

## JOURNAL WATCH

### **A Single Set of Numerical Cutpoints to Define Moderate and Severe Symptoms for the Edmonton Symptom Assessment System.**

**Reference:** In Journal of Pain and Symptom Management, vol.39, no.2, Feb.2010, pp 241-49. Authors: Debbie Selby, Alicia Cascella, Kate Gardiner, Randy Do, Veronika Moravan, Jeff Myers and Edward Chow. Sunnybrook Health Sciences Centre, University of Toronto.

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**Abstract** Symptom intensity in cancer and palliative care patients is frequently assessed using a 0-10 ranking score. Results are then often grouped into verbal categories (mild, moderate, or severe) to guide therapy. Numerical cutpoints separating these categories are often variable, with previous work suggesting different cutpoints across different symptoms, which is unwieldy for clinical use. The Edmonton Symptom Assessment System (ESAS) assesses nine common symptoms using this 0-10 scale. The primary aim of this study was to examine the relationship between the numerical and verbal scores using the ESAS and to identify a single cutpoint to separate severe and nonsevere symptomatology. A second goal was to similarly identify a cutpoint to separate moderate or severe from none or mild symptom intensity. Consenting patients (n=400) completed both a standard ESAS and an identical form that replaced 0-10 with none, mild, moderate, and severe. Receiving operating characteristics curves were generated to identify the best fit between sensitivity and specificity. For the 'severe' ranking, six symptoms had a best fit of 7, with sensitivity for the remaining three symptoms still greater than 80%. For the combined grouping of moderate or severe, results were less uniform. A cutpoint of either 4 or 5 would be supported by our data, with a greater sensitivity using 4 and improved specificity using 5 as the cutpoint. Across all ESAS symptoms, then, 7 or higher represents a severe symptom by patient definition, whereas a cutpoint of either 4 or 5 could reasonably define combined moderate and severe symptoms.

#### **Strengths**

A prospective study  
Adequate sample of palliative care patients.  
Stats well done with good sensitivity and specificity levels.

#### **Weaknesses**

Patients are highly functional (median PPS of 70% This could also explain the low number of patients who scored as severe symptoms: nausea (10), depression (23), anxiety (28) and shortness of breath(14). Therefore it is unclear as how the end-of-life distress might have interfered with patients' definitions of their symptoms (mild, moderate, severe).

#### **Relevance to palliative care**

The ESAS is a commonly used tool to better assess patients and to facilitate communication with the different members of the team involved in the care. This study will help to better understand the meaning of the scores. It also opens a door to further research dedicated specifically to more advanced cancer patients and their perceptions of the 9 symptoms included in the ESAS.