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Mind over matter: A qualitative examination of the coping resources used by women with cancer

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Abstract

Aim: This exploratory study investigates the coping resources used by six women diagnosed with cancer.

Objective: The purpose of this study was to provide these women with the opportunity to discuss their cancer experiences along with the specific coping methods they found to be helpful throughout their journey.

Methods: The participants, ranging in age from 25 to 63, completed a background questionnaire, followed by either a semi-structured interview (n=3) or an interview via written response (n=3).

Results: Several key coping methods were described as being helpful to these women, and these methods fell into three major categories: intrapersonal, interpersonal, and extrapersonal coping resources. Although each of these resource categories had a direct influence on overall well-being itself, the interpersonal and extrapersonal resources also influenced the intrapersonal category, offering an alternate means by which they could influence overall well-being. These findings highlight the many coping resources used by these women when navigating their cancer journey.

Key Words: Cancer, women, qualitative research, coping resources

Introduction

“Never talk defeat. Use words like hope, belief, faith, victory.” Norman Vincent Peale

Cancer has become virtually inescapable within today's society. It is the leading cause of premature death within Canada, with an estimated 159,900 new diagnosed cases and 72,700 deaths in the year 2007 alone.^[1] Approximately 39% of women and 44% of men in Canada will develop cancer at some point during their lifetime, and one in four will die from it.^[1] These numbers are equally dismal in the United States. There, it is estimated that 1,444,920

individuals will be diagnosed and 559,650 will die from cancer this year alone.^[2]

Once an individual has been diagnosed with cancer, they are not only faced with the practical repercussions of this diagnosis but also with the emotional ones. Countless visits to doctors, numerous tests and the agony and uncertainty of waiting for test results now become a painful reality for these individuals. On being diagnosed as having cancer, life is irreparably changed. Despite the fact that one may ultimately be cured of the cancer, one will never be the same person one was before hearing the words “You have cancer.” In light of the

burden that this diagnosis may have on one's life and given the fact that increasing numbers of individuals are faced with this illness each year, the examination of effective coping techniques should be recognized as a priority in cancer research.

Literature Review

Coping

Folkman^[3] suggests three reasons as to why coping is important: (1) coping behaviors may assist in finding connections between psychological and physical systems, (2) coping behaviors influence one's negative or positive emotions and (3) although personality responses to illness may be viewed as unchanging, coping behaviors represent an area where the medical community can intervene. In conjunction with allopathic care, some practitioners are advocating the use of holistic coping and healing strategies, some of which employ the mind-body connection.^[4]

Over 2000 peer-reviewed research studies in the area of mind-body connection have been published within the last 25 years.^[5] Jacobs^[5] argues that thoughts and emotions have a real and measurable physiological effect on the body. Coker^[6] strongly agrees, stating that biomedical evidence suggests a strong interaction exists between the mind and the body.

Folkman^[3] states that the coping process can influence one's emotions and can be used to link one's psychological "mind" to one's physical "body," whereas Jacobs^[5] contends that thoughts and emotions have a real and physiological effect on the body. As one's coping behaviors are thought to influence psychological and physical well-being, it is important to explore the coping techniques involved in one's experience with an illness such as cancer. Recent studies describe several positive coping strategies that are thought to increase the overall well-being. These strategies include social support, progressive muscle relaxation, mental imagery and the possession of a fighting spirit.^[7-9]

Positive thinking

Positive thinking is a strategy that can enhance the coping process. Although a hopeless and helpless

coping style has been linked to unfavorable disease outcome,^[10] the possible link between positive states of mind and favorable disease outcome remains under researched.^[11] Greer,^[11] however, feels that this is a valuable area for further research. Other studies reveal that positive thoughts can create effective cognitive and behavioral responses to stressors such as cancer.^[3] In a study of patients with acquired immunodeficiency syndrome, Folkman^[12] found that positive emotions were linked to certain coping strategies. The coping mechanisms that brought about the most positive emotions were those that made coping personally meaningful by incorporating the individual's values, beliefs and goals.^[12]

In his book, "Love, Medicine and Miracles," Dr. Bernie Siegel^[13] coins the term "exceptional patient," which reflects this idea of coping made personally meaningful. This is a patient who refuses to be a victim and who is proactive in her/his own care. More specifically he states:

They willingly accept all the risks and challenges (of their illness). As long as they're alive, they feel in control of their destiny, content to receive some happiness for themselves and give some to others. They have what psychologists call an *inner locus of control* (emphasis in original). They do not fear the future or external events. They know that happiness is an inside job.^[13]

These patients educate themselves, and participate actively in their own care, wanting to know every detail. As a result, they often become specialists in their own care. According to Siegel,^[13] the defining question to determine whether or not one is truly "exceptional" is, "Do you want to live to be a hundred?" If their response is an unequivocal "yes," then they probably are exceptional. This concept of the exceptional patient capitalizes on the notion of positive thinking and the importance of being in control of one's own care.

Spirituality

Religion and spirituality have been associated with physical and psychosocial well-being as well as quality of life, suggesting that a spiritual focus may stimulate

physical, emotional, behavioral and cognitive illness coping mechanisms.^[14] Highfield^[15] suggests that an understanding of religion and spirituality will assist healthcare providers in the provision of spiritual care during a patient's experience with cancer.

