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Cultural adaptation and validation of the Sinhala version of the spiritual needs assessment for patients (S-SNAP) questionnaire

Udayangani Ramadasa[1], Shehan Silva[2*], Suraj Perera[3] and Sarath Lekamwasam[4]

Abstract

Background Spiritual support for patients and caregivers of critically ill patients is associated with improved quality of life. This aspect, however, is not incorporated into the current care pathways in Sri Lanka. The Spiritual Needs Assessment for Patients (SNAP) questionnaire, comprised of 3 domains: psychosocial, spiritual and religious, gives a platform for clinicians to assess the spiritual needs of those patients. This study presents the results of validation of the Sinhala version of the SNAP (S-SNAP) questionnaire.

Methods The SNAP was translated from English to Sinhala using the standard forward and backward translation process. After verifying the content validity, unambiguity and clarity of items in a focused group discussion, and a pilot study, the pre-final version was tested among 267 volunteers with cancer selected from three state-run cancer care institutions. Data were analysed for internal consistency and item-total correlations. Factor analysis was done using Varimax rotation with Kaiser normalization. A Scree plot was also made to determine the number of factors.

Results The mean (SD) age of subjects was 63.2 (11.4) years. The total S-SNAP score ranged from 22 to 88 (maximum 88). The overall Cronbach's alpha was 0.94 while item-total correlations varied from 0.26 to 0.87. Total SNAP score showed inverse correlations with age, Charleson Comorbidity index and Barthel index while a positive correlation was seen with the Karnofsky performance status scale ($p < 0.05$). Kaiser-Meyer-Olkein value of 0.92 ($P = < 0.001$) for Bartlett's test indicated adequate sampling and non-linearity of factors. The scree plot showed a four-factor structure explaining 76% variation. Meaning of life and relationship with a supernatural being and religious rituals are loaded as 2 different factors. Worries, fears and forgiveness are grouped as the third factor while relaxation, coping and sharing feelings are loaded separately.

Conclusions The S-SNAP is a reliable and valid tool to assess spiritual suffering among patients with cancers conversant in the Sinhala language.

Keywords Spirituality, Spiritual needs Assessment for patients questionnaire. Palliative care, Cancer

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Background

The World Health Organisation (WHO) has identified spiritual health as a major component of holistic care when palliating patients with life-threatening illnesses [1]. Spirituality is a very wide and intriguing abstract with varied conceptualisations according to society, culture, religion, and educational background. It is a personal subjective experience or desire to make to connect with an ultimate reality that may be considered sacred or divine. There is a significant and profound desire to enlighten with real understanding and meaning in life. In contrast, religiosity is the adherence to beliefs, practices, and rituals in organised religions providing an experiential opportunity for sacred in a collective and structured manner. It also entails engagement in religious activity and adherence to dogmas and doctrines that have a bearing on morality, social norms, and decision-making [2, 3]. Widely, religion, as well as well-being, are linked up as well as overlapping with each other [4]. The consideration of dichotomising religiosity and spirituality has been considered recently [5].

In 2013, the International Consensus Conference on Improving the Spiritual Dimensions of Whole Person Care: the Transformational Role of Compassion, Love, and Forgiveness in Health Care was held in Geneva. Deliberations were made regarding spirituality as a quest to search for the ultimatum of purpose, connection, value, or transcendence in all aspects of life. These include intrapersonal, interpersonal and transpersonal relationships to that which is significant or sacred. The essence of spirituality can be demonstrated explicitly or implicitly via beliefs, values, traditions and practices [6].

Although the perception of spirituality equating to religion is prevalent in all societies, spirituality goes beyond religiosity by encompassing all those aspects of finding this ultimatum. Spirituality can also exist outside organised religions and their institutions in practice such as esotericism, spiritualism, or parapsychology [7].

Dame Cicely Saunders described that a desolate sense of meaninglessness is encountered by a person at the end of life which is the essence of spiritual pain [8, 9] It is evident that spiritual support is an essential component of palliative care to improve the quality of life towards the end [10]. According to a previous study done in Sri Lanka having faith and maintaining hope and dignity are key components of a good death [11]. Spiritual support for critically ill patients and their families is associated with improved quality of life. This is an important part of their overall care as revealed in another Sri Lankan study done in an intensive care setting [12].

