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A qualitative study of self-perceived effects of Mindfulness-based Stress Reduction (MBSR) in a psychosocial oncology setting

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Summary
Quantitative research has shown Mindfulness-based Stress Reduction (MBSR) programmes can reduce mood disturbance, improve quality of life, and decrease stress symptoms of cancer patients. However, the range of subjective effects experienced by programme participants has not been clearly described. Nine cancer patients who had participated in an 8-week MBSR programme through the Tom Baker Cancer Centre's Department of Psychosocial Resources, and who continued to attend weekly drop-in MBSR sessions were interviewed for this study. Qualitative research was conducted using grounded theory analysis. Data from semi-structured interviews and a focus group were analysed using QSR N6 software to identify themes concerning the effects patients experienced by adding meditation to their lives. Five major themes emerged from the data: (1) opening to change; (2) self-control; (3) shared experience; (4) personal growth; (5) spirituality. This information was used to develop specific theory concerning mechanisms whereby MBSR effects change for cancer patients. These understandings may be used to refine and further develop MBSR programmes to better assist patients during cancer diagnosis, treatment and recovery. Copyright © 2006 John Wiley & Sons, Ltd.

Key Words
MBSR; group psychosocial interventions; qualitative research; cancer; coping; post-traumatic growth

Introduction

Almost half of all cancer patients suffer from moderate to severe psychological distress, and face substantial difficulties in coping with their illness (Carlson et al., 2004; Spiegel, 1996; Zabora, BrintzenhofeSzoc, Curbow, Hooker, & Piantadosi, 2001). There are many potential

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sources of distress for people diagnosed with cancer, including the anticipation of suffering, taxing treatment regimens, difficulty coping with life changes, and adjusting to the inherent uncertainty and uncontrollability of the illness (Carlson, Ursuliak, Goodey, Angen, & Speca, 2001).

Standard cancer treatments, which include surgery, radiotherapy, chemotherapy, and hormone therapy, are designed to remove, retard or kill tumour cells. Oncologists and other health care providers may also recommend other types of treatment aimed at overall improvement of general health and well-being. These interventions are often referred to as complementary, as they are used along with standard therapies (Hilsden & Verhoef, 1999; Verhoef, Hilsden, & O'Beirne, 1999). For patients who use complementary therapies, making decisions regarding their use provides meaningful opportunity to assume some control over their disease, treatment and well-being during cancer treatment and recovery (Truant & Bottorff, 1999; Verhoef et al., 1999).

Mindfulness meditation is one example of a complementary therapy that has been embraced by many cancer patients and practitioners in behavioural medicine (Baer, 2003; Bishop, 2002). Recently, there has been a growth of clinical treatment and wellness programmes based on mindfulness meditation and yoga modelled after the Mindfulness-based Stress Reduction (MBSR) programme of Kabat-Zinn and colleagues at the Stress Reduction Clinic of the University of Massachusetts Medical Centre (Kabat-Zinn, 1990). Patients with chronic medical conditions who participate in MBSR programmes are able to effect positive changes in their physical and mental health status (Bishop, 2002; Grossman, Niemann, Schmidt, & Walach, 2004). The health promotion effects of MBSR appear to complement conventional biomedical treatment in a comprehensive, patient-centred approach to healing and the alleviation of human suffering (Reibel, Greeson, Brainard, & Rosenzweig, 2001).

Although there is empirical evidence suggesting MBSR is an effective approach, with applications in psychosocial oncology (Carlson & Garland, 2005; Carlson, Speca, Patel, & Goodey, 2003; Carlson, Speca, Patel, & Goodey, 2004; Carlson et al., 2001; Speca, Carlson, Goodey, & Angen, 2000), there is little actual understanding of the mechanisms at work or the process by which changes occur. Despite several studies showing significant improvements in quantitatively measured outcomes such as symptoms of stress, mood disturbance, sleep quality, fatigue and overall quality of life, the linkages between the existing empirical data that suggest MBSR programmes are an effective approach for working with cancer patients, and the self-perceived effects of meditation have not been delineated (Brennan & Stevens, 1998). The investigation of mindfulness is still in its infancy and requires great sensitivity and a broad range of theoretical and methodological perspectives to illuminate the richness and complexity of this phenomenon (Shapiro, Carlson, Astin, & Freedman, 2006). The present study explores patients' experiences of meditation and their impact on subjective well-being, in an effort to understand how meditation practice influences patients' lives and mediates their ability to manage their illness.

