

# Reliability and Validity of the Tagalog Version of the FACIT-Pal-14 Instrument in Measuring the Quality of Life of Filipino Cancer Patients

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## ABSTRACT

**Background.** Even though innumerable quality of life (QOL) questionnaires have been developed in palliative care, there is no gold standard assessment tool for QOL and no single questionnaire that fits all purposes and individuals. An important challenge to QOL assessments in palliative care is the highly diverse patient population with different diagnoses, disease states/prognosis, and languages. In an outpatient palliative care clinic population, FACIT-Pal-14 proved to be a valid and reliable scale in palliative care patients.

**Objectives.** We aimed to (i) determine the psychometric properties of the Tagalog version of the Functional Assessment of Chronic Illness Therapy – Palliative Care – 14 (FACIT-Pal-14) and (ii) measure the Quality of Life (QOL) of Filipino cancer patients.

**Methods.** This was a cross-sectional study. License for the use of the Tagalog version 4 of the FACIT-Pal-14 was requested from FACIT.org. To know the psychometric properties of the scales, Cronbach's alpha coefficient was used to assess reliability, and exploratory factor analysis, Pearson correlations, and independent samples T-test were used to determine validity.

**Results.** The Tagalog FACIT-Pal-14 was administered to 500 Filipino cancer patients consulting at the outpatient department of a training and regional medical center. The participants were mostly female (65.5%), aged 64 years and younger (82.6%), and had breast cancer (53.2%), colorectal cancer (19.2%), and lung cancer (9.4%). The mean Tagalog FACIT-Pal-14 score was 47.35 out of 56 (SD=7.14). The Cronbach's alpha coefficient of the Tagalog version of FACIT-Pal-14 was 0.784. Significantly lower mean Tagalog FACIT-Pal-14 scores were found in patients with Karnofsky Performance Status (KPS) 70 and lower, and Eastern Cooperative Oncology Group Performance Status (ECOG-PS) 2 and above compared with patients with KPS 80 and higher and ECOG-PS 0-1. ( $t=3.439$ ,  $p<.001$ ). While the Tagalog FACIT-Pal-14 scores, KPS, and ECOG scores only revealed a very weak, positive correlation ( $r=0.095$ ;  $p <0.05$ ), this ability to distinguish between groups known to differ regarding performance status showed the construct validity of the Tagalog FACIT-Pal-14.

**Conclusions.** In an outpatient oncology clinic population, the FACIT-Pal 14 showed evidence of reliability and construct validity for evaluating palliative care-specific QOL in Filipino cancer patients. Using this measure, Filipino cancer patients have a good QOL. Therefore, it is recommended that the Tagalog FACIT-Pal-14 be used on subsequent patient follow-ups to assess how their QOL would change over time so that the palliative care services provided will be suited to their needs.

**Keywords:** Quality of Life, FACIT-Pal-14, psychometric properties



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## INTRODUCTION

Worldwide, an estimated 19.3 million new cancer cases (18.1 million excluding nonmelanoma skin cancer) and almost 10.0 million cancer deaths (9.9 million excluding nonmelanoma skin cancer) occurred in 2020. The global cancer burden is expected to be 28.4 million cases in 2040, a 47% rise from 2020.<sup>1</sup>

In the Philippines, a Southeast Asian nation of over 110 million people, cancer is among the leading causes of death. In 2020 alone, cancer accounted for over 150,000 new diagnoses and over 90,000 deaths. In February 2019, the Philippine National Integrated Cancer Control Act (NICCA) was signed into law. The NICCA includes wide-ranging provisions covering the development of national and regional cancer centers; educational initiatives for healthcare professionals and laypeople; psychosocial, supportive, and palliative services; the establishment of a national cancer registry; support for training in and conduct of cancer research ranging from basic science and clinical investigation to psychological and sociological research; and expanded financial support for patients under PhilHealth and the Cancer Assistance Fund.<sup>2</sup>

