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TITLE: Developing a Training Program in Breast Cancer Research
to Decrease the Disparity of Morbidity and Mortality in
Underserved/Minority Women

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13. ABSTRACT (Maximum 200 Words) Winston-Salem State University (WSSU) a designated Historically Black College and University (HBCU) is committed to resolving some of the economic, social and health problems in the community in which the university is located. Breast cancer deaths and complication occur disproportionately in minority women than majority women within this community. This proposal is designed to develop a sustainable breast cancer training program at WSSU. Four faculty post docs from the School of Health Sciences are developing research skills by engaging in breast cancer research with professors at Johns Hopkins University who are experts in this area. In order to accomplish this project an interdisciplinary committee of doctors, nurses, educators, researchers and professors who have engaged in breast cancer research led by the researchers from JHU, are guiding the faculty through this development. The objectives of this training program are to allow the trainees the opportunity to develop fundable research proposals, to conduct successful clinical research projects, and to publish and to train other WSSU researchers. The faculty post docs will be able to apply their knowledge to assist minority elderly women to learn how to discover signs of cancer before the cancer become hard to treat. The knowledge gained will allow these researchers to participate in the training of other researchers in the area of breast cancer. Consistent with year 3 objectives, the faculty post docs have attended several training activities, submitted research abstracts and grant applications, presented in scientific conferences, and are continuously designing the program for future WSSU researchers.			
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INTRODUCTION

This 4-year training program is designed to prepare four faculty members in the School of Health Sciences (SOHS) to conduct research in the area of breast cancer. The program is intended to lay the groundwork for additional faculty to engage in breast cancer research by enhancing the research infrastructure in the SOHS. The four faculty members currently involved in the program represent nursing, clinical laboratory sciences, occupational therapy and physical therapy. Each of these faculty members is paired with a mentor from Johns Hopkins University School of Nursing (JHUSON) who is conducting breast cancer research. The JHUSON mentors are co-investigators on the project. Four academicians and practitioners from Wake Forest University Baptist Medical Center (WFUBMC) who are involved in providing health care to breast cancer clients or in conducting breast cancer research serve as consultants. These consultants represent the disciplines of gerontology, epidemiology, geriatrics and oncology. Two faculty members at WSSU serve as advisors and consultants to the four faculty post docs. The project also includes a biostatistician, housed at JHUSON, and a research assistant housed at WSSU. These persons assist the four faculty members/post docs to meet the goals of the program. In addition, the research assistant assists in maintaining the research center at WSSU. The Principal Investigator, Dr. Sylvia Flack, has administrative oversight of the project.

BODY

The post docs have been working hard during this report year. They have submitted several research abstracts and presented research at various cancer conferences. Several training activities were scheduled for the post docs to attend. These training activities included both formal and informal interactions between the mentors, the consultants, the advisors, the faculty post docs, and the trainees. They have taken place via email, telephone conferences, and face-to-face meetings. The project continues to be on schedule in lieu of the staffing changes. Dr. Sylvia Flack, the PI of this project has also had consistent interactions with those involved in the project. She and Dr. Fannie Gaston-Johannson, the co-investigator of the project from JHU, communicate at least monthly. She also continues to interact with the Dr. Bodiford Lee Stackhouse who is an advisor on the project. Dr. Flack has had extensive contact with Dr. Sharon Jackson. Dr. Jackson is a consultant from Wake Forest University and is involved in the Piedmont Alliance for Cancer Research and Education (PACRE) breast cancer project. Dr. Flack serves as a PACRE board member. The WSSU School of Health Sciences held a national conference, "Faces of a Healthy Future: A Conference to End Health Care Disparities." Dr. Flack served as the lead developer of this national conference. Several of the disparity presentation sessions were cancer related. The post docs submitted poster presentations depicting their work in Breast Cancer Research

Develop and submit Grant Applications

In addition to the grants that were mentioned in last years report, the post docs have attended grant writing workshops and received grant funding during this report year. One of the post docs submitted a grant to the Piedmont Alliance for Cancer Research and Education (PACRE) "Factors affecting breast cancer screening adherence in older African American women." This grant received funding in the amount of \$25,000. The grant proposal related to the tumor marker study submitted to PACRE at Wake Forest University in 2003 was not funded.

