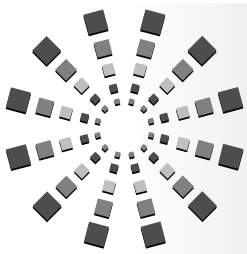

Robin M. Lally, PhD, RN, AOCN, CNS

Acclimating to Breast Cancer

A Process of Maintaining Self-integrity in the Pretreatment Period

KEY WORDS
Breast cancer
Grounded theory
Mental processes
Pretreatment period
Psychological well-being

Background: The period between diagnosis and initial treatment is one of the most stressful times for women with breast cancer. Unresolved distress may lead to future mental health and adjustment difficulties. Adjustment is facilitated by thoughts and behaviors that integrate a threatening event into a person's worldview. Few studies, however, have explored women's pretreatment thought processes. **Objective:** The purpose of this study was to develop a grounded theory of the pretreatment thought processes and behaviors of women diagnosed with breast cancer. **Methods:** Grounded theory method guided theoretical sampling of 18 women from a Midwestern, US breast center who were 37 to 87 years old, diagnosed with stage 0 to II breast cancer within the past 6 to 21 days and awaiting surgical treatment. Constant comparison of interview data and open, selective, and theoretical coding identified interrelated concepts and constructs that formed the grounded theory. **Results:** Threatened self-integrity was the main concern of women identified in the pretreatment period. Women addressed this problem through a continuous, nonlinear process of acclimating to breast cancer consisting of 3 stages: surveying the situation, taking action, and emerging self. Situational and personal factors influenced women's degree of engagement in 1 or more stages. **Conclusions:** Women's pretreatment response to breast cancer diagnosis involves integrated thought processes to maintain self-integrity influenced by situational and personal factors hypothesized to be amenable to interventions that facilitate adjustment. **Implications for Practice:** New insights provided by this theory can guide clinical practice and generate hypotheses to test pretreatment interventions to support psychological adjustment to breast cancer.

Author Affiliations: University at Buffalo School of Nursing, State University of New York.

This study was supported by an Oncology Nursing Society Foundation Nursing research grant, a Midwest Nursing Society Dissertation research grant, Helen Wells and Violet Shea Scholarship/University of Minnesota School of Nursing, and a University of Minnesota Graduate School doctoral dissertation grant.

Correspondence: Robin M. Lally, PhD, RN, AOCN, CNS, 3435 Main St, Wende Hall, Buffalo, NY 14214 (rmlally@buffalo.edu).

Accepted for publication February 6, 2010.

Breast cancer diagnosis initiates a sudden, distressing transition[1] from asymptomatic wellness to facing a potentially life-threatening illness. It is not surprising that women commonly react to receiving this diagnosis with feelings of fear, shock, and disbelief.[2] Moreover, over the weeks to months that elapse between knowledge of the diagnosis and treatment initiation, women face a myriad new physicians, terminology, tests, and decisions. Thus, the pretreatment period is regarded as one of the most demanding and stressful periods along the breast cancer trajectory.[1,3,4]

High levels of distress during the pretreatment period may be associated with perceived loss of concentration, attentional deficits, and mental fatigue, which if allowed to accumulate may adversely affect women's future adjustment[4] and even cancer recurrence and survival.[5] Although most women adjust well to their diagnosis following the initial emotional reaction,[2] an estimated 30% will experience significant distress,[6] which for some results in intense symptoms that interfere with quality of life and even meet criteria for psychiatric disorder.[2,3] Depression,[7,8] poor adjustment,[8,9] distress,[10,11] and posttraumatic stress disorder symptoms[12–15] have been identified among breast cancer survivors within 1 and up to 20 years after diagnosis.

Extensive research on women's adjustment to breast cancer both during and after treatment demonstrates that women's coping responses and psychological well-being affect current and long-term adjustment,[9,16] distress,[11,17] quality of life,[18] fear of recurrence,[19] mood, and depression symptoms.[20,21] However, despite indication that adjustment begins during the pretreatment period and evidence that pretreatment psychological state may predict future adjustment,[4,19,22] limited research has explored women's earliest, pretreatment responses to diagnosis.

Studies conducted during the pretreatment period have focused on quantifying the prevalence of distress and psychiatric symptoms[3] and describing women's cognitive abilities and symptom distress during this time.[4,23,24] Two pretreatment studies identified in our search examined women's perceptions of being diagnosed.[22,25] Within the days prior to treatment, women perceived being diagnosed with breast cancer as "a challenge" and having "value"[22,25]; however, they also described pessimism, ascribing negative meaning, and using maladaptive coping strategies[25] that resulted in poorer quality of life.[22]

Researchers have not directly explored the pretreatment thought processes that may underlie women's early distress and perceptions about their breast cancer diagnosis. Knowledge of pretreatment thought processes, however, is essential to understanding women's early psychological adjustment. Adjustment is facilitated by a variety of thought processes and behaviors that interpret and integrate a threatening event, such as a cancer diagnosis, into the preexisting view people maintain of themselves and their world.[26–28] Therefore, it is reasonable to expect that appropriate interventions aimed at women's pretreatment thought processes may reduce distress and facilitate initial adjustment, thereby improving future psychological adjustment.[15,26] A substantive theory grounded in the experience of women within the pretreatment period that identifies and links concepts relevant to women's thought processes and behaviors and is centered around their main concern could provide a basis for such interventions.

Therefore, the purpose of this study was to develop a grounded theory of the pretreatment thought processes and behaviors of women diagnosed with breast cancer. For this study, the pretreatment period was defined as the period of time after which women were aware of their breast cancer diagnosis but had not yet undergone surgical treatment.

■ Methods

Grounded theory method as developed by Glaser and Strauss[29] and later defined by Glaser[30–33] guided the conduct and analysis of this study. Grounded theory is a method of inductively generating theory from data.[32] The method consists of a systematic set of procedures that begin upon initial data collection and involve (1) open, line-by-line coding of the narrative text into categories that conceptually group the generated concepts and define the properties of the categories; (2) constant comparison of incidents within the data to each other and to the properties of the developing categories as simultaneous data collection and analysis proceed; (3)ongoing writing of memos about codes and the plausible relationships between categories; and (4) sorting of memos to identify theoretical codes (such as a "basic social psychological process"[33]) that conceptually relate, at a higher level, the properties of the categories into a theory.[30,32,33] The goal of a grounded theory is to generate a theory that accounts for how people work to resolve a specific main concern or problem through a basic social psychological process or other means. The problem and process of resolution are both grounded in the data.[32] Grounded theory was used in this study to discover the main concern of women in the pretreatment period following breast cancer diagnosis and to identify the thought processes and associated behaviors they used to work toward resolving this problem.

