

Translation and validation of M.D.Anderson Symptom Inventory-Heart Failure



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Translation and validation of M.D. Anderson Symptom Inventory-Heart Failure (MDASI-HF)

- **Background:**

- The cardio-toxicity of cancer treatments tend to induce heart disease such as heart failure in cancer patients (Kazemi-Bajestani et al., 2014)
- HF symptoms exacerbate the existing symptoms of cancer
- These symptoms intertwine with each other and impair patients' physical, emotional health, daily functioning, and quality of life (Fadol et al., 2015).
- The M.D. Anderson Symptom Inventory-Heart Failure (MDASI-HF) (Fadol et al., 2008)

The MDASI-HF		
27 items	Core symptom (13 items)	Measuring the presence and severity of the symptoms
	HF-specific symptom (8 items)	
	Interference (6 items)	Measuring how much the symptoms interfered with daily activities

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- **Purpose:** To translate and validate the M.D. Anderson Symptom Inventory-Heart Failure (MDASI-HF)
- **Methods:**

1. Instrument translation



2. Pilot



3. Reliability & validity test

Brislin's model (Brislin, 1986): forward translation, monolingual assessment, backward translation, and comparison

Reliability:

- Internal consistency
- Test-retest reliability

Validity:

- Content validity:
- Concurrent validity: MADSI-HF score, ECOG (Eastern Cooperative Oncology Group) performance status, and NYHA classification

Sensitivity: normal B-type natriuretic peptide (BNP) group vs. elevated BNP group on MADSI-HF score

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• Results

- Demographic characteristics of the participants (n=135)
- Results of reliability and validity

Reliability			Validity			Sensitivity		
	Cronbach's alpha	Test-retest reliability		ECOG	NYHA		Normal BNP	Elevated BNP
Core symptoms	0.913	0.976	Core symptoms	0.456*	0.477*	Core symptoms	2.76	4.08*
HF-specific symptoms	0.835	0.960	HF-specific symptoms	0.600*	0.631*	HF-specific symptoms	1.76	3.63*
Interference	0.897	0.989	Interference	0.508*	0.523*	Interference	3.68	5.59*
Total scale	0.949	0.984	All symptoms	0.539*	0.565*	All symptoms	2.38	3.91*

*P<0.001; BNP=B-type natriuretic peptide; ECOG: Eastern Cooperative Oncology Group; NYHA: New York Heart Association

香港中 Retired/no job 58 (43.0) III/ IV 23 (17.0)/ 10 (7.4)

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- Conclusion

- The Chinese version MDASI-HF is a valid and reliable instrument for symptom assessment in Chinese cancer patients with concurrent HF.
- This instrument can be employed in clinical practice to assess symptoms, to promote communications between healthcare team and patients, and to evaluate the effectiveness of interventions.

References

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