Spiritual needs in clinical care direct to the well-being of a patient with the definition of spirituality while including but not limiting to religious beliefs. The concept of spiritual care provision is not determined by whether a person is religious, spiritual, or atheist. Furthermore, it does not matter whether the same beliefs and values are the same as the care provider [13]. Spiritual needs are instrumental to providing care in a holistic manner acknowledging that patients have a spiritual aspect while having physical and psychological domains that influence their overall health and its quality in life [14, 15]. This requires understanding and supporting relationships with themselves, others, nature, and a higher power. These can resonate with acceptance of the past, support from loved ones, a comfortable environment, and gratitude for life [16]. Therefore spiritual care is the professional practice of recognizing and addressing these spiritual needs within a healthcare setting. Spiritual care is an important aspect of palliative care, significantly impacting patients' experiences and quality of life, especially during life-threatening illnesses [17, 18]. Spiritual care does not require explicit references to faith. However, a professional approach customised to the individual unique requirements of each patient with a compassionate approach and the capability to engage in meaningful conversations about existential topics is much needed [19]. The integration of spiritual health into healthcare practices is ever increasing internationally, with guidelines and best practices being developed to enhancing overall well-being and satisfaction with medical care [17].

A huge deficiency exists in the absence of a candid understanding as well as a consensus of what spirituality means among medical professionals [20]. Furthermore, there is a lack of knowledge of the burden of spiritual needs among patients in a generalisable manner although estimates range between 50 and 90% of patients not meeting spiritual care [13].

Spiritual care has an important role in illness, which influences the process of adaptation of patients and their ultimate well-being. Interventions on spiritual health with humanistic, pragmatic, and religious approaches, are evidenced by improvement of quality of life through the address of developmental, experiential, and socio-cultural needs [21, 22]. There is a reduction of anxiety, and stress, along with depressive symptoms. Furthermore, improvement of emotional exhaustion among health professionals also is achieved. Alleviation of spiritual distress and promotion of well-being occurs when the agony and suffering in the human experience, is provided a compassionate approach beyond the physical healing domains [23].

Palliative care is an established field in Sri Lanka and has a higher level of need as the prevalence of non-communicable diseases is rising along with an ever-increasing ageing population. The Ministry of Health (MoH) of Sri Lanka has recognised this well and has included this as an integral component of the National Health Policy,

National Strategic Framework for Palliative Care Development (2019-23), and the National Strategic Plan in Prevention and Control of Cancer in Sri Lanka [24–26]. The National Steering Committee of Palliative Care, the National Cancer Control Programme, and the Palliative and End of Life Care Task Force of Sri Lanka Medical Association have developed guidelines, protocols, and guidebooks on the establishment of palliative care services in the management of these patients as well as making end of life care decisions tailored according to local culture lifestyles and resource availability [27].

Cross-cultural aspects of cancer patients and their caregivers undergoing palliative care have been identified in Sri Lanka [28, 29]. These include awareness and gaining knowledge of cultural identity and issues, verbal and non-verbal communication, dignity, respect, autonomy, involvement of wider family/caregivers and moral as well as spiritual support. Incorporation of cultural consideration is a vital thing for the delivery of optimum personalised care. This is highlighted by the role of social workers in applying these aspects to the assessment and address of the varied needs of patients [30].

Sri Lanka has a significant challenge in the improvement of quality of life in the context of advanced and critical illnesses concerning societal aspirations and cultural norms. Society is based upon family and family-based caregiving for their loved ones in both sickness and health [28, 31]. This brings about implications for unprepared families with limited financial and human resources to look after them. Furthermore, there is complexity in care requiring better knowledge and skills. A self-noticeable gap in perceived competencies requires augmented training in medical curricula and in-service training [29]. There are deterrents in the supply and access to palliative therapy and services which are dependent on logistics such as transport, availability of health facilities, and even finances [32, 33].

