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## Table of Contents

<b>Cover.....</b>	<b>1</b>
<b>SF 298.....</b>	<b>2</b>
<b>Table of Contents.....</b>	<b>3</b>
<b>Introduction.....</b>	<b>4</b>
<b>Body.....</b>	<b>4-14</b>
<b>Key Research Accomplishments.....</b>	<b>15</b>
<b>Reportable Outcomes.....</b>	<b>15</b>
<b>Conclusions.....</b>	<b>15-16</b>
<b>References.....</b>	<b>17</b>

## INTRODUCTION

Breast cancer in young women with spouses and children increases the risk of psychological morbidity not only for the patient but also for the family due to the substantial mutual effects of each family member's adjustment to the diagnosis and its future implications. Psychosocial interventions are effective at reducing psychological morbidity in cancer patients, but to date the young woman with breast cancer and her family have not been targeted for such intervention. A pilot study was conducted to assess the impact of breast cancer on the families of younger women, focusing on the effects of breast cancer on parental adjustment, family coping and on the adjustment of preschool and school age children. Based on this pilot data, a Basic psychosocial intervention involving a group for breast cancer patients and their spouses and an Expanded intervention that adds groups for the children were developed for this study. The effects of the Basic and the Expanded interventions on reducing psychological distress and enhancing coping in young women with breast cancer and their families will be compared in the fourth year of this study.

### BODY: STATEMENT OF WORK

**Technical Objective 1: Conduct pilot study to assess: a) the psychological adjustment and parenting concerns of breast cancer patients with preschool and school age children and their spouses; and b) the emotional and behavioral functioning of the children.** (Completed 6/98). Results detailed in Annual Report submitted 9/98.

**Technical Objective 2: Design a Basic and Expanded psychosocial intervention for young women with breast cancer, their spouses, and children 12 years of age and under based upon the findings of the pilot study.**

**Task 1: Month 8-10: Analyze pilot data and finalize treatment manuals for intervention groups.** (Completed 6/30/98). Results detailed in Annual Report submitted 9/98.

**Task 2: Months 11-12: Subject recruitment for intervention study; Randomize patients to Basic, Expanded and Control groups; Send out pre-intervention assessment packets; Schedule appointments for child assessment for Basic intervention and Control groups** (Completed 8/31/98). (Intervention group scheduled to begin 9/10/98 canceled due to low enrollment.)

**Task 3: Months 13-16: Reformat Basic and Expanded interventions to increase participation; acquire educational materials required for revised interventions; submit revised proposal to institutional review board for approval. Subject recruitment for intervention study; Randomize patients to Basic, Expanded and Control groups; Send out pre-intervention assessment packets; Schedule appointments for child assessment for Basic intervention and Control groups.** (Completed 12/31/98)

The intervention groups were revised to take place over four monthly sessions approximately 1-1/2 hours long, with patient/partner groups taking place simultaneously with the children's groups. The Patient/Partner group intervention manual and the two children's intervention manuals (one for children aged 4-6 years and one for children aged 7-12) were revised (1999 Annual Report, Appendices 1-3). The older child group was

further divided in to sections for children aged 7-9 and those aged 10-12. Institutional Review Board approval was obtained for the revised intervention on 12/24/98.

**Technical Objectives 3-4: Compare the effectiveness of Basic and Expanded psychosocial intervention and assess the impact of the children's intervention.**

**Task 1:** Months 17-20: Randomize patients to Expanded Intervention, Basic Intervention and Control groups; Send out pre-intervention assessment packets and schedule pre-intervention child assessments; First cycle of intervention groups begins; Start data coding and data entry; Recruitment of participant families for the second intervention group cycle; Post-intervention assessment packets given to patients and post-intervention child assessments scheduled (Completed 4/30/99).