Participants

Participants were women seen for surgical consultation at a Midwestern US multispecialty breast center. Following institutional review board approval, women diagnosed with their first clinical stage 0 to II breast cancer, who had not yet received surgical treatment, and spoke English were introduced to the study by their nurse specialist. The researcher contacted interested women by phone to schedule an interview and discuss the information they would be asked to provide. As analysis of the data progressed, theoretical sampling[30] was used to achieve a sample that varied maximally in age and life experiences. These 2 factors appeared to alter women's appraisal of being diagnosed and their degree of engagement in various developing categories and thus were deemed relevant to the pretreatment thought processes and developing theory. Sampling and interviewing continued until additional data were not contributing to further development of properties and dimensions of the categories, and therefore, theoretical saturation was achieved.[30]

The final sample consisted of 18 women ranging in age from 37 to 87 years. All were white and most were married with either college degrees or some college experience. The women had received their diagnosis within the past 6 to 21 days (mean, 12 days) of the interview and underwent surgery an average of 8 days later (Table 1).

Data Collection

Data were collected from March through August 2005 and consisted of participant interviews and field notes from informal discussion with the clinic nurse specialist and breast center surgeons, observations at breast cancer events, and memos written throughout interviewing, analysis, and review of a published survivor's diary[34] and artwork.[35] Observations and review of breast cancer survivors' books and artwork were used to provide additional perspective and enhance the researcher's conceptualization of the narrative data.[32]

Table 1 • Sample Demographics (N = 18)

Characteristics	
Age	
Mean, y	57.2
Range, n	
37–44 y	5
46–53 y	4
60–68 y	6
78–87 y	3
Marital status, n	
Married	13
Divorced	2
Widowed	2
Single	1
Religious affiliation, n	
Lutheran	7
Catholic	6
Other	3
None	2
Education, n	
College graduate	7
Some college	5
High school	4
Technical-school graduate	2
Occupation, n	
Managerial	4
Health care	3
Accounting/admin	3
Retired	4
Homemaker	1
Other	3
Clinical disease stage, n	
0 (Noninvasive)	3
I	11
II	4
Time since diagnosis, n	
6–10 d	9
11–15 d	5
16–20 d	3
21 d	1

Table 2 • Select Examples of Interview Questions

Initial interview question (asked of all participants)
- Please share with me what the experience of being diagnosed with breast cancer has been like so far.
  - To start, think back to the day you were diagnosed and please tell me about that day—where you were, who was with you, what were you doing? And then go from there…

Probing questions (used early in the interviewing process to encourage sharing of thoughts)
- Are there any different thoughts going through your mind now compared with when you were first diagnosed? (Average 12 days earlier)
- Tell me about what you think about yourself and this cancer?
- What do you think the future holds for you?

Focused questions (used later in interviewing process to develop specific theory components)
- Some women have expressed that their faith plays a part in this process. It may or may not for you, but can you tell me about that?
- Do you think this experience will change your life, and if so, how?
- Some women have talked about what it means to be a "survivor." Do you identify with being called a survivor? Please tell me about that.

All interviews were conducted in a private area of the breast center and lasted 25 to 90 minutes. Four women requested that a significant other remain quietly in the room for support, whereas the other women were interviewed alone. Following informed consent, women were asked to think back to the day they were diagnosed and share their experience of being diagnosed with breast cancer over the intervening days. Interviews began with women sharing their thoughts and experiences without time limitation or interruption by the researcher. Probing questions were then used when needed to encourage women to elaborate further on the description of their thoughts and experiences. Questions related to the developing categories and factors appearing to influence engagement in categories of the process (eg, identity with one's faith) were asked of subsequent women as interviewing progressed. These questions were refined after each interview and became more specific to the developing categories as interviewing and analysis progressed (Table 2). All interviews were audiotaped and professionally transcribed. The researcher reviewed each transcript against the recording for errors.

Data Analysis

ATLAS.ti 5.0 (Scientific Software Development GMbH, Berlin) was used for data storage and organization of the analysis. Constant comparative analysis was performed, whereby data, codes, and categories were compared with each other on an ongoing basis throughout data collection and analysis.[30] Line-by-line open coding of the data generated initial conceptual codes. Codes were clustered into initial categories, and the categories

collapsed and refined, and relationships between them drawn as data collection and analysis proceeded (Figure 1). Theoretical coding, used to examine relationships between categories, was performed by sorting memos written throughout the analysis, development of a preliminary model,[30,36] and writing subsequent drafts of the study's findings[32] that resulted in a final rendering of the theoretical relationships between the categories and constructs (stages).

Rigor

Credibility, originality, resonance, and usefulness are criteria used to evaluate the trustworthiness of grounded theory studies.[37] Credibility of these data was achieved by (*a*) maintaining an audit trail of coded transcripts, field notes, and memos; (*b*) obtaining multidisciplinary expert review of coding and preliminary model development, as well as review of subsequent drafts of the categories and model leading toward development of the current theory; (*c*) vigilant efforts to remain grounded in the data and utilization of multiple sources of data to enhance overall conceptualization; and (*d*) the researcher's expertise in the area of breast cancer as well as enhancement of qualitative research skills through attending expert-led workshops throughout the writing process. Originality was achieved through the rendering of a new model of women's psychological adjustment in the underexplored pretreatment period following breast cancer diagnosis. Resonance was confirmed by willing study participants who reviewed the preliminary model and colleagues who identified applicability of the process to other circumstances of people dealing with traumatic events. Finally, the theory derived is useful to clinicians and researchers to enhance understanding of the pretreatment period and as a framework for the generation of hypotheses and development of interventions for future testing.

■ Findings

Threatened self-integrity was identified as the main concern for women in the pretreatment period following breast cancer diagnosis. The diagnosis threatened not only the women's health, but also the view they held of themselves in their world in which they were never to be "breast cancer patients" or "survivors." Self-integrity was also threatened by actual or perceived changes women saw in the way others viewed them and concern over loss or potential loss of usual social, work, and family roles because of the diagnosis. In addition, women's self-integrity was threatened when they attributed developing cancer to their own actions or inaction and when they contemplated whether and how their personal views and behaviors may change because of this experience.

Acclimating to breast cancer is the basic social psychological process used by women to resolve threats to and maintain self-integrity during the pretreatment period following a breast cancer diagnosis. By definition, "to acclimate" is to adapt to changes in one's environment or situation.[38] Whereas acclimating is often thought of as physical change, becoming a breast cancer patient places women in a new world, a foreign environment in which there are new roles, people, language, and situations they have never encountered before. "…Maybe

