

EFFECTIVENESS OF WOUND DRESSING INTERVENTION IN REDUCING CAREGIVERS BURDEN FOR ORAL CANCER PATIENTS: A REVIEW PAPER

Ahsan Manan¹, Raja², Ameer Ullah Khan³

¹Master of Science in Nursing, Ziauddin University Faculty of Nursing and Midwifery, Karachi

²Associate Professor, Ziauddin University Faculty of Nursing and Midwifery, Karachi

³Nursing Instructor, Qatar College of Nursing (Female), Orangi Town, Karachi

¹ahsan.19489@zu.edu.pk, ²raja.khatri@zu.edu.pk, ³amir.pyare@gmail.com

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Corresponding Author: *

Raja,

Associate Professor,

Ziauddin University Faculty

of Nursing and Midwifery,

Karachi.

raja.khatri@zu.edu.pk

Abstract

Background: Oral Cancer affects patients as well as their family members and it is a serious, life-threatening disease. Additionally, caregivers are crucial to the treatment of oral cancer patients. Primary caregivers are severely burdened by the side effects and consequences of oral cancer treatment. Oral cancer patients often require extensive wound care, which places a significant burden on primary caregivers.

Objective: To evaluate the impact of a wound dressing intervention on the care burden faced by the main caregiver of patients with oral cancer

Methods and Material: Several electronic databases were used in the literature review, including Google Scholar, Academia, Science Direct, Cumulative Index to Nursing and Allied Health Literature, and PubMed. The literature review procedure was recorded using the PRISMA flowchart approach. In the final review, which covered the last five years, we included 09 out of 235 papers that met the inclusion criteria and examined how wound dressing intervention effects on caregiver burden or primary caregiver of oral cancer patients. To detect common results across trials, data were combined using quantitative approaches.

Result: The research indicates that the wound dressing intervention significantly reduced the burden of care among caregivers of oral cancer patients.

Conclusion: The study's findings demonstrate that the wound dressing intervention effectively reduced the burden on patients with oral cancer who had primary caregivers. The significant reduction in post-intervention burden makes it abundantly evident that systematic wound care management is crucial to lowering carer stress and improving their general health.

INTRODUCTION

Oral cancer includes cancers of the oropharynx, lip, and other oral tissues. It ranks as the thirteenth most common type of cancer worldwide (Mu et al., 2021). However, the incidence of oral cancer varies greatly depending on socioeconomic status and is more common in men (between the ages of 50 and 60)

and more deadly in men than in women. In 2020, there were approximately 377,713 and 177,757 new cases of lip and oral cavity cancer worldwide, respectively (Organization, 2020).

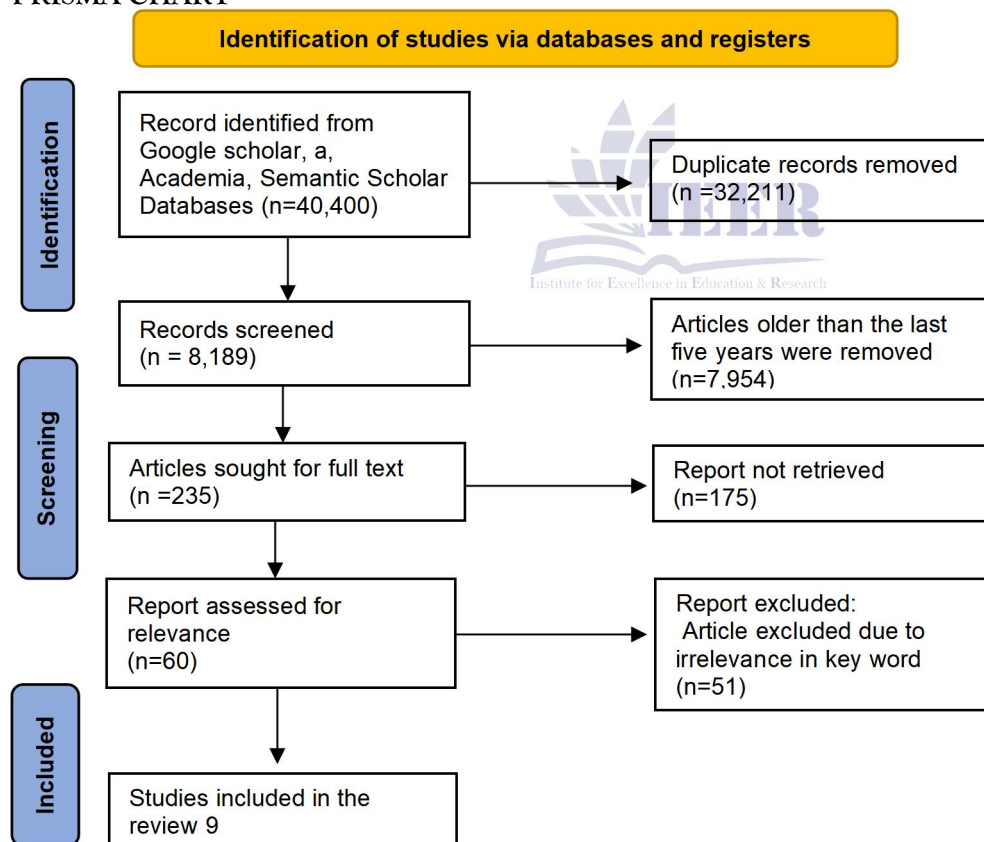
Although there aren't many recent studies examining OC in Asia, the high occurrence of OC greatly

