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A Qualitative Analysis of Cancer-Related Fatigue in Ambulatory Oncology

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Abstract

The purpose of this study was to describe patients' perceptions of the causes, relief, related symptoms, meaning, and suffering secondary to cancer-related fatigue (CRF). Two hundred and fifty two (n=252) patients with breast, lung, colon, and prostate cancers were enrolled in a quasi-experimental study to test the effects of a clinical intervention on reducing barriers to symptom management in ambulatory care. Analysis of data reported in this paper was derived from the Piper Fatigue Scale-Revised (PFS-R). Using qualitative research methods and content analysis, written statements related to the impact of CRF were coded using the following themes: patients' perceptions of cancer related fatigue, the causes, relief, related symptoms, meaning, and suffering. Comments were categorized and reviewed for content.

Overall, CRF had a significant impact on the physical, psychological, social, and spiritual wellbeing. CRF limited the ability of participants to function, socialize, and participate in enjoyable activities. Emotional issues as a result of CRF were common. The negative impact of CRF on patient's overall well-being alters the meaning and suffering related to the cancer experience. The assessment of personal meaning and suffering related to CRF is an important component of the multidimensional assessment of CRF. This will enable nurses to better understand the suffering related to CRF.

Cancer-related fatigue (CRF) is one of the most common and distressing symptoms experienced by cancer patient (Berger, 2009; Hofman, Ryan, Figueroa-Moseley, Jean-Pierre, & Morrow, 2007). Many patients experience fatigue as a presenting symptom prior to their diagnosis of cancer. Approximately 70–100% of cancer patients experience CRF at some time during diagnosis and treatment (Berger, 2009). Prevalence rates vary from 25% to 99% depending on the type of treatment, dose and route of administration, type and stage of cancer, and the method and timing used to assess CRF (Mitchell & Berger, 2008). CRF can negatively affect all aspects of a person's quality of life (QOL) and can limit their ability to fully engage in activities that give meaning and value to their lives (Berger, 2009). Despite its frequency and its negative impact, CRF remains under-reported, under-diagnosed, and under-treated (Berger, 2009).

In patients receiving chemotherapy (CT), 80–90% report CRF, and its prevalence rates and patterns over time may vary by the specific CT agent, its route of administration, and the frequency and density of treatment cycles. For example, a "roller-coaster" pattern of CRF

over time is reported in women with early stage breast cancer receiving 3–4 week CT cycles (Berger, 1998). Less is known about CRF's prevalence rates and patterns pre-diagnosis (Hofman, et al., 2007). During radiation therapy (RT), CRF is an almost universal occurrence with 70–100% of patients experiencing a gradually increasing, cumulative pattern of CRF over time that peaks and plateaus usually at 4–6 weeks and gradually declines thereafter over time (Berger, 2009). Most RT studies address CRF in patients receiving external beam RT or teletherapy. Increased levels of CRF are reported when different therapies such as RT and CT are used as combination therapy (Woo, Dibble, Piper, Keating, & Weiss, 1998). Although studies have described the prevalence and characteristics of CRF for cancer patients receiving treatment or follow-up in ambulatory care settings, few have addressed patients' perceptions of CRF, its meaning, and its related suffering. The understanding of suffering and the promotion of patients' search for meaning is an important goal of oncology nursing (Ferrell & Coyle, 2008). This article reports on patients' perceptions of the meaning of CRF and its related suffering through qualitative analysis of patient comments obtained through the Piper Fatigue Scale-Revised (PFS-R).

Literature Review

The most commonly used definition for CRF is found in the National Comprehensive Cancer Network's (NCCN) CRF evidence-based guidelines, where CRF is defined as a distressing persistent subjective sense of physical, emotional, and/or cognitive tiredness or exhaustion related to cancer or cancer treatment that is not proportional to recent activity that interferes with usual functioning (National Comprehensive Cancer Network, 2010). Patients may describe CRF as being more of a severe or overwhelming sense of tiredness that is unusual for them and that differs from the usual sense of tiredness they previously experienced when they were healthy. Studies consistently support this patient distinction by demonstrating that CRF is much more severe, distressing, and much less likely to be relieved by rest as noted above, or by a good night's sleep when compared to the fatigue experienced by healthy individuals (Jean-Pierre, et al., 2007; National Comprehensive Cancer Network, 2010). Additional descriptors may include having no energy, lacking in endurance, feeling mentally fatigued (not being able to concentrate or focus), and not being able to perform activities that they used to be able to do.

