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Review

Spiritual needs of older adults with cancer: A modified concept analysis

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ABSTRACT

Objective: To clarify the concept of spiritual needs and explain its meaning to older adults with cancer.
Methods: Electronic databases (Web of Science, PubMed, EBSCOASU, CNKI, Wanfang, and VIP) were systematically searched and analyzed using "spiritual needs" as keywords. Rodgers' evolutionary method guided the concept analysis to identify attributes, antecedents, and consequences. Two rounds of Delphi expert consultations ensured accuracy, reliability, and feasibility for implementation.
Results: Spiritual needs express an individual's expectations of comfort and inner peace that satisfy his or her perception of the meaning and purpose of life, the ability to love and be loved, feelings of peace and gratitude, and a sense of belonging and hope. Spiritual needs have four dimensions: personal, communal, environmental, and transcendence or supreme. The attributes of spiritual needs include meaning and purpose of life, love and being loved, peace and gratitude, belonging, and hope. The antecedents include spiritual recognition and events that trigger spiritual needs and spiritual need thresholds. The outcomes of addressing and meeting the spiritual needs of older adults with cancer include promoting their spiritual health and enhancing their quality of life. After two rounds of Delphi experts' consultation, the expert authority coefficients (Cr) were 0.83 and 0.88, respectively. Experts agreed on the concept of spiritual needs.
Conclusions: Exploring antecedents of spiritual needs in older adults with cancer clarifies obstacles to spiritual practice, offering intervention strategies for spiritual care and well-being. Meeting their spiritual needs enhances spiritual health and quality of life, essential in humanistic nursing care.

Introduction

The world's aging population is rapidly increasing by 2% annually and is expected to reach 21% of the global population by 2050.[1] Aging is believed to be the single greatest risk factor for cancer. Research has demonstrated that more than 50% of new cancer cases and nearly 70% of cancer-related deaths occur in people aged 65 years and older.[2] Spirituality is a topic of increasing interest to both clinicians and researchers, and it is considered of ultimate importance. Thus, spirituality is concerned with matters of meaning and purpose in life, truth, and values.[3] Older adults with cancer have strong spiritual needs, especially toward the end of their lives.[4,5] However, many caregivers have an incorrect understanding of the thoughts and behaviors of older adults and neglect their spiritual needs.[6]

Every individual has spiritual needs, especially regarding major stressful or ongoing traumatic events.[7] Most older patients with cancer have spiritual needs, and spirituality is an important asset in coping with aging and death.[4] Previous research has demonstrated that 77% of patients with cancer want spirituality to be part of their caregivers' daily care,[7] and 50%–59% of patients with cancer consider spirituality important during hospitalization; however, these needs are unmet in clinical practice.[8] A recent article on spiritual distress and spiritual needs of chronically ill patients in Poland presented that almost all patients exhibited signs of spiritual distress, and over 50% expressed spiritual needs.[9] Spirituality may be an essential resource for helping older people cope with the losses and changes they face as they age.[10] However, many caregivers do not adequately assess their patients' spiritual needs.[11] Spiritual distress arises from unmet spiritual needs and is directly proportional to spiritual needs; that is, the greater the spiritual distress, the greater the degree of unmet spiritual needs.[12]

Spiritual care can induce confidence and hope in times of crisis[13,14] and help individuals cope with loss and change in later life.[15,16] Spirituality has become integral to coping with aging and caring for older adults with cancer.[16] Recent literature has acknowledged the prevalence of spiritual needs and experiences among older adults with cancer. Assessing spiritual needs provides insight into meaningful spiritual

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experiences, identifies important spiritual resources, and provides better spiritual care for older adults with cancer.[17] Conversely, individuals cannot achieve optimal health if their spiritual needs are unmet.[18] Additionally, spiritual care can only be delivered after identifying spiritual needs.[19] Moreover, there is an intense desire for spiritual resources but an extreme lack of such resources.[20,21]

According to Erikson's theory of the developmental stages of life, the main goals of older adults are self-integration and self-despair.[22] According to the stage of spiritual development, the sensibilities, rationality, and spirituality of adults over 60 years are in the best-fit state. The stage provides a good opportunity for spiritual care and intervention.[23] Therefore, caring for older adults from a spiritual perspective, actively facing aging, and leading to spiritual health can help them seek the true meaning of life. A growing recognition of the spiritual needs of older people has been observed. Nevertheless, the concept of spiritual needs remains unclear, and there is no consensus on which dimensions belong to it.[14,24] Spiritual needs depend on many factors, including culture, history, social background, values, and religious beliefs.[25] Previous literature has often grouped spiritual and religious needs into a single category or dimension.[26,27]

In a culturally diverse country, implementing spiritual needs is difficult because of their vague concept. Insight into the spiritual needs of older adults with cancer is required if the best spiritual care is to be provided.[28] Conceptual analysis is an effective method of clarifying widely used but ambiguous concepts that involve multiple disciplines. The study aimed to explain the meaning of spiritual needs in older adults with cancer by identifying the attributes that comprise the concept, the antecedents that lead to the concept, and the consequences that occur when the concept is fulfilled.

