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A New Approach to Eliciting Meaning in the Context of Breast Cancer

KEY WORDS

Meaning of illness
Measurement
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A semistructured measure was developed from early descriptive work by Lipowski to elicit the meaning of breast cancer using eight preset categories: challenge, enemy, punishment, weakness, relief, strategy, irreparable loss, and value. This measure was applied in two studies: a cross-sectional survey of 1012 Canadian women at various points after diagnosis and a follow-up study 3 years later of 205 women from the previous study who were close to the time of diagnosis at the first testing. The majority of the 1012 women chose "challenge" (57.4%) or "value" (27.6%) to describe the meaning of breast cancer, whereas fewer chose the more negative "enemy" (7.8%) or "irreparable loss" (3.9%). At the 3-year follow-up assessment, 78.9% of the women who had indicated positive meaning by their choices of "challenge" or "value" did so again. Verbal descriptions provided by the women were congruent with those reported in previous qualitative studies of meaning in breast cancer with respect to the two most prevalent categories: challenge and value. At follow-up assessment, women who ascribed a negative meaning of illness with choices such as "enemy," "loss," or "punishment" had significantly higher levels of depression and anxiety and poorer quality of life than women who indicated a more positive meaning. The meaning-of-illness measure provides an approach that can be applied in large surveys to detect women who ascribe less positive meaning to the breast cancer experience, women who may be difficult to identify in the context of small, qualitative studies.

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The diagnosis of an illness such as cancer is a pivotal life event that can transform an individual. Loss of a person's previous, more stable life situation can stimulate a psychological quest to make sense of a new existence marked by uncertainty and the possibility of premature death. Qualitative research has documented aspects of this search for meaning by patients with cancer using a variety of inductive methods. Several studies have identified the reordering of life priorities that occurs in response to a diagnosis of breast cancer.¹⁻⁶ Carter¹ also described a less positive approach to ascribing meaning: viewing the disease as a form of punishment.

The advantage of these qualitative approaches is their rich description of individual and collective approaches to deriving meaning. The disadvantage is the intensive effort required for data collection and the difficulty linking different ascriptions of meaning to health outcomes.

Recent research suggests the importance of being able to make the connection between ascribed meaning and psychosocial outcomes. Tomich and Helgeson⁷ compared 164 survivors of breast cancer with age-matched healthy control subjects who rated five items related to meaning in life:

In terms of meaning of life, there was little evidence that deriving something positive from the stressful experience was associated with the quality of life of survivors or controls. . . . By contrast, there was much greater evidence that quality of life suffered among women who had found lasting harms from their experiences." (p. 166)

Knowledge about the relation between different ascriptions of meaning and psychosocial outcomes is needed to guide the development of supportive care interventions in the context of cancer.

The approach used to explore meaning in this study was developed from early work by a Canadian psychiatrist, Lipowski,⁸ who maintained that coping strategies are directly related to the meaning an individual ascribes to illness, injury, or disability. On the basis of clinical observations and relevant literature, Lipowski⁸ postulated that eight categories for the meaning of illness were prevalent in North American culture (Table 1). He noted that "the experience of illness may enhance the intensity and depth of the experience of living and this can be reflected in thought, feeling and action" (p.100). Lipowski⁸ suggested in his seminal article that the meaning an individual ascribes to an illness may "spell the difference between optimum recovery and psychological invalidism" (p.91).

As Fife⁹ noted, Lipowski's⁸ conceptualization of meaning is close to the symbolic interactionist framework. Within this theoretical framework, meaning refers to the nature of the perceived relation between an individual and his or her world, which is developed in the context of specific events. The symbolic interactionist framework emphasizes the importance of daily occurrences that shape the interpretation of events and one's response them over the process of a lifetime. This framework is particularly appropriate for studying meaning in the context of an illness such as breast cancer, which usually occurs later in life.