The current oncology nursing literature contains descriptions of the meaning of illness and symptoms in cancer. Meaning in illness has been described as an important process where patients derive meaning from the suffering related to their illness (Borneman & Brown-Saltzman, 2010). It is often referred to as the search for an existential meaning (Thompson, 2007). Faced with a serious illness, patients tend to search for meaning in that experience (Ferrell & Coyle, 2008; Steeves, 1992; Taylor, 2003). Studies have shown that the search for meaning in cancer can be transforming for patients, and that a greater sense of meaning may be associated with better social, psychological, and emotional adjustments (Ramfelt, Severinsson, & Lutzen, 2002; Taylor, 2000; Thompson, 2007).

Suffering related to an illness such as cancer is an intensely personal one. Suffering impacts all aspects of a person's being. Physical symptoms, such as fatigue, can have a negative effect on both the psychological and spiritual well-being of patients (Ferrell & Coyle, 2008). Cassell published a seminal paper in 1999, in which he described suffering as "experienced by persons, not merely bodies, and has its source in challenges that threaten the intactness of the person as a complex social and psychologic entity." He further stated that the way to understanding human illness and suffering is through the recognition of personal meaning (Cassell, 1999). Recognizing the trajectory of cancer, Reich described the experience of suffering through the metaphor of language (Reich, 1987, 1989). He described the sufferers'

struggle to discover a voice that would express the search for the meaning of suffering in three phases: mute suffering, expressive suffering, and new identity.

Although research has increasingly focused on the meaning of illness for cancer patients, few have focused on patients' perception of CRF, its meaning, and related suffering. The physical dimensions of CRF have also been the focus of the majority of research on CRF, but few have focused primarily on the psychological, social, and spiritual dimensions of CRF. This study contributes to current knowledge of meaning in cancer through a qualitative analysis of patients' perceptions of the causes, relief, related symptoms, meaning, and suffering related to CRF.

Methods

The data consisted of responses to seven open-ended questions from the Piper Fatigue Scale-Revised (PFS-R). The PFS-R is a 22-item, self-report scale that measures four dimensions of subjective fatigue (behavioral/severity [6-items], sensory [5-items], cognitive/mood [6-items], and affective meaning [5-items]) confirmed by principal axes factor analysis with oblique rotation (Piper, et al., 1998). Evidence for moderate to strong concurrent and discriminant validity estimates exist. Internal consistency (Cronbach's alpha) reliabilities remain strong (0.83–0.97) for the PFS and its subscales across various cultural samples, languages, and diagnostic groups and were 0.89–0.97 in this sample. Each item is measured on a 0–10 numeric rating scale with opposing word anchors such as "not at all" to "a great deal." Items are summed and divided by the total number of scale items to keep scores on the 0–10 scaling. Higher scores indicate more fatigue. Mild (1–3), moderate (4–6) and severe (7–10) PFS-Total scores levels have been validated with declines in physical functioning (MOS-SF-36 Physical Functioning subscale) (Piper, et al., 1998). Five additional items, not included in the scale's scoring, assess perceived causes, relief measures, additional fatigue descriptors, presence of other symptoms, and duration of fatigue (Piper, et al., 1998). Patients completed the PFS at baseline.

Study participants were recruited from the Medical Oncology Adult Ambulatory Care Clinic at an NCI-designated comprehensive cancer center. Institutional Review Board approval was obtained prior to patient accrual. Patients with breast, lung, colon, or prostate cancers were recruited and enrolled in the study if they met the following eligibility criteria: 1) time since diagnosis of at least one month; 2) an expected prognosis of six months or greater; and 3) subjective pain and/or fatigue rating of ≥ 4 (moderate to severe pain) on a numeric scale of 0–10 (0=none; 10=worst imaginable).

Data Analysis

The steps of the content analysis were as follows:

1. All original data from the seven open-ended questions of the PFS-R were obtained and grouped under the corresponding themes (cause, relief, other symptoms, meaning, and suffering). Responses for each theme were tallied.
2. The data were read by two researchers to bracket significant responses that could be useful for written analysis. The data were then analyzed using content analysis techniques in which responses relevant to each theme were identified. All aspects of the bracketing and coding were validated by the researchers who have extensive experience with qualitative data analysis.

