Brief Methodological Report

Demoralization and Depression in Patients With Advanced Cancer: Validation of the German Version of the Demoralization Scale

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Abstract

Context. The concept of demoralization has been widely used to describe states of existential distress and a self-perceived incapacity to deal effectively with a specific stressful situation.

Objectives. To evaluate the psychometric properties of the German adaptation of the Demoralization Scale (DS) in patients with advanced cancer.

Methods. Participants with heterogeneous tumor sites were recruited in several treatment and rehabilitation facilities. Concurrent and divergent validity of the DS was analyzed through associations with and group differences between measures of distress, depression, anxiety, and meaning-related life attitudes.

Results. From a total sample of 1102 patients, 516 individuals (45%) with advanced cancer were enrolled (male 53%, median age 58 years [range 18−88], breast cancer 21%, prostate cancer 17%). The total mean score of the DS was 29.8 (SD = 10.41). Four factors were extracted by exploratory factor analysis, which accounted for 59% of the variation (Cronbach $\alpha = 0.84$): loss of meaning and purpose ($\alpha = 0.88$), disheartenment ($\alpha = 0.88$), dysphoria ($\alpha = 0.80$), and sense of failure ($\alpha = 0.76$). DS dimensions shared between 12% and 62% of the variance. Demoralization was significantly associated with anxiety ($r = 0.71$), depression ($r = 0.61$), and distress ($r = 0.42$). Fifty-seven percent of patients had high distress, 24% depression, and 11% high anxiety. According to different cutoff values, between 16% and 39% were seriously demoralized and 73% had moderate levels of demoralization. Between 5% and 20% of patients were seriously demoralized but not clinically depressed; 60% of patients with moderate levels of demoralization had no depression.

Conclusion. Results provide further evidence that the DS is a valid and reliable instrument of high clinical relevance in patients with advanced cancer.   J Pain

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Introduction

The concept of demoralization has been widely used to describe states of "nonspecific" distress and a self-perceived incapacity to deal effectively with a specific stressful situation or a combination of distress and feelings of subjective incompetence.[1−3] Kissane et al.[4] and Clarke and Kissane[5] defined diagnostic criteria for the demoralization syndrome as a clinically relevant syndrome of existential distress and despair, with particular relevance for patients with severe physical illness. According to previous definitions, the demoralization syndrome is characterized as a person's incapacity to cope effectively with a stressful event and a loss of sense of mastery. The diagnostic criteria include 1) affective symptoms of existential distress, including hopelessness or loss of meaning and purpose in life; 2) cognitive attitudes of pessimism, helplessness, sense of being trapped, personal failure; 3) absence of drive or motivation to cope differently; 4) associated features of social alienation or isolation and lack of support; and 5) allowing for fluctuation in emotional intensity, these phenomena persist across more than two weeks. Furthermore, a major depressive or other psychiatric disorder is not present as the primary condition.[4]

Particular emphasis has been placed on the distinction between demoralization, anhedonia, and symptoms of depression, which seem phenomenologically closely related.[1,6,7] De Figueiredo[1] points out that both the depressed person and the demoralized person are unmotivated and inhibited from action. However, although this inhibition results from a decreased magnitude of motivation in the depressed person even when the appropriate direction of action is known, the demoralized person is inhibited from action by feelings of subjective incompetence and uncertainty with regard to the appropriate direction of action although the magnitude of motivation is intact. Accordingly, demoralization also has been connected to concepts such as learned helplessness,[8] external locus of control,[9] passive coping style,[3] and dysfunctional attributional style.[7]

Severe physical illnesses such as cancer are particularly demoralizing because of their threat to the integrity of the body and the mind, as well as a person's mastery and control.[5] Given the experiences of dependence, reduction of social roles and isolation in the face of an uncertain prognosis, feelings of helplessness and hopelessness, despair and demoralization are stress responses that arise among cancer patients.[6,10−16]

The Demoralization Scale (DS) measures existential distress according to the demoralization syndrome[4,13] covering five dimensions: loss of meaning and purpose (five items) ($\alpha = 0.83$), dysphoria (five items) ($\alpha = 0.77$), disheartenment (six items) ($\alpha = 0.82$), helplessness (four items) ($\alpha = 0.85$), and sense of failure (four items) ($\alpha = 0.68$). Items are rated on five-point Likert scales ranging from 0 (never) to 4 (all the time). A total score is obtained by summing up the single scale scores. Kissane et al.[13] found a mean score of 30.82 (standard deviation [SD] = 12.73) in an Australian sample of advanced cancer patients and used a cutoff score of >30 to indicate high demoralization. Mullane et al.[17] showed significantly lower levels of demoralization ($M = 19.94$, SD = 14.62).

