

Translation and Validation of the Vietnamese Version of the Barriers Questionnaire II in Patients with Cancer

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ABSTRACT

Background: The Barriers Questionnaire II (BQII) was developed to assess barriers to effective pain management.

Objective: This study aims to translate and validate the BQII into Vietnamese.

Method: The Viet-BQII was evaluated for content validity and reliability by 6 experts and 30 patients with cancer. The content validity of the questionnaire was measured by Item - content validity index and Scale - content validity index; the test-retest reliability was measured using Intra-Class Correlation; the internal consistency of the scale items was assessed by calculating Cronbach's α value.

Results: The Viet - BQII had a content validity in each question that ranges from 0.83 to 1.0, the content value for the scale was 0.92, Cronbach's α was 0.89, and the test-retest reliability with ICC was 0.82 ($p < 0.001$).

Conclusions: The Viet-BQII ensures the validity and reliability for measuring patient barriers to pain management in patients with cancer in Vietnam.

KEYWORDS: Patient, questionnaire, reliability, barriers, cancer, validity.

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INTRODUCTION

Pain is a common and common symptom in cancer patients: Pain appears in 59% of patients undergoing treatment; 64% in patients with advanced, metastatic, and end-stage disease; 33% in patients after treatment; 53% of patients are at all stages of the disease; Among patients with pain, more than one-third classified their pain as moderate or severe. The overall rate of pain is over 50% in all types of cancer [20]. Although painkillers are highly effective, pain control remains a persistent problem in people with cancer. Uncontrolled cancer pain will negatively affect the patient's daily activities, psychology, severity of the disease, and quality of life [5],[16] the patient can even become exhausted and die [first]. Currently, there are many methods to treat cancer pain: Surgery, radiotherapy, chemotherapy, targeted therapy, and immunotherapy, but complete, long-term pain elimination is rarely achieved [19]. According to Lance McCracken, to effectively control pain, in addition to the treatment and care of medical staff, there is also the active participation of the patient. The patient's participation is even

more important as the outpatient treatment time increases. go up [14]. To do that, cancer patients need to have basic knowledge, attitudes, and skills about pain management. On the other hand, according to our research, the need for information on cancer patients is high (86.8%)[3]. Therefore, pain management education for cancer patients is essential. A systematic review study by Oldenmenge and colleagues (2018) on the effectiveness of educational interventions for pain control stated that self-medication of pain in cancer patients is one of the important outcomes. important to evaluate program effectiveness. The interventions were effective on pain management barriers in people with cancer. Patients are highly subjective barriers and include the personal nature of pain experience, lack of awareness of the importance of reporting pain, poor communication with healthcare professionals, and misconceptions about pain medication[8],[21]. One of the commonly used tools to measure patient barriers is the Barriers Questionnaire II.

The Barriers Questionnaire II (BQII) is a 27-item self-report instrument designed to measure the extent to which people

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hold eight beliefs about reporting cancer pain and using analgesics that can act as barriers to pain management. These eight beliefs are a) fear of addiction; b) concerns about tolerance; c) concerns about side effects; d) fatalistic beliefs; e) desire to be a 'good' patient; f) fear of distracting one's physician from treating the disease; g) concerns about the ability to monitor changes in one's body; and h) fear that opioids impair immune function. The BQII has been found to consist of 4 subscales: a) Physiological effects, which consists of 12 items; b) Fatalism, which consists of 3 items; c) Communication, which consists of 6 items; and d) Harmful effects, which consists of 6 items. Participants rate the extent to which they agree with each item on a numeric scale (0–5), anchored with 0 (do not agree at all), and 5 (agree very much). Mean scores for the total scale and subscales are used for analyses, with higher scores indicating stronger barriers. The questionnaire is reliable when assessed repeatedly ($r = 0.90$), and internally consistent (Cronbach's alpha = 0.89) [9]. The BQII is a reliable and consistent measure of pain self-management barriers in cancer patients[21]. The toolkit has been translated into several languages such as Danish, Japanese, German, Chinese, Turkish, Brazilian, etc. However, it has not been translated, tested and used in Vietnam. Therefore, this study aims to translate and validate the BQII into a Vietnamese version.

