

# Interventions to Enhance Breast Cancer Adjustment in Women and Their Partners

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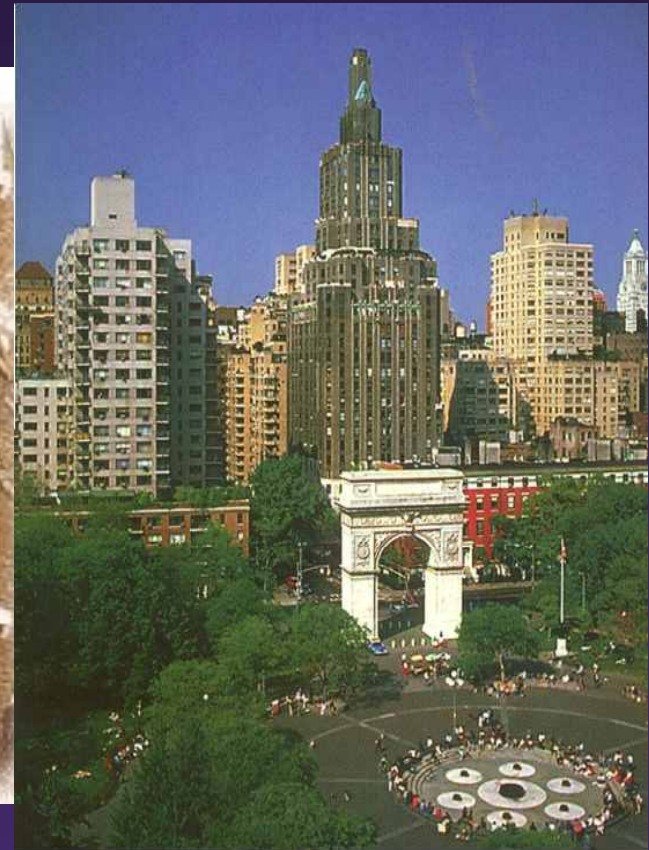
Global Breast Cancer Conference

Seoul, Korea

October 8-10, 2009

# Greetings from...

NYU Langone Medical Center



New York University  College of Nursing

# Research Team Members

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Director of Oncology Services, NYU Hospitals Center

# Objectives

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- Describe factors associated with breast cancer adjustment in women and their partners
- Identify strategies to enhance breast cancer adjustment in women and their partners
- Discuss how breast cancer adjustment in women and their partners vary according to types of dyad relationships



# Background

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- Breast cancer is a significant health problem affecting women and their partners.
- In the US, one out of eight women will be faced with a diagnosis of breast cancer in her lifetime.
- In 2009, an estimated 192,370 new cases of invasive breast cancer will be diagnosed among women in the United States.



# Background

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- Worldwide, more than one million cases of breast cancer occur annually, with some 580,000 cases occurring in developed countries
- In 2000, the last year for which global data exists, some 400,000 women died from breast cancer, representing 1.6 percent of all female deaths.
- The proportion of breast cancer deaths was far higher in the richer countries than in economically poor regions



# Background

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- The good news is that breast cancer mortality rates have started to decline in North America, Western Europe and Australia, mainly due to improvements in early detection and treatment programs.
- Five-year survival rates are higher than 75 percent in most developed countries.
- Breast cancer can have a profound effect on many aspects of a women's life.

# Background

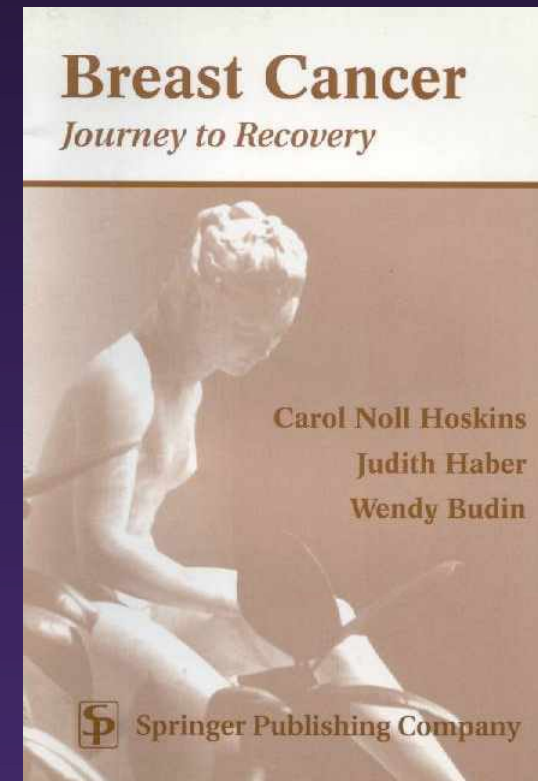
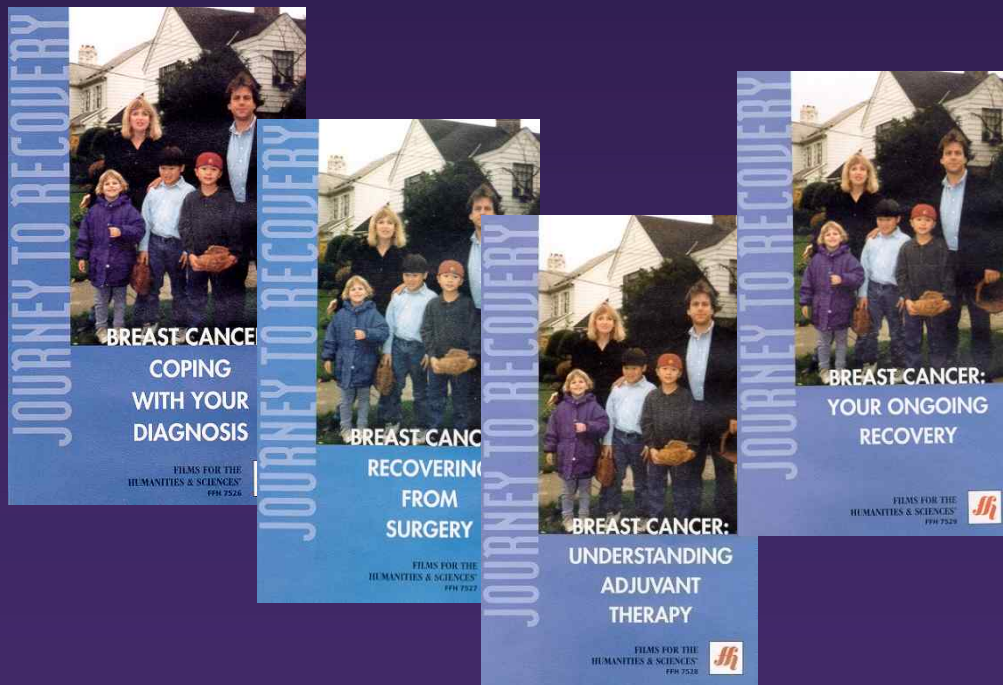
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- Adjustment requires a re-evaluation of roles and expectations across the diagnostic, treatment and recovery phases.
- Need to develop and test appropriate phase-specific psychoeducation and counseling interventions aimed at enhancing adjustment to breast cancer in women and their partners.