The objectives of this study were to evaluate the psychometric properties of the German adaptation of the DS in a sample of patients with advanced cancer. The instrument was translated forward and backward into the German language, supported by a native English speaker. We analyzed factor structure and replicability, internal consistency, and concurrent and divergent validity through associations with and group differences between measures of distress,

anxiety and depression, and meaning-related life attitudes.

Methods

Patients

The patients were recruited from two studies conducted at the University Medical Center Hamburg-Eppendorf. Both study protocols received local research ethics committee approval. Participants with heterogeneous tumor sites were recruited in local treatment facilities. Subject inclusion criteria comprised age older than 18 years and the capability to complete a battery of self-report measures. Completed questionnaires were obtained from 270 patients (41% response rate) in Study 1, and from 832 patients (70% response rate) in Study 2. To explore the validity of the DS, from the total sample of 1102 patients, only participants with advanced-stage cancer (Union for International Cancer Control cancer stages III–IV) and/or metastases and/or cancer recurrence/progression ($n = 516$) (45%) were included in psychometric analyses. The demographic and medical characteristics are shown in Table 1.

Measures

Sociodemographic data were obtained via self-report. Cancer and treatment-related information was obtained from medical charts. In addition to the DS, the following self-report questionnaires were used:

The National Comprehensive Cancer Network Distress Thermometer[18,19] is a screening measure for psychosocial distress that consists of a visual analogue scale ranging from 0 to 10 and a problem list. A score of 5 or higher is recommended as an indicator for a patient being significantly distressed.

Depression was measured through use of the Patient Health Questionnaire (PHQ-9).[20] The PHQ-9 is based on the *Diagnostic and Statistical Manual of Mental Disorders-IV* diagnostic criteria for major depressive disorder. It uses a four-point Likert scale rated from 0 (not at all) to 3 (nearly every day). A cutoff point of >9 is recommended for the screening of moderate depression.

Anxiety was measured through use of the Generalized Anxiety Disorder 7-item scale

Table 1
Demographic and Medical Characteristics of Participants ($n = 516$)

Variable	n (%)
Mean age in years (SD, range)	57.9 (11.9, 18–88)
Gender	
Male	272 (52.7)
Female	244 (47.3)
Marital status	
Married	349 (67.6)
Never married	88 (17.1)
Divorced	53 (10.3)
Widowed	26 (5.0)
Partnership	73.1 (75.0)
Educational level	
Elementary school	158 (30.6)
Junior high school	163 (31.6)
High school/university degree	170 (33.0)
Other/did not report	25 (4.9)
Tumor site	
Breast	109 (21.1)
Prostate	87 (16.9)
Hematology	71 (13.8)
Digestive system	64 (12.4)
Lung	41 (7.9)
Gynecology	34 (6.6)
Head and neck	28 (5.4)
Other	82 (16.2)
Months since current cancer/ cancer recurrence diagnosis (mean, SD, range)	11.5 (20.3, 1–187)
Months since first cancer diagnosis (mean, SD, range)	46.2 (59.6, 1–379)
Disease stage (UICC)	
I–II	43 (8.3)
III–IV	473 (91.7)
Disease phase	
First primary tumor	321 (62.2)
Recurrence/progression	159 (30.8)
Second primary tumor	36 (7.0)
Cancer treatments	
Surgery	327 (63.4)
Radiation therapy	171 (33.1)
Chemotherapy	194 (37.6)
Hormonal treatment	28 (5.4)
Total number of therapies (mean, SD)	1.4 (1.0)
Karnofsky index (mean, SD)	86.0 (14.2)

UICC = Union for International Cancer Control.

(GAD-7), a brief instrument for assessing general anxiety disorder.[21] It uses a four-point Likert scale rated from 0 (not at all) to 3 (nearly every day). A cutoff point of >9 is recommended for the screening of moderate anxiety.

