

## **Coping with Women’s Cancer and Perceived Providers’ Support: Does Type of Cancer Make a Difference?**

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### **Abstract**

Women with cancer utilize a variety of coping strategies to meet their emotional and informational support needs. Different cancer diagnoses are likely to influence patients’ coping and providers’ effectiveness in meeting their needs, but the relationship among coping dimensions and type of diagnosis are largely unknown. This study explored the relationship among diagnosis with ovarian or breast cancer, coping strategies, and perceived importance of nurses and physicians’ informational and emotional support. Methods included a survey with women who were diagnosed with either breast or ovarian cancer. Results indicated differences between women with breast cancer compared to those with ovarian cancer in coping strategies and perceived importance of support from health care providers. Coping strategies were related to differences in perceived importance of health care providers support. These findings highlight the importance of meeting women’s cancer-related support needs in cancer care settings by considering their coping style and diagnosis.

**Keywords:** cancer communication, communication in health care settings, coping, patient-provider communication, women’s cancer

Every year, more than 226,000 women in the United States receive a diagnosis of invasive breast cancer and about 22,000 women are diagnosed with ovarian cancer (American Cancer Society, 2012). Due to the prevalence of breast cancer and its centrality in Western society discourse (Wilkinson, 2000), Western women with breast cancer typically have access to abundant information and support sources. In contrast, women with ovarian cancer have fewer resources and are usually facing more severe prognoses (Howell, Fitch, & Deane, 2003). These differences in typical illness trajectories and availability of information and emotional support are likely to influence how women with these two types of cancer cope with their illness and their support needs in health care contexts. Understanding coping responses associated with different cancer diagnoses is essential for meeting patients' needs in health care settings. Therefore, the goal of this study is to examine the relationships among type of cancer diagnosis (breast or ovarian), coping styles, and perceived importance of information and emotional support from nurses and physicians.

### **Coping with Cancer**

Coping behaviors are important in adjusting to stressful life events, including having cancer (Livneh, 2000). According to the theory of stress and coping, *coping* is defined as "cognitive and behavioral efforts to master, reduce, or tolerate the internal and/or external demands that are created by the stressful transaction" (Lazarus & Folkman, 1984, p. 141). The theory posits that coping dimensions comprise *emotion-focused coping*, which are the efforts directed at managing emotions, and *problem-focused coping*, or the strategies directed at minimizing or solving the impact of the stressful event (Lazarus & Folkman, 1984). Studies show that coping plays a significant role in psychosocial adaptation to chronic illnesses and disabilities, including cancer. People use a wide range of coping efforts, and these efforts are linked to psychosocial adaptation both directly and indirectly. (For a review, see Livneh, 2000.) Whereas both problem-solving and emotion-focused coping can be adaptive, studies typically identified emotion-focused coping as indicative of maladjustment and negative results (e.g., Kohn, 1996). However, these studies confound negative emotional strategies with positive, healthy emotional strategies (Austenfeld & Stanton, 2004). In contrast, the Emotional-Approach Coping (EAC) scales (Stanton, Danoff-Burg, Cameron, Bishop, Collins, Kirk, et al., 2000; Stanton, Kirk, Cameron, & Danoff- Burg, 2000) assess positive coping strategies associated with acknowledging, understanding, and expressing emotions. EAC advanced a shift to a positive view of emotional coping. As studies have consistently shown women to

place more emphasis on emotional coping (Stanton, Danoff-Burg et al., 2000), the EAC is particularly suited to understanding women's needs in stressful healthcare contexts.

Studies have demonstrated a wide variation in women's responses to breast cancer, with many women adjusting relatively well and others having more problems (Andrykowski, Curran, Studts, et al., 1996; Avis, Crawford, & Manuel, 2004; Glanz & Lerman, 1992; Sammarco, 2001). Use of coping strategies is associated with adjustment and quality of life after breast cancer diagnosis (Dukes-Holland & Holahan, 2003; Epping-Jordan, et al., 1999; Hack & Degner, 2004; Kershaw, Northouse, Kritpracha, Schafenacker, & Mood, 2004). In contrast, very little is known about the coping of women with ovarian cancer (Hopkins, McDowell, Le, & Fung, 2005), and to our knowledge, no previous studies examined whether differences exist in how women cope with these two types of cancer. In view of the importance of understanding cancer patients' coping, including potential differences in coping with breast cancer or with ovarian cancer, the first research question was posed.

RQ1: What are the differences in coping strategies between women with breast cancer and women with ovarian cancer?

