Published in final edited form as:

Psychooncology. 2015 September ; 24(9): 1189–1196. doi:10.1002/pon.3737.

Emotion Episodes during Psychotherapy Sessions among Women Newly Diagnosed with Gynecological Cancers

Shannon Myers Virtue, Psy.D.^a, Sharon L. Manne, Ph.D.^a, Kathleen O'Neill, M.S.^a, Carolyn J. Heckman, Ph.D.^b, Melissa Ozga, D.O.^c, David Kissane, M.D.^{c,f}, Stephen Rubin, M.D.^d, and Norman Rosenblum, M.D.^e

^aDepartment of Medical Oncology, Rutgers Cancer Institute of New Jersey, New Brunswick, NJ

^bCancer Prevention and Control Program, Fox Chase Cancer Center, Philadelphia, PA

^cDepartment of Psychiatry and Behavioral Sciences, Memorial Sloan-Kettering Cancer Center, New York, NY

^dDepartment of Gynecologic Oncology, Fox Chase Cancer Center, Philadelphia, PA

^eDepartment of Gynecologic Oncology, Jefferson University Hospital, Philadelphia, PA

^fDepartment of Psychiatry, Monash University, VIC, Australia

Abstract

Objective—To describe emotion episodes during early and late psychotherapy sessions among women newly diagnosed with gynecological cancer and to examine whether the total number of emotional episodes during early and later sessions were associated with baseline psychological distress, dispositional emotion expressivity, and patient-rated therapeutic progress.

Methods—The study utilized data from an ongoing study examining the efficacy of two psychotherapy interventions, a coping and communication intervention (CCI) and a supportive counseling intervention (SC), for women diagnosed with gynecological cancer. Emotion episode coding was completed for the first and sixth psychotherapy session for each patient randomized to receive psychotherapy (N = 173). Patients completed baseline survey measures of psychological distress and dispositional emotional expressivity and post-session ratings of therapeutic progress.

Results—The average number of emotion episodes was 7.4 in the first session and 5.2 episodes in the sixth session. In both sessions, the majority of emotion episodes contained only negative emotions and focused on a cancer-related topic. A higher number of emotion episodes in the first session was associated with higher psychological distress reported in the baseline survey ($p = .02$). A higher number of emotions episodes in the sixth session was associated with a higher number of emotion episodes in the first session ($p < .001$) and higher patient-rated progress as rated in the sixth session ($p = .016$).

Conclusion—The findings highlight the importance of expressed emotions, particularly negative emotions about cancer-related topics, in therapeutic progress during psychotherapy among women diagnosed with gynecological cancer.

Keywords

cancer; oncology; psychotherapy; emotion expression

Gynecological cancer presents challenges related to difficult treatment regimens, adverse side effects, and poor prognosis [1–3]. Some women experience a need for psychotherapeutic interventions [4] due to significant anxiety, depression, and/or fear of recurrence [5,6]. Emotional expression is an adaptive coping strategy [7,8] and a fundamental element of effective psychotherapeutic interventions for cancer patients [9]. Dialectical-constructivist theory suggests that emotional expression is important to successful psychotherapeutic change and can help patients create meaning, identify goals, resolve inner struggles, and perceive feelings as less frightening [10–12]. Psychotherapy interventions that help patients experience and understand emotions are effective in the treatment of depression [13], trauma [14], and marital distress [15]. Additionally, evidence suggests that emotional expression plays a role in the effectiveness of less emotion-based therapies, such as cognitive-behavioral therapies [16]. Despite the adaptive function of emotional expression among cancer patients [7, 8] and its role in the effectiveness of psychotherapy [10], little is known about emotional expression during individual psychotherapy with cancer patients. Key question are: How much do patients express emotions? What types of emotions are expressed? Are emotions focused on the cancer experience? Are emotions associated with therapy progress?

In the present study we use ‘Emotion Episodes’ as an indicator of emotional expression in psychotherapy. Emotion episodes are utilized in psychotherapy process research as a unit of coding and analysis [17,18]. An emotion episode is a segment of psychotherapy during which a patient expresses an emotion, or emotions, in response to a situation. Identifying emotion episodes provides information about the frequency, types, and content of emotions. The coding system can be utilized to better understand emotional expression among cancer patients within an individual psychotherapeutic context.