Purpose and coherence as well as loss of meaning (existential vacuum) were assessed with two subscales of the Life Attitude Profile-Revised (LAP-R).[22,23] Items are rated

on a seven-point Likert scale from 1 (strongly disagree) to 7 (strongly agree).

Statistical Methods

Exploratory factor analysis (principal component analysis, PCA) with varimax as well as with oblique rotation was performed ($n = 516$). Item analyses were used, including internal consistency (Cronbach alpha coefficient), item selectivity (discriminatory power), skewness, and kurtosis. Convergent validity with subscales of the PHQ-9, GAD-7, Distress Thermometer, and LAP-R was explored using Pearson correlation matrix, whereas divergent validity was explored using cross-tabulation frequencies comparing high, moderate, and low demoralization scores with PHQ-9, GAD-7, and distress categories. Item selectivity was computed as part-whole corrected item-scale correlation ($r_{i(t-i)}$). An item selectivity less than $r_{i(t-i)} = 0.30$ is unsatisfactory. To provide an estimate of the magnitude of the group differences, Cohen standardized effect size (d, η^2) was calculated. Two-tailed significance tests were conducted using a significance level of $P < 0.05$.

Results

The total mean score on the DS was 29.80 ($SD = 10.41$) (range 2–61). Our sample of 516 advanced cancer patients was slightly less demoralized compared with the sample by Kissane et al.[13] ($P = 0.03$, $d = 0.07$); however, we found significantly higher levels compared with Mullane et al.[17] ($P < 0.001$, $d = 0.79$).

Factor Structure

As a result of the exploratory factor analysis, four factors were extracted, with the number of factors defined by eigenvalues ≥1, which accounted for 58.7% of the variation. These factors were loss of meaning and purpose, disheartenment, dysphoria, and sense of failure. Helplessness was not replicated as a single factor (Table 2).

Loss of meaning and purpose (Items 2, 3, 4, 9, 10, 14, 20, and 23) comprises the five items from the original subscale as well as items that originally loaded on the dimensions dysphoria (Item 10), disheartenment (Item 23) and helplessness (Item 9). Disheartenment (Items 7, 8, 18, 21, 22, and 24) comprises the

four items from the original subscale as well as items that originally loaded on helplessness (Items 7 and 8). For dysphoria (Items 5, 11, 13, 15, and 16), four items loading on this factor were identical with the original subscale. Item 5 originally loaded on the dimension helplessness. Sense of failure (Items 1, 6, 12, 17, and 19) comprises all items from the original subscale as well as Item 6, which originally loaded on the disheartenment dimension.

Internal Consistency

The internal consistencies have the following values: loss of meaning and purpose $\alpha = 0.88$, disheartenment $\alpha = 0.88$, dysphoria $\alpha = 0.80$, and sense of failure $\alpha = 0.76$. Cronbach alpha for the total scale was $\alpha = 0.84$.

Item Selectivity

Item selectivity ranges from $r_{i(t-i)} = 0.38$ (Item 13) to $r_{i(t-i)} = 0.77$ (Item 2). Items 1 and 13 have low discriminatory power of $r_{i(t-i)} < 0.40$; Items 2, 3, 4, 8, 21, and 24 show the highest discriminatory power of $r_{i(t-i)} > 0.70$.

Subscale Intercorrelations

Analyses show high intercorrelations among the dimensions of the DS. The loss of meaning and purpose subscale shared 62% of the variance with disheartenment, 38% with dysphoria, and 28% with sense of failure. The disheartenment subscale shared 41% of the variance with dysphoria and 25% with sense of failure. Also, the dysphoria and sense of failure subscales shared 12% of the variance (Table 3).

Concurrent Validity

Results show significant associations between all dimensions of DS with distress, depression and anxiety, coherence, and a lack of meaning in life (existential vacuum). Anxiety had the strongest correlation with demoralization, followed by depression (Table 4).

