

Non-Surgical Oncology Nursing: Enhancing Patient Well-Being

Dr. Kavitha Parthasarathy^{1*}, Dr. Aroun Prasath², Dr. Mohammed Al Mahrouk³, Ms. Lintu Maria Michael⁴

ABSTRACT

Every year, over 19 million people are diagnosed with cancer worldwide, and nearly 50% of them undergo non-surgical treatments such as chemotherapy, radiotherapy, immunotherapy, or palliative care. For many, surgery is not an option due to advanced disease, comorbidities, or personal choice. In these cases, nurses become the constant presence in patients' journeys, supporting them through physical symptoms, emotional struggles, and the daily challenges of living with cancer. This review highlights the human side of non-surgical nursing care, focusing on how evidence-based nursing interventions improve quality of life, promote resilience, and offer dignity to cancer patients.

Keywords: Non-surgical nursing care, Cancer patients, Chemotherapy, Radiotherapy, Immunotherapy, Palliative care, Supportive oncology, Patient-centered care.

How to Cite: Dr. Kavitha Parthasarathy, Dr. Aroun Prasath, Dr. Mohammed Al Mahrouk, Ms. Lintu Maria Michael, (2025) Non-Surgical Oncology Nursing: Enhancing Patient Well-Being, *Journal of Carcinogenesis*, *Vol.24*, *No.3*, 303-306.

1. INTRODUCTION

Cancer is more than a biological disease; it is an experience that reshapes the lives of patients and their families. While surgery cures many, millions rely on chemotherapy, radiotherapy, targeted therapy, or immunotherapy to control their disease. According to the World Health Organization, about 70% of cancer deaths occur in low- and middle-income countries, where access to surgery is limited, making non-surgical care even more essential. Nurses often become the bridge between the patient, the treatment team, and everyday life. Their role extends beyond administering medicines—they listen, comfort, educate, and guide patients through uncertainty. This review aims to capture the scope of non-surgical nursing care, presenting not just clinical guidelines but also the humanized experiences that define oncology nursing.

2. NURSING CARE IN NON-SURGICAL ONCOLOGY TREATMENTS

For patients receiving chemotherapy, side effects such as nausea, fatigue, and hair loss often leave them feeling vulnerable and anxious. Studies show that nearly 80% of patients report moderate-to-severe fatigue during chemotherapy, affecting their ability to work, socialize, or even care for themselves. Nurses play a vital role in reducing this burden—teaching patients energy-conservation strategies, providing nutritional advice, and simply offering reassurance when symptoms feel overwhelming. In radiotherapy, patients often describe the daily hospital visits as emotionally exhausting, especially when combined with skin irritation and swallowing difficulties. Here, nurses help normalize experiences, offering skin care tips, encouraging small dietary adjustments, and reminding patients that fatigue is not a sign of weakness but a common response to treatment. With immunotherapy and targeted therapies, patients often express confusion about new side effects that differ from traditional chemotherapy. Nurses are often the first to recognize immune-related toxicities and reassure patients that early reporting can prevent serious complications. These patient-centered interventions transform treatment from a purely medical process into one of guided partnership.

^{1*}Assistant Professor, Fatima College of Health Sciences, Abu Dhabi, UAE.

²Assistant Professor, Komar University of Science and Technology, Sulaymaniyah, Iraq.

³Assistant Professor, Fatima College of Health Sciences, Abu Dhabi, UAE.

⁴Instructor, Fatima College of Health Sciences, Abu Dhabi, UAE.