METHODS

Study design This validation study was conducted from December 2021 to April 2022, and consists of two phases: 1) translation and 2) validation (Figure 1).

Translation process

To translate the BQII into Vietnamese, Brislin's Model[18] was used, which includes four steps: 1) Forward translation from the source language version to the target language version, 2) Consultation with an expert panel, 3) Blind back-translation, and 4) Comparing the source language version and back-translated version for linguistic and cultural equivalence.

Before translating the questionnaire into Vietnamese, the authors received permission from the original author. The English version was translated into Vietnamese by an English teacher who holds a postgraduate degree in Public Health from Vinh Phuc College. The translation was then reviewed by an oncologist, a nurse (from the Oncology Department at K74 National Hospital), and a Ph.D doctor (from the Department of Internal Medicine at the Hospital of Osaka City University, Japan).

If the language was unclear or not culturally appropriate, the translation was modified after discussion between the researchers and the respondents. To ensure the accuracy of the translation, the Vietnamese version was back-translated into English by an expert (Assoc. Ph.D. Doctor at the Nuclear Medicine and Oncology Center, Bach Mai Hospital, and lecturer at Hanoi Medical University). The original English version and the back-translated version were

evaluated by a native English teacher at BlueSky Foreign Language Center and were found to be semantically similar.

Validation process

After the translation process, the Viet-BQII was evaluated for content validity by six experts and for reliability by thirty patients with cancer.

Content validity

The six experts are governed by two Oncologists, and four nurses who have a certificate in taking care of cancer patients. All experts had working experience of more than five years. The content validity assessment was performed by experts who assessed (a) the relevance of the question to the concept of self-relief pain as measured, (b) the level of clarity of the questions, and (c) the coverage of the questions to different aspects of the concept of self-pain relief effectiveness to be measured. Contents b, and c, commented by experts. Content a is rated on a 4-point scale, divided into 4 levels: (1) Not relevant, (2) Slightly related, (3) Quite relevant, (4) Very relevant. The question encoding rated at 1 or 2 was classified as 0 (fail). Questions at level 3 or 4 were classified as 1 (pass)[2].

The content validity of the Viet-BQII was assessed by the Item-content value index (I-CVI) and Scale-content value index (S-CVI). I-CVI = Number of experts who rated the item as pass/Total number of experts asked; the minimum I-CVI acceptance score is 0.78[13]. S-CVI = Average of I-CVIs; the minimum S-CVI acceptance score is 0.9[2].

Reliability

The study involved thirty patients with cancer at the Palliative Care Department, Nuclear Medicine - Oncology Center, Vinh Phuc General Hospital. They were selected based on the following criteria: 1) aged 18 years or older, 2) diagnosed cancer with pain, 3) pain score ≥ 3 points on the Numerical Rating Scale (NRS) scale at the time of selection, 4) medical treatment and/or radiation therapy, 5) without cognitive disorders, 6) ability to listen, speak, read and write in Vietnamese, and 6) agreed to participate in the study.

Numerical Rating Scale (NRS) was used for patients to rate their pain on an integer scale from 0 to 10, with the pain severity classification as None (0), mild (1-3), moderate (4 - 6), and severe (7-10)[4]. Demographic and clinical data were also gathered. The demographic data includes age, gender, academic level, profession, marital status, residence, and primary caregiver.

Clinical data includes type of cancer stage, type of cancer, therapy, and health insurance. Most information was obtained from medical records.

The reliability of the Viet-BQII was tested twice: 1) right after the patient entered inpatient treatment and 2) before the patient was discharged from the hospital. The reliability of the Viet-BQII was assessed by Internal consistency reliability (Cronbach's alpha), Observable variables with Item-total correlation (ITC), and Intra-Class Correlation index (ICC).

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The Cronbach's alpha value ranges from 0 to 1, with the result classified as high (≥ 0.9), very good (0.8 and 0.89), and good (0.7 to 0.79) [17]. Observable variables with Item-total correlation (ITC) ≥ 0.3 are accepted [7]. The intra-Class Correlation index (ICC) was used to measure the test-retest reliability, with the classification of the result as good (> 0.75), mean (0.50-0.75), and unreliable (< 0.50) [twelfth].

