



*Research Article*

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**An Analysis of the Reasons for Delayed Presentation of Head and Neck Cancers at a Tertiary Care Center in India**

Rejil Rajan<sup>1\*</sup>, Gull Mohammad Bhat<sup>2</sup>, Sandeep Bairwa<sup>3</sup>, Annu Rajpurohit<sup>4</sup>, Neha Rawat<sup>5</sup>, Manashi Ghosh<sup>6</sup>, Bhupendra Singh Chahar<sup>7</sup>, Chander Dutt<sup>8</sup>

1. Department of Medical Oncology, Dr. Balvir Singh Tomar Cancer and Research Institute, NIMS Hospital, Jaipur.

\***Correspondence to:** Rejil Rajan, Department of Medical Oncology, Dr. Balvir Singh Tomar Cancer and Research Institute, NIMS Hospital, Jaipur.

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**Abstract**

**Background:** In India, head and neck cancers are among the leading causes of cancer-related morbidity and mortality. Despite advances in diagnostic techniques and treatment modalities, the prognosis of head and neck cancers remains poor, especially in cases of advanced-stage disease. This study aimed to identify the primary reasons contributing to delayed presentation of head and neck cancers.

**Methods:** Treatment naive patients with head and neck cancer, who presented to medical oncology OPD of our hospital, were included in the study between May 2022 and March 2024. While taking history in OPD, the question on the primary reason for delay in presentation was asked in a language best understood by the patient and it has been recorded.

**Result:** Our analysis revealed several primary reasons for delays in the presentation of head and neck cancers. Patient-related factors such as lack of awareness, socioeconomic barriers, and fear of treatment and its complications were significant contributors. Additionally, healthcare system-related issues such as limited access to specialized care, delays in referral pathways were identified.

**Conclusion:** In conclusion, the delayed presentation of head and neck cancers in India is influenced by multiple factors, including neglect of symptoms by patients, failure of primary physicians to diagnose cancer, fear of treatment and its complications, and financial constraints. Addressing these barriers requires a multi-faceted approach, including public awareness campaigns, patient empowerment initiatives, and measures to enhance access to affordable cancer care services.

**Keywords:** Head and neck cancers, delayed presentation, tertiary care center, India.

**Introduction**

Head and neck cancers encompass a diverse group of malignancies arising from various anatomical sites including the oral cavity, pharynx, larynx and hypopharynx.

In India, head and neck cancer is a significant public health concern. The incidence of head and neck cancer in India is among the highest globally, largely due to prevalent risk factors and socio-economic factors [1].

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Tobacco use, including smoking and chewing forms such as gutka and paan, is the leading cause of head and neck cancer in India [2].

Men are disproportionately affected by head and neck cancer compared to women, with the incidence being notably higher in males across all age groups. However, the incidence in women is also notable, particularly in regions where tobacco and betel quid usage are prevalent among females [3].

Despite advancements in diagnosis and treatment, delayed presentation of head and neck cancers remains a challenge, particularly in low- and middle-income countries like India. Delayed presentation is influenced by a myriad of factors, including socioeconomic, cultural, and healthcare system-related factors [4].

This research paper aims to analyze the factors contributing to delayed presentation of head and neck cancers at a tertiary care center in India. Through a retrospective analysis of patient records, common reasons for delayed presentation will be identified and discussed. Understanding these factors is crucial for implementing effective strategies to promote early detection and improve outcomes for patients with head and neck cancers.

## Methods

Patients who were newly diagnosed with head and neck cancer, who visited the medical oncology outpatient department of our hospital, were included in the study between May 2022 and March 2024. While taking history, the question on reasons for delay in presentation was asked and it has been recorded.

Data on patient demographics, clinical characteristics, tumor stage at presentation, and time intervals from symptom onset to diagnosis were recorded.

## Results

A total of 135 patients were included; mean age was 50 years with 82% were men. 100% of the patients had habits of tobacco in some form, predominantly beedi smoking.

The mean duration of symptoms was 4.4 months (range 1- 18 months). Majority patients belonged to lower socioeconomic strata.

The following were the reasons for delayed presentation: neglecting of symptoms in 65 patients (48%) that symptoms were trivial and would heal on their own, primary physician did not diagnose that it could be cancer and were being treated symptomatically in 28 patients (21%), 26 patients (19%) due to financial issues and fear of treatment and its complications in 16 patients (12%).