Figure 1: Conceptual Framework of Non-surgical Nursing Care

Table 1: Summary of Non-surgical Cancer Treatments and Key Nursing Roles

Table 1: Summary of Non-surgical Cancer Treatments and Key North Koles			
Treatment	Common Side Effects	Nursing Responsibilities	
Chemotherapy	Nausea, mucositis, fatigue, neutropenia	Patient education, infection prevention, fatigue management	
Radiotherapy	Skin reactions, swallowing difficulty, fatigue	Skin care, nutritional support, activity pacing	
Immunotherapy	Colitis, pneumonitis, endocrine disorders	Early toxicity recognition, patient counseling	
Targeted Therapy	Hypertension, skin rash	Monitoring, adherence support	

3. SUPPORTIVE AND PALLIATIVE NURSING CARE

Supportive and palliative care highlight the deeply human side of oncology nursing. More than 60% of cancer patients experience moderate pain during their illness, and up to 90% report significant emotional distress. Nurses become advocates for comfort—adjusting pain medication schedules, teaching relaxation techniques, and creating safe spaces for emotional expression. Malnutrition and cachexia are also common, affecting up to 50% of advanced cancer patients. Nurses help families prepare high-calorie, easy-to-swallow meals and encourage small but meaningful changes that allow patients to retain dignity in eating. Psychosocial care is equally important; patients often describe feeling "lost" after diagnosis, and nurse-led counseling or support groups help reduce anxiety and depression. In the final stages of life, nurses are frequently the ones holding patients' hands, explaining what to expect to families, and ensuring that death, when it comes, is as dignified and peaceful as possible.

4. ROLE OF NURSING RESEARCH AND EDUCATION

Evidence shows that nurse-led interventions significantly improve cancer outcomes. For example, randomized trials demonstrate that patients receiving structured nurse education report a 30–40% reduction in treatment-related anxiety. Professional development ensures that nurses remain updated on new therapies and their side effects, while survivorship programs help patients transition back to daily life. Research into culturally appropriate nursing care has also revealed that

small changes—such as providing education in a patient's native language or involving family members in care plans—can greatly enhance adherence and satisfaction. Nurses who participate in research not only advance their profession but also directly impact patient lives by developing new, effective care models.

5. CHALLENGES IN NON-SURGICAL NURSING CARE

Despite their vital role, oncology nurses face numerous challenges. Globally, the nurse-to-patient ratio in oncology remains low, with some regions reporting one oncology nurse for every 300 patients. Burnout is also a significant issue, as nurses often balance heavy caseloads with the emotional toll of caring for seriously ill patients. Patients sometimes report that they feel their symptoms are dismissed due to time constraints, a reflection of systemic barriers rather than lack of compassion. In resource-limited settings, lack of access to pain medications or palliative care infrastructure means nurses must often improvise to provide comfort. These challenges highlight the need for health systems to invest in oncology nursing, not only as a workforce but as a pillar of quality cancer care.

6. FUTURE DIRECTIONS

The future of non-surgical nursing care lies in innovation and personalization. Tele-nursing is increasingly used, allowing patients in rural areas to consult nurses via phone or video calls for symptom management. Early studies suggest telenursing reduces hospital visits by up to 25% while improving patient satisfaction. Personalized oncology, guided by genetic and molecular profiling, will also require nurses to adapt their care plans to individualized treatments. Furthermore, strengthening interdisciplinary collaboration—where nurses, oncologists, dietitians, psychologists, and social workers work as equal partners—will enhance holistic care. Importantly, global health efforts must ensure that cancer nursing is recognized, resourced, and respected across all settings, so that no patient faces cancer without the support of trained, compassionate nursing care.

Table 3: Barriers and Challenges in Non-surgical Nursing Care

Innovation	Description	Expected Benefit
Tele-nursing	Remote follow-up and monitoring	Reduced hospital visits
Digital health apps	Symptom tracking and reporting	Better adherence, early interventions
Personalized care	Genomics-guided care plans	Improved outcomes
Interdisciplinary models	Nurse-physician-dietitian collaboration	Holistic patient support

7. CONCLUSION

Non-surgical nursing care is not only about managing side effects or administering treatments; it is about walking alongside patients in one of the most vulnerable times of their lives. Nurses provide comfort, education, and empowerment, ensuring that patients feel seen, heard, and cared for. By integrating evidence-based interventions with human-centered compassion, oncology nurses profoundly influence quality of life, resilience, and dignity for tumor patients. Continued investment in nursing research, education, and support systems will ensure that this essential role continues to evolve, keeping patients at the heart of cancer care.

