Yoga has been practiced for more than 5,000 years and is based on the collective experiences of yoga practitioners over time. Western countries and sophisticated medical facilities use this practice as a complementary therapy with standard medical treatments. Yoga has been shown to improve quality of life. Several types of yoga potentially can benefit people with cancer, including Hatha yoga. The type of recommended Hatha yoga is dependent on the physical conditions and fitness level of patients. This article explores the impact of different types of Hatha yoga on various cancer-related symptoms in patients with cancer.

The article also provides guidelines for healthcare personnel—particularly nurses—to help choose the right kind of Hatha yoga that suits their patients’ needs and interests. Additional information is provided on measures and instructions that are essential for healthcare providers to know before recommending any yoga type to their patients. Evidence of the feasibility and potential efficacy of yoga for patients with cancer is provided.

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different yoga styles and is found to be beneficial as therapeutic use in traditional Western medicine (Mustian et al., 2013). Different types of Hatha yoga include Iyengar, Ananda, Anusara, Ashtanga, Bikram, Kripalu, Kundalini, and Viniyoga (NCCAM, 2013). Certain forms should not be practiced during particular disease conditions (NCCAM, 2013). For example, Ashtanga yoga may be too vigorous for patients who are fatigued or too exhausted to practice. Similarly, patients with heart disease, lung disease, or a history of heatstroke may have difficulty practicing Bikram yoga, which is vigorous and practiced under a very high temperature.

Hatha yoga, through specific yoga activity and with precise structured poses, breathing, meditation, and relaxation, improves physical, mental, and spiritual well-being and further helps to purify the body and mind (Van Puymbroeck, Schmid, Shinew, & Hsieh, 2011). An eight-week Hatha yoga study was performed on 57 women, all of whom were up to nine months post-treatment for breast cancer (Van Puymbroeck et al., 2011). The study found that Hatha yoga helped to reduce physical activity constraints and improved lower- and upper-body strength and flexibility. Hatha yoga also supported changes in body image and enhanced physical fitness (Van Puymbroeck et al., 2011). In another study, 20 cancer survivors—primarily breast cancer survivors who were at least three months into cancer treatment—participated in a seven-week period of Hatha yoga (Culos-Reed, Carlson, Daroux, & Hately-Aldous, 2004). These patients were the intervention group for the study and were examined along with a control group (18 other patients with cancer). Significant improvements were noted in both groups in physical (e.g., resting heart rate, cardiovascular endurance, cardiopulmonary arousal) and psychosocial (e.g., global quality of life, stress, emotional irritability, mood disturbance, tension, depression, anger, confusion) variables (Culos-Reed et al., 2004). Physical changes noted in the yoga participants were an increase in distance walked and a lowered heart rate, showing improved cardiovascular endurance and heart function. Psychological changes noted in the patients from yoga intervention were lower mood disturbance, stress, tension, depression, anger, and confusion. Hatha yoga had a positive impact on mood, quality of life, and stress on patients with cancer.

These studies show that Hatha yoga can be helpful for patients with cancer with a variety of physical and emotional benefits (see Table 1). The following sections will discuss more about the different techniques of Hatha yoga.

**Iyengar Yoga**

Iyengar yoga, developed by Bellur Krishnamachar Sundararaja, is the most widely practiced yoga in the Western world (Guthrie, 2003; Speed-Andrews, Stevinson, Belanger, Mirus, & Cournyey, 2010). Iyengar yoga is a yoga type that is practiced with the use of different postures and props (e.g., mats, blankets, belts, blocks, sandbags, chairs). Patients with different levels of illness modify the postures and props to suit their fitness level and ability. This helps improve their strength, stamina, flexibility, and confidence (Sims, 2005; Speed-Andrews et al., 2010). Iyengar yoga has been shown to improve physical function and quality of life and reduce the negative effects of the disease, while increasing hope and improving peace of mind in cancer survivors (Speed-Andrews et al., 2010; Thomas & Shaw, 2011).

