig. 2 Patient Preferences for Healthcare Provider to Take Spiritual History

Among the 100 participating patients, five chose not to disclose their religious affiliation. Of the remaining 95 patients, 72 (75.8%) identified as Muslim, 19 (20%) as Christian, and 4 (4.2%) as Druze. No significant differences were observed across these religious groups regarding their views on the impact of spirituality on their health. Regarding the preferred healthcare provider to take their spiritual history (Fig. 2), 56% of all participants indicated they preferred not to have their spiritual history taken, 5% chose a nurse, 6% chose a doctor, 14% chose a social worker, and 19% expressed no preference.

Discussion

This study validated a questionnaire assessing spiritual needs in Lebanese critical care and cancer patients, revealing a significant desire for spiritual care, diverse interpretations of spirituality, and notable cultural influences. Key findings included a strong correlation between questionnaire scores and the desire for spiritual history, and a substantial unmet need for spiritual discussions with medical staff.

Validation of the spiritual needs questionnaire

The validation process identified two constructs: 'the need for inclusion of spiritual beliefs in the medical information' and 'the importance of spirituality for the patient.' This is the first questionnaire developed in Lebanon to assess the spiritual needs of this patient population. High scores on the first component correlated strongly with the desire for spiritual history to be taken (spearman's rho = 0.86). The eight items, categorized into two components, explained 60.29% of the scale's total variance, with all items showing high factor loadings. While adaptable to other populations, cultural and linguistic adaptation and psychometric validation are necessary. Its use in other healthcare settings should consider the variability of patient spiritual needs.

Prevalence and importance of spiritual needs

45% of patients desired medical staff to acknowledge and incorporate their spiritual beliefs in health decisions, aligning with guidelines from The American College of Critical Care Medicine. This underscores the importance of addressing spirituality in critical illness. Similar studies

confirm patient interest in discussing spirituality [3–6, 11, 14].

A systematic review showed that a majority of patients (median 70.5%) across various diagnoses found it appropriate for doctors to inquire about spiritual needs, with increased interest in severe cases [5]. Studies in ICU patients reported high prevalence of spiritual importance across diverse demographics [3]. A New Zealand study and a literature review on critical illness further confirmed the demand for spiritual care, including among surrogate decision-makers [4, 20].

Previous research in Lebanon indicated a protective effect of spirituality and religiosity in patients with cancer [11] and psychiatric patients [18, 19], and high spiritual self perception in palliative care patients [12].

Spirituality and religiosity

53% of patients distinguished spirituality from religiosity, 34% considered them the same, and 15% were unsure, highlighting the need for clear conceptualization. This affects spiritual care needs. Patients with religious beliefs more often desired physician inquiry about their beliefs in grave illness [14]. In the study by Piderman et al. (2010), 77% of ICU patients welcomed chaplain visits, citing needs for divine connection and interpersonal support [21]. Lebanese cultural perspectives on spirituality emphasize a two-level relationship with God and others [13]. Despite consistent spiritual care needs, interpretations vary, linking spirituality to health through peace, meaning, and connectedness [16, 22–28]. For cancer patients, it can foster resilience and coping [11, 29]. Spiritual support, often found through emotional regulation and prayer, aids coping [28]. Spiritual care expectations include compassion, information, and understanding [27, 29–31]. In other studies, patients expressed spirituality as related to their religious faith and its practice [32–34]. In predominantly Muslim regions, religious aspects are central, with spirituality defined as "return to God" and reliance on divine intervention [27, 30, 35, 36].

