Brief Methodological Report

Spanish Version of the Patient Dignity Inventory: Translation and Validation in Patients With Advanced Cancer

María Rullán, MD, Ana Carvajal, RN, PhD, Jorge M. Núñez-Córdoba, PhD, Marina Martínez, BPsych, PhD, José Miguel Carrasco, PhD, Irene García, BPsych, María Arantzamendi, RN, PhD, Alazne Belar, RN, MSc, and Carlos Centeno, MD, PhD

Department of Gastroenterology (M.R.), Complejo Hospitalario de Navarra, Pamplona; ATLANTES Research Program (M.R., J.M.C., I.G., M.A., A.B., C.C.), Institute for Culture and Society, University of Navarra; Faculty of Nursing (A.C., M.A.), University of Navarra; Department of Preventive Medicine and Public Health, Medical School (J.M.N.-C.), University of Navarra, Pamplona; Research Support Service (J.M.N.-C.), University of Navarra Clinic, Pamplona; Public Health and Epidemiology Area (J.M.N.-C.), University of Navarra; Palliative Medicine Group, Area of Oncology and Hematology, Navarra's Health Research Institute (IdiSNA) (J.M.C., I.G., M.A., C.C.), Pamplona; Navarra's Health Research Institute (IdiSNA) (J.M.N.-C.), Pamplona; Palliative Medicine Unit (M.M., C.C.), University of Navarra Hospital, Pamplona; and Aita Meni Hospital (A.B.), Guipuzcoa, Spain

Abstract

Context. The Patient Dignity Inventory (PDI) is an instrument to measure sources of distress related to dignity at the end of life.

Objectives. To obtain a Spanish version of the PDI and measure psychometric aspects in patients with advanced cancer.

Methods. A back-translation method was used to obtain the Spanish version. Inpatients and outpatients with advanced cancer were included. Patients completed the Spanish versions of the PDI (PDI-s), Edmonton Symptom Assessment System (ESAS), Hospital Anxiety and Depression Scale (HADS), and Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being (FACIT-Sp-12) instruments. The psychometric properties evaluated were internal consistency; concurrent validity between PDI-s/ESAS, PDI-s/HADS, and PDI-s/FACIT-Sp-12; discriminant validity, test-retest reliability, and factor analysis. The usefulness of the instrument also was tested.

Results. A Spanish version of the PDI was obtained. One hundred twenty-four patients completed the study. Cronbach's alpha coefficient for the PDI-s was 0.89. The PDI-s significantly correlated with the ESAS ($rs = 0.669$; $P < 0.001$), HADS ($rs = 0.788$; $P < 0.001$), and FACIT-Sp-12 ($rs = -0.442$; $P = 0.008$). The instrument distinguished outpatients from inpatients and between patients with differing Karnofsky Performance Status scores ($rs = -0.328$; $P < 0.001$). The test-retest method indicated excellent reproducibility (intraclass correlation coefficient = 0.931). Factor analysis showed three factors accounting for 79.4% of the variance. Factors were labeled *psychological and existential distress, physical symptoms and dependency,* and *social support.* Patients had no difficulties in understanding or completing the questionnaire (mean time to complete: 7.2 minutes).

Conclusion. The Spanish version of the PDI showed adequate psychometric properties when tested with advanced cancer patients. This research provides a three-factor alternative in Spanish to the PDI. J Pain Symptom Manage 2015;50:874–881

Key Words

Advanced cancer patients, validation, psychometric properties, Patient Dignity Inventory, dignity therapy

Introduction

Multiple sources of distress affect the quality of life of patients at the end of life.[1] There are several interventions, such as the clinical interview and cognitive behavioral therapy, to treat some of these sources of distress.[2] However, few of them focus on sense of

Address correspondence to: Ana Carvajal, RN, PhD, Faculty of Nursing, University of Navarra, C/ Irunlarrea s/n, 31009 Pamplona, Spain. E-mail: acarvajal@unav.es

Accepted for publication: July 13, 2015.

0885-3924/$ - see front matter
http://dx.doi.org/10.1016/j.jpainsymman.2015.07.016

dignity in a systematic way, as dignity therapy (DT) does.[3,4] This well-described therapy was developed specifically for patients with advanced and terminal cancer. It is brief and flexible and can be carried out at the bedside.[5] The aim of the therapy is to alleviate suffering, improve quality of life, and provide meaning and dignity.[3]

The Patient Dignity Inventory (PDI) was designed in 2008 to measure different sources of distress related to dignity at the end of life[3,6] and has been used to measure the effectiveness and feasibility of DT.[3] The instrument is based on the five dimensions obtained in the factor analysis of the original version: symptom distress, existential distress, dependency, peace of mind, and social support,[3] but it provides one score (the sum of all 25 items).