A qualitative research design was used to gain knowledge and understanding of these underexplored mechanisms of mindfulness practice. Grounded theory, defined as 'a general methodology of analysis linked with data collection that uses a systematically applied set of methods to generate an inductive theory about a substantive area' (Glaser, 1992, p. 16) was deemed the most appropriate qualitative methodology for this study, as it is also theory-generating (Creswell, 1998; Strauss & Corbin, 1990). This approach recognizes the importance of developing an understanding of an experience, phenomenon or process that is contextual and grounded by the knowledge of those who have had the experience. Developing increased theoretical knowledge of patients' experience may be valuable to inform clinical understanding of how to encourage positive lifestyle changes and reframe disease management in meaningful ways to give patients a greater sense of personal control (Stewart et al., 2001).

Some of the advantages of grounded theory methodology are the inclusion of the voice of participants, creation of knowledge from the interface of the observer (third person) and the observed (first-person) point of view, and the focus on the interpretation of participants' meanings and understandings (Guba & Lincoln, 1988). Although the analytic strategy of coding data into categories or themes is helpful to reduce massive amounts of data, one drawback is that this process decontextualizes statements and fractures participants' individual stories—hence some

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meaning may be lost. Nonetheless, based on its many advantages a grounded theory approach was chosen as most appropriate for investigating this research question.

Methods

Subject recruitment

Nine patients participated in this study. Subjects were selected based on their involvement in an ongoing MBSR drop-in group and their capacity to provide information relevant to the area of inquiry. All patients had previously attended an introductory 8-week MBSR course offered through the Centre and were thus eligible for the drop-in group.

Approximately 20 people regularly attend these weekly classes, and many have been doing so for a period of years. Purposeful sampling was used with the goal of identifying information-rich participants that would allow the researchers to study each patient in-depth for descriptive purposes and to select patients who would help the researchers build up a theory (Brennan & Stevens, 1998; Creswell, 1998; Mertens, 1998; Strauss & Corbin, 1990). This study was approved by the Conjoint Health Research Ethics Board of the University of Calgary, Faculty of Medicine and the Tom Baker Cancer Centre.

Procedures

Once recruited into the study, each group member participated in one 2-hour semi-structured interview. The aim of the interview was to provide a structure that tapped into specific areas of patients' subjective world, as they perceived their experiences of meditation in conjunction with the cancer experience. The interview opened with the invitation: Tell me about your experience in the MBSR group. Further probes were used including: Why did you decide to become involved in the MBSR programme? What effects, if any, have you noticed since joining the MBSR group? What role does mindfulness-based practice play in your cancer diagnosis/treatment/recovery? Why do you continue to come to the MBSR group? What additional information would you like to add today?

This interview approach permitted discussion and allowed for data to enter the interview that was not directly sought, thus allowing patients to provide information they believed was important and relevant to them (Brennan & Stevens, 1998). All interviews were conducted at the Tom Baker Cancer Centre and audiotaped with consent. Additionally, at the completion of the individual interviews, seven of the nine participants attended a focus group with three of the MBSR Group Facilitators in which emergent themes were discussed as a collective.

