

Assessment of Oral Cancer Patient's Health Quality: A Questionnaire Study

Divya Kumar Jain¹, Manish Kumar², Anand Bhatnagar³, Anurag Jain⁴

¹Associate Professor, Department of Dentistry, Jhalawar Medical College, Jhalawar, Rajasthan.

²Associate Professor, Department of Dentistry, Government Medical College & Hospital, Ratlam (M.P)

³Reader, Department of Periodontics, Jaipur Dental College Jaipur Rajasthan

⁴Associate Professor, Department of General Surgery, Government Medical College Ratlam MP

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Corresponding author: Dr Anurag Jain

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Abstract

Objective: The purpose of this study was to determine the relationship between postoperative health-related quality of life (QOL) and care requirements for oral cancer patients. Methods: 140 oral cancer patients without cognitive impairment who had undergone surgical treatment during the previous two years were enrolled in this cross-sectional study. The European Organisation for Research and Treatment of Cancer Head and Neck Cancer Quality of Life Scale and the Short-Form Cancer Needs Questionnaire were each completed by the patients. Results: Stepwise multiple linear regression analysis showed that "trouble with social contacts," "swallowing problems," "teeth problems," and "feeling sick" were four oral cancer-related symptoms and problems that were significantly associated with higher care needs in oral cancer patients (all $P \leq 0.05$).

Conclusion: A significant correlation exists between health-related QOL and care needs.

Keywords: Oral cancer, care needs, quality of life

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Introduction

The world health organization (WHO) contends that a person's physical and psychological well-being, level of independence, social connections, and interactions with key environmental elements are all influenced by their health [1]. Additionally, it defines the term "quality of health" as "an individual's view of their position in life in relation to their objectives, expectations, standards, and worries, as well as

the culture and value systems in which they live" [2].

Due to the fact that oral cancer is frequently detected in a later stage, the mortality rate is higher (i.e., stages III and IV). As symptoms like discomfort, a burning feeling, and a limited mouth opening only appear in the later stages, the clinical appearance of oral cancer frequently goes unrecognized in the early stages. In addition to the clinical symptoms,

patients also exhibit psychological symptoms like worry because they are worried about the prognosis and course of treatment. According to studies, patients with stage III and stage IV oral cancer had a maximum 5-year survival rate [3]. Males are more likely to develop oral cancer than females, and it most frequently affects middle-aged and older people.

When people encounter different issues or circumstances, they may think they can fix them or make them better, but they might not have access to the right tools or simple solutions, which creates a need [4]. Therefore, the purpose of this research was to thoroughly assess the HRQOL and care requirements of postoperative oral cancer patients, to identify potential risk factors for these outcomes, and to assess the relationship between HRQOL and care requirements

Method

The institute's ethical committee gave the research their approval. Postoperative oral cancer patients in the surgical and outpatient departments served as the study's subjects. They were approached by staff members from the two departments and asked to take part. Patients who were referred were accepted into the study if they fulfilled the requirements, agreed to take part, and completed informed consent forms.

Patients with an oral cancer diagnosis from a doctor who had undergone surgical treatment met the inclusion requirements. Exclusion criteria included patients with impaired cognitive function, dementia, and intellectual disability who were unable to comprehend the study instrument and questionnaire even after being given an explanation. Additionally, people who were underage, in prison, from an indigenous group, expectant, or who had a

mental or physical disability were not allowed to participate.

A total of 140 subjects were enrolled, and they were given the option of completing the questionnaire and scale themselves or allowing a single qualified interviewer to do so. The best instrument to use to assess QOL in people with oral cancer is the EORTC QLQ-H&N35, which was developed by the European Organization for Research and Treatment of Cancer. 22 The questionnaire assesses additional signs and side effects of the therapy, such as odor, salivation, sensory affectation, speech, sociable eating, dental issues, restricted oral opening, sticky saliva, and other things. The four categories of responses—"none at all," "a few," "some," and "many"—are worth 1 to 4 points each. The concluding five questions can be answered with "yes" or "no," with each option earning one or two points.

IBM SPSS statistical software version 22 for Windows was used for all statistical studies (IBM Corp, Armonk, New York). In order to summarize demographic, clinical, QOL, and care requirements, mean±SDs for continuous variables or n (%) for categorical variables were used.

Results

This research included a total of 140 patients, 134 male and 6 female, with a mean age of 54.2 years (range, 34-84 years). According to the QLQ-H&N35 findings, feeding tubes, weight gain or loss, and social interaction were less problematic for patients than teeth issues, difficulty opening one's mouth, and dry mouth. The "health information domain" and "interpersonal communication domain" of the CNQ-SF yielded the best and lowest scores, respectively (table 1)

