

## Beyond Medications: Non-Pharmacological Approaches in Cancer Care

Ram Kumar Garg<sup>1\*</sup>, Prabha Garg<sup>2</sup>, Bhartendra Sharma<sup>3</sup>, Yogesh Kumar<sup>1</sup>,  
Ram Niwas<sup>1</sup>, Jitendra Singh<sup>1</sup>

<sup>1</sup>Department of Community Health Nursing, Teerthanker Mahaveer University College of Nursing, Moradabad Uttar Pradesh India. <sup>2</sup>Department of Commerce & Management, IIMT University, Meerut Uttar Pradesh India. <sup>3</sup>Department of Medical Surgical Nursing, Mahatma Gandhi College of Nursing, Rajasthan, India. \*Corresponding Author's Email: ram.nursing@tmu.ac.in

### Abstract

The conventional approach to treating cancer primarily involves the use of pharmaceutical treatments such as immunotherapy, targeted medicines, and chemotherapy. However, non-pharmacological therapies have garnered increasing attention for their potential to enhance and complement the overall care of cancer patients. This critical review delves into a variety of non-pharmacological treatments, with a specific emphasis on lifestyle modifications encompassing stress management, exercise, and proper diet. Lifestyle changes are recognized for their capacity to benefit cancer patients by not only improving their general well-being but also by bolstering resilience and aiding in the management of symptoms and adverse effects associated with therapy.

**Keywords:** Exercise, Lifestyle modifications, Non-pharmacological therapies, Stress management.

### Introduction

Within the realm of non-pharmacological treatments, there exists a diverse array of modalities, spanning physical interventions, psychological support, complementary therapies, and lifestyle adjustments. By shifting the focus beyond the mere removal of tumors, these strategies aim to address the holistic requirements of cancer patients. This holistic approach places emphasis on promoting mental well-being, mitigating side effects linked to therapy, and ultimately enhancing the overall quality of life for individuals facing the challenges of cancer. Through this multifaceted approach, non-pharmacological methods contribute significantly to meeting the comprehensive needs of cancer patients throughout their treatment journey (1, 2).

Non-pharmacological methods play a crucial role in the comprehensive treatment of cancer, often complementing traditional medical interventions such as surgery, chemotherapy, and radiation therapy. These approaches focus on improving the overall well-being of individuals with cancer and addressing various aspects of the disease beyond the direct targeting of cancer cells. By

incorporating lifestyle modifications, psychosocial support, and complementary therapies, non-pharmacological methods aim to enhance patient outcomes, reduce treatment-related symptoms, and empower individuals to actively participate in their care. This integrative approach recognizes the importance of treating the whole person and acknowledges the interconnectedness of physical, emotional, and social factors in the cancer experience. Overall, the combination of conventional and non-pharmacological methods offers a comprehensive and patient-centered approach to cancer treatment (1).

**Critical factors underscoring the significance of non-pharmacological approaches in the treatment of cancer include**

#### Quality of Life Improvement

Cancer and its treatments can greatly affect a person's quality of life. Non-pharmacological interventions like supportive care, palliative care, and psychosocial support are crucial for managing symptoms, minimizing treatment side effects, and improving overall well-being.

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### **Symptom Management**

Cancer and its treatments bring about physical and psychological symptoms like pain, fatigue, nausea, anxiety, and depression. Non-pharmacological approaches, such as physical therapy, relaxation techniques, and counselling, are effective ways to manage these symptoms without relying solely on medications.

### **Emotional and Psychological Support**

Coping with cancer entails both physical and emotional or psychological challenges. Support groups, counselling, and mindfulness-based interventions can aid individuals in managing the emotional impact of cancer, alleviating stress, and enhancing mental well-being.

### **Nutritional Support**

The impact of cancer and its treatments on appetite, digestion, and nutritional status is notable. Non-pharmacological approaches, including dietary counselling, nutritional support, and integrative medicine methods, contribute to sustaining optimal nutrition and bolstering the body's resilience to cope with the demands of treatment.