burdens the Asian population (Rai et al., 2022). Because of the high rates of alcohol consumption, smoking, and betel quid chewing, it is considered one of the most common types of cancer in Southeast Asia (Moore et al., 2000). Smokeless tobacco use is most common in Pakistan, where prevalence rates for men and women were 21.3 and 19.3%, respectively. In Karachi, Pakistan, 40% of the population chews betel, areca, and tobacco products. Additionally, it has been observed that more than 74% of pupils regularly consume digestible foods, including as paan, charlie, gutkha, answer, and tombak (Ali et al., 2022).

According to reports, oral illnesses have a substantial detrimental influence on patients' quality of life, money, and overall health (Hernández-Morales et al., 2023). Because of this, being the primary

caregiver seems to be an extremely tense and stressful situation (Benson et al., 2019). A cooperative relationship between patients and their caregivers and the teaching process are essential throughout the early phases of therapy and follow-up visits, and they must be maintained throughout the process (Tolotti et al., 2021). In order to reduce the stress on primary caregivers and increase their preparedness, nurses are uniquely positioned to offer supportive interventions at home. In this instance, family caregivers are said to play a crucial part in the dying process (Becqué et al., 2020). Some family caregivers feel unprepared for their job as caregivers, despite the fact that they may feel overburdened by the duties involved in providing care (Becqué et al., 2020).

PRISMA CHART



Method and Materials:

For the literature review, a variety of search techniques were applied using multiple databases, including Google Scholar, Academia, PubMed,

ResearchGate, and the Cumulative Index to Nursing and Allied Health Literature (CINHL). Boolean operators (AND, OR, NOT) and a custom date range filter (2019-2024) were applied to PubMed, yielding 28 articles. From this pool, the most recent

and relevant papers were selected, while those unrelated to the study's subject were excluded. Similarly, A similar approach was used for ResearchGate and Google Scholar. 235, relevant articles were identified when peer-reviewed scholarly publications were searched and filtered for the same timeframe. Keywords such as wound dressing intervention, caregiver burden, head and neck cancer, oral cancer, lip and mouth cancer, oropharyngeal cancer, chemotherapy and radiotherapy were used to refine the search and locate pertinent studies. The initial search returned 40,400 results. After applying the duplicate filter, 32,211 were removed. An additional 8,067 records were eliminated after further filtering. Articles older than five years were also excluded, reducing the total by 12,402. Abstract and citation filtering further narrowed the selection to 235 articles that requested full-text review. Of these, 836 reports could not be retrieved, and after eligibility screening, 60 articles were assessed for relevance. A total of 780 articles were excluded due to irrelevance based on keywords. Ultimately, 28 articles were included in the study review. The most relevant abstracts and titles were carefully selected for final review. This process was documented using a PRISMA chart.

Result

For this study, 18 items were selected from a first search of 40,400. Findings suggest the effectiveness of wound dressing intervention on the burden of care among primary caregivers of oral cancer patients. Significantly reduce the burden of care among primary caregivers. There was thorough information provided about the stages of the article search.

Conclusion

It was concluded that the study underscores the significant role of wound dressing intervention in significantly reducing the burden of care among primary caregivers of oral cancer patients. This research validates prior evidence on the potential integration of effective wound care strategies to support caregiver well-being. Future studies should investigate its long-term impacts.