Data Analysis

Data were analyzed using SPSS 22.0 software on the Windows operating system. Descriptive statistics were computed for all study variables. Cronbach's alpha and Item-total correlation were computed to evaluate the internal

consistency reliability of the Viet-BQII. The intra-class Correlation index was computed to evaluate the test-retest reliability of the Viet-BQII.

Ethical Considerations

This study was approved by the Ethical Review Committee of Nam Dinh University of Nursing (approval number: No. 2676/GCN – HĐĐĐ on October 22, 2021) and permission for data collection from the authorities of the hospital. All participants received a full explanation regarding the study, with assurance assurance, and had the right to refuse or withdraw from the study until the data collection was completed.

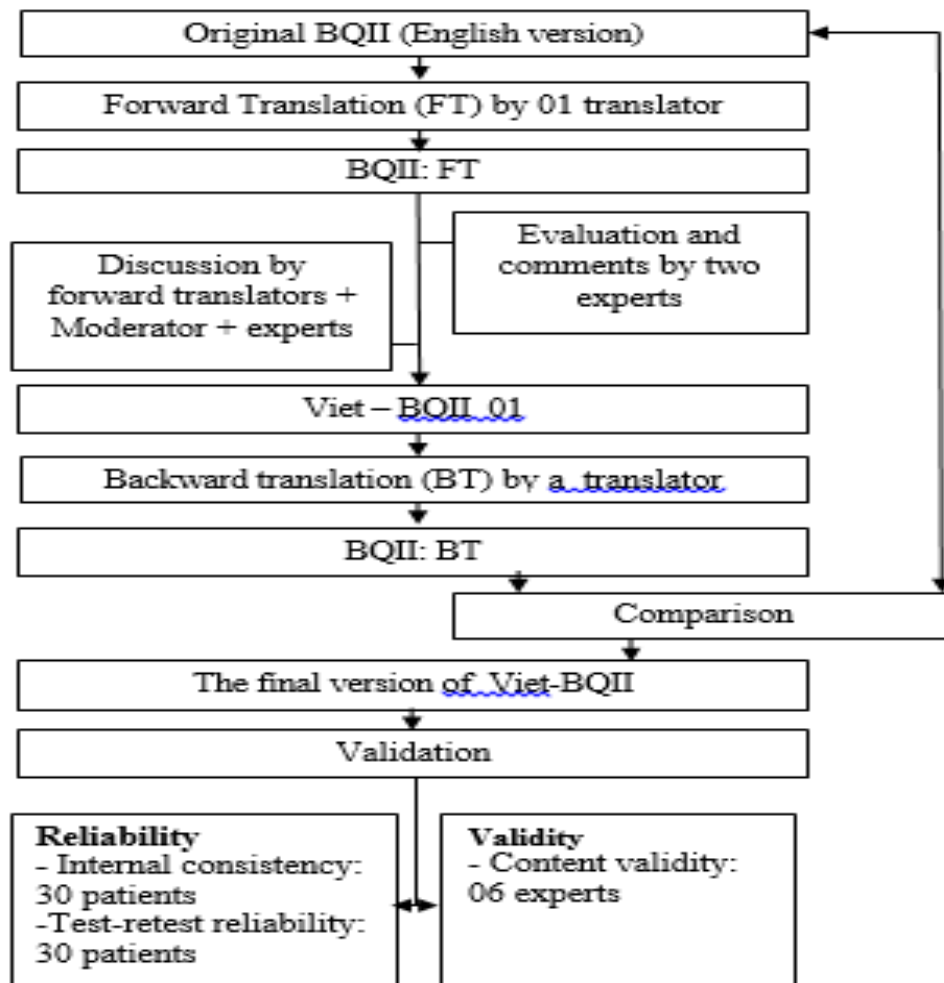


Figure 1. Questionnaire translation and validation process

RESULTS

Characteristics of Participants

The study included 30 cancer patients with a mean age of 60.80 ± 11.14 and an average pain score of 4.33 ± 1.67 , ranging from a minimum of 3 points to a maximum of 8 points. The majority of the patients were male (83.3%) and had received lower secondary and high school education (90%). The largest percentage of patients were employed in agriculture (56.7%). The five most common types of cancer