Hill and Butter^[16] found that a strong sense of religiosity correlates with better health. After an extensive review of more than 200 articles, Fosarelli^[17] concluded that there is a general positive association of better health or faster healing with greater religiosity. A longitudinal study tracking the coping strategies of 70 women revealed that women who initially experienced minimal hope and who were high on the religion scale experienced more positive adjustment over the first year after their diagnosis.^[18] However, very religious women who had high levels of hope found adjustment more difficult.^[18] Because this area of research remains relatively new, relationships between various factors can make it difficult to see a clear picture of the effects of religion on the coping process. However, in the minds of cancer patients themselves, Mytko and Knight^[14] report that spiritual beliefs are an important way of coping and increasing the quality of life. Perhaps, spirituality allows one to accept the limits of one's personal control. To accept one's limitations and hand these over to a higher power (i.e. God) can often allow one to develop a sense of peace.^[7] Mytko and Knight^[14] also suggest that people utilizing spiritual resources may have more effective physiological, affective, behavioral and cognitive coping mechanisms. For a complete review of the influence of spirituality on health, see Koenig, McCullough and Larson.^[19]

Since spirituality has been demonstrated to play a role in coping with stress during illness, it is not too difficult to believe that spirituality and faith may be perceived as enhancing the healing process. Although much research has been carried out on the empirical and objective aspects of coping, a gap exists in the subjective aspect of coping mechanisms.

Social support

Social support has been previously identified as a factor that eases the stress of having cancer.^[20] In a study of 56 women with breast cancer, perceived social

support was associated with positive adjustment to illness (i.e. a higher level of psychological well-being and positive health behaviors). Having a sense of social connection was integral in the women's coping experiences. More specifically, sharing concerns with significant members of one's social network decreased the sense of separation from the "normal" world.^[9] Other researchers have noted the importance of sharing concerns with a wide range of confidants, most notably close family members and friends.^[21] In agreement, a study examining conversations between breast cancer patients and their partners revealed that women felt best supported when their partner responded to their innermost concerns,^[22] denoting the importance of having a supportive partner. Figueiredo *et al.*^[21] and Ashing-Giwa *et al.*^[23] also describe one's partner as being one of the most important confidants for women with cancer in their respective studies.

In patients with head or neck cancer, the availability of emotional support before treatment was found to be beneficial to the individual's well-being after treatment. Furthermore, a greater formal social network was linked to fewer depressive symptoms in this population.^[24] Penninx *et al.*^[25] also found emotional support to be a buffer for depressive symptoms among patients with cardiac disease or arthritis, but found that it showed minimal effects for those patients with diabetes, cancer or lung disease. However, having a partner and numerous close relationships did positively alter the psychological status in participants, regardless of their disease status.^[25]

Specific mind-body techniques

Mind-body techniques are alternative modalities that capitalize on the connection between one's mind and one's body and how each of these can exert an influence on the other. In particular, progressive relaxation, mental imagery, meditation and yoga (examples of such techniques) have been investigated in the literature and found to be particularly helpful for individuals dealing with stress and/or chronic illness. Progressive muscle relaxation involves the contraction and relaxation of muscle groups and learning how to sense low and high amounts of tension.^[5] Jacobs^[5] conducted a study in which university students were taught the relaxation response. The results showed a

quantitative reduction in the students' cortical arousal, indicating that it had a calming response on the mind. Additionally, for those students learning the relaxation response for the first time, a clear decrease in the central nervous system activity was observed, also indicating that it exerted a calming influence on the body. Such research on the physiology of the mind-body interaction can be used to support its existence, ultimately creating the question of whether or not mental techniques can be used to alter the health of an individual.^[5] Many researchers argue that these mental techniques can increase the healing powers of the body. For example, Siegel^[4] contends that patients live longer as a result of the health benefits garnered from mind-body techniques.

Mental imagery is another mind-body technique commonly used to reduce stress. In a study by Cole and Pargament,^[7] participants were guided in an imagery relaxation exercise called the "Breath of God." This exercise involved deep breathing, the visualization of God's presence and imagining that one was inhaling God's light into one's breath. Cole and Pargament^[7] reported that for many of their participants this exercise was meaningful and gave them a reported sense of peace.

Coker^[6] writes about "mindfulness meditation," a particular philosophy on how to live one's life. Paramount to this constant awareness of the mind is the ability of the mind to sense when it is being distracted and being acutely aware of breathing and body sensations. The participant is first encouraged to focus only on his or her breath and eventually is encouraged to expand his or her awareness to sounds, body sensations or thoughts and feelings. Thoughts and feelings are to be observed, with the expectation that these thoughts, feelings, sensations and emotions can be replaced by others. Thus, positive emotions or thoughts can be used to replace those that are negative. Coker^[6] states that mindfulness meditation has been associated with increased levels of melatonin, a hormone thought to reduce the strength of tumor cells.

In a case study conducted by Hasitavej,^[26] a 45-year-old woman suffering from a complex medical history

including depression, coronary artery disease, systemic lupus erythematosus, gout and periodic angina was placed on a psychotherapy and self-healing program, which included guided imagery and progressive muscle relaxation. This woman learned to exert more control over her treatment plan and reported an improvement in her physical and psychological quality of life.^[26] It would appear that although there are a number of ways to describe and evaluate progressive muscle relaxation and mental imagery, both have been portrayed as being potentially helpful in altering one's health condition.

