

A Brief Intervention to Minimize Psychosexual Morbidity in Dyads Coping With Breast Cancer

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The diagnosis and treatment of female breast cancer are widely recognized to be associated with significant distress and uncertainty that disrupt the lives of survivors and their partners (Avis, Crawford, & Manuel, 2004; Baucom et al., 2009; Mellon & Northouse, 2001). In fact, for women who are partnered, breast cancer may best be thought of as a “couple’s disease,” the reason being that the adaptation of each partner has been shown to predict the adjustment and well-being of the other (Hoskins, 1995; Romero, Lindsay, Dalton, Nelson, & Friedman, 2008; Segrin, Badger, Sieger, Meek, & Lopez, 2006). Therefore, a primary concern within this population is the impact of breast cancer on the quality of the dyadic relationship. The uncertainty that comes with the diagnosis, along with changes in body image and side effects associated with the treatment, poses particularly serious threats to the self-esteem, quality of life, and psychosexual well-being of the survivor and, therefore, to her partner and to their relationship (Manne, Ostroff, & Winkel, 2007; Northouse, Templin, & Mood, 2001). Serious problems found to affect the relationship include sexually related issues that do not resolve spontaneously and extend well beyond the period of adjuvant therapy (Broeckel, Thors, Jacobsen, Small, & Cox, 2002; Ganz, Rowland, Desmond, Meyerowitz, & Wyatt, 1998; Schover, 1999). Difficulty communicating about intimacy, sexuality, and the fear of cancer are problems, too (Kornblith et al., 2006; Shields & Rousseau, 2004). Results from a preliminary focus group study that included survivors and their male partners found a lack of communication within the dyad to be common. The consequence often was that each individual made unwarranted negative assumptions, and support within the relationship decreased at the very time it was needed the most. In addition, partners often felt overlooked because of the concern of others for the well-being of the survivor. That left them with little support as they, too, coped with the fear and uncertainty associated with breast cancer, along with the threat of the potential loss of their loved one (Holmberg, Scott, Alexy, & Fife, 2001).

Purpose/Objectives: To develop and evaluate the feasibility of a brief intervention to attenuate the incidence of psychosexual morbidity within the dyad secondary to the diagnosis and treatment of breast cancer.

Design: Quasiexperimental, including intervention and treatment-as-usual comparison groups.

Setting: Breast clinic of a comprehensive cancer center in the Midwest United States.

Sample: 65 recently diagnosed breast cancer survivors who were pre- or perimenopausal and aged 20–55 years, and their partners.

Methods: Three intervention sessions were delivered based on a manual developed for the study. Twenty-five dyads received treatment as usual, 26 dyads received a face-to-face intervention, and 14 dyads received the same intervention by telephone. Questionnaires were completed at baseline, following completion of the intervention, six months postintervention, and from the comparison group at equivalent data points.

Main Research Variables: Intimacy, sexual functioning, and dyadic adjustment.

Findings: About 98% of dyads completed all intervention sessions, with an equal level of satisfaction among those in the telephone and face-to-face groups. Interesting trends in differences between the intervention and comparison groups on the relationship variables of intimacy, sexual functioning, and dyadic adjustment were obtained; however, given the sample size, power was not sufficient to reach statistical significance.

Conclusions: The intervention is feasible and acceptable for dyads comfortable discussing their relationship. Intervention by telephone was demonstrated to be as effective as the face-to-face mode of delivery.

Implications for Nursing: Nurses need to provide an opportunity for women to discuss problems they are experiencing relative to sexuality, intimacy, and body image.

Given the evidence of the serious implications for the quality of the partner relationship in this population, the development of effective interventions is vital. Although these problems are gaining increasing

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recognition, research focusing on interventions that take both members of the dyad into account is in the beginning stages. Several studies have focused on partners only (Bultz, Specia, Brasher, Geggie, & Page, 2000; Lewis et al., 2008), and a number of studies have focused primarily on the survivor (Avis et al., 2004; Fobair et al., 2006; Romero et al., 2008; Segrin et al., 2006); however, neither approach has been shown to adequately address the impact of breast cancer on the relationship.