Lipowski's⁸ hypothesis about the categories of meaning has had infrequent application in the context of cancer. Barkwell¹⁰

❁ Table 1 • Lipowski's Categories for Meaning of Illness

Challenge	Disability or disease is perceived as any other life situation which imposes demands and tasks to be mastered and which is accomplished by any means available.
Enemy	Disability or disease is perceived as an invasion by hostile forces either externally or internally. There is a need to fight these forces or a feeling of helplessness and a readiness to surrender may prevail.
Punishment	Disability or disease is perceived as just or unjust. It may or may not be regarded as allowing for atonement.
Weakness	Disability or disease is perceived as a failing, or as a sign of loss of control with negative moral implications. A feeling of shame may be involved.
Relief	Disability or disease is perceived as respite from demands and responsibilities of being well, or from a current interpersonal crisis or economic problem.
Strategy	Disability or disease is used as a technique to secure attention, support, or compliance from others (related to Relief).
Irreparable Loss	Disability or disease is perceived as an overwhelming loss that nothing can replace. For some individuals, even a minor loss of function may do this.
Value	The suffering involved in disability or disease is perceived as having some intrinsic value. Illness may be seen as helping the person grow in some way.

studied 100 Winnipeg patients with advanced cancer and found that the most common categories of meaning selected by patients were challenge (36%), punishment (23%), and enemy (20%). Patients who selected challenge had lower pain scores, higher coping scores, and lower depression scores than patients who selected enemy or punishment. Barkwell's¹⁰ work demonstrated that these categories of meaning were related to important clinical variables, consistent with the hypothesis put forward by Lipowski,⁸ and provided the stimulus for the studies reported in this article.

The purpose of the current two studies was to test a new approach to eliciting meaning that could be implemented as part of large-scale surveys. The intent was to develop a semi-structured measure that could be completed in a few minutes and yet yield rich data about ascriptions of meaning in the context of cancer. The brief assessment of meaning based on Lipowski's⁸ hypothesis and initially tested in Barkwell's¹⁰ survey was implemented in two studies: a cross-sectional survey of 1012 women with breast cancer at various points after diagnosis and a three-year follow-up evaluation assessing 205 of these

women who had been close to the time of diagnosis at the time of the first testing. Data from these studies were used to describe the meaning of breast cancer using Lipowski's⁸ conceptualization through qualitative analysis of the descriptions provided by the 1012 women, to describe differences in ascribed meaning by relevant sociodemographic and disease-treatment variables in the larger sample of 1012 women, and to link categories of ascribed meaning with psychosocial functioning for the 205 women who were 3 years beyond diagnosis. This extensive analysis of the new measure using both qualitative and quantitative approaches was deemed essential to determine its potential usefulness for future research and clinical practice.

■ Methods

Sample

From June 1992 to June 1994, a consecutive sample of women with a confirmed diagnosis of breast cancer and scheduled for a clinic visit at either of the two tertiary oncology referral clinics in the province of Manitoba were approached about participation in the study, irrespective of their time from diagnosis. In addition, a comparative sample of women with clinic visits over a 4-month period at each of two community hospital oncology clinics was approached. Manitoba is a province of 1 million people, and the clinics are located in Winnipeg, a city with a population of 630,000. The province of Manitoba provides comprehensive and universal coverage of healthcare costs without user fees. Each year approximately 730 women receive a diagnosis of breast cancer in Manitoba, and the Manitoba Cancer Registry estimates that currently about 4000 women are living with breast cancer in the province.

The Cross-sectional Study

A survey was conducted using a nurse-administered questionnaire. The study protocol was approved by the University of Manitoba Faculty of Nursing Ethical Review Committee and by the access committees at each data collection site. All the patients gave written informed consent. A target for subject accrual was set at 1000 patients to obtain a sample representing 25% of women living with breast cancer.

Patients completed the survey in a private area of the clinic. First, extensive sociodemographic and disease-treatment information was elicited by the research nurse. This section of the questionnaire was completed after the interview through consultation with clinic staff, and if necessary, the hospital record, attending physicians, and a pathologist. Next, the women completed measures of preferences for participation in treatment decision making and information needs. The findings from these two components of the research are reported elsewhere.¹¹

The final section of the survey asked the woman to provide information about the meaning that breast cancer currently had for her. Eight laminated cards that contained the titles of the meaning categories in a large typeface (Table 1) were laid out on a table in front of the women in random order by the

research nurse. The women were asked to read through a brief description of each category and to select the one that was closest to the way they currently felt about their breast cancer. After each woman had made her selection, the research nurse asked her to talk about why she had made that selection. The woman's statements were recorded in writing by the research nurse and subsequently transcribed.

The qualitative data, comprising each woman's rationale for the category she selected, were analyzed using constant comparative analysis. The women's statements within each category were examined, and each was compared with every other statement in that category. This process was completed by the first author at the halfway point in the data collection when a preliminary description of the two most frequently occurring categories, challenge and value, was developed, and again after all the data had been collected. The preliminary descriptions of the categories of meaning then were reviewed independently by the third (cultural anthropologist) and fourth (nurse scientist) authors and revised where necessary to ensure accurate reflection of the raw data.