There are limitations in the ideal conceptualization of palliation and palliative medicine although widely there is acceptance of comfort by pain control. Certain cultural norms are noted to make physical pain deemphasized when coupled with emotional or spiritual suffering [32]. Sri Lankan society also holds a misconception that palliative care is only required for the terminally ill. The message of integration in the trajectory of a serious illness in improving quality of life is poorly rooted in the public understanding. There is in existence of non-allopathic practices such as ayurveda and traditional medicine which unfortunately do not go hand in hand with allopathy. Conscientious collaboration ensuring patient safety and effectiveness would benefit those who suffer [34]. Therefore there is a greater need to understand palliative care while addressing contextual determinants and adapting conceptualization for universal acceptance and more importantly implementation.

The country's social context is based on Buddhism, Hinduism, Islam, and Christianity. All these faiths strongly emphasize the acceptance of death, suffering, letting go, and impermanence. This is in line with the vision of comfort and dignity in palliative care. Buddhism plays a huge role in the cultural norms of the country even in non-Buddhist communities as the nation is rooted in its philosophy. This faith demonstrates discouragement of aggressive interventions near the end of life which potentially delays access to palliative care [35]. This has shown to be an obstacle in accessing and providing medication and services.

Spiritual care or support is not adequately addressed in the current patient care pathways designed for those with life-threatening or terminal illnesses in Sri Lanka. This is partly because of the lack of awareness of such a need and the overwhelming workload in state-run hospitals. In busy clinics and inward settings, a simple screening questionnaire to identify patients and families who require spiritual support is much needed. Furthermore, there is a lack of published studies that have extensively identified this aspect.

A qualitative study done by Ramadasa et al. on the concept of a good death among patients with life-limiting illnesses in an urban hospital in Sri Lanka demonstrated that approximately 2/3rd of the participants valued maintaining hope as well as dignity [11]. Half of the respondents stated that maintaining a sense of control was paramount while themes of completion of life and appreciating as well as contributing to others emerged with a minority. Dayasiri et al. demonstrated that effective mindful meditative practice would reduce physical stress and depression in patients with malignancies [36].

A systematic review by Peter et al.. demonstrated that cohort studies on spirituality and purpose in life heavily determine adjustment outcomes in the long term [37]. In 2021 Lucchetti et al. conducted a systematic review that compared 25 tools on spiritual health. They stated that tools such as FICA, SPIRITual History, FAITH, and HOPE had greater scores on assessments of spiritual health. There are approximately 35 instruments assessing spirituality as per Monod et al.. These instruments are classified as indices of general spirituality, spiritual well-being, spiritual coping, and spiritual needs [38].

A questionnaire should provide any clinician with a practical and reliable tool to assess the spiritual distress of a given patient to plan out interventions [39]. Furthermore, the tool should assess the severity of distress and specific needs of patients which could help in designing individualized care plans for these patients [40–42].

In 1998, Fisher proposed a spiritual well-being model that addressed four domains. These included personal,

communal, environmental and global domains of human existence and the Spiritual Wellbeing Questionnaire (SWBQ) was based on this model [43, 44]. The Spiritual Well-Being Scale (SWBS) was developed in 1982 with 20 items assessing overall life satisfaction of religious and existential well-being. Items related to religious well-being measure how much one perceives spiritual well-being related to God. In 2017, Fisher and Davis developed a 4-item spiritual well-being index to assess the relationship that people have with God, nature, others, and self [45]. The Spiritual Needs Questionnaire (SpNQ) was developed by Büssing in 2009 which addressed four domains of necessity: religious, existential, inner peace and generativity.

The Spiritual Needs Assessment for Patients (SNAP) questionnaire developed by Sharma et al. provides a platform for clinicians to assess the spiritual needs of those who need such assessment [46]. The SNAP is a reliable screening tool with adequate psychometric properties, composed of 3 domains, namely psychosocial, spiritual and religious aspects. The responses to each of the 23 items are on an ordinal scale ranging from 'very much' (4 points) to 'not at all' (1 point). This tool has been validated in Mandarin Chinese and Brazilian Portuguese languages subsequently [47, 48]. The tools have been used well in various populations including those in both palliative and non-palliative settings [49, 50]. SNAP also is capable of edifying the physician-patient relationship. This is done by providing an opportunity to make clinical decisions by using patient's views for spiritual requirements [17].

