Title:
The Significance of Sleep Disturbance and Attentional Fatigue Among Breast Cancer Survivors

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Session Title:
Rising Stars of Research and Scholarship Invited Student Posters

Keywords:
Breast cancer survivors, attentional fatigue and sleep disturbance

References:


Abstract Summary:
The goal of this presentation is to improve participants' understanding of attentional fatigue in breast cancer survivors (BCS). At the end, participants' will understand its importance, identify demographic and medical characteristics that may impact attentional fatigue, and understand the impact of sleep on attentional fatigue in BCS.

Learning Activity:

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
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<tr>
<td>Define sleep disturbance and attentional fatigue as they relate to breast cancer survivors.</td>
<td>Definitions of the two main concepts, sleep disturbance and attentional fatigue, will be provided.</td>
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Identify the connection between sleep disturbance and attentional fatigue among breast cancer survivors.

The posters main outcome will highlight the relationship between sleep disturbance and attentional fatigue in breast cancer survivors.

Abstract Text:

Purpose and Background: The purpose of this study was to examine the impact of sleep disturbance on attentional fatigue in breast cancer survivors (BCS) while controlling for known covariates. Sleep disturbance is a common concern among BCS and has been shown to be related to other distressing symptoms. Attentional fatigue, a decrease in the ability to focus, has also been identified by BCS as a persistent challenge; however, little is known regarding the impact of sleep disturbance on attentional fatigue.


Methods: A secondary data analysis was completed on a cross-sectional, descriptive study of 68 BCS from a Midwestern cancer center. BCS completed questionnaires including the Pittsburgh Sleep Quality Index (PSQI), the Attentional Function Index (AFI), and demographic questionnaires. Sleep disturbance, a sub-scale of the PSQI, is measured by asking 9 questions about different sleep disturbances (i.e. dreams, temperature, pain, etc.) their occurrence and frequency. Higher sleep disturbance scores indicate worse sleep disturbance. Attentional fatigue was captured by using the AFI, a 13 question scale. Higher AFI scores indicate higher functioning. Descriptive statistics and multiple regression was performed to assess the impact of sleep disturbance on attentional fatigue controlling for the covariates of age, level of education, and time since treatment.

Results: 68 female BCS, ranging from 29 to 68 years of age (M=52.1; SD=8.6) and on average 4.97 (SD=3.36) years post-treatment, participated. In this sample 31% of the BCS had moderate to poor attentional function. Sleep disturbance significantly predicted attentional fatigue (p<0.05), explaining 16% of the variance of attentional fatigue, F(4, 57) = 2.68, p < 0.04, R2 = 0.16. Age, level of education, and time since treatment did not significantly predict attentional fatigue.

Conclusions: Nurses are in a position to assess and intervene to decrease sleep disturbance and improve attentional fatigue in BCS. However, sleep disturbance is just one factor contributing to attentional fatigue. Further investigation into other factors contributing to attentional fatigue in BCS is warranted.