

Translation And Validation Of A Quality Of Life And Needs Assessment Tool: The Cancer Rehabilitation Evaluation System And Its' Short Form

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BACKGROUND

Patient-centeredness is an important aspect of quality care. The use of patient reported outcome tools (PRO) to stimulate communication and patient involvement is encouraged. The Cancer Rehabilitation Evaluation System (CARES), a quality of life (QOL) and needs assessment tool, was translated and validated for use in the Dutch speaking part of Belgium. Psychometric properties of the full- and short version were examined.

CARES

+/- 20min
 139 items (min. 93- max.132)
 31 subscale, 5 summary scale and a total score
 Domains of life: physical, medical interaction, psychosocial, marital, sexual, miscellaneous

CANCER REHABILITATION EVALUATION SYSTEM

Example Items

How much does it apply to you?	Not at all	A little	A fair amount	Much	Very much	Do you want help?
1. I have difficulty walking	0	1	2	3	4	Y (N)
2. I find that food tastes bad	0	1	2	3	4	(Y) N

CARES-ShortForm

+/- 10 min.
 59 items (min. 32 - max. 57)
 5 summary scale and a total score
 Domains of life: physical, medical interaction, psychosocial, marital, sexual, miscellaneous

METHODS

Data collection:
 176 cancer patient



- T₀**
- CARES
 - Karnofsky Performance Status scale (KPS)
 - Hospital Anxiety and Depression Scale (HADS)
 - Social Support List (SSL)
 - Maudsley Marital Questionnaire (MMQ)
 - European Organisation for Research and Treatment of Cancer-Quality Of Life-Core 30 (EORTC-QOL-C30)
 - Distress Thermometer (DT)
- T₁** (after +/- 12days)
- CARES
 - supplementary questions on content of the CARES

RESULTS

Reliability

TABLE 1. Reliability Ratings CARES and CARES-SF

	Internal Consistency		Test-Retest Correlation	
	α		r *	
Global CARES and Scales	CARES ^a	CARES-SF ^a	CARES ^b	CARES-SF ^b
PHYSICAL	.93	.83	.90	.89
MEDICAL INTERACTION	.87	.72	.70	.70
MARITAL	.90	.74	.84	.80
PSYCHOSOCIAL	.96	.92	.91	.90
SEXUAL	.92	.85	.89	.85

* all r significant at 0.01 level (2-tailed), ^a research sample N=176, ^b test-retest sample n=158

Principal component analysis: the original factor solution of the CARES was approximately replicated, with factor loadings of .325-.851.

Construct validity

TABLE 5. Intercorrelations of CARES Total and Summary Scales

	CARES				
	Total	Physical	Medical	Marital	Psychosocial
Physical	.80*				
Medical	.49*	.32*			
Marital	.71*	.42*	.42*		
Psychosocial	.88*	.56*	.49*	.60*	
Sexual	.71*	.48*	.29*	.51*	.58*

* all r significant at 0.01 level (2-tailed)

TABLE 4. Intercorrelations of CARE-SF Total and Summary Scales

	CARES-SF				
	Total	Physical	Medical	Marital	Psychosocial
Physical	.78*				
Medical	.47*	.32*			
Marital	.60*	.33*	.35*		
Psychosocial	.67*	.55*	.46*	.51*	
Sexual	.74*	.49*	.28*	.51*	.63*

* all r significant at 0.01 level (2-tailed)

Concurrent validity

TABLE 2. Correlations of CARES Total and Summary scores with Concurrent Validity Instruments

Concurrent Validity Instruments	CARES				
	Total	Physical	Psychosocial	Marital	Sexual
KPS	-.50*	-.67*			
HADS-A	.68*		.75*		
HADS-D	.67*		.64*		
SSL-I	.09		.07		
SSL-D	.38*		.43*		
MMQ-M	.25*			.48*	
MMQ-S	.54*				.55*
EORTC-QOL-C30 General Health	-.56*				
EORTC-QPM-C30 Quality of Life	-.53*				
DT	.63*				

* r significant at 0.01 level (2-tailed)

TABLE 3. Correlations of CARES-SF Total and Summary scores with Concurrent Validity Instruments

Convergent Validity Instruments	CARES-SF				
	Total	Physical	Psychosocial	Marital	Sexual
KPS	-.54*	-.69*			
HADS-A	.66*		.73*		
HADS-D	.67*		.63*		
SSL-I	.09		.06		
SSL-D	.36*		.42*		
MMQ-M	.24*			.54*	
MMQ-S	.53*				.61*
EORTC-QOL-C30 General Health	-.58*				
EORTC-QPM-C30 Quality of Life	-.54*				
DT	.63				

* all r significant at 0.01 level (2-tailed)

CONCLUSION

The Flemish translations of the CARES and the CARES-SF have excellent psychometric properties. Reliability and validity ratings are in the same range as in the original American instrument.

RESEARCH AND PRACTICE IMPLICATIONS

The CARES is a valuable PRO-tool for research, since it is comprehensive in its' content and proves to have good reliability and validity. If for implementation in clinical practice a shorter instrument is needed, the CARES-SF is a good alternative.

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