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Coping with Pain Severity, Distress, and Consequences in Women with Ovarian Cancer

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Abstract

Background—Self-regulation can be useful in understanding pain management efforts in women with ovarian cancer. Self-regulation is a parallel process of problem-focused and emotion-focused coping; problem-focused coping involves efforts aimed at solving/reducing the problem directly while emotion-focused coping is aimed at managing negative emotions.

Objective—To describe the types of problem- and emotion-focused coping strategies used to manage pain severity, distress, and consequences, and to evaluate whether there was evidence of parallel processing (i.e. use of a combination of both problem- and emotion-focused strategies).

Methods—Women (N=162) from a cross-sectional study of cancer symptoms who reported pain as a most noticed symptom in the past week were included. Pearson correlations and t-tests were used to evaluate relationships among the variables.

Results—Mean ($\pm$ SD) pain severity was 5.5($\pm$ 2.7) on a 0-10 scale. An average of 4.6($\pm$ 2.1) coping strategies were reported. *Actively manage and planning* were the most frequent problem-focused strategies; *relaxation* was the most frequent emotion-focused strategy. Higher total number of coping strategies attempted, *expressing emotions*, and *seeking emotional support* were associated with higher pain distress and consequences scores and *actively managing pain* was associated with higher pain severity.

Conclusions—Women with a history of ovarian cancer continue to experience severe pain. Partial support for parallel processing was found.

Implications for Practice—The relative benefits of the two types of coping strategies are unclear. Thorough assessment of pain and the effectiveness of coping strategies is needed to help women identify strategies that work best for them.

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Background

Ovarian cancer is the second most common gynecological cancer, and only 15% of new cases are diagnosed at an early stage.¹ Treatment for ovarian cancer typically includes surgery and aggressive chemotherapy and a majority of women will experience a recurrence requiring additional and often ongoing chemotherapy.² Both the disease and the treatment regimens are characterized by a constellation of distressing symptoms.³ Pain is one of the most prevalent and distressing of these symptoms with up to 60% of women reporting cancer- or treatment-related pain.⁴⁻⁷ Persistent pain in cancer survivors is associated with decreased quality-of-life, lower levels of general well-being, and increased use of health care services.⁸

Coping with pain requires significant effort on the part of patients. These pain-related coping efforts can be understood within the broader context of self-regulation. Self-regulation is a systematic process of applying conscious efforts to modulate thoughts, emotions, and behaviors.⁹ Models of self-regulation describe a parallel process of problem-focused and emotion-focused coping.^{10,11} From a parallel processing perspective, an individual's cognitive representations about an illness or symptom (e.g. evaluations of pain severity or consequences of pain) would trigger problem-focused coping; emotional representations (e.g. symptom-related distress) would trigger emotion-focused coping. Problem-focused coping involves efforts aimed at solving or reducing the problem directly, such as taking the appropriate type, dose and schedule of medications, or using heat or cold.¹² Emotion-focused coping is "aimed at ameliorating the negative emotions associated with the problem," examples include using distraction, seeking support from friends and family, or expressing feelings of worry or distress.¹² Self-regulation theory does not explicitly place higher value on one type of coping over another, although emotion-focused coping has been cast in a negative light or as maladaptive.^{13,14} This view conflicts with research demonstrating the adaptive effects of recognizing, processing, and expressing emotions.¹³ Furthermore, if the goal of self-regulation is to modulate thought, emotions, and behaviors, then both types of coping would be viewed as adaptive. To date there has been no research on self-regulation of pain among women with ovarian cancer.

Objectives

The purpose of this study was to better understand the self-regulation process of women experiencing pain associated with ovarian cancer or treatment. Specifically, the aims of the study were to 1) describe the types of problem- and emotion-focused coping strategies used; and 2) evaluate whether there was evidence of parallel processing in which a) women used a combination of both problem- and emotion-focused strategies and b) if problem-focused strategies were more closely associated with pain severity and pain consequences and emotion-focused strategies were more closely associated with pain distress.

