Hope Herth Index (HHI): a validation study in Italian patients with solid and hematological malignancies on active cancer treatment

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ABSTRACT

Aims and background. Although hope is a widely used term, the experience of hope in patients with chronic or even life-threatening diseases is often disregarded due to the scarcity of carefully designed and validated assessment tools. The aim of this study was to validate the Hope Herth Index (HHI) questionnaire in the Italian population of patients with solid or hematological malignancies during active cancer treatment.

Methods. After the translation procedures, the psychometric properties of the Italian version of HHI were evaluated in 266 patients with non-advanced cancer cared for in four different settings. Summative scores ranged from 12-48, with a higher score denoting greater hope. Confirmative factorial analysis was performed to assess dimensionality. The test-retest reliability was assessed by means of the Lin concordance coefficient (two weeks' interval, 80 patients). Concurrent validity was assessed through the following questionnaires: Hospital Anxiety and Depression Scale (HADS), Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being (FACIT-Sp), Edmonton Symptom Assessment Scale (ESAS), and System Belief Inventory (SBI-15R).

Results. A total of 266 patients were enrolled. Confirmative factor analysis did not confirm the original three-factor solution, whereas a one-factor solution did perform well. Cronbach's alpha was 0.84 and the test-retest reliability was 0.64 (95% CI 0.51; 0.76). Large convergence was found with spiritual well-being as measured by the FACIT-Sp (0.69) and with anxiety-depression as measured by the HADS (inverse correlation: -0.51). Physical symptoms and religiousness were only slightly correlated, as expected.

Conclusions. The Italian version of HHI is a valid and reliable assessment tool – useful to initiate conversation with someone who is troubled but finds it difficult to talk – in patients with either solid or hematological malignancies on active cancer treatment during the non-advanced stages of the disease.