# Breast Cancer Adjustment

## Developing a Program of Research...



# Social Support and Patterns of Adjustment Among Women With Breast Cancer and Their Partners

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Funded by the Walter Langer Foundation

# Purpose

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- To identify predictors of adjustment in women with breast cancer and their partners over one year
- Examine effects of marital support and support from other adults on emotional and physical adjustment of both patient and partners during the course of diagnosis, surgery, adjuvant therapy, and recovery
- Evaluate role function and perceived health status over one year

# Design

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Longitudinal Repeated Measure Design,  
With Eight Data Collection Points:

- Initial Contact
  - Post-biopsy
    - 7-10 days post-surgery
    - 1-month post-surgery
    - 2-months post-surgery
    - 3-months post-surgery
    - 6-months post-surgery
    - 1-year post-surgery

# Hypotheses

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- The longitudinal design permitted the study of two different types of hypotheses:
  - The relations between predictors and outcomes of adjustment at each phase, considered separately
  - The longitudinal dynamics of the relations over time

# Inclusion Criteria

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- Intact data series were obtained from 128 women and 121 partners who met the following inclusion criteria:
  - Dx of breast cancer suspected
  - No previous history of cancer
  - No history of psychiatric hospitalization or drug abuse
  - Spouse or live-in male partner

# Sample Characteristics

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- Mostly Caucasian
- Mean age: 51.0 years (SD=9.9)
- Average Education: 14.8 years
- Household Income
  - 47% reported > \$40,000
- 68% employed outside the home
- Mean length of marriage: 25.0 years (SD=11.5)

# Inventories

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Partner Relationship Inventory (PRI)

[Hoskins, 1988]

Psychosocial Adjustment to Illness Scale (PAIS)

[Derogatis, 1983]

Profile of Adaptation to Life Clinical Scale (PAL-C)

[Ellsworth, 1981]

Self-Rated Health Subscale (SRHS)

[Lawton et al., 1982]

Treatment Response Inventory (TRI)

[Hoskins, 1990]



# Predictor Variables

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- Support in the Marital Relationship
  - Emotional Needs [PRI]
  - Interactional Needs [PRI]
- Other Support
  - Close Interpersonal Relationships [PAL-C]
  - Extended Family Relations [PAIS]
- Functional Status in Life Roles
  - Vocational Environment [PAIS]
  - Domestic Environment [PAIS]
  - Social Environment [PAIS]

# Outcome Variables

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- Emotional Adjustment
  - Negative Emotions [PAL-C]
  - Psychological Well-Being [PAL-C]
  - Psychological Distress [PAIS]
- Physical Adjustment
  - Physical Symptoms [PAL-C]
  - Treatment Side Effects [TRI]
- Overall Health Status
  - Better Health [SRHS]
  - No Problems [SRHR]

# Selected Findings

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- Adjustment could be predicted by marital support and by support from other adults in both the women and their partners.
- Relationships were significant at concurrent times, across contiguous times, and predicting from the 7-10 day post-surgical phase to both the 6-month and 1-year end points.

# Selected Findings

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- Functional status in vocational, domestic, and social roles was strongly and significantly related to emotional and physical adjustment at all phases with few exceptions.
- Changes in physical symptoms were significantly different between surgical groups, as were changes in health status between node status groups.

# Conclusions

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- Findings from this longitudinal study supported the importance of education and phase-specific supportive counseling for women with breast cancer and their partners
- Phase-specific needs and concerns were identified for patients and partners

# Conclusions

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- Women with supportive husbands seem to adjust reasonably well.
- Although there is growing evidence that women with supportive husbands adjust reasonably well, little was known about the impact of breast cancer among unmarried women.

# Conclusions

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- Some speculate that unmarried women may view their treatment as a serious deterrent to social and sexual activities.
- Although unmarried women with breast cancer may have special adjustment needs, they had not been studied as a group in a systematic way.

# Psychosocial Adjustment to Breast Cancer in Unmarried Women

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Principal Investigator:

Wendy C. Budin, Ph.D., R.N-BC

This study was funded in part by a research grant from the  
American Nurses Foundation