Although cancers historically have not been thought of as such, they increasingly meet the definition of chronic diseases: “They are permanent, leave residual disability, are caused by nonreversible pathological alteration, require special training of the patient for rehabilitation, or may be expected to require a long period of supervision, observation, or care.” Cancer care today often provides state-of-the-science biomedical treatment but fails to address the psychological and social problems created or exacerbated by cancer. This failure can compromise the effectiveness of health care and thereby adversely affect the health of cancer patients.<sup>3</sup>

One of the main goals of palliative care is to improve the health-related quality of life (HRQOL) of patients with advanced illnesses such as cancer, end-stage COPD, renal failure, heart failure, etc. The accurate measurement of HRQOL is essential for evaluating service delivery, understanding the impact of illness and treatment effects, and testing intervention effectiveness.<sup>4</sup>

There is no gold standard way to measure QOL, and the existence of a huge number of measures and related QOL concepts makes it difficult to discuss QOL. This means that many times we are using the same expression “QOL” but not talking about the same thing. The reason why we decide to evaluate QOL influences the measures we choose.<sup>5</sup> In general, QOL measures are based on questionnaires that must be valid and reliable. Validity refers to the ability of a questionnaire to assess what it sets out to measure accurately. Reliability refers to the degree to which a questionnaire is reproducible.

In cancer patients, QOL is measured using a wide range of instruments. Some tools focus on many aspects of QOL, while others focus on specific functions or symptoms. For example, the Karnofsky Performance Status (KPS) scale focuses on

functional performance, while the European Organization for Research and Treatment of Cancer (EORTC) and Functional Assessment of Cancer Therapy (FACT) tools cover various physical, role, emotional, cognitive, and social functioning and diverse symptoms. Tools are often modular, incorporating a general (core) questionnaire for use with all cancer patient groups, supplemented by a cancer-specific questionnaire (module), which focuses on issues of particular relevance to this patient group.<sup>6</sup>

A head-to-head comparison of reliability, validity, and responsiveness of four patient-reported outcome measures suitable for assessing HRQOL in palliative care settings was made by King and co-workers. These are the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire Core 15 Palliative Care (EORTC QLQ-C15-PAL), Functional Assessment of Cancer Therapy—General—7 Item Version (FACT-G7), Functional Assessment of Chronic Illness Therapy-Palliative Care (FACIT-Pal) and its short-form FACIT-Pal-14. Internal consistency was evaluated with Cronbach alpha, while construct validity was assessed via pre-determined hypotheses about the sensitivity of patient-reported outcome measures scores to Australia-modified Karnofsky Performance Status (A-KPS) groups. None of these four patient-reported outcome measures was superior, confirming that choosing the best measure requires careful consideration of the research goals, patient population, and the domains of HRQOL targeted by the intervention being investigated.<sup>7</sup>

The FACIT measurement system is a collection of over 700 items, 130 pediatric items, and 100 validated measures targeted to the management of chronic illnesses, as well as symptom- and treatment-specific scales. It includes a 27-item general measure, the Functional Assessment of Cancer Therapy (FACT-G), which captures four domains of HRQOL: physical, social, emotional, and functional well-being. It is available in over 30 languages, and because of its validity, reliability, and sensitivity to change in health, it is one of the most frequently used QOL questionnaires.<sup>8,9</sup>

Our previous study on QOL and psychological distress among Filipino advanced cancer patients employed the FACT-G and the 14-item Hospital Anxiety and Depression Scale (HADS). However, we noted that some advanced cancer patients had difficulty completing these questionnaires due to fatigue.<sup>10</sup>

The FACIT-Pal is a 46-item questionnaire of this group of questionnaires. It includes a 19-item palliative care subscale. It has face validity in that it contains items that appear relevant to persons living with advanced illness. Internal consistency was greater than 0.74 for all subscales and the total score. The FACIT-Pal was able to discriminate between participants who died within three months of completing the baseline and participants who lived for at least one year after completing the baseline assessment ( $t = -4.05$ ,  $P < 0.001$ ). The functional well-being subscale discriminated between participants who had a Karnofsky performance score of 70 and below,

and participants with a Karnofsky performance score of 80 and above ( $t = 3.40$ ,  $P < 0.001$ ). These findings support the internal consistency, reliability, and validity of the FACIT-Pal as a measure of HRQOL for persons with advanced cancer.<sup>11</sup> FACIT-Pal has been translated and validated into Turkish<sup>4</sup>, African<sup>12</sup>, and Spanish<sup>13</sup>.