Since this tool although developed in the West therefore has been validated and used in other cultural contexts the authors selected it in validation to the Sri Lankan context due to this success in the standardisation approach. Furthermore, the questionnaire can open paths to kindle communication between patients and their healthcare workers in providing holistic care. The tool efficiently probes into the 3 domains mentioned above, thus ensuring a comprehensive concise way of identifying the needs of the patient.

Methods

The Cross-Cultural Adaptation of Self Report Measures method described by Beaton and Guillemin was used in adapting the original English version of SNAP to Sinhala [51]. The original English version the of SNAP questionnaire was further translated into the Sinhala language by two independent healthcare professionals whose mother tongue was Sinhala but conversant in English as well. One was informed of the objectives and methodology of the study while the other was not. The principal investigator consolidated the two translations into one document in the presence of the two translators to improve the clarity, ease of comprehension, and unambiguity of the items. This version was then back-translated to English by two different healthcare professionals. This process was done to determine the comparability of the Sinhala questionnaire with the original English version. A focused group discussion was conducted with the participation of experts consisting of three physicians, one oncologist, and one community physician who have a special interest, training and experience in holistic medical care (including spiritual health) and palliative medicine. This group moderated by the principal investigator ensured clarity, face validity, content validity, and semantic equivalence of the translated Sinhala version of the SNAP questionnaire.

It was deliberated at the above discussion that items 19 and 20 (i.e. visits from clergy of your faith community and visits from hospital chaplain) reflected the same concept in the context of availability and sociocultural religious establishment in Sri Lanka. There are no designated or dedicated 'hospital chaplains' in Sri Lanka. Hospital visitation from the major religions is done by clergy who are personally known to individuals from religious places that the same individuals may visit for spiritual upliftment. Therefore, these items were consolidated as item 19 (visits from clergy of one's faith community). The items thereafter were numbered one less with a total of 22. (Supplementary file 1)

The pre-final version was piloted among 27 palliated cancer patients to assess the clarity of language and easiness of understanding the items included. Furthermore, we intended to ensure adequate internal consistency of the questionnaire. As a result of this fulfilled all requirements the final Sinhala version of SNAP (S-SNAP) was adopted for the main study. For the main validation study, considering 10 subjects for one item in the questionnaire and an additional 10% to compensate for attrition, non-respondence, and incomplete responses, the minimum sample size was considered as 250 subjects. The S-SNAP questionnaire was administered among 267 patients with advanced malignancies undergoing palliative care at Apeksha Hospital, Maharagama (the premier cancer hospital in Sri Lanka), and cancer units of Teaching Hospitals of Rathnapura and Colombo South. The questionnaire was administered by a trained interviewer after obtaining informed written consent. The Karnofsky Performance Scale and the Sinhala version of the Barthel index were also used during data collection [52, 53].

The internal consistency and item-total correlations of the 22-item S-SNAP were assessed to determine the reliability of the questionnaire. There are no validated scales to assess the spiritual needs of cancer patients in Sri Lanka. This is a limitation of the study in assessing criterion validity. For the Factor analysis, Varimax with Keiser normalization was used as the rotation method

and Kaiser-Meyer-Olkin test (KMO) and Bartlett's test of sphericity were used to determine the adequacy of the sample and correlations between items, respectively. The number of factors was determined by the Scree plot, the percentage of variance explained by each component, and the number of Eigen values over 01 (Kaiser-Guttman rule).

Ethical approval for the study (ERC/FOM-SUSL/L 01-12-22) was obtained from the Ethics Review Committee of the Faculty of Medicine, Sabaragamuwa University of Sri Lanka and the study was performed adhered to the ethical standards stated in the Declaration of Helsinki protocols [14].

Results

In the pilot study, item-total correlation the item-total correlation ranged between 0.4 and 0.78 indicative of a high measurement reliability. Furthermore, the overall Cronbach's alpha of S-SNAP was 0.92 demonstrating excellent internal consistency. Thus the translated and piloted study tool was recruited for the study proper.