among the participants were lung cancer (30%), colon cancer (20%), liver/stomach cancer (10%), and breast cancer (6.7%). A duration of one year or more of the disease was reported by 70% of the patients, while 63.4% of patients were in stages III and IV and 86.7% were receiving medical treatment. All patients undergoing cancer treatment had health insurance coverage, with their primary caregiver being their spouse or child in 90% of cases. Table 1 provides a detailed overview of the general characteristics of patients with cancer.

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Table 1. General characteristics of cancer patients (n=30)

Variable	Classify	n	%
Age	<i>30 - 59 years old</i>	ten	33.3
	<i>>60 years old</i>	20	66.7
Gender	<i>Male</i>	25	83.3
	<i>Female</i>	05	26.7
Academic level	<i>Middle School</i>	18	60.0
	<i>High school</i>	09	30.0
	<i>Intermediate and up</i>	03	10.0
Profession	<i>Farmer</i>	17	56.7
	<i>Sales/Service</i>	04	13.3
	<i>Public servants</i>	02	6.7
	<i>Other</i>	07	23.3
Marital status	<i>Married</i>	29	96.7
	<i>Divorced/widened/separated</i>	01	3.3
Residence	<i>City</i>	04	13.3
	<i>Countryside</i>	twelfth	40.0
	<i>Mountains/midlands/islands</i>	14	46.7
Cancer stage	<i>Stages 1 and 2</i>	11	36.6
	<i>Stages 3 and 4</i>	19	63.4
Type of cancer	<i>Liver Cancer</i>	3	10.0
	<i>Lung cancer</i>	9	30.0
	<i>Stomach cancer</i>	3	10.0
	<i>Breast cancer</i>	2	6.7
	<i>Colon</i>	6	20.0
	<i>Nasopharynx</i>	2	6.7
	<i>Others</i>	5	16.7
Current therapy	<i>Internally medical treatment</i>	16	53.3
	<i>Radiotherapy</i>	01	3.3
	<i>Surgery</i>	03	10.0
	<i>Others</i>	ten	33.4
Time with cancer	<i>From 0 to less than 1 year</i>	9	30.0
	<i>From 1 year to less than 3 years</i>	9	30.0
	<i>From 3 years to less than 5 years</i>	5	16.7
	<i>From 5 years or more</i>	7	23.3
Health Insurance	<i>Yes</i>	30	100
	<i>No</i>	0	0
Primary caregiver	<i>Wife or husband</i>	21	70.0
	<i>Child</i>	6	20.0
	<i>Other relatives</i>	3	10.0
Pain score	4.33 ± 1.67 (Min = 3, Max = 8)		

Validity of the Viet-BQII

Content validity of the Viet - BQII: Scale-content value index (S-CVI) was 0.92. All 27 items of the Viet-BQII showed a content validity index higher than 0.78, indicating that the items' content validity was at an acceptable level (Table 2).

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Table 2. Content validity of the Viet - BQII (n=6)