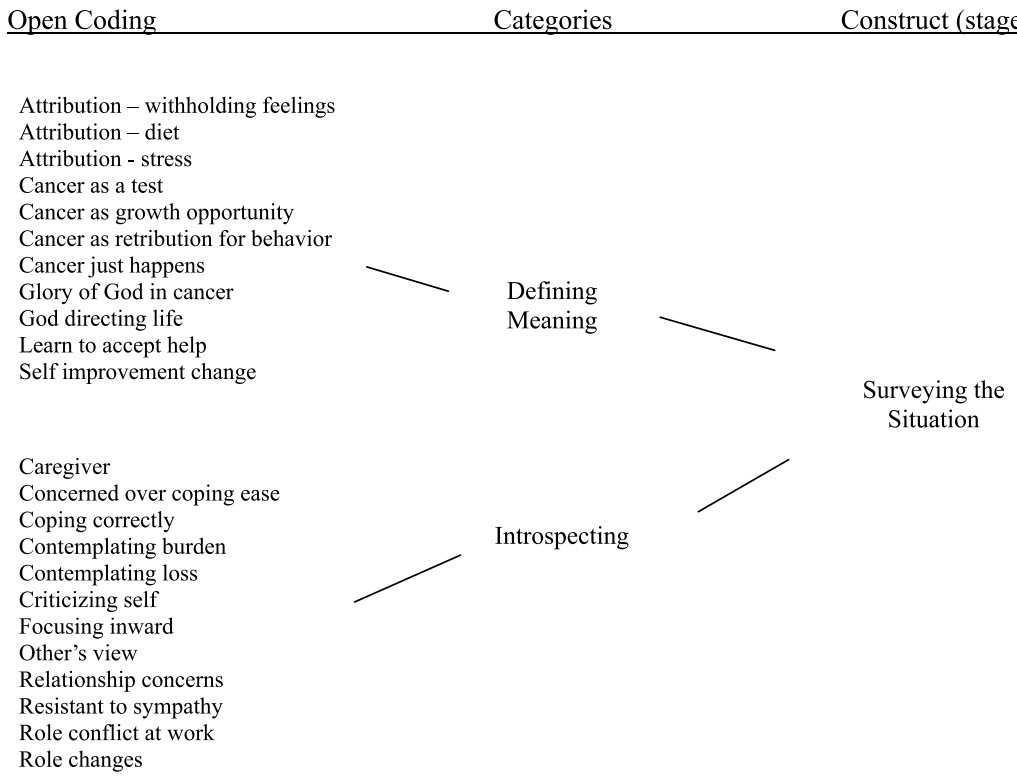

Figure 1 ■ Partial audit trail for construct of surveying the situation.

it's an acclimation process," said a woman in the study as she wrestled with her hesitancy to embrace her new role as a woman with breast cancer. The theory of acclimating to breast cancer explains women's earliest efforts at interpreting the event of breast cancer diagnosis and consists of 3 stages identified from the data: surveying the situation, taking action, and emerging self (Figure 2). Each stage is a construct joining integrated categories that represent ranges of women's thoughts and behaviors in the pretreatment period (Table 3). The process is neither linear nor finite. All women in this study engaged in 1 or more stages of the process, entering at any point and returning to stages as needed. Several personal and situational factors were found to influence engagement in the process (Table 4); however, clinical disease stage and type of upcoming surgery were not found to do so.

Surveying the Situation

Women experienced shock, surprise, and emotional numbness upon hearing the diagnosis of cancer, regardless of how prepared they believed they were to receive this news. These initial emotions dissipated quickly, especially for older women (aged 78–87 years) and women who had previously weathered a life-altering event, allowing them to begin responding cognitively to their diagnosis. Responding cognitively and engaging in the acclimating process were more difficult for women whose initial acute reactions became ongoing fear and distress. Women able to move beyond the initial reaction, however, surveyed the situation in which they now found themselves and attempted to define the meaning of the diagnosis and fit it into an understandable, mentally manageable framework. Sense of identity and self-concept prior to and after the diagnosis contributed to the meaning ascribed to the diagnosis, which in turn contributed to women's new identity as a woman with breast cancer, integrally linking the 2 conditions of defining meaning and introspecting in this stage of the process.

Table 3 • Definitions Associated With the Theory of Acclimating to Breast Cancer

Main concern or problem—threatened self-integrity
• A primary issue for those being studied that emerges from and is grounded in the data in connection with the process that continually works to resolve it.[27,29]
Basic social psychological process—acclimating to breast cancer
• A process that accounts for and models the activity of those studied as they work toward resolution of their main concern.[27,30]
Categories of the Acclimating Process
• Defining meaning—contemplating possible reason for the diagnosis and determining whether there is a greater purpose to the experience
• Introspecting—reflecting upon personal and professional identities and roles before the diagnosis and how diagnosis changes how one is perceived by others and oneself
• Escaping emotional triggers—separating mentally and physically from thoughts and reminders of cancer
• Controlling environment—actively maintaining or regaining control of internal thoughts and the external environment
• Incorporating cancer into life—allowing cancer to play either a primary or subordinate role in one's life while maintaining sense of normalcy and control
• Contemplating the future—mentally rehearsing future treatment and life scenarios
• Embracing personal change—recognizing current or anticipated changes in personal perspective, learning, and personal fulfillment
• Tenuous balancing—balancing positive and negative feelings resulting from defining meaning, introspecting, and other parts of the process

DEFINING MEANING

Defining meaning involved both contemplating the possible reason for the diagnosis and determining whether there was

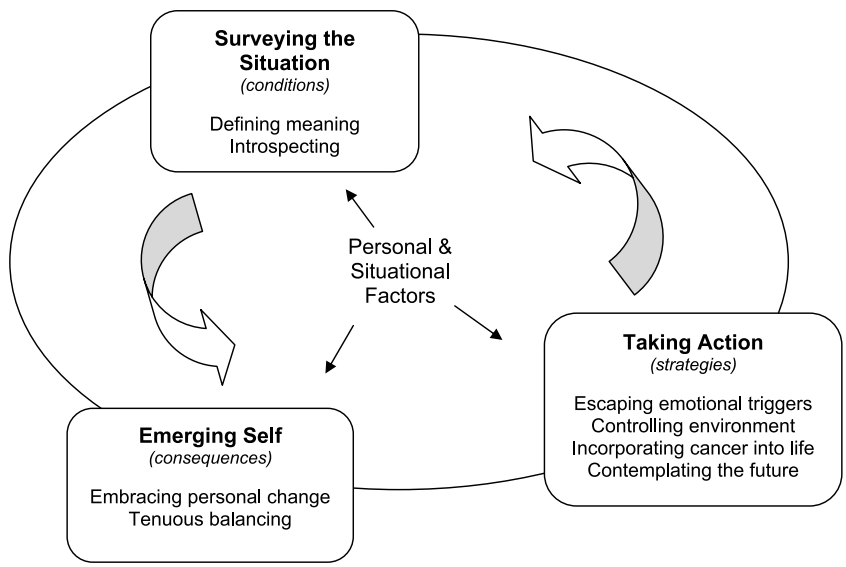

Figure 2 ■ Model of acclimating to breast cancer.

