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# The Role of Social Work and Nursing in Managing Oral Complications in Cancer Patients Undergoing Chemotherapy

Abdullaziz Saud Al-Aboud<sup>1</sup>, Abdulaziz Naif Almutairi<sup>2</sup>, Hamdan Ali Ayidh Alharthi<sup>3</sup>, Abdullah Ali Almuqbil<sup>4</sup>, Abdulrahman Mohammed Abdulrahman Almehrej<sup>5</sup>, Dr. Mansour Mohammed Alnoghither<sup>6</sup>, Mubarak Muter Sumayan Albnagi<sup>7</sup>, Eid Mutair Samyan Albnaqi<sup>8</sup>, Abdallah Hawag Noman Algmele<sup>9</sup>, Eman Muattish Alshammari<sup>10</sup>, Awadh Abdullah Suhil Alanazi<sup>11</sup>, Rawan Ibrahim Alshammari<sup>12</sup>

<sup>1</sup>Staff Nurse, King Fahad Hospital, Al Hufuf.

<sup>2</sup>Health Administration, Al-Iman Hospital.

<sup>3</sup>Nursing, Armed Forces Health Services.

<sup>4</sup>Nursing, Armed Forces Health Services.

<sup>5</sup>Clinical Laboratory Science, Special Security Forces.

<sup>6</sup>Social Work, Riyadh Third Health Cluster.

<sup>7</sup>Nurse, King Khaled Hospital, Hafar Al-Batin.

<sup>8</sup>Nurse, King Khaled General Hospital, Hafar Al-Batin.

<sup>9</sup>Nurse, King Khaled Hospital, Hafar Al-Batin.

<sup>10</sup>Nurse Specialist, Aluwayqilah General Hospital.

<sup>11</sup>Technician Emergency Medical Services, Ministry of National Guard - Health Affairs - National Guard Fire Unit, Riyadh.

<sup>12</sup>General Dentistry, Primary Health Care in Hail, National Guard Fire Unit, Riyadh.

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## **ABSTRACT**

Patients with cancer who are undergoing chemotherapy suffer from oral complications like mucositis, infections, and xerostomia which greatly diminishes their quality of life. The interprofessional team consisting of nurses and social workers is crucial in addressing these complications. Nurses deliver fundamental care such as mouth care instruction, pain control, problem identification, and other supportive measures while social workers render psychological support, counseling, and help with healthcare access. By working together a different aspect of care is provided which helps achieve an overall improved patient outcome. This combined approach of care helps ensure that both the physical and psychosocial aspects of health are attained. The incorporation of social work and nursing into oncology serves to promote comfort, compliance, and well-being of patients.

Keywords: Managing Oral, Complications , Cancer Patients , Chemotherapy

### INTRODUCTION

Chemotherapy has been widely used in the management of various types of cancer. With the increasing number of cancer patients who receive chemotherapy, the oral healthcare group is frequently involved in the management of complications related to chemotherapy. Many cancer patients experience oral complications during chemotherapy, where oral conditions usually impair patients' physical and nutritional status, as well as their performance and response in daily living activities (Wang et al., 2021). There is a perception that nursing involvement in oral care is low and that many nurses take an ad hoc approach to the oral examination of their patients, often leaving oral care to the patient or, more commonly, to the family or carer. Nurses in acute hospital care have a responsibility for the provision of basic oral hygiene and precautionary support for patients with oral-related complications. It is part of their accountability for the provision of safe and efficient care for their patients (Weening-Verbree et al., 2021).

Nurses play an essential role in the management of chemotherapy by conducting root cause analysis, evaluating and treating oral complications, preventing the progression of oral complications, providing necessary education to both healthcare professionals and patients, assessing and managing the patient's oncologic treatment, providing necessary education to both healthcare professionals and persons affected by the oncologic treatment,

and communicating with family members and other healthcare professionals (Jiang et al., 2022). Nurses must continue to support all other health professionals in their management of adverse effects that result from chemotherapy. The specific responsibilities and knowledge that nurses should possess in order to keep active the process of frontline management of oral complications related to chemotherapeutic patients are described in a subsequent section (Cope, 2022).

# 1. Understanding Oral Complications in Cancer Patients Undergoing Chemotherapy:

Oral complications are common in cancer patients undergoing chemotherapy, which makes it difficult for patients to maintain an adequate nutritional status. The nurses need to understand the various oral complications to provide the appropriate treatment in good time to prevent delays in chemotherapy. Cancer patients undergoing chemotherapy can suffer from a number of oral complications including mucositis, xerostomia, cranial nerve disorders, parotitis, taste alterations, and dental problems. The most frequent oral complications are: mucositis, xerostomia, and taste changes (Anand et al., 2023).