Recognition of the need to include both members of the dyad as participants in an intervention has resulted in several studies evaluating various approaches. Christensen (1983) conducted a study focusing on communication, body image, and sexuality that included both partners in the intervention. The design included 20 dyads and a no-treatment control. Participants improved with respect to increased sexual satisfaction and decreased distress, but the level of marital satisfaction did not change. More recently, Baucom et al. (2009) evaluated a dyad-based intervention that included 14 dyads randomly assigned to the experimental intervention or to treatment as usual, with 13% of eligible dyads consenting. Although the sample was too small to obtain statistical significance, the intervention approach indicated potential promise for the effectiveness of including both members of the dyad and focusing specifically on their relationship. Manne et al. (2005), using a group approach, incorporated a large sample of dyads living with early-stage breast cancer in a study that focused on the relationship. Findings indicated that method did not have a substantial effect, which may have been because many relationship issues are too personal for discussion in a group forum. The result was a small overall effect size for survivors, with no effect for partners. Kayser (2005) conducted an intervention for 50 breast cancer dyads that included nine sessions, and reported trends for significant differences between the treatment and control groups.

In addition, an intervention study for dyads coping with either breast cancer or gynecologic cancer was conducted by Scott, Halford, and Ward (2004) comparing three approaches: couple-based coping training (Can-COPE), individual coping training for the survivor only, and a medical education control. The sample of 57 breast cancer survivors and 37 gynecologic cancer survivors were randomly assigned to one of the three groups, which were not differentiated by diagnosis. Those participating in the couples training group showed significant improvement in supportive communication, less psychological distress, and improved sexual adjustment. The intervention was conducted in the homes of the dyads, and the communication outcome was assessed by a discussion with each dyad.

Given the evidence from earlier studies and the serious implications of breast cancer for the quality of the partner relationship, as well as for each partner's individual well-being, the primary purpose of the current study was to develop a brief intervention designed to minimize the incidence of psychosexual morbidity within the dyad secondary to the illness and evaluate its feasibility and acceptability. The secondary purpose of the study was to determine the effect size needed for a subsequent randomized clinical trial as the next step to evaluate the efficacy of the intervention developed in this feasibility study. Distinguishing features of the study include a focus on prevention rather than on the change of preexisting maladaptive behavior; the brief nature of the intervention, which is comprised of three sessions including both members of the dyad; and delivery relatively early in the breast cancer trajectory. Feasibility was tested further by the evaluation of two methods of delivery for the intervention, each of which included both partners in three sessions: in-person sessions that took place in the research office and delivery by speaker phone with participants at home. The content of the intervention was based on a written manual and was the same for both modes of delivery.

Methods

Participants

Heterosexual women were recruited from individuals coming to the Indiana University Simon Cancer Center in Indianapolis for the treatment of breast cancer. Eligibility criteria included being in a committed relationship of one year or longer, having a partner who was willing to participate, having received a diagnosis of stage I, II, or IIIa breast cancer within the past nine months, and being 20–59 years of age. The authors specifically targeted premenopausal and perimenopausal women because concerns such as raising children and fertility issues are distinct for younger women. The parameters of the sample were limited necessarily because of the level of resources provided for pilot studies by the National Institutes of Health.

A total of 243 women met the criteria and 62% ($n = 153$) expressed an interest in the study and gave verbal consent to receive detailed information. Of those potential participants, 65 women and their partners, or about 42%, consented to participate and completed the first questionnaire after receiving a description of what participation included (see Table 1). Initially, only the face-to-face mode of delivery was included and reasons for refusing to participate were distance from the clinic, a partner who was unwilling to participate, lack of time, and discomfort with the topic of sexuality. Consequently, the authors also decided to trial delivery

Table 1. Characteristics of Breast Cancer Survivors and Partners

Characteristic	Breast Cancer Survivor Groups						Partner Groups					
	Comparison (N = 25)		Face-to-Face (N = 26)		Telephone (N = 14)		Comparison (N = 25)		Face-to-Face (N = 26)		Telephone (N = 14)	
	\bar{X}	Range	\bar{X}	Range	\bar{X}	Range	\bar{X}	Range	\bar{X}	Range	\bar{X}	Range
Age (years)	45.4	31–56	44	29–52	42	29–52	46	32–59	46.5	29–52	41	30–53
Relationship length (years)	14	–	16	–	14	–	–	–	–	–	–	–
Characteristic	n		n		n		n		n		n	
Cancer stage												
I	8		7		6		–		–		–	
II	12		10		5		–		–		–	
III	5		9		3		–		–		–	
Ethnicity												
African American	1		1		1		2		1		1	
American or Alaskan Native	1		–		–		–		–		–	
Hispanic	2		2		–		–		–		–	
Caucasian	21		23		13		18		21		11	
Missing	–		–		–		5		4		2	
Education												
High school	3		4		1		4		3		1	
Business or vocational	2		3		1		5		3		1	
Some college	10		5		3		5		7		2	
College degree	7		8		6		2		6		5	
Graduate degree	3		6		3		4		3		3	
Missing	–		–		–		5		4		2	