The present study described emotion episodes during individual psychotherapy among gynecological cancer patients participating in a research trial examining the efficacy of two psychotherapy interventions, a Coping and Communication intervention (CCI) and a Supportive Counseling intervention (SC). The majority of psychotherapy research involving emotional expression has focused on non-medical populations [19]. Cancer research has focused on written emotional expression [20], online support groups [21], or group psychotherapy [22,23]. This study is the first to utilize emotion episode coding among cancer patients during individual psychotherapy.

The study had two aims. The first aim was to describe emotion episodes by total emotion episodes per session, types of emotions (e.g., fear, joy), proportion containing only positive, only negative, or both positive and negative emotions (mixed emotion), and the content (i.e., cancer-related or not). This exploratory aim didn’t have specific hypotheses. Comparisons

were made between an early (first) and later (sixth) session and the two interventions on total emotion episodes, proportion of positive, negative, and mixed emotion episodes, and proportion of cancer-related emotion episodes. Prior research with non-cancer populations found a decrease in total emotion episodes across sessions [19]. We hypothesized a decrease from the first to the sixth session. Since the SC intervention utilized more emotion-focused techniques, we hypothesized more total emotion episodes, but no differences in types or content.

The second aim was to examine correlates of total emotion episodes. First, we examined demographic, medical, and session-related (i.e., session length) variables. Prior research on written emotional disclosure among gynecological cancer patients suggests that demographic and medical characteristics are not associated with emotions expressed [20]. Therefore, we hypothesized that demographic and medical variables wouldn't be associated with total emotion episodes. We hypothesized that longer session length would be associated with more total emotion episodes. Second, we examined whether total emotion episodes were related to baseline psychological factors (i.e., cancer-related distress, dispositional expressivity) and post-session ratings (i.e., patient-rated session progress) after controlling for significant demographic, medical, and session-related correlates. Prior research suggested that psychological distress [24] and dispositional expressivity [25] are associated with more emotional expression. We hypothesized that greater cancer-related distress and dispositional expressivity would be associated with more total emotion episodes. Dialectical-constructivist theory suggests that emotional expression is a component of successful change in psychotherapy [10–12]. There is evidence that individuals perceive emotional expression about a difficult experience (e.g., “catharsis”) as beneficial [27–28]. Therefore, we hypothesized that more total emotion episodes would be associated with higher patient-rated session progress after each session.

Method

Participants and Procedures

The current study utilized baseline and psychotherapy data from an ongoing, multi-site randomized clinical trial (RCT) evaluating the efficacy of two individual psychotherapy interventions, a Coping and Communication Intervention (CCI) versus a Supportive Counseling Intervention (SC), and Usual Care (UC) (unpublished data). Both psychotherapy interventions consisted of seven one-hour in-person psychotherapy sessions and an eighth telephone booster session. Inclusion criteria for the RCT were: 1) 18 years, 2) diagnosed with gynecological cancer within the past six months at the time of recruitment, 3) Karnofsky Performance Status ≥ 80 or Eastern Cooperative Oncology Group (ECOG) score 1, 4) lived within two-hour commuting distance from recruitment center, 5) English speaking, and 6) no hearing impairment. Research assistants at each site identified eligible women, mailed a letter describing the study, and contacted them in person or by phone to explain the study. Interested women signed an informed consent document approved by the Institutional Review Board at each site, completed a baseline survey, and were randomly assigned to one of the three conditions. Participants were paid \$15 for the baseline survey. Participants in the psychotherapy conditions were paid for each session attended in

increasing increments, for a total of \$215 for all seven in-person sessions. Sessions were video and/or audio recorded. Procedures were approved by the IRB at each site and explained to women during informed consent.

The study included participants in the psychotherapy conditions ($N = 173$). The mean age was 54.7 years ($SD = 10.3$). The majority was Caucasian (83%), married (64%), and had graduated college (69%). The most common diagnosis was ovarian (59%) and the majority was diagnosed with advanced stage disease (66%). There were no significant differences between women in the CCI ($N = 87$) and SC ($N = 86$) conditions and the usual care condition (not included in the present study). Sample characteristics are in Table 1.

