



## A study to find out the association between quality of life of oral cancer patients with selected demographic and clinical variables

Nirupama Roy<sup>1</sup> and Dr. Shabana Anjum<sup>2</sup>

<sup>1</sup>Ph.D Nursing Scholar, Madhya Pradesh Medical Science University, Jabalpur Institute of Medical Sciences, Jabalpur, Madhya Pradesh, India

<sup>2</sup>Principal, Jabalpur Institute of Medical Sciences, Jabalpur, Madhya Pradesh, India

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### Abstract

Oral cancer and its treatment have substantial effect on patients' quality of life. Less is known about the association between quality of life of oral cancer patients with clinical and demographic profiles.

**Aim:** Aim of the present study was to find out the association between quality of life of cancer patients with selected demographic and clinical variables.

**Methodology:** A descriptive survey design was adopted to collect the background information along with the quality of life from the 40 adult oral cancer patients attending the oncology units of a tertiary care hospital. A Hindi version of FACT-H&T (version 4) scale was used for assessing the quality of life.

**Result:** In this study, majority of subjects (32.5%) belong to age group (31-40) years and (51 – 60) years, out of them, (85%) were male. Most of the respondents (27%) found to chew tobacco for maximum period of (11-15) years. The most common site of oral cancer was carcinoma tongue (37.5%) and carcinoma buccal mucosa (42.5%). Majority (37.5%) of the subjects had a disease duration of (0-5) months. Surgery was performed only in 10 (25%) subjects and in rest 30 (75%) were treated conservatively. Hemiglossectomy was the most commonly performed surgery in this study. Metastasis was seen in only 4 (10%) subjects. 14 (35%) of subjects received radiotherapy and 38 (95%) received chemotherapy as their treatment. The most used drugs were carboplatin 19 (50%), cisplatin 18 (47.4%), and paclitaxel 16 (42.1%). Chronic diseases were seen only in 4 (10%) of subjects. Majority (57.5%) of the subjects were in cancer Stage II. There was significant association between radiotherapy and FACT-H&N total score ( $\chi^2$  value = 9.428, df=2) and rest of demographic and clinical variables were not found significant.

**Conclusion:** Majority of study population had habit of tobacco consumption and low literacy level. More research needs for public awareness on this context. The quality of life of oral cancer patients were badly affected and had an average score range.

**Keywords:** Quality of life, FACT-H&T scale, surgery, radiotherapy, chemotherapy, cancer stage, metastasis

### Introduction

Cancer is the main health issue in the community across the world. Globally, cancer is one of the most common causes for morbidity and mortality. The results from GLOBOCAN (2012) showed that 14.1 million new patients were diagnosed with cancer and 8.2 million deaths were due to cancer. This is projected to rise by at least 70% by 2030 [1].

The cancer patients experience a variety of symptoms. Inadequate management of symptoms might hamper the performance of the daily activities of an individual. The treatment of symptoms will help relieve the suffering and improve the quality of life (QOL) [2].

As per The Global Cancer Observatory, March 2021 [3], Indian cancer statistics show: Number of new cases in 2020, both sexes, all ages Lip, oral cavity 135 929 (10.3%), Number of new cases in 2020, males, all ages Lip, oral cavity 104 661 (16.2%).

In recent years the quality of life of patients is very important in monitoring the treatment and therapeutic procedure success. It has become a significant factor in

assessing the therapeutic procedure accomplishment and for the first time the patient alone can access the success of the respective therapy [4].

### Methodology

Non-experimental descriptive survey approach was used to fulfil the purpose. The data were collected from 40 adult oral cancer patients attending the oncology units of medical college hospital during May 2022. Non probability purposive sampling technique used to collect relevant data. A structure interview done to collect on background information and quality of life. Functional Assessment of Cancer Therapy – Head & Neck {FACT- H&N (version 4)} [5] a standardized tool used to assess the quality of life of oral cancer patient.