Methods

Design

This report is a secondary analysis of a cross-sectional, descriptive study conducted via surveys mailed to women with ovarian cancer who were members of the National Ovarian Cancer Coalition (NOCC). The aims of the parent study were to describe the symptom experiences of women with ovarian cancer and to validate a modification of the well-established Illness Perception Questionnaire (IPQ) designed to assess cognitive and emotional representations of multiple symptoms.¹⁵

Sample

Eligibility criteria for the parent study included a history of ovarian cancer and 18 years of age. The parent study had a 35.3% response rate from 2,623 eligible individuals randomly selected from the NOCC membership database resulting in a sample of N=713 women with a history of ovarian cancer (e.g., active disease to long-term survivors). A complete description of the sampling methods is described in the publication of the parent study.¹⁵ Questionnaire instructions indicated they were to answer question about physical and emotional symptoms they experienced in the last week. Each woman completed severity scores for 22 symptoms that commonly occur as a result of ovarian cancer and/or ovarian cancer treatment. Fifty-five percent of participant in the parent study reported pain. Participants were then asked to identify the three symptoms she “noticed most” in the past week. This secondary analysis includes the subset of participants (N=162) who selected pain as a “most noticed” symptom in the past week. Identifying pain as one of three “most noticed” symptoms indicated that pain was a symptom they wished to focus on in the study. This study was granted exempt status by the Institutional Review Board at the University of Wisconsin and the University of Pittsburgh.

Measures

Demographic and clinical characteristics—Demographic (age, race, education, and income) and treatment characteristics were assessed through a self-report questionnaire. Survivorship status was determined using four separate parameters: current disease status (evidence of disease vs. no evidence of disease), history of recurrence (yes vs. no) time since primary treatment if no recurrences; and current treatment status (receiving vs. not receiving chemotherapy). The following survivorship categories were developed based on the likely similarity of symptoms that could be attributed to cancer or cancer treatments: 1) No evidence of disease, no recurrences, greater than five years since primary treatment; 2) No evidence of disease, no recurrences, less than five years since primary treatment; 3) No evidence of disease, at least one recurrence; 4) Evidence of disease or receiving chemotherapy for recurrent disease. Data regarding date of and stage at diagnosis were also collected for descriptive purposes.

Pain Experience—Pain Experience was assessed using the *Symptom Representation Questionnaire (SRQ)*, a theoretically derived instrument designed to assess participants' cognitive representations about cancer symptoms along five dimensions: *severity, cause, timeline, consequences*, and *controllability* as well as their *emotional response* to the

symptom (i.e. distress). The SRQ was adapted from the *Illness Perceptions Questionnaire (IPQ)*, a well-established measure used to assess cognitive representations of illness^{16,17} and includes 22 symptoms that commonly occur as a result of ovarian cancer and/or ovarian cancer treatment. The SRQ demonstrates acceptable construct validity, adequate internal consistency and test-retest reliability.¹⁵ In the parent study, the internal consistency reliability for individual subscales ranged from 0.67 – 0.88.¹⁵ Higher scores on each of the subscales indicate a more negative representation of pain. The total number of concurrent symptoms was determined by summing the symptoms that participants scored as one or higher on the symptom severity scales. The possible range is from 1 to 22.

Pain severity was assessed with a single item from the SRQ symptom list. The item asks participants to rate pain severity at its worst in the past week on a Numeric Rating Scale (NRS) with 0 (did not have the symptom) to 10 (as bad as I can imagine).

The *emotional response* (distress) subscale of the SRQ assesses the extent to which pain caused distress, worry, and ruminations. This subscale consists of three items. Response options are on a five point Likert scale from 0 = strongly disagree to 4 = strongly agree. The mean score of the three items is used in analyses. Internal consistency reliability for this study was .85.

The *consequences* subscale of the SRQ addresses the extent to which the pain had an effect on various aspects of the subject's life. This subscale consists of three items. Response options are on a five point Likert scale from 0 = strongly disagree to 4 = strongly agree. The mean of the three items is used in analyses. Internal consistency reliability for this study was .78.

Two *cause* questions were included to assess whether women believed that their pain was caused by their cancer or cancer treatments. Response options are on a five point Likert scale from 0 = strongly disagree to 4 = strongly agree. Responses were dichotomized into 0-3 (not caused by cancer or cancer treatments) and 4-5 (caused by cancer or cancer treatments)

Coping—Women are asked to recall the types of coping strategies they use within broad categories using *The Daily Coping Inventory (DCI)* which is a 9-item scale (table 1.) that assesses problem-focused and emotion-focused coping.¹⁸⁻²² The DCI was developed to capture broad categories of coping rather than specific strategies.²¹ The rationale being that recall of specific strategies biases toward problem-focused efforts and minimizes use of strategies that focus on the regulation of emotional. The DCI was originally characterized as covering across eight categories of coping with two items for planning and taking action.²² For this analysis planning and taking action were analyzed as separate activities. Factor analysis of the full sample in the parent study identified a factor structure of the two subscales. The *problem-focused* coping items included three items [manage symptom, planning, acceptance (a reverse coded item, meaning not simply accepting that pain would occur)]. The *emotion-focused* items included six items (distraction, relaxation, seeking social support, expressing emotions, reframing, and seeking spiritual support). Participants were asked to identify whether they did or thought anything over the past week to cope with their pain that fit into the listed types of strategies. Response options are yes or no.