Table 4 • Personal and Situational Factors' Influence on Women's Acclimating Process

Factors	Influence on Process Engagement
Personal factors	
Older age (≥78 y)	• Appraisal of event—less threatening • Incorporating cancer into life—less relevant • Embracing personal change—less relevant • Tenuous balancing—self-care concerns
Strong faith identity	• Defining meaning—readily engaged • Incorporating cancer into life—readily engaged (comfort with disclosing diagnosis) • Embracing personal change—readily engaged
Past life-altering experiences	• Appraisal of event—less threatening • Incorporating cancer into life—readily engaged • Embracing personal change—readily engaged
Avoidant coping style	• Escaping emotional triggers - pronounced
Situational factors	
Increased fear and distress	• Escaping emotional triggers—pronounced • Reduced engagement in overall process
Self-blame for diagnosis	• Introspecting—pronounced • Controlling environment—pronounced (reduced disclosure of information and feelings; manipulating/controlling others' actions)
Intense search for meaning and understanding	• Controlling environment—pronounced (increased questioning, mental/physical fatigue; controlling others' actions)
Stage of disease and planned surgery	• No effect on overall engagement in process (stage 0—defining meaning difficult and questioning worthiness to be acknowledged as having cancer)

a greater purpose to the experience. The intensity of searching and degree of responsibility for the diagnosis varied from a casual belief that it had to happen to someone so "why not me?" to blaming it on the environment, to seeing cancer as a personal failing that required change. "I want to… be more vocal, telling people how I feel and not keeping it inside. I want to be happier. Maybe this is why I got cancer. I don't know." Others wondered, "Oh, could I have done things differently; to eat better, should I have done this or…? You know, it goes through your mind, 'What did I do wrong, huh?'"

Women who expressed a strong faith identity (ie, readily volunteered how their faith and faith community were part of their lives and this experience) believed their diagnosis was part of God's greater plan, feeling strengthened by their faith and able to suspend searching for further meaning.

> I just look at it as God looking over me saying, "Ok, this is just what you're going to go through…." I've even laid in bed at night and thank God for the bad days. It's like, "I know you're putting me through this for a reason, I don't understand it now, but I will and I'll be thankful that I worked on through it."[36(p67)]

The meaning of the diagnosis was also defined as an opportunity or a motivator for personal change. "It might make me more empathetic for one thing, and it'll just, I don't know, I think it's going to be a good thing for me." Another woman added, "If this experience can teach me balance, then it's not in vain."

Finally, the manner in which the cancer presented also contributed to the meaning women attributed to the diagnosis. Whether the diagnosis meant a favorable or unfavorable outcome was determined by comparing risk factors, how women felt they had cared for themselves, and how their cancer presented with what they knew about other women with breast cancer. Breast cancers that did not present as a lump raised questions as to whether the diagnosis was correct or what it meant.

> Because it's so early and it's so very confined, it still doesn't seem to me that I have breast cancer. I don't have breast cancer like other women have breast cancer. It's almost like it's not real. We're doing all these things, but, I guess it still doesn't really sink in until I see it on paper. Then, I want to cry.[36(p68)]

INTROSPECTING

Women's thoughts turned inward upon receiving the breast cancer diagnosis. Introspecting involved reflecting upon personal and professional identities and roles before the diagnosis and how the diagnosis changed how one was perceived by others and oneself. "I had this flush of embarrassment…. Just the fact that you've got something that other people dread, that's what I think….." Introspecting was triggered when women were reminded of how their roles and world around them had changed. "[My friend said], 'Oh, I'll be bringing dinner over.' And, even though I would do that for someone else, I don't necessarily need or want someone to do that for me."

Informing family, friends, and coworkers about the diagnosis also triggered introspection. Women described telling others about their diagnosis as one of the most (if not the most) difficult tasks of the pretreatment period because of how the diagnosis changed how they felt about themselves. "'I was

diagnosed with breast cancer.' I would cry through the line… it's probably like people at AA, who have to say, 'Hi my name is….' That's what it felt like I was doing and that was the tough part."[36(p71)] Peoples' reactions also caused women to reflect on how they and their relationships were changed. "I told [husband], 'You better tell your mom to be strong. If she's crying every time I can't deal with that. I can't talk to her.'"

Introspecting also involved evaluating emotional reactions and coping behaviors against held beliefs about how women "should" react to a breast cancer diagnosis. Women expressed surprise at their reaction. "I haven't been anxious about this at all. I don't know why. I haven't cried yet, and I don't know if that's normal. I don't know if I'm in denial…. I feel very peaceful, and I don't know if that's normal."

Taking Action

Informed by the meaning given to the cancer diagnosis and women's perceptions of themselves, psychological self-care strategies were formulated to maintain self-integrity in the pretreatment period. The 4 strategies consisted of escaping emotional triggers, controlling the environment, incorporating cancer into life, and contemplating the future.

ESCAPING EMOTIONAL TRIGGERS

Escaping emotional triggers was used to maintain self-integrity in response to fear and emotional distress generated by the diagnosis. The strategy involved separating mentally and physically from thoughts and reminders of cancer. Most often, this strategy was used soon after diagnosis and sporadically thereafter. When women struggled with ongoing fear and emotional distress or resorted to avoidant coping mechanisms, this strategy was used almost exclusively, and focus was placed on self-protection, thereby reducing engagement in defining meaning, introspecting, and using other strategies to maintain self-integrity.

Escaping emotional triggers involved avoiding thinking, hearing, or reading about breast cancer to escape the fear and distress these reminders created. Women put breast cancer educational material in drawers out of sight and avoided going to their jobs or places where others would remind them of the diagnosis. One woman held her hands up in front of her to physically separate herself from everyone she described as "the mopey-type" to stop them from being emotional in her presence. Breast cancer survivors and anyone who might tell "horror stories" about breast cancer were also avoided. The isolating nature of this strategy on occasion initiated introspecting and questioning whether avoiding thoughts of cancer was normal. "I'm kind of like sticking my head in the sand. But, that usually works for me…. [But] I've just been real positive, which is not like me, to be positive about an illness… that has surprised me a lot."

CONTROLLING ENVIRONMENT

A great deal of cognitive energy was invested in developing strategies to care for one's mental well-being by actively maintaining or regaining control of internal thoughts and the external environment. These strategies were influenced by the meaning ascribed to the diagnosis, its effect on self-concept, and women's varying need for personal control. "Now I know I have to take care of myself first. I have to put myself first. I'm not making it an option. I have to take care of me, and that's one thing I'm trying to do…." Time to be alone, read, and put households, gardens, and lives in order was planned. Women also expressed the personal control and well-being that keeping a journal provided. "I need to start a chronological log of events…. It's not so much that I want to read and bring up bad memories, but if you get it out on paper, it doesn't dwell on your mind."[36(p89)]

Temporary distraction from thoughts of cancer, as opposed to total avoidance, was achieved by controlling the environment. Distracting strategies involved pleasurable activities and supportive contact with family or friends. Family vacations, coffee with friends, and "date nights" with spouses filled the time between the diagnosis and surgery.

> …We went on a vacation, which is a week from when I found out, and that was really good, getting away from the phone and talking about it every minute, …we just needed to not think about it for a while, and that really helped.