The mean (SD) age of subjects was 63.2 (11.4) years. The demographic details of the subjects are shown in Table 1. The total S-SNAP score ranged from 22 to 88 and the overall Cronbach's alpha was 0.94. The item-total correlations varied from 0.26 to 0.87. (Table 2)

The total S-SNAP score showed inverse correlations with age (r=-0.38, p=0.035), Charlson Comorbidity Index (r=-0.48, p=0.043) and Barthel Index (r=-0.44, p<0.05) while a positive correlation was seen with Karnofsky performance status scale (r=0.6, p<0.05). KMO value of 0.92 (p=<0.001) for Bartlett's test indicated adequate sampling and non-linearity of factors. The scree plot (Fig. 1) showed a four-factor structure explaining 76% variation. Meaning of life and relationship with a supernatural being and religious rituals are loaded as 2 different factors. Worries, fears and forgiveness are grouped as the third factor while relaxation, coping and sharing feelings are loaded separately. (Table 3)

Discussion and conclusion

Spirituality is an important domain in palliative care provision with a holistic approach. Patients utilize religious beliefs and understanding to endure the agony of their illness [54, 55]. Those with higher levels of optimism, self-esteem, and life satisfaction show higher levels of spiritual orientation [56]. Cross-sectional and longitudinal studies reveal that religious coping has been predictive of better mental health and physical health of individuals, after controlling for the effects of sociodemographic variables and nonreligious coping measures. However, less attention has been paid to determining the type of religious coping, positive or negative, that may differentially affect health outcomes. Positive religious coping methods, such as prayer and benevolent religious appraisals of negative situations, reflect the perception of a secure relationship with God, a belief in a benevolent purpose to life, and a sense of connectedness with a religious community. In contrast, negative religious coping methods, such as attributions of situations to a punishing God and feelings of abandonment by God, reflect a struggle that grows out of a perception of a tenuous relationship with God, a more ominous view of life, and a sense of disconnectedness with a religious community [57, 58].

Spiritual well-being (SWB) relates to inner peace, purpose in life, and nexus to a greater substance than oneself which provides strength and comfort, especially in adversity [59]. The connection between SWB and optimism is facilitated as a sense of hope and meaning facilitates patients to remain positive. A study by Wedani et al. demonstrated SWB and overall subjective well-being had a positive correlation of r^2 of 0.982 (p<0.001) among patients with cancer [60]. There is also a significant correlation between SWB influencing a positive outlook on life in chronic illnesses such as diabetes mellitus as shown by Faghani et al. leading to an optimistic approach [61].

Our study shows that the S-SNAP has a high Cronbach's alpha value demonstrating satisfactory internal consistency with adequate reliability. The item-total correlations confirm the positive contribution made by the individual items to the performance of the questionnaire. The questionnaire showed inverse correlations with age, comorbidity and activities of daily living while a positive correlation was seen between the questionnaire and the Karnofsky performance scale. These correlations were all significant (p<0.05).

The Cronbach alpha of 0.94 we observed is concordant with previous validations of the SNAP questionnaire. Cronbach alpha values of 0.95, 0.90, and 0.89 were observed during the validation of English, Brazilian Portuguese and Mandarin translations, respectively [46–48]. The average scores of psychological, spiritual and religious needs, however, varied somewhat between translations and this could, partly, be due to the diversity of social, cultural and religious beliefs of different populations or ethnicities. (Table 4)

Addressing the religious aspect in a palliative care plan is a well-accepted practice that reflects and projects success in coping with physical illnesses. A higher level of intrinsic religiousness predicts more rapid remission of depression, an association that is particularly strong in patients whose physical function is not improving [62, 63].