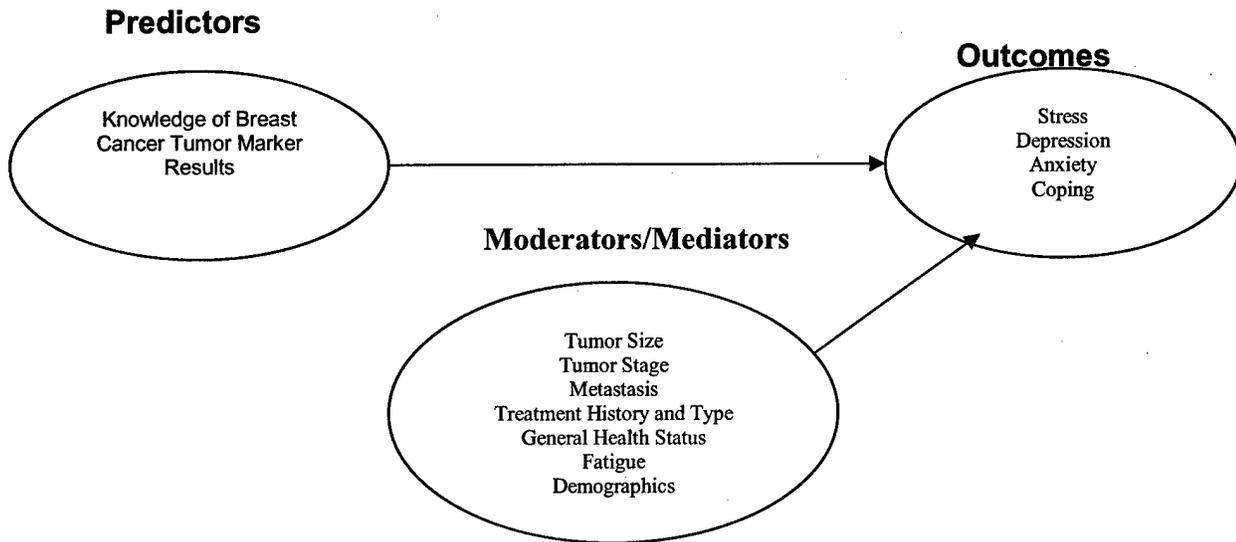
Design and Implement Breast Cancer Pilot Studies

In phase 1 of the project, the four faculty post docs received approval on their pilot studies from the Interdisciplinary Team. Phase 2 called for the development of the project. Pilot studies have been designed and are in the implementation phase in correspondence with Phase 3. The following are the approved research questions along with the research design:

Pilot Study 1 Knowledge of Breast Cancer Tumor Marker Results as a Predictor of Emotional Distress

Research Question
**Does Knowledge of Cancer Tumor Markers Predict Emotional
Distress?**

Research Model



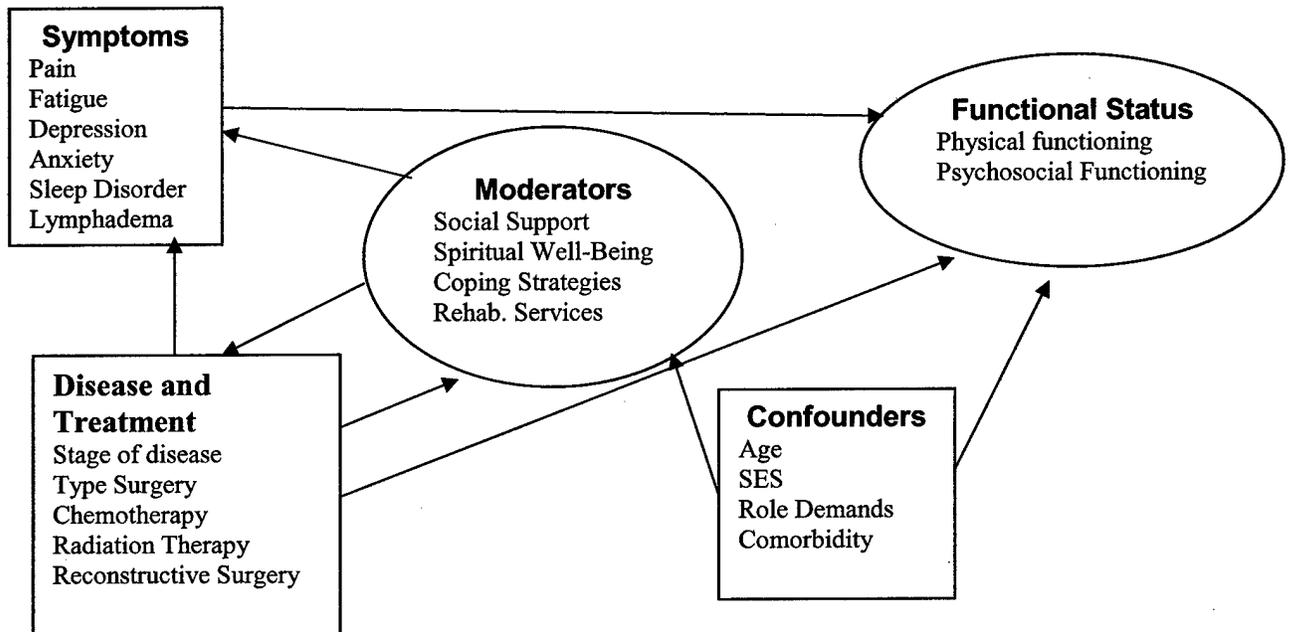
Pilot Study 2:

Research Question: What are the predictors of functional status in older minority women who have been treated for breast cancer?

Dependent Variable: Level Functional Status (physical, emotional, and social)

Independent Variables: Symptoms and Disease and Treatment (level of pain, fatigue, depression, anxiety, sleep, presence of lymphadema, stage of disease, type of treatment).

Research Model

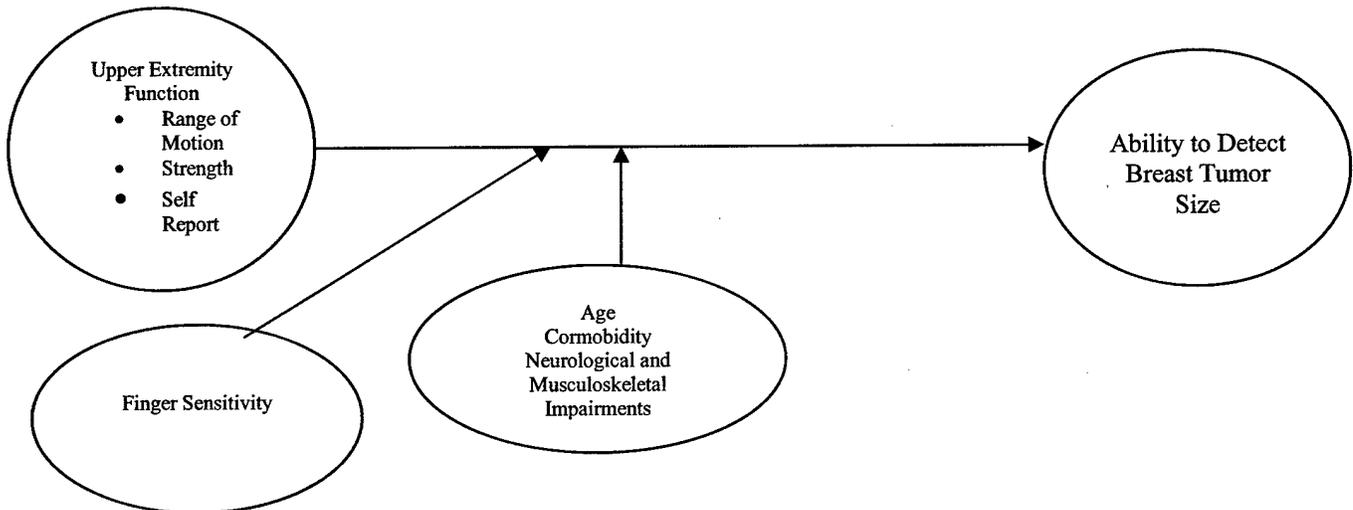


Pilot Study 3
Factors That Predict Elderly Women's Ability to Detect Breast Tumor Size

Research Question

What is the relationship between hand and upper extremity function, and tactile sensitivity of the fingers and the ability of elderly minority women to detect breast tumor size?