Additional space was provided for participants to write in specifically what they did for that strategy. Coping scores were calculated three ways: 1) Presence or absence of use of each of the 9 DCI coping strategies, 2) total number of coping strategies used (i.e. the total number of yes responses for each DCI item), 3) subscale scores for problem-focused coping (0-3) and emotion-focused coping (0-6).

Statistical analyses

Descriptive statistics (mean, SD, median, range) were generated to describe sample characteristics and study variables. Pearson correlation scores were calculated to determine bi-variate relationships among coping scores, pain severity, pain distress, and consequences. T-tests were used to evaluate whether scores on the cognitive and emotional dimension differed between women who did or did not use each type of coping strategy. A significance level of .05 was shared by 27 comparisons to minimize Type 1 error. The resultant significance level for the t-test was set at $p < .0018$.

Results

Demographic and clinical characteristics

The sample ($N=162$) was comprised of predominately white, well-educated women with median age of 54 and a mean ($\pm$ SD) age of 53.7 (± 11.6) years. The majority ($>50\%$) of the women had no current evidence of disease and had no history of recurrence. The mean ($\pm$ SD) number of months since diagnosis was 59 (± 48.1) and ranged from 5 to 566 months. Women reported an average of 12.1 (± 4.4) concurrent symptoms (See table 2 for a summary of disease and personal characteristics.)

The mean ($\pm$ SD) pain severity was 5.5 (± 2.7) on a 0-10 NRS. Mean pain distress score was 2.2 (± 1.0) with a possible range of 0-4. The vast majority of women (96.9%) reported some level of distress associated with their pain. The mean pain consequences score was 2.19 (± 1.1) with a possible range of 0-4. Sixty-three percent of the sample attributed their pain to either their cancer or cancer treatments. There was no relationship between the number of months since diagnosis and women's beliefs about the cause of their pain.

Coping strategies

Women reported using an average of 4.6 (± 2.1) coping strategies for their pain. *Manage symptom* (i.e., "did something to manage the symptom") was the most frequently used coping strategy (76%), followed by *relaxation*, and *planning* (Figure). The total number of coping strategies used was significantly, positively correlated with pain severity, distress, and consequences, as well as number of concurrent symptoms (see Table 3). As severity, distress, and consequences went up so did the number of coping strategies reported. Cancer disease status was not associated with number of coping strategies.

Parallel processing

The majority of the sample (69%) reported using a mix of both problem-focused and emotion-focused coping strategies, whereas 10% reported use of only emotion-focused coping and 13% reported use of only problem-focused coping. Differences in pain severity,

consequences, and distress scores were evaluated between women who reported using each of the nine DCI coping strategies and those who did not use the strategy. In support of parallel processing, women who “actually did something to manage the symptom” were experiencing higher pain severity than those who did not and women who “expressed emotions in response to the symptom to reduce tension, anxiety, or frustration” and those “who sought or found emotional support from loved ones, friends, or professionals” were experiencing significantly higher pain distress than those who did not express emotions. Counter to expectations, women using each of these two types of emotion-focused coping strategies were experiencing higher pain consequences scores than those who did not express emotions. See table 4 for t-tests for between group differences for all nine DCI strategies.

Neither women's age nor months since diagnosis was associated with reported pain severity, pain distress, or pain consequences. No between group differences on survivorship status were found for pain severity, pain consequence, or coping strategies. ANOVA with Bonferroni post-hoc contrasts found women with *no evidence of disease >5 year* had lower pain distress than women *no evidence of disease <5 years, with no recurrence and evidence of disease*; but had similar levels as women with *no evidence of disease, with history of recurrence*.

