Received: May 2023 Accepted: June 2023 DOI: https://doi.org/10.58262/ks.v11i02.168

# Validation of the Vietnamese Version of the EORTC QLQ-SWB32: A Measure of Spiritual Well-Being in Cancer Patients

Huong Pham Thi Thu1\*, Dau Vu Van2, Tam Nguyen Ba3, Huong Nguyen Thi Thanh4, Ngoc Pham Thi Bich5, Nga Nguyen Thi Bich6

## Abstract

Background: The study was conducted to validate the Vietnamese version of the European Quality of Life Questionnaire 32 in the Vietnamese community with cancer. Methods: The descriptive design was used to collect data of 367 cancer patients with cancer. The data collection was conducted in four hospitals in Vietnam including the National Lung Hospital, the Oncology Department of Nam Dinh General Hospital, Nghe an Oncology Hospital (49 patients) and the Oncology Department of Lam Dong General Hospital. Participants were hospitalized patients between November 2021 and April 2022. Results: Among types of cancers, the lung cancer accounted the highest prevalence rate (83.4%). The analysis of confirmatory factor was used to confirm the construct validity. The results indicated that the culturally appropriate model fit for Vietnamese individuals with cancer, as indicated by the Chi-Square / df value of 2.330, goodness-of-fit index of 0.896, comparative fit index of 0.890, and root mean square error of approximation of 0.060. The instrument demonstrated good reliability, with Cronbach's alpha ranging from 0.731 to 0.808 and MacDonald's omega ranging from 0.722 to 0.804. Conclusion: The EORTC QLQ-SWB32 questionnaire was reliable and suitable using for Vietnamese population for assessing the quality of life of cancer patients. The Vietnamese version of the EORTC QLQ-SWB32 can be used as a valuable tool in measuring and addressing the spiritual well-being of cancer patients, even in the face of a potentially fatal illness.

**Keywords:** OLO-SWB32, cancer, spiritual well-being, validation, measurement

## Introduction

Cancer is a malignant disease characterized by uncontrolled cell growth caused by exposure to carcinogenic agents, disregarding the body's control mechanisms <sup>1</sup>. While cancer treatments have improved significantly, the long-term nature of these treatments has shifted the focus towards a more holistic approach, encompassing Quality of Life (QoL). QoL is a comprehensive measure of an individual's physical, mental, and spiritual well-being, taking into account their cultural context, values, goals, desires, needs, standards, and concerns <sup>2, 3</sup>. Focus on understanding and quantifying the spiritual aspect of well-being in the context of cancer care, along with recognizing the significance of spirital well-being, researchers are also interested in exploring questions regarding the conceptualization and developing measurements <sup>4</sup>.In the early 1970s, according to the National Interfaith Coalition on Aging, the definition of spiritual well-being emphasizes the importance of various connections, including those with a higher power, oneself, the community, and the surrounding environment, in fostering and embracing a sense of completeness(Chatterjee, 2017).

<sup>1</sup> Faculty of Nursing, PHENIKAA University, Hanoi 12116, Vietnam. Email: huong-phamthithu@phenikaa-uni.edu.vn ORCID ID: https://orcid.org/0000-0001-9731-2390

<sup>2</sup> Faculty of Nursing, Namdinh University of Nursing, Namdinh city, Vietnam

<sup>3</sup> Faculty of Nursing, PHENIKAA University, Hanoi 12116, Vietnam

<sup>4</sup> Faculty of Nursing, Namdinh University of Nursing, Namdinh city, Vietnam

<sup>5</sup> Faculty of Nursing, Namdinh University of Nursing, Namdinh city, Vietnam

<sup>6</sup> Nursing Department, National Lung Cancer, Hanoi, Vietnam

While this definition may not encompass the entirety of spiritual well-being and may be somewhat imprecise, it does involve both religious and social-psychological aspects. Then, Ellison's review 5 identified two dimensions of spiritual well-being: religious well-being and existential well-being with a represented measurement. However, over the past 20 years, a literature review by Vivat et al. (2013) identified three dimensions: relationships with self and others, existential issues, and specifically religious and/or spiritual issues. These dimensions were selected as the hypothesized dimensions of spiritual well-being for the development of the EORTC QLQ-SWB36 measurement <sup>6</sup>, the first cross-cultural version (Rocha, Manica, Noronha, Ramos, & Klassen, 2019).