As subject recruitment was below the number necessary to randomize participants into three treatment conditions simultaneously, the decision was made to alternate cycles of the Basic and Expanded Intervention groups to increase the numbers of participants in each condition. Participant families for each intervention group cycle will be randomly assigned to either an Intervention group or the Control group. Ten families were recruited for the first cycle of the intervention (Expanded Intervention group, n=7 and Control group, n=3), which was started in January 1999 and completed in April 1999. Three families dropped out before the intervention started, one due cancer reoccurrence, one due to changes in work schedule, and the other due to serious illness in a family member. Thus the final number of participants in the first cycle was 7 (Expanded Intervention group, n=4 and Control group n=3). Baseline and post intervention data was collected from participants. This data has been coded entered into the study database.

**Task 2:** Months 21-24: Randomize patients to Basic and Control groups. Send out pre-intervention assessment packets and schedule pre-intervention child assessments; Second cycle of intervention groups begins; Continued data coding and data entry; Recruitment of patients for third intervention group cycle; Post-intervention assessment packets given to patients and post-intervention child assessments scheduled; Complete 8 month follow-up assessment for Cycle 1 subjects. (Completed 8/31/99).

Seven families were recruited to the second cycle of the intervention group (Basic Intervention group, n=5 and Control group n=2). Post-intervention questionnaires for Cycle 2 participants and eight-month follow-up questionnaires for Cycle 1 participants were coded for data entry and analysis.

**Task 3:** Months 25-36. Third through fifth group cycles are run, with procedures as described above in Tasks 1 and 2. (September 1999-August 2000).

Six participants and their families were recruited to the third cycle of the intervention group (Expanded Intervention group n=4, Control group n=2). This group was run between September 1999 and December 1999. The fourth cycle of the intervention group was delayed until March 2000 due to low subject enrollment. This group was completed in June 2000 and included 4 families (3 Expanded Intervention group families, 1 control group family). The fifth cycle of the intervention group thusfar includes 5 families (Basic Intervention Group n=4, Control group n=1) and is scheduled to run from October 2000 to January 2001. We plan to run the sixth and last cycle of the intervention group from February to May 2001.

The primary difficulty facing this study continues to be participant recruitment. Seventy women have been referred to this study since subject recruitment began in

December 1997. Of these women, 35 (50%) agreed to participate. Of those who did not participate, 5 were ineligible primarily due to the late stage of their breast cancer, while 30 chose not to participate. The most frequent reasons given for non-participation were scheduling conflicts, including the management of other stressors e.g., child with chronic illness (n=15), having a spouse or other family member who was not interested in participating or refused to let family participate (n=5), or having no interest in the study (n=4).

Of the women referred thus far to the study, 46 (66%) have been recruited from the University of Pittsburgh Cancer Institute/Magee-Women's Hospital Breast Cancer Center. The remaining 24 (34%) were recruited through ongoing television and radio public service announcements, advertisements in five different regional newspapers, periodic postings on the University of Pittsburgh Medical Center's internet home page, and brochures describing the study placed in four Hematology-Oncology medical practices affiliated with the University of Pittsburgh Medical Center. The University of Pittsburgh Medical Center Institutional Review Board does not allow us to recruit from non-affiliated medical offices. In addition to providing brochures to clinics associated with the University of Pittsburgh Cancer Institute, the research assistant calls each clinic on a monthly basis to encourage their identification of eligible participants for the study. Twice-yearly inservices for clinical trial coordinators at the University of Pittsburgh Cancer Institute also have been scheduled since September 1999 to increase study recruitment from affiliated hospitals. In spite of these efforts recruitment is still challenging.

