Integrating Yoga in Oncology: Is the wait over?

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Received: 18 August 2015 / Accepted: 7 January 2016 / Published online: 3 March 2016
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Diagnosis and treatment of cancer poses psychological threats and physical side effects to the patient over their extended hospital care that grossly affect the patient's overall functional quality of life (QOL) [1]. Fear and anxiety coupled with cancer-related intrusive thoughts, age, socio demographic characteristics and financial concerns along with a tendency towards negativity (neuroticism) may conspire to heighten a women's risk for psychologic distress which in turn can worsen the treatment related symptoms such as nausea and vomiting, pain and psychologic distress [2, 3]. This can lead to helplessness/hopelessness, sleep disturbances, poor antitumor immune response, decrease in overall and disease free survival with early relapse/recurrence and heightened distress [4].

Today we see a transition from cancer directed treatment that relies purely on tumour killing to treating the person who has cancer. Quality of life is given prime importance in treatment decision making. Quality of life is "not just relief from pain" but implies getting back to normal life or even better life than they had before they were diagnosed and treated for cancer. In a holistic sense, it is moving towards better social, emotional, physical and spiritual wellbeing. However, the choice to accept the cancer diagnosis and live with it by

making necessary changes in their lives is left to the decision of the patient.

The use of complementary and alternative therapies (CAM) used by cancer patients significantly exceeds that of the general population. Patients primarily use these CAM therapies to enhance the body's healing ability, to fight cancer more directly, to manage treatment-related side effects, or to improve their overall quality of life, including general symptom management and potential complications. Yoga as a Complementary mind body intervention has been used widely in cancer patients to promote a healthy lifestyle [5].

Yoga as a complementary and mind body therapy is being practiced increasingly in both Indian and western populations. It is an ancient Indian science that has been used for therapeutic benefit in numerous health care concerns in which mental stress was believed to play a role. The effects of yoga cannot be just attributed primarily to stress reduction. It is also known to improve one's perception and appraisal of the situations and help them cope effectively. Empirical evidence points to utility of yoga as a therapy and for prevention of non-communicable diseases and promotion of wellness. The practice of developing ones internal awareness and relaxation are said to be the main components of these practices that helps one to reach higher states of health which can be called "positive health".

A recent search on pubmed with key words Yoga and Cancer showed up 263 publications. Among these fifty seven were clinical trials; forty were randomized control trials, thirty eight systematic reviews and five Meta analyses. Evidence from these studies and metanalysis show benefit finding for the effect of yoga interventions in managing cancer treatment related distress, mood states, quality of life and symptoms [6, 7].

Evidence from our own research studies have shown that integrated Yoga is beneficial in reducing the affective states such as anxiety [8], depression and perceived stress [9]. Yoga reduced treatment related distress and toxicity such as fatigue,

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sleep disturbances, chemotherapy induced nausea and vomiting [10], constipation, sleep problems and pain [11]. Our studies have also shown Yoga to modulate anti-tumour and anti-inflammatory immune responses (TNF alpha, NK cell counts) following surgery [12], reduce genotoxic stress (DNA damage following adjuvant radiotherapy) [13] and normalize stress hormones (salivary cortisol rhythm), thus modulating the psychoneuroendocrinoimmune axes [9]. These studies have helped establish the stress reduction benefits of yoga through its influence on the hypothalamopituitary adrenal axes. Yoga has been widely used by cancer patient's world over in oncology practice to allay distress and reduce symptom burden in cancer patients.

There are various forms of yoga that have been used including Hatha Yoga, Iyengar Yoga, Integrated Yoga, Sudarshan kriya Yoga, Pranayama, Mindfulness based stress reduction (Buddhist meditation), Viniyoga, Tibetan Yoga etc. The heterogeneity in the type of yoga and the type of measures used has resulted in varied effects on the above outcomes. Whatever be the type of yoga, its goal is to attain relaxation and mindful awareness that helps in reducing intrusive thoughts that can lead to increased anxiety and depression. Cancer patients find these interventions and beliefs congruent to their lifestyles and have adopted them positively in managing their daily hassles. The wait for evidence for the beneficial effects of yoga appears to be over. The time has come to integrate yoga into cancer care and survivorship programs just like the west did with psychological and behavioural interventions.

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