Methods

A modified conceptual analysis method

Rodgers' Evolutionary Model was used to guide the analysis of spiritual needs. Evolutionary concept analysis is an effective method that is widely used in nursing. The evolutionary model is a systematic inductive approach that can provide understanding, explanations, and descriptions of a concept's use among disciplines; it holds that concepts are dynamic, develop over time, and are influenced by the context in which they are used.[29] Furthermore, the evolutionary model can be interdisciplinary, emphasizing the similarities and differences in the applications of concepts across disciplines. The philosophical perspective embodied in the inductive approach is characterized by the development of an understanding of the dynamic concept and the identification of a consensus.[30] The model's iterative steps assist in identifying the common meanings of spiritual needs and clarifying the features of the concept that can be useful in the nursing discipline. The enhanced clarity of the aforementioned concept can provide a solid conceptual foundation for future research. No consensus has been reached on the definition of spiritual needs; thus, Rodgers' evolutionary model is a good fit for the conceptual analysis. Spiritual needs also have cultural characteristics; thus, we adopted a modified conceptual analysis method to ensure cultural adaptability, standardization, uniformity, and applicability of the concepts. Rodgers' evolutionary concept analysis combined with Delphi expert consultation was employed to define the concept of spiritual needs.

Literature search strategy and screening process

The subject or keyword was “spiritual needs.” The literature for the concept analysis was obtained from Web of Science, PubMed, EBSCOASU, CNKI, Wanfang, and VIP, and we examined the articles' references to obtain additional studies. The inclusion criteria were as follows: (1) research content: conceptually defining characteristics, prerequisites, outcomes, and measurement of spiritual needs; (2) disciplines including medicine, nursing, religion, philosophy, social work, and psychology; and (3) language, including Chinese and English. To ensure search accuracy, we made appropriate adjustments according to different database characteristics. The initial search in the PubMed database displayed that spirituality has developed in the nursing discipline over the past 20 years; hence, the search dates of foreign databases were limited to the previous 20 years (2001/1/1–2022/12/30), and the search dates of Chinese databases were not limited. The exclusion criteria were as follows: conferences, editorials, bibliographies, news, videos, studies without full texts, and articles that were not peer-reviewed. In total, 2170 studies were included. Rodgers believed that a conceptual analysis needed to include more than 20% or 30% of the total literature to reach a reliable conclusion.[30] Therefore, according to the development of spiritual research in different countries, all Chinese articles and 30% of English articles were included in the qualified literature for full-text reading. Overall, 651 studies were reviewed (Fig. 1).

Data analysis

Rodgers' conceptual analysis framework, content analysis coding, and analysis strategy were evaluated.[30] The study mainly analyzes the following: the evolution of the spiritual needs concept and the uses of this concept, defining attributes, antecedents and influencing factors, consequences and meanings, synonyms, evaluation indicators, limitations, and further research directions. Data collection and analysis were conducted independently by two researchers.

After the literature for inclusion was identified, two researchers studied Rodgers' conceptual analysis framework and content analysis method in depth and developed Table 1 to determine what should be extracted from the literature, including the first author/year, sample size/population, average age/work experience, research methods, and content of spiritual needs. Each researcher read the relevant literature at least twice. During the first reading, they extracted the content of the literature in Table 1, and when reading the literature for the second time, they extracted the content of Rodgers' conceptual analysis framework. The evolution of the spiritual needs concept was traced using the publication time and specific content of the literature to make a comprehensive judgment. The uses of the concept, influencing factors, consequences and meanings, evaluation indicators, limitations, and further research directions were confirmed by assessing the purpose, results, and conclusions of the literature. The content analysis method categorizes the content and dimension of spiritual needs and determines the attributes and dimensions of spiritual needs by combining the frequency of specific spiritual needs, the quality of literature, and the maturity of research content. Synonym identification was used to clarify the conceptual issues of spiritual needs reflected in the Chinese literature, and a third party made a comprehensive judgment in cases of disagreement.

The purpose and standard sampling methods were used in consultation with Delphi experts. Inclusion criteria were as follows: (1) $\geq$ 10 years of geriatric nursing experience; (2) $\geq$ 5 years in hospice care units (including nursing staff, social workers, and priests); (3) $\geq$ 5 years of experience in management and education (psychology, philosophy); (4) $\geq$ bachelor's degree, associate senior title or above; (5) employed in general hospitals, universities, or hospice care institutions; and (6) voluntary participation. Experts who could not be contacted electronically were excluded. In the first round, 20 experts were contacted, 18 agreed to participate, and feedback was provided within 2 weeks. In the second round, 16 experts participated, and after each round, expert feedback refined the definition. If no response was received within 2 weeks, we considered it a lack of time or interest and discontinued contact. A high motivation was evident, with the recovery rate exceeding 80%.