Data analysis

One strength of grounded theory analysis is the thorough analytical process which is useful for developing concepts and determining their interrelations (Charmaz, 2000). The analytic process was simultaneous with data collection. The process involved coding, comparing and note-taking to build concepts. All interviews were transcribed and then analysed using the QSR N6 computer program (QSR International, 2002). The program allows for the organization of textual data into categories, themes and subthemes and facilitates management of a large volume of text. Central themes evoked by each patient regarding the effects of adding meditation to their lives were identified in each transcript as it became available, and then compared with subsequent interviews in an ongoing analysis. As the grounded theory analysis progressed, emerging themes were also compared in the same manner. As is usual within the methodology of grounded theory, the researchers constantly interacted with the data, asking questions designed to relate concepts and to generate theory (Strauss & Corbin, 1990). Researchers analysing the data were close to the topic: all interviews were conducted by a single researcher, then coded independently by a research assistant and the interviewer. Codes were compared and discussed to assure the consistence of coding. The research assistant had extensive experience with grounded theory methods, but was not familiar with the specific context of MBSR practice and hence had few pre-set beliefs about the practice, which afforded a different perspective. Codes, once identified at each level by the two coders, were reviewed and verified by a third researcher, the principal investigator on the overall project.

Trustworthiness

A focus group was used to check the validity and trustworthiness of study results from the participants' perspective. This technique, called member validation, is one way in which researchers attempt to enhance rigour, while striving for truthfulness (Hoffart, 1991). The researchers presented the data and interpretations to the participants, eliciting feedback regarding how well the themes captured the essence of their experiences. Patients were invited to discuss any of the interview content in greater depth and to clarify and confirm their own experience of each theme. Facilitators of the MBSR course also participated in the focus group, further validating the findings and, with the patients, adding deeper understanding and meaning to the initial data. Next, the thematically categorized research findings were integrated with the subjectively reported experience of patients in their own words, and these findings were then related to both the theoretical and empirical MBSR literature. Finally, the manuscript was shared with the participants, and comments invited before submission.

Results

Subjects

Nine subjects were drawn from the Tom Baker Cancer Centre's ongoing MBSR drop-in group. In total, seven females and two males were interviewed. Participants were between 43–77 years in age (average age 60.8 years). Additionally, participants had been active in the drop-in group for between 1 and 6 years (average time 2.8 years). Of the nine participants, four had breast cancer, two had prostate cancer, one had ovarian cancer, one had a malignant melanoma and one had multiple cancers (lung, thyroid and Hodgkin's Disease). Participants had been diagnosed between 31 and 4 years previously (mean, 8.3 years; median, 5 years).

Emerging themes

Theoretical saturation was achieved with nine participants. A tentative preliminary model emerged from the first round of interviews with each of the nine participants. The focus group with seven participants and three MBSR Group Facilitators was used as an opportunity to affirm, modify, clarify and elaborate on what was said in the first interview. This focus group was effective in checking the emerging content areas and for verifying the emerging theory.

Five major themes emerged from the data: (1) opening to change; (2) self-control; (3) shared experience; (4) personal growth; (5) spirituality.

Opening to change. Opening to change describes patients' initial personal experiences of the 8-week MBSR programme and joining the ongoing drop-in group. Changes occurred both in the way patients thought about their own illness and the range of ways to cope with it, and in their feelings about and relationship to the treatment centre. For the majority of patients, the very act of being introduced to the programme coincided with a time when they were actively searching for information to help them in their treatment and recovery.

> My motivation was there was no treatment left for me. I felt I'd better figure out how to cope with this disease. Meditation was what I thought I had to do.

One of the participants described the initial draw to the MBSR programme was due to the fact that it was offered through the Tom Baker Cancer Centre, which she described as follows:

> This was an institutionally supported programme. It was respectable and authorized. That was important to me.

Patients found the programme both intellectually stimulating and helpful on a practical level in dealing with a variety of issues. For example, in the MBSR programme, one group member found additional ways of perceiving her present life situation.

> In reading Kabat-Zinn's book *Full Catastrophe Living*, there were ideas he was putting forth that certainly echoed with my own experience of cancer diagnosis. The whole concept of the mind and body and trying to get a handle on what causes stress and how you can deal with it made a lot of sense. This whole notion of embracing change as the constant, I'd never really thought of it that way before.

