Evaluating cognitive, emotional, and physical fatigue domains in daily practice by single-item questions in patients with advanced cancer: a cross-sectional pragmatic study

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To assess cancer-related fatigue (CRF), multidimensional questionnaires are required. The aim of this study was to evaluate single-item fatigue (SIF) screening questions—one for global fatigue and three for the fatigue domains (cognitive, emotional, and physical)—for their immediate use in daily oncology practice. Sixty-one fatigued patients with advanced cancer completed SIF assessments (visual analog scales for global fatigue and for fatigue in the cognitive, emotional, and physical domains, respectively), and the Brief Fatigue Inventory (BFI), the Fatigue Assessment Questionnaire (FAQ), the Hospital Anxiety and Depression Scale (HADS), and the European Organization for Research and Treatment of Cancer (EORTC) Quality-of-Life-C30 (QLQ-C30). SIF-global correlated with BFI (r=0.51), and the domain-SIFs correlated with their respective FAQ domains (cognitive r=0.59; affective r=0.45; physical r=0.33) and functional EORTC QLQ-C30 subscales (r=0.62; r=0.42; r=0.34). The SIF-emotional also correlated with HADS-Anxiety (r=0.43) and HADS-Depression (r=0.62). Principal component analysis (domain-SIF; respective FAQ and functional EORTC QLQ-C30 subscales) revealed three clusters and a two-factor model (cognitive/emotional, physical), explaining 74% of variability. Patients with one predominant SIF domain had more domain-tailored fatigue interventions than had patients with mixed SIFs. These data suggest that three simple SIF questions permit rapid assessment of the physical and cognitive and probably the emotional domains of CRF in patients with advanced cancer.