Barriers to recruitment include competition for participants from several studies and the fact that we are recruiting only women who are premenopausal with early stage (i.e., Stages 0-2) breast cancer, with children between the ages of 3 and 12, who constitute a smaller segment of the population of women diagnosed with breast cancer. Although scheduling conflicts are cited as the modal barrier to participation, previous efforts to survey the participant population about alternate days, times, and format of study groups would not appreciably increase enrollment, as those declining participation cite being just "too busy" to participate. As our largest source of referrals has been through our daily attendance and recruitment at the University of Pittsburgh Cancer Institute/Magee-Women's Hospital Breast Cancer Center, we have made arrangements to expand our recruitment to another high volume breast cancer clinic, the University of Pittsburgh Cancer Institute affiliated Shadyside Hospital in Pittsburgh, PA. Although we already provide brochures and inservices to the Shadyside Hospital's oncology clinic staff, we have negotiated with nursing staff to visit this clinic to describe the study in person to eligible breast cancer patients who give nursing staff permission for us to discuss the study with them. We anticipate that recruitment will improve with an approximately 8-10 families available for the final cycles, leading to an estimated total participation of 40 families by the end of the six planned intervention cycles (3 Expanded Intervention, 3 Basic Intervention Cycles).

#### Summary of Baseline Data for Pilot Study & Intervention Cycles 1-4 (n = 30 families)

Baseline data for participants in the pilot study and intervention Cycles 1-4 are presented below. Post-intervention data are not presented in this report as there are as yet insufficient numbers of participants enrolled to compare across treatment groups (Expanded Intervention, n = 10, Basic Intervention, n = 5, Control, n = 7; Pilot study n = 8). Participants' post-intervention and 8 month follow-up data will be available for the final report. A comparison of the Basic and Expanded psychosocial interventions is the primary goal of this study, however, data gathered from participants (n = 30 families) upon study entry provide new information about the effects of breast cancer on parental adjustment, family adaptation and the adjustment of children. Demographic data for the sample are provided in Table 1.

**Table 1**  
**Family Demographics (n=30 Families)**

Characteristic	M $\pm$ SD	N	%
Family			
Marital Status (Married)		27	90%
Number in household	4 $\pm$ 1		
Mother's age	41 $\pm$ 5	30	
Father's age	42 $\pm$ 6	29	
Children			
Gender (male)		36/63	57%
Age (years)	9.5 $\pm$ 4		
Ethnicity			
Caucasian		29	97%
Asian		1	3%
Breast Cancer Stage			
0		5	17%
I		9	30%
II		14	47%
IV		2	6%
Time Since Diagnosis:	11 mos. $\pm$ 9		
Mother's Education			
12 years		4	13%
13-16 years		20	67%
> 16 years		6	20%
Father's Education			
12 years		5	17%
13-16 years		17	56%
> 16 years		8	27%
Mother's Employment			
Full-time		5	17%
Part-time		10	33%
Homemaker		10	33%
Other (unemployed, disabled)		5	17%
Father's Employment			
Full-time		28	97%
Unemployed		1	3%

## Parental Adjustment

The Symptom Checklist-90 Revised (SCL-90-R) (1) was used to examine parental psychological symptoms and general distress (Table 2). A large majority of the breast cancer patients (25/29, 86%) scored in the normal range on the nine SCL-90-R symptom subscales and the Global Severity Index (GSI), a measure of general distress. Eleven of the 25 spouses (44%) who completed the SCL-90-R however, reported psychological symptoms (e.g., Hostility, Depression) and global distress in the clinical range, as defined by a GSI T score of 63 or greater, or a T score of 63 or greater on two subscales. The most frequently endorsed symptoms for both the breast cancer patient and her spouse included feelings of irritability, worry, tension and low energy.

**Table 2**  
**Parental Psychosocial Functioning**

Symptom Checklist-90-R (SCL-90-R) Symptom Domains	Mothers	Fathers
	Mean (SD) (n = 29)	Mean (SD) (n = 25)
Global Severity Index (GSI)	52 (9)	53 (11)
Anxiety	51 (9)	51 (10)
Depression	54 (8)	56 (11)
Hostility	52 (9)	56 (11)
Interpersonal Sensitivity	50 (9)	52 (10)
Obsessive-Compulsive	53 (9)	56 (10)
Paranoid	47 (7)	50 (11)
Phobic Anxiety	46 (6)	49 (5)
Psychoticism	52 (8)	51 (9)
Somatization	53 (8)	45 (9)

\*As SCL-90-R raw scores are gender normed, T-scores are used to compare mothers and fathers. The parents' T-scores on the symptom subscales and the GSI were derived from nonpatient norms.