Cultural variations in spirituality and religiosity

Our study showed that non-Lebanese patients were more likely to value the role of religion and spirituality in motivating them and helping them adjust with their medical condition, and to want to discuss them with the medical team as compared to Lebanese patients. Non-Lebanese patients, primarily from the Arabian Gulf, might more strongly value the role of religion and spirituality in coping and desire its discussion with medical teams, likely due to higher religiosity and "tawakkol." [10] Cultural heterogeneity is evident; Iranian patients emphasized religion-based, moral, and humanitarian care, while Chinese patients focused on creating a good atmosphere and sharing self-perception, rather than religious practices. A systematic review on Chinese perspectives highlighted spirituality as a multidimensional, abstract concept, including internal force, suffering experiences, and cultural values [40–42]. In Australia, spirituality was defined as 'meaning and purpose in life,' with health professionals using brief assessments [43]. Culture-sensitive approaches are crucial.

A significant proportion of our patients reported that they would like their physicians to pray with them. Prayer is particularly valuable among Middle Eastern and African populations [44–46]. Physician-initiated prayer can support patients and enhance relationships, though appropriateness varies [5]. Patients in the studies in Pakistan and Iran cherished when physicians prayed with them [25, 34]. In this study, Muslim and Christian patients similarly valued spiritual beliefs in coping and decision-making, unaffected by demographics.

Barriers to providing spiritual care

Only 4% of patients who desired spiritual discussions engaged in them with medical staff, indicating a substantial unmet need. Barriers include lack of standardized protocols, high patient volumes, insufficient training, and fear of cultural boundary transgression. This issue is universal [7]. Literature highlights the impact of spirituality on quality of life and distress relief [48].

Doctor reluctance stems from confusion between religion and spirituality and societal suspicion of religion in medicine [8]. Physician spiritual beliefs influence patient care [47]. Healthcare providers acknowledge the need for improved spiritual care skills, but face time constraints and discomfort [48, 43,47, 49]. It has been shown that comfort to initiate spiritual assessment is due to individual factors and rather not a mismatch in religion between the patient and the healthcare provider [20, 50]. Lack of consensus on spirituality's meaning exists [5]. End-of-life care studies emphasize recognizing and supporting spiritual needs, including communication skills [51]. Older Lebanese physicians may not see spiritual care as their role. Integrating spiritual care training into medical education and streamlining the spiritual assessment is crucial.

Increased hospital visits correlated with decreased interest in spiritual discussions, potentially due to prior coping mechanisms or perceived medical staff disinterest. In Lebanon, the social support network is strong and often patients are surrounded by their family and friends who seek to attend to their needs. Another possible explanation is that patients who initially want to be asked about their spiritual history, after a certain number of visits, become convinced that the medical staff will not address such a need and thus decide they no longer want to be asked about it. A recent retrospective study on 15,242 patients receiving care at a tertiary center in

Chicago reported that chaplaincy care is more common among religiously affiliated and acutely ill patients [52].

Recommendations for holistic integration of spiritual care

Healthcare professionals should lead the integration of spirituality into holistic patient care [46, 53]. Culture-specific, patient-centred, and evidence-based approaches are recommended. Increased awareness and training are necessary [42, 43, 46, 51, 53].

Recognizing spirituality as distinct from religiosity allows addressing existential concerns broadly In practice, this means moving beyond asking about religious affiliation to exploring what brings comfort and meaning to each patient. Training programs should equip clinicians with communication skills to initiate these conversations in an open-ended, non-presumptive way. Medical and nursing education should incorporate structured learning on how to conduct spiritual assessments, using tools like the FICA (Faith, Importance, Community, Address in care) and HOPE (Hope, Organized religion, Personal spirituality, Effects on care) frameworks. Residency programs and continuing medical education (CME) should include case-based discussions and interprofessional collaborations. Supportive organizational culture and electronic health record integration are crucial. Integrating spiritual history-taking into routine patient assessments ensures that all providers can acknowledge and support patients' spiritual needs in ways that align with their medical care. Simple yet meaningful changes, such as including a section on spiritual preferences in medical charts, can help ensure that these discussions translate into action. Ethical considerations include autonomy, confidentiality, cultural sensitivity, and professional boundaries. Healthcare providers should facilitate patient exploration, not provide religious counseling. Clear roles for chaplains are necessary.

