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Background factors associated with problem avoidance behavior in healthy partners of breast cancer patients

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Abstract

Objective We evaluated avoidance behaviors of healthy partners of breast cancer patients and sought to (1) describe men's perception of their own avoidance behavior and (2) identify the background factors associated with such behavior.

Methods An Internet-based survey was conducted, and analysis was performed on the responses of 368 male spouses of female breast cancer patients.

Results Thirty to forty percent of spouses had some type of problem avoidance behavior toward their wives. There was a high correlation (r = 0.70, P < .001) between problem avoidance behavior at the time of diagnosis and subsequent problem behavior (mean follow-up period after diagnosis: 1.3 + 1.1 years). The characteristics of spouses with avoidant behaviors included having wives with recurrence, having wives treated with anticancer drug therapy or total resection, and having their own experience of cancer. Covariance structure analysis revealed 2 factors related to the background of spouses with problem avoidance behavior: (1) having a sense of difficulty in coping (beta = 0.68, P < .001) and (2) having a poor marital relationship (beta = -0.27, P < .001).

Conclusions Our findings suggest that problem avoidance behavior among healthy male partners of breast cancer patients is common and correlates with difficulty coping and a poor marital relationship. It is important to address both the problem avoidance behavior itself and to support couples early, before this behavior surfaces.

KEYWORDS

avoidance, breast cancer patients, husband, unsupportive behavior

1 | INTRODUCTION

Worldwide, breast cancer is the most common cancer among women. Most recurrences occur within the first 2 to 3 years after treatment, but, unlike other forms of cancer, breast cancer can recur even after 5 years of remission. Thus, while undergoing postoperative adjuvant therapy, most patients live with some form of anxiety about recurrence for 5 to 10 years after the initial diagnosis.¹ During this time, support from partners is crucial in helping patients adjust to their daily lives (eg, Granz et al²). Emotional support from partners has major effects on the psychological adjustment of breast cancer patients.³ Other relationships cannot compensate for a lack of partner support (eg, Gremore et al⁴).

A supportive partner can aid in a patient's psychological adjustment to her disease; however, nonoptimal support can cause dissatisfaction, distress, anxiety, and depression.^{4,5} Non-optimal, unsupportive behavior is defined as overtly critical behavior or subtle avoidant behavior.⁶ Perceived unsupportive behaviors are relatively uncommon but highly problematic, as they are strongly associated with distress among patients dealing with cancer.⁷

Manne et al⁶ tested an interindividual model of perceived partner unsupportive behaviors, cognitive and social processing, and psychological adjustment in patients with cancer and their partners. The results indicated that the perception of unsupportive behavior by either the patient or their partner was significantly associated with the individuals' own social and cognitive processing and adjustment as well as their partners'. Couples' perceptions of each other's unsupportive behaviors may have detrimental effects on both partners' social and cognitive processing as well as their ability to adapt to chronic disease.

Previous studies have suggested that the perception of unsupportive behavior from a partner predicts greater avoidance

WILEY | 1127

behavior in breast cancer patients themselves,⁷ which is associated with increased distress.⁸ Avoidance behavior has consistently been reported as having negative effects on their psychological adjustments.^{9,10} The negative effects of a partner's avoidance behaviors on a patient's psychological adjustment outweigh the positive effects of the same partner's helpful behaviors (eg, Manne et al⁹). According to Shiozaki et al,¹⁰ problem avoidance behavior was defined as an attempt to hide concerns and anxiety, an attempt to avoid disease-related topics, and sensitivity about the surgically affected area. Problem avoidance behaviors thus have large and pervasive effects on patients' psychological adjustment. Couple-focused interventions may be improved by focusing on reducing partners' problem avoidance behaviors.⁹

Unfortunately, addressing problem avoidance behaviors is not a simple task. One reason for this difficulty is that problem avoidance behaviors can be very subtle. In particular, male partners of female cancer patients may withdraw as a self-protective measure, or believe that it is better to avoid stressful issues in order to protect their partners' psychological well-being.¹¹ Hence, problem avoidance behavior may be difficult for partners to identify and correct. Even in the setting of healthy precancer relationships, couples may struggle to manage difficulties imposed by a cancer diagnosis.¹¹ However, a patient's distress can be reduced if they perceive that their partner is empathic and is not running away from hardship.¹² Marital satisfaction is associated with higher self-disclosure and partner responsiveness to disclosure, higher levels of reciprocal support, and more interdependence in satisfying support needs (eg, Laurenceau et al¹³). Conversely, individuals in less satisfying marriages depend less on their spouse as a primary confidante and source of support and are more likely to use extramarital sources of support.¹⁴ Furthermore, partners in broken marital relationships may negatively perceive any kind of behavior from one another. Women who were dissatisfied with their relationships 3 months after their cancer diagnosis were more likely to have experienced a breakup or divorce by 8-year follow-up than women who were satisfied with their relationships at 3 months.¹⁵