Different types of illnesses are associated with differences in utilization of coping strategies (Livneh, 2000), but differences between coping with breast or with ovarian cancer diagnosis have not been examined. Women diagnosed with breast cancer, who are typically facing better prognosis and enhanced access to information and emotional support, may demonstrate more problem-focused coping than ovarian cancer patients. Therefore, the first hypothesis was posed:

H1: Women with breast cancer will report higher levels of problem-focused coping strategies than women with ovarian cancer.

### **Physicians' Information and Emotional Support Provision in Cancer Communication**

Patient–physician communication is a central component in patients' illness experiences and in cancer care (Arora, 2003). Patients at different stages expect their healthcare providers to meet several of their information and support needs (Arora, 2003). Information from physicians is pivotal to decision-making processes regarding treatment (Carrigan, Gardner, Conner, & Maule, 2004) and cancer patients consistently identified physicians as their preferred information source (Hesse, Nelson, Kreps, Croyle, Arora, Rimer, & Viswantath, 2005). However, physicians tend to underestimate patients' information needs (Ong, De

Haes, Hoos, & Lammes, 1995; Waitzkin, 1985). Individual differences in patients' uncertainty management including their information preferences increase health care providers' difficulties in information provision (Brashers, Goldsmith, & Hsieh, 2002). Similarly, differences in coping strategies influence patients' expectations of patient-physicians' communication, including provision of information (Arora, 2003).

Provision of emotional support is an important albeit less understood dimension of the patient-provider interaction (Fallowfield & Jenkins, 2004). Paradoxically, cancer patients expressed generally high satisfaction from oncologists' emotional support despite a variety of physicians' observed behaviors (Blanchard, Ruckdeschel, Fletcher, & Blanchard, 1986). It is therefore possible that perceptions of physicians' emotional support are influenced by patients' communication needs, which in turn are influenced by their coping styles. However, previous research did not examine the relationship among coping strategies and perceptions of physicians' information and emotional support. To learn more about this relationship, we pose the second research question.

RQ2: What is the relationship among patients' coping strategies and the importance they attribute to physicians' information and emotional support?

Problem-focused coping refers to finding solutions to the situation. In view of the importance of medical information from physicians in making cancer-related decisions, we expect problem-focused coping strategies to be related to turning to physicians for information provision. Therefore, we posed the following hypothesis:

H2: Utilization of problem-focused coping strategies will be positively related to perceived importance of physicians' information.

Similarly, as utilization of emotional-approach coping strategies involves a focus on managing one's emotions, it is likely that individuals who demonstrate this type of coping will rely on physicians as important emotional support sources more than individuals who do not manifest this style of coping. Therefore, we posed the third hypothesis:

H3: Utilization of emotional approach coping strategies will be positively related to perceived importance of physicians as emotional support sources.

In addition to differences in coping, it is possible that the different realities faced by breast versus ovarian cancer patients impact their informational and emotional support needs, including their reliance on physicians for information and emotional support. To learn about the perceived importance that women with breast or ovarian cancer diagnosis attribute to physicians' provision of information and emotional support, we posed the third research question.

RQ3: What is the relationship among having a diagnosis of breast or ovarian cancer and the importance that women attribute to physicians' information and emotional support?

The inequity in availability of information and support sources between women diagnosed with ovarian cancer versus those diagnosed with breast cancer might lead to ovarian cancer patients having to rely more than breast cancer patients on information and emotional support from physicians. Consequently, we posed the following hypotheses:

H4: Women with ovarian cancer will attribute greater importance to physicians' information compared to women with breast cancer.

H5: Women with ovarian cancer will attribute greater importance to physicians' emotional support compared to women with breast cancer.

### **Nurses' Information and Emotional Support Provision in Cancer Communication**

Studies of patient-nurse communication in oncology settings concluded that this communication plays an important role in meeting the cognitive and affective needs of patients with cancer (for reviews, see Kruijver, Kerkstra, Bensing, & van de Wiel, 2000; Koutsopoulou, Papathanassoglou, Katapodi, & Patiraki; 2010). This line of research emphasized the importance of the affective aspect of nurses' communication, and concluded that empathy, touch, comforting, and supporting are essential in caring for patients with cancer (Kruijver, et al., 2000). A review of oncology nurses' emotional support for patients concluded that very few studies have examined patients' experiences of how nurses communicate (Slevin et al., 1996). In addition, most of these past studies were conducted in Europe, and thus report on experiences in different health care and cultural contexts that might not be generalizable to the U.S. In view of the importance of nurse-patient communication in oncology settings, and the limited knowledge about the relationship among patients' coping and nurses' provision of information and of emotional support, we posed the following research question:

RQ 4: What is the relationship among coping strategies and the importance breast and ovarian cancer patients attribute to nurses' information and emotional support?