The PDI can be used as a screening method to measure how different circumstances could influence a patient's sense of dignity,[7] but it can also be used in clinical practice and research. It was used in three randomized trials before and after DT intervention to assess effectiveness; two studies focused on patients with cancer[8,9] and one on elderly patients living in nursing homes.[10] Two cross-sectional studies evaluated its effectiveness in patients affected by motor neuron disease.[11,12] Juliao et al.[13] also assessed the instrument in a randomized trial to obtain the baseline distress level of study patients and to characterize the sample.

The original version of the PDI was written in English, and its face validity, internal consistency, test-retest factor structure, and concurrent validity were evaluated in an English-speaking context.[3] The PDI also has been translated into and validated in Italian[14] and German,[15] obtaining satisfactory psychometric properties. This instrument has not been validated in Spanish, and there is no other similar instrument available in a Spanish-speaking context. A validated Spanish-version PDI could provide new opportunities to explore and better understand sources of dignity-related distress in Spanish-speaking patients at the end of life.

The aim of this study was to provide a Spanish translation of the PDI and analyze its psychometric properties in patients with advanced cancer.

Methods

Translation and Cultural Adaptation

The procedure of translation and cultural adaptation was carried out following the European Organization for Research and Treatment of Cancer method.[16] This process consists of a back-translation method performed by two bilingual speakers of the target language and two of the source language. A Spanish version was achieved after a consensus procedure managed by a translation coordinator. A pilot study was then carried out to check the understanding of the new Spanish version (PDI-s).

Participants

A study sample of at least 119 patients was estimated to be required to test the existence of a correlation between the PDI-s and the Karnofsky Performance Status (KPS) scale, assuming an effect size of 0.3 for a zero-null hypothesis, a two-sided 5% significance level, and a power of 90%, given an anticipated dropout rate of 5%.

Patients seen in the Oncology and Palliative Medicine Department of the Clínica Universidad de Navarra (Pamplona, Spain) between October 2012 and April 2013, meeting inclusion criteria, were invited to participate in the study. A consecutive sampling method was used. Inclusion criteria were patients with advanced cancer (illness progression, palliative treatment, and limited prognosis), older than 18 years, KPS score higher than 30, normal cognitive function based on clinical consensus, and able to understand Spanish without any difficulties.

The Ethical Committee for Clinical Research of the Universidad de Navarra approved the study. Written informed consent was required to take part in the study. The authors of the PDI and 12-item version of the Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being (FACIT-Sp-12) scale authorized their use.

Procedures and Data Collection

In addition to the PDI-s, patients completed the Edmonton Symptom Assessment System-revised (ESAS-r), the Hospital Anxiety and Depression Scale (HADS), and FACIT-Sp-12. These instruments were selected for our study as they are being used as reference instruments to identify sources of distress.[17,18] They also have been used in previous PDI validation studies[3,14] and are validated in Spanish.[18–20]

The PDI is an inventory of 25 items, with each item rated on a five-point Likert scale (1 = not a problem, 2 = a slight problem, 3 = a problem, 4 = a major problem, and 5 = an overwhelming problem).[3] This instrument was designed to measure different sources of distress related to patient dignity at the end of life. The PDI score can range from 25 to 125.

The ESAS-r is a visual analogue scale from 0 to 10 of 10 different items used for physical and psychological symptom assessments. A Spanish version of this scale was validated in 2013 with patients from Spain and Guatemala (Cronbach's alpha 0.86).[18]

The HADS is a questionnaire for screening anxiety and depression. It consists of seven-item anxiety subscale and a seven-item depression subscale. Each item is scored on a four-point Likert scale, giving a maximum of 21 points for the depression and anxiety subscales, respectively. This instrument also was

validated in a Spanish population in 2003 (Cronbach's alpha 0.80−0.87).[19]

The FACIT-Sp-12 is a 12-item spiritual well-being scale for people with chronic illnesses or cancer. Its aim is to describe spiritual- and faith-related aspects that influence quality of life. A high score on the scale shows high spiritual well-being. This instrument is validated in Spanish-speaking countries (Cronbach's alpha 0.89).[20]

Self-report or assistance (reading out the questionnaire) to complete tests was offered to all our participants. Patient demographic and clinical data also were collected: general data (age, sex, marital status, occupation, education level, and religious practice), primary tumor, treatment, KPS result, and location of care (inpatient or outpatient).