Discussion

Pain is an ongoing problem for many women with a history of ovarian cancer and women continue to implement a wide range of strategies to cope with this persistent pain. The majority of participants were experiencing moderate levels of pain severity and distress after completion of treatments, for some up to five years post-cancer treatment. On average the women reported use of approximately five different strategies to cope with their pain and higher levels of pain severity, distress, and consequences was significantly, positively associated with the number of strategies used. Unfortunately, given the persistent severity of pain, it appears that women in this sample had difficulty achieving adequate pain management

One somewhat complex finding is that pain distress was lower for long-term survivors (i.e. greater than five years since primary treatment) and women with history of recurrence compared to the women with active disease and women who have not reached the five-year survivorship milestone but have no history of recurrence. A potential explanation for this finding is that women with active disease or in “early” survivorship who have not had a recurrence may believe that pain is an indicator of disease progression and therefore find it to be more distressing. In contrast, women who have reached the five-year milestone and those who have actually experienced a recurrence may have a less threatening perception associated with their pain experience.

In contrast, the other variables of interest (i.e., number of symptoms but not with pain severity, consequences, or number of coping strategies) were not associated with cancer disease status. This finding suggests that in terms of the cognitive dimension of the pain experience and use of coping strategies, patients with active disease and on treatment are

very similar patients who have completed treatment and are in remission or long-term survivors. This is the first study to evaluate the relationship between disease status and pain coping strategies.

With regard to specific types of coping strategies, strategies to actually “*Manage pain*” were the most common type of coping strategy, with over 70% of the sample reporting use of this strategy. This is consistent with other studies of coping with cancer pain.^{23,24}

There was partial support for parallel processing. The vast majority of women were using a combination of problem- and emotion- focused coping strategies. Problem-focused efforts are believed to reduce pain severity and its consequences. In this cross-sectional sample, use of direct pain management strategies were higher among women experiencing higher levels of pain severity. This supports the notion of parallel processing, reflecting women's problem-focused efforts to manage higher levels of pain. For the other problem-focused strategies, there were no differences in pain severity, distress, and consequences scores between women who used them and those who did not. The other problem-focused strategies include were *Planning* and *Non-Acceptance (refusing to accept that there is nothing to be done about the symptom)*. Similarly, in a study of women with breast cancer, no correlations were found between problem-focused coping and pain.²⁴ A possible explanation is that women with worse pain were attempting to actively do something to manage their pain such as take medications rather than using more cognitive coping strategies of planning to call the physician and refusing to accept that nothing can be done.

In contrast, emotion-focused coping was associated with distress (emotional) and consequences (cognitive) dimensions of the pain experience as well as the total number of symptoms experienced. Emotion-focused coping is believed to reduce the distress and other emotions associated with pain. *Expressed emotion* and *Emotional support* stand out as being significantly associated with higher pain distress and consequences. Although “consequences” has long been conceptualized as a cognitive dimension, in this sample, it appears to be associated with emotional responses. Similarly, in a study of coping strategies and pain in a sample of patients with various types of cancer, moderate to severe pain was associated with more emotion-focused coping strategies.²⁵ These findings are consistent with previous work describing strong associations between emotion-focused coping and distress^{13,26} and pain consequences.²⁴ One explanation is that during periods of stress when goals are blocked or threatened, the process of acknowledging, processing, and expressing emotions may help clarify, reinforce, or reframe goals and motivate action.²⁷ Emotional approaches to coping may lead to subsequent problem-focused forms of coping weeks or months later.

It is clear that the women in this study are not getting adequate control over their pain despite the wide range of both problem-focused and emotion-focused efforts to do so. The women included in this analysis selected pain as one of their most noticed symptoms whereas other women in the parent study who were not included in this analysis may have been experiencing pain as well but did not identify it as one of their “most noticed symptoms”. The women in this analysis may have been experiencing worse pain than the other women who did not choose pain as their one of most noticed symptoms; or

alternatively, the women in this analysis may have been struggling to find an effective coping strategy or combination of strategies to manage similar levels of pain to other women in the parent study.

Limitations

Limitations of this study must be noted. A cross-sectional design makes it difficult to determine if worse pain severity, distress, and consequences are driving coping efforts or are the results of ineffective coping efforts. A focus on women with ovarian cancer may be seen as providing limited generalizability. However, the etiology and treatment options for pain are very similar across oncology populations suggesting that the relationships between pain and coping may be similar across oncology populations as well. In addition, while the majority of these women attribute their pain to cancer and/or its treatments, we did not have medical record documentation that their pain was the result of the cancer. Interestingly, there was no relationship between time since diagnosis and women's beliefs about the cause of their pain. Persistent pain and late effect pain syndromes related to cancer treatment are well-known, 30-60% of cancer survivors reporting some pain^{28,29} and up to 10% reporting severe pain that interferes with functioning.³⁰ In fact, it is possible that additional long-term survivors in this dataset had unrecognized late effects of cancer treatment which they did not attribute to their cancer in the survey. While the lack of documented evidence of the cause of the pain is a noted limitation, the coping strategies evaluated in this study are not limited to strategies only known to be effective in cancer-related pain.