Mucositis is the most severe oral complication and can be extremely painful. The oral epithelial, mucosal, and salivary gland cells are therefore abundant in tumors, also due to their rapid turnover with a high replication rate, and are targeted by chemotherapeutic drugs. Conventional cancer chemotherapy, either alone or in combination with radiation, stimulates an inflammatory process which damages and inflames the mucosal area of the oral cavity and their salivary glands. Careful questioning concerning potential oral problems is therefore necessary (Anand et al., 2023).

The critical and multifaceted role of nurses in managing the various oral complications that may arise in cancer patients undergoing chemotherapy should encompass several essential responsibilities. Firstly, an important responsibility is to educate patients thoroughly, using appropriate teaching aids that are clear and helpful. These aids may include pamphlets, digital resources, and interactive discussions that ensure the material is understood. Secondly, nurses should vigilantly monitor the symptoms that patients exhibit, as timely identification of these symptoms can lead to more effective interventions (Quinn et al.,2024).

Thirdly, it is imperative for nurses to develop a comprehensive nursing care plan tailored for patients undergoing chemotherapy. This care plan should aim to significantly reduce the occurrence of oral complications, lessen the severity of existing symptoms, and minimize any potential complications that might arise from the treatment. Fourthly, providing emotional and practical support to the patients during this challenging time is crucial, as it can substantially improve their overall experience and outcomes. Lastly, nurses should actively consult and instruct other members of the healthcare team to ensure a collaborative approach in addressing the needs of the patients. In situations where patients require intensive and specialized oral medical treatment, it is vital for nurses to refer these patients to qualified dentists or oral oncologists for thorough examination and management following an appropriate consultation (Shiwlani et al., 2024, Zhang et al., 2021). By providing accurate and detailed information to outpatients, nurses can effectively assist in managing and addressing some of the important oral health issues that arise during the course of treatment. Ultimately, the overarching aim of a nurse in this context is to manage and control any aspect of chemotherapy that could impact oral health and to foster the well-being of cancer patients throughout their treatment journey (Kara et al., 2023).

### 2. The Importance of Oral Care in Chemotherapy Patients:

The oral cavity is the entrance to the digestive and respiratory tracts and a gateway to body health. The oral cavity often reflects the patient's overall health, and it occupies an important position in the human body. However, about 40%–60% of chemotherapy patients can manifest oral complications, resulting in the patient's quality of life being affected and the delay or interruption of treatment. Therefore, understanding the importance of oral care and dental assessment for cancer patients can play an important role in subsequent care (Soares et al., 2023).

The main symptom of the oral complications experienced by cancer patients is painful mucositis, bacterial and fungal infections, sores, or bleeding caused by platelet reduction, and mouth and throat irritation caused by symptoms such as simple pain, dry mouth, taste change, nausea, vomiting, and anorexia. Gastrointestinal and hand–foot syndrome present a painful oral problem and hyposalivation, which results in the accumulation of a large number of bacteria and fungi in the mouth, leading to oral infections and significant reductions in the quality of life. Therefore, oral care and dental assessments for cancer patients can not only alleviate the development of complications but also be helpful for the adjuvant therapy and therapeutic efficacy (Chan et al.,2021, Pilas and Kurt, 2024).

# **3. Nursing Interventions for Oral Complications in Cancer Patients:**

Nurses have an important role in educating patients about managing oral complications associated with chemotherapy. A multifaceted nursing interventions approach targets modifying the symptoms and provides support for the quality of life, including dietary counseling, electrolyte replacement, and antiemetics for the

prophylaxis of specific diseases such as mucositis flare-ups. Nurses can also educate cancer patients regarding preventive measures, including maintaining oral hygiene, reducing the oral accumulation of bacterial flora, adjusting denture use, denture and dental care, good nutrition, and amending factors that may promote oral hygiene, as well as lifestyle modifications such as cessation of smoking and chewing tobacco. Some nurses concurrently educate patients to plan for oral health beforehand as a preventive strategy (Tawfik et al., 2023). Engaging dental professionals to see cancer patients before going for chemotherapy can encourage oral health improvement, as well as address the possible adverse effects it has on gums and bones. Oral mucositis is a complex local feeling of anguish related to the palliative care of cancer or the therapeutic complications of its treatment. In spite of its severity, it often results in the inability to consume their favorite soft, consistent foods. In the past, oral complaints of cancer patients were assigned to physicians; as a result, non-physicians, particularly nurses, have important responsibilities, especially with respect to monitoring and managing the oral effects of chemotherapy and radiotherapy. By making constant evaluations and applying suitable management of oral complications, the overall quality of life and satisfaction with treatment can be positively impacted (Ouinn et al., 2024).