Survey participation was offered to 130 patients. The response rate was 95.38%, so a total of 124 patients completed the PDI-s. A subsample of 35 patients responded to the ESAS-r, HADS, and FACIT-Sp-12; another subsample (n = 31) repeated the PDI-s 48 hours later for retest purposes.

Psychometric Analysis

The internal consistency of the PDI-s was evaluated using Cronbach's alpha. Test-retest validity was analyzed using a subsample on the baseline day and 48 hours later. This time interval was considered appropriate because significant variation was not expected. Test-retest correlation was measured using the intraclass correlation coefficient (ICC).

Concurrent validity was assessed between the PDI-s/ESAS, PDI-s/HADS, and PDI-s/FACIT-Sp-12, measured by Spearman's rank correlation coefficient (rs). Discriminant validity was assessed by testing differences between two groups (inpatient and outpatient), analyzed with a Mann-Whitney U test. Variations between patients with differing KPS results were evaluated using Spearman's correlation.

To investigate the underlying PDI-s structure, we used an exploratory factor analysis using the principal-factor method with orthogonal varimax rotation. This approach is consistent with the method used in previous PDI validation studies carried out in different populations.[14,15] The sample-to-variable ratio was 5:1. The Kaiser-Meyer-Olkin measure of sampling adequacy was calculated. The optimum number of factors was determined based on the cumulative percentage of variance (greater than 75%), the Guttman-Kaiser criterion (eigenvalues greater than unity), and the Cattell scree test.

Usefulness was examined using the response rate, the time required to complete the questionnaire, and patients' opinions of the questionnaire. The patients' opinions were explored by asking them if the questionnaire was clear and easy to complete. They also could provide suggestions to improve the questionnaire.[21]

All statistical analyses were carried out using Stata 12 (StataCorp LP, College Station, TX) and IBM SPSS Statistics 20 (IBM Corp., Armonk, NY). Results with P-values <0.05 were considered significant.

Results

A Spanish version of the PDI was obtained satisfactorily (Appendix). Difficulties in the translation process were identified with Items 5 (feeling depressed) and 6 (feeling anxious). Previous studies have shown that these terms have negative connotations in Spanish, which could influence answers and underrate these problems.[22] We consequently decided to use the terms discouraged (*desanimado o triste*) and nervous (*nervioso*) instead of depressed and anxious.

Demographic and clinical characteristics of the participants are shown in Table 1. The mean participant

Table 1
Patient Sociodemographic Profile and Clinical Characteristics (N = 124)

Characteristics	n (%)
Age in yrs, mean (SD, range)	61.3 (11.5, 30−88)
Sex	
Female	54 (43.6)
Male	70 (56.4)
Occupation	
Retired	50 (40.3)
Employed	42 (33.9)
Self-employed	10 (8.1)
Homemaker	15 (12.1)
Other	7 (5.7)
Educational level	
Primary school	18 (14.5)
Vocational training	27 (21.8)
High school	29 (23.4)
University	49 (39.5)
Unknown	1 (0.8)
Location of care	
Inpatient	68 (54.8)
Outpatient	56 (45.2)
History of depression	15 (12.1)
History of anxiety disorder	21 (16.9)
Primary tumor	
Gastrointestinal	55 (44.4)
Genitourinary	21 (16.9)
Lung and pleural	19 (15.3)
Breast	11 (8.9)
Head and neck	8 (6.5)
Others	8 (6.5)
Unknown	2 (1.6)
Treatment received in the previous three months	
CT	67 (54.0)
RT	21 (16.9)
CT + RT	11 (8.9)
Others	14 (11.2)
Without treatment	11 (8.9)
Time from diagnosis to PDI-s questionnaire completion in months, median (range)	12 (4−48)

CT = chemotherapy; RT = radiotherapy.

age was 61 years. Inpatients constituted 68% of the total and those diagnosed with gastrointestinal tumors, 55%. The most prevalent treatment was chemotherapy (67%). The median KPS score was 70 (range 40−100). The median time from diagnosis to PDI-s completion was 12 months (interquartile range [IQR] 4−48), and the median PDI-s score was 35 (IQR 29−48).