### **Physical Rehabilitation**

Surgery, radiation, and chemotherapy may result in physical impairments and functional limitations. Non-pharmacological interventions like physical therapy and rehabilitation programs strive to restore and enhance physical function, improve mobility, and address concerns related to muscle weakness and joint stiffness.

### **Lifestyle Modifications**

Incorporating healthy lifestyle habits, including regular exercise, a balanced diet, and stress management, can significantly contribute to overall well-being and potentially improve treatment outcomes. These non-pharmacological interventions play a role in enhancing physical fitness, boosting the immune system, and supporting the body's capacity to tolerate and recover from cancer treatments.

### **Complementary and Integrative Therapies**

Some complementary therapies, like acupuncture, massage, yoga, and meditation, are gaining recognition for their potential to alleviate symptoms, enhance quality of life, and improve the overall treatment experience. Integrative medicine approaches integrate conventional medical treatments with evidence-based complementary therapies.

### **Patient Empowerment**

Non-pharmacological methods empower patients to actively engage in their care, fostering a sense of control, improved coping mechanisms, and a more positive outlook. These factors can contribute to better treatment adherence and outcomes (3).

In recent years, research into non-pharmacological methods in cancer treatment has garnered significant attention. It's crucial to emphasize that these approaches are not meant to replace conventional cancer treatments. However, numerous studies indicate that integrating non-pharmacological therapies into cancer care can have a positive impact on patient outcomes, overall quality of life, and general well-being.

### **Some of research highlighting the potential benefits**

**Psychosocial Support:** - Numerous studies consistently indicate that psychosocial interventions, including participation in support groups, counselling, and psychotherapy, are effective in enhancing emotional well-being and mitigating symptoms of anxiety and depression among individuals with cancer. These interventions play a vital role in assisting patients in coping with the psychological challenges associated with a cancer diagnosis and treatment, thereby contributing to an overall improvement in their quality of life.

### **Mind-Body Interventions**

Mindfulness-based stress reduction (MBSR) programs, including mindfulness meditation and yoga, have demonstrated positive effects in reducing stress, anxiety, and depressive symptoms in cancer patients. Studies suggest that these practices can enhance overall mental well-being and contribute to a better quality of life.

### **Physical Activity and Exercise**

Numerous studies have explored the benefits of regular physical activity and exercise for cancer patients. Exercise interventions have been shown to improve fatigue, muscle strength, cardiovascular fitness, and overall functional well-being. Physical activity is also associated with a reduced risk of cancer recurrence and improved survival rates in certain cancer types.

### **Nutritional Interventions**

Dietary counselling and nutritional support are integral components of cancer care. Research indicates that maintaining proper nutrition

during and after cancer treatment can improve outcomes, enhance treatment tolerance, and reduce the risk of treatment-related complications. Adequate nutritional support is crucial for sustaining the overall health and well-being of cancer patients.

### **Complementary Therapies**

Complementary therapies, such as acupuncture, massage, and aromatherapy, have been studied for their potential in alleviating cancer-related symptoms. While the evidence varies for each modality, some studies suggest that these interventions may help manage pain, nausea, and fatigue, contributing to improved patient comfort and well-being.

### **Integrative Medicine Programs**

Integrative medicine programs, which combine conventional medical treatments with evidence-based complementary therapies, have been investigated for their impact on patient outcomes. These programs aim to provide a holistic approach to cancer care, addressing not only the disease itself but also the physical, emotional, and spiritual aspects of the patient's well-being.

### **Palliative Care**

Palliative care, focused on providing relief from the symptoms and stress of the cancer experience, has been shown to enhance the quality of life for individuals with advanced cancer. Studies indicate that early integration of palliative care into cancer treatment plans can lead to better symptom management, improved communication between patients and healthcare providers, and enhanced overall satisfaction with care (4).