## Patient Quality of Life

The Cancer Rehabilitation Evaluation System (CARES) (2) was completed by the breast cancer patients to provide a multidimensional assessment of the impact of breast cancer on their quality of life, with higher scores indicative of more difficulties. The women's scores fell in the normative range on average, however, 15/29 (52%) of women at Baseline had one or more symptom domains 1 or more standard deviations above the norm (Table 3).

**Table 3**  
**Breast Cancer Patients' Quality of Life\* (n=29)**

CARES Domains	Mean (SD)
Global	50 (10)
Total Number of Problems	52 (9)
Average Severity	49 (9)
Physical	48 (10)
Psychosocial	51 (9)
Medical Interaction	53 (6)
Marital	53 (8)
Sexual	54 (8)

\*T scores where the mean = 50, and SD = 10.

## Family Adaptability & Cohesion

The Family Adaptation and Cohesion Scale, Version 2 (FACES II) (3) was used to assess family functioning. This scale characterizes families along the dimensions of Adaptability, the ability of the family to be flexible and responsive to change, and Cohesion, the emotional bonding that the family members have for one another. Sixty-eight percent of mothers and 64% of fathers described their families as "Balanced", i.e., moderate to high on levels of Cohesion and Adaptability, considered to be important to healthy family functioning (Table 4). Balanced family types were associated with lower Global Severity Index (GSI) scores for mothers ( $r = -.38, p = .05$ ) and fathers ( $r = -.48, p = .01$ ). Higher scores on Adaptability were associated with lower GSI scores for the fathers ( $r = -.62, p = .001$ ), whereas higher scores on Cohesion were associated with lower GSI scores for the mothers ( $r = -.43, p = .02$ ). These gender differences may indicate the need to focus psychosocial interventions on different aspects of family functioning for mothers and fathers.

**Table 4**  
**Family Adaptability and Cohesion**

Family Functioning*	Mothers (n=28)	Fathers (n=25)
	n (%)	n (%)
Balanced	19 (68)	16 (64)
Low Cohesion	3 (11)	5 (25)
Low Adaptability	10 (36)	11 (44)

\*Categories are not mutually exclusive.

### Family Coping

The Family Crisis Oriented Personal Evaluation Scale (F-COPES) (4) was used to assess family problem solving and coping behaviors. Women endorsed particular coping strategies more frequently than men did (Table 5). Both women and men scored in the moderate range in the use of most coping strategies, with the exception of very high endorsement of "Passive Appraisal", the family's ability to accept problematic issues while minimizing reactivity. There was substantial variability among participants on the F-COPES, as reflected in the very large standard deviations for all but the Passive Appraisal subscale. "Reframing", the individual's capacity to redefine stressful events to make them more manageable, was associated with lower symptom scores for mothers on the GSI ( $r = -.40$ ,  $p = .04$ ), as well as lower scores on the CARES Inventory, including marital concerns ( $r = -.50$ ,  $p = .01$ ) and number of problems endorsed ( $r = -.42$ ,  $p = .03$ ). Reframing was also related to lower symptom scores for the fathers, but only in relation to somatic complaints ( $r = -.48$ ,  $p = .02$ ).

**Table 5**  
**Family Coping\***

Coping Strategies	Mothers (n=27)	Fathers (n=24)
	Mean (SD)	Mean (SD)
Acquiring Social Support	80 (19)***	56 (30)
Mobilizing Family to Acquire Help	75 (24)**	67 (21)
Passive Appraisal	98 ( 4)	97 ( 4)
Reframing	66 (31)	56 (33)
Spiritual Support	44 (36)	38 (30)
<b>Coping Total</b>	<b>84 (22)***</b>	<b>67 (28)</b>

