Trajectories of mood disturbance are associated with co-occurring symptoms

Meagan Whisenant[1], Sandra Mitchell[2], Susie Beck[1,3], Bob Wong[1], and Kathi Mooney[1,3]

[1]University of Utah College of Nursing, [2]National Cancer Institutes, Outcomes Research Branch, [3]Huntsman Cancer Institute

Background

Mood disturbance is reported to co-occur with other symptoms during treatment for breast cancer. The collective consequence of simultaneous multiple symptoms may result in increased impairment when compared to the consequence of a single symptom. We previously identified 2 patterns of depressed mood (Consistently Mild and Consistently Low Moderate) and anxiety (Consistently Mild and Consistently Moderate) in women undergoing chemotherapy for breast cancer using a Latent Growth Mixture Model. The **purpose** of this study was to explore whether membership in symptom classes of depressed mood and anxiety is associated with other symptoms.

Methods

Using data from 2 multi-site randomized clinical trials, independent samples *t*-tests were used to distinguish between classes of women on co-occurring symptoms. The severity of 7 symptoms was self-reported daily by women (0-10 scale) during cycles 2 and 3 of chemotherapy, using an automated telephone system. Summative severity scores were calculated for each symptom, including the number of days subjects scored 4 or higher, and then compared to class membership.
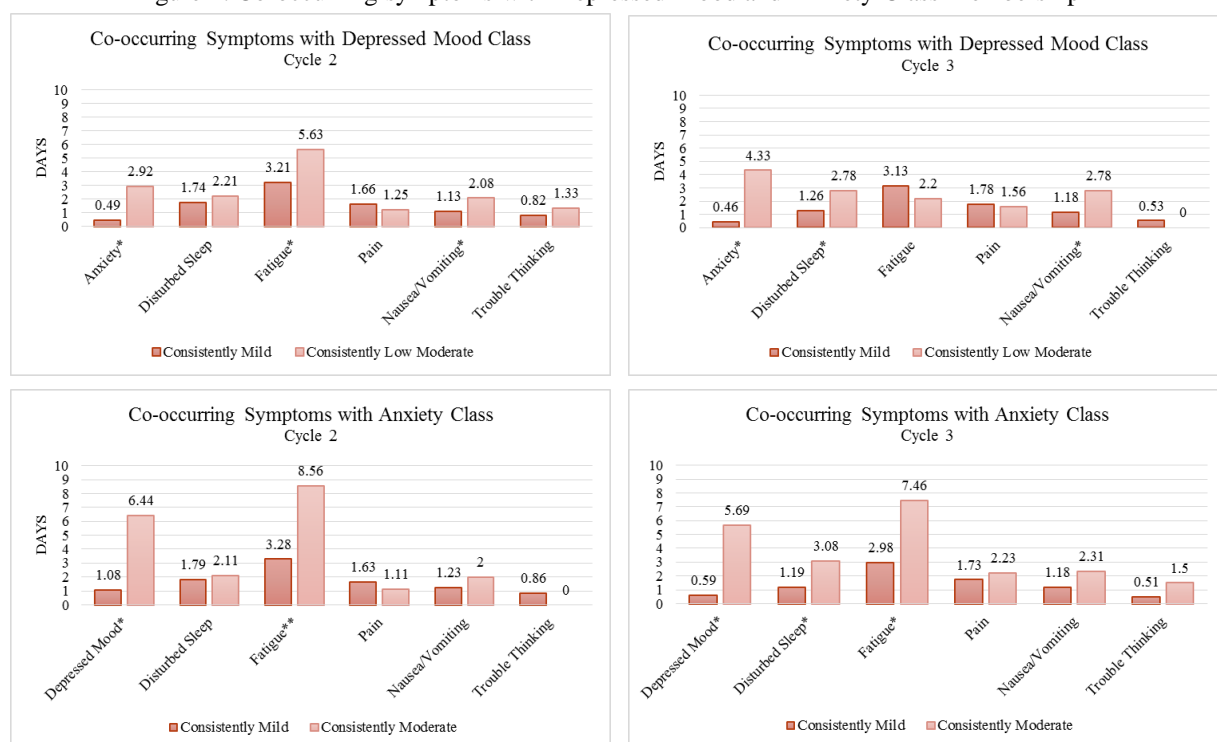
Results

- Participants (n = 166) had a mean age of 53 years (S.D. ± 10.8); 52.4% had early stage breast cancer. The majority of women were white (91.4%), married (75%), and not currently working (62.8%).
- Membership in the higher severity depressed mood class was associated with fatigue, disturbed sleep, anxiety, and nausea (see Figure 1)
- Membership in the higher severity anxiety class was associated with fatigue, disturbed sleep, and depressed mood (see Figure 1)

Conclusions

Symptoms co-occur during cancer treatment. Severity class membership for both depressed mood and anxiety was related to the presence of other symptoms at moderate to severe levels, suggesting a shared etiology or potential synergist effect among co-occurring symptoms. This dynamic process of multiple symptoms may be altered by future identification of the gateway symptom. Identification of women at risk for high symptom burden during chemotherapy allows clinicians to target those individuals for intervention, potentially avoiding poor outcomes associated with symptom burden.

Figure 1. Co-occurring symptoms with Depressed Mood and Anxiety Class Membership

*p <.01, ** p < .001

meagan.whisenant@nurs.utah.edu

HEALTH
UNIVERSITY OF UTAH