These traditionally available QOL assessment questionnaires can be taxing to palliative care patients. Hence, there is a need for shorter assessment instruments for use in clinical practice. Sixty patients and 56 healthcare professionals identified their top 10 most important issues and assessed the relevance of each item of the FACIT-Pal. The 46-item FACIT-Pal questionnaire was thus shortened to a 14-item FACIT-Pal-14 questionnaire, retaining the emotional, physical, and functional well-being subscales of FACT-G as well as issues pertaining specifically to palliative care patients, which are constipation, nausea, dyspnea, and sleep.<sup>14</sup>

In an outpatient palliative care clinic population, the original English language FACIT-Pal-14 has good internal consistency. Significantly lower mean scores were found in patients with lower performance status (Eastern Cooperative Oncology Group (ECOG-PS)= 3-4) compared with patients with higher performance status (ECOG-PS= 1-2),  $p = .007$ , thus showing evidence for its construct validity.<sup>15</sup> The Spanish version of FACIT-Pal-14 also proved to be a valid and reliable scale in palliative care patients.<sup>13</sup> Therefore, having these instruments in Tagalog can help clinicians in the Philippines assess the QOL of cancer patients seeking palliative care.

We aimed to determine the psychometric properties of the Tagalog version of the FACIT-Pal-14. We a priori hypothesized that QOL would differ between patients based on performance status. We tested whether patients with poorer functional status (KPS  $\leq 70$ , or ECOG 2 or higher) have lower Tagalog FACIT-Pal-14 scores than patients with better performance status (KPS  $\geq 80$  or ECOG 0-1). We also aimed to measure QOL among cancer patients in the Philippines using this instrument.

## MATERIALS AND METHODS

### Participants

This is a cross-sectional analytic study of 500 cancer patients consulting at the Oncology Clinic at the Outpatient Department of the Ilocos Training and Regional Medical Center (ITRMC) from August to November 2020. The sample size was calculated based on a guideline on validation studies to have a respondent-to-item ratio of a maximum of 30:1 (thirty respondents for every item questionnaire) and adding twenty percent of the computed sample size to account for possible dropouts.<sup>16,17</sup>

Participants were selected on the following inclusion criteria: patients 18 years or older, diagnosed with cancer, consulting at the Outpatient Cancer Clinic, and who agreed to participate and to sign the informed consent. These are

the exclusion criteria: Patients who presented with cognitive impairment or any neuropsychological disability that prevented them from answering the questionnaires and who did not know how to read or write in Tagalog. There were no missing data in the participants for each variable of interest.

### Procedures

Permission to use the Tagalog version 4 of FACIT-Pal-14 scales was requested through the official website. Average scores of a FACIT measure for a group of patients can be compared to normative data to determine the HRQOL of the patients relative to the general U.S. population. These comparisons facilitate meaningful interpretation of HRQOL in patient populations. Though the body of literature is constantly evolving, normative data typically does not exist for disease-, symptom-, or condition-specific subscales.<sup>8</sup>

### Instruments

The Patients Characteristic Form consists of patient-reported sociodemographic (e.g., age, sex) and medical (number of months with cancer and primary location of cancer) characteristics. The FACIT-Pal-14 consists of 14 items rated using a five-point Likert-type (0-4) scale (0 = not at all, 1 = a little bit, 2 = somewhat, 3 = quite a bit, 4 = very much). The FACIT-Pal-14 Tagalog version has the translation of the statements and responses in the vernacular. The higher the score, the better the QOL.