of the intervention by telephone, and the consent rate, including those returning the first questionnaire, increased to more than 60%. Because the primary purpose of the study was to evaluate the feasibility and acceptability of the intervention, assignment to the treatment or the questionnaire-only group was not random, but by choice of the participating dyad. The protocol for the study was reviewed and approved by the institutional review board and the Scientific Review Committee of the Indiana University Simon Cancer Center.

Design

The process underlying this developmental research follows the model of Sussman, Valente, Rohrbach, Skara, and Pentz (2006), which is based on the following phases. Phase one identifies the phenomena of interest, and phase two moves to the development of programs needed for application to a particular health context, which includes program development and pilot studies. Phase three involves efficacy trials using the randomized, controlled design; phase four involves implementation; and phase five involves dissemination trials. Phase one of this research was based on a focus group study (Holmberg et al., 2001), which provided the data for conceptualization of the research problem. Development of the intervention to target the problem, or phase two of the research, is described in this article. Additional

discussion of the development of interventions through the use of pilot research is found in Conn, Algase, Rawl, Zerwic, and Wyman (2010).

Measures

To address the aims of the study, self-report questionnaires were completed at three time points: T1 (baseline prior to the first intervention session), T2 (immediately following completion of the intervention), and T3 (six months following completion of the intervention). Questionnaires for the treatment-as-usual comparison group were timed to coincide with those for the face-to-face and telephone intervention groups. All measures were completed individually by the survivors and partners from each of the three groups, with the exception of the Body Image Scale and the Symptomatology Index, which were completed by survivors only.

The central concern of the intervention was the psychosexual well-being and the quality of the survivor-partner relationship, which were assessed using three measures. Intimacy was assessed with the **Heatherington Intimate Relationship scale** (Davis, Yarber, & Davis, 1988), which was adapted for this study with 19 items, for a total score ranging from 19–76. Higher scores indicate greater levels of intimacy. The scale was used to indicate the degree of comfort, closeness, fondness, and love the individual felt toward his or

her partner, as well as the degree of sharing and ease of communication within the relationship. Based on a combined data set for all participants in the sample at T1, the Cronbach alpha was 0.91.

Sexual functioning was assessed using the **Watts Sexual Functioning scale** (Greendale, Hogan, & Shumaker, 1996), which includes 15 items on a five-point Likert-type scale that address arousal and desire, level of satisfaction, and problems related specifically to sexual intercourse. In addition, it contains a single-item, 10-point response scale asking how important sexual activity is to the participant. Total scores range from 16–80, with higher scores indicating more positive sexual adjustment. The Cronbach alpha was computed separately for survivors and partners to take into consideration potential differences in the impact of the illness on their perspectives of the sexual relationship. Results were $\alpha = 0.8$ for survivors and $\alpha = 0.6$ for partners; using a combined sample of the survivors and partners, $\alpha = 0.75$.

The overall quality of the relationship was assessed by the **Dyadic Adjustment Scale** (Spanier, 1976), which is a widely used measure with demonstrated reliability and validity comprised of 32 items that factor into four subscales (dyadic satisfaction, dyadic cohesion, dyadic consensus, and affectional expression), for a total score ranging from 0–143. Higher scores indicate more positive dyadic adjustment (Graham, Liu, & Jeziorski, 2006).

Emotional response was indicated by two measures: the 20-item **Center for Epidemiological Studies Depression Scale (CES-D)** (Radloff, 1977), and the 20-item state subscale of the **Spielberger State-Trait Anxiety Inventory** (Spielberger, Gorsuch, & Lushene, 1970), with scores ranging from 20–80. Both measures are widely used and have long-standing demonstrated validity and reliability.

Coping strategies used by both the survivors and partners were assessed with the **Ways of Coping Checklist** (Lazarus & Folkman, 1984), modified to be specific to this population. Factor analyses of 63 items using data from a larger sample of cancer survivors resulted in the following subscales: active coping, emotion-focused coping, dyadic coping, spiritual coping, and avoidance coping. Total scores ranged from 0–252; the higher the score, the more frequently coping strategies were used. The Cronbach alpha for the subscales ranged from 0.83–0.88.