Siegel^[27] states that beating a disease does not necessarily mean curing it. Instead, it can mean rejoicing in the challenge of the disease and the opportunity it offers for personal growth. Siegel^[27] also presents a quantum physics view that suggests that intention and desire can cause actual physical changes in the world, lending support to the argument that having a number of coping resources readily available can result in a more positive disease outcome.

Positive thinking, spirituality, social support and specific mind-body techniques (i.e. progressive muscle relaxation and mental imagery) have each been cited in the literature as being potentially helpful for individuals who are affected by a number of life-altering illnesses. It is important to further explore and understand one's perceptions of these techniques and their unique contribution to the perceived well-being of those who are ill and to convey this information to others who are struggling with these (and other) illnesses. Essentially, their perceived role within the coping processes of individuals who are ill must be explored.

Methods

Purpose

This study explored the lived experiences of women with cancer. One of the research questions (and the focus of this article) explored the specific coping strategies that they found to be effective in helping them to cope with the stressors surrounding their illness (see Table 1 for a complete listing of the interview questions).

Table 1: Semi structured interview guide

1. Describe the circumstances surrounding your diagnosis.
2. Discuss your coping strategies at the onset of your diagnosis, during treatment, and following treatment.
3. Do you believe your mind (thoughts) has affected your overall well-being during your experience with cancer? Please explain.
4. More specifically, do you believe your mind has affected your physical health during your cancer experience? Please explain.
5. Did you try any mind-body techniques to help you cope? If yes, how effective were they? Please explain.
6. Did family members play a role in your ability to cope?
7. Did friends play a role in your ability to cope?
8. Do you believe healing of one's life can occur despite physical suffering?
9. What has your illness meant to you?
10. Has your view of the "power of the mind" changed since your experience with cancer, and if so, how?

Participants

On receiving ethical approval from the researchers' academic institution, six women were recruited to take part in this study, ranging in age from 24 to 63 years. The age range for five of the participants was 49–63, with an average age of 54. One of the participants was 24 years of age at the time of data collection. Despite the fact that she was much younger than the rest of the participants, she was ultimately included in this study. The reasoning for this decision included the fact that she was the coauthor of a book describing her experiences of having cancer and had a great deal to offer in terms of her insights into this cancer journey. We believed that her rich experiences contributed to the findings as a whole and meshed with those experiences described by the rest of the women, despite the discrepancy in age.

Four of these women had been diagnosed with breast cancer, one with leukemia and one with ovarian cancer. All of these women were more than 6 months post-diagnosis and were, on average, 7½ years post-diagnosis. All but one of these women had children, with four of them having two children and one woman having three. The marital status of these women varied over the course of their illness;

however, at the time of data collection, four were married, one was separated and one was single.

Although these women differed in terms of their particular treatment protocol, there were some similarities in the types of treatments each had encountered. Four of these women had had some type of surgery, including three women who had had a lumpectomy, two a unilateral mastectomy and one a unilateral (and ultimately a bilateral) mastectomy. Apart from surgery, three had had radiation and three had had chemotherapy. Three of these women also reported taking Tamoxifen. Only one of these women reported using complementary and alternative medicine as her sole means of treatment, with the complete exclusion of any allopathic means of medical intervention. For all these women, it was their first episode of cancer. One also suffered from a number of additional chronic conditions, including arthritis, osteoporosis and severe back pain.

The recruitment process was two-fold. Purposeful sampling was used to ensure that the data collected was from information-rich cases only, as discerned by the research team. Secondly, criterion sampling was used, with the key criterion being that the study would only include those women who had been diagnosed with cancer no less than 6 months before the study. We collectively decided that those who had received a diagnosis within the past 6 months would probably have an experience that was qualitatively different from those having received a diagnosis more than 6 months prior. Due to the exploratory nature of this study, we did not place any additional criteria on the potential participants. Participants were recruited from a cancer support center in Southern Ontario and also through snowball sampling. Snowball sampling refers to sampling that occurs through "word-of-mouth," and this method assisted in the recruitment of additional participants who were not necessarily members of the cancer support centre but who had shared in this cancer experience.

Data collection

The participants completed a background questionnaire that collected information about their age, marital status, diagnosis, treatments and support networks. Participants then completed either a semi

structured, in depth interview ($n = 3$) or an interview via written response ($n = 3$). These interviews were identical in terms of the questions. They differed only in the manner in which these experiences were conveyed (i.e. whether a verbal or written response was provided). Because this study was exploratory and qualitative in nature, the interview was comprised of 10 open-ended questions geared towards understanding the lived experiences of these women and the coping techniques they had used.

Procedure

Prior to the interview, an information letter was distributed among the participants. This letter described the purpose of the study, the inclusion criterion and the commitment involved. A sign-up sheet was made available to all interested women who fit the inclusion criterion. On agreeing to participate, each woman was asked to sign an informed consent letter and to fill out a background questionnaire. Those who wished to participate in the semi-structured interview process were asked to provide an interview time convenient for them and those who wished to participate in the interview via written response were sent the interview questions via email ($n = 2$) or by post ($n = 1$). Following the completion of each face-to-face interview, the interviewer completed field notes. These notes were meant to summarize the contextual characteristics of the interview, which may have been otherwise lost on reading the transcript at a later date. These notes were then used to inform the analysis of the data.

