



## NURSES' KNOWLEDGE AND PERCEIVED BARRIERS TOWARDS CANCER PAIN MANAGEMENT

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### Abstract:

**Background:** Cancer pain is a prevalent issue affecting a significant number of individuals, with its prevalence increasing as the population ages. Despite advancements in cancer treatment, many patients continue to experience poorly controlled pain, impacting their quality of life. Nurses, as frontline caregivers, play a crucial role in assessing and managing cancer pain. However, research indicates that barriers such as inadequate knowledge, time constraints, limited resources, and opioid-related concerns hinder effective pain management by nurses.

**Objective:** This research article aims to evaluate nurses' knowledge of cancer pain management, identify common barriers perceived by nurses in providing effective pain management, and explore the impact of nurses' knowledge and perceived barriers on the quality of cancer pain management. By understanding these factors, interventions can be developed to enhance nurses' capabilities in managing cancer pain and ultimately improve patient outcomes.

**Conclusion:** Despite improvements in cancer treatment, pain management remains a significant challenge for many cancer patients. While the prevalence of pain has decreased over the past decade, poorly controlled pain persists, especially among vulnerable populations. Nurses' pivotal role in cancer pain management is hindered by various barriers, highlighting the need for ongoing education, training, and organizational support to address these challenges and enhance the quality of care provided to cancer patients. By addressing these barriers, healthcare systems can improve pain management practices, leading to better outcomes and enhanced quality of life for individuals undergoing cancer treatment.

**Keywords:** Nurses, Oncology, Knowledge, Practices, Barriers, Pain management

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**Introduction:**

Cancer affects a substantial number of individuals, with its incidence on the rise as the population ages. Pain is a prevalent symptom associated with cancer diagnosis, becoming more common during and after cancer treatment [1]. Recent research encompassing studies from 2014 to 2021 revealed that approximately 44% of cancer patients experience pain, with 31% enduring moderate to severe pain, indicating a decline in pain prevalence and intensity compared to previous years [2]. Notwithstanding this decrease, poorly managed pain remains a significant issue for many cancer patients, as evidenced by a systematic review of papers from 2014 to 2020, where around 40% of patients received inadequate analgesic treatment [3].

The advancements in cancer therapy have resulted in improved survival rates, yet they have also led to a higher number of patients grappling with cancer-related pain, either due to treatment or the disease itself. Effective pain management is crucial for enhancing the quality of life for these patients. Despite progress in cancer treatment and pain management, a substantial portion of cancer patients globally continue to endure significant pain. Nurses, serving as advocates for patients, play a pivotal role in accurately assessing and addressing their pain. However, studies have indicated that nurses often lack sufficient knowledge about pain management and may hold negative perceptions towards it [5].

On the whole, 30–50% of cancer patients undergoing treatment report experiencing some level of pain, while 70–90% of those in advanced stages report moderate to severe pain. Several factors contribute to the high prevalence of pain among cancer patients, including inadequate patient education, limited treatment options, disease progression, and insufficient understanding or empathy among healthcare providers [6].

Inadequate pain management quality can be attributed to factors such as under-dosing of medications, incorrect administration timing, and reluctance to use potent opioids. Patients' outcomes, including hospital stay duration and recovery speed, are adversely affected by substandard pain assessment and management [7]. Nurses working with cancer patients face barriers to effective pain management, including inadequate training, poor teamwork, heavy workloads, limited communication with patients, and time constraints. Overcoming these obstacles through comprehensive training initiatives can enhance nurses' knowledge and attitudes towards pain management, ultimately resulting in more effective pain relief for cancer patients [8].

**Objectives:**

The main objectives of this review are:

1. To assess nurses' level of knowledge regarding cancer pain management.
2. To identify common barriers perceived by nurses in providing effective cancer pain management.
3. To explore the impact of nurses' knowledge and perceived barriers on the quality of cancer pain management.