Self-perception was indicated for the breast cancer survivors by the 15-item **Body Image Scale**, which was developed for earlier studies with this population. The Cronbach alpha for those was 0.87 (Fife, Kennedy, & Robinson, 1994). The level of personal control for the survivor and the partner was assessed using the **Mastery Scale** (Pearlin & Schooler, 1978; Ross & Sastry, 1999). The validity and reliability of that measure have

been demonstrated repeatedly, and it was developed for use in stress research, with a Cronbach alpha of 0.82 in this study. The Mastery Scale is a seven-item Likert scale that provides an indication of the extent to which individuals feel they have control over their current life and the future.

The degree of symptomatology experienced by the breast cancer survivor was assessed with the **Symptomatology Index** (Fife et al., 2000), which was developed for use in the cancer population and modified specifically for breast cancer. The index is comprised of 17 items that ask participants to rate the frequency with which each symptom occurs and the extent to which it interferes with daily living based on a four-point Likert scale, with scores ranging from 17–76 (Cronbach alpha = 0.87 for frequency, 0.9 for interference).

The authors also included a 16-item **participant evaluation questionnaire**, which asked about benefits received by participation in the intervention, with total scores ranging from 16–161. The questionnaire was developed specifically for this study and completed immediately following the intervention (i.e., T2) by both members of the dyad.

Intervention

The underlying theoretical framework of the intervention was based on systems theory (Cox & Paley, 1997; Sameroff, 1994), with a primary premise being that people living within a relationship neither experience nor resolve the effects of a crisis, such as breast cancer, independently of the other. Therefore, both the survivor and the partner were included in all aspects of the intervention, and the content was directed toward interaction within the relationship. Sessions took place either in the research office of the investigators for the face-to-face group, or by telephone using a speaker phone for the dyads who participated from home. Sessions lasted about 60 minutes, and took place two to three weeks apart, with the first session scheduled three to nine months following diagnosis. That timing was based on the rationale that dyads had too many decisions to make and too much stress to cope with during the first three months following diagnosis. Restricting initiation of the intervention to three to four months postdiagnosis, being that the focus is prevention, would be desirable to promote the establishment of effective long-term coping patterns; however, recruitment of the sample was challenging and made it necessary to include dyads up to nine months postdiagnosis.

The intervention sessions were based on a manual developed by the investigators, who also conducted the sessions with participants. They included a clinical nurse specialist, a psychologist, and a social worker. Throughout the intervention phase of the study, monthly reviews were held to discuss delivery of the intervention and

to consult with each other on any challenging issues that occurred. Session 1 focused on effective communication, which is the foundation for the psychosexual relationship; session 2 focused on intimacy and sexual functioning in the face of cancer; and session 3 focused on effective coping strategies for the management of stress (see Figure 1). As additional content for the intervention, the authors provided the booklet, *Sexuality and Fertility After Cancer for Women*, published by the American Cancer Society, and the book *Breast Cancer Husband*, by Marc Silver, for the partners. Copies were donated by the American Cancer Society and Rodale Books, respectively.

Prior to each session, the authors mailed a copy of the appropriate section of the manual to the dyad. Techniques used during the sessions included discussion and didactic presentation based on the content of the manual. Exercises to augment each session were available in the manual, and dyads were encouraged to use them. Quality control and adherence to the content and intervention format were assured through training of the interventionists and the monitoring of audiotapes of face-to-face sessions. Interventionists also completed a facilitator checklist, which asked about content covered and the quality of interaction between the dyad and interventionist, following face-to-face and telephone sessions throughout the study.

Data Analysis

Initial statistical analyses included examination of the distribution of all variables and verification of the normal distribution and variance for the data from each group. Descriptive statistics (e.g., mean, range, standard deviation, minimum, maximum) were calculated for the survivors and partners separately for the treatment-as-usual comparison group and the two intervention groups at each data point on each variable. The intervention groups, those receiving the face-to-face versus the telephone delivery, were not significantly different on any indicators.