Data analysis

Patton's^[28] method of phenomenological analysis was used to analyze this data. The reason we chose this method of analysis is that it "seeks to grasp and elucidate meaning, structure, and essence of the lived experience of a phenomenon for a person or group of people."^[28] It was this elucidation of meaning, structure and essence with regard to the cancer journey described by these women that we were most interested in. There are several stages to this form of data analysis, including *époche*, phenomenological reduction, delimitation of the data, developing a textural portrayal and, lastly, integrating all of the information to combine meanings and essence and

to explain the lived experience.^[28] Three researchers reviewed the data independently, using this method along with Glaser and Strauss's^[29] method of constant comparison of themes. This form of analysis involved continually comparing each transcript's themes with those previously analyzed. The researchers as a group then discussed common themes and patterns. The researchers were confident that saturation had been reached when they saw the replication of themes among the data of these women, and only those results where this commonality was evident are addressed here.

The credibility of the findings was enhanced by the fact that a comprehensive literature review was undertaken before data collection, providing the researchers with a general understanding and knowledge of the field. Also, the fact that numerous perspectives were encouraged while the team analyzed the data, both independent of one another and as a group, helped to decrease the likelihood that any misinterpretation of the data had taken place. Once the themes and the essence of their experiences had taken shape, the combined narrative of these experiences became evident. Although the women themselves did not contribute to the verification of the themes, the authors believe that their use of triangulation (via both methods triangulation and investigator triangulation) helped to ensure the credibility of the findings and the resulting analyses. The data has been presented here in a descriptive manner, in an attempt to elucidate the manner in which these women coped with their cancer journey.

Results

The complexity of the cancer experience was conveyed by these women throughout the process of data collection. The demographic information was helpful in providing a context for each of the interviews and the written responses. The interviews ranged in length from 75 to 120 minutes, and the email responses ranged in length from one to two written pages. Numerous themes pertaining to the coping process of these women were evident after the analysis of the data. Most notably, the coping resources used by these women seemed to fall into

three major categories: intrapersonal, interpersonal and extra personal resources. In addition to this, the interpersonal and extrapersonal categories influenced the overall well-being, both on their own and through their interaction with the intrapersonal resources category [Figure 1]. Overall, it was evident that utilizing any of these three coping resources appeared to have an impact on both the mental and the physical well-being of these women and that there was a strong mind-body connection in relation to one's health.

Intrapersonal resources

As indicated above, the intrapersonal category of resources appeared to have its own distinct influence, but was also significantly influenced by both the interpersonal resources and the extrapersonal resources categories. According to Merriam-Webster's Dictionary,^[30] the term intrapersonal refers to something that "occur(s) within the individual mind or self." The women in the present study spoke extensively of the intrapersonal resources they used to cope with their cancer, namely the power of the mind to influence illness outcomes, positive thinking, being spiritual and developing feelings of empowerment through personal control.

Power of the mind

All participants believed that their minds exuded a power of its own, which strongly influenced their overall sense of well-being (most notably in terms of their physical health). This influence was often positive in nature, but not exclusively so. The mind was also capable of generating a negative influence on the body. For example, one woman commented:

When I turned 40, I had some problems with anxiety and stress and developed physical symptoms so I knew that the mind and body were definitely connected. I know that it is hard to be involved in life and not experience some stress whether they are good things or bad, but I know it is how we deal with the stress, our support systems, that affects our body. It is important to listen to our body and when we feel the stress overtaking to take steps to reduce it. I am not saying stress makes us sick, but for sure it can reduce our immune system and make us more susceptible to getting an illness.

When asked if she believed her mind affected her overall well-being during her cancer journey, another woman responded by saying:

A lot. A lot. I, I think it's very important to get yourself

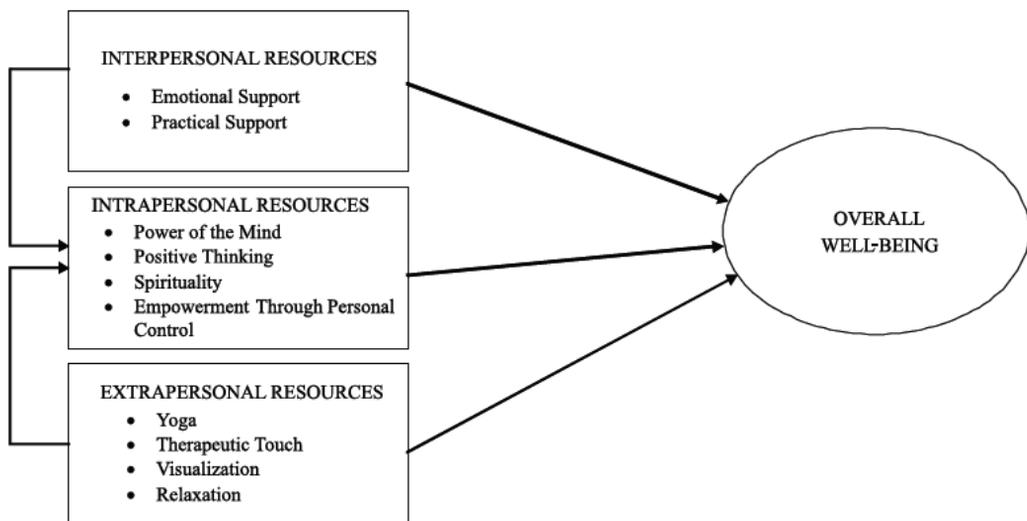


Figure 1: The coping resources used by women with cancer

into the right state of mind to go through this type of thing... and I think that calming your mind with music or whatever you can do, but definitely your mind, it's a very important part of it.

