



# Myths surrounding Oral Cancer

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## Abstract

Oral cancer poses a significant health challenge in India, which harbors the largest burden globally. With an alarming rise in cases predicted by GLOBOCAN, effective management is hindered by prevalent myths and misconceptions. This article explores common myths surrounding oral cancer, such as its association solely with smoking or age, and dispels these misconceptions through evidence-based insights. It emphasizes the importance of early detection and challenges the notion that oral cancer is easily identifiable, stressing the need for regular screenings. By debunking myths through education and awareness, this paper advocates for proactive measures to improve oral cancer outcomes in India and beyond.

## KEYWORDS

Oral Neoplasms, Health Knowledge, Attitudes, Practice, Early Detection of Cancer Health Education

## 1 | INTRODUCTION

India has the largest number of oral cancer cases and one-third of the total burden of oral cancer globally. Oral cancer poses a serious health challenge to the nations like India which are undergoing economic transition.<sup>1</sup> GLOBOCAN predicted that cancer cases in India would increase to 2.08 million, accounting for a rise of 57.5 per cent in 2040 from 2020.<sup>2</sup> The increasing number of cases of oral cancer are the most important concern for community health as it is one of the common types of cancers in India.<sup>3</sup> As compared to the west, the concern of oral cancer is significantly higher in India as about 70% of the cases are reported in advanced stages (American Joint Committee on Cancer, Stage III-IV) because of detection in the late phase, the chances of cure are very low, almost negative; leaving five-year survival rates around 20%.<sup>4</sup> Many cancers are curable, provided they are detected early by screening and treated effectively. Cancer myths and misconceptions are potential barriers to early cancer diagnosis and treatment compliance. The social, emotional, and financial devastation that all too often accompanies a diagnosis of cancer is, in large part, due to the cultural myths and taboos surrounding the disease. Certain popular ideas about how cancer starts and spreads, though scientifically wrong, can seem to make sense, especially when those ideas are rooted in old theories. This can lead to needless worry and even hinder appropriate prevention and treatment decisions. Some of the common cancer myths include the notion that being diagnosed with cancer equates to a death sentence and that cancer is an individual's fate and not preventable. Preference for opting for alternative therapies

not backed by adequate scientific evidence for the treatment of cancer and considering these strategies as free of any side effects is another common myth. This can lead to delays in seeking medical care, resulting in cancer progression and decreasing survival outcomes. Cancer myths can create fear and anxiety in patients, causing them to worry about the effectiveness of their treatment, the likelihood of survival, and the potential side effects of treatment. This can have a negative impact on their mental health and quality of life. Some cancer myths suggest that certain foods or diets can cure cancer or prevent it from recurring.<sup>5</sup> Cancer is a disease where myth can bring an end to a life. Undoubtedly, cancer is still a dreadful challenge for oncologists and researchers but that does not stop us from combating this killer disease. Diagnosis of cancer does not indicate that the person is suffering from an incurable disease where death is inevitable. Therefore, the need of the hour is to emphasize on debunking innumerable myths and misconceptions associated with cancer.

**Myth: Only Smokers Get Oral Cancer** Contrary to popular belief, smoking is not the sole cause of oral cancer. While tobacco use, including both smoked smokeless forms, are major risk factors, other also contribute to the development of oral cancer. These include excessive alcohol consumption, human papillomavirus (HPV) infection, poor oral hygiene, and a family history of the disease. It's crucial to recognize that non-smokers can also be at risk, and a comprehensive understanding of all risk factors is essential for early detection and prevention.

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**Myth: Mouth Cancer Only Affects Older Individuals** While the risk of developing mouth cancer increases with age, it can affect individuals of any age, including younger people. The prevalence of oral cancer in younger individuals is rising, emphasizing the importance of regular screenings and awareness campaigns targeting diverse age groups. Early detection is key, and everyone, regardless of age, should be vigilant about their oral health and seek medical advice if they notice any unusual symptoms.