1994 ANF Barbara A. Given, Ph.D., RN, FAAN Scholar

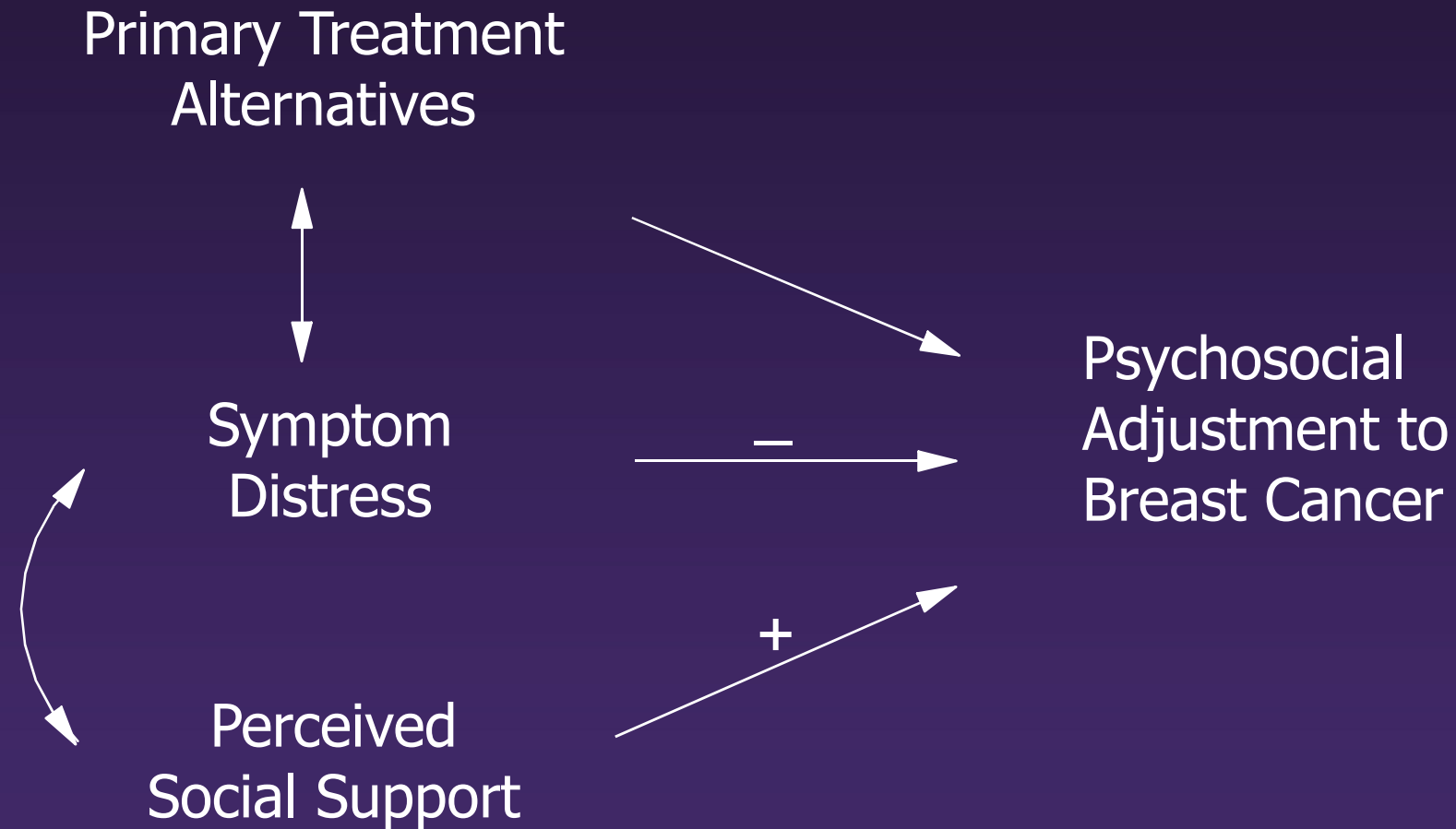


# Purpose

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- To determine whether primary treatment alternatives, symptom distress, and perceived social support account for a significant proportion of the variance in psychosocial adjustment to breast cancer in unmarried women during the late post operative recovery phase.

# Framework



# Research Questions:

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- Who are the primary sources of social support identified by unmarried women experiencing treatment for breast cancer?
- Do levels of perceived social support vary among sources?

# Definitions

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- *Unmarried Women with Breast Cancer:*
- Women not presently in a traditional married relationship or with a regular live-in partner.
  - Single-never-married
  - Divorced or Separated
  - Widowed

# Methods

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- A descriptive correlational design was used.
- Participants were selected from the practices of breast surgeons at major medical centers in the NY/NJ metropolitan area.
- Data were collected from 101 unmarried women during the late post-operative recovery phase through means of a mail survey.
- Participants completed a four-part questionnaire.

# Conclusions

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- The unmarried women in this sample experienced relatively low levels of psychosocial adjustment problems during the late post-operative recovery phase and perceived moderately high levels of social support.

# Conclusions

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- Symptom distress was inversely related to psychosocial adjustment to breast cancer indicating that women with more symptom distress had more adjustment problems.
- Perceived social support was positively related to psychosocial adjustment to breast cancer.
- Women receiving chemotherapy had significantly more symptom distress adjustment problems.

# Conclusions

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Source of Support:	# of participants identifying
Friends	83
Sister	41
Mother	27
Daughter	24
Boyfriend	23
Professional	22
Other Relative	20
Work Associate	19



# Conclusions

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Level of Support by Source:	M	SD
Boyfriend	4.5	.39
Daughter	4.3	.52
Sister	4.2	.59
Work Associates	4.1	.36
Religious	4.1	.44
Mother	4.0	.59
Father	4.0	.99
Friends	4.0	.51

# Reference

Budin, W. (1998). Psychosocial Adjustment to Breast Cancer in Unmarried Women. *Research in Nursing and Health*, 21, 155-166.

*Research in Nursing & Health*, 1998, 21, 155-166

## Psychosocial Adjustment to Breast Cancer in Unmarried Women

Wendy C. Budin\*

Seton Hall University, College of Nursing, South Orange, NJ 07079-2693  
Received 13 August 1996; accepted 29 September 1997

**Abstract:** Breast cancer is a significant health problem that can affect many aspects of a woman's life. Although there is growing evidence that women with supportive husbands seem to adjust reasonably well, little is known about the impact of breast cancer among unmarried women. Relationships among primary treatment alternatives, symptom distress, perceived social support, and psychosocial adjustment to breast cancer in 101 unmarried women were investigated using data collected during the late postoperative recovery phase. The women experienced relatively low levels of psychosocial adjustment problems and perceived moderately high levels of social support. Social support and symptom distress each accounted for significant proportions of the variance in psychosocial adjustment, whereas primary treatment alternatives did not. Symptom distress emerged as the variable accounting for the most variance in psychosocial adjustment to breast cancer. Implications for health care providers to facilitate positive adjustment to breast cancer in unmarried women and directions for future studies are suggested.  
© 1998 John Wiley & Sons, Inc. *Res Nurs Health* 21: 155-166, 1998

**Keywords:** breast cancer; social support; psychosocial adjustment; symptom distress; unmarried women

Breast cancer is a significant health problem among women. Despite advances in diagnosis and treatment, the incidence of the disease is growing. According to the National Cancer Institute (1996),

(Derogatis, 1983; Tulman & Fawcett, 1990), mental health (Ell, Nishimoto, Morvay, Mantell, & Hamovitch, 1989), self-esteem (Feather & Wainstock, 1989b), mood (Northouse, 1989a), quality

# Psychosocial Adjustment to Breast Cancer in Unmarried and Married Women

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Co-Investigators:

Wendy C. Budin, Ph.D., R.N.-BC.

Carol Noll Hoskins, Ph.D., RN, FAAN

# Purpose

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- To compare psychosocial adjustment to breast cancer outcomes between a group of married women and a group of women who were single, divorced, separated or widowed.

# Methods

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- Secondary analysis of the data sets from two larger studies
- A comparative design was used
- Participants selected from the practices of breast surgeons at major medical centers in the NY/NJ metropolitan area

# Conclusions

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- Unmarried with breast cancer have more problems associated with adjustment in the vocational environment, the domestic environment and sexual relationships.
- There were no significant differences between groups in extended family relationships, social and leisure activities, psychological distress, health care orientation, or total adjustment scores.

# Practice Implications

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- Assessments of all women with breast cancer need to be comprehensive, including resources for support and level of functioning in all facets of life.
- Need to explore adjustment among primary support providers identified by unmarried women with breast cancer.

