

# Qualitative and Quantitative Distress Assessment of Cancer Patients Using the NCCN Distress Thermometer: Pilot Experience from the Knight Cancer Institute

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## BACKGROUND

The National Comprehensive Cancer Network (NCCN) recommends all patients be screened for distress.

Despite the efficacy of psychosocial interventions, few patients in distress are actually identified and referred for help.

The "distress thermometer" and accompanying "problem list" is an NCCN endorsed instrument that has been validated and is widely used. It has been shown to have sensitivity ratings from 0.65 to 0.77 and is acknowledged for its ease in administration, scoring and interpretation.

**NCCN Guidelines Version 2.2013 Distress Management**

Second, please indicate if any of the following has been a problem for you in the past week including today. Be sure to check YES or NO for each.

YES	NO	Practical Problems	YES	NO	Physical Problems
<input type="checkbox"/>	<input type="checkbox"/>	Child care	<input type="checkbox"/>	<input type="checkbox"/>	Appearance
<input type="checkbox"/>	<input type="checkbox"/>	Housing	<input type="checkbox"/>	<input type="checkbox"/>	Bathing/dressing
<input type="checkbox"/>	<input type="checkbox"/>	Insurance/financial	<input type="checkbox"/>	<input type="checkbox"/>	Breathing
<input type="checkbox"/>	<input type="checkbox"/>	Transportation	<input type="checkbox"/>	<input type="checkbox"/>	Changes in urination
<input type="checkbox"/>	<input type="checkbox"/>	Work/school	<input type="checkbox"/>	<input type="checkbox"/>	Constipation
<input type="checkbox"/>	<input type="checkbox"/>	Treatment decisions	<input type="checkbox"/>	<input type="checkbox"/>	Diarrhea
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Eating
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Fatigue
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Feeling Swollen
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Fevers
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Getting around
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Indigestion
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Memory/concentration
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Mouth sores
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Nausea
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Nose dry/congested
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Pain
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Sexual
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Skin dry/itchy
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Sleep
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Substance abuse
<input type="checkbox"/>	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	Tingling in hands/feet

Other Problems: \_\_\_\_\_

## AIMS

To investigate the prevalence and contributing psychological factors of distress among cancer patients treated with radiation therapy, and to determine the relationship between these symptoms and treatment site.



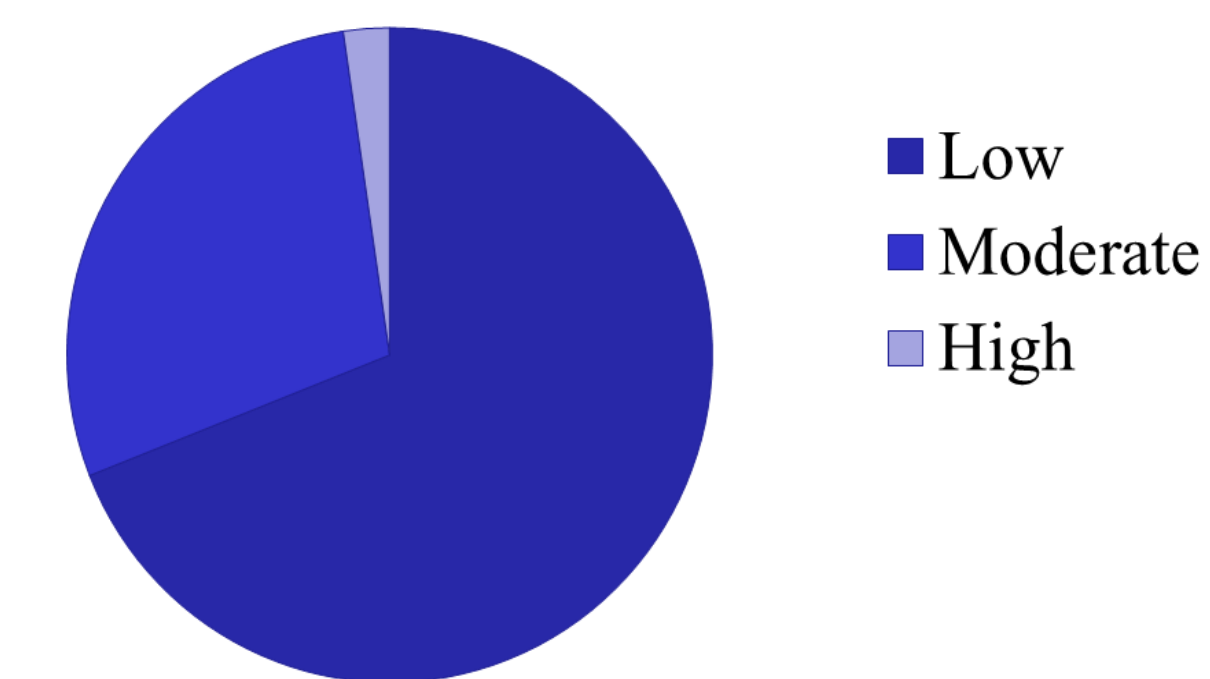
## METHODS

- 140 patients treated at Oregon Health Sciences University Knight Cancer Institute radiation oncology and medical oncology clinics were screened for psychological distress using the NCCN "Distress Thermometer" and problem list
- Patient and clinical data including age, sex, and disease site were acquired retrospectively for analysis.
- Chi-square analysis and Fisher's exact tests were employed to determine statistical significance.

## RESULTS

- Mean distress score: 3.5 (range 0-9)
- 89 (69%) had low distress, 0-4; 37 (28.7%) had moderate distress, 5-7; 3 (2.3%) had high distress, 8-10
- Distress score was not associated with gender or age
- Emotional (p<.001), physical (p=.001), and practical (p=.002) problems are associated with distress score
- Most common problem: fatigue (52%)

Distribution of Psychological Distress



Cancer type	Frequency (%)
Breast	5 (3.9)
CNS	5 (3.9)
GI	9 (7.0)
GU	23 (17.8)
Gynecologic	2 (1.6)
HEENT	11 (8.5)
Hematologic	54 (41.9)
Lung	14 (10.9)
MSK	1 (0.8)
Skin	5 (3.9)

Concern	Low (%)	Moderate (%)	High (%)	P-value
Emotional	43 (48.3)	36 (97.3)	3 (100)	<0.001
Family	19 (21.4)	13 (35.1)	0 (0.0)	0.18
Physical	-	-	-	<0.001
Practical	26 (29.2)	22 (59.5)	2 (66.7)	0.002
Spiritual	12 (13.5)	10 (27.0)	0 (0.0)	0.16

Patient reported problems with low distress scores (0-4)					
	n (%)		n (%)		n (%)
Worry	23 (25.8)	Pain	24 (27.0)	Finances	11 (12.4)
Sadness	8 (9.0)	Sleep	22 (24.7)	Sexual problems	5 (5.6)
Depression	5 (5.6)	Fatigue	35 (39.3)	Bathing/Dressing	5 (5.6)
Anxiety	17 (19.1)	Nausea	11 (12.4)		

## DISCUSSION/CONCLUSIONS

- Psychological distress can negatively impact patients as they cope with cancer diagnosis, treatment, and recovery
- A significant amount of emotional distress is present among patient undergoing radiation therapy.
- Emotional, physical, and practical concerns are shown to be particularly significant sources of distress.
- Patients undergoing radiation therapy may suffer from psychological distress despite being categorized as "low distress" on the NCCN distress thermometer.
- Radiation therapy patients should be assessed for psychological distress regularly, with particular attention to emotional, physical and practical contributors. However, the NCCN thermometer alone may be insufficient.