\*Mean F-COPES percentiles,

\*\*  $p < .05$ ,

\*\*\* $p < .01$

## Family Communication

Family communication patterns were assessed with the Family Problem Solving Coping Scale (FPSC)(5). This scale evaluates two patterns of communication important to how families cope with challenges: Incendiary communication (IC) and Affirming communication (AC) (Table 6). Fathers' and mothers' scores at Baseline were similar, with AC endorsed more often than IC. Total Positive Communication scores (TPCS) fell in the mid-range in relation to standardization samples. The fathers' TPCS were negatively correlated with their GSI score ( $r = -.42, p = .05$ ). IC in particular was positively associated with fathers' distress on the GSI ( $r = .51, p = .02$ ). The mothers' FPSC scores also showed a relationship with their general distress, but only for the Hostility subscale of the SCL-90-R (AC,  $r = -.54, p = .007$ ; IC,  $r = .46, p = .02$ ; TPCS,  $r = -.51, p = .01$ ).

**Table 6**  
**Family Communication\***

Communication Pattern	Women (n=24)	Men (n=21)
	Mean (SD)	Mean (SD)
Affirming Communication	12 (2)	12 (2)
Incendiary Communication	4 (2)	5 (4)
Total Positive Communication	23 (5)	21 (6)

\* Possible Ranges: FPSC subscales (0-15), FPSC Total Score (0-30)

## Child Behavior

Of the parents' 63 children, 49 were between 4 and 12 years, the age range of children eligible for the study's intervention groups. Baseline data were collected where possible for children younger than 4 (n=6) and those older than 12 (n=8). The age appropriate Child Behavior Checklist (CBCL) (6-7) was used to assess any emotional or behavioral problems in the children, as well as the competencies of children aged 6 - 12 in social, recreational and academic domains. A large majority (46/52; 88%) of the children assessed with the CBCL evidenced few emotional or behavioral problems, with competency scores also within normal limits (Table 7). Six children (3 males, 3 females) demonstrated significant levels of psychological distress, especially somatic problems and anxiety. Six children also evidenced competency scores in the borderline or clinical range, with 4/6 showing problems with school.

**Table 7**  
**Children's Behavioral Symptoms (n = 52)**

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Child Behavior Checklist (CBCL) /Children (4+ years)

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Outcome Domains	Mean (SD)
<u>Problem Scales</u>	
Aggression	52 (3)
Anxiety/Depression	53 (5)
Attention Problems	52 (7)
Delinquency	52 (4)
Withdrawn	52 (4)
Social Problems	53 (6)
Somatic Complaints	53 (6)
Thought Problems	52 (5)
Externalizing Symptom Total	45 (8)
Internalizing Symptom Total	47 (10)
Total Behavior Score	45 (10)
<u>Competence Scales (n = 45)</u>	
Activities	49 (7)
Social	49 (7)
School	48 (8)
Total Competence Score	52 (10)

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\*T-Scores are presented so that the participants' scores can be evaluated in reference to the normative population. For the Problem Scales, scores of 50 are in the normal range, scores 67-69 represent borderline clinical scores, and scores 70 and above indicate clinically significant behavioral or emotional problems. For the Competence Scales, scores of 50 are in the normal range, scores 33-31 are considered borderline clinical scores and scores 30 and below fall in the clinical range.

## Child Competencies

Ten children aged 4-7 completed the age/gender appropriate Harter Pictorial Scale of Perceived Competence (8) which comprehensively assesses the child's self-perceptions regarding peer and maternal acceptance, physical and cognitive competencies. Scores may range from 1-4. Their mean scores were medium to high across the four subscales: Peer Acceptance,  $M = 2.93$ ,  $SD = .58$ ; Maternal Acceptance,  $M = 2.96$ ,  $SD = .65$ ; Physical Competence,  $M = 3.23$ ,  $SD = .39$ ; Cognitive Competence,  $M = 3.46$ ,  $SD = .56$ . The range for the subscale means was 1.80-4.0, with lower scores (those  $<2.50$ ) more common on the maternal and peer acceptance scales.