To determine the construct validity of the Tagalog FACIT-Pal-14, we tested its ability to distinguish between groups known to differ regarding performance status. We used the two primary scales that measure performance status for those living with cancer: the Karnofsky Performance Status (KPS) scale and the Eastern Cooperative Oncology Group Performance Status (ECOG-PS). KPS and ECOG-PS assignments were strongly related to each other (Spearman R indices ranging from -0.825 to -0.901,  $p < 0.0001$ ).<sup>18,19</sup>

The KPS is a scale of 0 to 100, designed to measure a person's ability to perform activities of daily living (ADLs). It is an established and effective measurement in medical oncology, with good reliability and validity.<sup>20</sup> In addition, the KPS has proven useful for following the course of the illness and obtaining prognostic information. Patients with the highest (best) KPS scores at the time of tumor diagnosis have the best survival and QOL over the course of their illness. The ideal score is 100. The scoring is subjectively assigned by a health professional<sup>21</sup> based on the following hierarchical scale: 80-100 = Able to carry on normal activity and to work; no special care needed; 50-70 = Unable to work; able to live at home and care for most personal needs; varying amount of assistance needed; 10-40 = Unable to care for self; requires equivalent of institutional or hospital care; disease may be progressing rapidly; 0 = Dead.

The ECOG-PS ranks performance status on a scale of 0 to 5 that inversely aligns with the KPS. The ideal score is zero. From the largest set of paired KPS-ECOG assessments to

date, it has been shown that the KPS categories 10-40, 50-60, 70, 80-90, and 100 are equivalent to ECOG-PS categories of 4, 3, 2, 1, and 0, respectively.<sup>22</sup>

**Ethical Approval**

The FEU-NRMF Institutional Ethics Review Committee approved this study. Informed consent was obtained from patients. Written permission was obtained from the hospital where this study was conducted. FACIT.org<sup>9</sup> granted permission to use the FACIT-Pal-14 Tagalog version 4 and to do reliability and validity testing of the instrument.

**Data Collection**

A convenience sample of 500 cancer patients participated in this study. Data collection was carried out in the waiting room for outpatients. After receiving instructions, patients were asked to fill out the Tagalog FACIT-Pal-14 questionnaire. However, if the patient preferred, some data collection was completed by face-to-face interviews with a trained staff member. Instrument completion took approximately 10-15 minutes.

**Data Analyses**

Frequency count and percentage were used to describe the demographic profile of the patients, such as age, sex, number of months with cancer, and the primary location of cancer. Mean and standard deviation (SD) were used to describe the patients' age and Tagalog FACIT-Pal-14 scores. To compare means using independent samples T-test analysis, we dichotomized and categorized the following variables: age (64 years or younger, and 65 years or older); performance status: KPS 80 or above and KPS 70 or below; ECOG 0-1 and ECOG 2 or higher.

To know the psychometric properties of the Tagalog FACIT-Pal-14 scales, we evaluated reliability by calculating Cronbach's alpha values for internal consistency. To determine validity, we used several procedures. Exploratory factor analysis (EFA) using principal components analysis was

done. Pearson correlation was also performed to investigate concurrent validity among Tagalog FACIT-Pal-14 scores, KPS, and ECOG scores.<sup>14,15</sup> In addition, to assess construct validity, two-sided t-tests were used to analyze differences in group means. Based on prior literature and our experience, we a priori hypothesized that QOL would differ between patients based on performance status. Therefore, we tested whether patients with poorer functional status (KPS  $\leq$ 70, or ECOG 2 or higher) have lower Tagalog FACIT-Pal-14 scores than patients with better performance status (KPS  $\geq$ 80 or ECOG 0-1).<sup>10,23</sup> Statistical significance was defined as a P-value  $<$  0.05. Microsoft Excel and IBM-SPSS version 28 statistical programs were used for data analyses.

**RESULTS**

The participants were mostly female (65.6%) and had breast cancer (53.0%), colorectal cancer (19.4%), and lung cancer (9.4%). Most (73.6%) patients had been diagnosed with cancer for over six months. The mean age of the participants is 53.8 years (SD=12.28).