Recommendation

Based on the review of wound dressing interventions and their impact on caregiver burden in oral cancer patients, the following recommendations are proposed:

Implementation of Evidence-Based Wound Care Protocols:

Healthcare providers should adopt standardized, evidence-based wound dressing protocols to ensure optimal wound healing and reduce the complexity of at-home wound management for caregivers.

Training and Support for Primary Caregivers:

Structured educational programs should be developed to train caregivers on wound care techniques, infection prevention, and the appropriate use of modern dressing materials to enhance their confidence and competence in managing wounds.

Utilization of Advanced Wound Dressing Technologies:

The integration of advanced wound dressings, such as hydrocolloids, hydrogels, and antimicrobial dressings, should be encouraged to promote faster healing, minimize dressing changes, and reduce caregiver workload.

Enhanced Access to Healthcare Support Services:

Healthcare facilities should establish accessible wound care clinics, telemedicine consultations, and home-based nursing support to assist caregivers in managing complex wound cases more effectively.

Psychosocial and Emotional Support for Caregivers:

Psychological counseling and peer support groups should be made available to address the emotional stress, anxiety, and burnout experienced by caregivers of oral cancer patients.

Integration of Multidisciplinary Care Approaches:

A multidisciplinary approach, involving oncologists, wound care specialists, nurses, and palliative care teams, should be adopted to provide holistic patient care and ease the burden on caregivers.

Further Research on Wound Care Interventions:

Future studies should focus on the comparative effectiveness of different wound dressing materials and techniques, specifically in reducing caregiver burden, to refine current practices and inform policy decisions.

REFERENCES

- Ali, A., Manzoor, M. F., Ahmad, N., Aadil, R. M., Qin, H., Siddique, R., Riaz, S., Ahmad, A., Korma, S. A. & Khalid, W. 2022. The Burden Of Cancer, Government Strategic Policies, And Challenges In Pakistan: A Comprehensive Review. *Frontiers In Nutrition*, 9, 940514.
- Becqué, Y. N., Rietjens, J. A., Van Der Heide, A. & Witkamp, E. 2020. The Effectiveness Of A Nurse-Led Intervention To Support Family Caregivers In End-Of-Life Care: Study Protocol For A Cluster Randomized Controlled Trial. *Journal Of Advanced Nursing*, 76, 1266-1272.
- Benson, J. J., Parker Oliver, D., Demiris, G. & Washington, K. 2019. Accounts Of Family Conflict In Home Hospice Care: The Central Role Of Autonomy For Informal Caregiver Resilience. *Journal Of Family Nursing*, 25, 190-218.
- Hernández-Morales, A., González-López, B. S., Scougall-Vilchis, R. J., Bermeo-Escalona, J. R., Velázquez-Enríquez, U., Islas-Zarazúa, R., Márquez-Rodríguez, S., Sosa-Velasco, T. A., Medina-Solis, C. E. & Maupomé, G. Lip And Oral Cavity Cancer Incidence And Mortality Rates Associated With Smoking And Chewing Tobacco Use And The Human Development Index In 172 Countries Worldwide: An Ecological Study 2019-2020. *Healthcare*, 2023. Mdpi, 1063.
- Moore, S., Johnson, N., Pierce, A. & Wilson, D. 2000. The Epidemiology Of Mouth Cancer: A Review Of Global Incidence. *Oral Diseases*, 6, 65-74.
- Mu, G., Wang, J., Liu, Z., Zhang, H., Zhou, S., Xiang, Q. & Cui, Y. 2021. Association Between Smokeless Tobacco Use And Oral Cavity Cancer Risk In Women Compared With Men: A Systematic Review And Meta-Analysis. *Bmc Cancer*, 21, 1-12.
- Organization, W. H. 2020. International Agency For Research On Cancer Globocan 2020. World Health Organization.
- Rai, P., Ng, A., Intekhab, I., Sim, Y. F., Lai, C. W. M. & Loh, J. P. 2022. Oral Cancer In Asia-A Systematic Review. *Advances In Oral And Maxillofacial Surgery*, 100366.
- Tolotti, A., Pedrazzani, C., Bonetti, L., Bianchi, M. & Valcarenghi, D. 2021. Patients' And Nurses' Perceptions Of The Effectiveness Of An Oral Cancer Agent Education Process: A Mixed-Methods Study. *Cancer Nursing*, 44, E151-E162.