# **Integrative Medicine in Oncological Treatment**

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Medicina Integrativa no Tratamento Oncológico Medicina Integradora en el Tratamiento Oncológico

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### INTRODUCTION

Despite the advances in oncological treatment, with the implementation of new technologies and development of several drugs, cancer still is a life-threatening disease, potentially fatal, whose conventional treatment leaves physical, emotional, and psychological sequelae. Oncological care is complex and must always rely on a multidisciplinary team. Given this scenario, the search for a more welcoming, thorough, and scientifically based treatment has increased<sup>1</sup>.

Integrative medicine officially emerged in 1962, during a meeting of Portugal's Assembly of the Republic. In 2003, the Society for Integrative Oncology (SIO) was founded, initiating its partnership with the American Society of Clinical Oncology (ASCO), the most important oncology institution in the world<sup>2</sup>.

In 2017, integrative medicine spread out its reach when the World Health Organization (WHO) technical unit of Traditional and Complementary Medicine added the term "integrative medicine" to the integrative approaches of Traditional, Complementary, and Integrative Medicine (TCI) and conventional medicine in relation to politics, knowledges and practices. Nowadays, through the Academic Consortium for Integrative Medicine & Health, which gathers over 70 academic institutions devoted to medicine advances, integrative medicine is defined as:

The medicine practice that reaffirms the importance of the relationship between patient and health professional; is focused on the person as a whole; is evidence-based and uses every adequate, professional, therapeutic and lifestyle approaches and disciplines to improve health and promote healing<sup>3</sup>.

Growing through the years, today, over 50 reference hospitals in the United States have integrative medicine withing their areas of expertise. This growth reflects the commitment to a broader and patient-centered view of the illness. The health wheel (Figure 1) illustrates the

pillars of this approach. In the nucleus are the main actor, protagonist of the whole process, and the development of mindfulness and self-knowledge as the grounds for the journey success. Diet, physical activity/movement, bodymind connection, spiritual development and harmonious relationship with the environment one inhabits complete this virtuous circle of health, healing and quality of life. The patient is the focus<sup>4</sup>.



**Figure 1.** Wheel of Health – Duke Integrative Medicine **Source** Duke Health<sup>4</sup>.

### **DEVELOPMENT**

# WHY HAVE THE INTEREST IN INTEGRATIVE PRACTICES AND THEIR ADOPTION GROWN THROUGH THE YEARS?

Throughout history, medicine has gone through an intense fragmentation, boosted by the Industrial Revolution and Cartesian thinking. Descartes, in the 17th century, with his mechanistic view of the human body, separated the mind from the body, thinking of

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health separately. In the 19th century, the Bacteriological Revolution led by Pasteur and Koch focused on identifying and fighting specific pathogenic agents, which, despite greatly advancing medicine, also contributed for an even greater detachment from the patient as a whole, treating the disease as an isolated issue<sup>5</sup>.

Michel Foucault<sup>6</sup> highlighted in his analyses how modern medicine transformed into a system of control and power, often dismissing the individuality and subjectiveness of the patient. Given this scenario, the need to rescue an integral approach emerges. Integrative medicine emerges exactly with this purpose, seeking to reintegrate care and respect human complexities. It emphasizes principles that go beyond conventional medical practice, considering the person as a whole, reinforcing the fundamental role of the doctor-patient relationship, and highlighting the importance of lifestyles<sup>6</sup>.

So much so that: "The frame is broken, and the wheels are coming off" is the first line of an article that references integrative medicine as a way to bring medicine back to its roots. In this same context, the integrative approach is not seen as a radical change, but a path whose focus on the doctor-patient relationship is restored, the promotion of health and healing occurs in opposition to the excessively technological focus, the active engagement of patients with their self-care is promoted and health maintenance happens through a healthier lifestyle. In summary, it brings the view that the integrative medicine used today will be the new medicine of the 21st century.

Given such a broad view, it is imperative to clarify that integrative medicine is not the same as alternative medicine. Patients that give up conventional treatment as advised by the latter are known to have worse clinical outcomes<sup>7</sup>.

On the other hand, it is worth remembering that some integrative practices may bring harm to oncological patients. Thus, the importance of studies within this theme, since a great part of the patients adopts these practices without communicating their doctors<sup>8</sup>.

# WHAT IS INTEGRATIVE ONCOLOGY?

In this context, it is worth presenting the definition of integrative oncology<sup>9</sup>:

It is an evidence-based field of cancer treatment centered on the patient that uses body and mental practices, natural products and/or changes to lifestyle of different traditions as well as conventional cancer treatments.

Integrative oncology aims to optimize health, quality of life, and clinical results during cancer treatment, enabling people to prevent cancer and

become active participants before, during, and after cancer treatment.

This concept was elaborated by a multi-centric committee that included North America, Europe and Asia, through SIO, with the mission to promote integrative health with evidence rigor, with the aim of improving the life of people with cancer<sup>9</sup>. Since 2004, SIO publishes articles and guidelines in its Journal of the Society for Integrative Oncology, a reference in the field.