Questions	Expert reviews						Total score	I-CVI
	1	2	3	4	5	6		
Cancer pain can be relieved.	1	0	1	1	1	1	5/6	0.83
There is a danger of becoming addicted to pain medicine	1	1	1	1	1	1	6/6	1.00
Drowsiness from pain medicine is difficult to control.	1	1	1	1	1	1	6/6	1.00
Pain medicine weakens the immune system.	1	0	1	1	1	1	5/6	0.83
Confusion from pain medicine can not be controlled.	1	1	1	0	1	1	5/6	0.83
When you use pain medicine your body becomes used to its effects and pretty soon it won't work anymore.	1	1	1	1	1	1	6/6	1.00
Using pain medicine blocks your ability to know if you have any new pain	0	1	1	1	1	1	5/6	0.83
Pain medicine can effectively control cancer pain.	1	1	1	1	1	1	6/6	1.00
Many people with cancer get addicted to pain medicine	1	1	1	1	1	1	6/6	1.00
Nausea from pain medicine can not be relieved	1	1	1	0	1	1	5/6	0.83
It is important to be strong by not talking about pain	0	1	1	1	1	1	5/6	0.83
It is important for the doctor to focus on curing illness, and not waste time controlling pain.	1	1	1	1	0	1	5/6	0.83
Using pain medicine can harm your immune system	1	0	1	1	1	1	5/6	0.83
Pain medicine makes you say or do embarrassing things	1	1	1	1	0	1	5/6	0.83
If you take pain medicine when you have some pain, then it might not work as well if the pain becomes worse.	1	1	1	1	1	1	6/6	1.00
Pain medicine can keep you from knowing what's going on in your body.	1	1	1	1	1	1	6/6	1.00
Constipation from pain medicine can not be relieved.	0	1	1	1	1	1	5/6	0.83
If doctors have to deal with pain they won't concentrate on curing the disease	1	1	1	1	1	1	6/6	1.00
Pain medicine can hurt your immune system	1	0	1	1	1	1	5/6	0.83
It is easier to put up with pain than with the side effects that come from pain medicine.	1	1	1	1	1	1	6/6	1.00
If you use pain medicine now, it won't work as well if you need it later.	1	1	1	1	1	1	6/6	1.00
Pain medicine can mask changes in your health.	1	1	1	1	1	1	6/6	1.00
Pain medicine is very addictive	1	0	1	1	1	1	5/6	0.83
Medicine can relieve cancer pain	1	1	1	1	1	1	6/6	1.00
Doctors might find it annoying to be told about pain.	1	1	1	1	0	1	5/6	0.83
Reports of pain could distract a doctor from curing the cancer.	1	1	1	1	1	1	6/6	1.00
If I talk about pain, people will think I'm a complainer.	1	1	1	1	1	1	6/6	1.00
S-CVI								0,92

Reliability of the Viet-BQII: Table 3 shows that the correlation coefficient of the total variance of each item ranges from 0.31 to 0.75. Cronbach's alpha value was 0.89.

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Table 3. Internal consistency reliability of the Viet-BQII (n=30)

Sentence	Nội dung	Total variable correlation
1	Cancer pain can be relieved.	0.38
2	There is a danger of becoming addicted to pain medicine	0.33
3	Drowsiness from pain medicine is difficult to control.	0.54
4	Pain medicine weakens the immune system.	0.65
5	Confusion from pain medicine cannot be controlled.	0.66
6	When you use pain medicine your body becomes used to its effects and pretty soon it won't work anymore.	0.66
7	Using pain medicine blocks your ability to know if you have any new pain	0.37
8	Pain medicine can effectively control cancer pain.	0.31
9	Many people with cancer get addicted to pain medicine	0.54
10	Nausea from pain medicine can not be relieved	0.55
11	It is important to be strong by not talking about pain	0.34
12	It is important for the doctor to focus on curing illness, and not waste time controlling pain.	0.36
13	Using pain medicine can harm your immune system	0.66
14	Pain medicine makes you say or do embarrassing things	0.61
15	If you take pain medicine when you have some pain, then it might not work as well if the pain becomes worse.	0.75
16	Pain medicine can keep you from knowing what's going on in your body.	0.64
17	Constipation from pain medicine can not be relieved.	0.39
18	If doctors have to deal with pain they won't concentrate on curing the disease	0.58
19	Pain medicine can hurt your immune system	0.74
20	It is easier to put up with pain than with the side effects that come from pain medicine.	0.31
21	If you use pain medicine now, it won't work as well as if you need it later.	0.54
22	Pain medicine can mask changes in your health.	0.49
23	Pain medicine is very addictive	0.61
24	Medicine can relieve cancer pain	0.41
25	Doctors might find it annoying to be told about pain.	0.43
26	Reports of pain could distract a doctor from curing the cancer.	0.39
27	If I talk about pain, people will think I'm a complainer.	0.37
Cronbach's alpha		0.89

Table 4. Test-retest reliability of the Viet-BQII (n = 30)

Sentence	Nội dung	Total variable correlation	Sentence
1st	78.80± 14.0	0.82 (CI95%: 0.61 – 0.91)	p < 0.001
2nd	63.93± 9.19		

Table 4 shows the test-retest reliability of the Viet-BQII with the intra-class correlation coefficient between the first and second total scores being very high: ICC = 0.82, p = <0.001.