**Myth: Mouth Cancer is Rare, So Regular Check-ups Are Unnecessary**

While it's true that mouth cancer is not as common as some other types of cancer, it is still a significant health concern. The incidence of oral cancer in India has been on the rise, underlining the importance of regular dental check-ups and screenings. Routine examinations by dental professionals can aid in the early detection of precancerous lesions or early-stage cancer, significantly improving treatment outcomes.

**Myth: Mouth Cancer is Easy to Spot, So I Don't Need Regular Check-ups.** One of the dangerous misconceptions is assuming that mouth cancer is always easily visible. In reality, early stages of oral cancer may be asymptomatic or present with subtle symptoms that are easy to overlook. Regular dental check-ups are crucial because professionals can identify abnormalities that may not be apparent to individuals. Visual examinations, along with advanced diagnostic tools, play a pivotal role in early detection, making regular dental visits a proactive step in preventing and managing mouth cancer.

**Myth: Oral Cancer Is Not a Serious Health Issue.** Oral cancer can have severe consequences if not detected and treated promptly. Delayed diagnosis can lead to the spread of cancer to other parts of the body, making treatment more challenging. Additionally, the impact on an individual's quality of life, including difficulties in eating, speaking, and facial disfigurement, underscores the seriousness of this disease. Education and awareness are crucial to dispel the myth that oral cancer is a minor concern, emphasizing the importance of prevention and early diagnosis.

**Myth: Using a Mouthwash Can Prevent Mouth Cancer** Debunked: While using mouthwash is an excellent practice for maintaining good oral hygiene, it alone cannot prevent mouth cancer. Good oral hygiene practices, including regular brushing, flossing, and using mouthwash, contribute to overall oral health, reducing the risk of various dental issues.

However, the prevention of mouth cancer requires a holistic approach, including avoiding tobacco and excessive alcohol consumption, maintaining a healthy diet, and scheduling regular dental check-ups.

**Myth: Mouth Cancer is Always Painful** Debunked: Contrary to the belief that mouth cancer always presents with pain, especially in the early stages, it can be asymptomatic or exhibit mild symptoms. Pain may only occur in later stages when the cancer has progressed. This highlights the importance of not relying solely on pain as an indicator of oral health.

Regular self-examinations, coupled with professional check-ups, are crucial for detecting any abnormalities or changes in the oral cavity, even in the absence of pain.

**Myth: Mouth Cancer is Contagious** Debunked: Mouth cancer is not contagious and cannot be transmitted from person to person through casual contact. The primary risk factors for developing oral cancer are related to lifestyle choices, genetic predisposition, and certain infections such as HPV.

Understanding that mouth cancer is not contagious helps dispel unnecessary fears and promotes a more informed and supportive community for individuals affected by the disease. Apart from cervical cancer (caused by human papilloma virus)<sup>6</sup> and liver cancer (caused by hepatitis B and C virus)<sup>7</sup>, none of the other forms of cancer are contagious. **Myth: If There's No Lump, It Can't Be Cancer** Debunked: Unlike some other types of cancer, oral cancer may not always present as a visible lump. It can manifest as white or red patches, sores, or ulcers that do not heal. Additionally, changes in the texture or color of the tongue, persistent hoarseness, and difficulty swallowing can be indicative of oral cancer. Relying solely on the presence of a lump may lead to delayed diagnosis. Regular self-examinations and professional screenings are essential for detecting a range of potential symptoms.

**Myth: Oral Health Doesn't Affect Overall Health** Debunked: The health of your mouth is interconnected with your overall well-being. Neglecting oral health not only increases the risk of oral cancer but is also linked to various systemic health issues such as cardiovascular disease, diabetes, and respiratory infections. Maintaining good oral hygiene, adopting a healthy lifestyle, and attending regular dental check-ups contribute not only to preventing mouth cancer but also to promoting overall health and well-being.

**Myth: Cancer is always fatal** Debunked: Though there has been a sharp rise in cancer-related mortality, but improved treatment options have made it possible for thousands of patients to improve survival rate.