It's important to acknowledge that the effectiveness of non-pharmacological methods can vary among individuals, and these approaches should be tailored to the specific needs and preferences of each patient. Moreover, ongoing research continues to explore new interventions and strategies to optimize the integration of non-pharmacological methods into cancer care, with the ultimate goal of improving patient outcomes and well-being.

Non-pharmacological methods in cancer care are designed to address the holistic needs of patients, going beyond the direct treatment of the disease. By focusing on patient-centered outcomes, these interventions aim to enhance the overall experience of cancer patients in various ways.

Several patient-centered results linked to the incorporation of non-pharmacological approaches include they are as under:

### **Improved Quality of Life**

Non-pharmacological methods, such as psychosocial support, exercise, and complementary therapies, contribute to an improved quality of life for cancer patients. By addressing physical, emotional, and social aspects of well-being, these interventions help patients navigate the challenges of cancer treatment and recovery, leading to a more positive overall experience.

### **Enhanced Emotional Well-being**

Psychosocial support, counselling, and mindfulness-based interventions play a crucial role in addressing the emotional impact of a cancer diagnosis. These methods help patients cope with stress, anxiety, and depression, fostering emotional resilience and a sense of well-being.

### **Reduced Treatment-Related Symptoms**

Non-pharmacological approaches, such as exercise, nutritional interventions, and complementary therapies, can help manage and reduce treatment-related symptoms such as fatigue, nausea, pain, and insomnia. This leads to a more comfortable treatment experience and an improved ability to tolerate medical interventions.

### **Increased Treatment Adherence**

When patients feel supported and actively engaged in their care, they are more likely to adhere to treatment plans. Non-pharmacological methods that empower patients through education, communication, and participation in decision-making contribute to better treatment adherence, ultimately improving outcomes.

### **Empowerment and Sense of Control**

Participating in non-pharmacological interventions, such as support groups, rehabilitation programs, and lifestyle modifications, empowers patients and gives them a sense of control over aspects of their health. This empowerment can positively impact the patient's mindset, coping mechanisms, and overall perception of their cancer journey.

### **Enhanced Communication with Healthcare Providers**

Integrating psychosocial support and patient-centered care into cancer treatment fosters better

communication between patients and healthcare providers. Open communication enhances the patient-provider relationship, leading to improved understanding, trust, and shared decision-making.

#### **Social Support and Connectedness**

Support groups, peer mentoring, and community engagement initiatives provide cancer patients with opportunities to connect with others facing similar challenges. This sense of social support and connectedness is crucial for emotional well-being, reducing feelings of isolation, and fostering a supportive community (5).

#### **Optimized Symptom Management**

Non-pharmacological methods, including physical therapy, massage, and relaxation techniques, contribute to optimized symptom management. These interventions can help alleviate pain, improve sleep, and enhance overall physical comfort during and after cancer treatment (6).

#### **Personalized Care**

Non-pharmacological methods allow for a more personalized approach to care, taking into account the individual needs, preferences, and values of each patient. This personalized care enhances the patient's experience by tailoring interventions to their unique circumstances (7).

#### **Long-term Survivorship**

Non-pharmacological methods, particularly those focused on lifestyle modifications, exercise, and nutritional support, contribute to long-term survivorship. These interventions promote overall health and well-being, reducing the risk of recurrence and improving the chances of sustained recovery (8).

### **Conclusion**

Non-pharmacological therapies provide a beneficial complement to pharmacological cancer treatments. They attend to the many requirements of patients, encouraging overall health and enhancing pharmaceutical treatments. To deliver more thorough and patient-centered cancer treatment, this abstract emphasizes the significance of including non-pharmacological therapies into cancer care plans and supports more study to confirm their efficacy. Overall, non-pharmacological methods play a pivotal role in enhancing the well-being and treatment outcomes of cancer patients.

### **Abbreviations**

Nil

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