**Knowledge of nurses regarding cancer pain management:**

Nurses are integral in the care of cancer patients, particularly in the management of cancer pain. They are at the forefront of patient care, responsible for assessing, monitoring, and treating pain. It is crucial for nurses to have a comprehensive understanding of cancer pain management to provide optimal care and improve patient outcomes. Several studies have evaluated nurses' knowledge of cancer pain management, revealing both strengths and areas for improvement [9].

Ward et al. (2019) found that while nurses generally possessed a good grasp of fundamental pain management principles, such as the use of analgesics and non-pharmacological interventions, there were knowledge gaps in specific areas like the assessment and management of certain types of cancer pain, such as neuropathic pain or breakthrough pain [10]. This underscores the necessity for continuous education and training programs to enhance nurses' proficiency in managing complex cancer pain scenarios.

Moreover, Smith et al. (2018) conducted a systematic review that examined the impact of educational interventions on nurses' knowledge of cancer pain management. The review encompassed various educational programs, including workshops, seminars, and online courses, and concluded that these interventions effectively improved nurses' knowledge and confidence in managing cancer pain. However, sustaining knowledge gains over time posed a common challenge, indicating the need for ongoing reinforcement and support to ensure the application of new knowledge in clinical practice [11].

In addition, Jones et al. (2020) explored the factors influencing nurses' knowledge and attitudes towards cancer pain management, emphasizing the significance of organizational support, access to resources, and interdisciplinary collaboration in promoting effective pain management practices. Furthermore, Lee et al. (2017) investigated the impact of nurses' knowledge on cancer pain management on patient outcomes, revealing a

significant correlation between nurses' knowledge levels and patients' pain outcomes. Higher levels of nurse knowledge were associated with better pain control and improved quality of life for cancer patients, highlighting the critical role of nurses' knowledge in shaping the overall care experience and outcomes for cancer patients [12].

These findings underscore the importance of continuous efforts to enhance nurses' knowledge and skills in cancer pain management to improve the quality of care and outcomes for cancer patients. Education, training, and organizational support are pivotal in ensuring that nurses are well-equipped to effectively assess, monitor, and treat cancer pain, ultimately leading to better pain control and improved quality of life for patients [13].

#### **Factors affecting knowledge and practices of nurses about proper management of pain in patients with cancer:**

Numerous factors have been identified as substantial contributors to the knowledge and practices of nurses concerning the appropriate management of pain in cancer patients. Gender has been recognized as a distinguishing factor in knowledge scores, with male nurses exhibiting a higher median score in comparison to their female counterparts [14]. Moreover, nurses' comprehension of cancer pain management has been shown to be influenced by various variables including their level of education, practice area, years of experience in oncology, profession, and job title.

Additional factors that have been found to impact nurses' knowledge of cancer pain management encompass age, educational background, clinical rank, clinical experience, experience in delivering cancer care, and specific training in cancer pain management. It has been noted that nurses who have undergone training specifically related to cancer pain and have been exposed to a greater number of cancer patients tend to exhibit a higher level of knowledge in this domain [15].

In the context of Saudi Arabia, a notable knowledge deficit among nurses in assessing and treating cancer pain has been observed, with higher scores reported in the outpatient section as opposed to the emergency room and acute units [16]. Similarly, nurses in Jordan have demonstrated varying levels of knowledge based on factors such as hospital type, years of nursing experience, years in the clinical environment, and participant ages [17]. Furthermore, research conducted in Ethiopia has underscored that variables such as level of education, gender, and prior training in pain management are correlated with nurses' knowledge

and attitudes towards effective pain management in cancer patients [18].

#### **Barriers perceived by nurses in providing effective cancer pain management:**

Nurses are essential in providing comprehensive care for cancer patients, with a particular focus on managing cancer-related pain. Despite the critical role of pain management in enhancing the quality of life for individuals with cancer, nurses often face various obstacles that impede their ability to deliver optimal care in this domain. A significant challenge identified by nurses is the insufficient knowledge and training in cancer pain management [19]. Many healthcare professionals may lack adequate education on the intricate nature of cancer pain, encompassing different pain types associated with cancer, diverse pharmacological and non-pharmacological treatment modalities, and the significance of personalized pain management plans. This knowledge gap can lead to substandard pain assessment and treatment, resulting in inadequate pain relief for patients.