To examine the intervention effect on variables significant in the breast cancer experience, repeated-measures analysis of variance (ANOVA) was conducted using data from the treatment-as-usual comparison group and the combined intervention groups. First, data were examined for significant differences at T1 on all variables, including the demographic variables, using repeated-measures ANOVA and/or the Kruskal-Wallis test (for nonparametric data). No significant differences existed between the three original groups on any of these variables at baseline. Additional analyses comparing the two intervention groups at T2 and T3 on all variables also found no significant differences. Therefore, data from the face-to-face and telephone

Session 1: Communication

1. Discussion of basic elements of communication, including values of openness, effective listening, and sharing sensitive and emotion-laden issues
2. Communication as the primary way to solve problems relative to intimacy and sexuality, and as the means to maintain and strengthen bonds strained by the fear and anxiety cancer creates
3. Discussion of what the breast cancer experience has been like so far for each partner, what have been the most significant changes and problems, what are their major concerns, and what each could do for the other that would facilitate a mutually satisfying relationship

Session 2: Intimacy and Sexual Well-Being

Data from the baseline questionnaire on sexual functioning and intimacy were used as one basis of this intervention session.

1. Provide information regarding the physiological impact of breast cancer and its treatments on sexual functioning.
2. Coping with changes in body image
3. Discussion of the importance of taking time for each other alone as a means to promote intimacy
4. Discussion of specific problems of sexual functioning the survivor may be having (e.g., decreased libido, fatigue, vaginal dryness), and ways to manage them
5. Discussion of fears of abandonment and rejection

Session 3: Dyadic Coping and Effective Coping Strategies

1. Strategies for reducing emotional distress and enhancing mutual supportiveness
2. How to recognize signs of depression, anxiety, anger, and guilt and what to do about them; provide sources for additional intervention, if needed
3. Discussing strategies they have used in the past that have facilitated stress management within their relationship
4. Strategies for reducing demands
5. The negative impact of avoidance coping
6. Recognition that breast cancer is a “we disease” and how that promotes adaptive coping

Figure 1. Intervention Components

participants were combined into a single intervention group for the statistical analyses examining the impact of the intervention across time.

Feasibility of the intervention was evaluated by calculating percentages of those consenting, by participant retention or rates of completion for the three intervention sessions, and by responses to the measure of participant acceptability and satisfaction—the participant evaluation questionnaire—discussed earlier.

Findings

Acceptability and Feasibility

As cited previously, the consent rate for participation was 42%, with evidence that the sample was biased in terms of dyads' comfort with discussing their relationship and issues of intimacy and sexuality. As one woman

responded when approached about participation, “I think it is very important, but I could never talk about it;” a second stated, “That is just much too private.” Additional reasons given for refusal were distance from the clinic prior to offering the telephone intervention, a partner who was unwilling to participate, time constraints, and scheduling issues. However, that bias would most likely exist if the intervention were to be introduced as a part of usual care.

Indications from participants, based on retention and completion of all sessions, demonstrated the intervention to be feasible for dyads comfortable discussing their relationship. Of the 26 dyads participating in the face-to-face intervention, 25 completed all three intervention sessions, with one dyad dropping out after session 1. A total of 14 dyads participated in the telephone intervention, all of whom completed the three intervention sessions. Combining the two intervention groups, the completion rate for the intervention was 98%. Acceptability and satisfaction also were evaluated by the participant evaluation questionnaire (see Table 2).

In addition to the items given in Table 2, couples participating in the telephone intervention sessions were asked to describe any advantages or disadvantages of participating in the sessions via speaker phone. Disadvantages included not meeting the intervenor in person, with limits on communication they felt could be enhanced by face-to-face interaction. On the other hand, they appreciated the flexibility of scheduling, and not having to obtain child care or travel a long distance. In addition, the telephone modality provided an element of privacy that probably increased the comfort level of several participants when discussing deeply personal issues. A number of them stated they would not have been able to participate in the face-to-face sessions,

whereas several suggested a mix of face-to-face and telephone sessions would be ideal. In addition, several participants in both intervention groups stated the intervention should be made available as soon as possible following diagnosis, for that was the time they needed help the most.

Finally, clinicians caring for these dyads in the breast cancer oncology clinic were enthusiastic about developing this brief intervention because it addressed needs relative to sexuality and intimacy that patients brought to them. A surgeon, an oncologist, and a nurse clinical specialist who is herself a breast cancer survivor participated in development of the protocol. That is particularly important if the end goal is development of an intervention to be implemented within the clinical setting.