Results

A total of 280 participants were accrued to the study and completed the PFS-R. Out of this total sample, 252 participants provided responses to the seven open-ended questions. The demographics of study patients (n=280) are presented in Table 1. Mean age was 60.4. Importantly, over 1/3 of the patients were racial or ethnic minorities and a quarter of the patients each had colon or lung cancer. The majority of patients (79%) had Stage III or IV disease, and 30% were undergoing treatment. Functional status, as measured by the Karnofsky Performance Status (KPS) ranged from 80–70, suggesting that some patients were unable to carry on with normal activity.

Causes of CRF

Table 2 provides coded qualitative data from participants in regards to their perception of CRF. For causes of CRF, several themes emerged. Subjects frequently described sleep disturbance related to other symptoms, such as pain. In terms of emotional issues as cause of CRF, participants used descriptors such as “depressed and tired” as they attempted to communicate the intensity of the psychological effects of CRF. Many participants also reported their cancer treatment as a cause of CRF. The trips taken to and from treatment were also reported to contribute to CRF. Interestingly, some participants also believed that inactivity was a cause of CRF.

Relief of CRF

Overall, participants provided many insights into their perception on relief of CRF. Interestingly, both rest/relaxation and exercise/more physical activity were described as helping with CRF. Some participants described rest for more than one day as helpful, while others found exercise and physical activity provided a reason to get up and get moving. Participants also reported better diet and less activity as helpful in relieving CRF. For participants who are suffering from other symptoms such as pain, pain medication was helpful in relieving CRF. Several participants described the use of distraction such as reading, knitting, and meditation as helpful in relieving CRF. Interestingly, participants reported prayer and blessings from God as an effective method to relieve CRF.

Description of CRF

The descriptors provided by participants for CRF were mainly negative. CRF was described as a fluctuating symptom, where participants would have spurts of energy followed by a prolonged period of exhaustion. The weakness/exhaustion attributed to CRF was also described as comparable to being in a triathlon. CRF was described as “never-ending” despite sleep and rest. CRF was also described as emotionally labile and depressing. Participants described feeling lethargic, worthless, and losing interest in enjoyable things. Finally, CRF was described as having tremendous social impact, particularly with loved ones or family members.

Meaning of CRF

Because very few research in CRF have focused on the meaning of CRF, it was of particular interest during data analysis. Interestingly, the themes that emerged provided significant insight into the meaning of CRF as related to function and emotional well-being. Many participants attributed CRF to an inability to function at normal levels. CRF limited the ability of participants to participate in activities, and led to less enthusiasm to participate in physical activities. Participants described this effect as leading to poor QOL. Another significant theme was the loss of enjoyment that was attributed to CRF. Having CRF meant that participants lost the everyday enjoyment of just being alive. Again, participants

described the emotional impact of CRF, which led to depression, vulnerability, and worthlessness.

Suffering from CRF

As expected, participants' description of suffering related to CRF was related to their description of the meaning of CRF. Participants suffered from the inability to do enjoyable activities, including dancing and participating in important family events such as the birth of a granddaughter. As a result of this inability to participate in enjoyable activities, participants described that they were unable to live a productive life. Having CRF also meant suffering from its social impact, including employment issues, lack of interaction with others, and even failure of marriage. Emotionally, participants described suffering related to lack of hope, depression, and losing a sense of mission/purpose in life. Finally, participants also described a profound sense of loss that is related to body changes or the loss of time.

Other Related Symptoms

Table 3 presents tallies of comments regarding other symptoms related to CRF. Not surprisingly, pain/neuropathy was the most common symptom that participants experienced in conjunction with CRF. Other common symptoms included nausea/dizziness, emotional changes, and headaches.

Case Studies Related to CRF

Based on the qualitative data analyses, the following case studies are presented to provide a more comprehensive description of participants' perception of CRF based on the themes derived:

Case Study #1

Mrs. Howell (name changed) was a 49 year old woman with Stage III breast cancer. She was treated with surgery followed by chemotherapy. Co-morbidity included rheumatoid arthritis. During her third cycle of chemotherapy, Mrs. Howell reported a CRF rating of 7 out of 10. Although she was given medications to help with sleep, it wasn't very helpful. Mrs. Howell also reported severe menopausal symptoms at night. She took an average of 2–3 naps per day to compensate for the lack of sleep at night.

At her clinic visit one week following the completion of treatment, Mrs. Howell voiced concern over the fact that her energy level had not returned to normal. She continued to take about two naps during the day. Although her medications for hot flashes had enabled her to have some restful nights, Mrs. Howell reported that she always woke up tired. She described that she felt like "a 95 year old" and is frustrated that she cannot function normally anymore. She wonders whether she will ever be able to lead a productive life.