According to Monod et al., most of the instruments for spirituality assessment measure general spirituality and spiritual coping and only a few address spiritual needs and spiritual well-being [6]. The SNAP questionnaire, however, addresses the domains of psychological,

Table 1 Demographic characteristics of participants in the study

Variable	
Mean (SD) age (Years)	63.2 (11.4)
Male	100 (40%)
Female	150 (60%)
Level of Education of Caregiver	
Never attended formal school but are literate	4 (1.6%)
Primary education	50 (20%)
General Certificate of Education - Ordinary Level examination	71 (28.4%)
General Certificate of Education - Advanced Level examination	85 (34%)
Vocational training	24 (9.6%)
University level	16 (6.4%)
Monthly Household Earnings (United States Dollars)	
< 50	12 (4.8%)
50–100	26 (10.4%)
100–250	85 (34.0%)
250–500	126 (50.4%)
> 500	1 (0.4%)
Type of Malignancy	
Oral & Lingual	3 (1.2%)
Nasopharyngeal	7 (2.8%)
Laryngeal	2 (0.8%)
Bronchial	17 (6.8%)
Gastro-oesophageal	15 (6%)
Colorectal	55 (22%)
Hepatocellular	11 (4.4%)
Biliary	14 (5.6%)
Urological (including prostate & bladder)	22 (8.8%)
Haematological (leukaemia, lymphoma, multiple myeloma)	56 (22.4%)
Breast	27 (10.8%)
Gynaecological	7 (2.8%)
Penile and testicular	2 (0.8%)
Primary Cerebral	5 (2%)
Primary Bone	7 (2.8%)
Barthel Index Score of Patients	
Total dependency (≤ 20)	27 (10.8%)
Severe dependency (21–60)	39 (15.6%)
Moderate dependency (61–90)	90 (36%)
Mild dependency (91–99)	86 (34.4%)
Independence (100)	8 (3.2%)
Karnofsky Performance Status of Patients	
No complaints; no evidence of disease (100%)	10 (4%)
Able to carry on normal activity; minor signs or symptoms of disease (90%)	39 (15.6%)
Normal activity with effort; some signs or symptoms of disease (80%)	82 (32.8%)
Cares for self; unable to carry on normal activity or to do active work (70%)	55 (22%)
Requires occasional assistance but is able to care for most personal needs (60%)	25 (10%)
Requires considerable assistance and frequent medical care (50%)	19 (7.6%)
Disabled; requires special care and assistance (40%)	8 (3.2%)
Severely disabled; hospital admission indicated although death not imminent (30%)	10 (4%)
Very sick; hospital admission necessary; active supportive treatment necessary (20%)	2 (0.8%)
Moribund; fatal processes progressing rapidly (10%)	0 (0%)
Dead (0%)	0 (0%)

Table 2 Corrected item-total correlations of the S-SNAP

Item	Corrected item-total correlation	Cronbach's alpha if the item is deleted
Psychosocial needs	0.54	0.94
1. Getting in touch with other patients with similar illnesses		
2. Relaxation or stress management	0.73	0.93
3. Learning to cope with feelings of sadness	0.72	0.94
4. Sharing thoughts and feelings with one's close people	0.75	0.94
5. Worries one has about one's family	0.35	0.94
Spiritual needs	0.81	0.93
6. Finding meaning in one's experience of illness?		
7. Finding hope	0.76	0.94
8. Overcoming fears	0.57	0.93
9. Personal meditation or prayer practices	0.82	0.93
10. One's relationship with God or something beyond oneself	0.85	0.93
11. Becoming closer to a community that shares one's spiritual beliefs	0.87	0.93
12. Coping with any suffering one may be experiencing	0.78	0.94
13. The meaning and purpose of human life	0.75	0.94
14. Death and dying	0.53	0.94
15. Finding peace of mind	0.82	0.94
16. Resolving old disputes, hurts, or resentments among family or friends	0.53	0.94
17. Finding forgiveness	0.54	0.94
18. Making decisions about one's medical treatment that are in keeping with your spiritual or religious beliefs?	0.26	0.94
Religious needs	0.61	0.94
19. Visits from clergy of one's faith community?		
20. Visits from fellow members of one's faith community?	0.59	0.94
21. Religious rituals such as chant, prayer, lighting candles or incense, anointing or communion?	0.53	0.94
22. Someone to bring you spiritual texts such as the Dhammapada, Bhagavad Gita, Bible, Qur'an and Pirith Books?	0.60	0.94

