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Questionnaires Measuring Patients' Spiritual Needs: A Narrative Literature Review

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Abstract

Context: The objective of the present review was to collect published spiritual needs questionnaires and to present a clear image of the research condition of this domain.
Evidence Acquisition: First, an electronic search was conducted with no limits on time span (until June 2015) or language in the following databases: PubMed, Scopus, Ovid, ProQuest and Google Scholar. All derivations of the keywords religion and spiritual alongside need and its synonyms were included in the search. Researches that introduced new tools was then selected and included in the study. Due to the limited quantity of questionnaires in this domain and with no consideration given to the existence or lack of exact standardization information, all of the questionnaires were included in the final report.
Results: Eight questionnaires were found: patients spiritual needs assessment scale (PSNAS), spiritual needs inventory (SNI), spiritual interests related to illness tool (SpIRIT), spiritual needs questionnaire (SpNQ), spiritual needs assessment for patients (SNAP), spiritual needs scale (SNS), spiritual care needs inventory (SCNI), and spiritual needs questionnaire for palliative care.
Conclusions: These questionnaires have been designed from a limited medical perspective and often involve cultural concepts which complicate their cross-cultural applicability.

Keywords: Needs Assessment, Pastoral Care, Questionnaires, Religion, Spiritual Needs, Spirituality

1. Context

There are many different definitions for spirituality, but the following is provided by Cook as a working definition: "spirituality is a distinctive, potentially creative and universal dimension of human experience arising both within the inner subjective awareness of individuals and within communities, social groups and traditions. It may be experienced as a relationship which is intimately inner, immanent and personal, within the self and others, and/or as relationship with that which is wholly other, transcendent and beyond the self. It is experienced as being of fundamental or ultimate importance and is thus concerned with matters of meaning and purpose in life, truth and values" (1). Human beings are created of two physical and spiritual dimensions, and in the holistic care mechanism, both of the dimensions should be addressed (2). The world health organization (WHO) definition of supportive care of patients with serious diseases answers the spiritual needs of these patients alongside physical and psychosocial needs (3). Studies also have demonstrated that at least half of patients with chronic illnesses and their families need spiritual services. On the one hand, there is a strong association between emotional and spiritual needs of patients, their general satisfaction of treatment, and the reduction of symptoms such as anxiety, pain, and depression; on the other hand, it was seen that most health care providers were not educated enough in offering spiritual services (4-7).

The question remains as how these needs should be assessed. Several questionnaires are available to assess spiritual needs, though they might have some shortcomings (8). First, the applied questionnaires mostly contain different religious purports and are not applicable to all communities. Second, they are considered a detailed part of a more general questionnaire about spiritual assessment. Finally, the main interest of the questionnaire designers is in nursing rather than the medicine domain (9). Therefore, to improve the precision of assessment, new questionnaires are being developed by different research groups. Knowing how these questionnaires are made, their strengths and weaknesses, and their theoretical bases can provide the groundwork for creating future questionnaires. The purpose of this study was to collect comprehensive information about all of the scales that currently exist in this field. Therefore, this study may open a path for future research based on the present weaknesses.

2. Evidence Acquisition

2.1. Step One

An electronic search was performed with no limitations on time span (until June 2015) or language in databases including PubMed, Scopus, Ovid, ProQuest and Google Scholar. In order to design the search order, first, the word need and all its synonyms were selected from www.thesaurus.com as well as Oxford and Longman dictionaries. Each of them was then searched in combination with derivations of the words spirit and religion in the title and keywords fields of articles. For example, the search query in PubMed was as follows:

(spirit*[Title] OR religi*[Ttitle]) AND (need*[Title] OR wish*[Title] OR obligat*[Title] OR essenti*[Title] OR requir*[Title] OR demand*[Title] OR want*[Title] OR necess*[Title] OR requisi*[Title] OR intere*[Title])

2.2. Step Two

The titles and abstracts of the papers were studied by the authors of the present paper. The criteria for selecting papers for the final report included: the existence of one search word in the title or keyword, needs recognition being mentioned as the main research objective in the abstract, and research leading to the generation of a new questionnaire.