There also may be a potential for sample bias as recruitment for this was through the NOCC, a voluntary, advocacy organization. Women in this study were approximately 10 years younger than the median age of ovarian cancer survivors nationally.¹ Participants who choose to join such an organization may be younger, more pro-active in their coping efforts than are participants who do not join. Another limitation is that the DCI may under-estimate the actual coping efforts participants utilize because it asks broad questions about the type of coping the woman uses to deal with her pain. Thus, it depends on recall of effort rather than using an extensive list of specific coping strategies to which the women could respond yes or no. In addition, the overall coping score was a sum of coping strategies, which presumes that more different strategies equals more coping. Use of the DCI in this way does not reflect the experience of participants who cope well by using one or two highly effective strategies. Finally, the methodology of asking women to identify their most noticed symptoms and the coping strategies used to manage those symptoms prohibited a comparison of coping strategies used by women with well controlled pain with those used by women did not have well controlled pain.

Conclusions

From these results it is clear that emotional and cognitive dimensions of the pain experience are associated with use of multiple coping strategies for women with ovarian cancer. The psychological or physiological mechanisms underlying these relationships are not clear. A number of future research questions should be addressed: Do certain pain dimensions (i.e., increased severity, distress, consequences) drive coping (e.g., using more strategies or

different strategies)? How are specific coping strategies associated with pain severity, pain distress, and consequences with life? Are there differences in the pain experience if patients use more strategies and/or certain coping approaches (i.e., problem-focused, emotion-focused)? Would the pattern of coping differ for women who are achieving good pain management? Are women more likely to stick with one good problem-focused strategy once they find one? Questions about the relative value of problem-focused or emotion-focused coping may not necessarily advance the science as each type of coping may serve a different purpose. Longitudinal research is needed to determine the causal relationship between pain and coping. Improved understanding of the relationship between coping and cancer pain may lead to refining and testing personalized pain management interventions that leverage specific approaches to coping.

With regard to clinical implications for women with pain from cancer, the relative benefits of the two types of coping are not clear. In response to the ongoing debate about problem-focused coping versus emotion-focused coping, Lazarus noted, that an error in our collective thinking has occurred resulting in pitting problem-focused and emotion-focused against each other.²⁷ Frequent assessment of multiple dimensions of pain and the use of various coping strategies as well as follow up questions as to how well those strategies are working may provide the clinician with important insights into how their patients are coping with cancer pain and what changes are needed in the pain care plan. Clinicians should recommend that women trial a range of coping strategies – both problem-focused and emotion-focused – to identify the strategies that work best for them. This will provide women with a variety of skills to address both the physical and emotional aspects of cancer pain.

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Figure. Percentage of women with a history of ovarian cancer reporting use of each coping strategy for self-reported cancer pain

Table 1
Daily Coping Inventory Items and Associated Label

Coping Approach	Strategy Label	Daily Coping Inventory Items
Emotion-focused	Distraction	Diverted attention away from the symptom by thinking about other things or engaging in some activity.
	Reframing	Tried to see the symptom in a different light that made it seem more bearable.
	Expressed emotions	Expressed emotions in response to the symptom to reduce tension, anxiety, or frustration.
	Emotional support	Sought or found emotional support from loved ones, friends, or professionals.
	Relaxation	Did something to relax.
	Spiritual support	Sought or found spiritual comfort and support.
Problem-focused	Planning	Thought about ways to manage the symptom, or gathered information about ways to manage it.
	Manage symptom	Actually did something to manage the symptom.
	Acceptance	Accepted that the symptom had occurred, but that nothing could be done about it. (reverse scored)

Table 2
Sample Characteristics (N=162)

Personal and Disease Characteristics	
	Mean (SD)
Age in years	53.7 (± 11.6)
Number of concurrent symptoms (0 to 22)	12.1 (± 4.4)
Pain severity (0 to 10 NRS)	5.5 (± 2.7)
Distress	2.2 (± 1.0)
Consequences	4.1 (± 2.6)
Number of coping strategies	4.6 (± 2.1)
	N (%)
Race/Ethnicity	
White	150 (92.6%)
All others	12 (7.4%)
Education Level	
Some high school	5 (3.1%)
High school graduate	18 (11.1%)
Some college	69 (42.6%)
College graduate	34 (21.0%)
Post-graduate	36 (22.2%)
Survivorship Status	
No evidence of disease, no recurrences, > 5 years since primary treatment	24 (14.7%)
No evidence of disease, no recurrences, < 5 years since primary treatment	59 (36.2%)
No evidence of disease, at least 1 recurrences, < 5 years since last treatment	12 (7.4%)
Evidence of disease or active treatment	67 (41.7%)