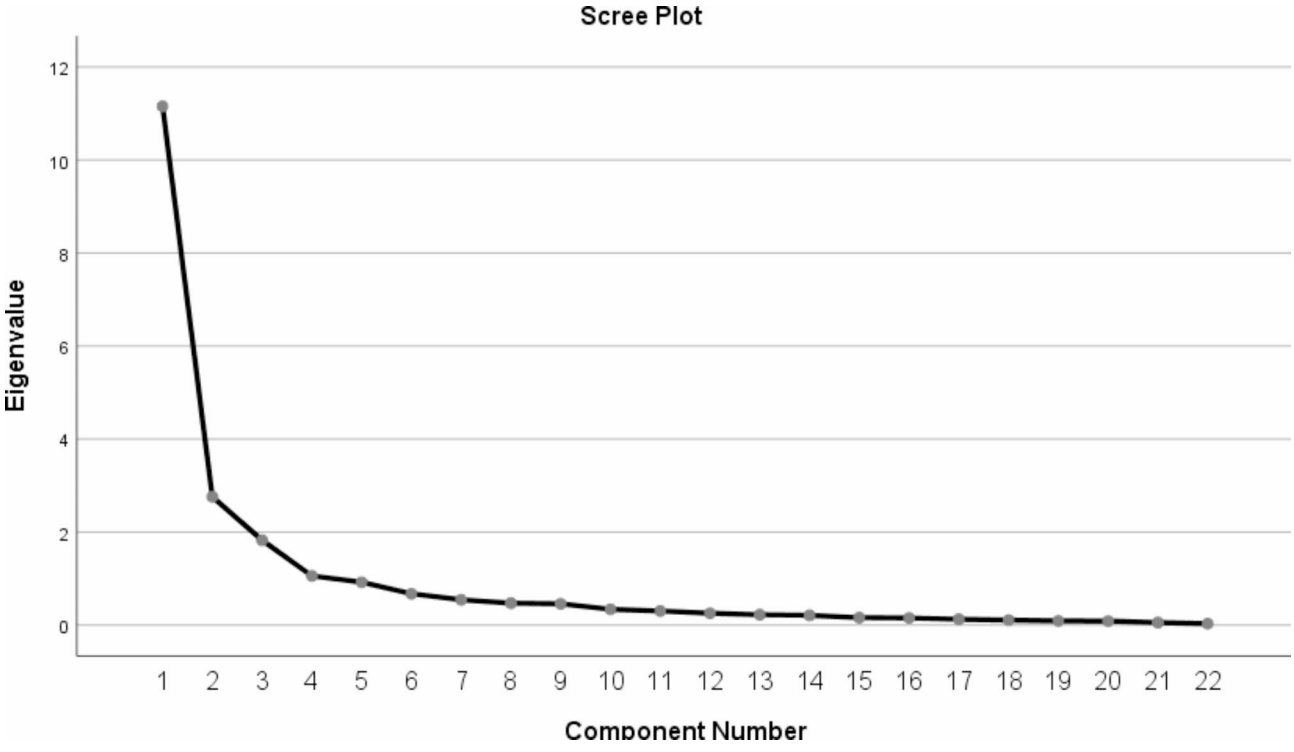

Fig. 1 The scree plot

Table 3 Rotated component matrix showing factor loading

Item number	Factor 1	Factor 2	Factor 3	Factor 4
Psychosocial needs				
1. Getting in touch with other patients with similar illnesses				0.781
2. Relaxation or stress management				0.701
3. Learning to cope with feelings of sadness				
4. Sharing thoughts and feelings with one's close people				0.751
5. Worries one has about one's family				0.625
Spiritual needs			0.687	
6. Finding meaning in one's experience of illness?				
7. Finding hope				
8. Overcoming fears	0.76			
9. Personal meditation or prayer practices				
10. One's relationship with God or something beyond oneself	0.774		0.685	
11. Becoming closer to a community that shares one's spiritual beliefs	0.798			
12. Coping with any suffering one may be experiencing				
13. The meaning and purpose of human life				
14. Death and dying				
15. Finding peace of mind				
16. Resolving old disputes, hurts, or resentments among family or friends	0.784			
17. Finding forgiveness			0.679	
18. Making decisions about one's medical treatment that are in keeping with your spiritual or religious beliefs?	0.705	0.773	0.851	
Religious needs	0.772			
19. Visits from clergy of one's faith community?			0.829	
20. Visits from fellow members of one's faith community?		0.840	0.449	
21. Religious rituals such as chant, prayer, lighting candles or incense, anointing, or communion?				
22. Someone to bring you spiritual texts such as the Dhammapada, Bhagavad Gita, Bible, Qur'an, and Pirith Books?		0.920		
		0.901		