2.3. Step Three

Full texts of the selected papers were studied. The information was selected, and finally all the references of the selected papers were reviewed. If they met the criteria, they were added to the selected papers in the following way: the keywords were reviewed, and new synonyms were added and searched again (the final form is mentioned as above). Altogether, eight assigned questionnaires were found. Tables 1 and 2 lists the instruments and their psychometric properties in detail and Table 3 displays their strong and weak points.

3. Results

3.1. Patients Spiritual Needs Assessment Scale (PSNAS)

This scale was developed by Galek et al. in 2005 in the USA and the three names Spiritual Need Survey, spiritual need scale and patient spiritual needs assessment scale were applied for its introduction in different studies (9-11). This questionnaire had no special religious procedure and was based on the results of 12 qualitative, 7 quantitative, and 3 theoretical studies, using a systematic review method and had 29 yes/no questions originally (9). In other studies, the developers modified the original tool and introduced the 28-item (10) and 24-item (11) versions of the questionnaire. PSNAS was also normalized in Turkey (20).

3.2. Spiritual Needs Inventory (SNI)

This questionnaire was designed by Hermann in 2006 in the USA in a qualitative study on patients diagnosed with cancer in the final stage of life. This questionnaire, which did not have any special religious procedure, was originally a special needs questionnaire design for patient with special problems. The aim was to investigate only spiritual needs and no other topic related to spirituality. Maslow's theory of motivation is the theoretical basis of this questionnaire, but with the assumption that spiritual needs exist at all of Maslow's levels, with the move toward deeper levels of fulfillment of more complex and abstract needs. In SNI, for each question there was also the survey of reply to the needs along with the survey of needs existence (according to a yes/no to answer the question: "Is this need being met in your life now?") (13). SNI was normalized in a group of caregivers of patients with cancer and demonstrated the reliability and validity in the group without illness (21).

3.3. Spiritual Interests Related to Illness Tool (SpIRIT)

This tool was created by Taylor in 2006 in the USA to investigate the spiritual needs prevalent in patients with cancer and their caregivers based on a qualitative and then quantitative study (14, 22, 23). The stem of all the questions in this self-report tool started with "How important is it now to …", and at the end of each group of questions, an item asked: "How important it is to have my (or my loved one) nurse help me satisfy these spiritual interests?" (14).

A notable aspect of this questionnaire was related to word choice. Because need may transmit a negative concept, authors used the word interest to avoid misunderstanding and to decrease patient denial in reporting their needs. Another important difference between this questionnaire and others was the need to review beliefs, which involved a cognitive involvement with concepts such as unfairness of what has been happening, correctness of beliefs about God, "Why did I/we deserve this?" and finally, receiving a response or gaining acceptance (14). This tool has been normalized in some other countries (24).

3.4. Spiritual Needs Scale (SNS)

This scale was designed by Yong et al. in 2008 in Korea with the assumption that spiritual needs vary across cultures. To extract key concepts of spiritual needs, both an extensive literature review on spiritual needs and semistructured interviews with 10 hospitalized participants were