### Results and Discussions

**Section I:** Distribution of subjects according to demographic variables.

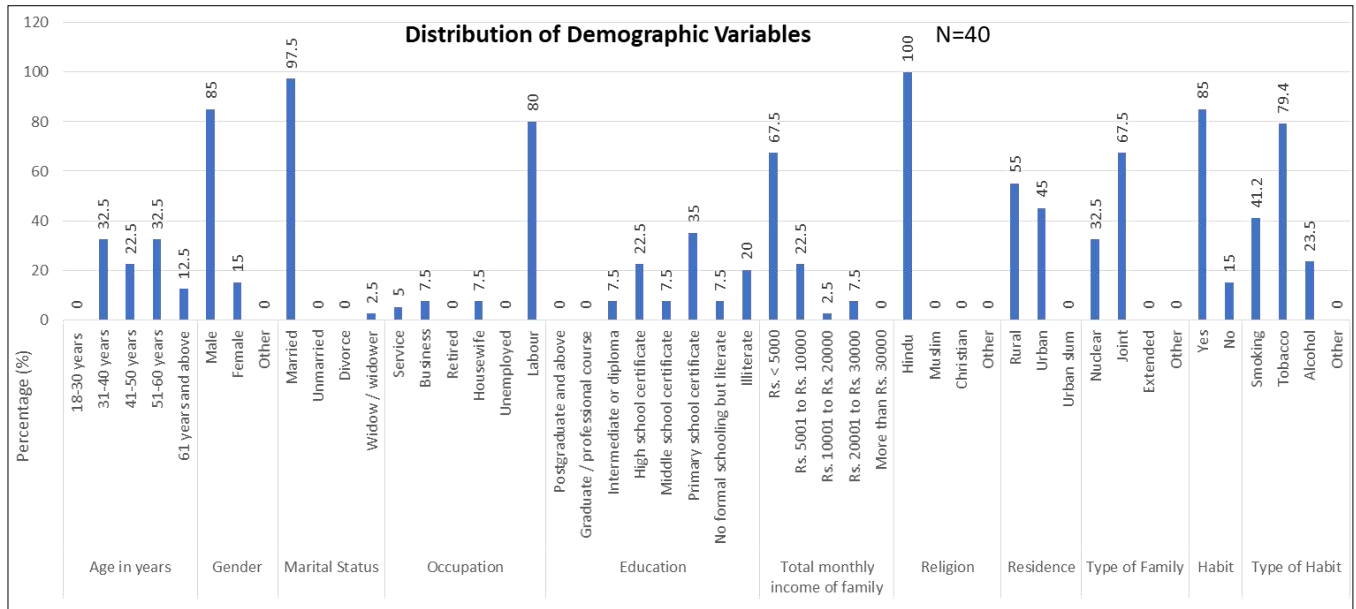


Fig 1: Distribution of Demographic N=40

The above bar diagram shows majority of the subjects (32.5%) were in the age group 31-40 years and 51-60 years. Male predominance was seen in oral cancers with 34 (85%). Majority of the subjects 39 (97.5%) were married. Maximum of respondents 32 (80%) were belong to labour group.

The above data showed the majority 14(35%) of the respondents were poorly educated with primary level. Majority 27 (67.5%) of the subjects had a total monthly family income of less than Rs. 5000.

All the patients belonged to Hindu religion (100%). 22 (55%) patients were from rural areas and 18 (45%) were

from urban areas. Slightly higher prevalence of patients from rural areas was seen in the present study. Most 27 (67.5%) of the subjects were from joint family.

Out of 34 subjects with habits, 27 (79.4%) using tobacco and 14 (41.2%) were smoking as their most common habits. Large part 14 (41.2%) of the subjects were continuing their habits for 11-15 years. Of these majority 15 (44.1%) subjects had stopped their habit since last 1-6 months.