Her comment that you need to be in the "right state of mind" implies that if you are not, the effect of the mind on the body may be less than desirable. Another woman shared her firm beliefs in the mind's power:

I always was a firm believer in the power of the mind but I guess I am even more now. I think that when we are thinking sad or bad thoughts it sends bad messages to our body. I always think of that verse that says something like "the acid does more damage to the vessel in which it is stored than on that which it is poured."

Not every participant felt quite as confident in describing how powerful the mind's influence could be on the body. Although one woman answered that yes, she believed her mind affected her overall well-being and physical well-being, she considered this a very tough question to answer, and suggested that confirming this connection may somehow infer blame on an ill patient.

That is a tough question because I am touchy about anything that infers some kind of blame – for example, (the notion that) if a patient has a bad attitude, they are hurting themselves and therefore are less likely to get well. Or to take it back a step – perhaps it is some incorrectness in the person's mental health that made them susceptible to the illness... What I know is during my illness, I felt sorry for my body and pity. I saw it as a struggling flower, trying to survive through the cracks in the cement, and (I) tried to encourage and love my body for its strength as much as I could. I saw my body as separate, on its own journey, and that I got to try to support it as well as I could. I saw it as incredibly strong and beautiful. I saw it as separate. I think my love for my body helped it – how could it harm it? I believe that my sympathy for my body rather than anger was healthier for my body. Still, I don't really know the answer.

It was indeed evident that the mind was viewed as

a powerful entity throughout this journey, largely described from a positive perspective and also capable of rendering a negative influence. Its overall influence as an intrapersonal resource used by these women to cope with their cancer was unquestionable.

Positive thinking

In addition to the "power of the mind" itself, positive thinking, in particular, was also reportedly an important intrapersonal coping resource that these women employed. One woman described how her focus on positive thoughts figured into her healing process after having suffered a more negative mindset just before treatment.

It was hard for me being at home all the time, not having a social life like, like I had before... so it was a big struggle for me in that time. And probably that was negative for my health, and then after I did treatment, and I knew I'm going to be healed and I was thinking positive, I think that helped me to get, to get healed.

Others commented as well on how possessing an innate positive attitude helped them cope throughout their cancer journey.

I know that I had a pretty positive attitude. I felt like I would be fine and so I proceeded in my life as though, in a sense, I was well. Not to the denial of what was happening, just so that I had things to look forward to and to distract my mind from the feeling sick part of the illness.

I think I felt very positively that I was going to be alright, and I was very determined to be alright. So I think that definitely, I wasn't going to lie down and be sick for long.

For some participants, thinking positively was a skill that they had to develop in order to effectively cope with the stresses of cancer. Therefore, it was not a quality that was innate to their personality. For instance, when asked whether it was easy to think positively, one participant responded, "It was not... it took practice and encouragement." Although these women acknowledged the importance of positive

thinking, a few commented on the fact that it was a difficult quality to attain and/or maintain and that it often required much effort.

Some described their thoughts as being more positive after their intense cancer experience. In this sense, their cancer was viewed as a “wake-up call” of sorts, which influenced the way they conducted their lives from then on.

I actually have come to the point where I can look at my cancer as (a) blessing. I think it may have saved my life. At 54, I am taking better care of myself which may prolong my life. As some friends have said at least now you know you have cancer, and you can do something about it. Some people aren't as lucky and they may not know that they have it and may not be doing anything about it. I have also had the surreal experience of looking death in the face and having the kindnesses of others lavished on me, that some only have in dying.

Thinking positively clearly acted as an effective intrapersonal resource for all six of the women who had survived cancer. Positive thinking was considered an innate quality for some, while for others it required great effort and encouragement to develop. Despite this, it was apparent that a positive spirit (be it innate or not) assisted in one's ability to cope with a cancer diagnosis. The following quote seems to succinctly summarize the views expressed by all six women:

... I know it is important to think positive, stay upbeat, look for the beauty in each day, be thankful, reduce stress if possible, let things go, don't take things so seriously, surround yourself with love, family and friends, talk to God, look after yourself, relax and live each day as if it were your last.

Spirituality

Spirituality was another theme that emerged from the data and was described by all six respondents, although each woman described it in her own way. Spirituality can be viewed from both a religious and a secular perspective. Both can be equally powerful, depending on the beliefs of the individual in question. One woman described how her belief in God (and her

knowledge of the belief of others) helped her to cope during the more difficult parts of her cancer journey.