Table 1: QOL-H&N35 and CNQ-SF Scores

Questionnaire	Symptoms	Mean ± SD
QOL-H&N35		
	Total score	25.51 ± 15.06

	Symptom	
	Pain	1.80 ± 0.62
	Swallowing	2.14 ± 0.71
	Senses problem	1.59 ± 0.80
	Speech problems	1.8 ± 0.74
	Trouble with social eating	2.09 ± 0.62
	Trouble with social contact	1.31 ± 0.64
	Less sexuality	1.54 ± 0.81
	Single item	
	Teeth	2.64 ± 1.20
	Opening mouth	2.41 ± 1.5
	Dry mouth	2.55 ± 1.0
	Sticky saliva	2.44 ± 1.28
	Coughing	1.80 ± 0.84
	Feeling ill	1.95 ± 1.04
	Pain killers	1.62 ± 0.1
	Nutritional supplements	1.68 ± 0.45
	Feeding tube	1.24 ± 0.44
	Weight loss	1.41 ± 0.4
	Weight gain	1.2 ± 0.40
CNQ-SF		
	Total score	35.21 ± 18.85
	Physical and daily living	2.20 ± 0.81
	Domain	
	Psychological domain	2.34 ± 1.01
	Interpersonal	1.84 ± 1.04
	communication domain	
	Patient care and support	2.40 ± 0.81
	Domain	
	Health information domain	3.29 ± 1.20

Four HRQOL-related variables, including "problems with social contacts," "swallowing problems," "teeth problems," and "feeling sick," were significantly linked to greater care requirements in oral cancer patients ($P \leq .05$) as shown in table 2.

Table 2: Multiple Linear Regression Analysis of Associations Between QOL-H&N35 Items and Total Scores of CNQ-SF

Variable	SE	P value
Social contact problem	9.425	<.001
Teeth problem	3.250	.007
Swallowing problem	4.450	.020
Feeling ill	3.510	.025

Discussion

Prior to determining whether or not there is a correlation between HRQOL and care needs in patients with oral cancer, a thorough assessment of both HRQOL and care needs was carried out. The primary objective of this research was to investigate whether or not there is a correlation between HRQOL and care needs in patients with oral cancer.

For patients and their families, the quality of life after oral cancer is uncertain. It is widely accepted that the type of treatment chosen will determine the postoperative QOL of oral cancer patients. Patients usually had lower QOL after surgery, and QOL significantly declined in the first three months following surgical treatment, according to a prospective study [5].

There are links between the movements of the tongue, mandible, and mouth aperture during chewing and swallowing [6,7]. Patients with difficulties eating and swallowing have a lower QOL. Additionally, the fit and stability of oral prosthetics as well as tooth loss must be taken into account. The findings of the current research show that the total score of the care needs questionnaire is strongly correlated with HRQOL-related issues such as dental issues, dry mouth, opening the mouth, and sticky saliva. Additionally, 2 independent variables that predict an increase in care requirements among oral cancer patients include swallowing issues and dental issues.

Supplemental nutrition and the overall score of the care needs questionnaire were substantially correlated [8]. In particular, there was a strong correlation between nutritional supplements and requirements for patient care and support as well as physical and daily living needs. However, there was no correlation between weight change—weight gain or loss—and the care requirements of patients with oral cancer.

Additionally, two independent variables that predicted an increase in care requirements among oral cancer patients were problems

making social connections and experiencing psychological distress [9].

After free flap reconstruction, the quality of life (QOL) and functional outcomes were found to be influenced by the type of reconstruction performed, which was found to be an independent factor in this research. The author came to the conclusion that reconstructive techniques played an essential role in ensuring a satisfactory QOL. Oral cancer is the most disabling and deforming illness; as a result of its treatment, patients' mental health can be negatively impacted as a direct result of the loss of facial structures, such as mandibles [10]. Rogers *et al.* [11] found that patients who underwent mandibulectomy followed by reconstruction experienced an increase in their quality of life due to improvements in their ability to eat, their physical appearance, and their general quality of life.

In relation to the life experience of postoperative oral cancer patients, a qualitative study has suggested that, aside from the obvious impact on patients' mouths and suffering life-threatening symptoms, patients' quality of life may also be affected by factors such as consciousness of their survival, restrictions on interpersonal relationships, state of adaptation, and establishment of a support network. This is in addition to the obvious impact on patients' mouths and suffering life-threatening symptoms [12, 13].

In addition to this, optimistic cancer patients reported higher mortality rates a year after their diagnosis, in comparison to pessimistic cancer patients. Patients diagnosed with cancer who are highly effective and have a feeling of agency or control may perceive a causal relationship between the coping behaviors they engage in and certain desired outcomes, such as the level and type of quality of life [14,15]. The findings of the current study lend credence to the conclusion reached in an earlier investigation, namely that there is a substantial

correlation between HRQOL-related symptoms and the psychological domain as well as the requirement for interpersonal communication regarding care needs.

The current research has a number of drawbacks. The one-time questionnaire was used in a cross-sectional study design to examine patients' QOL and care needs, which provided insight into postoperative oral cancer patients' care needs and QOL at just one specific time and did not permit assessment of long-term changes.

In addition, based on the findings of the current study, interventional studies may be carried out to determine whether or not information about patients' HRQOL and care needs can be used successfully to assist patients in interacting with family and society after oral cancer treatment and recovery.

Conclusion

The HRQOL of postoperative oral cancer patients and their care requirements show a substantial correlation, indicating that as patients' QOL declines, so do their care requirements. The trouble with social interactions, swallowing issues, dental issues, and feeling unwell are four oral cancer-related symptoms and problems that independently predict higher care requirements in oral cancer patients.

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