# Practice Implications

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- Nurses and other health care professionals need to develop useful, cost-effective, culturally sensitive intervention strategies that address psychosocial needs of women with breast cancer including:
  - Alleviation of distress related to treatment side effects
  - Promotion of support
  - Health Education



# Next Steps ...

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- Data from preliminary studies were used to develop two evidence-based interventions
  - A phase-specific psychoeducation video intervention
  - A phase-specific telephone counseling intervention
- Data were used to develop the BCTRI, a symptom experience assessment tool

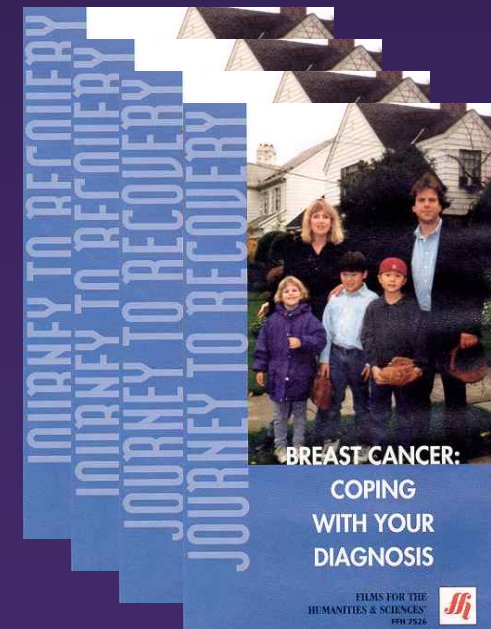
# Developing Phase-Specific Evidence-Based Interventions for Women with Breast Cancer and Their Partners

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Funded by the Hassenfeld Foundation,  
The Mutual of New York Foundation,  
The Travelers Foundation, Dr. I Fund Foundation,  
Rhone Poulenc Rorer Oncology, Helen L Kimmel  
and Lee Robison

# Journey to Recovery

- Four 30-minute phase-specific videos designed to provide a standardized evidence-based psychoeducation intervention for women with breast cancer and their partners
  - Coping with your Diagnosis
  - Recovering From Surgery
  - Understanding Adjuvant Therapy
  - Ongoing Recovery



# Video Features

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- Important points are reinforced through:
  - Real couple scenarios
  - Visual effects and graphics
  - Interdisciplinary interviews
  - Content is phase-specific for the diagnostic, post surgical, adjuvant therapy and ongoing recovery phases.
  - Organized according to :
    - health relevant information
    - coping strategies
    - psychosocial support.

# Telephone Counseling

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- Provide health relevant information
- Promote open communication between partners
- Normalize feelings, concerns, and fears
- Decrease fear of the unknown
- Provide a feeling of control
- Highlight the importance of social support
- Suggest community resources
- Promote effective problem solving
- Develop skills to reduce stress and increase effective coping
- Legitimize active participation in the breast cancer treatment process

# Breast Cancer Education, Counseling and Adjustment: A Pilot Study

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Funded by Academic Research Enhancement Award,  
#1 R15 NR04967-01, The National Institute of  
Nursing Research,  
National Institutes of Health.

# Team Members

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## Research Fellows:

Frances Cartwright-Alcarese, PhD, RN  
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Susan Vitale, MS, RN  
Joan Panke, BSN, RN  
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# Overall Aim

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- To test the feasibility of a randomized clinical trial to compare the effectiveness of three components of a phase-specific evidence-based intervention for women with breast cancer and their partners



# Secondary Aims

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- Develop a manual for standardized psychoeducation by video and telephone counseling interventions and training
- Train and supervise three Nurse Interventionists
- Pilot-test selected instruments
- Validate the phase-specific intervention protocols
- Obtain relevant data for use in sample size and power analysis for planning a confirmatory randomized controlled trial

# Selected Results

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- 12 patient partner dyads were enrolled and completed interventions
- Training and supervision using the Phase-specific Standardized Psychoeducation and Telephone Counseling Protocols and Scripts were carried out and revised
- Data collection instruments were validated and methods for data collection and data management were refined.

# Development and Psychometric Testing of the Breast Cancer Treatment Response Inventory (BCTRI)

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Wendy C. Budin, PhD, RN, BC  
Frances Cartwright-Alcarese, PhD, RN  
Carol Noll Hoskins, PhD, RN, FAAN

Funded by a Seton Hall University Research Grant

# Background

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- The concept of symptom clusters and their synergistic effect on specific outcomes is still evolving and requires further exploration
- Knowledge of effect of numerous concurrent symptoms and their possible multiplicative effect is lacking
- Accurate assessment and monitoring of treatment-related symptom experience is essential so that interventions can be aimed toward specific concerns throughout the breast cancer trajectory.

# Background

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- Need for valid and reliable instrument that includes:
  - Comprehensive list of all symptoms experienced by women with breast cancer from the time of diagnosis throughout treatment and ongoing recovery
- Three dimensions of symptom experience
  - NOS – Number of symptoms
  - SOS – Severity of symptoms
  - ADE – Amount of distress experienced

# BCTRI

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- Development and psychometric testing of the Breast Cancer Treatment Response Inventory (BCTRI)
  - ...an easy to use, self-report check-list and Likert-type instrument designed to provide multidimensional information about the prevalence and characteristics of common symptoms or side effects experienced by women with breast cancer from the time of diagnosis through treatment and ongoing recovery

# BCTRI – Sample Item Format

## Breast Cancer Treatment Response Inventory (BCTRI)

Budin, Cartwright-Alcarese, Hoskins, 2008 ©

Please check each symptom or side effect that you have at the present time.  
For those that you have, please rate its severity and amount of distress:

		If yes, how severe?			If yes, how distressful?				
1. Bleeding at surgical site/hematoma	<input type="checkbox"/> no 0	<input type="checkbox"/> yes 1	<input type="checkbox"/> slight 1	<input type="checkbox"/> moderate 2	<input type="checkbox"/> severe 3	<input type="checkbox"/> not at all 0	<input type="checkbox"/> mildly 1	<input type="checkbox"/> moderately 2	<input type="checkbox"/> very 3
		If yes, how severe?			If yes, how distressful?				
2. Bowel changes	<input type="checkbox"/> no 0	<input type="checkbox"/> yes 1	<input type="checkbox"/> slight 1	<input type="checkbox"/> moderate 2	<input type="checkbox"/> severe 3	<input type="checkbox"/> not at all 0	<input type="checkbox"/> mildly 1	<input type="checkbox"/> moderately 2	<input type="checkbox"/> very 3
		If yes, how severe?			If yes, how distressful?				
3. Decrease in appetite	<input type="checkbox"/> no 0	<input type="checkbox"/> yes 1	<input type="checkbox"/> slight 1	<input type="checkbox"/> moderate 2	<input type="checkbox"/> severe 3	<input type="checkbox"/> not at all 0	<input type="checkbox"/> mildly 1	<input type="checkbox"/> moderately 2	<input type="checkbox"/> very 3
		If yes, how severe?			If yes, how distressful?				
4. Difficulty concentrating	<input type="checkbox"/> no 0	<input type="checkbox"/> yes 1	<input type="checkbox"/> slight 1	<input type="checkbox"/> moderate 2	<input type="checkbox"/> severe 3	<input type="checkbox"/> not at all 0	<input type="checkbox"/> mildly 1	<input type="checkbox"/> moderately 2	<input type="checkbox"/> very 3
		If yes, how severe?			If yes, how distressful?				
5. Difficulty sleeping	<input type="checkbox"/> no 0	<input type="checkbox"/> yes 1	<input type="checkbox"/> slight 1	<input type="checkbox"/> moderate 2	<input type="checkbox"/> severe 3	<input type="checkbox"/> not at all 0	<input type="checkbox"/> mildly 1	<input type="checkbox"/> moderately 2	<input type="checkbox"/> very 3
		If yes, how severe?			If yes, how distressful?				
6. Emotional	<input type="checkbox"/> no 0	<input type="checkbox"/> yes 1	<input type="checkbox"/> slight 1	<input type="checkbox"/> moderate 2	<input type="checkbox"/> severe 3	<input type="checkbox"/> not at all 0	<input type="checkbox"/> mildly 1	<input type="checkbox"/> moderately 2	<input type="checkbox"/> very 3