Considering cultural differences is crucial when using a measurement instrument, including assessing its appropriateness for culturally diverse communities, content acceptability, and participant understanding of the author's intentions <sup>7</sup>. To address these concerns, researchers must evaluate the questionnaire's validity and reliability. Among the validation studies of the EORTC QLQ-SWB32, Vivat et al. <sup>8</sup> found the results on the patients with cancer, while another study targeted a curative oncology group with Croatian participants <sup>9</sup>. The primary objective of the research was to validate of the EORTC QLQ-SWB32 questionnaire in the Vietnamese population in concerning of the spiritual well-being of patients with cancer (Vance & Eads, 2014). The study did not distinguish between patients receiving curative or palliative treatment, aiming to encompass both groups. Additionally, the study also explored cultural validation to ensure the questionnaire's appropriateness and relevance within the Vietnamese cultural context (Todorov, Mitrev, & Penev, 2020).

#### Material and Methods

# Study Design

The cross-sectional correlation was used to conduct the study.

Sample: The research comprised a sample of 367 patients who were gotten treatments from four hospitals situated in both the North and Central regions of Vietnam. The participants were drawn from the National Lung Hospital (150 patients) and the Oncology Department of Nam Dinh General Hospital (110 patients) in the North region. In addition, patients from the Nghe an Oncology Hospital (49 patients) and the Oncology Department of Lam Dong General Hospital (58 patients) in the Central region were also included in the study. Eligible participants were individuals aged 18 years or older, capable of communicating in Vietnamese, and who willingly consented to participate. Patients with cognitive and mental disorders were excluded from the study (MOUSAVI-SABET, VATANDOUST, FATEMI, & EAGDERI, 2016).

Based on empirical guidelines, a sample size of 367 inpatients was deemed sufficient for factor analysis, with a minimum of three to ten patients per item <sup>11, 12</sup>.

### Variable Interpretation

Phase 1: Translation and adaptation/ Cross-Cultural Adaptation of EORTC QLQ-SWB32

The Vietnamese version of the SWB32 questionnaire was translated following the guidelines provided by the European Organization for Research and Treatment of Cancer Quality of Life. To ensure accurate translation, the forward and backward translation process involved four English teachers in the universities. Additionally, three experts were specialized doctors and nurses.

They had long experience in treatment and taking care of the patients with cancer, assessed the cultural appropriateness and content validity of the questionnaire. This rigorous process ensured that the translation captured the intended meaning and maintained cultural relevance for the target population.

In order to gather feedback on the translated questionnaire, the study conducted interviews with ten

eligible patients. The interviews aimed to evaluate the difficulties, identify any misunderstandings, and gather comments for the items of the SWB32 questionnaire. Based on the feedback received, adjustments were made to the questionnaire during the evaluation and translation process. The objective was to preserve the originality of the questionnaire while ensuring its suitability in the context of Vietnamese cultural factors. Notably, considering the religious affiliation of Vietnamese people, adjustments were made to items 22, 23, and 26 to reflect the inclusion of Buddhism as one of the main religions in Vietnam. By incorporating these adjustments, the study sought to improve the validity and relevance of the questionnaire for the target population.

During the translation process, participants expressed concerns regarding the item "I believe in life after death," implying that the word "death" might be inappropriate. As a result, item 30 was modified to "I believe in the afterlife."

Participants also sought clarification regarding the meaning of "spiritual well-being". Due to the challenges in finding an exact translation in Vietnamese, the research team clarified that the phrase refers to the capacity to engage in various activities. These activities allow individuals to express the meaning and purpose of their lives.