Psychotherapy data were obtained from the first and sixth sessions. While sessions were intended to be one hour, there was variability due to uncontrollable factors (e.g., therapist going over time, patient leaving for medical treatment). Across both interventions, the average session length was 63 minutes ($SD = 9.6$) and 64 minutes ($SD = 7.9$) for the first and sixth session. Due to comprehensive structured content, session length was significantly longer in CCI (First session: $M = 64.42$, $SD = 11.02$; Sixth session: $M = 67.63$, $SD = 8.4$) than SC (First session: $M = 60.14$, $SD = 7.1$; Sixth session: $M = 59.83$, $SD = 5.01$) for the first ($t(169) = -3.72$, $p < .001$) and sixth ($t(145) = -6.75$, $p < .001$) session. Of the 173 women who attended the first session, 152 (88%) attended the sixth. Three women (14%) died prior to the sixth session, two (9%) were too ill, three (14%) cited scheduling conflicts, four (19%) were no longer interested in sessions, and nine (43%) did not provide reason.

CCI session content was structured and focused on enhancing coping and communication skills related to the cancer experience (e.g., relaxation skills, communication skills). Sessions included didactic content, in-session exercises, and home practice assignments. Techniques were based on cognitive-behavioral interventions (e.g., cognitive restructuring, behavioral tasks). SC session content focused on enhancing psychological adaptation within a supportive context. Techniques were based on supportive counseling [29] and emotion-focused therapy [30] and included empathy, reflection, exploration of experience, and encouragement of emotional expression. Skill training was not conducted. Manuals are available from (second author). Therapists were extensively trained and 1:1 supervision for every session was provided. Therapists were social workers ($n = 17$), doctoral-level psychologists ($n = 14$), masters-level counselors ($n = 6$), advanced psychology doctoral students ($n = 5$), and psychiatrists ($n = 4$).

Baseline Measures

Demographic and medical data—Demographic information was obtained on the baseline survey. Medical chart review captured primary cancer diagnosis, stage, type of treatment, and time from diagnosis.

Cancer-specific distress—The Impact of Events Scale (IES) [31] assessed psychological distress related to the cancer. The 15-item scale assesses the frequency and severity of intrusive thoughts and feelings about cancer and efforts to avoid reminders of the cancer experience. Items are rated on a 6-point Likert scale ranging from 0 (*not at all*) to 5 (*often*). The total score is calculated, ranging from 0–75 with higher scores indicating greater

cancer-specific distress. Sample items include “I tried to remove it from memory” and “Other things kept making me think about it”. The scale has been utilized with cancer patients [32]. $\alpha = .89$.

Dispositional expressivity—The Emotional Expressiveness Questionnaire (EEQ) [33] assessed characteristic tendency to express positive and negative emotions. The 16-item scale is rated on a 5-point Likert scale ranging from 0 (*never*) to 4 (*always*). The total score is calculated ranging from 0–64 with higher scores indicating greater emotional expressivity. Sample items include “I often tell people that I love them” and “When I am angry, people around me usually know.” The scale has been used with this population [8]. $\alpha = .71$.

Post-Session Measures

Patient-rated session progress—Patients rated five items on a 6 or 7-point Likert scale. The items evaluated overall perception of the session, perceived progress, therapist helpfulness, degree to which the patient experienced a shift, and degree to which the patient would take a new course of action as a result of the session. A total score was calculated by summing the five items. Total score ranged from 5–33 with higher scores indicating greater patient-rated progress. A sample item is “To what degree do you feel you have experienced a change or shift as a result of this session?” (1 = *no change or shift*; 7 = *complete change or shift*). Items were based on the Therapy Session Questionnaire [34] and have demonstrated adequate psychometric properties in prior work [35]. $\alpha = .69$ (first session) and $\alpha = .82$ (sixth session).