The women were formed into three groups: group 1 (challenge), group 2 (value), and group 3 (enemy-punishment-weakness-irreparable loss) to facilitate the cross-sectional analysis of the relation between ascribed meaning and selected sociodemographic and disease-treatment variables. The qualitative analysis had demonstrated that the illness meanings for group 3 had sufficient conceptual overlap to be grouped into one category of "negative" meaning for the purposes of analysis. There were sufficient subjects in groups 1 and 2 that they were kept separate for the analysis, although they both were characterized by conceptually "positive" meanings. Women who chose the remaining categories were deleted from this analysis because as there were insufficient numbers of them for meaningful comparisons. Chi-square analyses were conducted to determine whether there were any differences in the distributions of the three groups according to variables suggested by the women themselves (age, stage of disease at interview, time from diagnosis, type of surgery) or by Lipowski's original work (education, cultural background, relative with breast cancer) as relevant to the meaning of illness.

The Cross-sectional Sample

Altogether, 1012 patients were recruited for the cross-sectional study (Table 2). Of those approached for the study, 184 (15.4%) refused to participate. These nonparticipants were more likely to have been older than 70 years ($\chi^2 = 86.45$; $P = .0001$) and to have been approached in tertiary settings ($\chi^2 = 6.97$; $P = .008$) as opposed to community hospital oncology clinics. The overall distribution of women by residence in Winnipeg, as opposed to outside the city, paralleled that of the provincial population.

The Follow-up Study and Sample

A decision was made to follow up on the women who were within 6 months of their cancer diagnosis at the time of the first study. This category included 278 women, or 27.5% of

❁ **Table 2 • Subject Demographics**

Variables	Cross-sectional Sample (n = 1012)	Follow-up Sample (n = 205)
Age, y		
Mean (SD)	58.25 (12.7)	59.5 (12.0)
<50, No. (%)	295 (29.2)	48 (23.4)
50–69, No. (%)	507 (50.7)	108 (52.7)
≥70, No. (%)	210 (20.8)	49 (23.9)
Education, No. (%)		
<High School	433 (42.8)	74 (36.1)
High School	237 (23.4)	59 (28.8)
>High School	342 (33.8)	72 (35.1)
Marital status, No. (%)		
Married	676 (66.8)	141 (68.8)
Widowed	165 (16.3)	331 (16.1)
Divorced/Separated	86 (8.5)	18 (8.7)
Never Married	85 (8.4)	13 (6.3)
Ethnicity, No. (%)		
English/Canadian	355 (35.1)	78 (38.0)
Ukrainian	88 (8.7)	23 (11.2)
French	77 (7.6)	17 (8.3)
Other	492 (48.6)	87 (42.5)
Residence, No. (%)		
Winnipeg, Manitoba	684 (67.6)	143 (69.8)
Other	328 (32.4)	62 (30.2)
Pathology stage at Diagnosis		
Stage 0	37 (3.7)	8 (3.9)
Stage 1	334 (33.2)	96 (46.8)
Stage 2	540 (53.6)	89 (43.4)
Stage 3	60 (6.0)	8 (3.9)
Stage 4	36 (3.6)	4 (2.0)

the 1012 women in the original sample. Of the 278 eligible women, 4 could not be located for interviewing, and 40 had died before the attempt to contact them. This left 234 women eligible for the follow-up study. Of these women, 29 (12.4%) declined to participate, yielding a participation rate of 87.6% and a sample size of 205 women. These 205 women constituted the follow-up sample. The women were tested in their own homes using the measure for meaning of illness described earlier and three previously validated measures: the Beck Depression Inventory¹² (Cronbach's α of .82 in this sample), the Spielberger State (α = .90) Trait (α = .84) Anxiety Inventory,¹³ and the EORTC Quality of Life Questionnaire¹⁴ (α = .85).

■ Findings

The Cross-sectional Study

The most frequent meanings selected by women were challenge (57.4%) and value (27.6%) (Table 3). Enemy (7.8%) and irreparable loss (3.9%) were the next most frequent categories chosen, with the remaining categories chosen by 1% of the sample or less.

The major themes in each category are outlined in Table 4 and described more fully in the following sections.

