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14. ABSTRACT This ongoing longitudinal study examines hot flashes and QoL in BC patients undergoing initial treatment and develops a taxonomy of the medical and CAM interventions used by patients. Women are assessed for hot flash intensity/frequency, use of medical and CAM interventions, emotional distress, physical and social functioning, and QoL at diagnosis and 6, 9, 12, 15, and 18 months. To date 106 women have been recruited to the study. Preliminary analysis of baseline descriptive data is available. The sample is primarily middle-aged ($M = 52$ years; $R = 28-81$ years), Caucasian (86.6%), has at least some college education (85%), and is married (71.7%). Most women (76.5%) report no hot flashes at baseline and only 25% report that they have experienced hot flashes in the preceding 12 months. Baseline distress scores using the Hopkins Symptom Checklist were moderate ($M = 43$) and almost half the sample (47.5%) exceeded criteria for elevated distress. Baseline distress was related to age, with younger women demonstrating higher distress levels ($r = -.28, p = .005$). Of women currently experiencing hot flashes, 51% report having used HRT and 26.7% used exercise to control hot flashes. At baseline, use of CAM products was rare, with 14.3% of women reporting use, most commonly flaxseed (5.1%). 69.8% report taking vitamin supplements, and 11.1% report taking dietary supplements such as soy products and lycopene. 21.2% report engaging in alternative therapies, most commonly relaxation techniques (11.1%) and massage therapy (7.1%).					
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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 the grant focused 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. After baseline measures are collected, subjects are followed across 6 month, 9 month, 12 months, 15 month, and 18-month assessment periods. IRB approval was granted by the DOD for this Hot Flash study in 12/04 and to date 106 subjects are participating in the 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

- Biweekly meetings with mentors as well as Dr. Steven Palmer, a behavioral psychologist, who is an additional mentor, to discuss the research project, ongoing training, and other related projects, current literature, and strategies for future work, presentations, and publications.
- Patient recruitment for the Hot Flash research project proposed as part of my training began after DoD IRB approval was granted in 1/05. To date 106 subjects have been recruited. I work very closely with Dr. Palmer, the coordinator of the parent study who also oversees data collection for the Hot Flash study.
- Biweekly research meetings with breast research project team including Dr. Palmer and the research assistant, Alison Taggi. Review progress to date of parent and Hot Flash studies as well as procedures and preliminary data analysis. Discuss ideas for new projects.
- Data analysis will be ongoing over the next year.
- Attend case conferences (bimonthly), breast clinical trial meetings (monthly), and journal clubs (monthly) in the Rowan Breast Center 2001-present.

- Attended a review of Breast Cancer Presentations from the May 2005 ASCO meeting that was held in the Rowan Breast Center at the University of Pennsylvania.

Reportable Outcomes

Activities:

Continue as the Oncology Nursing Society's Research Agenda Panel content area leader for research in survivorship and late effects, revising the 2003-2005 Research Agenda.

Society of Clinical Oncology (ASCO) Survivorship Expert Panel for the development of guidelines for long-term medical care of adult cancer survivors. First meeting, January 26, 2005.

American Society of Breast Disease (ASBD) Annual Meeting, Symposium Presentation, "The APN in the Survivors' Clinic." April 15, 2005.

Journal Articles:

Giarelli, E. & Jacobs, L.A. (in press). Modifying Cancer Risk Factors: The Gene-Environment Interaction. *Seminars in Oncology Nursing*, Fall 2005.

Zoltick, B.H., Jacobs, L.A., Vaughn, D.J. (in press). Cardiovascular risk in testicular cancer survivors treated with chemotherapy: incidence, significance, and practice implications. *Oncology Nursing Forum*, Fall 2005.

DeMille, D., Deming, P., Lupinacci, P., Jacobs, L.A. (in press). The effects of the neutropenic diet in an outpatient setting: a pilot study. *Oncology Nursing Forum*, Fall 2005.

Jacobs, L. A. & Giarelli, E. (2004). A model of survivorship in genetic cancer care. *Seminars in Oncology Nursing*. 20, 3:196-202.

Jacobs, L. A., Scarpa, R., Lester, J., & Smith, J. (2004). Oncology nursing as a specialty: The education, scope, and standards for advanced practice nursing in oncology. *Oncology Nursing Forum*. 31, 3: 507-509.

Posters:

Jacobs, L. A., DeMichele, A., Shapiro, P. J., Coyne, J. C., Palmer, S. C. Era of Hope 2005 Department of Defense Breast Cancer research Program Meeting, Poster Presentation. "Hot Flashes and Quality of Life among Breast Cancer Patients." June 8-14, 2005.

Alton, J., Jacobs, L.A., Fox, K., Schuchter, L., Domcheck, S., Glick, J., Meadows, A., DeMichele, A. San Antonio Breast Cancer Symposium. Poster Session. "Chemotherapy-related amenorrhea (CRA) in breast cancer survivors: Impact of taxanes on ovarian function." December 2004.

Book Chapters:

Jacobs, L.A., Hobbie, W., & Moore, I. (2005). Late effects of cancer treatment. In C. Yarbrow, M. Goodman, & M. Frogge, (Eds.), *Cancer Nursing: Principles and Practice*, 6th ed. MA: Jones and Bartlett.

Jacobs, L.A., & Giarelli, E. (in press). Advising the cancer survivor. In D. Heber, G. Blackburn, V.L. W. Go, & J. Miller, (Eds.), *Nutritional Oncology*, 2nd ed. Academic Press.

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. This training grant has provided me the opportunity to grow as an independent researcher and participate in many valuable experiences.

References

None

Appendices

None