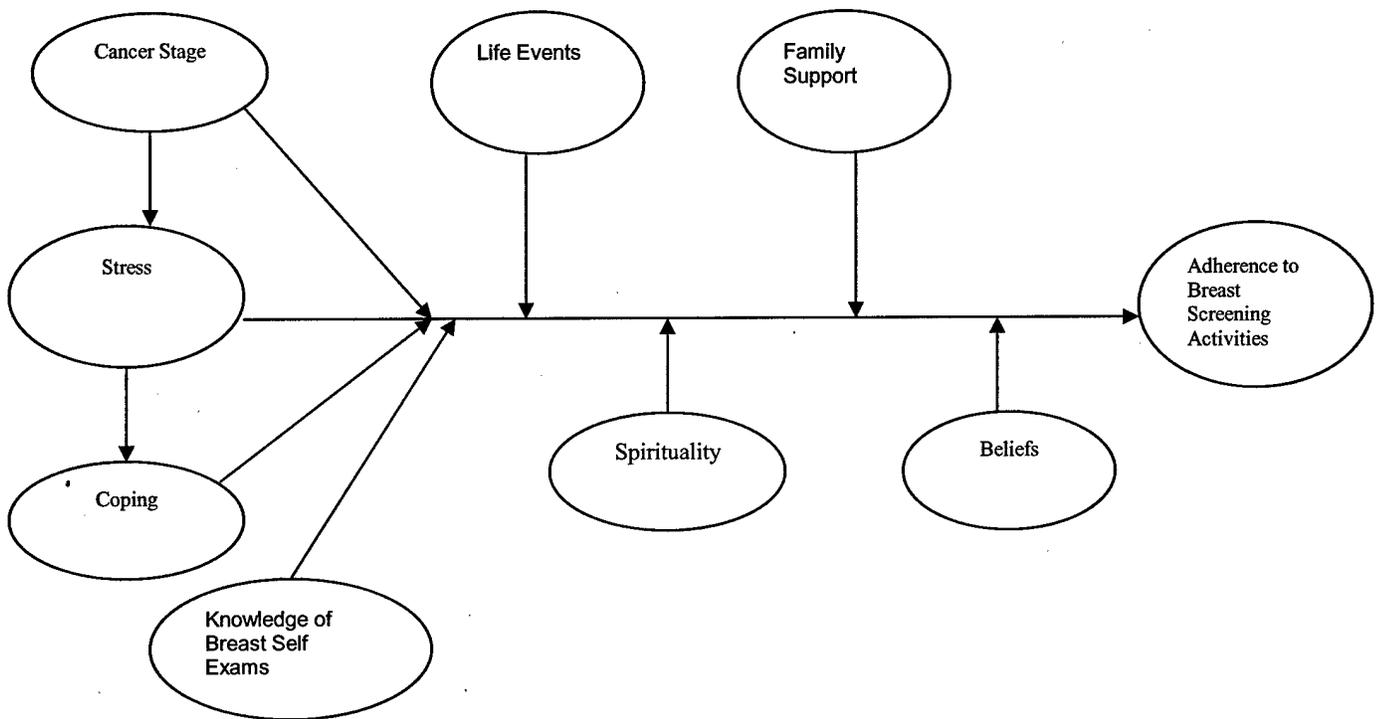
Research Model



Pilot Study 4
Breast Cancer Screening Adherence in Elderly Minority Women

Research Question
What are the relationships among stress, knowledge of BSE, coping, tumor size (cancer stage) and adherence to breast screening activities?

Research Model



Training Program for Future WSSU Researchers

As stated in last years report, the training process has been initiated for future WSSU researchers. In year 2 of phase 2 of the project, the post docs had identified future researchers in their respective areas. The post docs along with their trainees have attended breast cancer conferences, seminars and research workshops. This includes the Third Annual Future of Breast Cancer: An International Breast Cancer Congress conference from July 21 – July 25, 2004 in Bermuda. The trainees had also begun to design breast cancer projects of their own. The training process has been successful, but has encountered some unfortunate delays. The delays are due to changes in staffing at the university (see staffing changes below). A shortage in faculty members continues to interfere with some of the other post docs' ability to identify and train a future breast cancer researcher. As the faculty shortage continues to be addressed, doctoral prepared individuals are being employed. This will help the post docs achieve this goal.

Interdisciplinary Team Meeting

On a yearly basis, the Interdisciplinary Team meets for updates, revisions, and to keep an overall consensus for the project. The faculty post docs also travel to Johns Hopkins to meet with their mentors yearly. These meetings allow the post docs to have one-on-one discussions with their mentors, to meet directly with the biostatistician and to collaborate with established cancer researchers from well-known organizations ie NIH and NINR. Outcomes for these visits include manuscript critiques, critiquing of the research proposals that were submitted for funding for the pilot studies, and identifying additional funding mechanisms for the pilot studies.

Last years meeting had to be rescheduled due to unforeseen circumstances. The meeting was actually scheduled on January 26-30, 2004 and was held at Johns Hopkins University. Four of the post docs and 2 trainees were scheduled to attend. Two of the post docs were able to meet with their mentors and attend NUH sessions, while the others were not. This was due to incimate weather conditions causing cancellation of the event. Therefore, contacts and collaborations between mentors, post docs, the biostatistician and the trainees took place via email, conference calls, telephone conversations, etc. See Appendix A for the tentative schedule for this event.

Staffing Changes

Winston-Salem State University continues to incorporate research as an area of major focus. In doing this, several opportunities to advance in the research area are available. As stated in last years report, this advancement led the former project director Dr. Lenora Campbell to have to resign from this project and commit to a Principal Investigator role in another project. An additional project director has yet to be identified. Dr. Sylvia Flack, the PI of this project is currently serving in this role.