Divergent Validity

To establish divergent validity between the constructs of demoralization and depression, anxiety and distress, we used both the cutoff value of >30 for high demoralization (Category A) recommended by Kissane et al.[13] but further determined the scale cutoff by using the mean value ±1 SD also recommended by

Table 2
Scale and Item Characteristics (PCA, Varimax Rotation) of the Demoralization Scale

No.	Dimensions and Items	M	SD	Missing Value (n)	$r_{i(t-i)}$	Skewness	Kurtosis	h^2	F1	F2	F3	F4
	Loss of meaning and purpose: $\alpha = 0.88$, 41.2%[a]	0.50	.62			1.49	1.60					
2.	My life seems to be pointless.	0.53	.82	2	0.77	1.46	1.35	0.71	0.73			
14.	Life is no longer worth living.	0.39	.77	3	0.62	2.20	4.76	0.58	0.72			
3.	There is no purpose to the activities in my life.	0.64	.90	5	0.73	1.35	1.19	0.64	0.68			
4.	My role in life has been lost.	0.56	.95	2	0.76	1.59	1.43	0.66	0.67			
20.	I would rather not be alive.	0.23	.62	6	0.51	3.27	11.92	0.47	0.67			
9.	I feel hopeless.	0.63	.92	2	0.68	1.45	1.39	0.64	0.54	0.51		
10.	I feel guilty.	0.39	.73	0	0.53	1.89	2.79	0.48	0.50		0.47	
23.	I feel quite isolated or alone.	0.63	.93	0	0.61	1.45	1.43	0.50	0.45			
	Disheartenment: $\alpha = 0.88$, 7.7%[a]	1.05	.78			0.71	−0.19					
21.	I feel sad and miserable.	1.06	.93	1	0.74	0.56	−0.24	0.68		0.71		
18.	I feel distressed about what is happening to me.	1.74	1.08	5	0.54	0.07	−0.67	0.52		0.67		
24.	I feel trapped by what is happening to me.	0.97	1.10	2	0.72	0.94	−0.01	0.63		0.64		
8.	I feel that I cannot help myself.	0.93	1.03	2	0.71	0.88	−0.19	0.67	0.50	0.57		
22.	I feel discouraged about life.	0.64	.88	1	0.70	1.31	1.05	0.66	0.54	0.54		
7.	No one can help me.	0.93	1.04	11	0.56	0.96	0.09	0.48	0.42	0.54		
	Dysphoria: $\alpha = 0.80$, 5.3%[a]	1.17	.70			0.38	−0.27					
16.	I am angry about a lot of things.	1.29	.92	3	0.65	0.38	−0.39	0.66			0.76	
15.	I tend to feel hurt easily.	1.34	.97	2	0.66	0.37	−0.44	0.66			0.72	
11.	I feel irritable.	1.27	.97	3	0.65	0.42	−0.37	0.58			0.64	
13.	I have a lot of regret about my life.	1.11	.91	2	0.38	0.50	−0.39	0.46			0.61	
5.	I no longer feel emotionally in control.	0.84	.93	2	0.57	1.03	0.61	0.52		0.44	0.46	
	Sense of failure: $\alpha = 0.76$, 4.6%[a]	2.74	.71			−0.60	0.47					
17.	I am proud of my accomplishments.	2.81	.96	6	0.57	−0.75	0.41	0.59				0.74
19.	I am a worthwhile person.	2.93	.98	13	0.52	−0.65	−0.11	0.57				0.71
12.	I cope fairly well with life.	2.95	1.01	8	0.57	−1.13	1.14	0.55				0.66
1.	There is a lot of value in what I can offer others.	2.35	.97	20	0.39	−0.47	0.01	0.41				0.62
6.	I am in good spirits.	2.64	1.07	2	0.58	−0.88	0.26	0.59		−0.41		0.64

PCA = Principal Component Analysis; M = mean (0 = never to 4 = all the time); SD = standard deviation; $r_{i(t-i)}$ = item selectivity (part-whole corrected); h^2 = communalities.
[a]Variance explained by factor.

Table 3
Intercorrelations of the Demoralization Scale Subscales

Demoralization Dimensions	Loss of Meaning and Purpose	Disheartenment	Dysphoria	Sense of Failure
Loss of meaning and purpose	1	0.79[a]	0.62[a]	−0.53[a]
Disheartenment		1	0.64[a]	−0.50[a]
Dysphoria			1	−0.34[a]
Sense of failure				1

[a]$P < 0.001$ for all values.

Mullane et al.[17] Thus, on the basis of $M = 29.80$ (SD = 10.41), the Demoralization Scale was subdivided into three categories: low demoralization (≤19.4), moderate demoralization (19.5−40.2), and high demoralization (≥40.3) (Category B) (Table 5).