Psychotherapy Process Measures

Emotion episodes—The Emotion Episode coding system [17,18] was utilized. The coding captured the emotional response(s) and situation during the emotion episode. An emotion episode can contain multiple emotional responses to a situation (i.e., a patient can express fear and sadness in response to a situation). The emotional response is categorized into six basic emotions (e.g., love, joy, fear, anger, sadness, and guilt/shame). The coding system has been utilized in prior psychotherapy research and inter-rater agreement of emotion episode selection has been strong (98%) [19]. For study purposes, emotion episodes types were categorized as negative (i.e., expressed only negative emotions), positive (i.e., expressed only positive emotions), and mixed (i.e., expressed both a positive and negative emotion in the episode). Situations were categorized as cancer-related (i.e., pertaining to the cancer diagnosis, treatment, or impact) or not. Training in emotion episode coding was provided prior to and throughout the study. An extensively trained masters-level research assistant completed the coding via the video/audio session recordings. A second doctoral-level researcher coded one-third of the tapes. Emotion episode codes were compared for agreement. Raters were considered in agreement when all of the following criteria were met: 1) both identified the emotion episode, 2) the categorization of the emotion episode (i.e., positive, negative, or mixed) was the same, 3) the identified situation in the emotion episode was the same, and 4) the categorization of the situation (i.e., cancer-related vs. not) was the same. Discrepancy in any one of these areas was considered disagreement. Discrepancies were discussed in order to reach a consensus. Agreement between the raters was 93%.

Statistical Analyses

Data were analyzed utilizing Statistical Package for Social Sciences (SPSS). To address the first aim, we calculated descriptive data for each session on total number of emotion episodes, total emotion episodes containing the six basic emotions (e.g., fear, joy), proportion of positive emotion episodes, negative emotion episodes, and mixed emotion episodes, and proportion of cancer-related emotion episodes. Change in total emotion episodes between the first and sixth sessions was calculated by subtracting the first session total from the sixth. Positive values represented an increase. We compared the first and the sixth session on total number of emotion episodes, proportion of positive, negative, and mixed episodes, and proportion of cancer-related episodes utilizing paired sample *t*-test. We compared the CCI and SC interventions on total number of emotion episodes, proportion of positive, negative, and mixed episodes, and proportion of cancer-related episodes utilizing *t*-tests. To address the second aim regression analyses were conducted. First, we conducted preliminary correlational analyses to determine whether total emotion episodes correlated with any demographic, medical, or session variables. Variables significantly ($p < .05$) related to total emotion episodes were included in subsequent analyses. Second, we conducted hierarchical regression analyses for the first and sixth session separately. The dependent variable was total emotion episodes. The first step included demographic, medical, or session variables significantly correlated with total emotion episodes. The second step included baseline survey psychological variables. The final step included patient-rated session progress.

Results

Description of Emotion Episodes

There was at least one emotion episode in 324 of the 325 sessions (99.7%). Only one session (0.3%) did not contain any emotion episodes. Total emotion episodes in this study was significantly lower compared to a prior study of experiential therapy for individuals with depression ($t(202) = 6.97, p < .001$) [19].

First session—The average total emotion episodes in the first session was 7.4 ($SD = 3.8$; Range 1–20). The majority of episodes (77%) contained only negative emotions. The remaining were positive (17%) and mixed (5%). The most common emotion was fear, with patients expressing fear during 3.1 ($SD = 2.4$) episodes, followed by sadness ($M = 2.4, SD = 2.6$) and joy ($M = 1.5, SD = 1.5$). The least common emotion was love ($M = 0.2, SD = 0.5$). The majority of episodes (66%) focused on cancer-related topics.

Sixth session—The average total emotion episodes in the sixth session was 5.2 ($SD = 2.7$; Range = 0–14). The majority of episodes (74%) contained only negative emotions. The remaining were positive (21%) and mixed (5%). The most common emotion was fear, with patients expressing fear during 2.4 ($SD = 1.9$) episodes, followed by joy ($M = 1.2, SD = 1.2$) and sadness ($M = 1.2, SD = 1.4$). The least common emotion was love ($M = 0.1, SD = 0.5$). Approximately half (56%) were cancer-related.