The mean Tagalog FACIT-Pal-14 score was 47.35 out of 56 (SD=7.14), which shows that the respondents, on average, have good QOL. We tested whether Tagalog FACIT-Pal-14 scores significantly differed by age group or sex, and we found no significant differences. The mean Tagalog FACIT-Pal-14 scores based on their sociodemographic and clinical characteristics are shown in Table 1.

The Cronbach's alpha coefficient of the Tagalog version of FACIT-Pal-14 was 0.784, demonstrating acceptable reliability. The Cronbach's alpha coefficient is not improved by deleting any item. The results are comparable to other studies (Table 2).

The exploratory factor analysis found a structure in three factors that explained the 50.19% variance. Component 1 corresponds to social, functional, and spiritual well-being. Component 2 corresponds to physical well-being. Component 3 corresponds to emotional well-being and palliative concerns (Table 3).

**Table 1.** Mean Tagalog FACIT-Pal-14 Scores Based on Sociodemographic and Clinical Characteristics of Respondents (n=500)

		n (%)	Tagalog FACIT-Pal-14 Scores		p-value
			Mean	SD	
<b>Age group</b>	64 years or younger	413 (82.6%)	47.24	7.16	0.245
	65 years or older	87 (17.4%)	47.83	7.01	
<b>Sex</b>	Male	172 (34.4%)	47.67	7.03	0.228
	Female	328 (65.6%)	47.17	7.20	
<b>Tumor Type</b>	Breast	265 (53.0%)	47.63	6.80	
	Colorectal	97 (19.4%)	47.26	7.96	
	Lung	47 (9.4%)	46.21	6.80	

**Table 2.** Comparison of Different Studies on Mean FACIT-Pal-14 Scores and Reliability Test

Study	Mean FACIT-Pal-14 score	Cronbach's Alpha Coefficient
<b>Spanish<sup>13</sup></b>	24.91	0.807
<b>English<sup>15</sup></b>	32.5 in men	0.76
	31.7 in women	
<b>Tagalog</b>	47.35	0.784

The frequency distribution of the respondents based on their responses to the different statements in the Tagalog FACIT-Pal-14 confirms that the participants, on average, have good physical, social, emotional, and functional well-being. (Table 4).

Although the correlation was statistically significant, likely due to a large sample size, the Tagalog FACIT-Pal-14 scores, KPS, and ECOG scores only revealed a very weak, positive correlation ( $r = 0.095$ ;  $p < 0.05$ ). This could be due to the four values, which were mild outliers in the

**Table 3.** Exploratory Factor Analysis for Tagalog FACIT-PAL-14

		Rotated Component Matrix <sup>a</sup>		
		1	2	3
GS2	(Binibigyan ako ng aking pamilya ng emosyonal na suporta)	.758		
GF7	(Kontento ako sa kalidad ng buhay ko sa kasalukuyan)	.752		
Sp21	(Nararamdaman kong mayroong pag-asa)	.744		
GF3	(Kinasisiyahan ko ang aking buhay)	.742		
Pal14	(Kaya kong bukas na talakayin ang aking mga alalahanin sa mga pinakamalalapit na tao sa akin)	.596		
GP1	(Kulang ako sa enerhiya)		.750	
GP4	(Mayroon akong kirot)		.658	
GP2	(Pakiramdam ko na ako ay nasusuka)		.616	
GF5	(Nakakatulog ako nang mabuti)	.455	.522	
B1	(Nangangapos ang aking hininga)		.521	
Pal4	(Nararamdaman kong pabigat ako sa aking pamilya)			.765
GE1	(Malungkot ako)			.646
GE6	(Nag-aalala ako na lububha ang aking kalagayan)			.601
Pal5	(Nahihirapan akong tumae)			.441

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

<sup>a</sup> Rotation converged in 4 iterations.