Table 1. [Part 1] Psychometric Properties of Spiritual Needs Questionnaires

Article Key Author	Instrument Name and Its Aim	Number of Items	Spiritual Needs Domains	Validation Population	Standardization Information Summery
Galek et al. 2005 (9, 10, 11, 12)	Patients Spiritual Needs Assessment Scale (PSNAS): To inquire about one's current spiritual needs in hospital	Originally 29 items, but 28 and 24 items versions in other studies, 4-point Likert scale	Love, belonging and respect; Divine; Positivity, gratitude, hope and peace; Meaning and purpose; Appreciation of beauty; Resolution and death; Morality and ethics;(It was deleted from the 24-item version)	28-item version: 167 chaplains of different health institutions (10), 24-item version: 683 chaplains and pastoral care directors (11)	Qualitative study of 29-item version: Kappa coefficient = 0.84 - 0.86 (8), 28-item version: Cronbach's α = 0.78-0.88 (10), in factor analysis of the 24-item version: divine, meaning and purpose, and appreciation of beauty were completely independent, love, belonging, and respect, and resolution and death had some correlation, and positivity, gratitude, hope, and peace had a high correlation with other dimensions (11). Morality and ethics was deleted from the study during the preliminary testing of the scale because of its low scores (10, 12)
Hermann et al. 2006 (13)	Spiritual Needs Inventory (SNI): To assess the degree to which dying patients have spiritual needs and whether those needs are met in their lives	17 items, 5-point Likert scale	Outlook, inspiration, spiritual activities, religion, community	100 inpatient and outpatient hospice cancerous dying patients	Cronbach's α = 0.85, alpha-if-item-deleted = 0.83-0.85, item to total correlation = 0.33-0.7, construct validity: negative correlation of unmet needs with life satisfaction = -0.17 in Cantril ladder
Taylor et al. 2006 (14)	Spiritual Interests Related to Illness Tool (SpIRIT): To measure spiritual needs of patients with cancer and family caregivers	42 items, 5-point Likert scale	Needing positive perspective, needing relationship with God, giving love to others, receiving love from others, reviewing beliefs, finding meaning, practicing religion, preparing for death	The qualitative phase: 28 adult patients with cancer and primary family caregivers, the quantitative phase: 156 patients with cancer and 68 family caregivers who were primarily white and Christian and mostly perceived their cancers as not life threatening	-Overall Cronbach's α = 0.95, and for each group = 0.76-0.96, and for items related to caregivers = 0.98, content validity index = 0.88, concurrent validity: correlation with number of months since diagnosis r = 0.44, criterion validity: correlation with frequency of attendance at religious services r = 0.50
Yong et al. 2008 (15)	Spiritual Needs Scale (SNS): To assess spiritual needs of patients with cancer in Korea	26 items, 5-point Likert scale	Love and connection, hope and peace, meaning and purpose, relationship with God, acceptance of dying	Ten Korean hospitalized patients with cancer above stage II for semistructured interview and then 257 patients for quantitative investigation	Cronbach's α = 0.92, in factor analysis, five factors emerged, accounting for 62.9% of total variance. Concurrent validity for religion

conducted. SNS had five sub-constructs which were similar to sub-constructs of PSNAS, but which had one more construct, appreciation of beauty. On the other hand, the constructs of SpIRIT yielded two other different constructs, positive perspective and reviewing beliefs, which were not included in the constructs of SNS. This could be a sign of cultural influences on spiritual needs (15).