BREAST CANCER AS A CHALLENGE

The majority of women in this study viewed breast cancer as a challenge, or yet another hurdle in their lives to be overcome. One woman described this as the “John Wayne approach” in

❁ **Table 3 • Response Frequencies of Meaning of Illness Categories in the Cross-sectional Study**

Meaning	N	%
Challenge	565	57.4
Value	272	27.6
Enemy	77	7.8
Irreparable Loss	38	3.9
Weakness	13	1.3
Strategy	8	0.8
Punishment	6	0.6
Relief	6	0.6

**Table 4 • Central Themes for Meaning Categories**

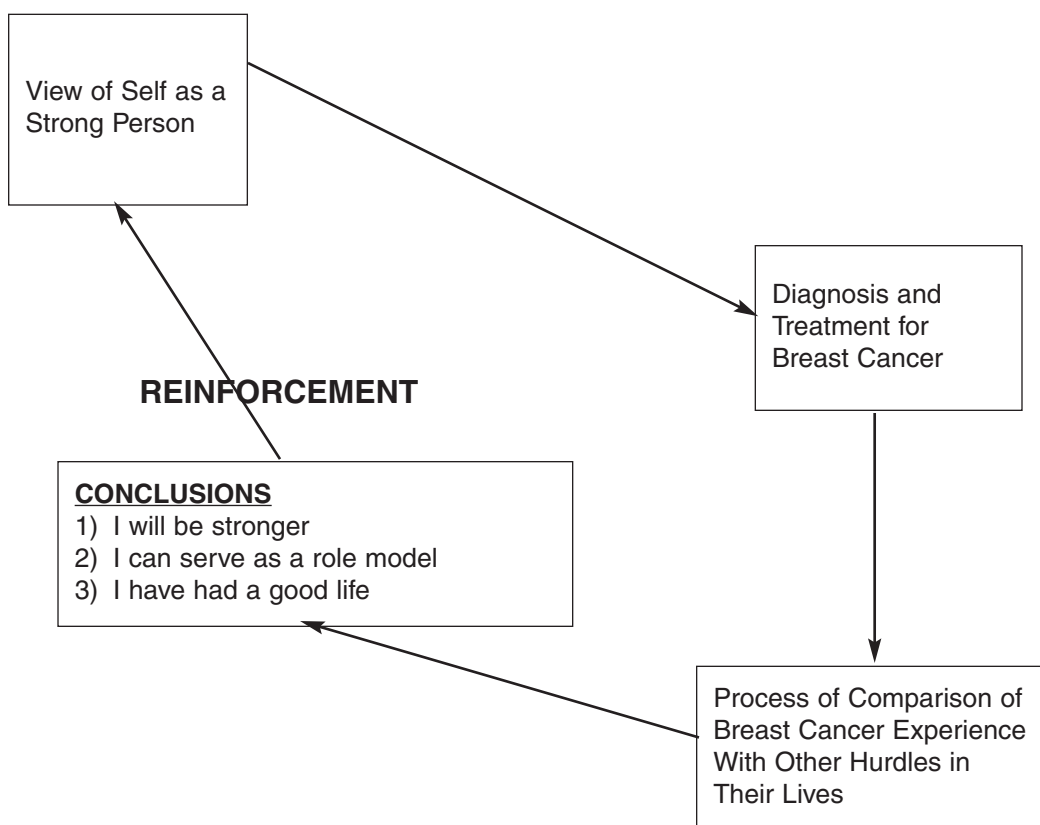
Category of Meaning	Central Theme
Challenge	I was strong but this made me stronger.
Value	I look at life differently now.
Enemy	This is an unfair violation of my body.
Punishment	Perhaps I got this because I did not treat my mother right.
Irreparable Loss	I am afraid that the disease is spreading and I will die.
Weakness	I can't do things that I used to.
Strategy	People pay more attention to me now.
Relief	I don't have to work as hard now.

which “you do what you have to do.” Women who espoused this approach saw themselves as strong people who had confidence in their ability to handle both the breast cancer and other challenges. They also knew what kind of people they were not. They were not complainers who sat around feeling sorry for themselves.

These women attributed their strength of character to their families of origin. One woman stated: “I’m basically a strong person. That is how we were brought up.” The women recalled female role models in their family who had influenced them by showing strength in the face of adversity. These women also referred to the importance of supportive husbands or children, but they did not need to rely on others to sustain their strength

of character. Rather, the challenge associated with breast cancer was their own personal construction, consistent with a life history of accepting responsibilities and meeting all of life’s many challenges.