**Table 4.** Frequency Distribution of the Respondents Based on their Responses to the Statements in the Tagalog FACIT-Pal-14 (n=500)

		Not at all (Hindi kailanman)	A little bit (Kaunti)	Some-what (Medyo)	Quite a bit (Medyo marami)	Very much (Lubos na marami)
<b>Physical Well-being</b>						
GP1	Kulang ako sa enerhiya	317 (63.4%)	53 (10.6%)	93 (18.6%)	32 (6.4%)	5 (6.4%)
GP2	Pakiramdam ko na ako ay nasusuka	418 (83.6%)	34 (6.8%)	38 (7.6%)	9 (1.8%)	1 (0.2%)
GP4	Mayroon akong kirot	238 (47.6%)	108 (21.6%)	114 (22.7%)	32 (6.4%)	8 (1.6%)
<b>Social/Family Well-being</b>						
GS2	Binibigyan ako ng aking pamilya ng emosyonal na suporta	14 (2.8%)	17 (3.4%)	17 (3.4%)	51 (10.2%)	401 (80.2%)
<b>Emotional Well-being</b>						
GE1	Malungkot ako	337 (67.4%)	80 (16.0%)	63 (12.6%)	17 (3.4%)	3 (0.6%)
GE6	Nag-aalala ako na lububha ang aking kalagayan	268 (53.6%)	83 (16.6%)	116 (23.2%)	17 (3.4%)	16 (3.2%)
<b>Functional Well-being</b>						
GF3	Kinasisiyahan ko ang aking buhay	27 (5.4%)	23 (4.6%)	60 (12.0%)	72 (14.4%)	318 (63.6%)
GF5	Nakakatulog ako nang mabuti	32 (6.4%)	69 (13.8%)	111 (22.2%)	86 (17.2%)	202 (40.4%)
GF7	Kontento ako sa kalidad ng buhay ko sa kasalukuyan	19 (3.8%)	32 (6.4%)	81 (16.2%)	88 (17.6%)	280 (56.0%)
<b>Additional Concerns</b>						
Sp21	Nararamdaman kong mayroong pag-asa	12 (2.4%)	9 (1.8%)	21 (4.2%)	32 (6.4%)	426 (85.2%)
Pal4	Nararamdaman kong pabigat ako sa aking pamilya	397 (79.4%)	39 (7.8%)	35 (7.0%)	8 (1.6%)	21 (4.2%)
Pal5	Nahihirapan akong tumae	393 (78.6%)	36 (7.2%)	54 (10.8%)	13 (2.6%)	4 (0.8%)
Pal14	Kaya kong bukas na talakayin ang aking mga alalahanin sa mga pinakamalalapit na tao sa akin	18 (3.6%)	24 (4.8%)	54 (10.8%)	74 (14.8%)	330 (66.0%)
B1	Nangangapos ang aking hininga	406 (81.2%)	49 (9.8%)	35 (7.0%)	8 (1.6%)	2 (0.4%)

distribution of the Tagalog FACIT-Pal-14 scores. However, as hypothesized, the group of participants with a higher performance status (as measured by KPS and ECOG) had higher Tagalog FACIT-Pal-14 scores when compared to participants with lower performance status. This ability to distinguish between groups known to differ regarding performance status showed the construct validity of the Tagalog FACIT-Pal-14 (Tables 5a and 5b).

**DISCUSSION**

Palliative care is an approach to patient-/family-/caregiver-centered health care that focuses on optimal management of distressing symptoms while incorporating psychosocial and spiritual care according to patient/family/caregiver needs, values, beliefs, and cultures. The goal of palliative care is to anticipate, prevent, and reduce suffering; promote adaptive coping; and support the best possible QOL for patients/families/caregivers, regardless of the stage of the disease or the need for other therapies.<sup>24</sup>

In healthcare, most researchers and clinicians agree that QOL is related to symptoms, functioning, psychological and social well-being, and probably to a lesser extent to meaning and fulfillment. This multidimensional health-oriented concept has been named health-related quality of life (HRQOL). However, according to Kaasa and Loge, spirituality and existential issues become more prominent during end-of-life care, as well as family members’ perception of the quality of care. Outcome measures in palliative care require constructs that reflect the specific goals of palliative care, such as improving QOL before death, symptom control, family support and satisfaction, as well as patients’ perceptions of ‘purpose’ and ‘meaning of life.’ It is generally recommended that internationally developed and validated patient-rated multidimensional questionnaires be used when assessing HRQOL in research.<sup>25</sup>