Table 1: Clinico-demographic profile of patients

Age (mean)	50
Sex (%)	
Male	82
Female	18
Habits (%)	
Only smoking	41
Only tobacco chewing	17
Only alcohol	0
Smoking + tobacco chewing	30
Tobacco chewing + alcohol	3
Smoking + tobacco chewing + alcohol	9
Total duration of symptoms (mean)	4.4 months
Occupation (%)	
Farmer	56
Labourer	33
Professional	11
Primary site (%)	
Oral cavity	56
Oropharynx	30
Larynx	10
Hypopharynx	4
Stage (%)	
I	0
II	0
III	17
IVA	24
IVB	52
IVC	7
ECOG PS (%)	
0	0
1	16
2	57
3	19
4	8

Table 2: Reasons for delayed presentation

Neglecting of symptoms (%)	50
Primary physician did not diagnose that it could be cancer and were being treated symptomatically (%)	21
Financial issues (%)	19
Fear of treatment and its complications	12

## Discussion

Understanding the reasons behind delayed presentation of head and neck cancers is crucial for implementing effective strategies to promote early detection and improve outcomes. This discussion aims to analyze the factors contributing to delayed presentation of head and neck cancers at a tertiary care center in India.

### Neglecting of symptoms:

One of the primary factors contributing to delayed presentation is the lack of awareness about the signs, symptoms, and risk factors of head and neck cancers among the general population.

Some patients may perceive their symptoms as trivial or self-limiting and may delay seeking medical help, hoping that the symptoms will resolve on their own. This neglect of symptoms can result in delayed diagnosis and treatment, allowing the cancer to progress to advanced stages.

Several studies have reported that patients with head and neck cancers often neglect their symptoms or attribute them to benign conditions, leading to delays in seeking medical evaluation. A study conducted in a tertiary care center in India reported that patients with head and neck cancers often ignored their symptoms until they became severe or debilitating, resulting in delayed presentation [5].

### Failure of primary physicians to diagnose cancer:

In our study, a significant proportion of patients reported that their primary physicians did not diagnose their symptoms as indicative of cancer. Instead, they were treated symptomatically for unrelated conditions. This failure to recognize the signs and symptoms of head and neck cancers by primary care providers can lead to delayed referral to specialized centers for further evaluation and management.

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Several studies have highlighted the challenges faced by primary care physicians in diagnosing head and neck cancers, particularly in the early stages when symptoms may be subtle or non-specific. A study reported that a significant proportion of head and neck cancer patients had initially sought medical help from primary care providers who failed to suspect cancer, resulting in delayed presentation [6].

**Fear of treatment and its complications:**

Fear of cancer treatment and its potential complications is another significant barrier to timely presentation. Patients may hesitate to seek medical help due to concerns about the side effects of treatment, pain, disfigurement, and impact on quality of life. Fear of undergoing surgery, radiation therapy, or chemotherapy can deter patients from seeking timely medical evaluation, leading to delayed diagnosis and treatment initiation.

A study conducted in a tertiary care hospital in India reported that fear of surgery and radiation therapy was a significant barrier to timely presentation among patients with head and neck cancers [7].

**Financial issues:**

Financial constraints and limited access to healthcare services can also contribute to delayed presentation of head and neck cancers. Many patients in India may lack health insurance coverage and may face financial difficulties in accessing specialized cancer care. The high cost of cancer treatment, including diagnostic tests, surgery, chemotherapy, and radiation therapy, can pose a significant barrier to timely diagnosis and treatment initiation.

A study conducted in a tertiary care center in India reported that a significant proportion of head and neck cancer patients delay seeking medical help due to financial difficulties [5].

In conclusion, the delayed presentation of head and neck cancers in India is influenced by multiple factors, including neglect of symptoms by patients, failure of primary physicians to diagnose cancer, fear of treatment and its complications, and financial constraints. Addressing these barriers requires a multi-faceted approach, including public awareness campaigns, patient empowerment initiatives, physician education and training and measures to enhance access to affordable cancer care services.

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## Conclusion

In conclusion, delayed presentation of head and neck cancers remains a significant challenge in India, contributing to poor clinical outcomes and increased healthcare costs. This research highlights the importance of understanding the multifactorial nature of delayed presentation and underscores the need for targeted interventions to promote early detection and improve outcomes for patients with head and neck cancers.

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