# BCTRI

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Participants record treatment related information pertaining to:

- Type of surgical procedures
  - Primary surgery / Reconstruction
- Stage of Disease / Results of Node Biopsy
- Follow-up treatment they are receiving
  - Radiation
  - Chemotherapy
  - Hormone Therapy



# Selected Findings

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Internal consistency was demonstrated with Cronbach's alpha coefficients:

- .72 – Number of Symptoms (NOS)
- .82 – Severity of Symptoms (SOS)
- .84 – Amount of Distress Experienced (ADE)

# Selected Findings

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- Symptoms identified as being the most distressful of women in the early post-op recovery phase:
  - Fatigue
  - Difficulty sleeping
  - Shoulder/Arm discomfort
  - Emotional upset
  - Pain
  - Difficulty Concentrating
  - Nausea/vomiting

# Selected Findings

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- Symptoms identified as being the most distressful of women in ongoing recovery:
  - Sweats (Hot Flashes)
  - Difficulty sleeping
  - Fatigue
  - Emotional upset
  - Vaginal dryness
  - Shoulder/Arm discomfort
  - Difficulty Concentrating
  - Sexual Problems

# Conclusions

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- The information provided supports the use of the BCTRI as an effective, easy to use, valid and reliable instrument to measure patient responses to a variety of breast cancer treatment related symptoms.
- Essential tool to examine breast cancer survivors' symptom experience as well as interaction between NOS, SOS, and ADE, so that nursing interventions can be aimed at the source of distress

# Reference

- Budin, W., Cartwright-Alcares, Hoskins, C.N. (2008). The breast cancer treatment response inventory: Development, psychometric testing and refinement for use in practice. *Oncology Nursing Forum*, 35(2), 209-223.

## The Breast Cancer Treatment Response Inventory: Development, Psychometric Testing, and Refinement for Use in Practice

Wendy C. Budin, PhD, RN-BC, Frances Cartwright-Alcares, PhD, RN, AOCN®,  
and Carol Noll Hoskins, PhD, RN, FAAN

**Purpose/Objectives:** To describe the development, testing, and utility of the Breast Cancer Treatment Response Inventory (BCTRI), an instrument that captures the symptom experience of women with breast cancer.

**Data Sources:** Journal articles and results of research studies used to establish BCTRI psychometric properties.

**Data Synthesis:** The tool is a valid and reliable method to determine and monitor numbers of symptoms, the severity of those symptoms, and the amount of distress experienced by patients. It is an easily and quickly employed assessment tool to guide and evaluate interventions.

**Conclusions:** The BCTRI has strong psychometric properties and is a valid and reliable instrument to measure symptom experience among populations of breast cancer survivors.

**Implications for Nursing:** Data collected using the BCTRI provide information that healthcare providers can use to target interventions toward symptoms that are most troublesome or distressful. The BCTRI can be used at meaningful points in treatment, recovery, and ongoing surveillance to inform the nursing assessment of symptom severity.

### Key Points . . .

- Women with breast cancer report continued distress resulting from ongoing symptoms associated with the diagnosis of breast cancer in the physical, psychological, social, and spiritual domains.
- In addition to emerging research methodologies that test the effects of interventions on nursing-sensitive outcomes, multi-dimensional instruments that conceptualize and operationalize the breast cancer symptom experience are needed.
- The Breast Cancer Treatment Response Inventory demonstrated strong psychometric properties in testing among women with breast cancer and has potential to be a valuable tool to examine symptom experience so that nursing interventions can be aimed at sources of distress.

# Breast Cancer Education, Counseling, and Adjustment among Patients and Partners: A Randomized Controlled Trial

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Funded by National Cancer Institute #RO1 CA09644  
National Institutes of Health.

# Research Team Members

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Frances Cartwright-Alcarese, PhD, RN, AOCN

Mildred Kowalski, PhD, RN

Christine Beyer McSherry, PhD, RN & Renee Fuerbach, PhD, RN

# Purpose

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- To conduct a randomized controlled clinical trial of phase-specific, evidence-based psychoeducation and telephone counseling interventions to enhance emotional, physical, and social adjustment in patients with breast cancer and their partners



# Theoretical Framework

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- Stress and Coping Model (Lazarus & Folkman, 1984)
- Crisis Intervention Model (Morely, Messik, & Aguilera, 1967)
- Preliminary Research
  - Hoskins et al. (1996) study entitled “Patterns of Adjustment to Breast Cancer in Patients and Partners”
  - Hoskins et al. (2001) study entitled “Breast Cancer: Education, Counseling, and Adjustment among Patients and Partners-A Pilot Study”

# Primary Research Hypotheses

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- Mean changes in emotional, physical, and social adjustment outcomes would be greater for both patients and partners in each of the three intervention groups as compared to those receiving standard care in the disease management control group,
  - and greater for those in the combined psychoeducation and telephone counseling group as compared to either psychoeducation or telephone counseling alone.

# Design

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- Randomized Controlled Trial (RCT)
- Data Collection Sites
  - Three Medical Centers in New York City
  - One Community Based Hospital in the Metropolitan area
- Purposive sample of 249 Patient-Partner dyads were randomly assigned to either the control group or to one of three intervention groups.

# Inclusion Criteria

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- Partner who was willing to participate
  - Partner – The individual most intimately involved in the breast cancer experience
- Single breast lesion – no metastasis
- No previous history of cancer
- Able to read and understand English
- No history of psychiatric hospitalization or drug abuse

# Intervention Groups

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- Group 1: Disease management (DM)
- Group 2: Standardized psychoeducation by video (SE)
- Group 3: Individualized telephone counseling (TC)
- Group 4: Standardized psychoeducation by video followed by individualized telephone counseling (SE + TC)

# Interventions

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- All SE and TC interventions were conducted separately for patients and partners at each of the four phases:
  - Diagnostic phase
  - Post-surgical phase
  - Adjuvant therapy phase
  - Ongoing recovery phase

# Methods

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- Self-report measures of physical, emotional and social adjustment, and overall health status were administered at entry into the study and following each intervention within a specified time interval.