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At the end of the initial 8-week course many patients felt they had benefited from the programme but needed to continue the formal group practice in some capacity to strengthen the initial shift in perspective. At that point many patients made a commitment to a regular practice of meditation and yoga and also to come to the Thursday drop-in group. A group member described this process as follows:

> The 8-week programme was a preparation for what we've been doing since. I can't say I didn't get a lot out of the initial programme, because I did, but looking back I got relatively little out of it compared to what I've got from the drop-in group. I feel sorry for people who do the 8-week programme and don't continue on. The benefit for me has come in the long term. Things keep happening, little bits here and there. The 8-week programme was just a start.

Many patients found the weekly drop-in group to be a resource on which they strongly relied, which helped to consolidate this shift in perspective.

Theme summary. The eight-week MBSR programme and the ongoing drop-in group have been useful in helping patients confront their initial cancer experiences in different ways, such as making lifestyle and attitude changes during the immediate crisis of cancer to facilitate coping—the beginning of a major shift in perspective. The MBSR programme was accepted as a credible and viable treatment adjunct because it was offered at a sanctioned cancer treatment centre. The initial 8-week programme was the entrance to see life from another perspective: participants were introduced to the techniques and tools for meditation and had the opportunity to learn about themselves in relation to this approach.

Self-control. Self-control refers to patients' developing ability to control their own behaviours. It requires patients to pay attention to the results of their behaviour and make corrective adjustments as needed. A participant describes the MBSR practice in those terms:

> Meditation and yoga are ways to take control of our lives in a positive way. What the meditation does is give me time to look within. By looking within, that gives me control.

Participants were aware that through regular meditation practice they became more able to consistently respond to stressors in a more desirable manner.

> When I do the yoga and meditation I'm in better control of myself, physically and mentally. Not that it works all the time . . . Doing meditation on a regular basis takes self-discipline. Now it's to the point that if I don't do it, I really notice it. Things go haywire.

A participant shared that she thinks of her time spent meditating, in some ways, as an investment:

> I think of this as an investment. I want to be able to draw on it when I need it . . . I don't want to lose the tools. I want to have them available to me whenever I need them. That's what motivates me.

The practice of mindfulness provided a means by which participants monitored and controlled their own arousal and were able to face and evaluate their problems with greater emotional equilibrium. According to one participant:

> I don't think the disease has gotten to me as stressfully and as horribly as it could have. I am a fairly emotional woman. If I hadn't taken mindfulness I would be a mess.

Theme summary. Self-control was an important outcome of meditation practice. Deeper knowledge and understanding of thoughts and feelings provided more clarity and control. Participants developed a sense of knowing where there was potential for influencing outcomes, and when to simply let go and relinquish efforts at controlling the uncontrollable. Self-awareness was further enhanced by the ability to self-regulate both physically and mentally, and by strengthening self-discipline. Patients learned to use these tools to exercise emotional control, reduce stress and live better with cancer.

Shared experience. Shared experience refers to the interaction between the group members during the weekly drop-in class. Members felt these social relationships buffered the severity of

individual perceptions of life stressors, provided support to handle the environmental demand, and helped to manage individual affective responses. All those interviewed conveyed that it was extremely important to be in a room full of cancer survivors.

> It's a very powerful experience sitting in a circle of people who have been affected by cancer . . . I find in it a very profound understanding because we all share a similar experience . . . We all know what it means to have cancer and live with it. You've had this deep experience and there are others who have had a similar experience. You're constantly reminded of your own humanity and the humanity of others.

Participants shared not only their cancer diagnoses but also the practice of meditation. Several participants equated their relationship with the other group members in terms of their collective meditation practice. For example a participant shared:

> There are a lot of people that have had cancer. Just because they've had cancer, doesn't mean you can go and talk to them. I think it's more the meditation.

By listening to and observing one another, patients shared in the discovery of solutions to common dilemmas and thus increased their repertoire of effective coping skills.