Change in Emotion Episodes across sessions—Total emotion episodes was significantly higher in the first session than the sixth ($t(150) = 7.15, p < .001$; 95% CI 1.65–2.91). Among the 152 women who attended the sixth session, 63% had a decrease in total emotion episodes, 29% had an increase, and 7% had no change. The proportion of positive emotion episodes increased significantly from the first (17%) to the sixth (21%) session ($t(150) = -2.42, p = .017$; 95% CI $-.09$ – $-.01$). The proportion of cancer-related emotion episodes decreased significantly from the first (65%) to the sixth (55%) session ($t(150) = 3.37, p = .001$; 95% CI $.04$ – $.16$). The change in total emotion episodes was not correlated with any baseline survey or post-session variables.

Comparison between interventions—In the first session, there were no significant differences between SC and CCI. In the sixth session, there were more total number of emotion episodes in SC than CCI ($t(150) = 2.77, p = .006$; 95% CI $.35$ – 2.06). In CCI, there was a greater proportion of negative emotion episodes ($t(150) = -2.01, p = .046$; 95% CI $-.17$ – $-.01$) and cancer-related emotion episodes ($t(150) = -3.17, p = .002$; 95% CI $-.23$ – $-.05$). See Table 2 for description of emotion episodes.

Regression Analyses Examining Correlates of Total Emotion Episodes

First session—Preliminary analyses indicated that total emotion episodes was significantly correlated with longer session length ($r = .25, p = .001$), but no additional demographic or medical variables. Thus, session length was included in subsequent analyses. The overall regression model was significant $F(4, 162) = 3.59, p = .008$. Session length, greater baseline survey distress, higher dispositional expressivity, and higher patient-rated session progress, as a set, accounted for 6% of the variance in total emotion episodes in the first session (Adjusted $R^2 = .06$). In terms of individual predictors, longer session length ($\beta = .23, p = .004$; 95% CI $.031$ – $.16$) and greater distress ($\beta = .18, p = .02$; 95% CI $.007$ – $.08$) were associated with more total emotion episodes.

Sixth session—Preliminary analyses indicated that total emotion episodes was significantly correlated with longer session length ($r = .18, p = .031$), more first session total emotion episodes ($r = .37, p < .001$), and SC intervention ($t(150) = 2.77, p = .006$). These variables were included in subsequent analyses. The overall regression model was significant $F(6, 139) = 10.76, p < .001$. First session total emotion episodes, session length, SC intervention, baseline distress, dispositional expressivity, and patient-rated progress, as a set, accounted for 29.6% of total emotion episodes (Adjusted $R^2 = .296$). In terms of individual predictors, longer session length ($\beta = .35, p < .001$; 95% CI $.06$ – $.19$), more first session total emotion episodes ($\beta = .36, p < .001$; 95% CI $.14$ – $.34$), SC intervention ($\beta = -.46, p < .001$; 95% CI -3.4 – -1.6), and greater patient-rated progress ($\beta = .18, p = .016$; 95% CI $.019$ – $.18$) were associated with more total emotion episodes.

Discussion

The study utilized a novel approach, the application of the Emotion Episode coding system [17, 18], to describe emotional expression during individual psychotherapy among gynecological cancer patients. With regard to the first aim, there were four main descriptive

findings. First, gynecological cancer patients experience at least one emotion episode in the majority of early and late sessions. Second, the majority of emotion episodes focus on negative emotions and relate to a cancer-related topic. Third, there was a decrease in total emotion episodes across sessions, an increase in the proportion of positive emotion episodes and a decrease in the proportion cancer-related emotion episodes, which was partially consistent with hypotheses. Fourth, there were more total emotion episodes in SC than CCI, but only in the sixth session, which was partially consistent with hypotheses. There was a greater proportion of negative and cancer-related emotion episodes in CCI for the sixth session, which was not predicted. With regard to the second aim, some variables emerged as correlates of total emotion episodes. Total emotion episodes were not related to demographic or medical variables. Longer sessions were associated with more emotion episodes. Greater distress was associated with more emotion episodes in the first session. Dispositional expressivity was not associated with total emotion episodes. Greater total emotion episodes was related to greater patient-rated session progress in the sixth session. These correlational findings are partially consistent with hypotheses.