Controlling the environment was most notable with regard to whom and how much information women disclosed, and allowed others to disclose, regarding the diagnosis. The intensity with which disclosure was controlled varied. Feelings of responsibility for bringing about the diagnosis, a fear of losing status, extensively searching for meaning and understanding, personal need to maintain control of information/others, and a desire not to burden others were thoughts that tended to increase the intensity with which women attempted to control their environment and limit disclosure. Although maintaining tight control over disclosure was potentially isolating and may reduce available support, the women did not express these concerns. One woman described controlling disclosure to her friends because of feelings of self-blame for her cancer:

> I haven't told them [woman friends] yet…. I probably should've talked about it in that it was a good opportunity, but I didn't feel comfortable doing that.[36(p82)] I really attribute a lot of getting cancer to being a stressful person, and so I don't like that; I mean, I like to be in control, and obviously I'm not in control of this [the cancer].

Disclosing openly could be supportive and empowering, but often it resulted in an outpouring of support and sympathy from people that was "overwhelming," "rushing in," and "humbling" and needed to be controlled. One woman described her experience with disclosure this way, "The look I got was 'Oh my God, are you alright?' [I thought] 'Well, I think I am. I was until we started this conversation anyway.'" Fearful reactions from others increased worry and reduced women's ability to maintain their desired appearance of strength, authority, and sense of control. Therefore, a wide variety of strategies were developed to control disclosure including selective use of the

phone, e-mail, recruiting family members to spread the news, swearing confidantes to secrecy, and choosing not to tell certain individuals about their diagnosis. One woman shared her e-mail:

> So, in the e-mail, I said, "This is what's happening. This is the schedule of events up until the surgery. I'm e-mailing you because it's easier than talking face to face, and its better not to talk about it at work at this time."

When disclosure was unavoidable, one woman described her strategy as follows:

> …Take a breath, step back, and realize who I'm talking to and realize what I need to tell that person…. I just come out and say calmly that I have been diagnosed with breast cancer and let that sink in, then… that the fortunate side is that it's low grade, nonaggressive, let that sink in, and then let them ask questions. I tell them right out, I say, "You know what, ask me whatever you want." …If I'm upbeat and I keep positive, everybody else is going to be positive, and we can make it through the day.

INCORPORATING CANCER INTO LIFE

By incorporating breast cancer into their lives in ways that suited them, women maintained a sense of normalcy and control that helped to maintain their self-integrity. Whether cancer took a prominent or subordinate role depended on women's introspections regarding the diagnosis' effect on self-concept and how they wanted to be viewed in light of their diagnosis. A goal of incorporating cancer into life was to show others through everyday actions that women are not victims but "fighters," to live up to the strength shown by other women with breast cancer, and to be "good role models" of how people with cancer live life. Women achieved this goal in the pretreatment period by making their lives and those of their family a priority again after the extensive initial time spent attending medical appointments. They also made an effort to use this experience to benefit their female friends and relatives by informing them of the importance of mammography whenever possible.

Incorporating cancer into life did not mean that women wanted to be defined by their breast cancer. Much to the contrary, there was a general reluctance among these women to become "advocates," embrace the title of survivor, or to wear pink clothes or ribbons that easily identified them as having breast cancer. Discomfort was expressed with the idea of being forced to take on this identity. Such convictions were especially strong when women felt some responsibility for their diagnosis, but were less so when women felt they should have been more accepting of support in the past. One woman who desired support took great comfort in knowing that she was now a part of the group of women with breast cancer: "…There are women out there that you now belong to—that you have a membership in an exclusive club that no one wants to belong to…. I will have bonds, and I will make bonds."[36(p91)]

Although plans to incorporate cancer into life occurred early after diagnosis, especially for those with a strong faith identity, incorporating was usually an ongoing and continual strategy throughout the pretreatment period that was anticipated to continue after surgery as well. Older women, whose life plans had been determined, were not as engaged in using this strategy as were younger and middle-aged women whose present and future self-integrity were more threatened by the diagnosis.

CONTEMPLATING THE FUTURE

Contemplating the future involved mentally rehearsing future treatment and life scenarios as a strategy to maintain self-integrity and gain a sense of mastery over what may lie ahead. Information about other women's experiences and information gathered about surgical recovery, adjuvant therapy, and survival enabled the women to contemplate both positive and negative outcomes. These contemplations were often not shared with family or friends to protect them from worry and to enable the women to maintain a strong image. One woman empowered herself by contemplating all the outcomes she was not afraid of: "I'm not fearful of telling people, and I'm not fearful of the surgery. I'm not fearful of the outcome, and I'm not fearful of the follow-up therapy. I have a fear of the unknown, but I think it's getting better." A more popular strategy, however, was to anticipate the worst, so as not to be "devastated" when bad news came. An extreme example was provided by one woman:

> I thought after surgery I was going to be in bed for 6 months, and I was going to need a caretaker…. I also literally made plans, and I thought if it was all over my body I am not going to live like they [friends with cancer] did for the last year of my life. I can't. So I had a little suicide thing in my head that I was going to do when it got to that point when I was getting uncomfortable, getting sick. I just wasn't going to live like that.

Most women, however, even if they prepared for the worst, had a positive outlook and expected to survive their disease:

> I got this feeling, just about what I'd gone through, and it was just an analogy that popped into my head, I felt like I was standing by a river, and my heart went into the river, and all I could think of was when I was told [I had cancer]. I …floated on down, …[and] decided it was time to get out, and there was a road…. I thought I have to go down the road, but there was a bunch of hurdles in the road, and so I had to go over them and find out that I could go around them…. I couldn't see the end, and I thought, well I just have to keep going…. I thought this is an analogy, you've got cancer…. You don't know where the road is going to go. But maybe there'll be sunshine… down this path of discovery.[36(p86)]

Emerging Self

Throughout the pretreatment period, women intermittently emerged from the work of maintaining their self-integrity and experienced positive insights and feelings about themselves and their future. For brief periods, women realized they may

emerge from the experience even better than before. Such thoughts, however, were sometimes countered by yet unresolved uncertainty and concerns that led women back to further processing of the diagnosis. Emerging self consisted of 2 consequences of the ongoing acclimating process: embracing personal change and tenuous balancing.

EMBRACING PERSONAL CHANGE

Embracing personal change took 2 forms; first, recognizing changes in personal perspective and learning that were occurring or anticipated as a result of the diagnosis. Women expressed gratitude that their diagnosis was a "wake-up call" to appreciate life and the people in it, worry less about the little things, and learn to accept help.

> That in me has already changed, …people—I guess I'm appreciating them, and I never appreciated them before. They did these nice things for me before, and I never appreciated it. And now it's like, wow, count your blessings. You've got some good people here. Don't lose them. Show them that you care too.

Embracing personal change also involved identifying changes that could be brought about to increase personal fulfillment. These included such things as spending more time with family and future plans to retire early, volunteer, donate money to charity, attend church more regularly, and follow dreams.

