Award Number: DAMD17-03-1-0264

TITLE: Hot Flashes and Quality of Life Among Breast Cancer Patients

PRINCIPAL INVESTIGATOR: Linda A. Jacobs, Ph.D.

CONTRACTING ORGANIZATION: University of Pennsylvania
Philadelphia, Pennsylvania 19104-6205

REPORT DATE: August 2004

TYPE OF REPORT: Annual Summary

PREPARED FOR: U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

DISTRIBUTION STATEMENT: Approved for Public Release;
Distribution Unlimited

The views, opinions and/or findings contained in this report are those of the author(s) and should not be construed as an official Department of the Army position, policy or decision unless so designated by other documentation.
**Title and Subtitle:**
Hot Flashes and Quality of Life Among Breast Cancer Patients

**Author(s):**
Linda A. Jacobs, Ph.D.

**Performing Organization Name(s) and Address(es):**
University of Pennsylvania
Philadelphia, Pennsylvania 19104-6205

**E-Mail:** pshapiro@mail.med.upenn.edu

**Sponsoring/Monitoring Agency Name(s) and Address(es):**
U.S. Army Medical Research and Materiel Command
Fort Detrick, Maryland 21702-5012

**Abstract (Maximum 200 Words):**
Breast cancer (BC) has the greatest one-year incidence of any cancer among women, and women diagnosed with BC constitute the largest group of female survivors of cancer at five years and beyond. Both because of the age of the population and the use of certain therapeutic agents this process often includes menopause. Hot Flashes among BC patients are highly prevalent and qualitatively different from those experienced by healthy menopausal women. Specifically, BC patients report more frequent, longer lasting, and more bothersome hot flashes. Furthermore, compared to BC patients who do not experience hot flashes, those who do report poorer quality of life (QoL) with decreased physical and social functioning, as well as poorer general health, even after controlling for medical, demographic, and treatment variables. However, not all BC patients who experience hot flashes experience decreased QoL. Further, it is unclear whether BC patients rely solely on medical intervention or utilize complementary/alternative medicines (CAM) to treat hot flashes. This study examines the relationship between hot flashes and QoL in BC patients and develops a taxonomy of medical and CAM interventions used by BC patients. To date 78 patients have been recruited to participate in the parent study to the proposed project.
Table of Contents

Cover......................................................................................................................... 1
SF 298......................................................................................................................... 2
Introduction.................................................................................................................. 4
Body............................................................................................................................. 4
Key Research Accomplishments................................................................................. 4
Reportable Outcomes.................................................................................................. 5
Conclusions.................................................................................................................. 6
References.................................................................................................................... 6
Appendices.................................................................................................................. 6
Introduction
This project is an individual training grant in breast cancer. The project involves focused mentorship and training in all aspects of breast cancer (BC) care and research, including psychosocial and quality of life issues. The training program outlined in this grant focuses on three main areas coordinated to facilitate development as an independent nurse researcher and focused on broad based QoL and survivorship issues in women with BC. The training consists of: 1) development of research skills in behavioral oncology and epidemiology; 2) mentored training in psychosocial research methods and design, and the psychosocial and physiological aspects of BC and its treatment; and 3) opportunities for experience working with mentors on current research projects and in the development of new research proposals. The research study segment of this grant is a sub-study within an ongoing project evaluating all new BC patients in the Rowan Breast Center at the UPCC for emotional distress, physical and social functioning, and QoL. Women are recruited at diagnosis and baseline measures are taken. These are repeated at 3 months after treatment began and the use of medical and CAM interventions for hot flashes, hot flash intensity/frequency, emotional distress, physical and social functioning, and QoL are examined. Recruitment of subjects to the parent study began approximately 5 months ago and women will be followed across 6 month, 9 month, 12 months, 15 month, and 18-month assessment periods. As soon as DoD IRB approval is granted, subjects will be consented to participate in the proposed study.

Body
This project received notice of award on December 4, 2002 and notification of final approval on July 3, 2003 stating that the grant contract was signed and scheduled to begin on July 21, 2003. Preparation for training and research began immediately after the final notification. Key Research Accomplishments, and Education and Career Development Activities including publications and presentations are outlined in the following sections. These items are in accordance with activities described and outlined original proposal and Statement of Work.

Key Accomplishments
• Developed a biweekly schedule to meet with mentors, Drs. Coyne, Vaughn, and DeMichele, to discuss the research project outlined in the grant and other related projects, current literature, and strategies for future work, presentations, and publications.
• Hired and trained research assistant, developed detailed research protocol, developed and implemented tracking tools and data management procedures. Research packets including tools are assembled and patients are being recruited.
• The research project proposed as part of my training is ready to begin and as soon as DoD IRB approval is granted, subjects will be consented to participate in the study. To date 78 subjects have been recruited to participate in the parent study. I am currently working very closely with Dr. Steven Palmer, a behavioral psychologist who is the coordinator of the parent study.
• Biweekly research meetings with breast research project team and mentors. Review progress to date of parent study as well as procedures and data for several projects. Discuss ideas for new projects.
- Attend case conferences (bimonthly), breast clinical trial meetings (monthly), and journal clubs (monthly) in the Rowan Breast Center 2001-present.

- Attended the University of Wisconsin Medical School sponsored talk on Breast Cancer Chemotherapy held on September 3, 2003.

- Attended the University of Pennsylvania School of Medicine’s 6th Annual Changing Concepts in Breast Cancer on September 11-12, 2003. This was offered through the Office of Continuing Education.

Reportable Outcomes

- Invited to be the Oncology Nursing Society’s Research Agenda Panel content area leader for research in survivorship and late effects, preparing the 2003-2005 Priority Research Agenda.


- Poster presentation on The use of a web-based survey to identify the need for an adult cancer survivorship program at the NCI’s Cancer Patient Education Network’s (CPEN) 14th Annual Conference November 5-8, 2003 Toronto, Canada.


- Attended the Oncology Nursing Society Sponsored Conference on Complementary, Alternative, and Integrative Therapies, held on March 5, 2004.

- Poster presentation at the University of Pennsylvania Abramson Cancer Center Scientific Symposium and Retreat, Late Effects of Breast Cancer: Establishing a Prospective Cohort of Survivors held on March 31, 2004.

- Co-authored a poster reporting data from a related project, Late Effects of Breast Cancer: Establishing A Prospective Cohort of Survivors, presented at the American Society of Breast Diseases meeting in April 7-9, 2004.

- Invited speaker to present Long-term Medical Care of Testicular Cancer Survivors at Holy Redeemer Hospital, a Penn Cancer Network Hospital on April 23, 2004.

- Invited speaker to present Cancer Survivorship: Medical Late Effects of Treatment at the American Cancer Society’s 8th Annual Cancer Survivor’s Conference Workshop held on April 24, 2004.

- Co-authored a poster reporting data from a related project, Predictors of Quality of Life Among Breast Cancer Survivors, presented at the American Society of Clinical Oncologists (ASCO) 2004 Annual Meeting held June 5-8, 2004.

• Attended the University of Pennsylvania School of Medicine’s *Post ASCO Update on Breast Cancer* on June 24, 2004. This was offered through the Office of Continuing Education.


**Conclusions**

Progress on the training grant continues. A number of related projects are in the planning phase and I am participating in a number of ongoing projects. I anticipate beginning recruitment for the proposed project in the near future. This training grant has provided me the opportunity to grow as an independent researcher and participate in many valuable experiences.

**References**

None

**Appendices**

None

6