

Children and the Mind/Body Connection: Mindfulness-Based Practice with Children Who Have Cancer

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In recent years, clinicians have increased their use of mindfulness-based practice and have extended its use to the treatment of adults who have cancer. Although research has demonstrated the physical and psychological benefits of these practices with adult cancer patients and with children in the general population, there is little research specifically on the use of mindfulness-based practices with children who have cancer. This article first explores existing research on the use of mindfulness-based practices with both adults who have cancer and children in the general population. The article then provides examples of cancer organizations using mindfulness-based practices in the treatment of children who have cancer. Last, the author provides recommendations for group mindfulness-based programs designed for children who have cancer in outpatient or community-based settings and discusses the role of social workers in facilitating the research and implementation of such programs.

The use of mindfulness-based practice has increased in recent years, as has the research on its physical and psychological benefits (Burke, 2010). Research points to significant benefits of mindfulness-based practices for adults undergoing treatment for or recovering from cancer (Baer-Wu, 2010; Speca, Carlson, Goodey, & Angen, 2000). Researchers also have begun to investigate the positive psychological and social benefits of mindfulness-based practices with children (Burke, 2010; Greenberg & Harris, 2012; Hooker & Fodor, 2008; Napoli, 2004; Thompson & Gauntlett-Gilbert, 2008). Yet, research on the effects of mindfulness-based practices with children who have cancer remains limited.

It is critical that social workers begin to examine the potential benefits of incorporating mindfulness-based practices into the treatment of children who have cancer. Social workers are poised to be leaders in the development, implementation, and evaluation of such holistic programs because of the profession's tradition of expanding the medical model to incorporate clients' individual, social, and familial needs.

This article first defines mindfulness-based practice and then explores the existing research on the use of mindfulness-based practices with both adults who have cancer and children in the general population. Next, the article highlights existing programs that incorporate mindfulness-based practices in the treatment of children who have cancer. Finally, the author provides recommendations for group mindfulness programs designed for children who have cancer in outpatient or community-based settings and discusses the role of social workers in the development and implementation of such programs.

Mindfulness-Based Practice: A Definition

Mindfulness can be defined as “the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment” (Kabat-Zinn, 2003, p. 145). Mindfulness-based practice includes both “formal” practices such as yoga, body scans, or sitting meditation and “informal” practices such as daily mindful tasks or breath awareness (Kabat-Zinn, 2003, p. 148). In mindfulness-based practice there is no outcome or goal; rather, the focus is on remaining present and observing, describing, and acting with awareness (Carmody & Baer, 2008). Mindfulness-based practice also maintains a strong emphasis on nonjudgmental acceptance; all emotions or sensations are observed carefully but not evaluated as good or bad, true or false (Baer, 2003).

Mindfulness-based practice originated in a number of Eastern meditation practices, but Buddhism is primarily credited with its development (Kabat-Zinn, 2003). Western researchers and clinicians have introduced mindfulness-based practices into mental health treatment programs and, for the most part, are teaching the skills independently of their religious and cultural origins (Baer, 2003). Increasingly evidence supports a number of modalities, which have stemmed from mindfulness-based practice, including Mindfulness-Based Stress Reduction, Mindfulness-Based Cognitive Therapy, Dialectical Behavior Therapy, and Acceptance and Commitment Therapy (Baer, 2003; Carmody & Baer, 2008). These interventions have become progressively popular to treat “well” individuals and clients suffering from chronic pain, life-threatening illness, and Axis I Disorders. Research suggests these interventions are successful because mindfulness-based practices incorpo-

rate exposure, cognitive restructuring, relaxation, and acceptance, leading to symptom reduction and improved well-being (Baer, 2003; Carmody & Baer, 2008).

Mindfulness-Based Practices with Adults Who Have Cancer

Over 75% of cancer patients integrate complementary or alternative medicine into their treatment plans (Ang et al., 2005). With new studies linking psychological stress to cancer, more patients are including mindfulness-based practice to address their stress and anxiety (National Cancer Institute, 2012).

Through standardized measures and patient self-report, a number of studies have found that mindfulness-based practice reduces anxiety and stress while increasing a patients' coping abilities and their quality of life during treatment (Baer-Wu, 2010; National Cancer Institute, 2012; Thompson & Gauntlett-Gilbert, 2008). Similarly, Speca, Carlson, Good-ey, & Angen, (2000) found that mindfulness-based practices lower mood disturbance and emotional irritability in cancer patients, leading to fewer physiological problems, such as cardiopulmonary and gastrointestinal symptoms.

Other studies point to mindfulness-based practice's efficacy in altering brain function and changing thought patterns and attitudes, which can help individuals conceptualize and approach their diagnoses in emotionally healthier ways (Davidson et al., 2003; Hooker & Fodor, 2008). Yoga, a form of mindfulness-based practice, has been found to help with recovery from cancer treatments by improving sleep patterns, reducing fatigue, improving flexibility, and increasing energy levels (Bower, Woolery, Sternlieb, & Garet, 2005; Ivy Child International, 2012). Research has found that even short-term mindfulness-based programs can be effective in altering immune function, an important component of the health of patients undergoing cancer treatment (Davidson et al., 2003).