Psychometric Properties

Internal PDI-s consistency was studied for 124 patients, obtaining a Cronbach's alpha of 0.89. When eliminating one item each time, none of the Cronbach's alpha values was substantially greater than the Cronbach's alpha for the whole scale, indicating that there was no need to drop any items (Table 2). To evaluate test-retest validity, the ICC between the baseline PDI-s measurement and the 48-hour measurement was 0.931 (95% CI 0.795, 0.972).

The PDI-s fairly and significantly correlated with the ESAS (rs = 0.669; $P < 0.001$) and the HADS (rs = 0.788; $P < 0.001$). The PDI-s showed an inverse correlation with the FACIT-Sp-12 (rs = −0.442; $P = 0.008$), indicating that the higher the FACIT-Sp-12 score (spiritual well-being increases) the lower the PDI-s score tends to be, and vice versa.

Table 2
Internal Consistency Analysis of the Spanish Version of the Patient Dignity Inventory (*N*=124)

Total Scale	Mean	Variance		Cronbach's Alpha
	38.8	140.1		0.895
Item	Scale mean if item deleted	Scale variance if item deleted	Item-to-total correlation	Cronbach's alpha if item deleted
1	37.2	125.9	0.471	0.889
2	37.4	128.2	0.430	0.890
3	37.0	127.1	0.441	0.892
4	37.1	124.2	0.546	0.887
5	36.8	121.9	0.633	0.885
6	37.0	126.8	0.530	0.890
7	36.5	123.0	0.603	0.888
8	36.8	125.2	0.476	0.890
9	37.4	128.5	0.420	0.890
10	36.8	123.4	0.577	0.888
11	36.7	121.6	0.672	0.885
12	37.6	135.7	0.302	0.894
13	37.4	129.3	0.497	0.890
14	37.4	129.7	0.483	0.890
15	37.7	138.0	0.170	0.895
16	37.3	129.4	0.452	0.890
17	37.6	137.7	0.133	0.896
18	36.8	123.5	0.606	0.888
19	37.3	127.3	0.530	0.889
20	37.5	132.3	0.397	0.891
21	37.8	139.4	0.123	0.896
22	37.8	139.8	0.131	0.896
23	37.4	133.0	0.393	0.893
24	37.4	132.6	0.395	0.892
25	37.7	138.3	0.074	0.896

The discriminant validity assessment included the comparison between the PDI-s score values in the inpatient group ($n = 68$; median PDI-s score 37.5 [IQR 29.5−50.0]) and those in the outpatient group ($n = 56$; median PDI-s score 33.5 [IQR 27.5−41.5]), showing a statistically significant difference ($P = 0.018$). The PDI-s score also correlated with KPS-measured functional status (rs = −0.328; $P < 0.001$). The better the patient's functional status was (higher KPS) the lower the PDI-s item score was. Moreover, the outpatients showed lower PDI-s score values than inpatients.

Median time to complete the questionnaire was 7.2 minutes (IQR 5-10 minutes). Almost all patients considered that the instrument was clear and presented no difficulties (98.4%), and most of them preferred someone to read out the PDI-s instead of doing it as a self-report (96%). A single patient had difficulties identifying the assessment period "last few days," and another patient had problems knowing whether the questions referred to real or potential problems.

The overall Kaiser-Meyer-Olkin value was 0.78. According to the Guttman-Kaiser criterion (eigenvalues >1), three factors were retained, which together accounted for 79.4% of the data variance (Table 3). The examination of the scree plot of the eigenvalues plotted against the factor numbers also supported the three-factor choice (Fig. 1). Table 3 presents the highest factor loading values for the orthogonal varimax rotations. Based on the magnitude of the factor loadings, the 25 items of the PDI-s were allocated to one of the three factors previously identified. The factors were labeled *psychological and existential distress* (Factor 1), *physical symptoms and dependency* (Factor 2), and *social support* (Factor 3).

Discussion

This study has provided the first Spanish version of the PDI, following a rigorous translation method to ensure that PDI terms identify sources of patient distress properly in a Spanish context. This instrument was originally designed and validated in English[3] and later translated into and validated in both Italian[14] and German.[15] Studies on the PDI in four different languages have indicated the cross-cultural usefulness of this approach. This instrument permits comparing sources of dignity-related distress in patients with advanced cancer from different countries.

The participants in this study were patients with advanced cancer, as was the case in the study that proposed and evaluated the original PDI.[3] Our study provides evidence of PDI-s validity and usefulness in this patient population from Spanish-speaking countries.