**Viniyoga**

Viniyoga is a soothing and mindful yoga that is believed to have been developed by T.K.V. Desikachar (Guthrie, 2003). Viniyoga is considered to be a gentle style of yoga that integrates different postures, chanting, breathing, and meditation (Guthrie, 2003). This style of yoga emphasizes safety and is considered to be easy to learn in comparison to other yoga styles (Sherman, Cherkin, Erro, Miglioretti, & Deyo, 2005). Viniyoga adapts different means and approaches of practice that can be individualized according to patients’ unique health conditions. Therefore, Viniyoga is considered to be helpful for people with

### Table 1. Benefits of Yoga for Cancer

<table>
<thead>
<tr>
<th>Yoga Type</th>
<th>Focus of Practice</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ananda</td>
<td>Meditation and deep relaxing</td>
<td>Increase in relaxation, Calms the mind, Increases self-awareness by increasing deep spiritual experiences, Builds strength and balance</td>
</tr>
<tr>
<td>Anusara</td>
<td>Alignment and physical activity with spiritual expressiveness</td>
<td>Used when one is depressed, Relieves stress and fatigue, Relieves anxiety and depression, Comforts one to become more inspiring and uplifting</td>
</tr>
<tr>
<td>Ashtanga</td>
<td>Vigorous physical exercise</td>
<td>Used when one is stressed, Helps to relieve stress, Builds cardiovascular strength, Improves flexibility</td>
</tr>
<tr>
<td>Bikram</td>
<td>Physical practice with sweating and detoxification of the body</td>
<td>Used to stretch and loosen muscles and tendons</td>
</tr>
<tr>
<td>Iyengar</td>
<td>Symmetry and alignment</td>
<td>Used when one is unfocused, Helps to build body strength, Increases sleep quality</td>
</tr>
<tr>
<td>Kripalu</td>
<td>Mind-body integration with flowing and merging of body, breath, and mind</td>
<td>Increases relaxation along with body strength and flexibility</td>
</tr>
<tr>
<td>Kundalini</td>
<td>Breathing with the use of different mantras</td>
<td>Used to increase spiritual and emotional dimensions</td>
</tr>
<tr>
<td>Viniyoga</td>
<td>Integrates different postures by using chanting, breathing, and meditation</td>
<td>Used when one is anxious and fearful, Better for people with chronic health problems</td>
</tr>
</tbody>
</table>

Note. Based on information from Alexander, 2013; Guthrie, 2003; Levin-Gervasi, 1999; Sims, 2005.
chronic health problems (American Viniyoga Institute, 2011; Guthrie, 2003). No research study was found on Viniyoga and patients with cancer; however, a 12-week Viniyoga study done on 101 adults with chronic lower back pain claims that this type of yoga was effective in improving function and reducing chronic lower back pain (Sherman et al., 2005). Viniyoga may be superior to other traditional exercises and has shown improvements in functional status and a reduction in analgesic medication use (Chou & Huffman, 2007).

Kundalini Yoga

In ancient India, Kundalini yoga, also called the “royal yoga,” was taught only to royal families and their close associates and was introduced in the West about 40 years ago (Lyndley, 2008). Kundalini yoga, which was introduced by Sikh master Yogi Bhajan to the United States, consists of a collection of meditation techniques and encompasses different chanting, call and response, and mantras (Guthrie, 2003; Sims, 2005). A mantra is a syllable, word, or phrase used as a sacred language that is used to raise consciousness. The purpose of Kundalini yoga is to enhance the energy of an individual by connecting him or her with a universal energy (Lyndley, 2008). The connection is acquired via various breathing exercises, physical postures, hand positions, sounds, and meditation (Lyndley, 2008). Kundalini yoga traditionally is used for treating depression, fatigue, anxiety, anger, regret, and fear (Shannahoff-Khalsa, 2005). Such therapies also are expected to treat emotional distress that comes with a cancer diagnosis (Shannahoff-Khalsa, 2005). Kundalini yoga techniques have yet to be widely used or evaluated in clinical trials for patients with cancer (Shannahoff-Khalsa, 2005). However, Kundalini yoga and its techniques have been highly effective for similar symptoms of obsessive compulsive disorder (Shannahoff-Khalsa, 2005). Patients with cancer who are physically stronger are likely to acquire more benefit from Kundalini yoga for similar psycho-oncology symptoms (Shannahoff-Khalsa, 2005).