# Outcome Variables

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- Emotional Adjustment
  - Psychological Well-being (PAL-C)
  - Side Effects Distress (BCTRI) [Patients only]



# Outcome Variables

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- Physical Adjustment
  - Side Effects Severity (Patients only) (BCTRI)
  - Physical Symptoms Subscale (PAL-C) [Partners only]
  - Overall Health Status (SRHS)

# Outcome Variables

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- Social Adjustment
  - Role Function Subscales (PAIS)
    - Domestic
    - Vocational
    - Social Environment

# Sample Characteristics

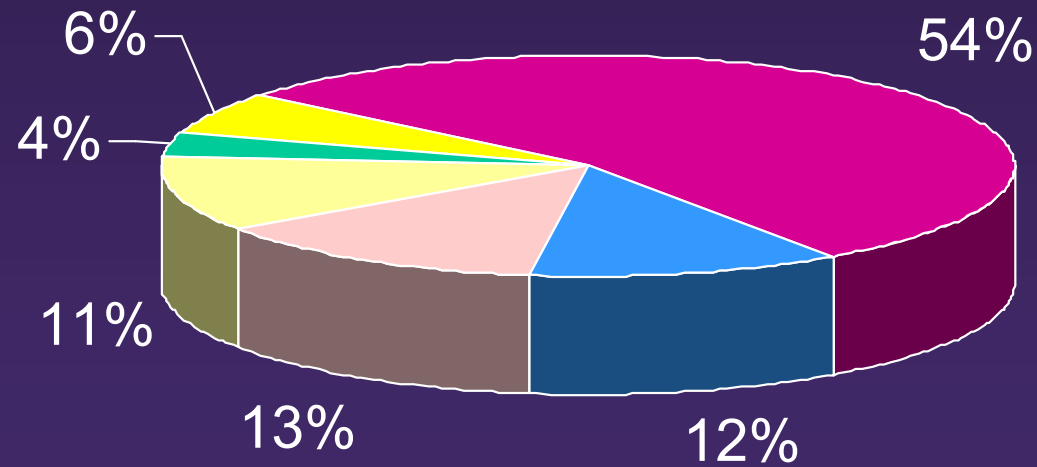
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(n=249)

	Mean	SD	Range
Patients' Age	53.8	11.7	33-98
Partners' Age	51.6	12.0	14-89

# Sample Characteristics

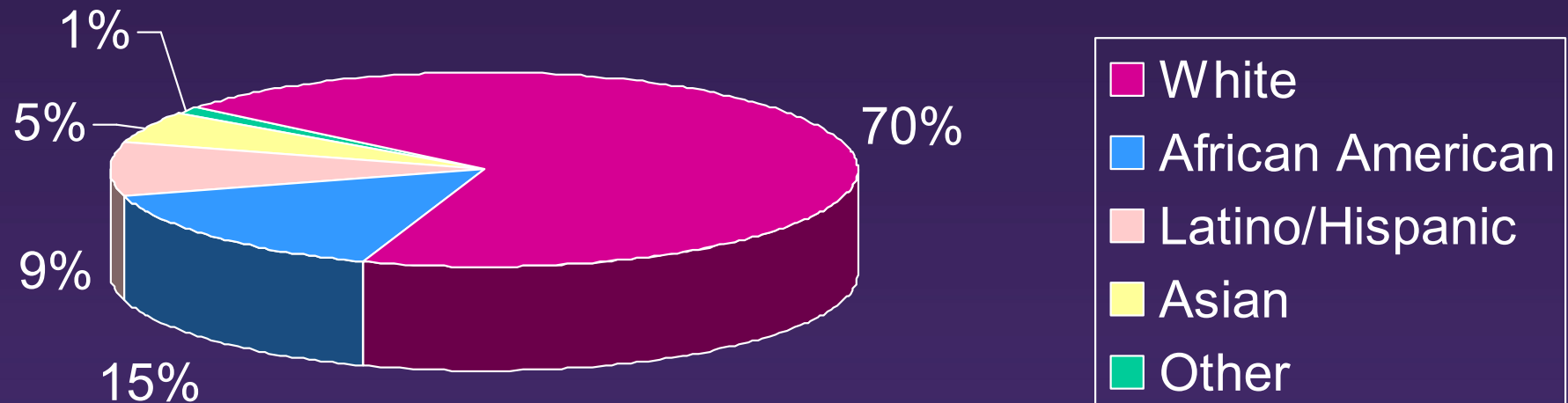
## Patient - Partner Dyad Status



- Patient/Spouse
- Patient/Daughter
- Patient/Sister
- Patient/Friend
- Patient/Mother
- Patient/Other

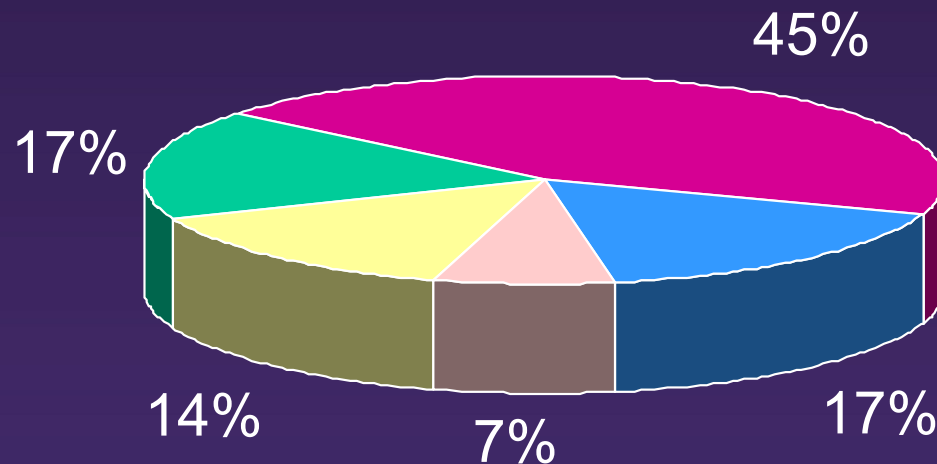
# Sample Characteristics

## Racial Background - Patients



# Sample Characteristics

## Surgical Procedure - Patients



- Lumpectomy
- Partial Mastectomy
- Total Mastectomy
- Modified Radical Mastectomy
- Immediate Reconstruction

# Data Analysis

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- Modified intention-to treat analyses were performed
  - included all participants exposed to any aspect of an intervention.
- Primary outcome measures were change from baseline in emotional, physical, and social adjustment for patients and partners.
- A mixed model analyses of covariance (ANCOVA) was used to analyze the mean changes over time for each of the outcome measures, and performed separately for patients and partners.