Several concepts had an adaption when being translated into Vietnamese, such as "peace" (Item 2) - translated as "bình yên," "troubled" (Item 5) - translated as "buồn bã và lo lắng," "talk about my feelings" (Item 10) - translated as "chia sẻ cảm giác của mình," and "fulfilling" (Item 14) - translated as "toại nguyện". Item 27 required special attention, as it implied that patients believed they would be remembered after death. The researcher adapted this item to Vietnamese, resulting in the translation: "Những lời nói, hành động của tôi sẽ sống mãi trong tâm trí của mọi người," which means "My words and actions will live forever in people's minds."

In Phase 2, the validated SWB32 instrument in Vietnamese was used to collect data from eligible patients. The validation process involved statistical analysis, including confirmatory factor analysis (CFA) to assess the structural validity of the AMOS version 20 was utilized to adjust the model fit, with modification indices used to achieve an acceptable goodness-of-fit index (GFI) >0.8 13. The internal consistency of the instrument and its subscales were evaluated using Cronbach's alpha coefficient and McDonald's omega 14. Data collection took place from November 2021 to April 2022. The survey questionnaire was divided into two parts. Part 1 collected the participants' characteristics. Part 2 consisted of the SWB32 questionnaire, which comprised 32 items. These items were further categorized into four scoring scales: Relationship with Others, Relationship with Self, Relationship with Someone or Something Greater, and Existential Furthermore, the instrument included an item regarding the connection with Buddha (Relationship with Buddha (God, Allah) (RG)). However, this item was not applicable to participants who responded "not at all" to both questions 22 and 23. Additionally, certain items (4, 7, 22, 23, 24, 25, 28, and 29) were not scored but instead aimed to explore their experience regarding to a health status and foster discussions between study participants 8. Along with the SPSS version 27, descriptive analysis was used for data analysis. The statistical significance level was set at p < 0.05. Ethical considerations were taken into account throughout the study. The Institutional Review Board of the University provided ethical approval (No: 249/2021 /YTCC-HD3). All participants were aware of their confidentiality right and ability to back out of the research at any moment and provided their informed consent (Zhang, X., & Li, G 2022).

# Results

#### The Participants' General Information

Among the investigated age groups, individuals aged 56-65 were the most predominant (43.1%), and there was a higher representation of male participants (73.8%) compared to female participants (26.2%). A significant proportion of the research group had an education level of high school or

secondary school (75%). There was about 3% of the patients reported being single, widowed, or divorced. Farmers accounted for 40.1% of the patients included in this research. Approximately 90% of the participants reported that they had no religious affiliation.

Distribution of cancer stages and types: Participants with stages third and fourth of cancer constituted approximately 93% of the total sample. Types of cancer were various including lung, digestive, neck, urinary, respectively (see Table 1).

Table 1: Participants' general information

		N (367)	%
	<55	86	23.4
Age group (years)	56–65	158	43.1
	>65	123	33.5
Gender	Male	271	73.8
	Female	96	26.2
	Primary school	14	3.8
	Secondary school	139	37.9
Education level	High school	136	37.1
	College and above	73	19.9
	Other	5	1.4
	Single	5	1.4
Marital status	Married	356	97.0
	Divorced	2	0.5
	Widow	4	1.1
	Worker	41	11.2
	Farmer	147	40.1
Occupation	Official	17	4.6
	Housewife	2	0.5
	Businessman	3	0.8
	Retired	97	26.4
	Other	60	16.3
	Buddhist	27	7.4
Religion	Christian	10	2.7
	None	328	89.4
	Other	2	0.5
	1	3	.8
	2	21	5.7
Cancer state	3	81	22.1
	4	261	71.1
	Missing	1	0.3
	Head and neck	5	1.4
	Other	6	1.6
Cancer type	Lung	306	83.4
	Urology	5	1.4
	Digestive	38	10.4
	Breast. gynecological	7	1.9