DISCUSSION

Content validity was significant for all questionnaires. Content validity shows whether the questions of the questionnaire are related or appropriate to the concept being measured and have fully expressed the different aspects of the concept being measured. There are two types of content validity index: question content validity index (I-CVI) and overall question content validity index (S-CVI)[2]. In our study, the Viet - BQII questionnaire had an I - CVI index ranging from 0.83 to 1.0 and a high S - CVI index (0.92). According to Elizabeth R Lenz (2010), the content validity index of each question, if the question set has 6 or more expert

raters, the I-CVI score is Minimum is 0.78[13] and the content validity index of the entire questionnaire in this case according to author Nguyen Hoang Long must be at least 0.9 [2]. Thus, with the research results we found, the Viet-BQII questionnaire is assessed to have high content validity and ensures the research evaluates the reliability of the questionnaire.

In addition to validity, reliability was a critical factor in assessing the quality of the questionnaire used in the study. The Viet-BQII's reliability, with respect to both intrinsic consistency and repeat assessments, was evaluated among cancer patients, Table 3 presents the internal consistency of the questionnaire, measured by Cronbach's alpha, which reached a high level of 0.89. This result is similar to the original BQII (0.89) [9], and parallels the JQB-II's Sakakibara, N (0.9)[15], the DBQ-II of Jacobsen,

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R(0.87)[10], the BQII-G of Koller, A.(0.92) [11], and the ABQ-Br'sCampos, D.R. D (0.88)[6]. The total variable correlation coefficient of each question ranges from 0.31 (question 20) to 0.88 (question 15). All questions have a total variable correlation coefficient ≥ 0.3 , showing that the questions are valid in assessing internal consistency reliability. From the above initial analysis results, it can be confirmed that the Viet-BQII is internally consistent and reliable.

The test-retest reliability of the Viet-PSEQ was evaluated by using the Intra-class Correlation Coefficient (ICC) among 30 participants who were assessed twice at different times: (T1) immediately after the patient entered inpatient treatment, and (T2) before the patient was discharged from the hospital. Table 4 shows that the ICC value and confidence interval (CI95%) of Viet - BQII are very good, reaching 0.82 (CI95%: 0.61 - 0.91). The ICC value in this study is close to that of the original BQII (0.9)[9], the ABQ-Br'sCampos, D.R. D (0.86)[6], higher than that of the study Sakakibara, N with JBQ-II (0.7)[15] with the second assessment 2 weeks later than the first assessment. From this comparison result, we see that the second re-evaluation time affects the correlation coefficient (ICC) value; the longer the re-evaluation time, the lower the ICC index. The above differences may also be due to other factors such as disease progression, treatment, stress factors, and psychosocial factors. The Viet-BQII questionnaire has a very high ICC value, so it is reliable for measuring patient barriers to pain management in patients with cancer in Vietnam.

LIMITATIONS

This study has a drawback in that native English speakers did not participate in the translation phase. Despite the study being corrected by inviting translators who have lived and worked in English-speaking countries for a long time, there may still be certain differences from those of native English language speakers.

CONCLUSIONS

The Viet-BQII has been found to be valid and reliable, with an I-CVI value ranging from 0.83 to 1.0, an S-CVI of 0.92, a Cronbach's alpha of 0.89, and ICC of 0.82 (CI95%: 0, 61 – 0.91, $p < 0.001$). As a result, healthcare professionals can use the Viet-BQII to measure patient barriers to pain management in patients with cancer in Vietnam.