Table 3
Factor Analysis[a] of the Spanish Version of the PDI

No.	PDI Items	Mean	SD	Dimensions	Cronbach's Alpha	Factor Loadings[b] Factor 1	Factor 2	Factor 3
4	Feeling that how I look to others has changed significantly	1.7	1.1	Factor 1	0.868	0.5276	0.3758	
5	Feeling depressed	2	1.1	(% variance: 32.3)		0.6612	0.3496	
6	Feeling anxious	1.8	1	Psychological and		0.6696		
7	Feeling uncertain about my illness and treatment	2.3	1.2	existential distress		0.6850		
8	Worrying about my future	2	1.1			0.5547		
11	Feeling like I am not who I once was	2.1	1.1			0.5995	0.3919	
14	Feeling that life no longer has meaning or purpose	1.4	.8			0.5753		
15	Feeling that I have not made a meaningful and lasting contribution during my lifetime	1.1	.4			0.3166		
16	Feeling I have "unfinished business"	1.5	.9			0.4018	0.3580	
19	Feeling that I do not have control over my life	1.5	1			0.4792	0.3541	
23	Feeling like I am no longer able to mentally "fight the challenges of my illness"	1.4	.8			0.6403		
24	Not being able to accept the way things are	1.4	.7			0.4737		
1	Not being able to carry out tasks associated with daily living	1.6	1	Factor 2	0.820		0.8260	
2	Not being able to attend to my bodily functions independently	1.4	1	(% variance: 28.9) Physical symptoms			0.7908	
3	Experiencing physically distressing symptoms	1.8	1.1	and dependency			0.5578	
9	Not being able to think clearly	1.4	.9				0.5060	
10	Not being able to continue with my usual routines	2	1.2				0.6213	
13	Not being able to carry out important roles	1.4	.9			0.3050	0.4108	0.3588
17	Concern that my spiritual life is not meaningful[b]	1.2	.6			0.1202	0.1525	
18	Feeling that I am a burden to others	2	1.1			0.4032	0.4831	
20	Felling that my illness and care needs have reduced my privacy	1.3	.6				0.5168	
12	Not feeling worthwhile or valued	1.2	.5	Factor 3	0.541			0.4695
21	Not feeling supported by my community of friends and family	1	.2	(% variance: 18.2) Social support				0.8932
22	Not feeling supported by my health care providers	1	.1					0.9096
25	Not being treated with respect or understanding by others	1.1	.4					0.4477

PDI = Patient Dignity Inventory.
[a]Orthogonal varimax rotated three-factor solution.
[b]Absolute factor loading values <0.3 not shown, except for Item 17 (absolute factor loading values <0.1 not displayed).

There was a median of 12 months from diagnosis to PDI completion in our sample, although this period was 24 months[14] and 6.1 months[15] in previous studies.

Cronbach's alpha coefficient for the PDI-s was relatively high (0.89). This result suggests appropriate internal consistency among items, similar to other published PDI validation studies (0.93[3] and 0.96[14,15]). A reliability coefficient range is considered acceptable between 0.7 and 0.9,[23,24] and higher scores also could be justified in instruments with more than 20 items.[25] The test-retest reliability was measured within 48 hours, obtaining high concordance (ICC 0.931). This time interval was considered appropriate because significant variations were not expected, and the patients would not be able to remember the answers. This test-retest interval was similar to the study by Chochinov et al.[3] (retest 24 hours later, $r = 0.85$). However, Ripamonti et al.[14] completed the retest 14 days later (Lin's concordance correlation coefficient of 0.73).

Both inpatients and outpatients completed the PDI-s, and both groups were able to use the PDI-s to assess dignity-related distress; this suggests that the PDI-s can be used with both patient types, as noted in previous PDI studies.[3,14,15] The instrument properly discriminated between inpatients and outpatients ($P = 0.018$), perhaps because inpatients might have higher levels of dignity-related distress than outpatients; this could be related to exhaustion from hospitalization or the inconvenience of not being at home.

The participants who completed the questionnaire had various educational levels (Table 1). Despite that diversity, 98.4% of the patients considered that the instrument was clear, and they had no difficulties in understanding or completing it. This suggests that educational level is not a limitation when using the PDI-s.