Table 4 Comparison of average scores of various domains and the internal consistency of SNAP in validated translations

	English	Mandarin	Brazilian	Sinhala
Psychological Needs	12.1	13.7	16.3	13.1
Spiritual Needs	30.1	28.5	40.57	35.6
Religious Needs	9.5	8.3	15.53	10.2
Internal Consistency (Cronbach alpha coefficient)	0.95	0.85	0.90	0.94

spiritual and religious needs robustly. Moreover, this tool assesses the current state of spirituality, which is more relevant in designing a care plan and spiritual interventions.

The study demonstrates that the validated S-SNAP is suitable for assessment the spiritual needs of patients with malignancies in Sri Lanka. Such needs are currently not assessed or included in the care plan, mostly due to the unawareness of this crucial domain in palliative care. Furthermore, the lack of a valid and reliable questionnaire adds to this care gap. Busy clinics with overcrowding and time constraints may limit the utilization of this questionnaire in real clinical settings We, however, found that the S-SNAP requires only 4.5 min for the full completion and we believe that this questionnaire has the potential to be incorporated into the palliative care plan of those with malignancies in Sri Lanka. Implementation of this tool to clinical practice will provide a conducive opportunity for health care professionals to assess the spiritual health issues. This along with implementation of training in knowledge, skills and attitudes would ensure provision of a humanistic and holistic care for patients [29]. Undergraduate and postgraduate medical curricula along with in-service training should integrate teaching-learning activities in such aspects as clear outcome-based education.

The SNAP questionnaire has originated from Western society which uses English as the first language and has social, cultural, and religious beliefs and needs different from those in Sri Lanka, Although we consider this to be a limitation, we assessed the content validity and face validity of the questionnaire with a panel of local experts

with interests in spiritual health and holistic care in a focus group discussion. This involved the removal and consolidation of recurring themes as items that do not apply to our setting. As an example visitation of clergy and hospital chaplain were found to be similar. Another limitation of this study is the absence of an existing tool to test the criterion validity of spiritual needs in the Sinhala language. This questionnaire was piloted three times to ensure face validity, content validity, and semantic equivalence.

Conclusion

When dealing with patients under palliation, the S-SNAP provides a reliable and valid tool to assess their unmet and unrecognized spiritual needs Despite the high patient turnover in clinical settings, the authors believe that this brief questionnaire can be incorporated into the care plan of such patients.

Abbreviations

KMO	Kaiser-Meyer-Olkin test
SD	Standard Deviation
SNAP	Spiritual Needs Assessment for Patients
S	SNAP-Sinhala version of Spiritual Needs Assessment for Patients
SpNQ	Spiritual Needs Questionnaire
SWBQ	Spiritual Wellbeing Questionnaire
SWBS	Spiritual Well-Being Scale
WHO	World Health Organisation `

Supplementary Information

The online version contains supplementary material available at https://doi.org/10.1186/s12904-024-01579-0.

Supplementary Material 1

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Author contributions

UR, SS, SP and SL have been involved in the design, data collection, analysis and writing of this study.

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Data availability

No datasets were generated or analysed during the current study.

Declarations

Ethics approval and consent to participate

Ethics approval was obtained from the Ethics Review Committee of the Faculty of Medicine, Sabaragamuwa University of Sri Lanka. Written informed consent was obtained from all volunteers for participation in this study after providing information verbally and through an information sheet. The study was performed and adhered to the ethical standards stated in the Declaration of Helsinki.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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