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Abstract

Women at familial breast cancer risk have highly inflated perceptions of their risk of developing the disease, high levels of cancer specific distress, and lower levels of natural killer cell activity (NKCA) than women without familial breast cancer risk. To date, little research has been done on women of African descent with family histories of breast cancer, despite the fact that they may be at particularly high risk for chronic distress due to their fatalistic attitudes towards the disease. The proposed study will examine the impact of an expressive writing intervention on emotional, biological, and cognitive processes among women of African descent at familial breast cancer risk. This intervention has been shown to have positive effects on emotional outcomes (e.g., decreased distress), biological outcomes (e.g., increased NKCA), and cognitive outcomes (e.g., increased working memory) in individuals writing about a variety of life stressors including minor stressors and major trauma. We propose a randomized controlled trial examining the effects of expressive writing intervention on emotional, biological, and cognitive functions in health women of African descent at familial breast cancer risk.

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“Emotional, Biological, and Cognitive Impact of a Brief Writing Intervention for African American Women at Familial Breast Cancer Risk”

Principal Investigator: Dr. Heiddis Valdimarsdottir

INTRODUCTION:

Having a family history of breast cancer is a risk factor for developing cancer in one's lifetime. Women at familial breast cancer risk have highly inflated perceptions of their risk of developing the disease, high levels of cancer-specific distress, and lower levels of natural killer cell activity (NKCA) than women without familial breast cancer risk. To date, little research has been done on African American Women (AAW) with family histories of breast cancer, despite the fact that they may be at particularly high risk for chronic distress due to their fatalistic attitudes towards the disease. The most common intervention for women at familial risk is breast cancer risk counseling which provides a wealth of information about personal breast cancer risk and various screening options. Considering the high levels of cancer-specific distress that many of these women report it may not be surprising that a number of studies now suggest that these women do not adequately process the information provided to them during the counseling. The possibility that distress associated with familial breast cancer risk affects cognitive processing is raised by studies demonstrating that working memory, which plays a critical role in various tasks, including learning of new information, is compromised by intrusive thoughts about stressful life events. The proposed study will examine the impact of an expressive writing intervention on emotional, biological, and cognitive processes among AAW at familial breast cancer risk. This intervention has been shown to have positive effects on emotional (e.g., decreased distress), biological (e.g., increased NKCA), and cognitive outcomes (e.g., increased working memory) in individuals writing about a variety of life stressors including minor stressors (e.g., going to college) and major trauma (e.g., surviving the Holocaust). We propose a randomized controlled trial examining the effects of expressive writing intervention on emotional, biological, and cognitive functions in AAW at familial breast cancer risk.

The goal of the proposed research is: first, to examine the impact of expressive writing on emotional, biological, and cognitive outcomes among AAW at familial breast cancer risk. We hypothesize that: 1) the expressive writing intervention will lead to reduced distress, increased immune function (e.g., NKC) and increased cognitive functioning (e.g., working memory); 2) the impact of the intervention on immune function and working memory will be mediated by cancer-specific distress; 3) the intervention will be particularly effective for women with high levels of social constraints in expressing their concerns about cancer. Second, to determine if expressive writing improves the effectiveness of familial risk counseling. We hypothesize that: 1) the women in the expressive writing intervention will have greater increases in knowledge following the risk counseling than women in the control condition and be more likely to adhere to recommended surveillance behaviors; 2) this increased knowledge will be due to the beneficial effects of the intervention on emotional and cognitive processes.

BODY:

As indicated in our Statement of Work, our goal was to recruit participants into the study in months 3 to 44 of the grant. Therefore, during year one, we would have expected to start recruiting and enrolling participants into the study and to be collecting data. However, we are behind in recruitment due to spending more time than expected on designing an appropriate familial breast cancer risk counseling session. The current literature mainly focuses on hereditary breast cancer risk counseling sessions, but that type of counseling is not appropriate for women at familial breast cancer risk. Therefore, we had to spend a considerably longer time than anticipated to develop a counseling manual with information tailored to women at familial risk.

KEY RESEARCH ACCOMPLISHMENTS:

At this point in the research, we have designed a familial breast cancer risk counseling session. We are in the process of pilot testing the contents of the counseling session, and we will submit the familial breast cancer risk counseling session to the Department of Defense when it is finalized. We have started to identify participants from Project 3 "Immune surveillance, stress, and inherited susceptibility to breast cancer: A psychobiological analysis of the healthy daughter of breast cancer patients" (Dr. Bovbjerg). We are modifying the measures based on recent literature and will submit them to the Department of Defense once finalized. IRB approval has been obtained from both the DOD and Mount Sinai School of Medicine. All new material will be submitted to both IRB's once it has been finalized.

REPORTABLE OUTCOMES:

To date, we have not enrolled any participants and do not have any outcomes to report.

CONCLUSIONS:

To date, we have developed, and are in the process of finalizing, the familial breast cancer risk counseling session. The familial breast cancer risk counseling session is currently being pilot tested. The measures are in the process of being modified based on recent literature. Once the familial breast cancer risk counseling session and measures are finalized, they will be submitted to the Department of Defense and we will start recruiting participants from Project 3.

REFERENCES:

None.

APPENDIX:

Not applicable.