Table 2. Agree or Strongly Agree Responses to the Participant Evaluation Questionnaire by Group

Evaluation Item	Survivors % (N = 29)	Partners % (N = 21)
Please evaluate the following statements with respect to the impact of the intervention sessions on your relationship.		
The sessions met my needs individually.	100	100
The sessions met our needs as a couple.	100	100
The sessions helped me deal more effectively with the stresses I face.	96	89
The sessions helped me cope better with the demands of the illness.	93	86
Communication within our relationship has been strengthened.	90	100
The sessions were helpful in strengthening the intimacy and connectedness we share as a couple.	90	93
The sessions were helpful in informing us of changes in our sexual relationship to be expected due to treatment(s) for breast cancer.	83	96
The information provided in the sessions will be helpful in enhancing important aspects of our relationship throughout recovery.	96	100
The individualized format of the intervention sessions made us feel more comfortable than we would have in a group discussion.	100	100
The healthcare professional leading the session was responsive to my specific concerns and goals for attending the sessions.	97	100
The number of sessions seemed to be about right.	90	96
The time I invested in attending the sessions was worthwhile.	97	100
I found the book <i>Breast Cancer Husband</i> to be helpful.	100	91
Please review the following topics from each intervention session and rate each topic based on how helpful you found the material covered in the session and in your intervention manual.		
Session 1: Communication	100	100
Session 2: Intimacy and Sexual Well-Being	100	94
Session 3: Dyadic Coping and Effective Coping Strategies	96	89

Statistical Findings

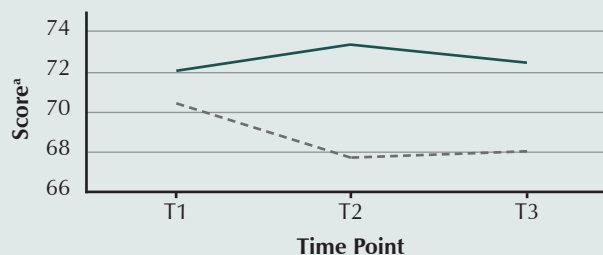
Initially, data from the two intervention groups were examined for significant differences at all three time points on each variable and, when no differences were found, they were combined for the comparative analyses with the questionnaire-only group. Repeated-measures ANOVA comparing the combined intervention group with the questionnaire-only group at each data point found no statistically significant differences on any variables; however, several interesting trends were observed across time that would have possibly reached statistical significance with a larger sample (see Figures 2, 3, and 4). Those trends were found in variables central to the intervention and would be key for consideration in the next step of the research, which is designing an efficacy trial.

Based on the analyses, Figures 2A and 2B show the patterns across time in intimacy for the two survivor groups and the two partner groups, respectively. At T1, the two groups started at a similar level, with partners in the comparison group being slightly higher; however, a subsequent decrease in intimacy was observed at T2 and T3 for both survivors and partners in this group compared to those in the combined intervention group, who maintained the level of intimacy as it was at baseline.

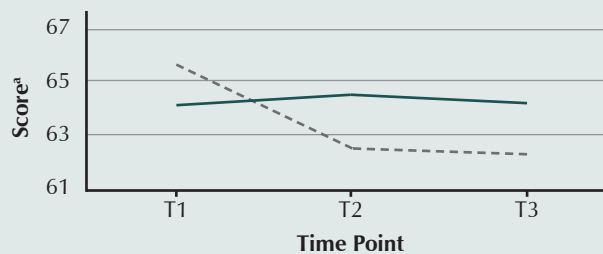
The pattern for the two groups of breast cancer survivors with respect to sexual functioning also differed, as seen in Figure 3A. It remained relatively unchanged for the three data points for those receiving the intervention, whereas those in the comparison group declined at T2 and then returned to the baseline level at T3, where it was slightly less positive than for the intervention survivors, although they started at a lower point. Patterns as well as scores at each data point for partners in the two groups with regard to sexual functioning were almost identical. Figure 3B illustrates the findings with respect to dyadic adjustment for survivors. Similar to the level of intimacy, survivors started at about the same level; however, a decrease occurred for the comparison survivor group on dyadic adjustment, with the intervention group remaining unchanged across time. Partners in both groups were similar and did not change. It is interesting that the decrease in both intimacy and dyadic adjustment within the comparison group was greatest between T1 and T2, after which little change occurred. Figure 3C tracks body image for each of the two survivor groups across time, with the intervention group trending upward toward a more positive image than those survivors in the comparison group.