Data analysis

Data analysis was performed using SPSS version 25.0 (IBM Inc., Armonk, NY). The demographic characteristics of experts were described using frequency and percentage. The expert authority coefficient (Cr)

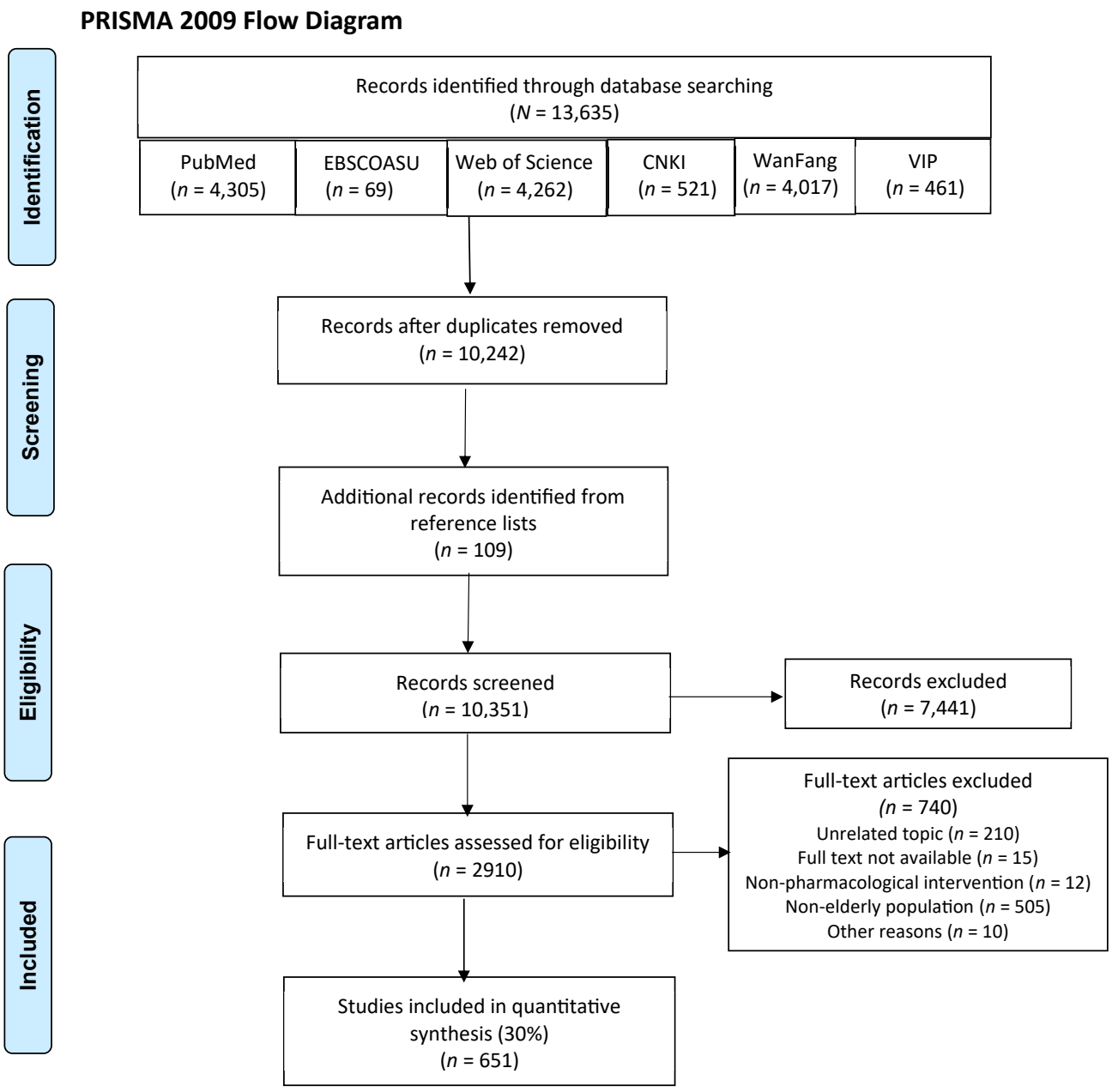

Fig. 1. Flowchart for inclusion and exclusion.

was computed using the expert judgment coefficient (Ca) and expert familiarity coefficient (Cs), where $Cr = (Ca + Cs)/2$. $Cr \geq 0.7$ indicated acceptable reliability; $Cr > 0.8$ indicated good authority.

Ethical considerations

The study was approved by the West China Hospital of Sichuan University Biomedical Research Ethics Committee (IRB No. 2020697). All participants provided written informed consent.

Results

The evolution of the spiritual needs concept and uses of the concept

Maslow established the theoretical foundation for transpersonal psychology.[31] Transpersonal psychology is considered the Fourth Force in psychological circles and emphasizes spirituality. In 1962, Abraham Maslow published his book, "Toward a Psychology of Being," and based his theory for the development of happiness and true being on the concept of human needs. His hierarchy of needs included multiple levels, with the four most basic needs of human beings at the bottom of the hierarchy (physiological needs, need for peace of mind, need for love, need for respect, and the need to be acknowledged). Two more advanced needs are in the middle of the hierarchy (the need for knowledge and understanding and the need for creativity and aesthetics).