Thirty-six children aged 8-13 years completed the Harter Scale of Perceived Competence Questionnaire (9) (Table 8). Both boys and girls on average scored at or above the standardization sample means on all subscales. There was a trend for boys to score higher than girls on scholastic competence ( $t=1.91$ ,  $df=32$ ,  $p=.06$ ) and social acceptance ( $t=1.72$ ,  $df=34$ ,  $p=.09$ ).

**Table 8**  
**School-Aged Children's Perceived Competence**

Competence Domain	Boys (n = 23)	Girls (n = 13)
	Mean (SD)	Mean (SD)
Athletic	3.08 (.70)	3.09 (.69)
Conduct/Behavior	3.17 (.50)	3.10 (.91)
Physical Appearance	3.30 (.60)	3.18 (.89)
Scholastic	3.43 (.52)	3.03 (.70)
Social Acceptance	3.30 (.61)	2.90 (.79)
Global Self-Worth	3.54 (.44)	3.22 (.75)

### Summary

Thirty families, including 49 children aged 3-12, have been recruited to the "Families Coping with Cancer Project". While only baseline data is reported, this preliminary data does provide some new information about family adaptation when a young mother has breast cancer:

- The psychosocial functioning of a majority of premenopausal breast cancer patients was within normal limits.
- Spouses endorsed more psychological distress than the patient, emphasizing the importance of including the patient's partner in psychosocial interventions for young breast cancer patients.
- Low levels of adaptability were associated with distress for fathers, whereas low levels of cohesion were associated with distress for the mothers, indicating the need to

consider different potential moderators of stress for the breast cancer patient and her husband.

- The cognitive coping strategy, "Reframing," was consistently associated with lower distress, especially for the breast cancer patient, and provides support for instruction in cognitive coping techniques in the intervention portion of this study.
- Incendiary speech was a significant predictor of the partner's psychological distress. The association found between negative communication and distress supports the emphasis on communication skills in the intervention groups as well as the need to focus on the relationship between communication and distress for the fathers in particular.
- Most children were reported to exhibit few emotional or behavioral problems, although there was some preliminary evidence of gender differences in self-competence, with school age girls scoring below boys.
- Global scales of family functioning revealed a general pattern of competency in coping with cancer in the family, with a subset of families exhibiting distress both on psychosocial symptom checklists and measures of family coping.

The ultimate goal of this research is to provide information regarding the best design of a psychosocial intervention for the premenopausal woman with breast cancer and her family. This research should also provide information regarding which patients and families are at high risk for psychosocial distress, and thus assist in determining the best use of resources to meet the psychosocial needs of the young woman with breast cancer and her family.

Finally, the principal investigator moved to the Children's Memorial Hospital in Chicago, Illinois in September 2000. The research assistant, Ms. Carole Mallick, who has worked on the study since May of 1998 will continue managing the day to day recruitment of participants and organization of the intervention groups. Dr. Karen Woodall has been hired to take the principal investigator's place as the psychologist co-leader of the intervention groups. Dr. Woodall is a senior clinical health psychologist who is very familiar with the intervention group as she consulted on the development of the group in the first year of this research project. The nurse educator, Ms. Linda Robertson, will remain the same. The principal investigator will return to Pittsburgh, PA to review work on the research on a quarterly basis. In the interim, management of the grant will continue via phone and email.

**Technical Objectives 3-4: Compare the effectiveness of Basic and Expanded psychosocial intervention and assess the impact of the children's intervention.**

The remaining tasks are yet to be addressed:

**Task 4:** Months 37-45: No cost extension of 12 months. Fifth and Sixth cycle of intervention group are run; Continued data coding and data entry; Complete 8-month follow-up for Cycle 5 participants.

**Task 5:** Months 46-49: Eight month follow-up for Cycle 6 participants is completed. Data analyses to compare treatment effects of Basic and Expanded interventions and impact of children's intervention upon child psychological adjustment and parenting stress.