Women who viewed breast cancer as a challenge processed their life experiences in a manner that helped them construct this particular meaning (Figure 1). When confronted by the initial diagnosis and treatment, they were shocked. Some initially viewed the illness as an enemy, but most did not. They started a process of comparing this experience with every other significant experience in their lives. Older women considered themselves lucky to have this rich source of life events from which to draw strength, indicating that it might have been

**Figure 1 ■** Breast cancer as a challenge.

more difficult to view the situation as a challenge had they been younger.

The process of comparison involved them in examining other hurdles they had overcome in dealing with their own health and the health of others close to them. As reflected in the median age of the sample, most had encountered serious illnesses before the diagnosis of breast cancer. If they had not, it was likely that a close family member had. These women also were able to compare the breast cancer experience with other significant life events such as death, divorce, abuse situations, or serious problems in raising children. Some women could describe the multiple challenges they had faced in life, indicating that the breast cancer was certainly less important than other problems they had dealt with in the past or other problems they currently were facing. If these women had no other significant life event with which to compare the breast cancer, they could imagine something worse, such as losing a child. As one woman stated: "It is certainly easier than having my husband diagnosed with cancer."

As a result of this comparative process, these women came to an important conclusion: having the breast cancer had made them stronger people. As one woman stated: "I was strong, but this made me stronger." This theme was pervasive in the data, stated in different ways by the majority of the women. This conclusion served to reinforce their previous image of themselves as a strong person. At the same time, the women noted that they wished they did not have to handle having breast cancer. One woman said, "I certainly didn't need this."

The women came to two other major conclusions: that they could serve as role models for others by confronting their illness in a positive manner, and that they had had good lives and felt fortunate compared with others. As one woman stated: "I feel very lucky. I've lived to raise my children." Several women noted that when they received the diagnosis of cancer, they did not ask, "Why me?" Rather, they asked, "Why not me?" This way of viewing the world exemplified the attitude of women who saw breast cancer as a challenge.

BREAST CANCER AS A VALUE

The central theme underlying the meaning of breast cancer as value is summarized in one woman's statement: "I look at life differently now." Several women said having breast cancer had made them "stop and smell the roses." These women had stopped and reconsidered their lives, and as a result, had reordered their priorities in life. Some said they had been trying to be superwomen, that they had been workaholics, or that they had been taking things for granted. The diagnosis of breast cancer forced them to reevaluate their lives. For some, an important part of this reevaluation was the consideration of their relationship with God. For others, attention to their spiritual side included a sensitivity to nature. This focus on religion or spirituality led them to see every day as "precious." This concept of life as a precious commodity was central to these women, although they expressed it in different ways such as "each day is a bonus," or "I try to make each day count."

As an important part of reordering their priorities in life, these women changed their patterns of interaction with others. They talked about becoming more openly expressive of their feelings, and about how this had improved their relationships with husbands and other family members. They also believed that they had developed more compassion and understanding for others outside their families, particularly for those experiencing illness. One woman stated that she realized she had been quite a shallow person. Her diagnosis dramatically changed the way she related to others. Another said that she had stopped worrying about the dust in her house so she could spend more time with family members.

Another important consequence of reordering priorities was that the women were more likely to focus on themselves and do things they had always wanted to do. Women who previously had focused on material things shifted to wanting to pursue interests they had neglected. One woman now said that the value of money had changed for her, so that it became valuable only insofar as it could allow her to purchase experiences such as travel.

Like the women who chose challenge as the meaning of breast cancer, these women also noted that they had become stronger as a result of their illness. However, this strength was defined differently, less as matter of character and more as spiritual or moral strength. The process of becoming more connected to nature and to other people signified personal growth that gave the breast cancer experience meaning. At the same time, the women said they were less passive, more assertive, more confident, and more likely to speak up on their own behalf. The women spoke of these changes as new aspects of themselves and, to a certain extent, surprising developments. Whereas the women who chose "challenge" as their meaning category knew they had strength of character before this all happened, the women who chose "value" were less sure of themselves and considered that the breast cancer had indeed played an important role in their personal development.

BREAST CANCER AS ENEMY, PUNISHMENT, WEAKNESS, AND IRREPARABLE LOSS

The women who saw their breast cancer as an enemy described the disease as an attack, a violation, or an invasion of their bodies. A central theme was the unfairness of the disease. Many women had asked, "Why me?" They believed that they did not deserve this disease. Many echoed the statement of one woman: "I live a good life; I don't drink; I don't smoke; and still it happened to me." They described their feelings of powerlessness, loss of control, and loss of independence. They felt that their bodies had let them down. Some described their feeling that the disease had robbed them of their womanhood. These women knew they had to fight the disease, seeing it as an enemy against which they had to defend themselves. They lacked the confidence of the women who chose challenge as the meaning of their illness. As one woman stated: "I don't know whether I can overcome it or not." They knew they had to overcome the disease, but were not sure they could. Some

women indicated their resentment that a cure was not yet available.

