

A Hospital-Based Descriptive Assessment of the QoL amongst All Diagnosed Cases of Head and Neck Cancer

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Abstract

Aim: The aim of the present study was to assess the QoL amongst all diagnosed cases of head and neck cancer.

Methods: This was a hospital-based, descriptive, cross-sectional study in which the quality of life of 50 patients diagnosed with head and neck cancer attending the out-patient Department of ENT, SKMCH, Muzaffarpur, Bihar, India were studied. The study was conducted for the period of one year. Patients presenting to outpatient department and fulfilling the following criteria were included in the study.

Results: The highest number of cases was observed 50-59 years age group (28%), followed by 60-69 years age group (20%). The number of cases was significantly higher in males with 42 cases (84%) as compared to females who comprised only 8 cases (16%). When asked to state the aspect of lifestyle was most distressing/inconvenient for the patient in past one week (up to three choices per patient), the highest fraction of patients responded pain (56%), followed by appearance (38%) and chewing (36% each) and subsequently, swallowing (30%) and speech (32%). 30% patients responded that they can swallow certain soft solids, but cannot swallow certain foods. 48% had normal saliva. On being asked about the sexual aspect of their lifestyle, around 26% patients responded that they were a little dissatisfied, 16% patients were moderately dissatisfied and 4% patients were very dissatisfied with their sex lives. On being asked about their mood, around 38% patients stated that they were neither in a good mood nor depressed, while around 34% revealed that they were depressed about their cancer. Around 36% patients experienced shoulder stiffness.

Conclusion: The study findings suggested that the treatment and intervention protocol for head and neck cancer patients should not only be focused on survival but also on ensuring QoL throughout the management intervention and stages of recovery.

Keywords: Head and neck cancer, Quality of life, UW-QOL

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Introduction

Quality of life (QoL) is a multi-dimensional concept and it includes domains related to physical, mental, emotional, and social functioning. [1] A related concept of QoL is well-being,

which assesses the positive aspects of a person's life, such as positive emotions and life satisfaction. [2] It is associated with the individual's degree of satisfaction found in family life, love life, social and

environmental life, and the very existential sense. [3] The notion of QoL has become increasingly important in patient treatment, particularly in oncology where treatment rarely offers complete recovery and there is limited life expectancy. For head and neck cancer (HNC), the principle domains to achieve are mainly survival with improvement of QoL. [4]

The main outcome measure in oncologic patients has long been survival, based on tumor control, but recently, treatment implications for the patient's global quality of life (QOL) has been emphasized as a very important issue. In the last 20 years, an increasing number of studies have measured QOL as an end point in the evaluation of the impact of the disease and its treatment on the patient's daily life. [5-7] Head and neck cancer is a worldwide public health problem. It is especially troubling in developing countries where most patients are diagnosed at advanced clinical stages and need more aggressive treatment, which is usually associated with poor survival. [8] Due to the anatomic characteristics of the head and neck, treatment of head and neck cancer can result in deficits to cosmetic appearance and varying degrees of dysfunction in speech, swallowing, and respiration. These factors could have a negative impact in the functional outcomes and psychosocial adjustments of patients and their families as well as socioeconomic consequences with regard to the health system. [7,9-11]

The world's highest incidence of cancers in men, which was of the lower pharynx (11.50/100,000 people) and the tongue (7.60/100,000 people), was reported from Mizoram. Pondicherry had also reported the incidence of oral cancer in males (7.80-8.90/100,000). However, the highest incidence of nasopharyngeal cancer had been reported from Nagaland. [12-16] Although the treatment for head and neck cancer had resulted in a significant improvement in survival rates, yet the correct assessment and aiding the patient's

quality of life still remained a pivotal challenge.

The aim of the present study was to assess the QoL amongst all diagnosed cases of head and neck cancer.

Materials and Methods

This was a hospital-based, descriptive, cross-sectional study in which the quality of life of 50 patients diagnosed with head and neck cancer attending the out-patient Department of ENT, SKMCH, Muzaffarpur, Bihar, India were studied. The study was conducted for the period of one year. Patients presenting to outpatient department and fulfilling the following criteria were included in the study.