The two most abstract needs are at the top of the hierarchy (the need for self-actualization and transcendence). The need for transcendence refers to an individual's spiritual needs. Spirituality can be considered self-completion. Without spirituality, people become unhappy, dissatisfied, empty, or indifferent. Spirituality provides a better understanding of oneself and promotes inner enrichment.[32]

Table 1
General demographic information from two rounds of expert consultations.

Variables		First round	Second round
		$n = 18$, n (%)	$n = 16$, n (%)
Gender			
	Male	2 (11.1)	1 (6.3)
	Female	16 (88.9)	15 (93.8)
Age, years			
	30–40	1 (5.6)	1 (6.3)
	41–50	6 (33.3)	7 (43.8)
	51–60	10 (55.6)	8 (50.0)
	> 60	1 (5.6)	0
Degree			
	Bachelor degree	3 (16.7)	3 (18.8)
	Master degree	4 (22.2)	3 (18.8)
	Doctor degree	11 (61.1)	10 (62.5)
Professional title			
	Associate senior title	8 (44.4)	7 (43.8)
	Senior title	10 (55.6)	9 (56.3)
Research direction			
	Geriatric nursing work (including clinical geriatric nursing, geriatric nursing education, nursing management, and other fields)	8 (44.4)	7 (43.8)
	Hospice care (including nursing staff, social workers, and priests)	4 (22.2)	4 (25.0)
	Psychology and Philosophy	6 (33.3)	5 (31.3)
Years of work experience			
	5–10	1 (5.6)	1 (6.3)
	11–20	2 (11.1)	2 (12.5)
	21–30	2 (11.1)	3 (18.8)
	31–40	13 (72.2)	10 (62.5)
Geographical representation			
	North China	4 (22.2)	3 (18.8)
	Northeast China	1 (5.6)	1 (6.3)
	East China	3 (16.7)	2 (12.5)
	Central China	1 (5.6)	1 (6.3)
	South China	3 (16.7)	3 (18.8)
	Southwest China	5 (27.8)	5 (31.3)
	Northwest China	1 (5.6)	1 (6.3)

British nurse Florence Nightingale, known as the "Goddess of the Lamp," believed that holistic care is the core of nursing and comprises meeting patients' spiritual needs.[33] Compared to other needs, spiritual needs are often overlooked. However, spiritual needs are universal and are more pronounced when a major traumatic event occurs.[14] With the development of modern medicine, the importance of spiritual needs in human health has received increasing attention. However, the descriptions of spiritual needs among scholars remain few. The most widely used concept is that spiritual needs are the needs and expectations of individuals, whether they practice religion or not, to find meaning, purpose, and value in their lives.[7,34] Scholars have not agreed on a unified concept of spiritual needs in China, and it is difficult to reveal the specific content of spiritual needs at different stages of life and the circumstances under which the spiritual needs will change significantly. Assessing the spiritual needs of an individual is difficult because the nature of spirituality can vary between individuals. The difficulty may also be attributed to the lack of a shared concept for exploring needs.

Narayanasamy et al believed that the main feature of spiritual needs is that an individual's inner existence motivates them to find meaning in all experiences and dynamic relationships with others, the self, and anything of personal perceived value.[35] Additionally, Young suggests that life events associated with old age, such as retirement and chronic illnesses, could affect the search for meaning in life.[36] Therefore, older adults may have more urgent spiritual needs and require spiritual resources or external environmental support as compared to younger populations. Reed believed that events that trigger spiritual needs challenge common ways of finding comfort and meaning, especially in the face of spiritual stress.[37] Sherwood believes that spiritual needs can be realized through faith, hope, love, trust, meaning and purpose, relationships, forgiveness, and creativity. Some people achieve this through their religious faith and spiritual care.[38] Owing to the subjectivity of human spirituality, spiritual needs are also affected by individual culture, experience, disease state, and other factors and display uniqueness, diversity, and variation.[39] Presently, research on spiritual needs is mainly categorized based on the characteristics of different groups, and their spiritual needs are identified through qualitative research and structured, semi-structured, or unstructured assessment tools. Regarding the spiritual needs of the older population, it is possible to live with illness, have some or all of the spiritual needs of a particular disease group, lives without illness without the spiritual needs of the specific diseases, or have other spiritual needs. As individuals age, they increase their thoughts about daily life, end-of-life life, faith, health, family, love, and assistance.[40] Currently, there are few tools for understanding and evaluating spiritual needs based on Chinese culture, and there are some differences in the recognition and understanding of spiritual needs. Therefore, comprehending spiritual needs from an open perspective based on a specific culture is necessary.[41]

After conducting all the studies systematically, the content related to spiritual needs is presented in Appendix A. Two primary research methods were employed to study the spiritual needs of older adults. The first method involved a cross-sectional investigation utilizing existing measurement tools, while the second utilized a semi-structured in-depth interview that explored the spiritual needs of specific groups. However, the first method was limited to the scope specified in the scale and could not be used to further explore the spiritual needs of older adults. On the other hand, the second method could be used to explore spiritual needs further. However, owing to the sample size, characteristics of the interviewees, and other factors, only a portion of spiritual needs could be presented, which limits the clinical application. Therefore, it is necessary to systematically synthesize the literature to understand and summarize the spiritual needs of older individuals. The forms of expression and degrees of needs vary even if the same scale and population are used to measure spiritual needs. The complexity of older adults' spiritual needs can be observed; however, certain basic rules also exist. After analyzing and summarizing the spiritual needs, we identified that they could be extrapolated as follows: meaning and purpose of life, love and being loved, peace, gratitude, belonging, hope, and religious beliefs. The aforementioned seven spiritual needs are cited most frequently and are the most important.

