



Integrative Oncology

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SUMMARY

Integrative oncology is an emerging field that helps support the health of patients with cancer and their caregivers through an evidence-informed approach to lifestyle and behavior modification and the use of complementary health therapies in the context of conventional cancer care delivery. Integrative approaches, such as lifestyle, meditation, yoga, acupuncture, and massage, can provide patients relief from cancer and cancer treatment-related symptoms and improve their physical and psychosocial health. In this review, the current status of this subject both in the world and in our country has been discussed.

Keywords: Integrative oncology; integrative medicine.

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Introduction

Integrative medicine (IM) is a healing-oriented medicine that takes into account the whole person as a whole, including all aspects of his or her lifestyle. It emphasizes the therapeutic relationship between practitioner and patient, is evidence based, and makes use of all appropriate therapies.[1,2]

Integrative oncology is the application of IM to the care of patients with cancer and their caregivers. In addition, naturopathic oncology in conjunction with conventional treatment is commonly referred to as integrative oncology.[1,2]

Patients with cancer often use different methods, such as acupuncture, meditation, herbs, and dietary supplements, in addition to their conventional cancer treatment. A meta-analysis of surveys showed that the use of such therapies has been increasing over the last decades.[3]

According to the United States National Center for Complementary and Integrative Health, complementary health approaches refer to natural products, such as dietary supplements or herbals; mind and body practices, such as meditation, yoga, massage, or

acupuncture; and other systems of care, such as traditional Chinese medicine, Ayurvedic medicine, or naturopathy.

Integrative oncology programs may include clinical services, such as a physician consultation, oncology massage, acupuncture, nutrition counseling, health psychology (e.g., stress management, support for behavior change, and lifestyle counseling), exercise counseling, expressive arts (e.g., music therapy and art therapy), and group classes (e.g., meditation, yoga, and tai chi/qigong). However, there are some concerns on the quality of supplements and natural products made available through retailers. The manufacturing of these herbal supplements and natural products has limited oversight, with potential for inaccurate labeling, contamination, product substitution, and use of fillers.[4] Studies of supplements have revealed cases in which none of the desired product is present in the formulation assessed.[5] Other studies have revealed contamination with toxic levels of harmful substances, such as arsenic, lead, and mercury.[6] Such uncertainty in product quality and content poses a potential for harm in the setting of individuals receiving cancer therapeutic

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tics. Dietary supplements or herbal products may be harmful when combined with cancer therapies, such as chemotherapy, targeted therapies, radiation, and surgery.[7] Herbal products and high-dose antioxidants may interfere with the efficacy of treatments, such as radiation and chemotherapy.[8-10]

Integrative oncology, which is generally accepted as referring to the use of a combination of complementary medicine therapies in conjunction with conventional cancer treatments, has been defined in different ways, but there is no widely accepted definition.

In some countries, some universities have integrative oncology departments, and with the integration of interventions, such as acupuncture, mindfulness and yoga, and lifestyle counseling into major cancer centers in North America (e.g., MD Anderson and Memorial Sloan Kettering Cancer Center), the term “integrative oncology” has been increasingly used. In Duke University, there are integrative health coach training programs for health professional education.

“Integrative” better represents the process of care that is provided in centers where patients are receiving these types of interventions in addition to their conventional cancer treatments. The Society for Integrative Oncology (SIO) was established in 2003 as a non-profit multidisciplinary professional organization. The term “integrative oncology” was further legitimized and began to be widely used. After this date, the British Society for Integrative Oncology (BSIO) as a non-profit, multidisciplinary organization was founded in 2012 for people interested in learning more about the application of integrative oncology on people affected by cancer. Its aims have been aligned with those of the SIO in the USA. Since the health care systems of the UK and the USA are very different, the pathway to achieving their aims may also be very different.

The BSIO ultimately aims to provide a balanced view of the evidence to enable people affected by cancer in the UK and their oncologists to have an informed dialog about safe, effective complementary options that are unlikely to interact with orthodox treatment and to support patient choice and decision-making. The BSIO will provide a focal point to achieve this aim as follows:

1. to develop and maintain a network of professionals and organizations in the field of integrative oncology in the UK,
2. to provide education and conferences to promote dialog between professions, enhance understanding of integrative oncology, share best practice, and promote clarity about safety, effectiveness, and cost-effectiveness,

3. to provide links to reliable evidence-based resources providing high-quality information on integrative oncology,

4. to maintain international links, especially with the SIO in the USA that inspired the foundation of the BSIO.

The SIO is the premier multidisciplinary professional organization for integrative oncology. The SIO, a non-for-profit organization, enables communication, education, and research to occur by bringing together practitioners from multiple disciplines focused on the care of patients with cancer and survivors. The mission of the SIO is to advance evidence-based, comprehensive, integrative health care to improve the lives of people affected by cancer. Members share the common goals of excellent comprehensive patient care, enhancement of anti-cancer therapy, supportive care, and prevention of cancer. They are part of a unique multidisciplinary community of oncologists, nurses, psychologists, social workers, nutritionists, complementary therapy practitioners, naturopathic doctors, herbalists, acupuncturists, massage therapists, and many other health care practitioners through the SIO. Members are in academic and health care institutions, small businesses, and corporations and also include individual practitioners. The SIO clinical practice guidelines are referenced in MEDLINE and are posted on the National Institutes of Health National Center for Complementary and Integrative Health website (<https://nccih.nih.gov/health/providers/clinicalpractice.htm>). The SIO clinical practice guidelines are the only comprehensive evidence-based guidelines for incorporating complementary and integrative therapies into conventional oncology clinical practice. The SIO published guidelines in *Chest* on the use of Complementary therapies and integrative oncology in lung cancer.[11] After this publication in 2014, the SIO published the Clinical practice guidelines on the use of integrative therapies as supportive care in patients treated for breast cancer in the *Journal of the National Cancer Institute Monograph Special Issue on Integrative Oncology*. [12] All of these guidelines are tools, not rules. They are changeable due to the culture of different countries. The SIO organizes conferences regularly, and attendees are a multidisciplinary community of physicians, nurses, researchers, acupuncturists, nutritionists, other scientific health care disciplines, students, and patient advocates interested in scientific advances and evidence-based complementary therapies for oncology practice.

The term “integrative oncology” was further legitimized and began to be widely used. An example is the

Berlin School of Integrative Oncology at the Charité Medical School in Berlin,[12] which is an initiative of the German federal and state governments that aims to educate young scientists and physicians in oncology in an interdisciplinary, translational research context.

In our country, there are some specific applications, but they are not organized. There is some information on alternative and complementary medicine for our patients in Turkish language on the Turkish Radiation Oncology Society's website. Patients can access this website at https://trod.org.tr/tamamlayici_alternatif.php. In addition, the Turkish Medical Society has prepared a cancer patients' page, and there is some information available at <https://kanser.org/saglik/toplum/index.php?action=sayfa&id=2>.

Conclusion

In conclusion, the education level is rising in the community, and integrative oncology is becoming more important for patients, health professionals, and countries. Health care givers should work in augmentation to achieve evidence-based data and to collect data. In integrative oncology, the scientific evidence, mentioned in the definition as "evidence-informed," plays a major role. This short and comprehensive definition for the term "integrative oncology" will facilitate better understanding of and communication in this emerging field by using an international and multidisciplinary development process.

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