As noted above, several previous studies have examined how the perception of unsupportive behaviors from a partner relates to psychological adjustment among couples dealing with cancer. Less is known about the background factors affecting a partner's problem avoidance behavior. We therefore focused on avoidance behaviors in partners of breast cancer patients and sought (1) to describe the perception of a partner's own problem avoidance behavior and (2) to identify the background factors associated with such behavior.

We began the study with 2 hypotheses. First, we hypothesized that gender-related beliefs promote protective buffering. Manne et al¹⁶ reported that male patients engaged in more buffering than female patients from additional stress. Male partners may be particularly prone to this behavior given the societal belief that emotional vulner-ability is a more feminine trait and mental strength is a more masculine trait.¹⁷ Indeed, male partners have been shown to be less willing to express emotions of distress and less likely to seek emotional support than female partners.¹⁷ In addition, male partners may not acknowledge their role as an emotional support provider¹⁸ and may not listen to women's worries or concerns with empathy.¹⁹ Thus, we

hypothesized that partners holding traditional beliefs about male behavioral norms would be more engaged in problem avoidance behaviors.

Second, we hypothesized that a partner's need for self-protection would lead to more problem avoidance behavior. After a cancer diagnosis, maladaptive patterns of communication may arise for a number of reasons, including the need to manage multiple competing demands such as work, caregiving for a spouse and children, and the partner's own emotional distress.²⁰ Partners who feel threatened by their wives' disease, and who are unable to cognitively process their thoughts and emotions, also have difficulty coping with their wives' disease.^{10,21} Therefore, we hypothesized that partners who express difficulty in coping with their situation would be more engaged in problem avoidance behaviors.

2 | METHODS

2.1 | Participants and procedures

An Internet-based survey was administered to male spouses who satisfied the eligibility criteria of this study. The eligibility criteria were as follows: male spouses between the ages of 30 and 69 years old of wives with (a) a pathological definitive diagnosis of breast cancer, (b) whose diagnosis had been disclosed to her (diagnosis is not always disclosed to patients in Japan), and (c) who was within 5 years of diagnosis.

Using an Internet-based survey company, 77,600 male spouses between the ages of 30 and 69 years were recruited. Of these, 431 men satisfied the eligibility criteria and 368 consented to participate in the survey. This study was conducted with the approval of the ethics committee. Data analysis was performed using PASW Statistics 18 for Windows.

2.2 | Measures

2.2.1 | Participant characteristics

Spouses were asked about their age, number of years of marriage, employment status, and whether they had children. The single-item measure of social support of Bleke and McKay²² was used to assess the social support of participants. The metric asks participants how many people they can ask for help in times of difficulty. Spouses were also asked about their wives, including age, number of years from diagnosis, surgical procedure, whether a nonsurgical treatment had been performed (anticancer drug therapy, radiation therapy, and/or hormone therapy), and presence or absence of recurrence.

2.2.2 | Difficulty in marital communication

Difficulty in marital communication was measured using 10 items based on the study of Koga et al.²³ The items were designed to address 4 factors: F1, misunderstanding wives' feelings; F2, worry about the adverse impact of their own words and actions; F3, feeling a large personal burden; and F4, feeling limited in what they could do for their wives. Items included "I did not know that my wife needed support (F1)," "My encouragement placed pressure on my wife (F2)," "I felt

1128 WILEY

burdened by my wife because I could not live my daily life as before (F3)," "I worried about the limitations of what I could do (F4)." Total scores and scores for each factor were calculated.

2.2.3 | Problem avoidance behavior

Problem avoidance behavior was assessed using the problem avoidance behavior scale of Shiozaki et al,¹⁰ which consists of 3 items. These items addressed the frequency of problem avoidance behavior toward wives at the time of breast cancer diagnosis and at the time of the survey. Items included "I avoid talking about my wife's disease with her" and "I hide my anxiety and concern about my wife's disease." Participants responded to these items on a 5-point scale from never to always.