Case Study #2

Mr. Bryan (name changed) was a 42 year old man with Stage IV lung cancer that had metastasized to the brain. He was being treated on a clinical trial with chemotherapy. The treatment led to severe anemia, and the patient received frequent blood transfusions. Since his diagnosis, Mr. Bryan had lost a significant amount of weight. He also got nauseous after eating and often vomited after eating. His fatigue rating is 7 out of 10. Since beginning clinical trial treatment, Mr. Bryan's functional status had decreased tremendously, to the point where he relied on his wife to help with basic ADLs.

At a routine clinic visit, Mr. Bryan wondered aloud whether there was a sense of purpose in life anymore. Although he understood that the clinical trial treatment may not help with his cancer, he wanted to continue trying for the sake of his wife and 7 year old daughter. He mourned his loss of independence, and worried that his wife was being burdened with doing everything for him. Although Mr. Bryan had tried to maintain as active as possible, it was becoming increasingly difficult for him. He reported that the nausea and constant fatigue kept him from attending his daughter's soccer games. Missing out on important family events and milestones make him angry, depressed, and wondering why he "is still on earth."

Discussion

The aim of this qualitative analysis in a cohort of cancer patients in an ambulatory oncology setting was to describe participant's perceptions of CRF. The findings underscore the importance of assessing CRF as a multidimensional concept. In busy clinical settings where time dedicated for patient assessment may be limited, the assessment of CRF intensity is often not enough to obtain the personal suffering related to CRF. Cognitive appraisals, such as perception, may be important components of understanding how patients derive meaning and suffering from cancer and its related symptoms. To fully assess the impact of a specific symptom on patients' overall well-being, it may be necessary to also assess personal meaning and suffering related to debilitating symptoms such as CRF. As nurse researchers test interventions for fatigue such as psychoeducational approaches, outcomes should include evaluation of all domains of QOL. Interventions are needed which include physical approaches such as exercise combined with psychosocial therapies to treat the whole person experience of fatigue.

Figure 1 presents a potential model of CRF derived from our qualitative analyses. This is an early schema and additional research is needed to test this model's validity and the relationship between variables or causation. The spiraling effects of CRF begin prior to a diagnosis of cancer, when an individual characterizes life as healthy. Individuals are able to function normally with independence and a sense of control. Tiredness is relieved by rest and sleep. The downward spiral of QOL begins when a diagnosis of cancer is given, and treatment is initiated, followed by its severe side effects. As CRF sets in, it becomes more than a symptom. CRF begins to impact all dimensions of QOL. Physical well-being is negatively impacted due to CRF-related symptoms, such as pain, dyspnea, anorexia, insomnia, and nausea. The tiredness becomes tremendously unreliable, and cannot be relieved by rest or sleep. This physical experience impacts overall psychological well-being as depression and worry are reported. The combination of physical and psychological suffering related to CRF spirals to higher levels of distress. As CRF continues to linger, social well-being is disrupted, and the individual becomes isolated. Dependency and lack of control leads to a sense of vulnerability. As the downward spiral continues, the individual's spiritual well-being is disrupted by a sense of existential crisis. This brings about a feeling of uncertainty, hopelessness, and an awareness of the threat of death.

This qualitative analysis of CRF provided a poignant investigation into the personal meaning of CRF and its related suffering. Cancer patients experiencing CRF are burdened with tremendous physical, psychological, social, and spiritual suffering that may alter the meaning of their cancer experience. This analysis was limited to narrative data from a validated measurement tool for CRF. Because data were derived only from participants' written responses, this may limit the interpretation of our findings. Future studies are needed to further explore the personal meaning and suffering related to CRF in ambulatory oncology settings. Research is also needed to assess the feasibility of including brief assessments of the meaning of cancer-related symptoms to patients who are undergoing active treatments.

Implications for Nursing Practice and Research

The findings of the present study provided preliminary insight into the personal meaning and suffering related to CRF for cancer patients who are actively receiving treatment. In the process of caring for cancer patients, nurses must be aware of the unique concerns of cancer patients who are experiencing CRF. Many patients will be burdened with CRF during and after their treatment; therefore, attention to the understanding of the meaning of CRF and its related suffering will be of particular importance. Nurses should recognize that patients will strive to derive meaning to their cancer experience, and this search for meaning should be encouraged. Nurses should also recognize that the burden of suffering from uncontrolled symptoms such as CRF may negatively alter patients' efforts to derive meaning from their cancer experience.