**Section II:** Distribution of subjects according to clinical variables.

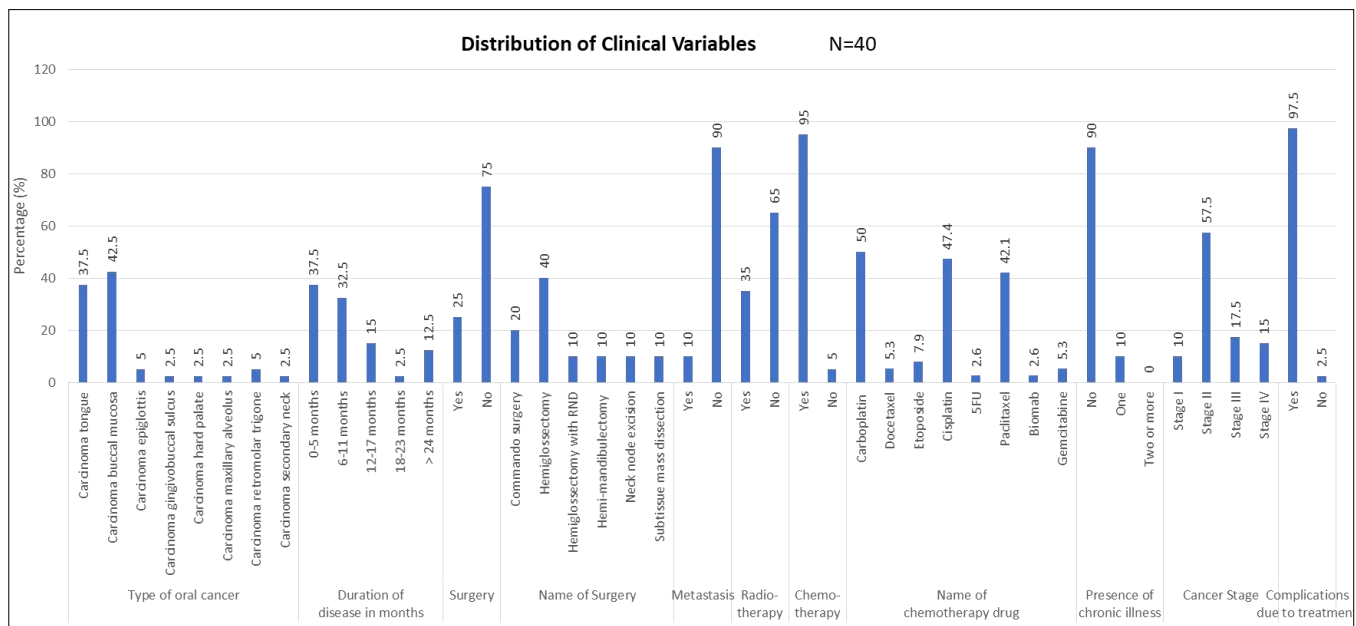


Fig 2: Distribution of Clinical Variables N=40

The above bar diagram shows the distribution of patients according to clinical profile.

The most common site of oral cancer was carcinoma tongue 15 (37.5%) and carcinoma buccal mucosa 17 (42.5%).

Majority 15(37.5%) of the subjects had a disease duration of (0-5 months).

Surgery was performed only in 10 (25%) subjects and in rest 30 (75%) were treated conservatively. 4 (40%)

Hemiglossectomy was the most commonly performed surgery in this study. Metastasis was seen in only 4 (10%) subjects. 14 (35%) of subjects received radiotherapy and 38 (95%) received chemotherapy as their treatment.

Of the 38 subjects who received chemotherapy, the most used drugs were carboplatin 19 (50%), cisplatin 18 (47.4%), and paclitaxel 16 (42.1%).

Chronic diseases were seen only in 4 (10%) of subjects.

Majority 23(57.5%) of the subjects were in cancer Stage II.

39 (97.5%) subjects experienced complications due to

treatment and only 1 (2.5%) patient had no treatment related complications. Many of the patients suffered from multiple treatment related complications. Pain was seen as major complication cover 15 (38.5%) subjects.