# Results: Emotional Adjustment

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## Psychological Well-being - Patients

- No significant group difference after baseline
- There was a significant effect for time
  - ↑ Psychological well-being over time ( $p = 0.033$ )
- Significant Group x Time interaction
  - Changes over time - only significant for the TC group
  - Marked ↑ from post surgery to adjuvant therapy ( $p = 0.02$ )
  - ↓ from adjuvant therapy to ongoing recovery



# Results: Emotional Adjustment

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## Psychological Well-being - Partners

- No significant group difference after baseline
- No significant effect for time
  - Psychological well-being remained fairly constant from post-surgery to ongoing recovery
- Group x Time interaction not significant

# Results: Physical Adjustment

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## Side Effect Severity - Patients

- Side Effect Severity significantly changed over time
- Only patients in the DM+SE+TC reported less side effect severity at ongoing recovery compared to post surgery ( $p = 0.002$ )
- Group x time interaction was significant when comparing DM to the pooled intervention group ( $p = 0.07$ ).

# Results: Physical Adjustment

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## Physical Symptoms – Partners

- Significant group differences ( $p = 0.024$ )
  - $DM+SE+TC < DM+TC$
  - None of the other group pair wise comparisons were significant

# Results: Physical Adjustment

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## Overall Health - Patient and Partners

- Overall Health ↑ significantly over time for patients in all groups ( $p < .000$ )
- No significant change in overall health over time for partners

# Results: Social Adjustment

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## Vocational Environment - Patient and Partners

- Patients
  - There were no significant main effects for Group, Time, or Group x Time interaction.
    - All groups showed gradual improvement in vocational environment
- Partners
  - Significant main effect for Group ( $p = 0.046$ )
    - TC group appeared to have significantly more problems in vocational environment

# Results: Social Adjustment

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## Social Environment - Patient and Partners

- For both Patients and Partners
  - No significant main effects for Group, or Group x Time interaction, however there was a main effect for Time
  - All groups showed improvement in social environment

# Results: Social Adjustment

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## Domestic Environment - Patient and Partners

- There were no statistically significant effects for the domestic environment variable for either patients or partners.
- Role function in the domestic environments remained fairly constant from baseline to ongoing recovery for both patients and partners.

# Conclusions

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- Emotional, physical, and social adjustment outcomes in both patients and partners varied with phase of illness.
- Patients showed poorer adjustment over time in the DM group on selected measures of emotional adjustment.
- All patients showed improvement over time in Overall Health and Adjustment in Social and Vocational Environment
- Symptom Distress and Symptom Severity continued to be a concern for patients at ongoing recovery.



# Conclusions

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- Partners in all groups exhibited improvement over time regardless of interventions on measures of:
  - Social environment
    - but no changes in overall health or psychological well-being
- Partners in the TC group had:
  - Poorer scores on physical symptoms compared to the SE + TC group, and
  - Poorer vocational scores compared to the DM group

# Limitations

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- Limited generalizability
  - Self selected sample
  - Homogeneous sample
    - Need to recruit and retain more minorities and underserved
    - Instruments excluded non-English speaking individuals
  - Partner dyads were diverse

# Reference

Budin, W., Hoskins, C., Haber, J., Sherman, D., Maislin, G., Cater, J., et al. (2008). Breast Cancer: Psycho-Education, Counseling, and Adjustment Among Patients and Partners – A Randomized Controlled Trial. *Nursing Research*, 57(3), 199-213.

Nursing Research • May/June 2008 • Vol 57, No 3, 199-213

## Breast Cancer

### Education, Counseling, and Adjustment Among Patients and Partners: A Randomized Clinical Trial

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Jacqueline R. Cater ▼ Frances Cartwright-Alcarese ▼ Mildred Ortu Kowalski ▼  
Christina Beyer McSherry ▼ Renee Fuerbach ▼ Shilpa Shukla

► **Background:** Although various forms of psychoeducation and counseling interventions have been examined among patients with a variety of diagnoses, the unique contribution of phase-specific psychoeducation and telephone counseling (TC) to the ongoing process of adjustment has

According to the American Cancer Society, in 2007, an estimated 178,480 new cases of invasive breast cancer were expected to be diagnosed in the United States (Jemal et al., 2007). Women diagnosed with breast cancer experience a wide array of physical, psychological, informational, and support needs, which often extend well be-

# Differences in Physical, Emotional and Social Adjustment to Breast Cancer among Intimate, Family, and Non-Family Patient-Partner Dyads

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A secondary analysis of data from an RCT  
Funded by National Cancer Institute #R01 CA09644  
National Institutes of Health.

# Background

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- In identifying the individual who is most significantly involved in the illness experience, many women with breast cancer identify their spouse as partner.
- Married people often first turn to their spouses, then their children, other family members, friends, and neighbors for assistance and support.

# Background

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- However, some married women may perceive that their needs are better met by female relatives or friends than by her husband.
- Caregiver literature, which describes caregivers as spouses, family members, and non-family who are involved in the care of patients with serious illness, indicates burden and adjustment issues for caregivers.
- Few studies have delineated caregiver according to dyad status

# Background

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- Secondary analysis focused on the nature of the patient/partner dyads
  - Dyads were categorized according to whether they included...
    - an intimate partner
    - another family member
    - a friend or other non-family individual.

# Purpose

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- To compare patient and partner demographic and pre-surgical characteristics among dyad types and assess the degree to which post-surgical adjustment outcomes in patients and partners depend on the nature of the patient/partner dyad relationship.
- Hypothesis: That emotional, physical, and social adjustment will differ according to dyad type.



# Sample Characteristics

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Total Dyads:  $n = 202$

Dyad Type	n	%
• Intimate partner dyads	112	55%
• Family member dyads	58	29%
• Non-family dyads	32	16%

# Results – Demographic

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- Patients in dyads that included an intimate partner were significantly younger (M = 50.5 years) than those with other family members (M = 59.4 years) or non-family partners (M = 56 years).
- Partner age did not vary significantly among dyad types.

# Results – Demographic

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- Patients in intimate partner dyads:

- had greater incomes

and were more likely to...

- discover the lump by routine mammogram (53.6%)  
as compared to family member (49.1%),  
or non-family member dyads (29.4%).
- report change in hours worked

# Results – Post-surgical Comparisons

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- There were no significant differences in patients..
  - Emotional adjustment
    - measured as
      - psychological well-being
      - side effect distress, or
  - Physical adjustment
    - measured as
      - side effect incidence
      - severity
      - overall health.

# Results – Post-surgical Comparisons

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- Social adjustment:
  - Patients with intimate partners
    - greater difficulty in their social and domestic environments
    - no difference in their vocational environment or in social support.

# Results – Post-surgical Comparisons

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- Partners in intimate partner dyads
  - lower scores on psychological well-being
- Partners in intimate partner dyads:
  - more problems in social and domestic adjustment
  - less social support to promote social adjustment
- There were no significant differences in
  - physical symptoms or
  - overall health of partners, according to dyad type.

