Clinical Subgroups of a Psychoneurologic Symptom Cluster in Women Receiving Treatment for Breast Cancer: A Secondary Analysis

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Symptom clusters are groups of interrelated symptoms that occur together (Kim, McGuiere, Tulman, & Barsevick, 2005). Identifying clinical subgroups of patients with cancer with different patterns of symptom severity can help determine who needs more intensive care and assist the development of symptom management strategies tailored to a specific patient subgroup (Gwede, Small, Munster, Andrykowski, & Jacobsen, 2008). The current analyses build on previous research that identified a psychoneurologic symptom cluster (depressed mood, cognitive disturbance, fatigue, insomnia, and pain) (Kim, Barsevick, Tulman, & McDermott, 2008) by evaluating whether subgroups of patients with breast cancer with different patterns of those symptoms could be identified. A psychoneurologic symptom cluster in this study is defined as a set of emotional or behavioral symptoms that could be related to psychological or neurologic dysfunction and that co-occur and are interrelated with each other.

Several studies have provided empirical evidence of the clustering tendency of psychoneurologic symptoms in patients with cancer (Bender, Ergun, Rosenzweig, Cohen, & Sereika, 2005; Chen & Tseng, 2006; Kim et al., 2008). For instance, a previous study by the current authors (Kim et al., 2008) empirically identified two treatment-related symptom clusters by factor analyzing 20 different oncologic symptoms at three different time points across the cancer treatment trajectory in patients with breast cancer. The previously mentioned psychoneurologic cluster was present before and during treatment; an upper gastrointestinal cluster (nausea, vomiting, and decreased appetite) was identified after the commencement of treatment. Of note, in the authors’ previous work and in work by others,