Title:
Pain Symptom Cluster's (SC) Effect on the Psychoneurological SC and Performance in Advanced Breast Cancer

Kawther Ismail Hamash, PhD, MSN, BSN
Nursing, Indiana University-Purdue University-Fort Wayne, Fort Wayne, IN, USA
Wendy Umberger, PhD
College of Nursing, Kent State University, Kent, OH, USA
Aynur Aktas, MD
Academic Advancement, Emory University School of Nursing, Atlanta, GA, USA
Thomas Declan Walsh, MD, MSc
Survivorship, Genetics, Navigation, and Integrative Oncology Departments, Levine Cancer Institute, Charlotte, NC, USA
Vinay Kumar Cheruvu, PhD, MS, MSc
Biostatistics, Environmental Health Sciences, and Epidemiology, Kent State University, Kent, OH, USA

Session Title:
Strategies in Addressing Cancer Pain
Slot:
H 17: Monday, 30 October 2017: 2:45 PM-3:30 PM
Scheduled Time:
2:45 PM

Keywords:
Symptom clusters, advanced breast cancer and performance status

References:

Kirkova, J., Aktas, A., Walsh, D., Rybicki, L., & Davis, M. P. (2010). Consistency of symptom clusters in advanced cancer. American Journal of Hospice and Palliative Care, 27, 342–346.

Kirkova, J., Ryibicki, L., Walsh, D., Aktas, A., Davis, M., & Karafa, M. T. (2011). The relationship between prevalence and severity and cancer primary site in 796 patients with advanced cancer. American Journal of Hospice & Palliative Medicine, 28, 350-355.

Nguyen, L.T., Yates, P., Annoussamy, A.C., Troung, T.Q. (2016). The effectiveness of non-pharmacologic interventions in the management of symptom clusters in adult cancer patients: a systematic review protocol. The Joanna Briggs Institute, 14, 49-59.

Walsh, D., & Rybicki, L. (2006). Symptom clustering in advanced cancer. Supportive Care in Cancer, 14, 831-836.

Abstract Summary:
This abstract will be presented in the form of Oral presentation. A power point presentation will be presented to show the study aim, design, and results. At the end, the author will present clinical and nursing implications of the study results.
Learning Activity:

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE

The learner will be able to identify the most commonly reported symptoms in breast cancer women.	Background and definition: Breast cancer can be a fatal disease and it is associated with multiple symptoms that may affect physical functioning and quality of life if left untreated. Pain, fatigue, depression, sleep disturbances, anxiety, nausea, vomiting, constipation, and other symptoms are reported frequently in samples of women with breast cancer. Many of these symptoms are highly correlated and reported in groups, called symptom clusters
The learner will be able to define the term of "Symptom cluster".	Definition of Symptom Cluster with a drawing in Power Point Presentation: The presence of two or more co-occurring symptoms That are correlated to each other; The correlation between symptoms in one cluster should be stronger than their correlation with other symptoms in different clusters.
The learner will be able to conclude the significance of managing symptom clusters rather than managing individual symptoms.	study results integrated to the study model in power point presentation: Pain symptom cluster contains Pain and Constipation. Constipation is the most common side effect of Opioid (Pain analgesics). Study findings showed: Women who had moderate to severe constipation were three times more likely to have the psychoneurological SC (OR = 3, CI = 1.18 – 7.62). The OR indicated that having severe pain increased the risk of having the psychoneurological SC by 56%. The ORs showed that participants who had severe pain were 38% more likely to be bedridden (OR = 1.38, CI = .57 – 3.40). Managing both componenets of Pain symptom cluster (i.e.,Pain and Constipation) would alleviate the psychoneurological symptom cluster (i.e., Depression, Anxiety, and Sleep disturbances). Conclusion: Managing one symptom cluster effectively can prevent or control the occurrence of other symptoms or symptom cluster

Abstract

Background: Breast cancer is associated with the occurrence of multiple symptoms, which can lead to negative consequences on the patient's physical status, social life, and psychological and financial status. Symptoms that are correlated with each other are known as Symptom Cluster (SC). Pain, fatigue, depression, sleep disturbances, anxiety, nausea, vomiting, constipation, and other symptoms are reported frequently in samples of women with breast cancer (Kirkova, Ryibicki, Walsh, Aktas, Davis, & Karafa, 2011). These symptoms have negative effect on performance status (PS) in different stages of

breast cancer. Depression, anxiety, and sleep disturbances are often reported in the psychoneurological SC. Examining the effect of SCs on performance status (PS) in advanced stages of breast cancer can alleviate their effect on performance and thereby improve a patient's quality of life.

Aim: This study examined the effect of the pain SC on one or more symptoms of the psychoneurological SC and PS in advanced breast cancer.

Design: This study was a secondary analysis of 86 women diagnosed with advanced breast cancer who represented a subsample of a previous large 1000 patient cross-sectional study. **Setting/participants:** A de-identified complete data profile of 86 women diagnosed with advanced breast cancer who were referred to a palliative care center at a large tertiary medical center in northeast Ohio was included in this study.

Results: Logistic Regression was conducted to examine the effect of pain, constipation, and the psychoneurological symptoms on PS. The Odds Ratio (OR) of the effect of the psychoneurological SC on PS was not significant at the 90% CI (OR = .46, CI = .17 – 1.29), indicating the psychoneurological SC had no significant effect on the PS. Constipation showed a significant effect on the psychoneurological SC but not on PS (OR: 3 [1.18 – 7.62]). The effect of pain on the psychoneurological SC showed no significant differences (OR = 1.56, CI = .66 – 3.69). Although statistically not significant, the study results showed that severe pain increases the risk of having poor psychoneurological symptoms and increases the risk of having poor PS.

Conclusions: The differences in the sample characteristics, disease stage, instruments used, and statistical tests can lead to differences in studying the effect of SCs on PS. The findings of this study show that patients reporting constipation experienced worse psychoneurological symptoms compared with patients who did not report constipation. The significant effect of constipation on the psychoneurological symptoms highlighted the importance of managing all symptoms identified in SC rather than individual symptoms to reduce the severity of other SCs or symptoms identified in other clusters.