The investigators acknowledge that assessment of fatigue both in the clinical setting and in research is challenging. Patients may find it difficult to quantify or rate their fatigue and a multidimensional symptom. True assessment of this symptom can be time consuming. Because the experience of fatigue is often overwhelming and distressing, assessment of fatigue often leads to patient's sharing of other concerns, such as spiritual distress or psychological responses. Increasing fatigue may be associated with worsened disease by patients thus may create concerns about survival. Therefore, optimal symptom management is of particular importance.

In conclusion, CRF is a complex, multi-causal, and multidimensional sensation (Piper et al., 2008). Both the intensity of CRF and its impact need to be assessed and measured in practice and research settings. Oncology nurse researchers and clinicians serve a vital role in advancing understanding of this important symptom and improving the multidimensional care of this distressing symptom.

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Key Points

1. Cancer-related fatigue (CRF) can negatively affect all aspects of a person's quality of life (QOL) and can limit their ability to fully engage in activities that give meaning and value to their lives.
2. The suffering of patients experiencing CRF is characterized by unique perceptions that negatively alter the meaning of their cancer experience.
3. Nurses must be aware of the unique issues faced by patients with CRF, specifically the search for personal meaning.

Figure 1.
The Spiraling Effects of Cancer-Related Fatigue

Table 1

Demographics and Treatment Data (n=280)

Characteristic	N	%
<i>Age</i>		Mean = 60
<i>Gender</i>		
Female	171	(61)
Male	109	(39)
<i>Race</i>		
Caucasian	180	(64)
African American	27	(10)
Hispanic/Latino	41	(15)
Other	32	(11)
<i>Education</i>		
High School or Less	102	(37)
College	122	43)
Graduate	56	(20)
<i>Marital Status</i>		
Married	174	(62)
Single	106	(38)
<i>Types of Cancer</i>		
Breast	109	(39)
Colon	56	(20)
Lung	72	(26)
Prostate	43	(15)
<i>Stage</i>		
I–II	56	(20)
III	82	(30)
IV	138	(50)
<i>Disease Status</i>		
Recently Diagnosed and undergoing rx	141	(51)
Recurrence and undergoing rx	84	(30)
Completed rx, NED	20	(7)
Other	32	(12)
<i>KPS</i>	Range = 80–70	

Table 2

Qualitative Data from the PFS-R

Code	Sample Written Quotes
Cause of CRF	
• Sleep Disturbance related to Symptoms	“Unable to have a good night sleep because of pain”
• Cancer Treatment	“Fatigue seems to come about 2 weeks after receiving chemo” “The treatment is so strong” “I’ve been told the chemo... destroy red blood cells, less oxygen... short of breath” “The trip back and forth from treatment contributed to daily fatigue”
• Cancer/Medical Condition	“My present diagnosis of cancer mets to my liver”
• Emotional Issues	“I feel depressed and tired. I have noticed changes like wanting to be alone and cry” “Stress that my daughter may go thru life with no mother.” “Fear future diagnosis” “... Pressure of decisions”
• Work	“My work is a very stressful place to work”
• Inactivity	“Not active, unable to go out” “Limiting amount of weight-bearing exercise”
• The unknown	“The ‘not knowing’ is what I think causes my fatigue”
Relief of CRF	
• Rest/relaxation	“Rest for a couple of days, and I feel much, much better”
• Sleep/sleep medication	“Sleep and more sleep” “Medication to help me sleep”
• Exercise/more activity	“Moving around, exercise, but it is so hard to start exercising” “Continue to work has given me a purpose, reason to get up and get moving” “Pushing myself to be active”
• Distraction	“distracting myself with reading, knitting, crossword puzzles etc” “Listening to music, meditation”
• Treatment of symptoms	“Unfortunately it’s the pain medication”
• Better diet	“Finding something to eat to bring up my energy level”
• Slowing down/less activity	“Reducing work hours” “Rest for short periods of time during the day and being active when feeling up to it” “Let family members do more around the house”
• Prayer	“To pray always to our Lord and to shower more of His blessing to me”
• Think positive	“Friends and family interaction and keeping a positive attitude” “Being in a bright place”
• Ignoring it	“Trying to ignore it and push forward”
Description of CRF	
• Spurts of energy followed by fatigue	“It fluctuates during the day” “I’m able to complete a project like gardening and then I am tired for a couple of days”
• Weakness/exhaustion	“On bad days, it could be described as comparable to as participating in a triathlon” “I am not the same energetic person I used to be”