Opportunities for change were identified immediately following diagnosis; however, embracing personal change was most often the consequence of women defining the meaning of the diagnosis, its impact on their identity, and the strategies they developed to maintain self-integrity. Thus, embracing personal change was associated with finding positive meaning in the diagnosis, being open to allowing the diagnosis to affect change in oneself, possessing a strong faith identity, and feeling deserving of taking the opportunity to make personal changes. Fear and escaping emotional triggers were barriers to identifying positive personal changes. Older women also anticipated few personal changes would result from this experience because they had "no regrets" with how they had lived their lives.

TENUOUS BALANCING

Throughout the acclimating process, a tenuous balancing of positive and negative feelings resulted as consequences of defining meaning, introspecting, and the strategies used to maintain self-integrity. For the most part, women felt optimistic and hopeful that they would survive their cancer. "Deal with it and move on" was a commonly expressed attitude. Women expressed confidence in their physicians and modern science and felt fortunate that their cancer was not more severe, regardless of the stage at which they were diagnosed. Finding meaning in the diagnosis and new strategies to provide psychological well-being generated personal growth and positive changes in the women that were empowering. Women hoped their newfound strength would continue beyond the pretreatment period.

Positive perspectives were balanced, however, against intermittent fear of the unknown, mental fatigue, mourning losses, and feelings of unworthiness, guilt, disappointment, and anger. Women mourned the potential loss of their role as a caregiver, as they were now more often the recipient of care. They also mourned the loss of confidence they once had in their health. Physical functioning was a particular concern for older women who feared being a burden and losing their independence as a result of surgery. This fear led older women to limit disclosure regarding their health to their families. Women experienced fatigue from searching for meaning and trying to understand the experience, guilt over putting others through this and for bringing breast cancer into the family history, and anger over loss of time to focus on family and not controlling aspects of their lives that may have led to the diagnosis. Finally, women questioned their worthiness to receive the care and attention of others, attend support groups, or be called a survivor because regardless of cancer stage women felt their cancer experience may not be as significant as that of other women. "I thought about that…. Somehow I'm not worthy of having these feelings because it's not that bad. Darn it, it is too bad, it's bad to me! (crying)."[36(p74)]

■ Summary

Eighteen women diagnosed with early-stage breast cancer shared their thoughts as they lived through the period between diagnosis and initial treatment of their cancer. The theory of acclimating to breast cancer accounts for the process of thoughts and associated behaviors engaged in by women to maintain self-integrity during the pretreatment period. The stages of surveying the situation, taking action, and emerging self represent women's earliest attempts at finding the meaning of the diagnosis for themselves and their world, leading to the generation of strategies to maintain self-integrity, in an attempt to adjust to life as a woman with breast cancer.

■ Discussion

This study makes an important contribution because it identified interrelated thought processes and behaviors used to resolve the threat to self-integrity created by a diagnosis of breast cancer, grounded in the narratives of women currently enmeshed in the pretreatment period. The theory of acclimating to breast cancer is useful because it is consistent with existing theories of adjustment to other life-altering events[15,28,39] and research on adjustment in later phases of the breast cancer continuum.[17,18,21,40–45] This relationship supports a link between the pretreatment thought processes and behaviors identified in the present study and psychological adjustment. Furthermore, because few studies have explored the pretreatment period, these findings provide new understanding from which to develop hypotheses to test pretreatment interventions aimed at facilitating initial and long-term adjustment to breast cancer.

The theory of acclimating to breast cancer integrates cognitive processing theories of adjustment to traumatic events[15,27] and self-affirmation.[46] Cognitive processing is a term used to describe a variety of mental activities that support psychological adjustment by giving meaning to and integrating an experience into the preexisting mental model of self and the world that has been disrupted by a threatening event.[26,28,47] Mental activities involved in cognitive processing include reexamining and contemplating the event,[26] as well as assimilating the event into one's world view or accommodating that view for the event.[27] Failure to engage in or only partially process a threatening event may perpetuate intrusive thoughts, avoidance, and perpetual searches for meaning.[27]

In this study, the breast cancer diagnosis initiated a threat to the preexisting view women held of their world in which they never expected to be breast cancer patients or survivors. Women engaged in mental activities associated with successful cognitive processing when they contemplated how to define the meaning of this experience and rectify inconsistencies between their present and preexisting beliefs about their health, cancer, fate, and the future. Assimilation was demonstrated as women identified ways to control their environment and incorporate the new challenges posed by the diagnosis into their daily lives. At times, women also accommodated and planned to embrace changes in themselves and their future lives brought about by the diagnosis. Mental activities indicative of less successful cognitive processing such as avoiding reminders of cancer, people, and disclosure of their feelings and illness[48] were also engaged in by women in this study, suggesting areas for possible intervention.

Affirmation theory[46] posits that threats to self-integrity can be to both self-regard and welfare and result from threatening events such as illness that shake one's sense of control. Women in this study felt the sympathy of others and perceived that the diagnosis threatened their ability to be perceived as strong and independent. These perceptions initiated actions to control disclosure of the diagnosis, how they were viewed by others, and the degree to which they would allow the diagnosis to change their lives to maintain self-integrity. A person's primary defense to a threat to self-integrity is to affirm her general integrity, not necessarily by resolving the particular threat.[39,46] Successful self-affirmation reduces inconsistency in self-view arising from the event and thus the reduction in dissonance reduces distress. Although finding value in a traumatic event is often seen as a lengthy process,[28,39] women in this study described self-affirming plans and actions, just days after diagnosis, such as to emerge from this experience with more empathy for others, to be a better person, and to volunteer and give to charity. Therefore, acclimating to breast cancer is a self-affirming adjustment process used to maintain self-integrity when initially threatened by this diagnosis.

This study identified several personal and situational factors that affected women's pretreatment acclimating process (Table 4). Consistent with cognitive processing theories,[15,47] age was a factor that differentiated women's appraisal of the diagnosis and engagement in the acclimating process. Although older women were surprised and disappointed by the diagnosis, they reported reacting calmly and focused on retaining control and maintaining their self-care abilities after surgery, whereas younger women became more fully engaged in strategies to incorporate cancer into their lives and contemplate how this experience would change them. These findings are consistent with studies of older long-term survivors for whom quality of life in the physical domain was of greater concern than for younger women[40,49] and demonstrate that the focus of interventions to support psychological adjustment in the pretreatment period may need to differ by age.

Women's past experience encountering life-altering events was also a personal factor that lessened their appraisal of breast cancer as a threat. These women also readily engaged in incorporating cancer into their lives and identifying growth opportunities. This finding is consistent with coping theories, but contradicts other research in which cumulative stressors increased cancer patient's threat appraisal.[15] Therefore, determining whether past experience is a factor that is useful in differentiating women at risk for adjustment difficulties is an area for future study.