Attributes of spiritual needs

Based on the literature, expert consultations, and the Chinese cultural background, the study summarizes the conceptual attributes of the spiritual needs of older individuals (including hospitalized and non-hospitalized). The needs were identified as meaning and purpose of life, love and love, peace and gratitude, belonging, and hope. According to the complexity of spiritual needs, we identified four dimensions of spiritual needs: personal, communal, environmental, and transcendence/supreme faith. The personal dimension refers to an individual's intrinsic connection to the purpose, meaning, and value of life. The communal dimension is expressed in terms of the quality and depth of interpersonal relationships and connections between the self and others, particularly within the family context. The environmental dimension refers to the interaction between individuals and the natural environment in which they live and the experience of the unity of nature and man, including reverence, protection, and harmonious coexistence with nature. The transcendence and supreme faith dimension refers to the connection between the self and greater power or the relationship with entities

beyond oneself, including cosmic power, religious beliefs, inheritance of traditional culture, and transcendent reality or God.[42] Some older adults and researchers have highlighted the importance of spiritual resources and support. If medical staff can accurately identify the spiritual needs of older individuals and provide spiritual care, it can reduce spiritual stress, increase spiritual well-being, improve care satisfaction, and significantly improve quality of life.[43]

Antecedents and influencing factors of spiritual needs

Antecedents are events or situations that occur before a concept is manifested.[30] The first is to recognize spirituality. Only by believing and acknowledging the fact that each of us has spirituality, can we become aware to identify spiritual needs and plan to meet an individual's unique spiritual needs.[43] Second, concerning events that trigger spiritual needs, older individuals often encounter two types of difficulties. On the one hand, stressful events such as economic problems, diseases, changes in social roles, the death of a spouse, and the death of a good friend. On the other hand, the decline in physical function or lack of mental preparation affects the resistance to stress of older individuals, significantly impacting their physical and mental health.[44] Spirituality is an important tool for providing emotional support. Lastly, events that trigger spiritual needs need to reach the threshold of an individual's psychological capacity, as demonstrated by the intensity and duration of the events; however, some older adults may not have spiritual needs.[45]

Consequences and significance of spiritual needs

A consequence is an event or situation resulting from the creation of a concept.[30] Unmet spiritual needs lead to many negative consequences, such as increased spiritual distress, deteriorating health, and increased cost of medical consumption. Identifying the spiritual needs of older patients can provide them with corresponding spiritual care measures to solve or improve their physical, psychological, social, or spiritual problems, help them live peaceful lives, and improve their quality of life.[46] Moreover, the identification of spiritual needs also has a profound impact on improving the quality of care.

In the context of aging, meeting the spiritual needs of older patients and helping them discover the value and meaning of life are livelihood issues and top priorities for national stability, unity, and harmonious society.

Synonym for the concept of spiritual needs

Two ways to express spirituality are mentioned in literature: mental/psychic and spiritual.[47] Some scholars have suggested the use of mental/psychic;[48,49] however, according to the literature and definitions in online dictionaries, spiritual needs cannot be replaced due to their completely different nature and connotations.

Mental/psychic expression presents a psychological/psychiatric argument about spiritual needs if mistranslated; psychic/psychic expression does not. Furthermore, mental/psychic expressions carry both positive and negative connotations, whereas spirituality does not. Mental and psychic phenomena may encompass cognitive, emotional, and behavioral attributes. In contrast, spirituality is a broad and abstract construct that exists in the deepest realms of the human mind and is considered the essence of matter and/or a life-sustaining force. Spirituality encompasses a range of spiritual phenomena related to human existence, such as the pursuit of meaning and purpose in life, values, beliefs, and attitudes, and the relationship with a power perceived as greater than oneself.[50,51] Some scholars equated spiritual needs with religious and transcendental needs. However, according to definitions in the literature, religious belief is not the sole means to meet spiritual needs. Existential needs are only part of spiritual needs, and transcendental needs are not easily understood nor widely expressed.[51,52]

Based on the analysis, the concepts of spiritual needs among older patients are as follows: spiritual needs represent a form of demand for the fulfillment of individual spiritual ability, which is embodied in the expectation of spiritual comfort and inner peace by caregivers in a way that satisfies individual needs for meaning and purpose of life, love and being loved, peace and gratitude, a sense of belonging, and hope. Spiritual needs have four dimensions: personal, communal, environmental, and transcendence/supreme (Fig. 2).

Results of Delphi expert consultation

The expert positive coefficients were 90% and 83.3%, indicating that the experts were highly motivated to participate in the study. After the first and second rounds of Delphi experts' consultation, Cr were 0.83 and 0.88, respectively. The experts agreed on the concept of spiritual needs (Tables 1 and 2 and Appendix B).