Table 2. [Part 2] Psychometric Properties of Spiritual Needs Questionnaires

Article Key Author	Instrument Name and Its Aim	Number of Items	Spiritual Needs Domains	Validation Population	Standardization Information Summery
Büssing et al. 2010 (16)	Spiritual Needs Questionnaire (SpNQ): To measure spiritual, existential and psychosocial needs of patients with chronic diseases	19 items, 4-point Likert scale	Religious needs, need for inner peace, existentialistic needs, actively giving	210 patients with chronic pain, cancer and other chronic conditions	Overall Cronbach's α = 0.932, item difficulties = 0.2-0.8, four groups covered 67% of total variance in factor analysis, concurrent validity: some associations between actively giving and life satisfaction r = 0.17, and negatively with the symptom score r = -0.29; Need for inner peace associated with satisfaction with treatment efficacy r = 0.24
Sharma et al. 2012 (17)	Spiritual Needs Assessment for Patients (SNAP): To measure spiritual needs of patients with cancer	23 items, 4-point Likert scale	Psychosocial needs, Spiritual needs, religious needs	47 cancer patients	Cronbach's α for the entire questionnaire was 0.95, and for spiritual, psychosocial, and religious subscales it was 0.74, 0.93, and 0.86, respectively, test-retest reliability for the whole questionnaire was 0.69, and for the psychosocial, spiritual, and religious subscales it was 0.51, 0.7, and 0.65, respectively, construct validity was assessed by comparing each of the subscale scores with the question: "Are your spiritual needs being met?"
Vilalta et al. 2014 (18)	Spiritual needs questionnaire for palliative care (no official name for the questionnaire was introduced by developers) to assess spiritual needs of patients with advanced and terminal cancer	28 items, 5-point Likert scale	Recognition as a person until the end of life, reinterpret own life, find a meaning for existence, freedom from blame and guilt and forgiving others, reconciliation and forgiveness, life beyond the individual, need for continuity and an afterlife, need for religious expression, need for hope, need for truth, need for freedom and to be free	Ten patients of an outpatients clinic with advanced or end-stage cancer for pilot	Valid regarding face validity, no published psychometric evaluation
Wu et al. 2015 (19)	Spiritual Care Needs Inventory (SCNI): To assess the spiritual care needs in patients of acute care hospital	21 items, 5-point Likert scale	Meaning and hope, caring and respect	1351 adult acute care patients from Taiwan	Item level content validity index = 0.82-1.00, instrument level content validity index = 0.87, internal consistency for meaning and hope = 0.96, internal consistency for caring and respect = 0.91

Table 3. Strong and Weak Points of Spiritual Needs Questionnaires

Instrument Name	Strong Points	Weak Points
Patients Spiritual Needs Assessment Scale (PSNAS) (9-12)	Was based on content analysis of the result of 22 studies, assessed needs in current condition, was designed for religiously heterogeneous patients' population, standardization was based on the experiences of experts chaplains	Ignored different needs of different patients and different stages of disease, data was derived just from English language journals, psychometric standardization was performed with chaplains not real patients, there was absence of complete psychometric standardization
Spiritual Needs Inventory (SNI) (13)	Had theoretical bases (Maslow's motivation theory), assessed needs in end of life, was based on interviews with real patients, assessed reply to needs along with the survey of needs existence	Ignored different needs of different patients and different stages of disease, small sample volume, lack of racial, cultural, and religious diversity in the sample, all subjects were hospice patients, lack of test-retest estimation
Spiritual Interests Related to Illness Tool (SpIRIT) (14)	Was based on qualitative and quantitative study, assessed patients and carers' needs, assessed beliefs about fairness, faith and god	Ignored different needs of different patients and different stages of disease, limited to Euro-Americans and Christians, limited to patients and family caregivers for whom cancer was experienced as not life threatening, absence of complete psychometric standardization
Spiritual Needs Scale (SNS) (15)	Assessed spiritual needs of eastern culture, merge of western literature review with qualitative study of eastern patients, was developed based on patients with diverse religious backgrounds and those with no religion	Ignored different needs of different patients and different stages of diseases, lack of cultural diversity, predominance of advanced stage cancer, small sample size, ignored whether the needs are met or not, absence of test-retest reliability
Spiritual Needs Questionnaire (SpNQ) (16)	Assessed active role of patients to cope with chronic illnesses, focused on fatal and non-fatal chronic conditions, was translated and normalized in different countries	Ignored different needs of different patients and different stages of diseases, absence of test-retest reliability
Spiritual Needs Assessment for Patients (SNAP) (17)	Was based on collection of the existing data in literature and justification through interview with patients and experienced clinical workers, participants were from variety of religious, ethnical and cultural background	Participants were recruited from a single institution, unrecognized seriousness and stage of illness, small sample volume and low subject-to-variables ratio, most participants were female, English-speaking and Christian, non-precise construct validity
Spiritual Needs Questionnaire for Palliative Care (No official name for the questionnaire was introduced by developers) (18)	Was developed based on a comprehensive literature review and experts' opinions, the scales used considered both quantitative (not at all, a little, quite a lot, a lot, totally) and temporal (never, rarely, sometimes, often, always) factors	Very small sample size, because of the observational nature of the study, the developers didn't perform any psychometric investigation
Spiritual Care Needs Inventory (SCNI) (19)	Assessed spiritual needs in acute care, was normalized in multi-faith society, high internal consistency, normalization with large sample size	Was limited to acute care hospital patients, normalization without attention to cause of hospitalization