Inclusion criteria

Patients of head and neck cancers attending the OPD of ENT, SKMCH; patients above 18 years of age; patients who were able to understand the questions of the questionnaire UW-QoL; patients who gave consent were included in the study.

Exclusion criteria

Patients whose diagnosis had not been confirmed; terminal cases who were not able to understand and/or answer the questionnaire, by any means whatsoever were excluded.

Data collection

Patients satisfying the inclusion criteria were subjected to a questionnaire on QoL using UW-QOL, which included the dietary and sexual aspects of their lifestyle. The study was a hospital-based observational study, so no statistical analysis between the parameters was evaluated. The study was approved by the institutional ethics committee.

The data collected were tabulated in Microsoft excel worksheet and computer-based analysis was performed using Microsoft excel 2013. The categorical

variables were summarised as proportions and percentages.

Results

Table 1: Demographic data

Age (years)	N	%
Less than 20	01	2
20-29	01	2
30-39	07	14
40-49	10	20
50-59	14	28
60-69	10	20
70-79	03	6
80-89	03	6
90-99	01	2
Sex		
Male	42	84
Female	8	16

The highest number of cases was observed 50-59 years age group (28%), followed by 60-69 years age group (20%). The number of cases was significantly higher in males with 42 cases (84%) as compared to females who comprised only 8 cases (16%).

Table 2: Aspect of lifestyle which were among the three most important for the patient in past one week

Criteria	N	%
Pain	28	56
Appearance	19	38
Activity	7	14
Recreation	6	12
Swallowing	15	30
Chewing	18	36
Speech	16	32
Shoulder	05	
Taste	00	
Saliva	01	
Mood	10	
Anxiety	12	

When asked to state the aspect of lifestyle was most distressing/inconvenient for the patient in past one week (up to three choices per patient), the highest fraction of patients responded pain (56%), followed by appearance (38%) and chewing (36% each) and subsequently, swallowing (30%) and speech (32%).

Table 3: Severity of pain experienced by patients

Severity of pain	N	%
0 (no pain)	2	4
25 (mild pain not needing medication)	13	26
50 (moderate pain needing regular non-narcotic medication)	20	40
75 (severe pain controlled by narcotic medication)	5	10
100 (severe pain not controlled by medication)	10	20

Majority of patients (40%) stated that they experienced moderate pain needing regular non-narcotic medication.

Table 4: Effect of difficulty in swallowing on life of patients, effect of saliva and Status of sexual satisfaction on life of patients

Effect on swallowing	N	%
Unaffected	14	28
Certain solid food	15	30
Only liquid food	13	26
Cannot swallow	8	16
Saliva		
Normal	24	48
Less than normal	17	34
Too little	7	14
No saliva	2	4
Status		
6 (very dissatisfied)	02	4
5 (moderately dissatisfied)	08	16
4 (a little dissatisfied)	13	26
3 (neither satisfied nor dissatisfied)	25	50
2 (a little satisfied)	01	2
1 (moderately satisfied)	01	2
0 (very satisfied)	00	00

30% patients responded that they can swallow certain soft solids, but cannot swallow certain foods. 48% had normal saliva. On being asked about the sexual aspect of their lifestyle, around 26% patients responded that they were a little dissatisfied, 16% patients were moderately dissatisfied and 4% patients were very dissatisfied with their sex lives.

Table 5: Mental status of patients and Shoulder function of patients

Mood	N	%
Excellent and unaffected	01	2
Generally good, occasionally affected	13	26
Neither good mood nor depressed	19	38
Somewhat depressed	14	28
Extremely depressed	03	6
Shoulder function		
Unaffected	32	64
Stiff, not affected activity	11	22
Stiffness/pain leading to change of work	4	8
Cannot work	3	6

On being asked about their mood, around 38% patients stated that they were neither in a good mood nor depressed, while around 34% revealed that they were depressed about their cancer. Around 36% patients experienced shoulder stiffness.