Indicators of spiritual needs

Indicators of spiritual needs are reflected in the following assessment tools:

The Spiritual Needs Scale (SNS), developed by Yong et al, in 2008,[53] comprises 26 items, categorized into five dimensions (love and connection, hope and peace, meaning and purpose, relationship with God, and acceptance of dying). The scale applies to all types of patients with cancer (irrespective of their faith group). Cheng et al translated and tested the reliability and validity of a Chinese version of the SNS (SNS-Ch). The revised SNS-Ch consists of 23 items distributed across five dimensions: love and connection, hope and peace, meaning and purpose, relationship with the supernatural, and acceptance of death. The SNS-Ch has good reliability (0.92 in the study) and validity, effectively assessing the spiritual needs of Chinese patients with cancer.[54]

The Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being Scale (FACIT-Sp), was validated by Peterman et al, in 2002.,[55] consists of two subscales: one measuring a sense of meaning and peace, and the other assessing the role of faith in illness. The total score for spiritual well-being was obtained. The FACIT-Sp is a psychometrically reliable measure of spiritual well-being in people with cancer and other chronic illnesses.

The Spiritual Needs Questionnaire (SpNQ; version 1.2) was developed and validated by Büssing et al (2010).[56] The SpNQ comprises 19 items distributed across four dimensions (religious needs, need for inner peace, existentialistic needs (reflection/meaning), and active giving). The scale is intended for use in patients with chronic diseases and cancer. The Chinese version of the SpNQ (SpNQ-Ch) was first validated in 2013 to assess the psychosocial and spiritual needs of Chinese patients.[57] The 17-item SpNQ-Ch had a factorial structure similar to that of the original version. The Cronbach's alpha for the SpNQ-Ch ranges from 0.51 to 0.81 and is 0.93 in this study. Four dimensions of the SpNQ-Ch, inner peace needs, giving/generativity needs, religious needs (with two subconstructs, praying and sources), and reflection/release needs, can be used in future studies involving predominantly nonreligious patients in China.

The Spiritual Needs Inventory (SNI) was developed in 2006,[45] and was designed for use in patients nearing the end of their lifetime. After testing, the original 26-item SNI was reduced to 17 distributed across five dimensions (outlook, inspiration, spiritual activities, religion, and community). Cronbach's alpha for the revised SNI was 0.85. The SNI can not only assess the degree of patients' spiritual needs but also identifies unmet spiritual needs. This holds significant value as a reference for providing spiritual care.

Sharma et al (2012) developed and tested the Spiritual Needs Assessment for Patients (SNAP).[14] The SNAP comprises 23 items across three dimensions: psychosocial, spiritual, and religious. The Cronbach's alpha for the SNAP was 0.95. The assessment is used to measure the spiritual needs of diverse patient populations. Moreover, SNAP has been