## Reliability and Construct Validity

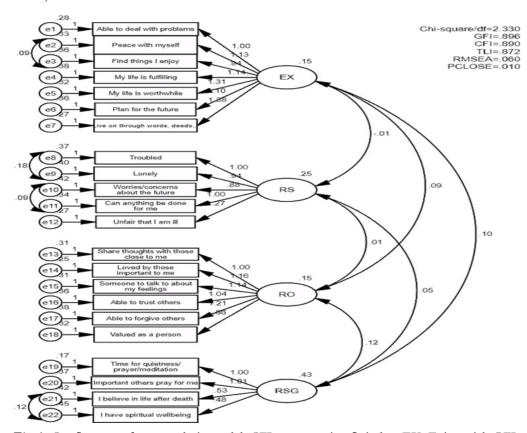
Table 2 presents the reliability of the SWB Vietnamese version components. The SWB32 questionnaire Kurdish Studies

demonstrated good internal consistency, with Cronbach's alpha and McDonald's omega coefficients of 0.815 and 0.776 for the overall scale, respectively, and ranging from 0.731 to 0.808 and 0.722 to 0.804 for the subscales.

**Table 2:** Summary and analysis of the results regarding the specificity of the questionnaire.

Scale	Number of items	Cronbach's alpha	MacDonald's omega	Mean	Range
Relationship with Others (RO)	6	0.764	0.763	39	16.67-100.00
Relationship with Self (RS)	5	0.808	0.800	48.32	0.00- 100.00
Relationship with Someone or Something Greater (RSG)	4	0.731	0.722	47.32	0.00- 100.00
Existential [5]	7	0.808	0.804	49.31	0.00-100.00
Relationship with Buddha (God, Allah) (RG)	1	-		33.33	0.00- 100.00
Global SWB	1	-		50.00	0.00- 100.00
Overall		0.815		0.776	

To assess the construct validity, confirmatory factor analysis was conducted using AMOS software. The fit indices considered acceptable were a Chi-Square/df ratio of <5.0, root mean square error of approximation (RMSEA)  $\le 0.06$ , and a goodness-of-fit index (GFI) > 0.8 <sup>13</sup>. The representation in Fig. 1 demonstrated the results as follows: Chi-Square/df = 2.330, GFI = 0.896, comparative fit index (CFI) = 0.890, and RMSEA = 0.06.



**Fig 1:** Confirmatory factor analysis model, CFI, comparative fit index; EX, Existential; GFI, goodness- of-fit index; PCLOSE, name of one p-value, which is used to test close fit; RMSEA, root mean squareerror of approximation; RO, Relationship with Others; RS, Relationship with Self; RSG, Relationship with Someone or Something Greater.

#### Discussion

The EORTC QLQ-SWB32 instrument was widely applied in various context to evaluate spiritual well-being (SWB) in the patients with cancer and shown positive effects. The study results in Vietnam, we explored the cultural, educational, religious, and traditional value differences among participants. Comprehending the role of spirituality and SWB in curative and palliative care is crucial for delivering holistic and culturally appropriate patient-centered care, as emphasized by Feng et al. <sup>15</sup>.

This research aimed to evaluate insights into the reliability and validity of the questionnaire in the Vietnamese context, contributing to the understanding of spiritual well-being among cancer patients in Vietnam. The survey included 367 patients with cancer, with the majority having lung cancer (83.4%). The other prevalent cancer types among the participants were digestive system cancer (10.4%), urinary system cancer (1.4%), head and neck cancer (1.4%), and breast and gynecological cancers (1.9%). Stage 4 cancer were 71.1% of the patients. The majority of the participants were male accounting for 73.8%. The disease was primarily observed in individuals over the age of 55 (76.6%).