3.5. Spiritual Needs Questionnaire (SpNQ)

This questionnaire, which may be the most important assigned questionnaire for the evaluation of spiritual needs of particular patients, was designed in 2010 by Büssing et al. in Germany. It was, in fact, a continuation of the dedication of assessing the spiritual needs of special patient populations. The reason for selecting patients with chronic illnesses such as chronic pain and cancer was that for these patients, one important method of coping with illness was the use of religion and spirituality. Most previous questionnaires focused on the spiritual needs of patients close to death as opposed to those with chronic illnesses. A novel aspect of SpNQ was the need of actively giving, which is the need of having an active role in life instead of the role of an afflicted patient (16).

SpNQ has been used in different settings (25) and also normalized in Malaysia, Nigeria, Poland, France, China, and England and is now normalized in Iran. In each country, the questionnaire has been normalized with minor changes and the priority of needs has been reported differently (26).

3.6. Spiritual Needs Assessment for Patients (SNAP)

This questionnaire was developed in 2012 by Sharma et al. in the USA and was introduced as a complete tool for spiritual needs assessment in the published paper. The developers tried to merge all the existing data in literature with experts' opinions and also their clinical experiences. This short questionnaire consisted of 23 questions with scoring ranged between 23 and 89, such that the closer the score to 89, the greater the need. This questionnaire placed needs into three main groups and appeared as an integration of the previous needs questionnaires (17). SNAP was

translated and normalized in Chinese. A noteworthy point is that in the Chinese normalization, researchers found that some items that were considered as spiritual needs by western patients were not considered as such for Chinese patients (27).

3.7. Spiritual Needs Questionnaire for Palliative Care

This questionnaire was developed by Vilalta et al. in 2014 in Spain. With the aim of designing a simple, effective and easily tool, they performed a comprehensive literature review and selected the most common repeated typologies of spiritual needs. After incorporating them, in collaboration with experts who were specialist in theology, ethics, bioethics, psychology and oncology, they developed the tool (18). We did not find any published data about the questionnaire's psychometric evaluation in databases we searched until the time the present article was being written, with the exception of its face validity and a pilot study involving 10 patients (18).

3.8. Spiritual Care Needs Inventory (SCNI)

This questionnaire was developed by Wu et al. in 2015 in Taiwan. With the aim of designing a specific tool to assess spiritual needs in acute care hospital patients with different religious beliefs, they merged items obtained from 149 published articles and three patients' spiritual needs instruments. After incorporating them, they performed its psychometric procedure. The Inventory placed needs into two groups. The meaning and hope component referred to the domains of self, nature and environmental aspects of spiritual well-being, and the caring and respect component referred to the domain of communal relationship with others (19).

4. Discussion

This literature review identified eight questionnaires which intended to assess spiritual needs of patients. A distinctive feature of this study was collecting the detailed characteristics of the instruments with their strong and weak points. Therefore, those interested in spiritual needs can choose the appropriate instrument regarding the constructs assessed by these instruments. However, the followings are some pitfalls seem to exist in this field of research:

A, The similarity of all the aforementioned questionnaires assessed spiritual needs of patients in critical conditions, mostly patients with cancer, and designed questionnaires to answer these specific patients' needs. On the other hand, cancer can significantly increase and change patients' spiritual needs, because patients rely on spirituality as a strong method to deal with cancer (10, 28, 29). This approach, however, clinically limits the concept to a particular group. Further studies are recommended to design appropriate instruments for other patient groups and the healthy population; B, for assessing spiritual needs, one should understand the voice that lies deep within the respondent that may reveal something of the respondent's inner self. Furthermore, these needs are related to each other and they are not independent. Therefore, despite the advantages of questionnaires in research, clinicians should be cautious of this point and avoid applying instruments stereotypically (30); C, with the exception of the questionnaires mentioned in this paper, there were many qualitative studies to evaluate spiritual needs that considered other variables. These variables sometimes had an important role, but were not used in scales. Some examples include transcendental needs, mystical needs (including desire and mystical consciousness), which involve abstract aspects of spiritual needs (30), and needs such as life beyond the individual, need for continuity and after life, need for truth, and need for freedom and to be free (18). These points highlight the need to study and develop new questionnaires that cover more dimensions of spiritual needs; D, In most of these questionnaires, normalization information was incomplete. In some, the sample volume was not only low, but often used in limited studies, and in most of them, the theoretical bases of the questionnaire design were not mentioned. Therefore, using these questionnaires in clinical daily work should be performed with care until further research is conducted; E, Some concepts of these questionnaires are culture-dependent. For example, in western cultures, listening to music is a spiritual need, while in Iran listening to the Quran is more significant. Furthermore, depending on the culture in which the questionnaire is used, the priority of needs will change. In the Chinese version of SNAP, for example, the first priority is the need of actively giving (not inner peace that is seen in the German normalization) (26). In Iran, on the other hand, the significant need is going to the prayer hall and participating in mass prayer (2, 30-32). In Korea, in contrast with western cultures, some patients are not comfortable in talking about death and unfinished works at the end of life (15). This is important from two perspectives: First, one construct can be measured by different factors in different cultures. Therefore, translating these questionnaires into different cultures requires some adjustment of certain items. Second, because of cultural differences and the relationship between spiritual needs and culture, it can be recommended to design culture-specific questionnaires; F, historically, a criticism in questionnaire design is the reductionist approach. It seems that the concept of spirituality varies from religious to secular, and this topic is seen in spiritual needs surveys. For example, in the afore-

mentioned questionnaires, general concepts such as the need of meaning discovery in illness are weak, and strong concepts such as life beyond the individual were measured by variables such as talking with others. The concept of life beyond the individual is more extensive than interaction with others. For example, in top sense, the beauty can achieve (that is kind of intuitive beauty) (33), while the concept of life beyond the individual was simply about talking with others. This point should be considered important in culture-specific questionnaire design, especially in Eastern cultures where religious concepts have a strong link to spiritual concepts (18, 34, 35).

There were some limitations for the present study. First, there were not enough references such as congress papers, abstracts, theses, etc. The reason was the unavailability of details because of lack of publication in research sites. Second, the concept of spiritual needs is an extensive one for the introduction of which several words can be used and may be overlooked in the keywords. Furthermore, there were many questionnaires that assess different dimensions of spirituality including spiritual needs. We deleted them from our study because our focus was on the questionnaires that assessed spiritual needs specifically.

In conclusion, spiritual need is a complicated, multidimensional phenomenon. Although most of the studies showed that the need of relationship was the center of spiritual needs, the complexity of these needs cannot be summarized in this concept (25, 36). Therefore, the assessment of questionnaires should be conducted with a great deal of care and consideration. This is an aspect that has been ignored in most questionnaires and has led to the lack of harmony in terms of content and assessment.

Footnotes

Authors' Contribution: Ruohollah Seddigh conceived and designed the evaluation, participated in drafting of the manuscript and revised it critically for important intellectual content; Amir-Abbas Keshavarz-Akhlaghi participated in designing the evaluation, collected and interpreted the data, drafted the manuscript and revised it critically for important intellectual content; Somayeh Azarnik participated in collecting and interpreting the data, drafted the manuscript and revised it critically for important intellectual content. All the authors read and approved the final manuscript.

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