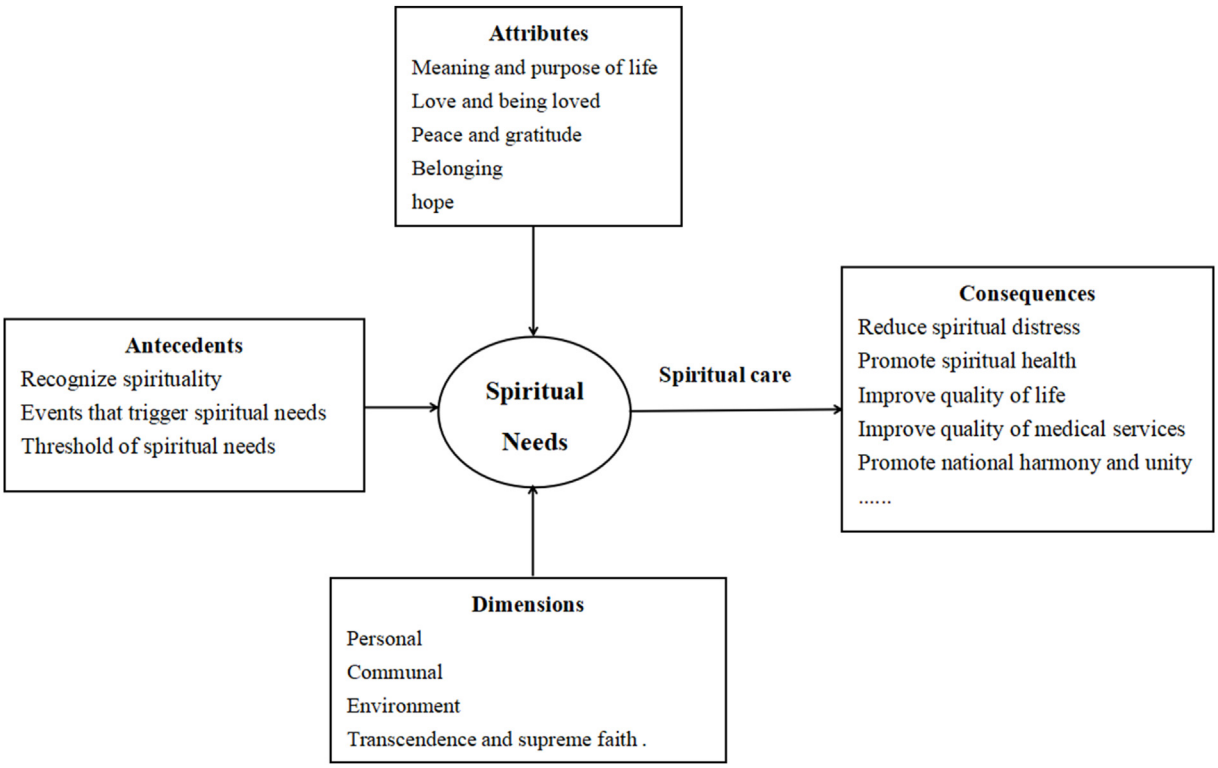

Fig. 2. Results of conceptual analysis of spiritual needs.

Table 2
Results of Delphi expert consultation.

First-round results				Second-round results			
NO	Ca	Cs	Cr	NO	Ca	Cs	Cr
1	0.90	1.00	**0.95**	1	0.90	1.00	**0.95**
2	0.90	0.90	**0.90**	2	0.90	0.90	**0.90**
3	0.90	1.00	**0.95**	3	0.90	1.00	**0.95**
4	0.70	0.90	**0.80**	4	0.90	1.00	**0.95**
5	0.70	0.90	**0.80**	5	0.70	1.00	**0.85**
6	0.70	0.90	**0.80**	6	0.70	1.00	**0.85**
7	0.70	0.80	**0.75**	7	0.50	0.90	**0.70**
8	0.70	0.90	**0.80**	8	0.70	0.90	**0.80**
9	0.90	1.00	**0.95**	9	0.90	1.00	**0.95**
10	0.90	1.00	**0.95**	10	0.90	1.00	**0.95**
11	0.70	0.90	**0.80**	11	0.90	1.00	**0.95**
12	0.90	1.00	**0.95**	12	0.90	1.00	**0.95**
13	0.70	0.70	**0.70**	13	0.70	0.70	**0.70**
14	0.90	1.00	**0.95**	14	0.90	1.00	**0.95**
15	0.50	1.00	**0.75**	15	0.50	0.90	**0.70**
16	0.90	0.80	**0.85**	16	0.90	1.00	**0.95**
17	0.90	1.00	**0.95**				
18	0.70	1.00	**0.85**				
Total	**0.79**	**0.87**	**0.83**	**Total**	**0.80**	**0.96**	**0.88**

Note: Ca represents the expert's judgment on the items.
Cs represents the expert's familiarity with the items.
Cr represents the authority coefficient and the authority degree of experts Cr=(Cs + Ca)/2.

translated into Chinese and is mainly used for outpatients with cancer. Furthermore, the assessment has been verified in Chinese patients with cancer living in New York[58] and has good reliability and validity. However, the apparent lack of correlation between SNAP scores and questions on unmet spiritual needs suggests that Chinese patients may not readily describe themselves as spiritual. Therefore, its applicability requires further verification.

The Spiritual Interests Related to Illness Tool (SpIRIT) was developed and tested in 2006.[59] The tool was designed for patients with cancer and family caregivers and comprised a total of 44 items in 8 dimensions: relating to God, loving others, receiving love and spiritual support, finding meaning, maintaining a positive perspective, preparing for death, reevaluating beliefs and life and asking "why?" In 2015, Lin et al developed and validated the Chinese version of SpIRIT (C-SpIRIT) for patients with cancer in Taiwan.[60] The C-SpIRIT comprises 21 items across five dimensions: beliefs/religions, positive attitudes toward life, love to/from others, seeking the meaning of life, and a peaceful mind. The C-SpIRIT serves as a valid and reliable instrument for assessing the spiritual needs of patients with cancer in Taiwan.

The Spiritual Self-Assessment Scale (SSS) was developed and tested by Xu in 2006 among older adults in China, including those at home and in care facilities.[61] The scale comprises 30 items in 5 dimensions: meaning of life, relationship with oneself, relationship with family, relationships with friends and people around you, and relationship with the environment. The Cronbach's alpha for the SSS was 0.839. The SSS has good reliability and validity. The SSS reflects the characteristics of traditional Chinese culture and focuses on family relations, but needs further verification for older individuals with different religious beliefs.

Many tools for assessing spiritual needs are present, but they are measured and used from the perspective of religious beliefs and disease type. Consequently, the content of the measurement is often unclear regarding the spiritual needs of older patients, and universal assessment tools are lacking. This phenomenon is primarily a result of the unclear connotation of the concept of spiritual needs and a lack of in-depth research. Therefore, further studies are necessary to strengthen research in this area.

Discussion

Conducting concept analysis is a valuable intellectual exercise that plays a pivotal role in literature research and discipline development. A modified Rodgers' evolutionary concept analysis method was applied to identify the concept of spiritual needs, which is perfectly reasonable. The antecedents and consequences of the concept are briefly described, and the concept of spiritual needs in the context of Chinese culture is clarified.