Valid and reliable QOL questionnaires may also be used to assess patient care needs in clinical settings, provide quality monitoring in health systems, measure clinical outcomes in clinical trials, and estimate the utility and cost-effectiveness of clinical interventions.<sup>26</sup>

The local literature on the impact of cancer on HRQOL among Filipino cancer patients is gradually growing in number. The largest study measured QOL using an indigenously developed instrument called the University of the Philippines-Department of Health Quality Of Life (UP-DOH QOL) scale, which measured the physical wellness, emotional well-being, social status, cognitive well-being, and functional status of 1,064 patients presenting at the cancer clinics of tertiary referral hospitals in four regions of the country. The items for the scale were content-validated using results of exploratory interviews with patients, relatives, and attending physicians. Construct validity was established by relating the test results with clinical expectations/hypotheses. Scale results were also compared with data from the Functional Assessment for Cancer Therapy (FACT). The scale’s reliability was determined using Cronbach’s alpha (0.67-0.87). Kappa agreement with FACT ranged between 0.04 and 0.31.<sup>27</sup> The UP-DOH QOL scale was also used for patients with head and neck cancers.<sup>28</sup>

Other local studies measured QOL for specific cancer groups or institutions.<sup>29-37</sup> The World Health Organization Quality of Life Instrument (WHOQOL-BREF) Filipino version has been used to assess the QOL of cancer patients and their family caregivers at the University of the Philippines – Philippine General Hospital Cancer Institute.<sup>38</sup>

The ACTION study is a prospective longitudinal study examining the economic and health impact of cancer in the Southeast Asian Region. Country-specific analysis of QOL changes in Filipino cancer patients from baseline to one year after diagnosis was conducted by Ngelangel and co-workers. Three validated quality of life (QOL) instruments were used in this study: Euro-QoL 5D, QLQ c30, and HADS.<sup>39</sup>

However, shortened QOL tools are advantageous in palliative care patients. Chiu and co-workers compared three shortened QOL questionnaires. The EORTC QLQ-C15-PAL and the FACT-G7 were reliable and appropriate for assessing HRQOL issues, the former for palliative cancer patients and the latter for advanced cancer patients receiving chemotherapy. Conceptually, the FACIT-Pal-14 holds promise to cover social and emotional support issues that still need to be completely addressed by the other two questionnaires; however, further validation is needed.<sup>40</sup>

**Table 5a.** Construct Validity of Tagalog FACIT-Pal-14: Ability to Distinguish between Groups Known to Differ regarding Performance Status (KPS)

	KPS	N	Mean	SD	T-statistic	p-value
FACIT-Pal-14 Scores	≥80	466	47.64	7.040	3.439	<.001
	≤70	34	43.32	7.393		

**Table 5b.** Construct Validity of Tagalog FACIT-Pal-14: Ability to Distinguish between Groups Known to Differ regarding Performance Status (ECOG-PS)

	ECOG-PS	N	Mean	SD	T-statistic	p-value
FACIT-Pal-14 Scores	0-1	466	47.64	7.040	3.439	<.001
	2 or higher	34	43.32	7.393		

In the present study, the Cronbach's alpha coefficient of the Tagalog FACIT-Pal-14 was 0.784. This finding is comparable with the Cronbach's alpha coefficient of 0.76 obtained by Shinall and co-workers<sup>15</sup>, and the Cronbach's alpha coefficient of 0.807 obtained from the Spanish version,<sup>13</sup> hereby showing the reliability of the Tagalog FACIT-Pal-14 scale.

In this study, significantly lower Tagalog FACIT-Pal-14 scores were noted in Filipino patients with limited performance status on both ECOG-PS and KPS scales. Our results are consistent with those of Shinall and co-workers where significantly lower scores were noted in patients with limited performance status on the ECOG-PS scale.<sup>15</sup> This ability to distinguish between groups known to differ regarding performance status supports the construct validity of the Tagalog FACIT-Pal-14.