Reliability analysis results demonstrated that all scales had Cronbach's alpha coefficients were above the acceptance level from 0.73 to 0.80. These results were consistent with international studies 8 and other language versions, such as the Chinese version for gynecological cancer patients 16 and Goyarrola et al 17. However, our reliability values were higher compared to the study conducted by Dabo et al. 18. The measurement proved to be easily understandable and accepted by patients, facilitating its wide application in quantifying SWB in Vietnam. These results were consistent with other research conducted worldwide 8, 18. In terms of construct validity, the majority of the scoring questions of the EORTC QLQ-SWB32 questionnaire in Vietnamese were organized into the Relationship with Others, Relationship with Self, Relationship with Someone or Something Greater, and Existential group, which closely resembled the structure of the original questionnaire. However, there was a notable distinction with item 27, "the words and actions will live forever in people's minds," as it exhibited the highest factor loading within the EX group. This finding suggests that this specific item strongly reflects the existential aspect of spiritual wellbeing among the participants in this study. Our results differed from other studies 8, 19 due to the diverse characteristics of our research participants. These findings further supported the hypothesis of the study that the Vietnamese population discomfort with the concept of death might make them find difficulty to accept to certain aspects 20. Oriental cultural always special issue, mysterious and need for discovery. The concept of existential well-being, as defined by Ellison 5, encompasses understanding one's purpose, identity, and sense of belonging. Additionally, when cancer patients express a desire for "wanting the best for their children" (10), they often strive to maintain their health, adopt an optimistic attitude, and wear a happy smile in the presence of their loved ones. This is done in order to create positive memories for their family members and leave a lasting impression. Although without any discussion from Goyarrola, Lipsanen <sup>17</sup>, the appearance of item 27 in the subscale of EX can define the change position of this is correct and sufficient. Religion played a notable role in our study, differing from previous research. According to reports, Buddhism and Catholicism are followed by 4.8% and 6.1% of the Vietnamese population, respectively <sup>21</sup>. In our study, 5.1% identified as Buddhists and 2.8% as Christians, while a significant proportion (89.4%) identified as being non-religious. Among the 328 participants who mentioned not having a religion, many still held beliefs in someone or something greater than themselves, similar to the findings of Ku et al. 20. Vietnamese individuals may not consider themselves Buddhists or Christians, but they often go to pagodas for their peace of mind. Additionally, Vietnamese families, apart from Catholics, typically have an altar for grandparents and ancestors, reflecting the custom of ancestor worship 22. The strong relationships among RO, RSG, and EX (r = 0.388 and 0.448, p < 0.001) reaffirmed the Vietnamese people's close-knit community and their emphasis on maintaining good relationships and leaving a positive impression on others, not only for themselves but also for future generations, as reflected in the results of Table 3.

**Table 3:** Correlation among scales

Scale/item	RO	RS	RSG	EX	RG	GSW
s						
Relationship with Others (RO)						
Relationship with Self (RS)	0.055					
Relationship with Someone or Something Greater (RSG)	0.388***	0.094				
Existential (EX)	0.448***	-0.058	0.347***			
Relationship with Buddha (God, Allah) (RG)	0.163	0.042	0.295**	0.091		
Global SWG (GSW)	0.420	-0.030	0.077	0.04	0.117	

Note. \*, \*\* and \*\*\* are significant at the statistical levels of 5%, 1% and 0,1% respectively. CFA's results with a Chi-Square/df ratio of 2.330, GFI = 0.896, CFI = 0.890, and RMSEA = 0.060 presented the high construct validity of the questionnaire in assessing the quality of life among Vietnamese individuals. Although the fit was not very high, the model proved to be a acceptable questionnaire for measuring SWB in patients with cancer, consistent with the original four-factor structure 8.