Since patient-nurse communication is typically portrayed as emotionally supportive, we expect problem-focused coping to positively correlate with the importance that participants attribute to nurses' provision of emotional support. Hence, the sixth hypothesis was posed.

H6: Utilization of problem-focused coping strategies will be positively related to the degree to which ovarian and breast cancer patients rate nurses' information as important.

In light of the importance of emotion management among those who use emotional approach coping, we also expect women who use emotional approach coping to attribute greater importance to nurses' emotional support than women who score lower on emotional approach coping. Therefore, the seventh hypothesis was advanced.

H7: Utilization of emotional approach coping strategies will be positively related to the degree to which ovarian and breast cancer patients rate nurses' emotional support as important.

Finally, we explore whether diagnosis with breast versus ovarian cancer is associated with the degree to which participants rate nurses' provision of information and emotional support as important.

RQ5: What are the differences between women with breast or ovarian cancer in the degree to which they rate nurses' information and emotional support as important?

Following the same rationale that guided our hypothesis regarding physicians' support, we expect women with ovarian cancer to attribute greater importance to nurses' information and emotional support compared to women with breast cancer.

H8: Women with ovarian cancer will attribute greater importance to nurses' information compared to women with breast cancer.

H9: Women with ovarian cancer will attribute greater importance to nurses' emotional support compared to women with breast cancer.

## Methods

### Participants

Participants were 61 women with breast (n=31) and ovarian (n=30) cancer. This sample size provided power of .80 to detect an  $R^2$  of 0.15 at  $\alpha = .05$ . To be eligible, women had to be diagnosed with either breast or ovarian cancer 6 to 18 months prior to participation in the study. We selected this time frame as time since diagnosis is likely to influence women's experiences and therefore impact their coping. Following the approval of the university's institutional review board (IRB), women were recruited by contacting oncologists, cancer support groups, and using snowball sampling procedures in two metropolitan areas (one large, one medium-sized) in the Southwest, as well as by free media coverage in local newspapers in the larger metropolitan area. Eligible women were informed of the purpose of this study and signed informed consent and HIPAA forms. These were paper and pen surveys that respondents filled in at the presence of a team member that was available for questions. Participants were not compensated for their participation.

### Variables and Instrumentation

**Demographic.** The questionnaires included demographic and medical information, including age, marital status, race/ethnicity, employment, health insurance, annual income, educational level, cancer site, cancer stage, time of diagnosis, treatment received, and current stage in treatment.

**Coping.** We measured problem-focused coping using the active coping, planning and suppression of competing activities coping subscales from the previously validated instrument of the COPE scale (Carver et al., 1989). Responses are on a 4-point scale ranging from "I usually don't do this at all" to "I usually do this a lot." These subscales have been found to be reliable with Cronbach alphas of .62, .80, and .68, respectively. Cronbach alphas for the current study were .85 for "active coping," .95 for "planning," and .87 for "suppression of competing activities." Alpha for the overall problem-focused scale was .93. Emotional-focused coping was measured using 8 items from the Emotional Active Coping (EAC) instrument (Stanton, Kirk, et al., 2000). Responses are on a 4-point scale ranging from "I usually don't do this at all" to "I usually do this a lot." Alpha for the emotional coping scale was .94; and the subscales' alphas were .85 for "acknowledging emotions," .84 for "taking time for emotions," and .94 for "expressing my emotions."

**Information and emotional support source utilization.** To assess patients' perceived importance of physicians and nurses' information and emotional support provision, we asked participants whether they used physicians and nurses as a source for such support, and to what degree this support was important. Responses are on a 4-point scale ranging from "not important at all" to "very important."

## Results

### Participants

**Demographic information.** The average age of participants was 54 ( $SD = 10.51$ ) with the youngest being 27 and the oldest 81. The majority were White ( $n=56$ , valid percent: 93), three were Latina (4.5%), one was Native American (1.5%) and one (1.5%) did not indicate ethnicity.

Twenty-two (36%) women were single, divorced, or widows, 39 were married (64%). The majority of the participants were employed ( $n=37$ , 60%). Only one participant (1.5) did not have health insurance, and 60 (98.5%) were medically insured. Twelve (22%) had annual household income of under \$50,000. Twenty-seven had income between \$50,000 and \$100,000, and 16 (23%) had an income greater than \$100,000. Six (10%) participants did not indicate their income. The average year of schooling of participants was 16 ( $SD = 2.33$ ), and ranged from 12 to 21 years.