A few women saw their breast cancer as a punishment. One woman thought the disease may have developed because she did not go to see her mother in hospital during the last few days of her life. Another suggested that perhaps she got breast cancer because she did not help her mother enough. Other women attributed the disease to a variety of causes, such as not having lived the kind of life they should have, or being relieved at a husband's death. All of these perceptions were advanced as speculations, and it is not clear to what extent the women believed their own theories.

Women who chose irreparable loss as the meaning of their breast cancer were either concerned about the probability of recurrence or had already experienced recurrence and were concerned about dying. Their disease was spreading, and they worried about what would happen after their deaths to family members such as children or infirm husbands. For a few other women, the loss associated with breast cancer was the mutilation of the surgery or the loss of relationship with their husbands.

The major theme of breast cancer as weakness was the loss of physical strength such that the woman could no longer carry on her former activities. Another type of weakness identified was the failure of the body to fight the disease or to fight infection. These women felt a profound loss of control. As one woman stated: "Sometimes I just cry and cry."

BREAST CANCER AS RELIEF OR STRATEGY

Very few women chose the categories of relief or strategy to describe the meaning of their breast cancer. A few women saw that getting breast cancer had enabled them to be relieved of family or work responsibilities, and this was positive for them. Similarly, those who chose strategy as their meaning category identified secondary gains that had resulted from their illness. These women described others as more attentive and watchful since the development of their breast cancer. They said they were closer to friends or family members, and could identify one female family member with whom they were much closer as a result of their breast cancer experience.

VARIABLES RELATED TO THE MEANING OF BREAST CANCER IN THE CROSS-SECTIONAL STUDY

Women younger than 50 years were more likely to view their illness as enemy-punishment-weakness-irreparable loss than older women ($\chi^2 = 11.437$; $df = 4$; $P = .022$). Similarly, women with late-stage disease at the time of the interview were more likely to ascribe negative meanings to their breast cancer than were women with early-stage disease ($\chi^2 = 10.132$; $df = 2$; $P = .006$). English-Canadian women were more likely to view their breast cancer as a challenge or as having value than women who identified themselves belong to cultural groups ($\chi^2 = 10.378$; $df = 4$; $P = .035$). There were no differences in meaning related to education level, time from diagnosis, type of surgery, or whether the woman had a relative with breast cancer.

The Follow-up Study

CHANGES IN THE MEANING OF BREAST CANCER

Most of the women ($n = 142$, 78.9%) in the follow-up study maintained a positive view of breast cancer as representing either a challenge or a value. A small minority ($n = 10$) ascribed a negative meaning at both testing times. The numbers of women who shifted from positive to negative ($n = 15$) or negative to positive ($n = 13$) over time also were small.

Qualitative data provided by the 10 women who ascribed a negative meaning at both testing times were reviewed. The women who viewed breast cancer as an enemy initially felt attacked and invaded, then came to see it as something to fight against in order to survive. Viewing breast cancer as weakness was associated with feeling a loss of control over what was happening in one's bodies and in relation to treatment. Women who viewed their breast cancer as punishment felt something unfair had happened to them: "What did I do wrong?" "It's payback time [for past deeds]." "Why me?"

For some of the women who ascribed a negative meaning to breast cancer, the choice seemed to have been influenced by external events in their lives. These events included marital breakdown, discomfort from lymph node removal, unresolved anger about something that had occurred before diagnosis, or a feeling of being trapped and unhappy in their current situation.

THE MEANING OF BREAST CANCER AND PSYCHOSOCIAL FUNCTIONING

The women who viewed breast cancer as a challenge or a value at the time of the diagnosis had significantly less trait anxiety at the follow-up assessment than the women who ascribed a negative meaning ($F = 6.36$; $P = .002$). No other differences were found in psychosocial functioning at the follow-up assessment by ascribed meaning at the time of the diagnosis. However, the women who ascribed a negative meaning to their breast cancer at the follow-up evaluation also had higher levels of depression and anxiety and poorer reported levels of emotional functioning and quality of life at the follow-up assessment (Table 5). There were no differences in physical, role, cognitive, or social functioning by ascribed meaning of illness at the follow-up evaluation.