# Study Strengths and Limitations

This study had several strengths. Firstly, it focused on a homogeneous group of participants, representing the common characteristics of Vietnamese individuals across multiple regions. The questionnaire used in the study was carefully translated and adapted to the Vietnamese context, ensuringeasy of understanding and response. The reliability of the questionnaire was found to be high, comparable to other versions used worldwide. As a result, the instrument can be effectively utilized for assessing spiritual well-being (SWB) in Vietnam and neighbors with alike cultural backgrounds and education levels. However, there were certain limitations in the research. The sample size was small, which may make the generalization of the study results. Moreover, the study predominantly included lung cancer patients, indicating the need for future research to encompass a broader range of cancer types. Additionally, the assessment primarily focused on inpatient treatment settings, leading to a majority of participants being at advanced stages (3 and 4) of the disease. To gain a deeply understanding of SWB, the future extended research to include patients at earlier stages (1 and 2). However, conducting studies with these patient groups poses challenges in Vietnam due to the lack of mandatory health check-ups and low awareness, resulting in a significant proportion of cancer patients being diagnosed at advanced stages.

#### Conclusions

The psychometric validation of the SWB questionnaire Vietnamese version were assessed on a sample of Vietnamese patients with cancer, revealing cultural distinctions in the CFA structure. The questionnaire demonstrated high reliability, as indicated by an acceptable Cronbach's alpha and McDonald's omega level. Vietnamese cancer patients found the scales to be easily understandable and answerable. The Vietnamese SWB scale exhibited strong reliability and has been widely adopted to evaluate the subjective well-being of cancer patients in Vietnam. From a clinical perspective, this instrument can assist in assessing and identifying cancer patients who may be experiencing low levels of spiritual well- being. Consequently, appropriate interventions can be developed to enhance the psychological health of patients throughout their hospitalization.

# Acknowledgements

The authors thank all participants who greatly contributed to this study:

- Thanks to Phenikaa University for providing part of the funding to carry out the research.
- Thanks to the patients with cancer for completing the survey.

Conflict of Interest statement: There was no conflict of interest.

**Funding Statement:** The authors thank Phenikaa University (Vietnam) for financial support to carryout this study.

## References

- Chatterjee, T. (2017). Patenting genomics innovations: post-myriad challenges and possibilities. International Journal of Advanced Research (IJAR), 5(2), 769-773.
- MOUSAVI-SABET, H., VATANDOUST, S., FATEMI, Y., & EAGDERI, S. (2016). Tashan Cave a new cave fish locality for Iran; and Garra tashanensis, a new blind species from the Tigris River drainage (Teleostei: Cyprinidae). FishTaxa, 1(3), 133-148.
- Rocha, H. Z., Manica, G., Noronha, L. d., Ramos, E. A., & Klassen, G. (2019). Análise comparativa do perfil histopatológico e epidemiológico dos carcinomas ductal e lobular da mama diagnosticados no Hospital de Clínicas da Universidade Federal do Paraná entre 2008 e 2013. Jornal Brasileiro de Patologia e Medicina Laboratorial, 55, 69-86.
- Todorov, T., Mitrev, R., & Penev, I. (2020). Force analysis and kinematic optimization of a fluid valve driven by shape memory alloys. Reports in Mechanical Engineering, 1(1), 61-76.
- Vance, J., & Eads, C. (2014). Sensitivity Analysis of a Three-Species Nonlinear Response Omnivory Model with Predator Stage Structure. Letters in Biomathematics, 1(1), 77-86.
- Weir HK, Thompson TD, Soman A, Møller B and Leadbetter S. The past, present, and future of cancer incidence in the United States: 1975 through 2020. *Cancer*. 2020; 121: 1827-37.
- Steinhauser KE, Alexander SC, Byock IR, George LK, Olsen MK and Tulsky JA. Do preparation andlife completion discussions improve functioning and quality of life in seriously ill patients? Pilot randomized control trial. *J Palliat Med.* 2008; 11: 1234-40.
- Whoqol Group. Development of the World Health Organization WHOQOL-bref quality of life assessment. The WHOQOL Group. *Psychological Medicine*. 1998; 28: 551–8.
- Vivat B, Young TE, Winstanley J, et al. Development and validation of a cross-cultural EORTC measure of spiritual well-being (SWB) for palliative care patients with cancer. *BMJ Supportive and PalliativeCare*. 2014; 4: 246.
- Ellison CW. Spiritual well-being conceptualization and measurement. *Journal of Psychology and Theology*. 1983; 11: 330-8.
- Vivat B, Young T, Efficace F, et al. Cross-cultural development of the EORTC QLQ-SWB36: a standalone measure of spiritual wellbeing for palliative care patients with cancer. *Palliat Med.* 2013; 27: 457-69.
- Vivat B. Measures of spiritual issues for palliative care patients: a literature review. *Palliative Medicine*. 2008; 22: 859-68.
- Vivat B, Young TE, Winstanley J, et al. The international phase 4 validation study of the EORTC QLQ-SWB32: A stand-alone measure of spiritual well-being for people receiving palliative care for cancer. *Eur J Cancer Care (Engl)*. 2017; 26.
- Doran N, Sanders PE, Bekman NM, et al. Mediating influences of negative affect and risk perceptionon the relationship between sensation seeking and adolescent cigarette smoking. *Nicotine Tob Res.* 2011; 13: 457-65.
- Labun E. Cultural discovery in nursing practice with Vietnamese clients. *Journal of Advanced Nursing*. 2001; 35: 874-81.
- Nunnally JC and Bernstein IH. Psychometric theory. New York: McGraw-Hill, 1994.