**Medical information.** 26% ( $n=6$ ) of breast cancer patients were diagnosed at stage 0; 27% of breast and 30% of ovarian cancer patients ( $N=7$ , & 8, respectively) were at stage 1; 40% of breast and 13% of ovarian cancer patients were at stage 2; 4% of breast and 43% of ovarian cancer patients were at stage 3, and 13% ( $n=4$ ) of ovarian cancer patients were diagnosed at stage 4. One ovarian cancer patient (3%) did not know her stage. Almost all of the women had surgery ( $n=59$ ; 96%), and 16 (26%) had radiation. Forty-two (69%) completed treatment at the time of the survey.

### Coping Strategies and Diagnosis with Breast or Ovarian Cancer

The first research question explored the relationship among diagnosis with breast or ovarian cancer and coping strategies. The first hypothesis predicted that women with breast cancer will demonstrate higher levels of problem-focused coping strategies compared to women



with ovarian cancer. T-test analysis revealed that breast cancer patients scored higher for problem-focused coping than ovarian cancer patients,  $t(59) = 1.96, p < .005$ , thus supporting the first hypothesis. There were no statistically significant differences between breast and ovarian cancer patients in emotional approach coping ( $p = .622$ ).

### **Coping Strategies and Importance of Physicians' Information and Emotional Support**

The second research question explored the relationship among patients' coping styles and the importance that patients attributed to physicians' information and emotional support. The second hypothesis predicted that utilization of problem-focused coping strategies will be positively related to perceived importance of physicians' information. The analysis revealed that problem-focused coping was significantly correlated to rating physicians' information as important, with Spearman correlation coefficient  $r(55) = .27, p < .05$ . Therefore, the second hypothesis was supported. In addition, rating physicians' information as important was correlated with emotional approach coping  $r(56) = .26, p < .05$ .

The third hypothesis stated that use of emotional approach coping strategies would be positively related to perceived importance of physicians' emotional support. Our findings indicated that utilizing emotion-approach coping was significantly correlated to rating physicians' emotional support as important,  $r(55) = .24, p < .05$ . The third hypothesis was supported.

### **Diagnosis with Breast or Ovarian Cancer and Physicians' Information and Emotional Support**

The third research question focused on the relationship among diagnosis with either ovarian or breast cancer and the degree to which women perceived physicians' information and emotional support as important. The fourth hypothesis posited that perceived importance of physicians' information would be higher for women with ovarian cancer than for women with breast cancer. The results of the analysis revealed that differences in perceived information from physicians between women with breast cancer ( $M = 3.62$ ) and women with ovarian cancer ( $M = 3.89$ ) were not statistically significant ( $p = .07$ ). Thus, the hypothesis was not supported.

The fifth hypothesis predicted that perceived importance of physicians as sources of emotional support would be higher for women with ovarian cancer than for women with breast cancer. The analysis revealed that women with breast cancer rated their physicians' importance in provision of emotional support ( $M=1.9$ ) as much lower than women with ovarian cancer ( $M=2.9$ ), and that the difference was statistically significant  $t(56) = -2.76, p < .005$ . Therefore, the hypothesis was supported.

### **Coping Strategies and Importance of Nurses' Information and Emotional Support**

The fourth research question centered on the relationship among patients' coping styles and the importance they attribute to information and emotional support from nurses. The analysis revealed that problem-focused coping was not significantly correlated to rating nurses' information as important, with Spearman correlation coefficient  $r(56) = .23, p = .09$ .

The sixth hypothesis predicted positive correlation between emotional approach coping and perceived importance of nurses' emotional support. Results of the analysis indicated that problem-focused coping was significantly correlated to rating nurses' emotional support as important,  $r(56) = .275, p = .04$ . The sixth hypothesis was supported. In addition, emotion-focused coping was not significantly correlated to rating nurses' information as important,  $r(56) = .21, p = .127$ . The seventh hypothesis predicted that emotion focused coping will be positively correlated with perceived importance of nurses' emotional support. The analysis revealed that the correlation between emotional approach coping and rating nurses' emotional support as important was not statistically significant,  $r(56) = .19, p = .157$ . The seventh hypothesis was not supported.

### **Diagnosis with Breast or Ovarian Cancer and Nurses' Information and Emotional Support**

The fifth research question explored the relationship among having breast or ovarian cancer and the importance patients attributed to nurses as sources for information and emotional support. Findings indicated that information from nurses was somewhat more important to ovarian ( $M= 3.32$ ) than to breast cancer patients ( $M= 2.70$ ), but this difference did not reach significance ( $p=.06$ ). Thus, the eighth hypothesis was not supported.