This concept is recent, having been instituted by the National Cancer Institute in the 2000s, being disseminated above all in the main oncological treatment reference centers in the United States, like MD Anderson Cancer Center, Dana Farber Cancer Institute, Johns Hopkins University, Memorial Sloan-Kettering Cancer Center, Mayo Clinic and others.

### SYMPTOM MANAGEMENT DURING ONCOLOGICAL TREATMENT

It is important to not only know the main symptoms of oncological patients, but also the indication of each integrative approach in this context. It is also worth mentioning that the guidelines of the National Comprehensive Cancer Network (NCCN) for controlling fatigue<sup>10</sup>, nausea<sup>11</sup> and pain<sup>12</sup> have a chapter on the non-medication approaches, including integrative practices. Similarly, ASCO endorses SIO's guidelines for the use of integrative medicine in breast cancer treatment<sup>13</sup>.

Fatigue, for example, is a complaint from 80% of patients in oncological treatment. By definition, cancerrelated fatigue is a subjective, persistent, and anguishing feeling of physical, emotional, and/or cognitive tiredness, or an exhaustion related to cancer or its treatment, which is disproportional to the recent activity and interferes in the patient's normal functioning<sup>10</sup>. Given this comprehensive understanding of such a common symptom, it is hard to think that a restrictive approach to medication prescription will be effective. It is worth highlighting that an adequate fatigue management not only significantly improves the quality of life of patients, as it is also associated to a greater survival rate14. Thus, it is worth using every scientifically proven integrative approach available to control it, such as yoga, meditation, nutritional guidance, physical activity, acupuncture, and massage techniques<sup>15</sup>.

Another common symptom is pain, not just during the treatment; up to 50% of cancer survivors report feeling pain<sup>16</sup>. Whether it's due to the surgery, radiotherapy, chemotherapy, or hormone block, pain is an unpleasant sensory and emotional experience, associated to an actual or potential tissue lesion, or that resembles such lesion<sup>17</sup>. Among the integrative interventions indicated for this purpose are yoga, physical activity, nutritional



support, spiritual support, relaxation techniques, cognitive behavioral therapy, and others<sup>8</sup>.

Depression and anxiety disorders are also frequent in patients after being diagnosed with cancer, and once again, the ASCO guidelines bring integrative approaches that can be associated to the treatment, including mindfulness, a practice of being fully concentrated in the present, physical activities, cognitive behavioral therapy and relaxation techniques<sup>19</sup>.

It's also possible to seek a relationship between mind and body practices and direct symptom management. Meditation/mindfulness, for example, shows strong evidence of helping control depression and anxiety, but also with fatigue, pain, insomnia, cognition and general well-being. Likewise, relaxation techniques can help with anxiety, depression, nausea, vomiting, and pain<sup>20</sup>.

It is worth highlighting that most patients use some alternative/complementary/holistic/integrative approach and only a small portion reports it to their doctor, due to fear or lack of space in the communication, leaving out this important information and putting their own safety at risk<sup>21</sup>. It is known that up to 80% of patients use some kind of food supplement. Several multivitamin supplements can have antioxidant action, which decreases the efficacy of chemotherapy<sup>22</sup>. Translating this reality into numbers: despite 73% of breast cancer patients admit using some integrative approach, oncologists believe that only 43% of their patients use it<sup>23</sup>.

With so many benefits, it is easy to understand that the use of different integrative medicine modalities can contribute for the well-being and emotional health of patients with cancer. Together, these approaches can decrease anxiety, pain, nausea, in addition to improve sleep, functionality and the sense of well-being. Since each modality can have counter-indications, patients should be followed up by trained professionals and, if possible, an integrative medicine department partnered with oncologists, to offer support and care to the patients<sup>24</sup>.

# **CONCLUSION**

Oncology, just like every field of medicine, finds several points of anguish in its practice. One of them is the difficulty in offering the solace patients seek, exclusively prescribing medication. The pain that is not only physical, the tiredness that is also fear and anxiety, among many other symptoms arising from the cancer treatment and diagnosis, are everyday challenges faced by doctors who see the patient as a whole, and not just as a disease.

With self-care and a welcoming doctor-patient relationship, integrative medicine allows the patient to seek a balanced diet, the practice of physical activities, mind-body balance, spirituality, and healthy relationships. It also encompasses spirituality and concern with the family who is also suffering by seeing their family member suffer

What patients seek is active listening and a humanized journey in which they feel fit to follow in the process of healing. In this context, integrative medicine represents the perfect union of science, and the care patients deserve.

### CONTRIBUTION

Sabrina Rossi Perez Chagas participated of all the stages of the article from the design until the final approval of the version to be published.

# **DECLARATION OF CONFLICT OF INTERESTS**

There is no conflict of interests to declare.

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