> That's what is really special about the group, hearing about what people are coping with. You can listen to someone talk about their suffering and you can accommodate that. You don't have to walk away from it. I was pretty good at doing that before I went through this whole thing . . . I'm really happy I have an opportunity to know about those things . . . You don't want to run from that.

Sympathetic and direct confrontations with difficult issues were seen as necessary in the group, which was achieved through connecting with the others.

> You come for not only learning how to connect more with yourself, but you're also connecting with other people who understand the pain. Not necessarily just the physical but the mental pain of what cancer is. It's about life, right in that circle, right in that room.

Perhaps one of our senior group members who subsequently passed away said it best:

> If a family is composed of people who've had similar experiences, then this is an adopted family . . . I feel closer to those people than I do to my own family. There is an understanding there and camaraderie . . . What keeps me coming back is the fellowship or the connection with the group and the general improvement in my level of satisfaction with the life I'm leading.

Theme summary. The 8-week MBSR programme and the ongoing drop-in group allowed cancer patients to create a supportive environment in which they developed unique relationships. The opportunity to build close connections and being empowered to use their developing inner resources was important to patients. The group provided the space for patients to stabilize their meditation practice; it provided continuity and community, and became a place where they belonged and in which they built relationships with others in similar situations and with a similar kind of life identity.

Personal growth. Participants talked about mindfulness as a powerful method for coming to terms with their relative personal situations in ways that provided comfort, meaning, and direction in times of high stress and uncertainty.

> Meditation means taking time out of all the chaos. Meditating, in my own limited experience, gave me the chance to give the chaos some kind of meaning. I was clearing my mind and doing whatever it is that had to be done. No big deal.

Participants also talked directly about the process of meditation as a practice that facilitated personal transformation on several levels.

> The healing has elevated me to a higher level of recognizing this programme as beneficial, no matter what. It's changed my outlook on life, my relationship to other people and, most importantly, my relationship to

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> myself. That's the one person I have to deal with every day.

The value of the actual practice and experience of meditation was emphasized.

> The ideas actually have a physical embodiment. That's what is so powerful about this—you don't just read it. It's about how you take those ideas and actually do what you have to do. It's very simple what you have to do. You have to sit, you have to be quiet and you have to listen to your breathing. That is really beautifully simple.

Group members saw that any situation, even cancer, can become one's teacher. Participants manage to significantly transform the meaning of their cancer illness. One participant described making this transformation in viewing her cancer as a motivating force:

> The way I look at cancer is that once you get through the awfulness it's a very powerful motivator to live your life. I'm grateful I can come up here and be reminded of that.

The extent of personal growth and transformation was further illustrated by the degree of centrality of the cancer experience—in some cases cancer became an event rather than the defining characteristic of the patient.

> I'm not feeling my cancer is growing, it's becoming less and less. It's secondary. I'm on this other pathway. I'm looking at the positive aspects of becoming healthier, maybe even healthier than I was before.

Theme summary. By practicing meditation and yoga, participants identified great gains in their personal growth. In the group and during practice, patients cultivated relationships within themselves in which they built and nurtured their inner lives. Participants discussed shifting from a negative to positive attitude and beginning to see cancer as a motivating force to make a difference in the way they relate to both themselves and others. In the group and during practice, patients cultivated relationships within themselves in which they built and nurtured their inner lives.

Spirituality. Spirituality did emerge as an important theme for group members even though the focus of the MBSR group was secular, and spirituality was not specifically discussed or its development explicitly encouraged. This lack of a specific religious focus especially resonated with one of our senior participants:

> When you look at all these religions and philosophies there's an underlying common current among all of them. The biggest problem with the world is that they're concentrating on each others' differences instead of their common ground.

Despite its non-doctrinal stance, for some of the participants, their meditation practice began to meld with their other spiritual and religious practices, particularly prayer:

> Doing meditation brought me more into the spiritual. A lot of times I'll do meditation and then I'll do a prayer after that or before, one of the two. I kind of link the two together. The mindfulness and meditation brought me back more into the spiritual part of it.