I can't count the number of people who said that they were praying for me and who sent cards saying I was in their prayers. I have told many people that answered prayer can be the only cause of the unexplainable calm that came over me after I finally got the results and knew what I was dealing with. I had always been involved in the church, felt that I had a strong faith, prayed and read my daily devotions, but now I talk to God all the time. When I am going through my day I hum my favourite hymns and I feel that I am even closer to God. I know now, like never before, that my life is in his hands.

Another participant attributed her survival from ovarian cancer solely to God's intervention: “I believed that God did that miracle for me, because I could have died.”

The use of spirituality as an intrapersonal coping resource did not always involve organized religion or a direct belief in God. Spirituality itself was experienced in a number of secular ways as well. According to Dictionary.com,^[31] the word “secular” refers to things “not pertaining to or connected with religion.” A few of these women referred to their spirituality in this non-religious sense. For instance, one woman experienced her spirituality as follows:

...I don't know what drives you through it, but there's something, there's something... I don't have a spiritual (religious) commitment... but yet there was a spiritual sense of something that helped me through everything... It seemed important at the time. That something seemed to help me and give me a lot of courage and a lot of strength.

Spirituality, which was interpreted differently by each woman, acted as an effective intrapersonal coping resource for each of these participants. Its importance appeared to be in the woman's perception and openness to the concept of spirituality and its ultimate influence on their overall well-being.

Empowerment through personal control

The final intrapersonal coping resource that emerged from this data was that of empowerment through personal control. All these women expressed feeling an increased need for control over their lives and, more specifically, over their illness. Thus, many of these women described this sense of control, both during and after their illness. One woman described this sense of control in terms of how she coped with the details surrounding her illness:

I firmly believed that I had to do everything myself—become educated with regard to cancer—listen to what the doctors told me, but question them re: why was this being done? Why this medication? What did they hope it would do for me? What could the side effects be?

When asked if seeking out all possible knowledge in the area of breast cancer was one of her major methods of coping, another woman replied, “Huge. Probably top.”

The prevalence of this need for control over one’s illness was widespread among these women, although achieved in different ways, depending on the woman in question. One woman described this sense of control as evolving from her intuition to make quick and correct decisions:

I think I always had intuition, but I don’t think I ever used it in the way that I did when I was going through this...I was so powerful, I mean, I couldn’t stop this powerful feeling, and I’d look at (the person), and I had to sort of draw from them what I was going to do, or what they could do...or what decision I should make...I needed to do it quickly...normally, I make my decisions very slowly. I move with haste (sic) slowly, but that was one thing that I learned to do, and I can do that now.

This empowerment through personal control was a strong theme described by all six of these women. Each of them experienced a need for control and, thus, worked at increasing their personal sense of control over their illness. In the end, this appeared to be a beneficial intrapersonal coping resource.

Interpersonal resources

According to Merriam-Webster’s Medical Dictionary,^[32] the term interpersonal refers to “being, relating to, or involving relations between persons.” Hence, interpersonal resources were those coping resources that revolved around supportive others in the lives of these women and how they assisted in this coping process throughout their cancer journey.

Social support

All these women discussed the importance of social support in their coping processes. This social support encompassed both emotional support (e.g. listening and caring) and practical means of support (e.g. rides to and from treatment, etc.). Many avenues of social support were evident, including support from one’s spouse, family members, friends, colleagues and even medical professionals. When questioned on the background questionnaire as to the actual number of close family members and friends these women confided in, all reported having a number of close contacts. On average, these women reported having seven close family members and 10 close friends whom they confided in on a regular basis, throughout the time of their illness. It was evident that these women felt well supported by their loved ones.

Several women noted the strength they felt from the support they had received from both their colleagues at work and their family members:

...The support of my teaching colleagues and my students, actually the entire school body, gave me the strength to tackle each day.

I felt an incredible strength in my family. My extended family came together to offer me and my parents a lot of support.

One’s partner was also a commonly cited source of support. Their support was typically demonstrated through love, listening and encouragement. One woman talked specifically about her husband’s ability to listen:

I am in a much better frame of mind now, although sometimes I feel scared and sad. I try to talk to my

husband about it right away and let it out, not keep it inside of me. He is great and says to just live my life like I am healed and well.

Another woman described the love, comfort and support from her husband, whom she had married during her cancer treatment:

Sometimes I would be really, really down, umm, and that's when I would need to talk, excuse me (says under her breath), talk to (my husband), and (my husband) and I could be "down" together, and I could be afraid and miserable and bitchy and "It's not fair," and go through all of those emotions, and he would just pick them up like a sponge, and uh, I was safe doing that. And even as I'm doing that and griping and complaining, I know this is temporary. I'll let it out and I'll be better and I'll feel better later, whether it's tomorrow, next week, or whatever, but it will. I can work this through. And uh, I remember distinctly when I lost my hair when I first went through the chemo. I was just so sad, so upset. I just hated the way I looked, and I said to (him), "This is awful. I just hate this," and he just grabbed me and he said, "You know, this is a good thing." "Right, it's a good thing my hair's falling out—thank-you." He said, "No, it's a good thing because it means it's working. It's doing what it's supposed to do." And uh, sometimes you just need someone to grab you and say, "Hey, you know, this is okay."