Mindfulness-Based Practice with Children

The majority of research on the use of mindfulness-based practices, and especially studies with cancer patients, focuses primarily on their efficacy with adults. Additional mindfulness studies are limited by

their failure to distinguish between children and adults within their study designs and analyses (Greenberg & Harris, 2012). Despite the paucity of thorough research, extant research demonstrates that mindfulness-based practices are appropriate for and beneficial to younger clients (Burke, 2010).

The bulk of research on mindfulness-based practice with children has been conducted in schools, which offer easy access to children in the general population. This research suggests that the use of mindfulness, meditation, and yoga can lead to increased attention, academic performance, self-acceptance, and self-understanding and reductions in anxiety and stress (Greenberg & Harris, 2012; Hooker & Fodor, 2008; Napoli, 2004).

Research argues that mindfulness-based practices can be beneficial to children because many children are on “autopilot” throughout the day, following the directions given by adults in their lives without really experiencing the day fully. As a result, children are an important population in which to develop greater self-awareness (Hooker & Fodor, 2008). Some scholars have raised concerns that mindfulness is not developmentally appropriate for children because they are not yet capable of abstract thought (Greenberg & Harris, 2012). Yet, other researchers contend that children are highly creative, imaginative, and open to new experiences and opportunities to explore. In addition, young children have “beginners” minds’ and have yet to develop a sense of self-consciousness, allowing them to be open to mindfulness-based practice and be compassionate and non-judgmental with themselves (Greenberg & Harris, 2012; Hooker & Fodor, 2008).

With further research, mindfulness-based practice with children could complement other forms of work with children that address children’s emotional and physical well-being in child-friendly ways. Now is an opportune time to explore the value of mindfulness-based practices with children who have cancer.

Mindfulness-Based Practice in Pediatric Cancer Treatment and Therapy

A number of pediatric oncology outpatient programs and cancer-related nonprofits in New York City already include mindfulness-based practice in their treatment and therapy. Memorial Sloan-Ket-

tering Cancer Center (MSKCC) has an integrative medicine team that offers services to complement traditional medical care. For children, some of these offerings have a basis in mindfulness-based practice, including mind/body therapies and yoga. MSKCC's website suggests that these practices can help pediatric cancer patients manage their symptoms and improve their quality of life by lessening pain, nausea, headaches, and insomnia. Mindfulness-based practices can also help children manage anxiety, stress, and depression; decrease fears; enhance coping skills; and improve relaxation during procedures, treatments, and long hospital stays (MSKCC, 2013).

Similarly, Montefiore Medical Center has followed other hospitals in the United States by starting a Kids Kicking Cancer program where pediatric oncology patients practice breathing techniques, meditation, and martial arts to help cope with pain and anxiety (Kids Kicking Cancer, 2013). Gilda's Club New York City, an affiliate of a nationwide cancer support organization, has a children's program known as Noogieland that incorporates yoga into their workshops for children who have been diagnosed with cancer, have a loved one living with cancer, or have a loved one who died from cancer (Gilda's Club, 2013).¹

Other organizations are developing research-based curricula built entirely around mindfulness-based practice. In May 2012, Ivy Child International launched a mindfulness program designed originally for pediatric cancer patients. The program is a 16-week certificate program that meets once a week for one hour at a time. Classes include 20 minutes of circle time to learn mindfulness-based practices, 20 minutes of yoga postures, and 20 minutes of discussion. Additionally a self-assessment feelings chart is collected at every class. Ivy Child International implements this mindfulness program in early childhood centers and hospitals (Ivy Child International, 2012).

All of the aforementioned organizations are taking vital first steps in integrating mindfulness-based practice into the treatment of children who have cancer. These programs can serve as foundations for further research in the development, implementation, and evaluation of mindfulness-based programs in pediatric outpatient or community-based organizations.

¹At the time of this publication, the author worked as an independent contractor for Gilda's Club New York City.

Recommendations for Further Research and Practice

Although many existing pediatric cancer treatment programs incorporate mindfulness-based practice there exists a growing need for curriculum-based group mindfulness programs for children who have cancer. Each stage of the development, implementation, and evaluation of these programs must be based in methodologically rigorous, evidence-based research and integrate evaluations that can contribute to existing research and help guide future studies.

The curricula for such programs should be developed using research, literature, and other similar programs as guides. Curricula should combine a mixture of mindfulness practices to engage children in varied and engaging ways, as particular practices might be more efficacious for certain children. Each practice should be included purposefully, with all exercises examined in advance to ensure they are developmentally appropriate for each group of children (Greenberg & Harris, 2012; Hooker & Fodor, 2008; Thompson & Gauntlett-Gilbert, 2008).