Moreover, time constraints and heavy workloads present substantial hurdles for nurses in providing effective cancer pain management. Juggling multiple responsibilities and competing priorities can make it arduous for nurses to allocate the required time and attention to evaluate and address pain in cancer patients. Consequently, pain may go unnoticed or undertreated, causing unnecessary distress for patients [20]. Additionally, the scarcity of resources, such as access to pain management experts, medications, and supportive care services, further impedes nurses' capacity to deliver holistic pain management for cancer patients.

Another barrier encountered by nurses is the apprehension of opioid addiction and concerns regarding opioid-related side effects. While opioids are fundamental in cancer pain management, misconceptions and stigma surrounding these drugs can make nurses hesitant to prescribe or administer them at appropriate dosages. This fear can lead to inadequate pain relief and reluctance to incorporate opioids into a multimodal pain management strategy [21]. Furthermore, regulatory hurdles and stringent prescribing protocols for opioids can pose challenges for nurses in providing timely and efficient pain relief to individuals with cancer.

Communication barriers among healthcare professionals, patients, and their families can also affect the efficacy of cancer pain management [22]. Inadequate communication may result in misunderstandings concerning pain symptoms, treatment objectives, and patient preferences, leading to suboptimal pain control and

dissatisfaction with care. Nurses must engage in effective communication with patients to accurately assess their pain levels, educate them on pain management techniques, and involve them in decision-making regarding their treatment regimen. Nevertheless, obstacles such as language disparities, cultural distinctions, and insufficient communication skills training can hinder effective communication and collaboration in cancer pain management [23].

### **Impact of nurses' knowledge and perceived barriers on the quality of cancer pain management:**

Nurses play a pivotal role in the effective management of cancer pain, serving as frontline caregivers for patients. Their understanding and awareness of potential obstacles can significantly influence the quality of pain control for individuals receiving cancer therapy. A comprehensive grasp of the intricate nature of cancer pain, encompassing its origins, evaluation, and therapeutic alternatives, is imperative for nurses to proficiently handle pain and enhance patient outcomes [24]. Nurses who are well-versed in the fundamentals of pain management can play a vital role in ensuring that patients promptly receive suitable interventions to alleviate their pain and enhance their overall well-being. The influence of nurses' knowledge and perceived barriers on the quality of cancer pain management is substantial and multifaceted. Nurses equipped with a strong foundation in pain management principles are better prepared to evaluate and manage patients' pain effectively, resulting in improved pain relief and heightened patient contentment. Conversely, nurses lacking expertise or education in pain management may encounter challenges in adequately addressing patients' pain, leading to substandard results and heightened distress for cancer patients [25].

The presence of perceived obstacles to effective pain management can also negatively impact the quality of care delivered to cancer patients. When nurses encounter barriers such as restricted access to resources or organizational limitations, they may struggle to implement evidence-based pain management approaches or offer comprehensive care to individuals grappling with cancer-induced pain. This can result in delays in pain alleviation, insufficient symptom control, and diminished quality of life for patients undergoing cancer treatment [26].

### **Conclusion:**

In conclusion, despite advancements in cancer treatment, pain management remains a significant challenge for many cancer patients. The prevalence

of pain in cancer patients has decreased over the past decade, but poorly controlled pain still persists, particularly in elderly patients and those in low-medium economic countries. Nurses play a vital role in assessing and managing cancer pain, but barriers such as inadequate knowledge, time constraints, limited resources, and fear of opioid-related issues hinder effective pain management. Addressing these barriers through ongoing education, training, and organizational support is crucial to improving the quality of cancer pain management and ultimately enhancing the quality of life for cancer patients.

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