Some described the extensive support they had received from others who had been through the cancer experience itself. One woman, in particular, described the emotional release she felt when she was able to spend time with women who had survived their cancers too:

Um, I just found some of them just incredible to talk to, and to be with...they were people who had gone through quite similar situations, and uh, and we were able to sort of stop, look back to where we'd been, what we'd gone through, and where we were, and I found talking to them was a great stress reliever. I had no idea I had so much built up inside me until I actually sat down and talked to them, and discovered that yeah, that's how I felt. That's how you felt...I

think it uh, I think I felt uh, sort of a gushing forth of feelings when I was with them. It was like some great well of something just straight up and overflowed. It was almost like a waterfall of, and I'm not talking about just tears, of feelings. And uh, and it was like coming home. It's like when the world's horrible outside and you come inside after a storm. It was like, that was sort of like what it felt like. It was suddenly a place where people completely understood me, and I understood them, and we could just talk freely. It was, it was a very uh, it was a great place of release... it was the only place where I had been where they could understand because they'd been there, and it was amazing to be with people who completely had been in the same place.

In addition to social support being offered through an emotional means, it was also offered through practical means, and this interpersonal resource played a major role in the coping processes of several of these women. This practical support included such things as the provision of childcare, food and transportation to and from chemotherapy treatments.

During treatment, I tried to relax and take care of myself. I surrounded myself with supportive friends and family. I let them do things for me. I learned to say no. My staff sent in meals after my surgery and I let them. During radiation, a different friend or family member drove me each day to London and we tried to make it fun.

My friends and family made all the difference. They brought me food and flowers.

Although social support (emotional or practical) was important for all of these women as an interpersonal resource, the particular avenue of this support differed. Some experienced most of their support through one or two close relationships whereas others experienced an overwhelming amount of support from a number of different people in their lives (e.g. colleagues, spouse, family). Although a distinct theme on its own, interpersonal resources also had a direct influence on the minds of these individuals via its influence on their intrapersonal resources. The support provided by others,

regardless of whether it was emotional or practical in nature, had a positive influence on the minds of these women, which ultimately affected their overall sense of well-being.

Extra personal resources

Although Merriam-Webster's Medical Dictionary does not have an entry to define extrapersonal resources, these women described resources that they employed in their day-to-day efforts to cope, which were external to themselves, such as specific therapeutic programs or modalities that they had learned to do themselves. We have given these resources a label of extrapersonal resources because it refers to those resources that occur outside of the individual and that employ a specific technique (e.g. yoga, relaxation exercises, etc.).

Several women reported using a number of extrapersonal resources, which they found to be helpful. In particular, two of those mentioned were yoga and therapeutic touch. In terms of yoga, these women discussed its significance as an extrapersonal coping resource:

Yoga, for me has been the most tremendous effort... and that's a strong body, mind, spirit, soul, you name it, it's all a package...so that's been a time when I can really say yes, I'm concentrating on my body, I'm feeling good, this makes me feel good.

I had done yoga for years, and I think um, that was a help to me.

According to The Therapeutic Touch Network in Ontario,^[33] therapeutic touch involves the conscious direction of energy from a practitioner's hands to a patient in order to promote healing. One woman elaborated on her particular experience of the healing benefits of therapeutic touch:

My mom and step-mom also practiced therapeutic touch. At first, I was very skeptical of this and let my mom do it for *her* sake. Then, I saw some improvements in some cuts I had that were amazing. I attributed these to the (therapeutic touch).

Others described visualization and relaxation as being particularly helpful throughout their coping processes. Although these two techniques were not always described as being immediately helpful, over time, and as these techniques were perfected, they were described as being more useful. One woman, who had initially described herself as having difficulty using these techniques, did ultimately design her own relaxation/visualization tape and stated that it had become beneficial in helping her relax enough to get some sleep. Another woman stated:

If I feel myself getting stressed, I try relaxation techniques. One that works (well) is imagining that I am in a falling elevator, and letting the stress go as I descend down. Sometimes I have to start at the thirty-seventh floor now, but it works.

It was evident from the descriptions of these women that they indeed felt that their minds and bodies were closely connected, although they rarely acknowledged the fact that they were using specific mind-body techniques to circumvent the effects of their illnesses on their bodies. The techniques that were employed by these women can be described as extrapersonal resources and it was most notable how these resources (as with the interpersonal resources) had a significant impact on the intrapersonal resources of these women. Therefore, it is essential that these three categories be viewed in conjunction with one another, rather than being viewed as separate entities [Figure 1].

Discussion

Overall, the results from this study provide support for current research concerning the mind-body connection and coping. Although all the six women stated that they believed that their mind influenced their overall well-being and, more specifically, their physical well-being, one woman did express some trepidation in drawing this definitive conclusion. Her belief was that the mind and the body are separate. She believed that to some extent, if she believed in this mind-body connection, she could then be perceived as being somehow responsible for her illness. However, despite this, she emphasized the belief that her love for her physical body was much

healthier than anger would have been. It thus seems reasonable that although this woman views her mind and body as separate entities, she also believes that they are somehow connected.

The participants' unanimous belief in the mind's power supports the work of researchers such as Jacobs,^[5] who argues that thoughts and emotions have a real and measurable physiological effect on the body and Coker,^[6] who states that biomedical evidence suggests that a strong interaction exists between the mind and the body.