2.2.4 | Background factors

2.2.4.1 | Sense of difficulty in coping with wives' disease

Intrusive thoughts were assessed with the Japanese version of the Impact of Event Scale-Revised (IES-R) developed by Weiss.²⁴ The IES-R is an 8-item scale that measures the state of intrusion. Participants responded to these items on a 5-point scale from not at all to extremely.

The threat from breast cancer was examined using 4 items based on the study of Romero et al.²⁵ These items included "I am concerned about whether a balance can be achieved between my work and the fight against my wife's disease" and "I am afraid of seeing my wife endure difficult treatment." Participants responded to these items on a 5-point scale from not very applicable to very applicable. Maximum likelihood factor analysis with promax rotation was used, and a 1-factor solution was obtained (α = 0.82).

2.2.4.2 | Male role norms

Twelve items were extracted from the Japanese version of the male role norms inventory developed by Hayashi.²⁶ These items encompassed all subfactors. Participants responded on a 5-point scale from not very applicable to very applicable. Maximum likelihood factor analysis with promax rotation was used, and a 4-factor solution was obtained. Six items with 2 interpretable factors were reanalyzed, and a 2-factor solution with 3 items per factor was obtained. Factors 1 and 2 could be interpreted as the "suppression of emotion" (α = 0.86) and "mental strength" (α = 0.82), respectively. The items included "It is better for men not to show their emotions" and "It is manly to with-stand adversity under any circumstance."

2.2.4.3 | Attitude to playing a supporter role

The study by Stroebe and Diehl¹⁸ was used to design 3 items to assess a partner's willingness to play a supportive role. The items included "There is very little that I can do because breast cancer is a curable disease, if surgically treated." Participants responded on a 5-point scale from not very applicable to very applicable. Maximum likelihood factor analysis with promax rotation was used, and a 1-factor solution was obtained ($\alpha = 0.71$). Thus, answers to the 3 items were used to establish a single score that measured a partner's willingness to play a supportive role.

2.2.4.4 | Satisfaction in the marital relationship

The study used the scale developed by Moroi²⁷ to measure satisfaction in the marital relationship at the time of breast cancer diagnosis. The scale included 6 items, such as "My relationship with my wife was very stable." Participants responded on a 5-point scale from not very applicable to very applicable.

3 | RESULTS

3.1 | Participant characteristics

The mean age was 48.5 ± 8.9 years for spouses and 46.5 ± 8.4 years for patients. The mean years of marriage was 18.9 ± 9.6 and 314 participants had children (85.3%). The current employment status included employed (319 participants, 86.7%), on leave (9 participants, 2.4%), and unemployed (40 participants, 10.9%). There were 55 spouses (14.9%) who previously had a cancer diagnosis themselves. The mean number of people whom the participants could ask for real help in times of trouble or difficulty was 3.7 ± 3.9 (range, 0-50). The mean number of years since cancer diagnosis was 1.3 ± 1.1 (range, 0.25-3.58 years). Surgical procedures included total mastectomy (135 patients, 36.7%), breast-sparing surgery (210 patients, 57.1%), no surgery (18 patients, 4.9%), and unknown (5 patients, 64.9%), radiation therapy (236 patients, 64.1%), and hormone therapy (220 patients, 59.8%). Cancer recurrence occurred in 22 patients (6.0%).

3.2 | Problem avoidance behavior in partners of breast cancer patients

Figure 1 shows responses to the 3 items that assessed problem avoidance behavior of spouses. The combined number of spouses who responded "always," "often," and "sometimes" at the time of cancer diagnosis accounted for 38.3% of all spouses. Similarly, 67.3% of spouses hid their anxiety about the disease and 46.3% hesitated to look at or touch their wives' surgical wounds. At the time of the survey, however, 31.3% of spouses avoided the topic of the disease, 39.9% hid their anxiety about the disease, and 32.8% were hesitant about their wives' surgical wounds.

There was a strong correlation between problem avoidance behavior at the time of diagnosis and behavior at the time of the survey (r = 0.70, P < .001). However, problem avoidance behavior significantly decreased over time (t = 7.07, P < .001).

