

## Short Communication...Therapeutic Values of Yoga and Qigong – Are These Exercises Suitable for Breast Cancer Survivors? 瑜珈和氣功的治療價值 - 這兩種運動適合乳癌復康者嗎？

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Breast cancer is one of the most common malignant diseases in women. The mortality rate of breast cancer patients is rather low and the survival rate continues to increase worldwide (Siegel, Naishadham, & Jernal, 2012). However, conventional breast cancer treatments (e.g., mastectomy and radiotherapy) often lead to long-term physical impairments such as lymphedema and shoulder dysfunction (Cheville & Tchou, 2007). These side-effects may diminish the psychological well-being and quality of life of breast cancer survivors (Fong et al., 2013a). Promoting the health and well-being of this growing population has, therefore, become a major concern for healthcare professionals.

Evidence from recent systematic reviews supports the value of mind-body therapies such as yoga and qigong for improving the physical and psychosocial well-being and hence the quality of life of breast cancer survivors (Lee, Chen, Sancier, & Ernst, 2007; Smith & Pukall, 2009). Yoga originated from India and focuses on posture, breathing and meditation (Hunter, 2013; Smith & Pukall, 2009), while qigong originated from China and focuses on smooth coordinated movements and diaphragmatic breathing (Fong et al., 2013b; Lee et al., 2007). These two types of ancient exercise are quite similar in nature except that qigong includes more smooth coordinated movements (Mak, 2012) whereas yoga includes more strengthening and stretching postures (Hunter, 2013). Nevertheless, is one type of exercise more suitable specifically for breast cancer survivors? Previous randomized controlled intervention studies and non-randomized prospective studies may provide some hints.

## Yoga

Smith & Pukall (2009) reviewed six randomized controlled trials (RCTs) and found that breast cancer patients and/or survivors who participated in yoga programs reported improved quality of sleep, mood, and quality of life, and decreased stress levels after training. These findings are consistent with the results of the non-controlled clinical trials. Additional benefits of yoga, such as increased energy (less fatigue) and decreased anxiety, were noted in the non-RCTs. To the best of our knowledge, most of these studies measured the subjective outcomes (feelings) of the participants and objective measurements such as joint range of motion (flexibility) and muscular strength were lacking (Elkins, Fisher, & Johnson, 2010; Smith & Pukall, 2009). Therefore, based on the current scientific evidence, it seems that yoga can improve the psychological well-being and quality of life more than the actual physical impairments of breast cancer patients and survivors. Yoga could be useful as a complementary therapy to conventional cancer treatments.

## Qigong

Similar to yoga, there is some evidence from RCTs in support of qigong as a complementary intervention for breast cancer patients and survivors. The evidence suggests that qigong training can reduce pain and fatigue, attenuate psychological distress, and improve cognitive functioning, mood and quality of life in this particular group of patients/survivors (Elkins et al., 2010; Lee et al., 2007; Oh et al., 2010 & 2012). Recently, Oh and colleagues (2010 & 2012) discovered that a 10-week medical qigong training program reduced systemic inflammation in cancer patients (32.4% of whom were breast cancer patients) by measuring the biomarker CRP. Our research team (Fong et al., 2013a & 2013b) also found that qigong-trained breast cancer survivors had greater shoulder muscular strength, better upper limb circulatory status and lesser extent of lymphedema in the affected upper limb. It appears that qigong may improve both physical and psychological well-being and quality of life in breast cancer patients and survivors.

To conclude, the existing evidence supports the use of both yoga and qigong as suitable complementary therapies for breast cancer rehabilitation. Yoga could benefit the psychological well-being of breast cancer patients and survivors while qigong could provide both

psychological and physical benefits. In addition, both types of mind-body therapy can improve the quality of life of breast cancer patients and survivors.

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