The findings pertaining to positive thinking offer support to Folkman,^[3] who states that positive thoughts can create effective cognitive and behavioral responses to stressors such as cancer. In addition, spiritual well-being has been correlated with quality of life and psychological adjustment to a cancer diagnosis.^[34]

The empowerment theme is similar to the characteristic of a fighting spirit found within the literature.^[8,10] Fighting spirit has been defined as an active coping style attained by patients with cancer who view their illness as a challenge, actively research their disease, explore treatment possibilities and attempt to stay positive and hopeful.^[8] A fighting spirit has been shown to improve well-being and the possibility remains that it may also improve the illness outcome.^[4] Although empowerment through personal control seems like an appropriate descriptor for this particular coping resource used by these women, it includes many (if not all) of the characteristics of a fighting spirit.

This study also provides support for the work completed by Cole and Pargament,^[7] who report that imagery and relaxation exercises can enhance a participant's sense of peace and Holland and Holahan's^[9] findings, which perceived that social support is associated with a greater level of psychological well-being. This social support network does not need to be large in order to be beneficial. The important factor seems to be the sheer presence of this network, be it large or small. In any event, as long as it offers comfort and support, it will likely be

perceived as beneficial.

The unique contribution that this study has made in terms of its findings is the development of a framework in which to view the coping resources described by these women. This extends the current state of coping research among women with cancer and could be further explored to determine whether these (and other) coping resources are similar for other populations (e.g. men, individuals with other types of cancers or individuals with other chronic illnesses and/or disabilities).

It must be acknowledged that although the participants in this study have been described as possessing three types of coping resources, the coping process is just that – a process. One does not ever fully complete one's cancer experience. As such, each of these women will continue to be challenged in building upon and expanding these coping resources over time and over the course of their recovery.

Limitations

Although the findings from this study have supported recent findings in the literature, some limitations to this study exist. Despite the fact that several common themes were evident among the six participants, it is not conclusive whether these particular resources will be present or even effective for all women with cancer. Despite the small sample size of six women, the authors believe that the data collected was of significant depth and was truly rich, elaborating on the commonalities of the cancer experience for these women. This research is exploratory in nature and thus can only provide suggestions for effective coping strategies and recommendations for future research.

The issue of recall must also be considered. Because these women were asked to remember events that had happened some time ago, there remains the possibility that the reported memories were not entirely accurate. However, when researching coping resources, one may argue that it is the participant's perception of these events that is most important and, thus, the incorrect recollection of specific events does not necessarily discount these findings.

Another limitation was the fact that some women completed in depth interviews whereas others reported their thoughts and feelings to the questions over email. Depending on the chosen method of data collection, it is possible that the depth of information provided by these women was affected. The interviews averaged in length from 75 to 120 minutes in length, whereas the email responses were approximately 1–2 pages in length. Although this may have affected the amount of information provided by each of these women, on review of the data, it would appear that the information provided in the email responses tended to be more clear and concise than the interview data because these women had more time to compose their thoughts. Therefore, the research team does not believe that this difference in data collection compromised the data in any way. It still provided rich data with thick description. Although conducting personal interviews with each participant was the preferred method, it was not possible in all cases. Therefore, emailed responses were deemed a suitable alternative and the research team was extremely satisfied with the responses that were submitted in this manner.

One final point in terms of limitations is that a subject pool including women of similar age, type of cancer, time elapsed since the cancer experience and family situation would have allowed for a more homogeneous comparison of effective coping resources. Alternatively, the women who participated offered a variety of perspectives as a result of their varying backgrounds, which contributed to the overall breadth of discovery for this issue.

Although the findings from this study cannot be generalized, the coping resources described as being helpful for the majority of the participants in this study could be suggested to other women going through similar experiences.

Future Research and Conclusions

Many areas of potential research exist to complement the findings of this study. As qualitative research regarding personal illness experiences is relatively scarce, further research is required to fully

comprehend the experiences of women with cancer. More specifically, it would be interesting to examine the benefits of differing forms and avenues of support for women of different ages and at different stages of their illness. For example, it would seem likely that a woman in the earlier stages of the diagnosis would find different forms of support more helpful than a woman who was 2 years post-treatment. Also, a study focusing primarily on the particular coping resources used during the various stages of the coping process would also be beneficial.

Although psychological well-being is an important goal throughout the coping process, one strives also for physical well-being. Thus, perhaps by studying, the coping resources of a large sample of women with cancer longitudinally, one could identify possible links between particular coping resources and overall psychological and physical well-being.

In summary, these findings provide information about some of the coping mechanisms found useful to women with cancer and how these coping resources interrelate. After an in depth examination of the cancer experiences of these six women, the coping resources were believed to fall into three major categories: intrapersonal, interpersonal and extrapersonal coping resources. Increasing the awareness among women with cancer about these potential coping resources could possibly aid in the coping processes of other women with cancer. Additionally, it is helpful for friends and family to be aware of these resources, particularly the importance of meaningful relationships and a broad social support network within the context of cancer, as well as the potential benefits of the mind–body connection and feelings of empowerment, spirituality and positivity. The value of this study is inherent in its discussion of specific coping resources, the opportunity it provided for the expression of personal experiences by these women and the inspiration it can provide to those in similar circumstances.

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