Finally, the change across time in partner anxiety is shown in Figure 4. Partners in the intervention group started with a higher level of anxiety than those in the comparison group; however, a consistent trend existed toward a decreasing level of anxiety for those

A. Breast Cancer Survivors



B. Partners of Breast Cancer Survivors



— Intervention group ---- Comparison group

^aOn the Heatherington Intimate Relationship Scale

Figure 2. Patterns Across Time for Intimacy by Group

individuals, whereas the level of anxiety for those in the comparison group increased between T1 and T2.

Discussion

Based on the full participation of consenting dyads, the current study provides evidence indicating the feasibility and acceptability of an intervention to address issues of intimacy and sexuality for dyads coping with breast cancer. That is suggested by the fact that 98% of those participating in the intervention completed all three sessions, and their evaluations of the intervention were positive. At the same time, other findings based on the consent rate of 42% point to the fact that a number of dyads indicated they were not comfortable participating in an intervention concerning the personal issues of intimacy, sexuality, and their relationship. That finding is similar to a study conducted by Baucom et al. (2009) in which 13% of eligible dyads participated.

The face-to-face and telephone modes of intervention appeared to be equally acceptable based on the rapport and trust the authors were able to establish with the dyads in both groups, as indicated by their responses to the participant evaluation questionnaire. However, the telephone modality increased convenience and decreased expense, thereby increasing feasibility because it enabled dyads that lived at a distance, had nonflexible work schedules, and had child care issues to participate. In addition, delivery of the intervention by telephone added an element of privacy that may have increased

the comfort level of some participants. The response to the telephone intervention provides important data for expansion to an efficacy trial that could include a design combining an initial face-to-face session to introduce the intervention occurring during a scheduled medical visit early in the treatment trajectory, with the three subsequent sessions delivered by telephone. An addition to the intervention also could include a follow-up telephone contact about three months following completion of the intervention to consolidate positive changes that have occurred, and to suggest community resources for assistance with ongoing or developing problems not apparent during the intervention.

Data obtained during session 1 indicated the topic of communication was particularly important for these dyads, and crucial as an opening for the intervention. A number of participants indicated that discussing cancer within the context of their relationship was difficult, and survivors and partners talked about their fear of upsetting the other. The authors believe the material covered in this session on communication served as an important foundation for sessions 2 and 3, and should thereby remain as the opening topic for the intervention in subsequent research.

Three intervention sessions appeared to be adequate to meet the goal of easing problems participants faced within their relationship, based on responses to the Participant Evaluation Questionnaire. If dyads had important and continuing issues that needed to be resolved, the authors planned for referrals for in-depth counseling. However, no indications existed during the intervention sessions that referrals were necessary with any dyad, and no participants reported seeking additional help. The authors believe this supports their thinking that the sample was biased in terms of those most comfortable openly discussing their relationship concerns.

Based on the analyses, evidence seems to exist in the trends that enhancing quality of life within the dyad may be a possible outcome, as individuals participating in the intervention tended to maintain a baseline status or improve on targeted variables. In addition, a decline was more frequently the trend for those individuals in the treatment-as-usual comparison group. As previously stated, the trends did not reach significance, given the relatively small sample size and a subsequent lack of statistical power. Although they may not have reached statistical significance with a larger sample, these trends, along with the high rate of participation, indicate a randomized, controlled trial to fully evaluate the efficacy of the intervention is warranted.

The findings also suggest that in the absence of serious psychopathology or relationship issues prior to the diagnosis of breast cancer, a brief intervention may help avert deterioration within the relationship. The dyad is the executive subsystem of the family and excessive

distress and unresolved problems within this dyad could have major mental health consequences for children in the family, as well. Although a number of dyads are uncomfortable participating in an intervention that focuses on their relationship and on sexual issues, having such an intervention as a part of routine care offered to all survivors may normalize the problems many dyads face and serve to reduce the hesitation to participate.