Among all patients, 125 (24.2%) were classified as having depression and 58 (11.2%) as having moderate to high anxiety. On the basis of the cutoff value of >30, 202 patients (39.1%) had high levels of demoralization. We identified 101 cases (50% of all patients with high demoralization) with high demoralization but low scores on depression. We further identified 147 cases (73% of all patients with high demoralization) with high demoralization yet who were not anxious. With regard to overall distress, we identified 48 cases (24% of all patients with high demoralization) with high demoralization but who were not distressed. Using the cutoff value based on the mean value (±1 SD), 81 patients (15.7%) were classified as having high demoralization and 377 patients (73.1%) were classified as having moderate levels of demoralization. We identified 26 cases (32% of all patients with high demoralization) with high demoralization but low depression. We further identified 44 cases (54% of all patients with high demoralization) with high demoralization yet who were not anxious. With regard to overall distress, we identified nine cases (11% of all patients with high demoralization) with high demoralization but who were not distressed.

Associations with Demographic and Medical Characteristics

Age was negatively correlated with demoralization ($r = -0.14$) ($P = 0.001$). Women showed higher levels of demoralization ($M = 31.73$, SD = 10.6) than men ($M = 28.05$, SD = 9.9) ($P < 0.001$) ($\eta^2 = 0.03$). Patients who lived alone had significantly higher levels of demoralization ($M = 31.92$, SD = 11.8) than patients living with a partner ($M = 29.06$, SD = 9.8) ($P = 0.03$) ($\eta^2 = 0.01$). No association with time since primary or current cancer diagnosis ($P = 0.81$) or cancer site ($P = 0.20$) was found. Demoralization was associated with a higher number of practical problems ($r = 0.21$) ($P < 0.001$), family problems ($r = 0.32$) ($P < 0.001$), emotional problems ($r = 0.62$) ($P < 0.001$), spiritual problems ($r = 0.21$) ($P < 0.001$), and physical problems ($r = 0.41$) ($P < 0.001$).

Discussion

Because psychological distress is often underdetected in clinical and palliative care settings, the screening of symptoms of existential distress and depression is important with regard to improving detection and management of distress.[16,24−28] This study aimed to assess the dimensionality and the psychometric

Table 4
Correlations Between the Demoralization Scale Subscales and Distress, Anxiety, Depression, Coherence, and Existential Vacuum

Psychological Variables	Demoralization Scale				
	Loss of Meaning and Purpose	Disheartenment	Dysphoria	Sense of Failure	Total Scale
Distress	0.37	0.47	0.38	−0.27	0.42
Depression	0.58	0.59	0.52	−0.34	0.61
Anxiety	0.63	0.71	0.65	−0.36	0.71
Purpose and Coherence	−0.26	−0.37	−0.30	0.31	−0.26
Existential Vacuum	−0.25	−0.34	−0.19	0.32	−0.20

$P < 0.001$ for all values.

Table 5
Cross-tabulation Frequencies (*n*) Between Different Cutoff Scores for Demoralization and Presence of Depression, Anxiety, and Distress

Psychological Distress	DS Category A		DS Category B			
	Low (≤30)	High (>30)	Low (≤19.4)	Moderate (19.5–40.2)	High (≥40.3)	Total
PHQ-9 category						
Not depressed	290	101	57	308	26	391
Depressed	24	101	1	69	55	125
GAD-7 category						
Not anxious	311	147	58	356	44	458
Anxious	3	55	0	21	37	58
Distress Thermometer category						
Not distressed	173	48	39	173	9	221
Distressed	141	154	19	204	72	295

properties of the German adaptation of the DS in a sample of 516 patients with advanced cancer. The adaptation of the DS is, furthermore, an attempt to provide the field of palliative care in German-speaking countries with a feasible and valid instrument to identify emotional and cognitive states of existential distress and demoralization that contribute to suffering and difficult treatment decisions in patients with disease progression.