The findings suggest that gynecological cancer patients express emotions during individual psychotherapy, with a decrease across sessions, consistent with prior research [19]. There were fewer emotion episodes in this study compared to a study of experiential therapy for individuals with depression [19]. A possible reason is that Pos' study [19] included only individuals meeting diagnostic criteria for major depressive disorder. Existing research suggested that psychological distress is related to more frequent emotional expression during psychotherapy [24]. Individuals diagnosed with major depression may experience high levels of psychological distress and be more apt to express emotions. While we did not utilize psychiatric diagnostic interview to determine the prevalence of major depression, our sample may have been less distressed which may have, contributed to fewer emotion episodes. Another possible explanation is the different psychotherapy modalities. In Pos and colleagues' study therapists were trained to identify specific emotional markers [19]. The main focus in our sessions was not identifying emotions, particularly in CCI. Indeed, here was evidence that in SC, which involved more exploration of emotions, there were more total emotion episodes in the sixth session. In psychotherapy aimed explicitly at processing emotions, such as emotion-focused therapy [35], there may be more total emotion episodes.

In terms of types and content of emotion episodes, the majority of episodes were negative and focused on cancer. This is not surprising given the women were newly diagnosed with gynecological cancer. Fear was the most common emotion, consistent with prior research on cancer patients' emotional expression during online support groups [21] and evidence that gynecological cancer patients experience significant fear [36]. However, patients also expressed positive emotions. The proportion of positive emotions increased across sessions. While research suggests that negative emotions are important to psychotherapeutic change [17], there has been recent emphasis on positive emotions in psychological adaptation [37,38]. Indeed, expression of positive and negative emotions during online and in-person support groups among cancer patients has been beneficial [39, 40].

In terms of correlates, demographic and medical variables were not related to total emotion episodes. Women reporting more baseline distress had greater total emotion episodes and

more cancer-related emotion episodes during the first session. Consistent with the goal of therapy, sessions are a safe environment to express negative feelings about the cancer experience. Surprisingly, women who described themselves as more emotionally expressive did not have more total emotion episodes. Dispositional expressivity may not be indicative of the degree to which cancer patients express emotions during psychotherapy. However, first session total emotion episodes was associated with sixth session total emotion episodes, suggesting there may be factors that were not assessed that allow some women to have more emotion episodes during psychotherapy, such as therapeutic alliance.

More total emotion episodes was associated with greater perceived progress after the sixth session. The relationship remained significant after accounting for session length, type of intervention, and baseline psychological variables. This finding is partially consistent with our prediction and research suggesting that patients perceive benefit in expressing emotions related to difficult experiences [27]. First session total emotion episodes was not related to perceived progress. Dialectical-constructivist theory suggests that emotional expression facilitates psychotherapeutic change [10,11] which would suggest a relationship between total emotion episodes and session progress. However, patients' perceptions of progress may differ from other measures of psychotherapeutic progress. Indeed, college students who expressed emotions about a difficult event reported perceived benefit, but survey measures found no psychosocial improvement [27]. It is possible that total emotion episodes during the first session may be associated with other measures of progress. It is also likely that significant progress would be considered premature in the first session. Further research is needed to better understand factors that play a role in the therapeutic benefit of emotion episodes for cancer patients.

There are study limitations. First, factors that were not included may influence the role of emotional expression during psychotherapy, such as therapists' responses to emotion episodes (e.g., empathy). Second, the study focused on the first and sixth sessions. It is possible that emotional expression varies across middle sessions. Third, the study utilized data from women participating in a psychotherapy research trial. It is possible that there are factors that differentiate these women from those who seek psychotherapy outside of a research context. Finally, the study did not examine long-term psychological outcomes after treatment was completed since it was part of a larger, ongoing study.

This study has important clinical implications. Facilitating emotional expression may be important component of therapy because gynecological cancer patients have emotion episodes during sessions and total emotions episodes was correlated with patient-perceived session progress. According to dialectical-constructivist theory, the psychotherapeutic benefit of emotion involves experiencing and tolerating emotion, exploring beliefs about emotion, and creating adaptive meaning [10, 19]. Therapists working from this framework may consider how those tasks could be incorporated. Given the frequency of cancer-related emotion episodes during the first session, it may be important for therapists interested in utilizing emotional expression as a vehicle of adaptation to lay this framework early. Given the increase in positive emotions, and evidence positive emotions play a role in psychological adaptation [39], therapists may consider how to utilize these opportunities to promote psychotherapeutic progress.