One participant described how meditation had become, for her, a type of 'self-prayer':

> I know there is the power of prayer and its evidence. If I can take that word prayer and say meditation is a form of self-prayer. It's spending time with myself, not looking outside but looking within.

Finally, some participants indicated their growing spirituality was not necessarily something they had sought or expected from the meditation practice:

> Whenever I find that I'm really bogged down I go and I meditate. I've become a lot more spiritual. It's quite funny.

Participants often came to feel grateful for all they have and what the practice has given them. One group member asked:

> How did I make a switch from being negative to positive in dealing with cancer? It was gratitude.

Theme summary. Although spirituality is not explicitly discussed as a theme in the MBSR programme, the practices of MBSR may support spiritual growth, as attested by these participants.

The development of an ability to identify and appreciate spiritual resources and tools that were not previously considered further enhanced personal growth. The secular stance of the programme may provide a welcome venue to explore spirituality in an unthreatening way.

Theory building

The general theory that emerged from these interviews posits five common aspects of MBSR programme participation, as detailed earlier: (1) opening to change; (2) self-control; (3) shared experience; (4) personal growth; (5) spirituality. In broad terms, the initial participation in the 8-week programme is only the beginning of a shift in orientation that begins the growth process. The MBSR programme helps to meet their needs for understanding they are not alone in their journey, teaches concrete tools for self-control, and introduces ways to perceive the world they may not have previously considered. This results in benefits such as reduced stress symptoms and lower levels of mood disturbance. As practice progresses in the drop-in group, social support deepens as relationships are further developed, and people begin to exercise more diffuse self-control across a wider variety of life circumstances. Underlying this process is a theme of personal growth. With this comes the further development of positive qualities, beyond the symptom reduction documented over the course of the initial programme. A growing spirituality of feeling increasingly interconnected with others is part of this personal growth. Qualities of gratitude, compassion and equanimity may be the ultimate culmination of practice. Although this theory of the development of mindfulness practice is stated in linear terms, all of these processes likely occur simultaneously to varying degrees. Accordingly, the emphasis or importance of different aspects may oscillate depending on the life circumstances of each individual.

Discussion

Through the process of qualitative inquiry, a theory emerged, describing the process by which the participants in an ongoing MBSR drop-in group have integrated mindfulness practice into their lives as cancer survivors. Although specific to these individuals, many commonalities with other theories of mindfulness and its mechanisms of action are apparent. The MBSR programme as described by Kabat-Zinn seeks to facilitate patients' increased awareness of their propensity to analyse, evaluate and project into the future. This allows patients to see their life situations more clearly and to influence the level of stress associated with their habitual reactions in difficult situations (Kabat-Zinn, 1990). The participants endorsed this approach, as they described the effects of embracing this model of mindfulness on their lives.

The first theme 'opening to change' is reflected in the initial decision of patients to pursue mediation as a complementary therapy for coping with cancer. Through mindfulness practices they began to see how they habitually responded to stressors and could choose to change those patterns that were no longer helpful. A recent model of mindfulness mechanisms proposed by Shapiro et al. (2006) describes the central shift that occurs in meditation practice as one of 'reperceiving': being able to see things from a completely different perspective for the first time. Our participants' description of opening to a new way of understanding their experience through mindfulness has similarities to this idea of reperceiving.

The second theme identified by participants, 'self-control' is a crucial mechanism which may contribute to the changes in psychological and physical health found in MBSR interventions (Shapiro, 1998). The idea of self-control also fits with the Shapiro et al. (2006) model, which posits self-regulation as a mechanism that results from engaging in the process of reperceiving. This directly relates to the participants' experience of being able to see one's options and reactions and then choosing to respond in the more beneficial ways.