Code	Sample Written Quotes
<ul style="list-style-type: none"> Emotionally labile Depressed Social Impact 	<p>“Never ending tiredness no matter how much I sleep”</p> <p>“Legs and arms feel like jelly or a rag doll”</p> <p>“It’s like its time to go to bed all the time. No energy at all”</p> <p>“The majority of the time I feel like a fish out of water”</p> <p>“I have lost interest in many things I used to enjoy”</p> <p>“Totally consuming”</p> <p>“Feeling lethargic”</p> <p>“It’s frustrating and debilitating!”</p> <p>“Mental fatigue is really important”</p> <p>“feel worthless”</p> <p>“It’s a feeling of ‘blah,’ everything is too much to bother”</p> <p>“Fatigue can be depressing due to inability to work full-time”</p> <p>“Depression from not being able to accomplish different task”</p> <p>“Exhausting and hopelessness”</p> <p>“impatient with others”</p> <p>“The effects it has on loved ones/family”</p>
Meaning of CRF	
<ul style="list-style-type: none"> Inability to function Loss of enjoyment Emotional Impact Loss of Control Deterioration of Condition Less Independence 	<p>“Inability to function normally at all levels”</p> <p>“Slow me down – I tend to overdo all day and then by days end I’m tired”</p> <p>“Not able to do as much as I used to, having to take time for naps”</p> <p>“Unable to do the things I previously could”</p> <p>“Less enthusiasm to undertake same physical activities”</p> <p>“Leads to very poor quality of life. Unable to function normal activities”</p> <p>“For me it is feeling 95 years old”</p> <p>“Feeling tired and worn out desperate to lie down”</p> <p>“Yes, this means I have to listen to my body when it is telling me it’s time to rest”</p> <p>“Usually active with my grandchildren, now they seem reluctant to ask me to play”</p> <p>“Loss of everyday enjoyment of just being alive”</p> <p>“Makes me feel useless”</p> <p>“It makes me feel vulnerable”</p> <p>“Down, lack of energy, almost feeling depressed”</p> <p>“Wanting to know why I am still here (on earth)”</p> <p>“It is unpredictable”</p> <p>“Seems sickness is getting worse”</p> <p>“Feels like if I were dying”</p> <p>“More dependency on others. I was strong, my family doesn’t understand how I feel”</p>
Suffering from CRF	
<ul style="list-style-type: none"> Inability to do enjoyable activities 	<p>“Yes, it limits my ability to do the things I enjoy”</p> <p>“I was unable to fly to CO for the birth of my youngest daughters 1st child”</p> <p>“Enjoyed swimming, cooking, and domestic jobs, now very difficult to perform”</p> <p>“It changed my life, I used to dance with my partner”</p>

Code	Sample Written Quotes
<ul style="list-style-type: none"> • Impact on Social Well-Being • Emotional Impact • Sense of Loss 	<p>“I avoid certain situations such as babysitting my grandchildren”</p> <p>“I wanted to go back to school but I am not able to at this time”</p> <p>“No joy!”</p> <p>“Reduced mobility”</p> <p>“Not able to do things for a long period of time”</p> <p>“Unable to live a productive life”</p> <p>“Job unsupportive of work from home after chemo”</p> <p>“Too fatigued to interact with anybody”</p> <p>“Yes, my marriage is falling apart”</p> <p>“Can’t do anything without help”</p> <p>“I don’t feel like getting out of bed”</p> <p>“It has kept me from living with hope”</p> <p>“Embarrassment of my crying”</p> <p>“I feel that I don’t have a mission in life and I’m only existing – survive day-by-day”</p> <p>“Causes me to feel depressed and useless”</p> <p>“I miss my hair, eyelashes and body”</p> <p>“I have lost so much of me... I want my life again!”</p> <p>“Just loss of time”</p>

Table 3

Prevalence of Other Symptoms Related to CRF

Symptoms	n
Pain/Neuropathy	57
Nausea/Dizziness	14
Emotional changes	11
Headache	10
Weakness/sleepy	10
GI (Constipation/Diarrhea)	11
Soreness	5
Swelling	3
Throat burning	3
Skin problems (rash, dryness, itchiness)	6
Hot flashes	4
Vision problems	2
Loss of appetite	1
Heart problems	1