Limitations

This study has some limitations that must be noted. Our sample size was small (100 participants) and may have limited the ability to detect statistically significant differences between subgroups (e.g., different religious affiliations, age groups). A larger sample size would have allowed for a more nuanced understanding of spiritual needs across different groups. Larger studies are needed to confirm the findings observed in this study.

The small sample size may have also affected the results of the principal component analysis (PCA) and a larger sample size would have provided more robust support for the factor structure of the developed scale. In addition, small sample size reduces the statistical power of the study, increasing the risk of Type II errors.

The second limitation is that the sample is not completely representative, which limits the generalizability of the findings to the broader Lebanese population. The results are not representative of all critically ill and cancer patients in Lebanon since the sample was taken from one medical center.

There is also potential bias due to self-reported data. The sensitivity of the topic, particularly questions related to religion, may have affected certain responses. Despite this, only 7 patients refused to fill in the questionnaire.

Conclusion

In conclusion, this preliminary research shows an unmet need in Lebanon to incorporate religion and spirituality in the care of cancer and critically ill patients. The large discrepancy between the patients' preference and the actual spiritual care provision warrants attention. These findings call for systemic changes to ensure that spirituality is recognized as an essential component of patient care rather than an afterthought. Healthcare providers should routinely ask patients if they wish to discuss their spiritual concerns and incorporate these discussions into ongoing treatment planning. The tool developed can be used in critically ill and cancer patients to identify R/S support needed during the hospital encounter. Training programs must prepare clinicians and nurses to feel comfortable addressing R/S in practice. Hospitals and medical institutions should develop clear guidelines on when and how to provide spiritual support, ensuring that patients who desire it receive care that aligns with their values and beliefs, and include spiritual history in the patient's medical record while ensuring ethical considerations are being met.

Future studies should employ larger and more representative samples, utilize multi-center designs, and incorporate qualitative methods to gain a deeper understanding of the lived experiences of patients and to explore the nuances of spirituality in the Lebanese context. Studies from the healthcare team's perspective and the family members perspective, are beneficial to address the process of R/S care delivery and feasibility in our population and to look into the influence of R/S on patient and family perception.

Supplementary Information

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Supplementary Material 1

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M.N, M.A, A.A., H.A., J.H., M.H., R.Y., has contributed to the design, planning, and implementation of the study, in addition to data analysis and write up of main manuscript text including figures.A.R. has contributed to data analysis

and write-up of main manuscript text, and tables. All authors reviewed the manuscript.

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Data availability
No datasets were generated or analysed during the current study.

Declarations

Ethics approval and consent to participate
This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Ethics Committee of the American University of Beirut: Institutional Review Board (Date 2018). Oral Informed consent was obtained from all individual participants included in the study. Both written and oral consents were taken from patients who were able to write.

Consent for publication
Not applicable.

Competing interests
The authors declare no competing interests.