Bikram Yoga

Bikram yoga, developed by Bikram Choudhury, includes 26 different postures (Guthrie, 2003; Hewett, Ransdell, Gao, Pettichickoff, & Lucas, 2011) and is designed to scientifically warm and stretch muscles, ligaments, and tendons by circulating oxygenated blood to each part of the body, promoting perspiration to detoxify the body (Hewett et al., 2011; Sims, 2005). Bikram yoga is physically and mentally challenging when compared to other forms of yoga because it is performed in a very high-temperature setting (40.5°C/105°F and 40% humidity) and lasts for 90 minutes (Hewett et al., 2011). Because of its challenging nature, Bikram yoga is less popular than some of the other types of yoga, but Bikram yoga has positive effects on psychological and physical health (Hewett et al., 2011). Bikram yoga improves mindfulness, perceived stress, cardiorespiratory endurance, flexibility, and balance (DiStasio, 2008; Hewett et al., 2011).

Kripalu Yoga

First described by Swami Kripalvananda, Kripalu yoga is a less strenuous form of yoga that puts minimal stress on joints and safely can be recommended for patients with cancer (Cope, 2002; Guthrie, 2003). Kripalu yoga is practiced by slow, regular breathing combined with stretching muscles, lengthening the spine, and improving flexibility. It provides physical and psychological benefits (Cope, 2002). Those who practice Kripalu yoga are more energized and report fewer chemotherapy side effects (Cope, 2002). In addition, Kripalu yoga also can be beneficial for stress reduction, as it integrates postures with breathing (DiStasio, 2008).

Ananda, Anusara, and Ashtanga Yoga

Ananda yoga was developed by Donald J. Walters, who also is known as Swami Kriyananda. Ananda yoga uses different postures to clear and energize the body to prepare for meditation, concentrating on the postures to increase self-awareness. Ananda yoga is gentle and emphasizes deep relaxation and focusing on the postures (Levin-Gervasi, 1999).

Anusara yoga, designed by John Friend, means following the heart or flowing with nature and is influenced by Iyengar yoga with a spiritual element that helps to express oneself (Dowdle, 2011; Guthrie, 2003). It focuses on physical practice that helps and comforts one to become more inspiring and uplifting (Dowdle, 2011).

Ashtanga yoga, developed by K. Pattabhi Jois, is considered to be extremely physically challenging and helps to purify the mind and body (Guthrie, 2003). It is a kind of vigorous aerobic exercise that helps to relieve stress. This kind of yoga is practiced by applying different postures, moving rapidly from one to another with breath. These yoga sessions consist of multiple levels—primary, secondary, and tertiary—and practitioners must master one level before moving to the next. This yoga is practiced strictly, with discipline, by linking exercise with a breathing technique, Ujjayi, for 90–120 minutes (Levin-Gervasi, 1999).

No research studies were found on these three yoga techniques for patients with cancer. However, considering the physical and emotional benefits of these types of yoga, these Hatha yoga techniques also may help patients with cancer.

Implications for Practice

- Teach patients that cancer can affect them physically and psychologically, causing pain, fatigue, insomnia, depression, or anxiety.
- Provide complementary interventions, such as yoga, which are effective over time without any side effects.
- Help patients recognize their cancer-related symptoms and recommend certain yoga types to help minimize these symptoms.