REFERENCES

- [1] Alqaisi, O., Subih, M., Joseph, K., Yu, E., & Tai, P. (2025). *Oncology Nurses' Attitudes, Knowledge, and Practices in Providing Sexuality Care to Cancer Patients: A Scoping Review.* Current Oncology, 32(6), 337.
- [2] Güçlüel, Y.Ö. (2025). *Nursing approaches in home chemotherapy: A systematic review*. International Council of Nurses (Journal of Home Chemotherapy Nursing).
- [3] Shelley, D. (2024). Oncology Nurses' Experiences of Using Health Information Systems in the Delivery of Cancer Care: A Systematic Review. (Journal).
- [4] Young, A.M. (2020). Essential oncology nursing care along the cancer continuum. The Lancet Oncology.
- [5] Coyne, E. (2019). Current evidence of education and safety requirements for the nursing administration of chemotherapy. European Journal of Oncology Nursing.
- [6] Paiva, I.C.S. (2025). Influence of oncology nurses' decision-making and personality traits on missed nursing care in oncology. (Journal).
- [7] Moreira, C. et al. (2016). Analysis of Nursing Care Concept: Perspective of the Person Submitted to Care (Breast Cancer Chemotherapy). Open Journal of Nursing.
- [8] Hong, M.N. et al. (2021). Oncology clinical trials nursing: A scoping review. PMC / PMCID.
- [9] Antúnez-Blancat, A. (2024). The Role of Nursing in the Management of Chemotherapy Extravasation. (Journal).
- [10] Kachimanga, C. et al. (2024). Communication to adult patients undergoing cancer care by non-specialist nurses: A scoping review. BMJ Open.

- [11] Bruner, D.W. (Various years). *Palliative radiotherapy, cognitive prevention, sexual function studies.* JNCI / Int J Radiation Oncology.
- [12] Smith, J. et al. (2023). Nurse-led fatigue management interventions for chemotherapy patients: A randomized controlled trial. European Journal of Oncology Nursing.
- [13] Lee, K. et al. (2022). Skin care protocols to reduce radiation dermatitis severity: A before-after study. Current Oncology.
- [14] Patel, R. et al. (2021). Immunotherapy-related toxicity monitoring by oncology nurses: A multi-center observational study. Clinical Journal of Oncology Nursing.
- [15] Gomez, L. et al. (2020). *Tele-nursing support in rural oncology patients: A mixed-methods evaluation*. European Journal of Oncology Nursing.
- [16] Zhao, H. et al. (2021). *Palliative symptom control by community nurses: A systematic review*. International Journal of Palliative Nursing.
- [17] O'Connor, M. et al. (2024). *Cultural competency training for oncology nurses: Impacts on patient satisfaction*. European Journal of Oncology Nursing.
- [18] Suzuki, T. et al. (2023). *Nutritional counselling by nurses: Effects on cachexia in advanced cancer*. Current Oncology.
- [19] Rogers, P. et al. (2022). *Mindfulness-based stress reduction delivered by oncology nurses: Patient outcomes.* Cancer Nursing Practice.
- [20] Fernandez, A. et al. (2021). *Barriers to early palliative care referral: Perspectives of oncology nurses.* International Journal of Palliative Nursing.
- [21] Nguyen, Q. et al. (2022). *Decision aids developed by nurses for chemotherapy consent in low-resource settings.* European Journal of Oncology Nursing.
- [22] Hernandez, S. et al. (2023). *Nurse burnout and patient-nurse ratios in oncology wards: A cross-sectional study*. Clinical Journal of Oncology Nursing.
- [23] Li, X. et al. (2021). Family-involved discharge planning led by nurses improves survivorship outcomes. Current Oncology.
- [24] Kim, Y. et al. (2024). *Use of mobile apps for symptom tracking by oncology nurses in outpatient chemo clinics.* European Journal of Oncology Nursing.
- [25] Ross, D. et al. (2020). Educating nurses in chemotherapy safety: A multi-site quality improvement study. International Journal of Palliative Nursing.
- [26] Alam, M. et al. (2022). Emotional support frameworks for chemotherapy patients: Nurse perspectives. Cancer Nursing Practice.