# Conclusions

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- Women with breast cancer experience similar physical and emotional adjustment outcomes whether they have an intimate partner (spouse/significant other) or have family or non-family/friends as partners during the cancer experience.
- Women without marital partners who are single, divorced, or widowed do not appear to be at greater risk for problems with physical or emotional adjustment.

# Conclusions

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- However, women with intimate partners experienced more problems with social adjustment than family or non-family dyads with regard to social and domestic environments.
- Intimate partners (spouses/significant others) are at greater risk for adjustment issues. They report more problems with:
  - emotional adjustment
  - social and domestic adjustmentand
  - receive less social support



# Reference

Sherman, D., Haber, J., Hoskins, C., Budin, W., Maislin, G., Cater, J., et al. (2009). Differences in Physical, Emotional, and Social Adjustment of Intimate, Family, and Non-Family Patient-Partner Dyads Based on a Breast Cancer Intervention Study. *Oncology Nursing Forum*, 36(4), E185-E197.

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## Differences in Physical, Emotional, and Social Adjustment of Intimate, Family, and Nonfamily Patient-Partner Dyads Based on a Breast Cancer Intervention Study

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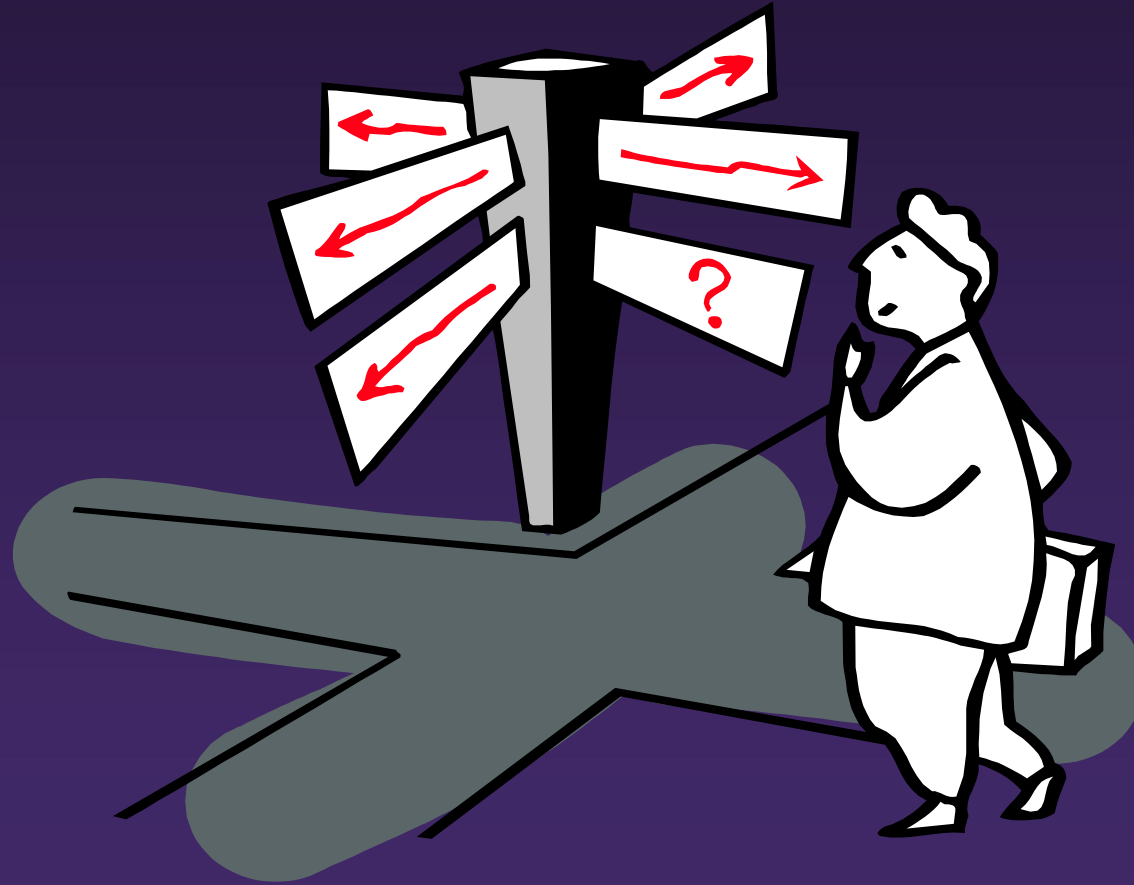
**C**ancer creates a stressful situation that affects the adjustment of patients and families (Ben-Zur, Gilbar, & Lev, 2001; Wimberly, Carver, Laurenceau, Harris, & Antonia, 2005). In identifying who is

**Purpose/Objectives:** To assess the degree to which postsurgical adjustment in patients with breast cancer and their partners depends on the nature of the patient-partner dyad relationship.

**Design:** Secondary data analysis from a randomized con-

# Future Directions

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# Recommendations

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- Replication with other populations including more socio-economically and culturally diverse groups with adequate representation of minority and underserved women and their partners in order to increase the external validity.
- When designing interventions for women with breast cancer and their partners, consideration must be given to types of patient-partner dyads and interventions need to be tailored accordingly.

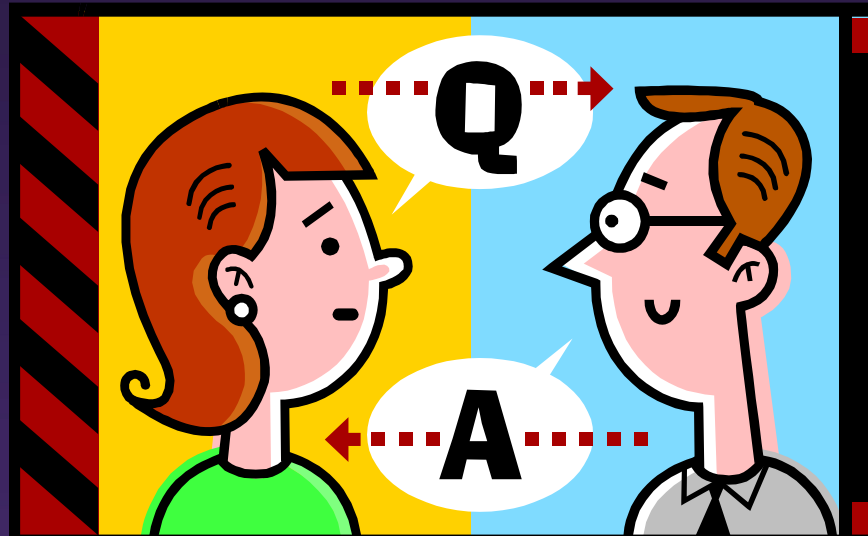
# Recommendations

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- Because women and partners still were experiencing adjustment problems at the ongoing recovery phase there is a need to explore ongoing adjustment issues among breast cancer survivors who have completed treatment

# Thank You!

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Any Questions?