The results of the exploratory factor analysis demonstrated a four-dimensional factor structure of the DS explaining 58.7% of the variance. Our factor solution revealed slightly different item clusters compared with the previous studies by Kissane et al.[13] and Mullane et al.[17] The factors loss of meaning and purpose, disheartenment, dysphoria, and sense of failure were replicated; however, helplessness did not emerge as a single factor. The items of the original factor loaded on the other four dimensions. Yet, on closer analysis of the item content of the helplessness subscale, it emerges that the items match with the other dimensions and are most likely related to disheartenment. Item 9 "I feel hopeless" had high loadings on both Factor 1 (loss of meaning and purpose) and Factor 2 (disheartenment). Items 7 "No one can help me" and 8 "I feel that I cannot help myself" had high loadings in Factor 2 (disheartenment). Finally, Item 5 "I no longer feel emotionally in control" had high loadings on both Factor 3 (dysphoria) and Factor 2 (disheartenment).

The low percentage of missing data across all items shows the high acceptance of the DS among advanced cancer patients. Good to very good internal consistencies of the four dimensions as well as the total score, ranging between Cronbach $\alpha = 0.76$ and $\alpha = 0.88$, were demonstrated. However, scale analyses also revealed high intercorrelations between the factors, particularly between loss of meaning and purpose and disheartenment.

Correlation analyses showed that all DS dimensions correlated significantly with distress, anxiety and depression, purpose and coherence, as well as existential vacuum. Interestingly, associations were the strongest not with depression but with anxiety, particularly between anxiety and disheartenment. Given the theoretical concept that distinguishes demoralization from depression by the feelings of subjective incompetence and uncertainty with regard to the appropriate direction of action,[1] our findings strengthen this hypothesis, as it can be assumed that feelings of subjective incompetence and uncertainty are closely related to high anxiety.

Correlations between the DS dimensions and depression range between $r = -0.36$ and $r = 0.61$. Across all measures of psychological distress and meaning-related life attitudes, the highest correlations were found with disheartenment.

Divergent validity was explored using cross-tabulation frequencies comparing high, moderate, and low demoralization scores with PHQ-9, GAD-7, and DT categories. In our

sample, 57% of all patients suffered from high distress, 24% from depression and 11% from high anxiety. Using a cutoff of >30 for demoralization as recommended by Kissane et al.,[13] 39% of our patients were demoralized, a lower percentage compared with the study by Kissane et al., who found 47% of patients with high demoralization. Based on this cutoff, we identified 20% of such patients who were demoralized yet not depressed and 28% of such patients who were demoralized yet had no anxiety disorder. Compared with the 7% −14% reported by Kissane et al.,[13] we found a much higher percentage of patients that were seriously demoralized but not clinically depressed. In detail, Kissane et al.[13] used both the PHQ and the Beck Depression Inventory II. Because the cutoff value for depression based on the PHQ was <9 in both Kissane et al.[13] and our research, 20% of our study population were seriously demoralized but not clinically depressed compared with 14%. We also found lower correlations between demoralization and depression ($r = 0.61$) compared with Kissane et al.[13] ($r = 0.79$), although Cronbach alpha values were comparable between both samples. This result indicates that in the German sample, both constructs overlap to a lower extent.

Using the cutoff value based on the mean value (± 1 SD), 16% of the patients were classified as having high levels of demoralization and 73% were classified as having moderate levels of demoralization. Thus, we found much higher levels of demoralization compared with Mullane et al.,[17] who used the same classification approach. Based on these cutoff values, we found 60% of participants with moderate levels of demoralization and 5% of those with high levels of demoralization who had no depression. With regard to anxiety, we identified 69% of participants with moderate levels of demoralization and 8.5% of those with high levels of demoralization who had low levels of anxiety. Overall, our findings indicate that in contrast to patients with moderate levels of demoralization, patients with severe demoralization (cutoff ≥ 40) are more likely to suffer from depression or anxiety disorder also.

The strengths of this study are the relatively large sample size of patients with advanced cancer, the lack of a gender bias and the low rates of missing values. However, the study is potentially limited by the fact that no information about the approximate life expectancy of patients was available and the relatively low response rate in Study 1. Yet, the study provides further evidence that the DS is a valid instrument showing very good psychometric properties. Findings also suggest that demoralization, despite a partial overlap with depression, anxiety and distress, is a distinct concept of high clinical relevance in this population. With regard to the clinical relevance of demoralization, several evidence-based treatments that address the search for meaning and purpose in the face of advanced cancer have been developed and evaluated during recent years.[25,29,30] Moreover, a study by Vehling et al.[31] showed that older patients and women were at a particularly higher risk for demoralization. Thus, attention should be placed on the needs of these groups in the prevention of demoralization.

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