Almost all patients (96%) chose to complete the PDI-s by having someone read it out rather than self-report. This might be because patients in our cultural context prefer to answer someone's questions instead of filling out a questionnaire. This also provided them with an opportunity to talk about other aspects that they considered important about their life and their illness. Professionals viewed the PDI-s not only as an assessment tool but also as a means of intervention because it enhanced patient-professional communication. Previous studies, where

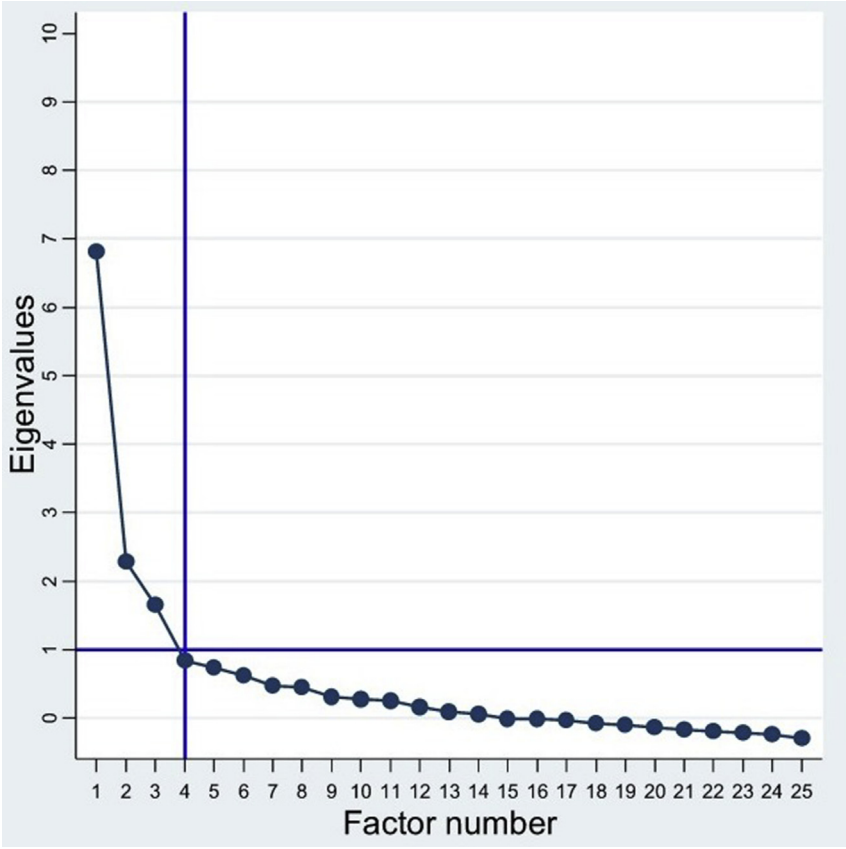

Fig. 1. Scree plot after factor analysis of the Spanish version of the Patient Dignity Inventory.

the PDI was described as a therapeutic method used to enhance the therapeutic relationship, also have mentioned its interventional usefulness.[4] Most patients completed the PDI-s relatively quickly and reported that the instrument was clear and easy to use. This suggests that the PDI-s could be useful in clinical practice and reinforces similar PDI results in other studies.[5]

There were three factors obtained in the present study: *Psychological and existential distress* (Factor 1, 12 items), *Physical symptoms and dependency* (Factor 2, nine items), and *Social support* (Factor 3, four items). Factor 1 includes items related to psychological aspects (depression and anxiety) and aspects associated with closeness to death (feeling uncertain, not feeling like who I once was, or feeling there was unfinished business). Factor 2 includes items related to physical limitations and inability to perform task in daily life. Factor 3 includes items related to support from health professionals, having friends, being treated with respect, and feeling valued by others. The three-factor structure of the PDI-s accounted for a relatively high percentage of data variance (79.4%), so adding more factors was estimated unnecessary. The factor loadings for two items were relatively low (Factors 15 and 17). Previous studies accounted for 58%[3] and 71%[15] of overall PDI result variation.

Factor 2 comprises all items of the factor called dependency by Chochinov et al.,[3] among others. All items included in their factor called social support[3] also are contained in our PDI-s Factor 3. Some of the items included in PDI-s Factors 1 and 2 appear in the factor that Chochinov et al.[3] called symptom distress.

Cronbach's alpha for Factor 3 (0.54) was low, indicating poor internal consistency for this factor in comparison with the relatively high reliability showed by Factors 1 (0.86) and 2 (0.82). Our factor analysis results also showed some similarities with the four factors found in the German version.[15] All the items included in the German version factors, physical symptom distress and loss of autonomy, are included in Factors 1 and 2 of the present study. All the items of the factor that Sautier et al.[15] called anxiety and uncertainty are included in PDI-s Factor 1, except Item 20 (which is in Factor 2).