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References

1. Devictor D. Are we ready to discuss spirituality with our patients and their families? Pediatr Crit Care Med. 2005;6(4):492–3.
2. Mazanec P, Tyler MK. Cultural considerations in end-of-life care: how ethnicity, age, and spirituality affect decisions when death is imminent. Am J Nurs. 2003;103(3):50–8.
3. Aslakson RA, Kweku J, Kinnison M, Singh S, Crowe TY 2, AAHPM Writing Group. Operationalizing the measuring what matters spirituality quality metric in a population of hospitalized, critically ill patients and their family members. J Pain Symptom Manage. 2017;53(3):650–5.
4. Gordon BS, Keogh M, Davidson Z, Griffiths S, Sharma V, Marin D, Mayer SA, Dangayach NS. Addressing spirituality during critical illness: A review of current literature. J Crit Care. 2018;45:76–81.
5. Best M, Butow P, Olver I. Do patients want Doctors to talk about spirituality? A systematic literature review. Patient Educ Couns. 2015;98(11):1320–8.
6. Gad I, Tan XC, Williams S, Itawi S, Dahbour L, Rotter Z, Mitro G, Rusch C, Perkins S, Ali I. The religious and spiritual needs of patients in the hospital setting do not depend on patient level of religious/spiritual observance and should be initiated by healthcare providers. J Relig Health. 2022;61(2):1120–38.
7. Kuckel DP, Jones AL, Smith DK. The spiritual assessment. Am Fam Physician. 2022;106(4):415–9.
8. Best M, Butow P, Olver I. Why do we find it so hard to discuss spirituality?? A qualitative exploration of attitudinal barriers. J Clin Med. 2016;5(9):77.
9. Choi PJ, Curlin FA, Cox CE. Addressing religion and spirituality in the intensive care unit: A survey of clinicians. Palliat Supportive Care. 2019;17(2):159–64.
10. Joint Commission on Accreditation of Healthcare Organizations. Spiritual beliefs and preferences - Evaluating a patient's spiritual need, Chapter: Provision of care treatment and services PC. jointcommission.org, August 7, 2024.
11. Chaar EA, Hallit S, Hajj A, Aaraj R, Kattan J, Jabbour H, Khabbaz LR. Evaluating the impact of spirituality on the quality of life, anxiety, and depression among patients with cancer: an observational transversal study. Support Care Cancer. 2018;26(8):2581–90.
12. Abu-Saad Huijer H, Bejjani R, Fares S. Quality of care, spirituality, relationships and finances in older adult palliative care patients in Lebanon. Ann Palliat Med. 2019;8(5):551–8.
13. Doumit MAA, Rahi AC, Saab R, Majdalani M. Spirituality among parents of children with cancer in a middle Eastern country. Eur J Oncol Nurs. 2019;39:21–7.
14. Ehman JW, Ott BB, Short TH, Ciampa RC, Hansen-Flaschen J. Do patients want physicians to inquire about their spiritual or religious beliefs if they become gravely ill? Arch Intern Med. 1999;159(15):1803–6.
15. Palmer Kelly E, McGee J, Obeng-Gyasi S, Herbert C, Azap R, Abbas A, Pawlik TM. Marginalized patient identities and the patient-physician relationship in the cancer care context: a systematic scoping review. Support Care Cancer. 2021;29(12):7195–207.
16. Balboni MJ, Babar A, Dillinger J, Phelps AC, George E, Block SD, Kachnic L, Hunt J, Peteet J, Prigerson HG, VanderWeele TJ, Balboni TA. It depends: viewpoints of patients, physicians, and nurses on patient-practitioner prayer in the setting of advanced cancer. J Pain Symptom Manage. 2011;41(5):836–47.
17. Koenig HG, Al Zaben F. Psychometric validation and translation of religious and spiritual measures. J Relig Health. 2021;60(5):3467–83.
18. Sfeir M, Zeitoun A, Hallit S, Obeid S. Presence of a psychiatric patient at home and work fatigue in family caregivers: the moderating effect of spirituality. Perspect Psychiatr Care. 2022;58(4):2664–75.