■ Discussion

The findings reported in this article support the usefulness of a brief measure of meaning that can be incorporated into surveys. Rich qualitative descriptions can be obtained in a few minutes. In future research, the central themes provided by the women, as outlined in Table 4, could be placed on cards under each category of meaning to customize the measure to the breast cancer context. The "pick one" approach was acceptable to the women in this study, although they at times picked two cards and described which elements of each were in their thinking. They also could use the cards to describe how their ascribed meaning changed over time.

 **Table 5 • Depression, Anxiety, and Quality of Life by Ascribed Meaning at Follow-up**

	Challenge/Value			Negative Meaning			ANOVA	
	n	Mean	SD	n	Mean	SD	F Value	P
Beck Depression Inventory (Mean)	159	5.88	4.16	24	11.75	8.90	28.59	.0001
Speilberger Anxiety								
State	159	33.14	9.30	24	41.04	12.03	13.88	.0003
Trait	159	37.60	6.44	24	45.75	10.44	27.64	.0001
EORTC Functional Scales								
Emotional*	159	82.86	15.72	24	67.01	27.42	16.82	.0001
Cognitive*	159	82.91	16.77	24	73.61	21.38	5.95	.0157
Social*	159	93.19	17.00	24	81.25	32.34	7.71	.0061
Global Health Status/QOL1	159	75.16	16.65	24	59.38	24.12	16.44	.0001

*High score represents a high healthy level of functioning or quality of life.

A major finding of this study was the generally positive meaning that the majority of women attached to their experience of having breast cancer. However, these women did not achieve their positive stance without a struggle. Their statements were congruent with Lipowski's⁸ original thesis that the experience of illness can enhance the intensity and depth of the experience of living. The psychological work that these women had to undertake after their diagnosis was time consuming and at times painful, but became central to their definitions of who they were. The majority had come from the process of reviewing their lives and the way they were living with the conclusion that they were stronger as a result of the cancer experience.

The positive view of breast cancer reported in this article probably was not a result of social desirability bias. To elicit meaning, Barkwell¹⁰ used the same method as that implemented in this study, and found that only 36% of the patients with advanced cancer chose "challenge," and that only 2% chose "value." These patients were similar in age to the women with breast cancer, but all had advanced cancer and had been experiencing pain for at least 6 months before their interview. Barkwell's¹⁰ study group was a mixed sample of men and women, suggesting that gender could have had an influence on ascribed meaning.

The finding that younger women and women with later-stage disease had more negative views of their illness was not surprising. The women emphasized the importance of previous life experiences in helping them construct a positive meaning now that they were confronting a life-threatening illness, and many noted that they may not have been able to do this if they had been younger at the time of diagnosis. The stage of the disease at the time of the interview clearly was a powerful factor. The women facing progressive disease were less likely to see a positive meaning in their situation. These findings suggest that the new measure was able to discriminate among "known groups" in the expected directions.

Most of the of non-English Canadian subgroups in this sample identified their land of origin as a country in continental Europe, particularly the Ukraine, France, or Germany. In some continental European countries, such as Italy, patients are shielded from knowing they have cancer because, as Gor-

don¹⁵ noted, "hope" and "cancer" are mutually exclusive. Another metaphor pictures cancer as an epidemic. Gordon¹⁵ described how the great Italian plague of the 17th century was branded into the collective memory of Italians. The epidemic image was evoked for Italian women with breast cancer when they were confined to hospital with many other similar sufferers. Women who have such images are unlikely to choose the terms "challenge" or "value" to describe their breast cancer.

A British study of 104 women with newly diagnosed breast cancer used the same measure of meaning as that implemented in the two current studies. Luker et al¹⁶ found that the British women were more likely than Canadian women to ascribe negative meanings to the experience of breast cancer. However, this may have been related to their early point in the disease trajectory, only 2.5 weeks from the time of diagnosis. The process of coming to see the breast cancer experience as having some value takes time, and the British women clearly had very limited time during which to process their experience.

The current study was not able to ascertain the extent to which women's attribution of meaning is influenced by societal context or cultural norms. Wilkinson and Kitzinger^{17(p806)} suggested that in the context of breast cancer, "thinking positive" is presented as a moral obligation, as something you "have" to do. As Good et al¹⁸ also suggested, the "discourse on hope" that characterizes North American oncology may be an important factor in shaping a more positive view of cancer among North American women. Further research that contrasts the meaning derived by North American women with breast cancer to the meaning derived by patients from countries in which such discourse is not the norm is required if this issue is to be addressed. For example 24% of 86 Swedish patients with colorectal cancer chose the term "relief" to describe the meaning of illness, using Lipowski's framework,¹⁹ whereas only 0.6% of 1012 Canadian patients with breast cancer chose this category of meaning.