NRS, numeric rating scale

Table 3

Pearson Correlations

	Pain Severity	Pain Distress	Pain Consequences	Number of Coping Strategies	Emotion-Focused Coping	Problem-Focused Coping	Number of Concurrent Symptoms
Severity	1						
Distress	.464^a	1					
Consequences	.550^a	.701^a	1				
Number of coping strategies	.276^a	.382^a	.324^a	1			
Emotion-focused coping	.917^b	.333^a	.324^a	.937^a	1		
Problem-focused coping	.184^b	.037	.200*	.353^a	.225^a	1	
Number of concurrent symptoms	.509^a	.451^a	.404^a	.319^a	.264^a	.104	1

^aCorrelation is significant at the 0.01 level (2-tailed)

Table 4
Differences in Pain Severity, Distress, and Consequences Scores by Use of 9 Coping Strategies

	Pain Distress			Pain Consequences			Pain Severity		
	Mean (±SD)	t-test (df)	p-value	Mean (±SD)	t-test (df)	p-value	Mean (±SD)	t-test (df)	p-value
Distraction	Yes 2.3 (±1.0)	-1.8 (149)	p=0.08	Yes 2.3 (±1.0)	-1.29 (147)	p=0.20	Yes 5.6 (±2.7)	-0.72 (150)	p=0.47
	No 2.0 (±1.1)			No 2.1 (±1.1)			No 5.3 (±2.8)		
Reframing	Yes 2.3 (±1.1)	-0.69 (149)	p=0.49	Yes 2.3 (±1.1)	-0.78 (147)	p=0.44	Yes 5.8 (±2.6)	-0.55 (150)	p=0.59
	No 2.2 (±1.0)			No 2.2 (±1.1)			No 5.5 (±2.8)		
Expressed emotions	Yes 2.8 (±0.8)	-5.4 (146)	p=0.000	Yes 2.7 (±0.8)	-4.8 (144)	p=0.000	Yes 6.2 (±2.6)	-2.1 (147)	p=0.04
	No 1.9 (±1.0)			No 1.9 (±1.1)			No 5.2 (±2.7)		
Emotional support	Yes 2.5 (±0.9)	-3.3 (149)	p=0.001	Yes 2.6 (±0.9)	-4.7 (147)	p=0.000	Yes 6.0 (±2.9)	-1.8 (150)	p=0.07
	No 1.9 (±1.0)			No 1.8 (±1.1)			No 5.2 (±2.6)		
Relaxation	Yes 2.3 (±1.0)	-1.7 (149)	p=0.90	Yes 2.3 (±1.0)	-1.1 (147)	p=0.30	Yes 5.7 (±2.6)	-1.2 (150)	p=0.24
	No 2.0 (±1.1)			No 2.0 (±1.2)			No 5.1 (±3.1)		
Spiritual support	Yes 2.4 (±1.0)	-2.5 (151)	p=0.01	Yes 2.3 (±1.0)	-1.9 (149)	p=0.057	Yes 5.9 (±2.7)	-1.7 (152)	p=0.09
	No 2.0 (±1.0)			No 2.0 (±1.0)			No 5.1 (±2.8)		
Planning	Yes 2.3 (±1.0)	-0.6 (149)	p=0.54	Yes 2.3 (±0.9)	-1.9 (147)	p=0.52	Yes 5.9 (±2.8)	-1.9 (150)	p=0.06
	No 2.1 (±1.1)			No 1.9 (±1.1)			No 5.0 (±2.6)		
Manage symptom	Yes 2.3 (±0.9)	-2.2 (148)	p=0.03	Yes 2.3 (±1.0)	-2.6 (146)	p=0.02	Yes 6.0 (±2.7)	-3.6 (149)	p=0.000
	No 1.9 (±1.0)			No 1.8 (±1.2)			No 4.2 (±2.6)		
Acceptance	Yes 2.4 (±0.9)	-1.7 (148)	p=0.90	Yes 2.1 (±1.1)	-0.7 (146)	p=0.50	Yes 5.5 (±2.8)	0.16 (148)	p=0.87
	No 2.1 (±1.0)			No 2.2 (±1.1)			No 5.5 (±2.8)		