Current problem avoidance behavior was more frequently observed in spouses who previously had cancer themselves (t = 2.59, P < .05), spouses who had wives with recurrence (t = 2.43, P < .05), and spouses with wives who had received anticancer drug therapy (t = 4.79, P < .001). Problem avoidance behavior had no significant relationship with age of either individual, years of marriage, or years since diagnosis. Spouses whose wives had undergone total mastectomy tended to have more frequent problem avoidance behavior than those whose wives had undergone breast-sparing surgery (t = 1.79, P = .07).

Spouses who engaged in problem avoidance behavior felt that marital communication was more difficult (total score; r = 0.68,



c) I hesitate looking at or touching my wife's surgical affected area.

FIGURE 1 State of problem avoidance behavior in partners

P < .001). Problem avoidance behavior was reported more frequently in spouses who (1) worried about the adverse impact of their own words and actions on their wives (F2; *r* = 0.62, *P* < .001), (2) felt a large personal burden (F3; *r* = 0.62, *P* < .001), (3) did not understand their wives' feelings or know how to improve their marital interactions (F1; *r* = 0.61, *P* < .001), and (4) felt limited in what they could do for their wives (F4; *r* = 0.61, *P* < .001).

3.3 | Examination of hypothesized model

Table 1 shows the correlation between problem avoidance behavior and variables influencing behavior. The hypothesized model was tested using covariance structure analysis (Figure 2), which revealed a good fit to the data (GFI = 0.99, AGFI = 0.95, CFI = 0.97, RMSEA = 0.06). Background factors that significantly correlated with spouses' problem avoidance behavior included a severe difficulty with coping and minimal satisfaction with the marital relationship, both on the part of the spouse. Adherence to male social norms and lack of willingness to play a supportive role were not significantly correlated with problem avoidance behavior.

WILEY | 1129

4 | DISCUSSION

4.1 | Problem avoidance behavior in partners of breast cancer patients

Our study found that 30% to 40% of spouses had engaged in some form of problem avoidance behavior within 3 years of the initial

TABLE 1 The relationship between problem avoidance behavior and variables

	1	2	3	4	5	6	7	8
1: Problem avoidance behavior(at the diagnosis)	1							
2: Problem avoidance behavior (now)	.696**	1						
3: Intrusive thoughts	.363**	.444**	1					
4: Suppression of emotion	.193**	.184**	.103*	1				
5: Mental strength	.071	.082	.071	.502**	1			
6: Threat from disease	.346**	.392**	.384**	.252**	.191**	1		
7: Attitude to play a supporter role	.166**	.202**	.086	.264**	.208**	.208**	1	
8: Satisfaction in marital relationship	212**	292**	020	096	.042	040	182**	1

**P < .05.

*P < .01.

1130 | WILEY



FIGURE 2 Result of hypothesized model

diagnosis. We found a strong correlation between problem avoidance behavior at the time of diagnosis and behavior at the time of the survey. Although this result is not surprising given the relatively short interval between the 2 time points on average, it supports findings of previous studies. For example, poor psychological adjustment of spouses at the time of diagnosis has been shown to negatively affect the psychological adjustment of patients 3 and 6 months later.²⁸ Our data suggest that the initial emotional upset gradually resolved over time, resulting in decreased problem avoidance behaviors. However, we found that 30% to 40% of couples continued to experience avoidance problems for many years after the diagnosis.

We found that problem avoidance behavior of spouses had no relationship to age or years of marriage. However, problem avoidance behavior of spouses was correlated with a previous experience of cancer in spouses themselves, recurrence in their wives, prior treatment with anticancer drug therapy, and total mastectomy. Multiple stressful situations have been shown to make psychological adjustments difficult for patients and their families, including exacerbation of disease, recurrence, anticancer drug therapy with side effects, and highly invasive total mastectomy.²⁹ These stressful situations may increase the frequency of problem avoidance behavior of spouses. Hence, early support of husbands and wives who have identified challenges in coping as a couple may decrease future problem avoidance behavior.

4.2 | Background factors of problem avoidance behavior

The most prominent background factor we identified was a sense of difficulty in coping with their wives' disease. According to a social cognitive-processing model,³⁰ the experience of cancer can be effectively processed by directly addressing problems, carefully thinking through problems, and reevaluating when necessary. In this process, it is necessary to think about the problems as one is repeatedly exposed to the problems. When one talks to sympathetic people for support, appropriate cognitive processing is promoted.²¹ By contrast, cognitive processing is suppressed when patients unconsciously suppress their thoughts and emotions due to pressure from external relationships,³¹ or when patients actively avoid disclosing their thoughts or emotions (eg, Pennebaker³²). These phenomena can be cyclical in nature. The perception of unsupportive behavior may have detrimental effects on both partners' social and cognitive processing and adaptive ability. One way to disrupt this cycle is to provide early preventive care for high-risk partners, that is, partners with a previously cancer diagnosis themselves or who have wives with recurrence or treatment with anticancer drug therapy. Exploration of problem avoidance behavior may be critical to distress screening, psychosocial assessment, and appropriately targeted intervention for maladjusted partners.