The method used to elicit meaning in this study was focused and used a preexisting framework. Although the method lent itself well to use in a large-scale survey, it is not clear to what extent similar results would have been obtained using a more in-depth and unstructured approach. However,

in a qualitative study of 30 patients, two thirds of whom had breast cancer, O'Connor et al⁴ identified two themes that were analogous in their description of challenge and value. A "review of life" involved a taking stock of one's life, whereas a "change in outlook" involved a restructuring and revaluing of attitudes toward self, life, and others.

In another qualitative study involving 14 survivors of breast cancer, Fredette²⁰ elicited statements about the meaning of having cancer that were remarkably similar to those provided by the women in the current studies who chose the terms "challenge" or "value" to describe the experience. Utley²¹ also described "cancer as transforming" in eight women, using paragraphs congruent with the current descriptions of challenge and value. These previous findings lend support to the validity of the current brief assessment approach to meaning, at least for the most prevalent categories of challenge and value. Because the remaining categories occurred so infrequently in the current population, it is not surprising that they were not described in previous small qualitative studies.

The findings that demonstrated a linkage between negative ascriptions of meaning and poorer psychosocial functioning are congruent with those of Schüssler.²² Using Lipowski's framework to study 153 patients with chronic physical disease, he found a negative correlation between illness as a challenge and symptoms of anxiety and depression, and a positive correlation between such symptoms and selection of "punishment," "enemy," or "strategy" as the meaning of illness. The similar pattern of results identified in the current study suggests that Lipowski's framework may provide a useful screening approach for identifying patients with cancer at risk for reduced psychosocial functioning. Further research is needed to determine the efficacy of such a screening measure in oncology practice and its applicability in a range of patient groups.

■ Implications for Clinical Practice

The findings of these studies have implications for the framing of information during discussions with women. Military metaphors that describe the cancer cells and chemotherapy as being engaged in combat are used frequently in medical practice.²³ Such metaphors may not be appropriate for the majority of women, and may in fact interfere with their ability to process information. If a woman believes that facing her disease and treatment is a "challenge" in her life, as did most of the women in these studies, use of the "enemy" metaphor is at odds with her way of making sense of the experience. The frequently expressed concern that women with breast cancer do not receive the amount or the kind of information they require²⁴ may be a symptom of information inappropriately framed by health professionals.

Assessment of the meaning ascribed to the breast cancer experience could provide nurses with important clues about an individual woman's level of psychosocial functioning. Efforts to initiate such discussions could be based on the qualitative descriptions provided in this study. The findings suggest specific questions that could be useful in stimulating such a dialogue:

- What does having breast cancer mean to you?
- Have you found yourself reexamining your life experiences and priorities, then making changes in your life?
- Do you associate your illness with punishment, enemy, or loss?
- If you could make one statement about what having breast cancer means to you, what would it be?

In particular, it is important to elicit the very negative ascriptions of meaning that may be associated with impaired psychosocial functioning so that appropriate interventions can be initiated. Understanding a woman's ascription of meaning to breast cancer before initiation of treatment regimens such as adjuvant chemotherapy and at significant points in the disease trajectory such as relapse could provide important information for the planning of supportive care interventions.

■ Study Limitation

A major limitation of this study was its lack of measures for anxiety, depression, and quality of life in the first study to provide data that could have been used as covariates with the follow-up results on these variables. However, the first study was designed to be conducted in ambulatory clinics to maximize accrual, whereas the second study occurred in the privacy of subjects' homes, where more time for scale administration was possible. The sample of 1012 used as a basis for the qualitative analysis was cross-sectional and drawn from a population of women at various points in their disease trajectory. The smaller follow-up sample to determine the relation between ascribed meaning and psychosocial outcomes was drawn from the larger sample of 1012 on the basis of their time from diagnosis (less than 6 months). The two samples differed, most notably in that there were fewer younger women (age less than 50 years) and fewer women with lower levels of education (less than high school) in the follow-up sample. There also were fewer women with advanced disease in the follow-up sample as a result of deaths caused by disease. Subsequent studies to link ascribed meaning with psychosocial outcomes for women with breast cancer need to address these limitations.

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