19. Kassem M, Haddad C, Hallit S, Kazour F. Impact of spirituality and religiosity on suicidal risk among a sample of Lebanese psychiatric in-patients. Int J Psychiatry Clin Pract. 2021;25(4):336–43.
20. Egan R, MacLeod R, Jaye C, McGee R, Baxter J, Herbison P, Wood S. Spiritual beliefs, practices, and needs at the end of life: results from a new Zealand National hospice study. Palliat Support Care. 2017;15(2):223–30.
21. Piderman KM, Marek DV, Jenkins SM, Johnson ME, Buryska JF, Shanafelt TD, O'Bryan FG, Hansen PD, Howick PH, Durland HL, Lackore KA, Lovejoy LA, Mueller PS. Predicting patients' expectations of hospital chaplains: a multisite survey. Mayo Clin Proc. 2010;85(11):1002–10.
22. Jordan KD, Masters KS, Hooker SA, Ruiz JM, Smith TW. An interpersonal approach to religiousness and spirituality: implications for health and well-being. J Pers. 2014;82(5):418–31.
23. Moss KO, Williams IC. End-of-life preferences in Afro-Caribbean older adults: a systematic literature review. Omega (Westport). 2014;69(3):271–82.
24. Speck P. Culture and spirituality: essential components of palliative care. Postgrad Med J. 2016;92(1088):341–5.
25. Bashar FR, Vahedian-Azimi A, Salesi M, Hajiesmaeili M, Shojaei S, Farzanegan B, Goharani R, Madani SJ, Moghaddam KG, Hatamian S, Moghaddam HJ, Arrascaeta-Llanes A, Miller AC. MORZAK collaborative. Spiritual health and outcomes in Muslim ICU patients: A nationwide cross-sectional study. J Relig Health. 2018;57(6):2241–57.
26. Lazenby M, Khatib J, Al-Khair F, Neamat M. Psychometric properties of the functional assessment of chronic illness Therapy–Spiritual Well-being (FACIT-Sp) in an Arabic-speaking, predominantly Muslim population. Psychooncology. 2013;22(1):220–7.
27. Otuzoğlu M. (2017). Development of a scale to determine the spiritual care needs of oncology patients. Doctoral Thesis. Hacettepe University, Ankara. https://openaccess.hacettepe.edu.tr/xmlui/bitstream/handle/11655/4145/10175073.pdf?sequence=1%26;isAllowed=y
28. Garssen B, Uwland-Sikkema NF, Visser A. How spirituality helps cancer patients with the adjustment to their disease. J Relig Health. 2015;54(4):1249–65.
29. Hunter-Hernández M, Costas-Muñíz R, Gany F. Missed opportunity: spirituality as a Bridge to resilience in Latinos with cancer. J Relig Health. 2015;54(6):2367–75.
30. Köktürk Dalcali B, Kaya H. Spiritual care needs of patients in oncology units and nursing practices in Turkey: A qualitative study. J Relig Health. 2022;61(3):1861–1881. Erratum in: J Relig Health. 2022;61(4):3566.
31. Khosravani M, Nejat N. Spiritual experiences of patients in the cancer trajectory: A content analysis. Ethiop J Health Sci. 2022;32(6):1147–56.
32. Musa AS, Pevalin DJ. Development of the Arabic spiritual care Intervention-Provision scale. J Clin Nurs. 2016;25(15–16):2275–84.
33. de Diego-Cordero R, López-Gómez L, Lucchetti G, Badanta B. Spiritual care in critically ill patients during COVID-19 pandemic. Nurs Outlook. 2022;70(1):64–77.
34. Jawaid H. Assessing perception of patients and physicians regarding spirituality in Karachi, Pakistan: A pilot study. Perm J. 2020;24:19214.
35. Dedeli O, Yildiz E, Yuksel S. Assessing the spiritual needs and practices of oncology patients in Turkey. Holist Nurs Pract. 2015;29(2):103–13.
36. Kırca K, Özveren H, Bağcı S. Evaluation of the spiritual care needs of patients with cancer in a chemotherapy unit in Turkey. J Relig Health. 2024;63(2):1457–74.
37. Erci B, Aslan H. Validity and reliability of the Turkish version of the spiritual needs assessment scale of patients with cancer. Palliat Support Care. 2022;20(5):671–7.