The third theme identified, 'shared experience', is also emphasized in the literature. Previous research indicates sharing a similar diagnosis creates a sense of community that alleviates the deep sense of isolation so commonly experienced by patients with cancer (Spiegel, Bloom, & Yalom, 1981). The most effective group strategies involve accepting cancer as a diagnosis and facing the problems related to cancer directly (Nezu et al., 1999). These factors were very important to our participants and the sense of community was often what kept them coming week after week. There was also a sense of shared meditation practice and a shared path, intermingled with sharing of the cancer journey, which added to the

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benefit of social support alone. The process of group members sharing experiences and developing group cohesion is similar to that described by other authors in respect to supportive expressive group therapy (Spiegel, 2001). This is interesting since the format of the MBSR groups is primarily experiential, with relatively little time devoted to talking and sharing.

The fourth theme, 'personal growth', has also been discussed in the literature. Bonadonna (2003) suggests that meditation may be a practice that facilitates growth, thereby enhancing health. This inward orientation toward one's experience can be extremely valuable in charting a course of action (Kabat-Zinn, Massion, Hebert, & Rosenbaum, 1998). The participants in this study were able to see their illness in a different light, transforming the very meaning of illness through the identification of some positive benefits, instead of entirely negative consequences, a process documented in the literature as benefit-finding, or posttraumatic growth (Cordova & Andrykowski, 2003; Kabat-Zinn et al., 1998; Thornton, 2002). Responding mindfully to change and loss makes a difference in the perception of stressful events, such that having cancer can become simply an event rather than the defining characteristic of the patient (Coker, 1999).

In terms of findings on the theme 'spirituality', definitions often include dimensions such as making meaning of life, faith, purpose, and connection with others and a higher power (Kroepfer, 2000; Mytko & Knight, 1999). Other research has shown MBSR participants often report an increase in the compassion they feel for themselves and greater empathy for others (Shapiro, 1998). MBSR programme graduates also demonstrate increases in both affiliative trust, defined as a sense of basic trust, openness and caring; and oneness motivation, which is a positive sense of feeling connected to something larger than oneself (Roth & Stanley, 2002). Despite the programme's secular stance, the development of spirituality may be an inevitable outcome of the practice, as one becomes aware of the intricate interconnections among themselves, other individuals and eventually all aspects of nature through direct experience.

Conclusions

This study is not without limitations. Inherent in the qualitative methodology, findings cannot be generalized beyond this group of informants, who are unique in terms of their personal history, geographic and social backgrounds, cancer type, severity, time living with cancer and treatment history, education, ethnicity and age. This study is one of possibility, rather than probability. It can generate hypotheses about some of the ways mindfulness can potentially affect individuals who choose to pursue it with the degree of vigour that these participants have. They are a unique group in that not only did they complete the 8-week programme, they have been attending weekly practice groups consistently for a number of years. The benefits of practice elucidated by these participants may not be attainable by the majority of cancer patients or even the majority of MBSR participants, but they are certainly possible and consistent with MBSR theory and the suggested mechanisms of action.

In this capacity, any effective clinical approach in behavioural medicine must engage the active participation of the client to use and develop his or her full range of internal resources (Salmon, Santorelli, & Kabat-Zinn, 1998). MBSR researchers should continue to make a commitment to recording and confirming the stories of programme participants. As one of the senior members said:

> You don't realize how beneficial it is to be able to talk about your experience. Being able to tell my story and have somebody who will listen.

Taking the opportunity to explore patients' lived experience of meditation and how they have integrated the practices into their lives provides useful information that strongly suggests future directions for research (Brennan & Stevens, 1998). The richness of this data provided a source from which questions and theories can emerge concerning the self-perceived experiences of those who practice meditation in conjunction with mainstream cancer treatments (Brennan & Stevens, 1998). As stated by a founding group member who died following the data collection phase of this study[1]:

> I'm a much happier person than I ever thought I could be with the disease . . . the

[1] This paper is dedicated to the memory of Edward Schwarz (1932–2004) and Carol Lowery (1934–2005).

programme has really transformed my life—I've got a much better life for it.

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