Strong faith identity also differentiated how women engaged in the acclimating process. Women expressing strong faith identity quickly identified meaning in the diagnosis, plans for personal growth, and incorporating cancer into their lives. They also engaged in strategies to maintain self-integrity, such as disclosure that supports cognitive processing and adjustment.[44,48] Although it is unclear whether it is always beneficial for survivors to find positive meaning in their diagnosis,[21,42,43] women in the present study who expressed a strong faith identity found meaning in their faith, which in turn supported feelings of peace, strength, and support from their faith community. This finding is consistent with previous studies of adjustment in long-term survivors[44] and suggests that a strong faith identity may be a factor that supports women's pretreatment adjustment process.

Avoidance coping during the course of survivorship negatively affects adjustment.[9,16] Although avoidance immediately after diagnosis may be protective and expected,[19] use of this strategy was not the norm among women in this study, even though they had been diagnosed only a week or so earlier. Avoiding thinking about events interferes with cognitive processing.[27] Consistent with this finding, women in this study who relied heavily on escaping emotional triggers engaged little in other aspects of the acclimating process. Thus, a hypothesis can be made that early assessment and intervention directed toward reducing women's fears and other reasons for avoidance in the pretreatment period may facilitate the acclimating process and reduce current and subsequent distress, thus facilitating adjustment.

Previous studies have questioned whether searching for meaning or assigning attribution is always beneficial to adaptation.[45,46] In the present study, an intense search for meaning and understanding was associated with extensive use of control strategies and mental fatigue. Women who held negative attributions (self-blame) felt anger about the diagnosis, controlled people's actions and events around them, and reduced disclosure of their thoughts and feelings to maintain self-integrity.

Self-blame,[17,18] pessimism,[22] and inhibited disclosure adversely affect adjustment among cancer survivors.[41,48] Mental fatigue may also lead to adjustment difficulties.[4] Therefore, the present study's findings suggest that future studies should test whether addressing women's negative attributions and extensive searching for meaning in the pretreatment period facilitate cognitive processing and adjustment.

Finally, the findings of this present study are consistent with previous research indicating that planned surgery is not a factor that differentiates the distress experienced by women in the pretreatment period.[4,24] Neither planned surgery nor clinical stage (which had not been specifically examined in previous studies[3,4,24]) was a factor that differentiated women's engagement in the acclimating process. However, an important finding was that women with noninvasive cancer expressed difficulty in defining the meaning of their diagnosis because of its atypical presentation and felt less worthy to be acknowledged as having breast cancer more consistently than other women in this study. Therefore, future study of the pretreatment period should test whether distress is reduced through interventions that assist women with noninvasive breast cancer to define the meaning of their diagnosis.

■ Limitations

The findings of this study should be viewed in that the women who participated were all white, educated, socioeconomically stable, and treated at a facility where a nurse specialist and support services were readily available and offered to patients. Research is ongoing to extend this theory by addressing the thought processes of diverse samples of women in different health care environments.

■ Implications for Practice and Research

The process identified in this study provides new understanding of the thought processes used by women to maintain self-integrity in the pretreatment period following breast cancer diagnosis. The theory serves as a reminder to practitioners to listen to and assess for differences in women's thoughts and behaviors that may not be readily shared or apparent during initial clinic visits but nevertheless may affect women's cognitive processing of the diagnosis. Although testing of interventions derived from this theory will be needed, nurses and other practitioners may find the insights gained from this study useful in several ways. First, because these findings are grounded in the experiences of newly diagnosed women, nurses may find the findings useful to help other women feel understood and reassured that their thoughts about cancer and its effect on self-integrity are not atypical. For example, women may find it reassuring to know that not every woman embraces the "survivor" label if they too are finding this troublesome. In addition, nurses may also be able to use these findings when appropriate to suggest to women and their families several self-integrity supporting strategies (eg, disclosing the diagnosis through e-mail) found useful by women in this study. Furthermore, because heightened fear, distress, searching for meaning, and self-blame appeared to reduce engagement in the acclimating process, early assessment of the meaning women ascribe to their cancer and sources of fears and misunderstandings may allow nurses to specifically target information toward these concerns and thereby enable women to further process the diagnosis.

Researchers may also use the theory to generate hypotheses and test interventions focused on facilitating pretreatment psychological adjustment. For example, based on this theory, future study should determine which components of acclimating and associated personal and situational factors are useful in predicting adjustment to identify those who may benefit most from early intervention. Studies should also examine the effect of pretreatment interventions to support self-integrity, reduce self-blame and fear, or help women identify the meaning and incorporate cancer into their lives on the initial as well as future psychological adjustment of breast cancer survivors.

ACKNOWLEDGMENTS

The author thanks Marsha Lewis, PhD, RN; Janice Post-White, PhD, RN, FAAN; Cynthia Peden-McAlpine, PhD, RN; and Todd Tuttle, MD, for their support and mentoring, as well as Jeanne Harkness, MS, RN, AOCNS, for her support in making this research possible, and all the author's colleagues at the University at Buffalo School of Nursing. The author also thanks Jennifer Hydeman, PhD, Roswell Park Cancer Institute, who contributed to the review and ongoing development of this article.

References

1. Hewitt M, Greenfield S, Stovall E, eds. *From Cancer Patient to Cancer Survivor: Lost in Transition*. Washington, DC: The National Academies Press; 2006.
2. Hewitt M, Herdman R, Holland J, eds. *Meeting Psychosocial Needs of Women With Breast Cancer*. Washington, DC: The National Academies Press; 2004.
3. Hegel MT, Moore CP, Collins ED, et al. Distress, psychiatric syndromes, and impairment of function in women with newly diagnosed breast cancer. *Cancer*. 2006;107(12):2924–2931.
4. Cimprich B. Pretreatment symptom distress in women newly diagnosed with breast cancer. *Cancer Nurs*. 1999;22(3):185–194.
5. Andersen BL, Yang H-C, Farrar WB, et al. Psychologic intervention improves survival for breast cancer patient. *Cancer*. 2008;113(12):3450–3458.
6. Zabora J, Brintzenhofeszoc K, Curbow B, Hooker C, Piantadosi S. The prevalence of psychological distress by cancer site. *Psychooncology*. 2001;10(1):19–28.
7. Fann JR, Thomas-Rich AM, Katon WJ, et al. Major depression after breast cancer: a review of epidemiology and treatment. *Gen Hosp Psychiatry*. 2008;30(2):112–126.
8. Badger TA, Braden CJ, Mishel MH, Longman A. Depression burden, psychological adjustment, and quality of life in women with breast cancer: patterns over time. *Res Nurs Health*. 2004;27(1):19–28.
9. Hack TF, Degner LF. Coping responses following breast cancer diagnosis predict psychological adjustment three years later. *Psychooncology*. 2004;13(4):235–247.