**Task 6:** Months 46-49: Preparation of final report and publications.

## KEY RESEARCH ACCOMPLISHMENTS

- Treatment Manual For Patient And Partner Group
- Treatment Manual for School-aged Children
- Treatment Manual for Preschool Children
- Completion Of Third and Fourth Intervention Cycles and Start of Fifth Intervention Cycle
- Implementation of More Intensive Efforts For Subject Recruitment

## REPORTABLE OUTCOMES

Presentations of the Parent and Children's intervention groups developed for this study are being prepared for presentation at academic meetings. Presentation of the results of the intervention groups will be made as soon as sufficient numbers of participants are recruited to allow for comparisons among treatment conditions. The baseline data described above were presented as a poster and as a Platform presentation at the Department of Defense, Breast Cancer Research Program Meeting in June 2000, Atlanta, Georgia:

Tarbell, S. Coping with breast cancer in young women and their families. Era of Hope, Department of Defense Breast Cancer Research Program Meeting, Proceedings, Volume II, p. 784.

Tarbell, S. Coping with breast cancer in young women and their families. Symposium: Breast cancer Issues in Premenopausal Women, Era of Hope, Department of Defense Breast Cancer Research Program Meeting, June 11, 2000, Atlanta, GA.

## CONCLUSIONS

Thirty families, including 49 children have been recruited to the "Families Coping with Cancer Project". While increased subject recruitment is the primary goal for the final year of this study, the preliminary data gathered from 30 families does provide some new information about family adaptation when a young mother has breast cancer.

The psychosocial functioning of a majority (86%) of premenopausal breast cancer patients was within normal limits as assessed by the SCL-90-R. In contrast, 44% of spouses endorsed psychological distress in the clinical range, emphasizing the importance of including the patient's partner in psychosocial interventions for young breast cancer patients. The women's quality of life as assessed by the CARES was in the normative range on average, however, 52% of the women had one or more elevated symptom domains. On the FACES II, 68% percent of mothers and 64% of fathers described their families as "Balanced", i.e., moderate to high on levels of Cohesion and Adaptability, considered to be important to healthy family functioning. Balanced family types were associated with lower symptom scores on the Global Severity Index (GSI) of the SCL-90-R, for mothers ( $r = -.38$ ,  $p = .05$ ) and fathers ( $r = -.48$ ,  $p = .01$ ). The cognitive coping

strategy, "Reframing," as assessed by the F-COPES, was consistently associated with lower distress, especially for the breast cancer patient ( $r = -.40$ ,  $p = .04$ ), and provides support for instruction in cognitive coping techniques in the intervention portion of this study. Family communication as measured by the FPSC, particularly incendiary speech, was a significant predictor of the father's psychological distress ( $r = .51$ ,  $p = .02$ ). These gender differences may indicate the need to focus psychosocial interventions on different aspects of family functioning for mothers and fathers.

A majority (46/52; 88%) of the children exhibited few emotional or behavioral problems on the Child Behavior Checklist. Trends were found for gender differences in self-competence, with school age girls scoring below boys in scholastic competence ( $t=1.91$ ,  $df=32$ ,  $p=.06$ ) and social acceptance ( $t=1.72$ ,  $df=34$ ,  $p=.09$ ) on the Harter Scale of Perceived Competence. These data on family adaptation when a young mother has breast cancer can help identify families at risk for psychosocial distress, and assist in determining the best way to meet their psychosocial needs.

The impact of the Expanded and Basic intervention on the psychosocial outcomes of these distressed families will be of particular interest. It may turn out that the psychosocial interventions being tested work best for those in distress, but it will also be important to ascertain whether those families who already exhibit a positive psychosocial adaptation to breast cancer can enhance their coping skills and show lower symptom scores after participating in the intervention groups. Comparisons between the Expanded and the Basic interventions will also allow the determination of whether children benefit most from direct intervention or whether they evidence improvement in psychosocial adaptation by proxy--that is, through parental involvement in the intervention only. The ultimate goal of this research is to provide information regarding the best design of a psychosocial intervention for the premenopausal women with breast cancer and her family. This research should also provide information regarding the identification of which patients and families are at high risk for psychosocial distress, and thus assist in determining the best use of resources to meet the psychosocial needs of the young woman with breast cancer and her family.

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