Acknowledgments

This work was funded by NIH grant R01 xxx to the second author.

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Table I

Baseline characteristics of study sample. (N = 173).

Variable	N	(%)	M (SD)
Demographic Variables			
Age			54.7 (10.3)
Household Income			\$150,000
Marital Status			
Married	110	64	
Not Married	60	35	
Race			
Caucasian/White	144	83	
African-American/Black	18	10	
Hispanic/Latino	3	2	
Asian/Pacific Islander	3	2	
Other	5	3	
Education			
< High School	5	3	
High School Diploma/GED	22	13	
Some College/Trade School	27	15	
College Degree	54	32	
Graduate/Professional Degree	64	37	
Medical Variables			
Primary Cancer			
Ovarian	102	59	
Endometrial/Uterine	44	25	
Fallopian Tube	10	6	
Cervical	6	4	
Peritoneal	4	2	
More than one	6	4	
Stage			
I	34	20	
II	17	10	
III	83	48	
IV	32	18	
Not Staged	7	4	
Metastatic Sites			
Yes	101	59	
No	71	41	
Time from Diagnosis [months]			3.7 (1.6)
Receiving Chemotherapy			
Yes	148	87	
No	19	11	

Variable	<i>N</i>	(%)	<i>M</i> (SD)
Functional Impairment [CARES]			33.6 (20.2)
Psychological Variables			
Impact of Events Scale [IES]			29.1 (16.2)
Emotional Expressiveness Questionnaire [EEQ]			41.1 (7.0)

Table II

Descriptive analyses of emotion episodes.

Emotion Episode Data	Total Sample N = 173	SC Intervention N = 86	CCI Intervention N = 87	Comparison between CCI and SC <i>t</i> (<i>p</i>)
Session One (N = 173)				
Total Emotion Episodes (<i>M</i> , <i>SD</i>)	7.4 (3.8)	7.3 (3.5)	7.6 (4.1)	-.47 (.636)
Type of Emotion (%)				
Negative	77%	75%	79.5%	-1.31 (.192)
Positive	17%	19.5%	15%	1.57 (.119)
Mixed	5%	5.5%	4.5%	0.57 (.567)
Content (%)				
Cancer-related	66%	62%	69%	-1.93 (.06)
Non cancer-related	34%	38%	31%	
Session Six (N = 152)				
Total Emotion Episodes (<i>M</i> , <i>SD</i>)	5.2 (2.7)	5.8 (2.8)	4.6 (2.5)	2.77 (.006)**
Type of Emotion (%)				
Negative	74%	70%	79%	-2.01 (.046)*
Positive	21%	24%	17%	1.55 (.123)
Mixed	5%	6%	4%	1.11 (.266)
Content (%)				
Cancer-related	56%	48%	63%	-3.17 (.002)**
Non cancer-related	44%	52%	37%	

Note

**
p < .01*
p < .05

Table III

Regression analyses of correlates of total in-session emotion episodes

Variable	<i>B</i>	<i>SE B</i>	<i>β</i>	<i>t</i>	95% Confidence Interval
First Session					
Session Length	.095	.033	.23	2.92**	.031 to .16
Cancer Distress	.045	.019	.182	2.35*	.007 to .081
Dispositional Expressivity	.038	.043	.069	0.89	-.047 to .123
Perceived Session Progress	.011	.078	.011	0.14	-.144 to .166
Sixth Session					
Session Length	.125	.03	.354	4.11***	.065 to .185
Intervention Type	-2.49	.465	-.465	-5.36***	-3.41 to -1.57
Session 1 Episode Total	.241	.049	.365	4.89***	.144 to .339
Cancer Distress	.007	.013	.041	.55	-.018 to .032
Dispositional Expressivity	.013	.029	.034	.46	-.044 to .07
Perceived Session Progress	.098	.04	.177	2.45*	.019 to .178

Note

* $p < .05$

** $p < .01$

*** $p < .001$