### 4. Best Practices and Strategies for Nurses in Managing Oral Complications:

Cancer is a prevalent and potentially life-threatening medical condition that can cause severe pain and suffering. Chemotherapy is a type of cancer treatment that uses cytotoxic drugs to kill cancerous cells. Worldwide, a high incidence of oral complications is reported in patients undergoing chemotherapy treatment. These oral complications cause poor oral health and hinder oral functioning and, on many occasions, result in treatment delays for the underlying cancer. One group of healthcare specialists in a good position to manage these oral complications is the nurses who provide care to cancer patients undergoing chemotherapy. Performing regular oral assessments on cancer patients according to the chemotherapy treatment schedule is a good practice for the nurses (Akitomo et al., 2024).

Nurses who identify patients at an increased risk of developing oral complications can then take steps to prevent and manage these complications, thus minimizing the potential disability and treatment delays that may result during the course of cancer treatment. Furthermore, regular oral assessment may lead to early detection of life-threatening conditions such as oral hemorrhage, and cancer patients thus stand to benefit from early specialist referral. All of these practices are essential for care provision to be both comprehensive and efficient. It is also crucial for the nurses to get involved in specialized oral assessment training programs and to participate in the development of chemotherapy management guidelines that are specific to oral-related side effects (Ferrández-Pujante et al.,2022).

Nurses also need to encourage patients to undertake basic preventative oral care measures such as tooth cleaning and gentle mouthwashes. It is beneficial for nurses to work together with dental professionals to ensure that important oral management care is given to cancer patients. In any case, having the assistance of nursing staff whose role is acknowledged as being helpful by the dental team is an essential part of comprehensive dental care provision (Tseng et al., 2021).

## Functions of Social Work Relating to Oral Problems of Cancer Patients on Chemotherapy

Social work is helpful in managing oral issues with cancer patients undergoing chemotherapy. Issues like mucositis, infection and xerostomia can be highly distressing both physically and emotionally to a cancer patient. In relation to this, social workers help in holistic care of patients by providing support to the psychological, social, and economic issues they face due to these complications(Akitomo et al., 2024)..

Social workers play a critical function of providing psychosocial support. An oral complication causes a lot of pain and discomfort which cancer patients experience while undergoing chemotherapy. Social work provides qualitative counseling, emotions, and better ways to cope with painful experiences. Social workers also assist families of patients with practical ways to offer support and counseling to patients (Tseng et al., 2021)...

On the other hand, social workers help patients gain access to health care services, funding programs, insurances, or community services. Numerous cancer survivors suffer from poverty endured as a byproduct from the medical procedures, limiting affordable options for effective oral hygiene. Social work helps patients with prescribed medications, dental care, or nutrition that are necessary for primary oral hygiene(Quinn et al., 2024).

In addition, social workers interface with the medical staff, which includes nurses and oncologists, to provide patient care as a team. They help in the coordination of multidisciplinary aid, conduct educational sessions for support group leaders, and teach basic caring techniques for oral problems to be performed at home. Social workers empower the patients with information and tools that enhance compliance with the treatment plan and improve their overall quality of life(Tawfik et al., 2023).

To sum up, social work in relation to oncology is important because it assists in dealing with the nonclinical phenomena associated with oral issues emerging from chemotherapy. Social workers contribute significantly in

enhancing the patient's comfort during treatment through psychosocial support, resource provision, and working together with other health professionals.

#### **CONCLUSION**

Nurses play an integral role in the effective management of oral complications in cancer patients receiving chemotherapy. When they are equipped with knowledge and given the opportunity to contribute to patient care, they play a critical role in assisting these patients to effectively manage their symptoms. They provide a vital link between the cancer patient and the rest of the healthcare team. If these patients are to successfully endure often-repetitive courses of chemotherapy and carry on with their lives, the prevention and management of oral complications during treatment remains a priority. Current thinking is that a significant number of these oral complications in the majority of patients appears to be preventable, especially with the input from nurses. The provision of appropriate and effective oral care during chemotherapy in close collaboration with the oncology team is, therefore, essential.

It should be recognized that not all health professionals have the necessary skills in oral care to manage the oral complications associated with chemotherapy. Nurses are often overlooked as an invaluable resource to make a significant contribution to the care of these patients. They practice nursing care of the patient as a whole, incorporating knowledge from both traditional as well as those tools learned in specific educational areas, such as that of oncology, and expand these skills to incorporate the management of some of the oral complications experienced by the patient. Further research should be conducted to develop better opportunities for nurses to learn how to manage these oral problems so that they can become a more integrated and enthusiastic part of the oncology healthcare team.

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