Interventions

The literature suggests that yoga is an effective intervention for the management of cancer symptoms. Yoga has a low rate of side effects when practiced correctly (see Figure 1); however,
If planning to do home practice, patients should consult with a healthcare provider and qualified yoga therapist before starting yoga.

Use an open space and turn off all electronics to reduce probable disturbances. Never practice yoga when you are in a rush or physically disturbed.

Always practice yoga with bare feet.

Always warm up by walking around or swinging arms and feet before practicing yoga.

Patients with symptoms of anemia, postural hypotension, or light-headedness and dizziness should take precaution when practicing prolonged standing postures and while changing from one position to another.

Patients who have difficulty with balance should use a chair, wall, or other props to maintain balance and stability during yoga.

More vigorous yoga postures should be avoided by patients who are suffering from high fever, systemic infection, or thrombocytopenia.

Patients suffering from neutropenia should avoid crowded classes and try to maintain individual space and good hygiene to prevent infection.

Patients should work with a minimum pace and not overdo the postures. Always be aware of body strength, and adapt poses to one’s need and ability. If necessary, the patient needs to discuss modifying the exercises with the instructor.

The yoga interventions must be tolerated by the patient, and the patient must adhere to the yoga program for its duration (NCCAM, 2013). Most of the yoga postures are gentle and can be practiced by patients with cancer when proper training is provided (NCCAM, 2013). In addition, no evidence-based guidelines contradict the use of yoga as a therapy for patients with cancer (Oestreicher, 2008).

Nurses can help patients by incorporating yoga with cancer management and instructing them about certain yoga types and their benefits, depending on the patient’s disease and condition. Nurses can encourage patients to practice yoga by providing different resources about yoga, its types and benefits, yoga centers, and instructors who have experience working with patients with cancer. Nurses also can encourage patients to keep a record of regular yoga practice in a log book, which eventually can help patients evaluate themselves for better performance and adherence.

Many medical and cancer centers across the United States offer yoga classes. Therefore, instruction should be given by those who have expertise with particular cancer diagnoses and who can understand the patients’ physical capabilities coupled with their emotional needs. Yoga instructors’ training and certification depend on different yoga styles (NCCAM, 2013).

Recommendations

Patients with cancer often experience various problems, and each patient can suffer different signs and symptoms. Therefore, yoga interventions should be individualized, and these interventions need to be designed according to individual patients and their needs. Iyengar yoga can be practiced when the patient needs to reduce fatigue and increase sleep quality. Kripalu yoga is helpful for stress reduction. Yoga should be practiced in groups. Patients may feel safer in a class when instructed by yoga professionals. Practicing yoga in a group may help to increase social support by connecting with others and developing interpersonal relationships. However, individualized instructions also can be provided if a patient does not feel comfortable in a group setting.

Increasingly, yoga teachers and therapists are starting certification programs or teacher training aimed at working with patients with cancer. Yoga being integrated within inpatient and outpatient oncology settings to supplement physical and occupational therapists would benefit patients. Clinical guidelines by the National Comprehensive Cancer Network (2013) may help support the practices of various complementary therapies, including yoga, because it helps to reduce fatigue and sleeping difficulty.

Conclusion

Many researchers have concluded that yoga is a gentle form of physical exercise that is beneficial for patients with cancer and cancer survivors (Culos-Reed et al., 2012). Studies have supported the feasibility and potential efficacy of yoga for patients with cancer (Carson et al., 2007; DiStasio, 2008). Although many studies on yoga have been done, research is lacking on the benefits of different types of yoga for patients with cancer. Studies addressing the benefits of Bikram yoga for patients with cancer are needed because of its many potential benefits for patients with cancer. No evidence exists of negative side effects of yoga in patients with cancer. A variety of yoga practices exist if patients are not capable of practicing Hatha yoga that may be beneficial. Nurses can have a significant impact on patients’ quality of life by integrating yoga into practice and educating patients about the benefits of different types of yoga depending on their symptoms, physical conditions, and level of fitness.

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