- MacCallum RC, Widaman KF, Zhang S and Hong S. Sample size in factor analysis. *Psychol Methods*. 1999; 4: 84–
- Doll WJ, Xia, W., Torkzadeh, G.: A confirmatory factor analysis of the end-user computing satisfaction instrument. *MIS Quarterly* 1994; 18: 357–69.
- McDonald RP. Test theory: A unified treatment. psychology press, 2013.
- Feng Y, Liu X, Lin T, et al. Exploring the relationship between spiritual well-being and death anxiety in patients with gynecological cancer: a cross-section study. *BMC Palliative Care*. 2021; 20: 1-10.
- Chen J, Feng Y, Zhang S, et al. Post-Traumatic Growth and Its Influencing Factors among Chinese Women with Gynecological Cancer: A Cross-section Study. 2022.
- Goyarrola R, Lipsanen J, Saarelainen SM, et al. Spiritual well-being correlates with quality of life of both cancer and non-cancer patients in palliative care further validation of EORTC QLQ-SWB32 in Finnish. *BMC Palliat Care*. 2023; 22: 33.
- Dabo I, Skocilic I, Vivat B, Belac-Lovasic I and Sorta-Bilajac Turina I. Spiritual Well-Being for Croatian Cancer Patients: Validation and Applicability of the Croatian Version of the EORTC QLQ-SWB32. *Int J Environ Res Public Health*. 2021; 18.
- Asgeirsdottir GH, Sigurdardottir V, Gunnarsdottir S, et al. Spiritual well-being and quality of life among Icelanders receiving palliative care: data from Icelandic pilot-testing of a provisional measure of spiritual well-being from the European Organisation for Research and Treatment of Cancer. Eur J Cancer Care (Engl). 2017; 26.
- Ku Y-L, Ha LTH, Kuo S-M and Chen S-M. Spiritual distress of patients living with cancer in Northern Vietnam. *International Journal of Palliative Nursing*. 2022; 28: 114-22.
- The number of followers of Buddhism remains at 4.6 million, ranking second in Vietnam! Giác ngô online2019.
- Van VH. Determine The Appearance And The Value System Of The Traditional Culture Of Vietnam Through The Worship Of Ancestors Belief Of Vietnamese People. *PSYCHOLOGY AND EDUCATION*. 2020; 57: 621-30.
- Zhang, X., & Li, G. (2022). Modernization of national governance system and Entrepreneurial Orientation for the use of information-sharing platform. Journal of Commercial Biotechnology, 27(1). https://doi.org/10.5912/jcb1083