The PDI is used to identify dignity-related distress, which contributes to suffering toward the end of life.[3] In our study, the PDI-s correlated well with ESAS and HADS. The correlation between PDI-s and FACIT-Sp-12 was slightly lower than expected. This may be because the PDI underrepresents the spiritual well-being dimension in comparison to other aspects such as psychological and existential distress, physical

symptoms, dependency, and social support. Interestingly, the absolute factor loading value of Item 17 (concern that my spiritual life is not meaningful) was lower than 0.2 for all three factors, which may support this hypothesis (Table 3).

One of the limitations of the study is that the research was carried out in a single hospital, which could limit population heterogeneity. Another limitation is that almost half of the patients had been diagnosed with gastrointestinal tumors, so results may not fully generalize to patients with other type of tumors. The test-retest analysis was carried out with an apparently small sample. However, this sample size had enough statistical power to detect significant correlations between PDI-s scores and scores obtained using other instruments to identify sources of distress. Finally, future studies specifically evaluating the potential impact of self-administered and assistance-administered PDI questionnaires also are warranted.

Conclusion

The PDI-s can help assess the level of distress in patients with advanced cancer in clinical practice in the Spanish context. Particularly, this instrument, designed to consider and explore dignity-related distress, may be especially important in palliative care units, where it can contribute to alleviating suffering and improving quality of life for these patients. This study also provides a screening instrument useful for further studies on dignity-related distress and DT.

Disclosures and Acknowledgments

This study received financial support from an Educational Grant of Collaboration for Medical Students 2012–2013 from the Ministry of Education, Government of Spain, to María Rullán Iriarte. Financing also was provided by the University of Navarra Foundation through the ATLANTES Research Project. The authors declare no conflicts of interest.

The authors are grateful to Dr. Harvey Chochinov for his suggestions and advice.

References

1. EAPC. White Paper on standards and norms for hospice and palliative care in Europe: part 1. Recommendations from the European Association for Palliative Care. Eur J Palliat Care 2009;16:279–289.

2. Newell SA, Sanson-Fisher RW, Savolainen NJ. Systematic review of psychological therapies for cancer patients: overview and recommendations for future research. J Natl Cancer Inst 2002;94:558–584.

3. Chochinov H, Hassard T, McClement S, et al. The Patient Dignity Inventory: a novel way measuring dignity-related distress in palliative care. J Pain Symptom Manage 2008;36:559–571.

4. Chochinov HM, Hack T, McClement S, Kristjanson L, Harlos M. Dignity in the terminally ill: a developing model. Soc Sci Med 2002;54:433–443.

5. Chochinov HM, Hack T, Hassard T, et al. Dignity therapy: a novel psychotherapeutic intervention for patients near the end of life. J Clin Oncol 2005;23:5520–5525.

6. Chochinov HM, McClement S, Hack T, et al. The Patient Dignity Inventory: applications in the oncology setting. J Palliat Med 2012;15:998–1005.

7. Chochinov HM, Hack T, Hassard T. Dignity in the terminally ill: a cross-sectional, cohort study. Lancet 2002;360:2026–2030.

8. Chochinov HM, Kristjanson LJ, Breitbart W, et al. Effect of dignity therapy on distress and end-of-life experience in terminally ill patients: a randomised controlled trial. Lancet Oncol 2011;12:753–762.

9. Hall S, Goddard C, Opio D, et al. A novel approach to enhancing hope in patients with advanced cancer: a randomised phase II trial of dignity therapy. BMJ Support Palliat Care 2011;1:315–321.

10. Hall S, Goddard C, Opio D, Speck P, Higginson IJ. Feasibility, acceptability and potential effectiveness of dignity therapy for older people in care homes: a phase II randomized controlled trial of a brief palliative care psychotherapy. Palliat Med 2011;26:703–712.

11. Bentley B, O'Connor M, Kane R, Breen LJ. Feasibility, acceptability, and potential effectiveness of dignity therapy for people with motor neurone disease. PLoS One 2014;9:e96888.

12. Aoun SM, Chochinov HM, Kristjanson LJ. Dignity therapy for people with motor neurone disease and their family caregivers: a feasibility study. J Palliat Med 2015;18:31–37.

13. Juliao M, Oliveira F, Nunes B, Vaz Carneiro A, Barbosa A. Efficacy of dignity therapy on depression and anxiety in Portuguese terminally ill patients: a phase II randomized controlled trial. J Palliat Med 2014;17:688–695.