Dr. Donna Leach, former chair of Clinical Laboratory Sciences at WSSU and former trainee of post doc Dr. Denny Ryman has accepted another position else where and is no longer employed at the university. This was effective in September, 2004. Dr. Ryman has identified two potential trainees from the Clinical Lab Sciences department. Dr. Patricia Bowyer-Johnson, former trainee of Dr. Lynda Baldwin resigned from the project as she also accepted another position elsewhere. She was able to attend conferences and had designed a breast cancer project under the mentorship of Dr. Vickie Mock of Johns Hopkins. Dr. Baldwin and Dr. Hamdy Radwan are in the process of identifying a

potential trainee from the Occupational Therapy and Physical Therapy department, respectively.

Research Center

The research center continues to be housed in the SOHS' building. Resources for the research center are collected on a continuous basis. Books identifying potential funding sources and additional cancer related articles are continuously added to the center.

KEY RESEARCH ACCOMPLISHMENTS

- **Dr. Sylvia Flack, PI**, lead developer of a national health disparities conference entitled "Faces of a Healthy Future: A Conference to end Health Care Disparities. (500 + attendees)

Sits on the board of the Piedmont Alliance for Cancer Research and Education (PACRE).

- **Dr. Denny Ryman** attended the Third Annual Future of Breast Cancer : An International Breast Cancer Congress –July 21 – July 25, 2004 – Bermuda.

Attended and Presented:

Presented a poster presentation/discussion on breast cancer tumor markers for "Faces of a Healthy Future" National conference to end health disparities, in Winston-Salem, NC, Fall 2004.

Submitted:

Submitted a grant proposal for tumor marker study to PACRE (Wake Forest University) in late Fall 2003. (not funded)

- **Dr. Bobbie Reddick** attended the Third Annual Future of Breast Cancer : An International Breast Cancer Congress – July 21 – July 25, 2004 – Bermuda.

Attended and Presented:

"Developing low-literacy, culturally relevant breast cancer education materials" Cancer Prevention and Early Detection program for HBCU/MI nurse Educators Dissemination Colloquium, June, 2004, Miami, Florida.

"Developing low-literacy, culturally relevant breast cancer education materials" Research Day, Rho Lambda Chapter of Sigma Theta Tau International Nursing Honor Society, Feb, 2004, WSSU, WS, NC.

Poster Presentation: Psychological distress, fatigue, burden of care and quality of life in primary caregivers of breast cancer ABMT patients."Faces of a Healthy Future" National conference to end health care disparities, Sept. 27-29 WS, NC

Attended grant writing workshop, August 2004, WS, NC

Funding:

Received: Funding for a pilot study "Factors affecting breast cancer screening adherence in older African American women" \$25,000.

Co-Principal Investigator with Post-Doc student at Wake Forrest University School of Medicine. Funded by PACRE (Piedmont Alliance for Cancer Research and education)

Submitted:

"Resubmitted revised article "Examining the influence of coping on depression, anxiety, and fatigue among women receiving autologous bone marrow transplant for breast cancer treatment. September, 2004 to Journal of Psychosocial Oncology.

Article was accepted with revisions, March 2004.

REPORTABLE OUTCOMES:

- Dr. Bobbie Reddick presented at "Faces of a Healthy Future" National conference to end health disparities, Sept. 27-29 WS, NC
- Dr. Bobbie Reddick presented at Cancer Prevention and Early Detection program for HBCU/MI nurse Educators Dissemination Colloquium, June, 2004, Miami, Florida.
- Dr. Bobbie Reddick presented Research Day, Rho Lambda Chapter of Sigma Theta Tau International Nursing Honor Society, Feb, 2004, WSSU, WS, NC.
- Dr. Bobbie Reddick received funding for a pilot study "Factors affecting breast cancer screening adherence in older African American women" \$25,000 from PACRE.
- Dr. Bobbie Reddick Co-Principal Investigator with Post-Doc student at Wake Forrest University School of Medicine.
- Dr. Bobbie Reddick Resubmitted revised article. Article was accepted with revisions, March 2004.
- Dr. Denny Ryman presented a poster on breast cancer tumor markers at "Faces of a Healthy Future" National conference to end health disparities, Sept. 27-29 WS, NC
- Dr. Denny Ryman Submitted a grant proposal for tumor marker study to PACRE (Wake Forest University) in late Fall 2003. (not funded)

Appendix Materials (See Attachments)