REFERENCES

- I. Nguyen, D.B et al. (2009), *Ung thư học đại cương*, Nhà xuất bản Giáo dục Việt Nam, Hà Nội.
- II. Long, N.H. (2021). *Measurement tools in nursing research and health sciences*. Medicine Publishing House, Hanoi.
- III. Vu, SD et al (2021), "Palliative care needs of patients with cancer at the Center Oncology, Thai Nguyen Central Hospital and some related factors", *Nursing Science*. 5(2), pp. 31-40.
- IV. Hartrick, C. T., Kovan, J. P., & Shapiro, S. (2003). The numeric rating scale for clinical pain measurement: A ratio measure? *Pain Practice*, 3(4), 310-316. <https://doi.org/10.1111/j.1530-7085.2003.03034.x>
- V. American Cancer Society. *Managing, Cancer Pain at Home*. [https://www at.cancer.org/treatment/treatments-and-side-effects/physical-sideeffects/pain/pain.html](https://www.at.cancer.org/treatment/treatments-and-side-effects/physical-sideeffects/pain/pain.html).
- VI. Campos, D. R. D., Paiva, C. E., Brandão, A. P. M. S., Ameringer, S., & Paiva, B. S. R. (2021). Validation of the Adolescent Barriers Questionnaire for use in Brazilian adolescents with cancer. *Jornal de Pediatria*, 97, 348-353.
- VII. Cristobal, E., Flavian, C., & Guinaliu, M. (2007). Perceived e-service quality (PeSQ) measurement validation and effects on consumer satisfaction and website loyalty. *Managing service quality: An international journal*, 17(3), 317-340.
- VIII. Ferrell, B. R., & Paice, J. A. (Eds.). (2019). *Oxford textbook of palliative nursing*. Oxford University Press.
- IX. Gunnarsdottir, S., Donovan, H. S., Serlin, R. C., Voge, C., & Ward, S. (2002). Patient-related barriers to pain management: the Barriers Questionnaire II (BQ-II). *Pain*, 99(3), 385-396.
- X. Jacobsen, R., Møldrup, C., Christrup, L., Sjøgren, P., & Hansen, O. B. (2009). The Danish Barriers Questionnaire-II: Preliminary Validation in Cancer Pain Patients. *Pain Practice*, 9(4), 266-274.
- XI. Koller, A., & Jahn, P. (2018). Developing a short form of the German barriers questionnaire II: a validation study in four steps. *Journal of Pain and Symptom Management*, 55(2), 458-467.
- XII. Koo, T. K., & Li, M. Y. (2016). A guideline of selecting and reporting intraclass correlation coefficients for reliability research. *Journal of Chiropractic Medicine*, 15(2), 155-163.
- XIII. Lenz, E. R. (2010). *Measurement in nursing and health research*. Springer Publishing Company.
- XIV. McCracken, L. M. (1998). Learning to live with the pain: acceptance of pain predicts adjustment in persons with chronic pain. *Pain*, 74(1), 21-27.
- XV. Sakakibara, N., Komatsu, H., Takahashi, M., Yamauchi, H., Yamauchi, T., & Doorenbos, A. Z. (2020). Validation of the Japanese version of the barriers questionnaire II in cancer pain management: a cross-sectional study. *BMC Palliative Care*, 19, 1-9.
- XVI. Sholjakova, M., Durnev, V., Kartalov, A., & Kuzmanovska, B. (2018). Pain relief is an integral part of palliative care. *Open access Macedonian Journal of Medical Sciences*, 6(4), 739.

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- XVII. Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55. Retrieved from <https://doi.org/10.1186/1745-2975-2-53>.
- XVIII. Triandis, H. C., & Brislin, R. W. (1984). Cross-cultural psychology. *American psychologist*, 39(9), 1006.
- XIX. Turk, D. C. (1990). Customizing treatment for chronic pain patients: who, what, and why. *The Clinical Journal of Pain*, 6(4), 255-270.
- XX. Turk, D. C. (1990). Customizing treatment for chronic pain patients: who, what, and why. *The Clinical Journal of Pain*, 6(4), 255-270.
- XXI. Ward, S. E., Goldberg, N., Miller-McCauley, V., Mueller, C., Nolan, A., Pawlik-Plank, D., ... & Weissman, D. E. (1993). Patient-related barriers to management of cancer pain. *Pain*, 52(3), 319-324.