We found that belief in traditional male behavioral norms was not associated with problem avoidance behavior. Studies on gender and social support indicate that women exchange more emotional support than men.33 Male socialization often includes de-emphasizing the expression of feelings and places a high value on self-reliance, while female socialization includes an emphasis on expression of feelings and places a high value on close, communal, and intimate relationship.³⁴ One possible interpretation is that traditional gender norms change over time and polymorphous sexuality is socially acceptable. Hence, gender norms may not be a significant factor when coping with cancer, as there are other, more powerful drivers of male behavior under these conditions. Hagedoorn et al³⁵ observed that gender, rather than role, was the determining factor in distress level. Women, regardless of their role as spouse or patient, experienced more distress than their male counterparts. Future studies are required to address the confounding nature between gender and the role of patient and spouse.

In this study, problem avoidance behavior was associated with a poor marital relationship. If spouses feel unsatisfied with the marital relationship, it may be difficult for them to consider their wives' disease as something that they must confront and handle. Alternatively, spouses may have supportive intent for their wives but are unable to function in supportive ways. In either case, 1 method for supporting psychological adjustment might be a marital therapy approach that encourages patients and their spouses to work toward the common goals of facing the cancer, coping with it, and adapting to it together.⁹.

4.3 | Study limitations

This study has several limitations. First, our study participants were recruited from a large Japanese survey company. There may have been a bias in registered members and in participants with valid responses. Second, our study focused on spouses of breast cancer patients in Japan and may not be generalizable to other populations. By comparison with a 2005 report by Statistics Japan,³⁶ our participants seemed to roughly reflect the general Japanese population of male spouses. Third, our study design may have included retrospective bias. Participants were asked to provide answers regarding 2 time points: at breast cancer diagnosis and at the time of the survey. There may have been retrospective bias in recalling problem avoidance behavior at the time of diagnosis. Likewise, the clinical characteristics of the women (treatments, surgery, etc) were recalled by spouses. Forth, we had limited information about the patients with breast cancer. For example, we were unable to assess how wives perceived their husbands' behaviors and were unable to assess the wives' own psychological adjustment. Future studies may be able to use paired data of breast cancer patients and their spouses.

4.4 | Clinical implications

Although our study had several limitations, it included 368 participants, which is more numerous than previous studies on spouses of breast cancer patients,³⁷ and our findings provide some valuable clinical perspectives. A number of studies have shown that enhancing partner support can aid in the psychological adjustment of breast cancer patients. Our findings emphasize that it is important to support the spouse both as a provider for the patient and as an individual himself. Spouses often take on the role of support provider, isolating themselves from sources of personal support. The resultant difficulty in coping with their wives' disease can create a dysfunctional and avoidant marital relationship. It is thus important that spouses recognize themselves as both support providers and support receivers.

Problem avoidance behaviors can be very subtle and may be difficult for partners to identify and correct. Our findings suggest that if direct couple-focused interventions cannot reduce problem avoidance behaviors in partners, indirect coping-focused interventions may be helpful. One potentially helpful intervention is problem-solving therapy (PST). PST, a cognitive and behavioral intervention, has been applied and evaluated as a means of positively impacting similar problems.³⁸ PST trains individuals in skills that help them cope more effectively with life stressors. PST might thus be helpful in reducing problem avoidance behavior among partners.

5 | CONCLUSION

In conclusion, our findings suggested that 30% to 40% of spouses have engaged in some form of problem avoidance behavior, and these behaviors appear to stem from the spouses' sense of difficulty in coping with their wives' disease. It is therefore important to address both the problem avoidance behavior itself and to support spouses and patients early, before this behavior surfaces. Early support to husbands and wives as a couple, in the form of distress screening, psychosocial assessment, and appropriately targeted interventions, may decrease problem avoidance behavior among partners of patients with breast cancer.

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<u>1132 |</u>WILEY

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