14. Ripamonti CI, Buonaccorso L, Maruelli A, et al. Patient dignity inventory (PDI) questionnaire: the validation study in Italian patients with solid and hematological cancers on active oncological treatments. Tumori 2012;98:491–500.

15. Sautier L, Vehling S, Mehnert A. Assessment of patient-śdignity in cancer care: preliminary psychometrics of the German version of the patient dignity inventory (PDI-G). J Pain Symptom Manage 2014;47:181–188.

16. Dewolf L, Koller M, Velikova G, et al. EORTC quality of life group translation procedure, 3rd ed. Brussels: European Organization for Research and Treatment of Cancer, 2009:9–10.

17. Richardson LA, Jones GW. A review of the reliability and validity of the Edmonton Symptom Assessment System. Curr Oncol 2009;16:53–64.

18. Carvajal A, Hribernik N, Duarte E, Sanz-Rubiales A, Centeno C. Spanish version of the Edmonton Symptom Assessment System-Revised (ESAS-r): first psychometric analysis involving patients with advanced cancer. J Pain Symptom Manage 2013;45:129–136.

19. Herrero MJ, Blanch J, Peri JM, et al. A validation study of the Hospital Anxiety and Depression Scale (HADS) in a Spanish population. Gen Hosp Psychiatry 2003;25: 277–283.

20. FACIT measurement system. 2014. Available at: http://www.facit.org/FACITOrg/Questionnaires. Accessed March 2, 2015.

21. McDowell I, Newell C. Measuring health: A guide to rating scales and questionnaires, 2nd ed. New York: Oxford University Press Inc., 1996.

22. Noguera A, Centeno C, Carvajal A, et al. Spanish "fine tuning" of language to describe depression and anxiety. J Palliat Med 2009;12:707–712.

23. Nunnally JC. Psychometric theory. New York: McGraw-Hill, 1978: 225–236.

24. Polit D, Hungler B. Nursing research: principles and methods. Philadelphia: JB Lippincott & Co., 1999:411–415.

25. Campo-Arias A, Oviedo HC. Propiedades psicométricas de una escala: La Consistencia Interna. [Psychometric properties of a scale: internal consistency.] Rev Salud Pública 2008;10:831–839.

Appendix

Inventario de Dignidad del Paciente (PDI-s)

Para cada cuestión, por favor, indique hasta qué punto esto le ha supuesto un problema o preocupación en los últimos días:

1.- No ser capaz de llevar a cabo actividades básicas de la vida diaria (p.e. asearme, vestirme).
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
2.- No ser capaz de atender mis necesidades corporales de forma autónoma (p.e. requerir asistencia en actividades relacionadas con ir al baño).
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
3.- Experimentar síntomas físicamente angustiosos (como dolor, dificultad para respirar, nauseas).
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
4.- Sentir que ha cambiado significativamente la forma en que los demás me ven.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
5.- Sentirme desanimado.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
6.- Sentirme con ansiedad o nervioso.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
7.- Sentir incertidumbre respecto a mi enfermedad y tratamiento.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
8.- Preocuparme sobre mi futuro.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
9.- No ser capaz de pensar con claridad.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
10.- No ser capaz de continuar con mi rutina diaria.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
11.- Sentir que ya no soy el que era.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
12.- No sentirme estimado o valorado.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
13.- No ser capaz de llevar a cabo roles importantes (ej. esposo/a, padre o madre).
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
14.- Sentir que la vida ya no tiene sentido o propósito.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
15.- Sentir que no he hecho ninguna aportación significativa o duradera en toda mi vida.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
16.- Sentir que tengo asuntos pendientes (ej. Cosas sin decir o inacabadas).
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
17.- Preocuparme por la falta de sentido de mi vida espiritual.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
18.- Sentirme una carga para los demás.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
19.- Sentir que no tengo control sobre mi vida.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
20.- Sentir que mi enfermedad y mis cuidados me han hecho perder intimidad.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
21.- No sentirme apoyado por mi familia y mi grupo de amigos.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
22.- No sentirme apoyado por el personal sanitario que me atiende.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
23.- Sentirme incapaz de "combatir" mentalmente los retos que me presenta mi enfermedad.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
24.- No ser capaz de aceptar las cosas como son.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador
25.- No ser tratado con respeto o comprensión por parte de los demás.
1☐No es un problema 2☐Es un problema leve 3☐Un problema moderado 4☐Un problema grave 5☐Un problema abrumador