Discussion

Head and neck cancers are malignant tumours of the upper aero-digestive tract including oral cavity, nasopharynx, oropharynx, hypopharynx and larynx. [17] However, in developing nations like India, approximately 30-40% of all cancer cases

are head and neck cancers. [18] In India, one-fourth cases of head and neck cancers are seen in males and one-tenth in females. Even with modern advances in diagnostic and treatment methods, mainly the increasing use of chemoradiation regimens, the overall survival rates among patients with head and neck cancer have been largely unchanged. This lack of improved survival has turned attention to evaluation of the function and QOL of survivors. [5-7] Because of the unique anatomic characteristics of the affected areas, head and neck cancer and its treatments have a remarkable impact on the patient's daily life. Such tumors usually result in some degree of dysfunction of speech, swallowing, and/or respiration as well as disfigurement of appearance. Such alterations in function and appearance may have a significant impact on the patient's self-image and may affect the psychosocial areas of the patient's life. [5,11,19] For these reasons, it is important to assess QOL in the head and neck cancer population.

The highest number of cases was observed 50-59 years age group (28%), followed by 60-69 years age group (20%). The number of cases was significantly higher in males with 42 cases (84%) as compared to females who comprised only 8 cases (16%). In the study by D'Souza et al [20], a total of 89 patients with HNC were assessed in which similarly, most (54%) of the participants belonged to the age group of 45-64 years, majority of the HNCs aroused from oral cavity (40%) and were diagnosed in the advanced stage III (35%) and IV (35%). Another study by Terrel et al [21] showed that a total of 570 patients with HNC were studied in which majority were male (78%) within the age group of 27-88 (mean 59 years). When asked to state the aspect of lifestyle was most distressing/inconvenient for the patient in past one week (up to three choices per patient), the highest fraction of patients responded pain (56%), followed by

appearance (38%) and chewing (36% each) and subsequently, swallowing (30%) and speech (32%). In the study, importance-rating using the UW-QoL questionnaire in patients treated by primary surgery for oral and oropharyngeal cancer, patients tended to rate speech, chewing and swallowing as more important than the other UW-QOL domains, which was majorly consistent with our study. [22] In the study, Influence of pain severity on the quality of life in patients with head and neck cancer before antineoplastic therapy, 66.9% of all patients reported that they used analgesics for pain control, despite which the number of patients with pain (59%) remained high. [23]

30% patients responded that they can swallow certain soft solids, but cannot swallow certain foods. 48% had normal saliva. On being asked about the sexual aspect of their lifestyle, around 26% patients responded that they were a little dissatisfied, 16% patients were moderately dissatisfied and 4% patients were very dissatisfied with their sex lives. On being asked about their mood, around 38% patients stated that they were neither in a good mood nor depressed, while around 34% revealed that they were depressed about their cancer. Around 36% patients experienced shoulder stiffness. In the study, issues of intimacy and sexual dysfunction following major head and neck cancer treatment, one-third of those answering the intimacy and sexuality questions reported substantial problems with sexual interest and enjoyment. [24] In the study, the identification of mood and anxiety concerns using the patients concerns inventory following head and neck cancer, 44% patients had reported significant anxiety or mood problems on the UW-QOL or highlighted issues of anxiety, mood and/or depression. [25]

Conclusion

The study findings suggested that the treatment and intervention protocol for

head and neck cancer patients should not only be focused on survival but also on ensuring QoL throughout the management intervention and stages of recovery. Support and care should not only be provided for the prevention of complications and further progression of the disease but also to facilitate management of pain, psychosocial instability and towards prevention of the debilitating loss of function after treatment interventions. Along with this, doctors should consider the impact of management interventions on QoL when considering and discussing about treatment option with HNC patients. Detailed assessment of the various factors which hamper the quality of life in head and neck cancer patients should be entitled which can henceforth provide quality care, a completely new view into the health care experience and improving patient satisfaction.

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