The ninth hypothesis stated that women with ovarian cancer diagnosis would rate nurses' emotional support as more important than would women with breastcancer. The analysis indicated that nurses' emotional support was more important to women who were diagnosed with ovarian compared to those with breast cancer ( $M=3.1$  versus  $2.3$ ). This finding was significant,  $t(56) = -1.90, p < .005$ . Therefore, the ninth hypothesis was supported.

## **Discussion**

This study investigated the relationship among problem-focused and emotional approach coping strategies, being diagnosed with ovarian or with breast cancer, and the importance participants attributed to physicians and nurses' information and emotional support. Our findings revealed significant relationships between type of diagnosis and coping strategies. Specifically, women diagnosed with breast cancer reported higher levels of utilization of problem-focused coping strategies than did women with ovarian cancer diagnoses. Moreover, both coping strategies and type of diagnosis were associated with the importance that patients attributed to information and emotional support from health care providers. Use of problem-focused coping strategies was significantly correlated to rating physicians' provision of information as important, but not to perceiving their emotional support as important, whereas emotional approach coping was associated with rating physicians' information and emotional support provision as important. Additionally, information from physicians was equally valued by women with these two types of cancer, but women who had ovarian cancer rated emotional support from their physician as significantly more important than did women with breast cancer. In contrast, perceived importance of nurses' emotional support was related only to problem-focused coping, and perceived importance of nurses' information support was not related to coping style. Finally, emotional support from nurses was more important to women with ovarian cancer than to women with breast cancer.

These results were largely consistent with our expectations. Since ovarian cancer diagnosis is less prevalent and usually more severe than diagnosis with breast cancer, we expected women with this diagnosis to be less likely to engage in problem-focused strategies that are perhaps more taxing on limited resources such as time and emotions. Although this hypothesis was supported, the reason for these differences cannot be established in this analysis. Therefore,

these findings demonstrate the importance of future investigations that should further examine additional factors that can explain these associations.

To our knowledge, this is the first study that identified relationship among coping styles and patients' perceptions regarding information and emotional support from providers in cancer care settings. Future studies should investigate the relationship among other sources of cancer information and emotional support, including other patients, family members and friends, books, mass media, and professional information services.

Perhaps the most notable implications of this study are on patient-physician and patient-nurse communication. Most of our participants rated information from physicians as "very important." This finding supported numerous previous studies about the critical role that physicians play in health information provision(See review by Ong et al., 1995), a role that did not decrease even following the proliferation of other health information sources over the Internet (Hesse et al., 2005). The majority of our participants ranked physicians' information provision as very important, regardless of their diagnosis and coping strategies. In contrast, our research identified differences in perceived importance of physicians' emotional support. Demonstrating emotional approach coping styles, and being diagnosed with ovarian cancer was associated with ranking physicians as important emotional support providers. This is an important finding, as it suggests that patients might differ in the emotional support they expect from physicians based on their type of diagnosis and/or coping strategies.

Our findings also highlight the important albeit complicated role of nurses as information and emotional support providers. Perhaps the most notable lesson is that nurses' emotional support is rated higher by ovarian than breast cancer patients. Nurses who work with ovarian cancer patients should be cognizant of this importance. In addition, women with problem-focused coping rated nurses as important emotional support sources. This relationship requires further examination. It is possible that problem-focused women recognize the role of nurses as emotional support providers.

Therefore, this study has practical implications for physicians and nurses. First, these findings support the importance of physicians' information provision. It is crucial that physicians understand this importance and not overlook patients' information needs. Second, physicians should be aware that their emotional support is particularly important to patients with ovarian

cancer and to women who manifest emotionally-focused coping styles. Whereas individuals' coping styles are not as easy to discern as their diagnoses, they can be relatively easily assessed. This study was exploratory in nature. Future studies should continue to explore coping and cancer communication behaviors. Such examinations can include, but are not limited to, how coping styles influence use of other information and support sources, the relationship among coping styles and information-avoidance, and preferred supportive messages and their relationship to coping styles.

Finally, this study is not free from limitations. First, although the sample size was adequate for identification of meaningful correlations, it was limited by design to two types of illnesses. In addition, the participant pool consisted predominantly of White women. In addition, our focus was limited to three of the 14 subscales that comprise the COPE scale (Carver, 1997; Carver et al., 1989;) and to perceived importance of physicians and nurses' provision of information and emotional support. Finally, we utilized only two items to measure perceptions of providers' importance in information provision, and two items to examine their emotional support. Future research should expand the scope of the current study by exploring other types of illnesses, by including male participants, by sampling individuals from different cultures, and utilizing more in-depth measures of information and emotional support at different points in the cancer trajectory.

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