**Section III:** Association of FACT- H&N total score with selected demographic and clinical variables. (FACT-H&N total score= PWB score + SWB Score + EWB Score + FWB Score + HNCS Score).

**Table 1:** Association between demographic variables and Fact-H&N Total Score (Fact-H&N)

S. No.	Demographic Variable	Fact-H&N Total Score (Fact-H&N)			χ <sup>2</sup> value, df	Table value
		Poor	Average	Good		
<b>Age in years</b>						
1.	18-30 years	0	0	0	4.803, df=6	12.59, NS
	31-40 years	4	8	1		
	41-50 years	1	7	1		
	51-60 years	6	7	0		
	61 years and above	1	4	0		
<b>Gender</b>						
2.	Male	10	22	2	0.382, df=2	5.99, NS
	Female	2	4	0		
	Other	0	0	0		
<b>Occupation</b>						
3.	Service	1	1	0	2.991, df=6	12.59, NS
	Business	1	2	0		
	Retired	0	0	0		
	Housewife	2	1	0		
	Unemployed	0	0	0		
	Labour	8	22	2		
<b>Total monthly income of the family</b>						
4.	Rs. < 5000	9	16	2	2.108, df=6	12.59, NS
	Rs. 5001 to Rs. 10000	2	7	0		
	Rs. 10001 to Rs. 20000	0	1	0		
	Rs. 20001 to Rs. 30000	1	2	0		
	More than Rs. 30000	0	0	0		
<b>Type of family</b>						
5.	Nuclear	3	9	1	0.640, df=2	5.99, NS
	Joint	9	17	1		
	Extended	0	0	0		
	Other	0	0	0		
<b>Habit</b>						
6.	Yes	10	22	2	0.382, df=2	5.99, NS
	No	2	4	0		

Data presented in the above chi square table indicate there was no significant association between age, gender,

occupation, total monthly family income, type of family and habit with FACT-H&N total score.

**Table 2:** Association between clinical variables and Fact-H&N Total Score (Fact-H&N) (N=40)

S. No.	Clinical Profile	Fact-H&N Total Score (Fact-H&N)			χ <sup>2</sup> value, df	Table value
		Poor	Average	Good		
<b>Metastasis</b>						
1.	Yes	1	2	1	3.746, df=2	5.99, NS
	No	11	24	1		
<b>Radiotherapy</b>						
2.	Yes	7	5	2	9.428, df=2	5.99, Sig
	No	5	21	0		
<b>Chemotherapy</b>						
3.	Yes	11	25	2	0.459, df=2	5.99, NS
	No	1	1	0		
<b>Surgery</b>						
4.	Yes	2	7	1	1.162, df=2	5.99, NS

	No	10	19	1		
5.	<b>Presence of chronic diseases</b>				5.242, df=2	5.99, NS
	No	10	25	1		
	One	2	1	1		
	Two or more	0	0	0		
6.	<b>Cancer stage</b>				4.672, df=6	12.59, NS
	Stage I	0	4	0		
	Stage II	8	14	1		
	Stage III	2	5	0		
	Stage IV	2	3	1		
7.	<b>Complications due to treatment</b>				0.552, df=2	5.99, NS
	Yes	12	25	2		
	No	0	1	0		

Data presented in the above chi square table indicate there was significant association between radiotherapy and FACT-H&N total score and rest of clinical variables were not found significant.

### Limitations

- Since it was a pilot project with a small sample of oral cancer patients, the association between quality of life and most of demographic and clinical variables were not found statistically significant.
- Only radiotherapy was significantly associated with the quality of life of oral cancer patients.

### Conclusion

Oral cancer has unlimited impact in term of quality of life for the clients and their families. Timely appropriate treatment can reduce the suffering. The cancer management strategies to improve the quality of life must be emphasized. Majority of study population had habit of tobacco consumption and low literacy level. More research needs for public awareness on this context. The quality of life of oral cancer patient were badly affected and had an average score range. There was a strong association between radiotherapy with the quality of life of oral cancer patients.

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