Curricula should begin with basic mindfulness techniques so that the children can experience success early on and feel encouraged to continue further. For example, beginning with a 1-5 minute meditation exercise would be more effective than asking children to sit still for 10 or 15 minutes (Hooker & Fodor, 2008). Mindfulness practices could include yoga, belly breathing, meditation, daily mindfulness tasks, and body awareness (Hooker & Fodor, 2008; Napoli, Krech, & Holley, 2005; Bower, Woolery, Sternlieb, & Garet, 2005). All practices need to include discussion so that children's questions, concerns, or discomforts can be addressed (Hooker & Fodor, 2008). The practice and discussion must focus on acceptance, compassion, and acknowledgment of where each child is in the process of her or his illness and experience in the mindfulness-based practice program. Children should be encouraged to accept that they might feel pain or worry during their treatment and that this practice is not intended to deny or pathologize these fears, but rather it is designed to help them cope with their experiences (Hooker & Fodor, 2008).

The programs should be held in outpatient pediatric treatment centers at the hospitals in which the children are receiving treatment or in cancer-focused community-based organizations (Thompson & Gauntlett-Gilbert, 2008). Programs should be designed for implementation in

groups of children of similar ages so that the children can provide mutual support when exposed to practices that might be new or uncomfortable at first (Thompson & Gauntlett-Gilbert, 2008). Programs should be run by trained facilitators, who can provide instructions for each practice in concrete and clear child-friendly language (Greenberg & Harris, 2012; Hooker & Fodor, 2008; Thompson & Gauntlett-Gilbert, 2008).

Throughout implementation and review, programs should integrate rigorous evaluation processes, including standardized measures for the children to fill out at baseline and at pre-determined intervals (Kabat-Zinn, 2003). These measures could include standardized anxiety or coping scales, self-report, and teacher or caregiver report. If possible, the evaluations might include analyses of changes in physical health throughout participation in the program, whether through self or caregiver report or through medical records (Greenberg & Harris, 2012). Analyses can also disaggregate data by age and gender, enabling program developers to further hone curricula to maximize benefits to clients.

An ambitious program could also evaluate the effects of mindfulness-based programming on family members and caregivers or include a simultaneous caregiver mindfulness group. Including caregivers acknowledges caregiver stress and enables caregivers to reinforce the mindfulness-based practices with the children outside of the program and provide additional support and comfort (Greenberg & Harris, 2012).

Social Work Involvement and Implications

Social workers can play an integral role in the scientific study and practice of mindfulness-based practices with children who have cancer. The mission of the social work profession is to serve vulnerable populations through incorporation of the person-in-environment approach in both research and practice (Code of Ethics of the National Association of Social Workers, 2013). Social workers are equipped to advocate for and coordinate the treatment of the whole person in her or his context, which includes not only the treatment of disease, but also attention to psychological, social, behavioral, and spiritual factors involved. This holistic practice is in line with the mind/body connection, a central tenet of mindfulness-based practice.

Social workers are often members of multidisciplinary teams, either as part of a hospital treatment team of doctors, nurses, and child

life specialists or as part of a community-based organization's team of psychologists, art therapists, and play therapists. Social workers can take the lead in using the expertise of their team members to create holistic mindfulness-based programs with attention to the diversity of a child's cancer treatment and therapy experience. Social workers can also be instrumental in engaging families, who can then help the children apply what they have learned and integrate mindfulness techniques in daily routines.

Finally, social workers are charged to be culturally aware and conscious of their therapies and interventions (NASW, 2013). With mindfulness-based practices especially, clinicians and researchers must find ways to incorporate the practices into Western science and treatment plans, while honoring the integrity of the cultures and religions in which these practices are rooted. Social workers must find a balance between respecting the traditions and providing an environment free of cultural, religious, or ideological factors where patients can experiment with ways to relieve suffering of both the mind and body (Kabat-Zinn, 2003).

Conclusion

Promising research, albeit limited in scope, documents the efficacy of mindfulness-based practices with children and adults who have cancer in reducing anxiety and increasing coping skills. Thus, mindfulness practices could be effective in treating children who have cancer (Greenberg & Harris, 2012). More research should be conducted to investigate the effects of mindfulness practices in children. Current studies and programs can serve as guides so newly developed programs are designed specifically to meet the unique needs of children who have cancer. A mindfulness-based group program for children who have cancer has the potential to treat both the physical and emotional side effects of cancer and lead to better overall health and quality of life for these children, their families, and their caregivers.

Medical social workers have the opportunity to engage with members of multidisciplinary teams to integrate traditional medical treatments with innovative therapies. Moving beyond a rigid medical model is crucial for building approaches that treat the whole individual. Examining the value of mindfulness-based practices with children who have cancer allows for further research that may lead to the incorporation

of these practices with children who have other chronic illnesses. Social workers must continue to pioneer creative, researched-based programming in order to best serve clients and their families.

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