38. Ghahramanian A, Markani AK, Davoodi A, Bahrami A. Spiritual needs of patients with cancer referred to Alinasab and Shahid Ghazi Tabatabaie hospitals of Tabriz, Iran. Asian Pac J Cancer Prev. 2016;17(7):3105–9.
39. Büssing A. The spiritual needs questionnaire in research and clinical application: A summary of findings. J Relig Health. 2021;60(5):3732–48.
40. Heidari A, Kazemi A, Abbasi M, Adeli SH, Ahmari Tehran H, Eskandari N, Heidari M, Khalajinia Z, Yoosefee S. Developing a charter of spiritual care for patients. Int J Qual Health Care. 2021;33(1):172.
41. Wang Z, Tang X, Li L, Zhou H, Zhu Y, Chen L, Su T, Liu M, Pang X, Yi X, Liu L, Liu J, Liu M. Spiritual care needs and their attributes among Chinese inpatients with advanced breast cancer based on the Kano model: a descriptive cross-sectional study. BMC Palliat Care. 2024;22(1):50.
42. Niu Y, McSherry W, Partridge M. Exploring the meaning of spirituality and spiritual care in Chinese contexts: A scoping review. J Relig Health. 2022;61(4):2643–62.
43. So H, Mackenzie L, Chapparo C, Ranka J, McColl MA. Spirituality in Australian health professional practice: A scoping review and qualitative synthesis of findings. J Relig Health. 2023;62(4):2297–322.
44. Hamilton JB, Kweon L, Brock LB, Moore AD. The use of prayer during life-threatening illness: A connectedness to god, inner-self, and others. J Relig Health. 2020;59(4):1687–701.
45. Ogunkorode A, Holtslander L, Ferguson L, Maree JE, Anonson J, Ramsden VR. Seeking divine intervention to manage the advanced stages of breast cancer in Southwestern Nigeria. Cancer Nurs. 2021;44(3):E163–9.
46. Bar-Sela G, Schultz MJ, Elshamy K, Rassouli M, Ben-Arye E, Doumit M, Gafer N, Albashayreh A, Ghrayeb I, Turker I, Ozalp G, Kav S, Fahmi R, Nestoros S, Ghali H, Mula-Hussain L, Shazar I, Obeidat R, Punjwani R, Khleif M, Can G, Tuncel G, Charalambous H, Faraj S, Keoppi N, Al-Jadiry M, Postovsky S, Al-Omari M, Razzaq S, Ayyash H, Khader K, Kebudi R, Omran S, Rasheed O, Qadire M, Ozet A, Silbermann M. Human Development Index and its association with staff spiritual care provision: a Middle Eastern oncology study. Support Care Cancer. 2019;27(9):3601–3610. Erratum in: Support Care Cancer. 2019;27(9):3611–3612.
47. Curlin FA, Chin MH, Sellergren SA, Roach CJ, Lantos JD. The association of physicians' religious characteristics with their attitudes and self-reported behaviors regarding religion and spirituality in the clinical encounter. Med Care. 2006;44(5):446–53.
48. Willemse S, Smeets W, van Leeuwen E, Nielen-Rosier T, Janssen L, Foudraine N. Spiritual care in the intensive care unit: an integrative literature research. J Crit Care. 2020;57:55–78.
49. Balboni MJ, Sullivan A, Enzinger AC, Epstein-Peterson ZD, Tseng YD, Mitchell C, Niska J, Zollfrank A, VanderWeele TJ, Balboni TA. Nurse and physician barriers to spiritual care provision at the end of life. J Pain Symptom Manage. 2014;48(3):400–10.
50. Schmidt C, Nauta L, Patterson M, Ellis A. Medical students' (Dis)comfort with assessing religious and spiritual needs in a standardized patient encounter. J Relig Health. 2019;58(1):246–58.
51. O'Brien MR, Kinloch K, Groves KE, Jack BA. Meeting patients' spiritual needs during end-of-life care: A qualitative study of nurses' and healthcare professionals' perceptions of spiritual care training. J Clin Nurs. 2019;28(1–2):182–9.
52. White K, Jennings JC, Karimi S, Johnson CE, Fitchett G. Examining factors associated with utilization of chaplains in the acute care setting. J Relig Health. 2022;61(2):1095–119.
53. Balboni TA, VanderWeele TJ, Doan-Soares SD, Long KNG, Ferrell BR, Fitchett G, Koenig HG, Bain PA, Puchalski C, Steinhauser KE, Sulmasy DP, Koh HK. Spirituality in serious illness and health. JAMA. 2022;328(2):184–97. Erratum in: JAMA. 2022 23.

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