Spirituality plays a crucial role in nursing, yet it has not been sufficiently emphasized in the development of nursing in China. The main reason for this is a lack of spiritual recognition. In secular societies, people traditionally believe that spirituality exists only among religious believers. The antecedents of spiritual needs in this study explain the essential factors that must be considered during the advancement of the nursing discipline. By acknowledging the fact that people have spirituality and spiritual needs, caregivers and patients become more willing to address problems from a spiritual perspective when events occur and reach the threshold of an individual's psychological capacity.

The concept of spiritual needs in the study exhibits a high degree of generality and practical feasibility. The attributes and four dimensions of this concept lend concreteness to spiritual needs. If our objective was to explore the spiritual needs of a group, it would entail exploration and construction. Since the essence of spirituality determines the individuality of spiritual needs, individual characteristics determine the complexity of spiritual needs and the specificity of ways to meet spiritual needs. The attributes of the concept not only express the individual's expectation of spiritual needs but also what kind of expectations they have. The four dimensions of spiritual needs help determine how spiritual care is provided, which is important for guiding the nursing discipline in achieving human-centered development goals.

The conceptual analysis of spiritual needs presented in this study offers several advantages: (1) it systematically synthesizes domestic and foreign studies, sorting out and integrating research on spiritual needs from different cultural backgrounds in different countries, and defines a concept of spiritual needs suitable for Chinese people that is universal and worthy of reference and promotion; and (2) the concept is defined based on recognized studies and revised by two rounds of Delphi expert opinions, which are unanimously recognized by experts and scientists. (3) The concept distinguishes the content and level of spiritual needs and solves the problem of spiritual needs that have not been unified for a long time. Spiritual needs cannot be specifically defined because of their complex content; however, they can be classified.

The study had some limitations. First, the older population is a special group in relatively complex situations, such as hospitalized and non-hospitalized patients, different family backgrounds, different places of residence, disease characteristics, and their spiritual needs have different focuses. The concept will be further discussed in future research. Second, the study does not discuss spiritual crises, spiritual distress, spiritual health, or spirituality, each of which could be the subject of future studies. Moreover, because the concept of spiritual needs has different meanings in different cultures, in-depth research and interpretation in different environments are required to obtain a broader vision and provide better spiritual care measures.

Conclusions

The study explores the concept of spirituality based on a modified Rodgers' evolutionary concept analysis method from a secular perspective in Chinese culture. Understanding spiritual needs significantly promotes guidance for nurses regarding their patients' spiritual care with profound consequences for older adults. Moreover, clarifying the concept provides specific guidance for the in-depth development of spiritual research in secularized countries. Which will also cause many scholars to pay attention to spiritual issues, enabling them to identify problems from a spiritual perspective and solve practical conflicts, including how to deal with death anxiety, aging, and understand the meaning and value of life, and even rebuild a healthy lifestyle with a new perspective. Additionally, clarifying the concept of spiritual needs will specifically benefit older adults with cancer in the future and extend to other groups. The nature of the spiritual needs of older adults with cancer makes a clear and characteristic distinction between this concept and other concepts, deepening the understanding of the population and their spiritual needs, thereby promoting the in-depth development of spiritual needs in practice. By identifying the antecedents of spiritual needs and analyzing the conditions and influencing factors of spiritual needs, the obstacles faced by spiritual needs can be effectively resolved in a targeted manner. Understanding spiritual needs is aimed at meeting spiritual needs, thus improving spiritual health and ultimately promoting the health and harmony of individuals and the entire nation. Further, the concept of spiritual needs provides the basis and reference for developing and implementing spiritual care. It categorizes the complex spiritual needs content into individual, community, environmental and transcendence, and supreme faith dimensions, concretizing the complex spiritual needs content, which is consistent with the dimension of spiritual health and conducive to the development of clinical practice.

Declaration of generative AI in scientific writing

No AI tools/services were used during the preparation of this work.

CRediT author statement

Linan Cheng: Conceptualization, Methodology, Writing – Original draft preparation. **Hongxiu Chen**: Data collection, Data curation. **Lu Lin**: Conceptualization, Methodology, Data collection. **Huiling Li**: Conceptualization, Methodology, Revised draft preparation. **Fengying Zhang**: Writing – Original and Revised draft preparation. All authors had full access to all the data in the study, and the corresponding authors had final responsibility for the decision to submit for publication. The corresponding authors attests that all listed authors meet authorship criteria and that no others meeting the criteria have been omitted.

Declaration of competing interest

All authors have none to declare. The third author, Dr. Lu Lin, is a member of the editorial board of the *Asia-Pacific Journal of Oncology Nursing*. The article underwent the journal's standard review procedures, with peer review conducted independently of Dr. Lu and their research groups.

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Ethics statement

The study was approved by the West China Hospital of Sichuan University Biomedical Research Ethics Committee (IRB No. 2020-697). All participants provided written informed consent.

Data availability statement

Data availability is not applicable to this article as no new data were created or analyzed in this study.

Appendixes A[62–106] and B. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.apjon.2023.100288.

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