In our study, the mean QOL reported on the Tagalog FACIT-Pal-14 scale was 47.35, higher than the results found in the Spanish study,<sup>13</sup> with a mean score of 24.91.

In terms of gender, the mean QOL based on the Tagalog FACIT-Pal-14 scores was also higher and was not significantly different between men (47.57) and women (47.17) compared to the study carried out by Shinall in the US<sup>15</sup> in which the mean QOL based on FACIT-Pal-14 scores were lower but likewise almost similar between men (32.5) and women (31.7).

The higher mean QOL reported by the cancer patients in this study may be because our study population were patients in the outpatient clinic and had good performance status. This is consistent with the results of previous studies that the QOL of cancer patients in the outpatient and rehabilitation setting is higher than inpatients<sup>41</sup>, and the QOL of fully active patients is better than those with poorer performance status<sup>42</sup>.

### Study Limitations and Strengths

Some limitations of this study should be mentioned. We did not have measures to explore the criterion validity of the tool. The EORTC-QLQ-C15-PAL and FACIT-Pal have been validated and could have been used as the gold standard,<sup>6</sup> except that they do not have the Tagalog version yet, and our respondents were not fluent in English.

This cross-sectional study on measuring QOL is limited in its generalizability as the study population was recruited in the outpatient department of one hospital, and the data were collected only at one time point. The participants were only cancer patients seeking consult at a medical oncology clinic. Despite being relatively common in our country, gynecological cancers were not represented in our study. Also, we were interested in the palliative care population. However, we were unable to identify the disease stage in most patients because this data was missing from their medical records, and most patients did not know their disease stage. Also, the participants in our study mostly had good performance status since we did the survey during the pandemic, and the

more immunocompromised patients tended to avoid going to the hospitals. Hence, our data did not reflect the problems of those with other life-limiting illnesses, those with poor functional capacity, and those with poor prognosis. Also, QOL often changes as the disease progresses. Furthermore, an individual's perception of their QOL may evolve over time.<sup>26</sup> Therefore, we suggest future evaluation of the psychometric properties of the Tagalog FACIT-Pal-14 and the measurement of QOL of palliative care patients with the Tagalog FACIT-Pal-14 in a more diverse population in the Philippines. Future studies can also look into the Tagalog FACIT-Pal-14 instrument's responsiveness to change, i.e., the ability of the QOL questionnaire to reflect any improvement or deterioration in the patients over time.

Despite these limitations, this study makes an important contribution toward moving the palliative care service and research forward. To our knowledge, this is the first study on the psychometric properties of the Tagalog FACIT-Pal-14 among Filipino cancer patients in the outpatient department. This is also the first study to have measured the QOL of Filipino cancer patients using the Tagalog FACIT-Pal-14 scale.

### Clinical Implications

QOL assessment tools have a beneficial role in improving clinical practice through more inclusive decision-making. QOL outcomes provide clinicians with a better understanding of patients' perspectives, encouraging discussions that enable clinicians to take a more holistic view of patients' needs.<sup>6</sup> Hence, more than just looking at the results of the Tagalog FACIT-Pal-14 as QOL data and interpreting it as a high or low score, it may improve patient-physician communication in that an identified aspect of well-being or lack of well-being may be discussed more frequently and with more depth during consultation.

### CONCLUSIONS

Our results show an instrument with acceptable reliability and construct validity. Furthermore, the QOL of cancer patients in an outpatient palliative care clinic population in the Philippines, as shown by the mean Tagalog FACIT-PAL-14 score was good. Therefore, it is recommended that the Tagalog FACIT-Pal-14 be used on the subsequent patient follow-up to assess how their quality of life would change over time so that the palliative care services provided to them will suit their needs.

### Statement of Authorship

Both authors certified fulfillment of ICMJE authorship criteria.

### Author Disclosure

Both authors declared no conflicts of interest.

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