10. Millar K, Purushotham AD, McLatchie E, George WD, Murray GDA. 1-Year prospective study of individual variation in distress, and illness perceptions, after treatment for breast cancer. *J Psychosom Res*. 2005; 58(4):335–342.
11. Nosarti C, Roberts JV, Crayford T, McKenzie K, David AS. Early psychological adjustment in breast cancer patients: a prospective study. *J Psychosom Res*. 2002;53(6):1123–1130.
12. Amir M, Ramati A. Post-traumatic symptoms, emotional distress and quality of life in long-term survivors of breast cancer: a preliminary research. *J Anxiety Disord*. 2002;16(2):191–206.
13. Kornblith AB, Herndon JE, Weiss RB, et al. Long-term adjustment of survivors of early-stage breast carcinoma, 20 years after adjuvant chemotherapy. *Cancer*. 2003;98(4):679–689.
14. Mehnert A, Koch U. Prevalence of acute and post-traumatic stress disorder and comorbid mental disorders in breast cancer patients during primary cancer care: a prospective study. *Psychooncology*. 2007;16(3): 181–188.
15. Redd WH, DuHamel KN, Johnson Vickberg SM, et al. Long-term adjustment in cancer survivors: integration of classical-conditioning and cognitive-processing models. In: Baum A, Andersen BL, eds. *Psychosocial Interventions for Cancer*. Washington, DC: American Psychological Association; 2001:77–97.
16. Holland KD, Holahan CK. The relation of social support and coping to positive adaptation to breast cancer. *Psychol Health*. 2003;18(1):15–29.
17. Bennett KK, Compas BE, Beckjord E, Glinder JG. Self-blame and distress among women with newly diagnosed breast cancer. *J Behav Med*. 2005;28(4):313–323.
18. Friedman LC, Romero C, Elledge R, et al. Attribution of blame, self-forgiving, attitude and psychological adjustment in women with breast cancer. *J Behav Med*. 2007;30(4):351–357.
19. Stanton AL, Danoff-Burg S, Huggins ME. The first year after breast cancer diagnosis: hope and coping strategies as predictors of adjustment. *Psychooncology*. 2002;11(2):93–102.
20. Carver CS, Smith RG, Antoni MH, Petronis VM, Weiss S, Derhagopian RP. Optimistic personality and psychosocial well-being during treatment predict psychosocial well-being among long-term survivors of breast cancer. *Health Psychol*. 2005;24(5):508–516.
21. Carver CS, Antoni MH. Finding benefit in breast cancer during the year after diagnosis predicts better adjustment 5 to 8 years after diagnosis. *Health Psychol*. 2004;23(6):595–598.
22. Schou I, Ekeberg O, Ruland CM. The mediating role of appraisal and coping in the relationship between optimism-pessimism and quality of life. *Psychooncology*. 2005;14(9):718–727.
23. Cimprich B, So H, Ronis DL, Trask C. Pre-treatment factors related to cognitive functioning in women newly diagnosed with breast cancer. *Psychooncology*. 2005;14(1):70–78.
24. Lehto RH, Cimprich B. Anxiety and directed attention in women awaiting breast cancer surgery. *Oncol Nurs Forum*. 1999;26(4):767–772.
25. Luker KA, Beaver K, Leinster SJ, Owens RG. Meaning of illness for women with breast cancer. *J Adv Nurs*. 1996;23(6):1194–1201.
26. Lepore SJ, Helgeson VS. Social constraints, intrusive thoughts, and mental health after prostate cancer. *J Soc Clin Psychol*. 1998;17(1):89–106.
27. Lepore SJ. A social-cognitive processing model of emotional adjustment to cancer. In: Baum A, Andersen BL, eds. *Psychosocial Interventions for Cancer*. Washington, DC: American Psychological Association; 2001: 99–116.
28. Janoff-Bulman R. *Shattered Assumptions: Towards a New Psychology of Trauma*. New York: The Free Press; 1992.
29. Glaser B, Strauss A. *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New York, NY: Aldine De Gruyter; 1967.
30. Glaser B. *Advances in the Methodology of Grounded Theory: Theoretical Sensitivity*. Mill Valley, CA: The Sociology Press; 1978.
31. Glaser B. *Emergence vs. Forcing: Basics of Grounded Theory Analysis*. Mill Valley, CA: The Sociology Press; 1992.
32. Glaser B. *Doing Grounded Theory: Issues and Discussion*. Mill Valley, CA: The Sociology Press; 1998.
33. Glaser B. *The Grounded Theory Perspective III: Theoretical Coding*. Mill Valley, CA: The Sociology Press; 2005.
34. Davies D. *From There to Here: A Breast Cancer Journey*. Elk River, MN: De Forest Press; 2005.
35. *Lilly Oncology on Canvas: Expression of Woman's Cancer Journey*. New York, NY: Lilly Oncology; 2005.
36. Lally RM. *Theory of Acclimation in Newly Diagnosed Breast Cancer Patients* [dissertation]. Minneapolis, MN: University of Minnesota; 2006.
37. Charmaz K. *Constructing Grounded Theory: A Practical guide Through Qualitative Analysis*. Thousand Oaks, CA: SAGE Publications, Inc; 2006.
38. *Merriam-Webster's Collegiate Dictionary*. 11th ed. Springfield, MA: Merriam-Webster; 2005.
39. Taylor SE. Adjustment to threatening events: a theory of cognitive adaptation. *Am Psychol*. 1983;38(11):1161–1173.
40. Ganz PA, Guadagnoli E, Landrum MB, Lash TL, Rakowski W, Silliman RA. Breast cancer in older women: quality of life and psychosocial adjustment in the 15 months after diagnosis. *J Clin Oncol*. 2003;21(21): 4027–4033.
41. Cordova MJ, Cunningham LLC, Carlson CR, Andrykowski, MA. Social constraints, cognitive processing, and adjustment to breast cancer. *J Couns Clin Psychol*. 2001;69(4):706–711.
42. Tomich PL, Helgeson VS. Is finding something good in the bad always good? Benefit finding among women with breast cancer. *Health Psychol*. 2004;23(1):16–23.
43. Sears SR, Stanton AL. The yellow brick road and the emerald city: benefit finding, positive reappraisal coping, and posttraumatic growth in women with early-stage breast cancer. *Health Psychol*. 2003;22(5):487–497.
44. Gall TL, Cornblat MW. Breast cancer survivors give voice: a qualitative analysis of spiritual factors in long-term adjustment. *Psychooncology*. 2002;11(6):524–535.
45. Tomich PL, Helgeson VS. Five years later: a cross-sectional comparison of breast cancer survivors with healthy women. *Psychooncology*. 2002; 11(2):154–169.
46. Steele CM. The psychology of self-affirmation: Sustaining the integrity of the self. In: Baumeister RF, ed. *The Self in Social Psychology*. Philadelphia, PA: Psychology Press; 1999:372–390.
47. Creamer M, Burgess P, Pattison P. Reaction to trauma: a cognitive processing model. *J Abnorm Psychol*. 1992;101(3):452–459.
48. Lepore SJ, Ragan JD, Jones S. Talking facilitates cognitive-emotional processes of adaptation to an acute stressor. *J Pers Soc Psychol*. 2000;78(3):499–508.
49. Cimprich B, Ronis DL, Martinez-Ramos G. Age at diagnosis and quality of life in breast cancer survivors. *Cancer Pract*. 2002;10(20):85–93.