Limitations

This study was funded and conducted as pilot feasibility research. It included the development of an intervention and evaluation of the willingness of breast cancer survivors and their partners to participate in an intervention concerning their relationship, as well as its acceptability and perceived effectiveness. It was not designed as a randomized, controlled efficacy trial, and the available resources limited the number of

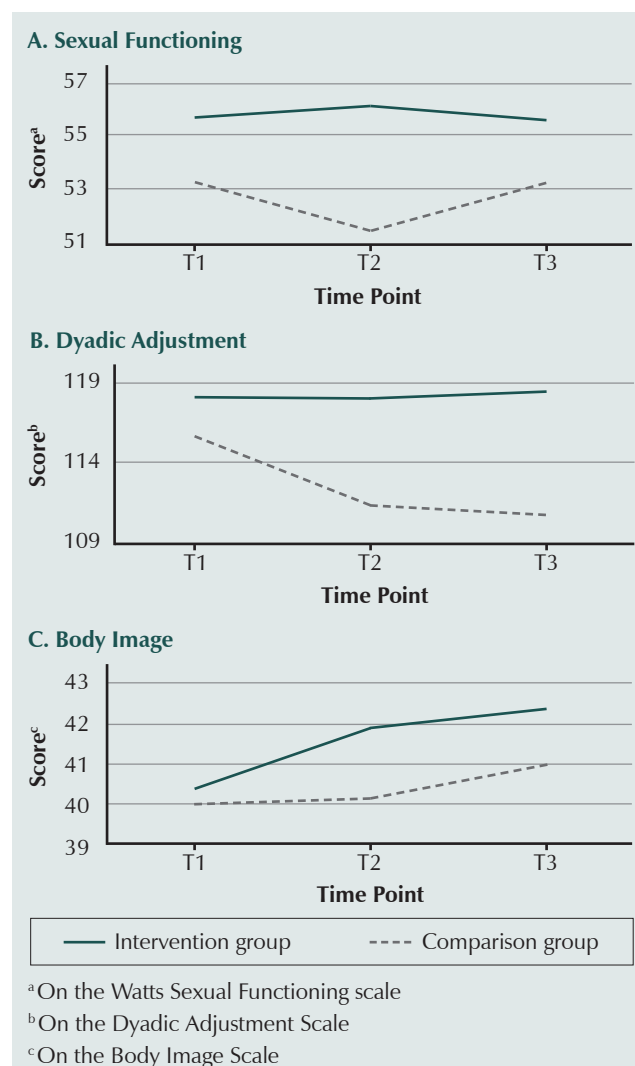
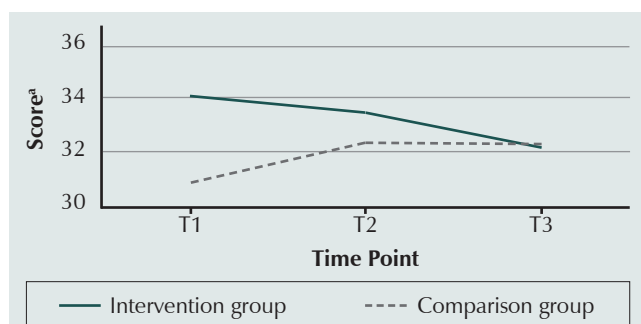


Figure 3. Patterns Across Time for Breast Cancer Survivors in Sexual Functioning, Dyadic Adjustment, and Body Image



^aOn the Spielberger State-Trait Anxiety Inventory

Figure 4. Anxiety Level of Partners of Breast Cancer Survivors Across Time

participants that could be included. Given the highly sensitive focus of the intervention, recruitment also was a challenge and random assignment was not used. The outcomes as discussed earlier, along with the need for preventive interventions in this population, provide support for efficacy testing, and these data provide the basis for estimating the needed sample size. Its brevity and the fact that it can be delivered by telephone speak to the practicality of the intervention.

Nursing Implications

The study's research with this population points to the difficulty women and their partners have discussing sexual issues relative to breast cancer, and the discomfort they feel bringing their questions to healthcare professionals. That problem is compounded by the fact that

nurses and physicians often have difficulty themselves broaching topics of intimacy and sexuality. Educational programs by experts relative to sexuality and cancer are needed, and ways that nurses can increase the comfort level for patients need to be discussed. One approach could be having workshops that include role-plays on bringing up problems with dyads by directly asking if they are having sexual difficulty, or if they have any questions they would like to ask pertaining to sexuality or intimacy. In addition, ensuring that resources for referrals exist is important, as well as identifying reading materials ahead of time. Although patients may hesitate to discuss deeply personal issues with physicians, nurses often are more comfortable to turn to if they simply indicate a willingness to listen. Nurses are the professionals who often have and make the most time to talk with patients and family members; they often are thought of as being the most available and approachable members of the healthcare team.

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Digital Object Identifier: 10.1188/12.ONF.176-185

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