**Myth: Biopsies as well as surgery aggravates cancer.** Debunked: Biopsies are the effective diagnostic tools for detection of cancer. Avoiding biopsies may lead to late detection and poor prognosis of the disease process.

**Myth: Every abnormal growth is cancerous.** Debunked: Benign tumours do not possess the capability to metastasize. In case of any clinical problem, these can be surgically removed.<sup>8</sup>

**Myth: Cancer is a hereditary disease.** Debunked: Genetic predisposition is an important factor which contributes towards development of cancer, but all cancers are not liable to develop from genetic inheritance. Only 5-10% of all cancers are attributed to genetic defects and the remaining 90-95% have their strings attached to environment and lifestyle.

**Myth: Nausea, sickness and pain are part and parcel of cancer treatment.** Debunked: Individual variation exists regarding response to a particular treatment regimen. Recent advancements with anti-emetics have made it possible to reduce the side effects like nausea and sickness. Pain relieving medications and exercises provide better quality of life to the patients.

**Myth: Clinical trials are highly experimental and patients are treated like "Guinea pigs" and are a risky undertaking.** Debunked: Clinical trials generally incorporate the best available medicine and then add to it or adjust it to observe if enhancements can be made to improve the quality of life of patients or their response rates. Clinical trials are closely monitored by the doctors and caregivers, as well as an Institutional Review Board assigned to each trial and details are carefully documented.

**Myth: Sugars feed cancer. Sugar is not responsible for the spread of cancer.** Debunked: Excess intake of sugar can lead to obesity and, therefore, can enhance the risk of oral cancer. Naturally occurring sugars like those found in fruits, vegetables and whole grains are all needed to help maintain muscle and weight during cancer treatment and have been shown to help fight cancer.<sup>8</sup>

**Myth: Positive attitude is enough to cure cancer.** Debunked: Positive attitude is always desirable during cancer treatment but this cannot be the only option for cancer cure, since proper medication and therapy are the foremost priority in case of cancer patients.

**Myth: There is no need to talk about cancer.** Debunked: It is always good to have an open and frank discussion about cancer, which might help to create awareness, therefore, improving outcomes at an individual, community level.

**Myth: One having cancer treatment cannot live at home, work or go about usual activities.** Debunked: Very often patients need to get admitted to a hospital for treatment. At times it may be helpful to travel to a specialty medical centre for treatment. The truth is that many people with cancer may be treated on an outpatient basis. A great deal of effort is ongoing to make it easier for cancer patients to live a normal life during their treatment.

**Myth: Supernatural factors and ill fate influence cancer.** Debunked: Very often people attribute an illness to supernatural factor, ill fate and witch craft with the occurrence of cancer. These affect the well-being of the patients due to bereavement in decision making and delayed medical care.<sup>8</sup>

**Myth: Cancer research is fruitless.** Debunked: Oncology, the study and management of cancer, is the fastest evolving branch of modern medicine today. Though the cause of cancer is still an enigma, the advanced interdisciplinary research has increased the scope of fighting the disease. Cancer research has brought in a number of new molecules which has helped to blend the targeted therapy, hormone therapy along with better surgical options, radiotherapy and chemotherapy to improve the disease free survival of the cancer patients.<sup>9</sup>

## 2 | DISCUSSION

Not only myths, social taboos also are an obstacle in dealing with cancer. A diagnosis of cancer is a life changing event commonly evoking feelings of shock, fear, anger, sadness, loneliness and anxiety. Cancer remains taboo and people with cancer are even subjected to stigma and discrimination that may stop them from admitting that they have cancer. Negative public concept of cancer can perpetuate a cycle of fear and misinformation that hinders raising awareness about cancer prevention and the importance of early detection. Lack of awareness is the root cause of the oncologic misconceptions. Cancer awareness programmes are foremost initiatives which are needed to debunk these myths. In a pilot survey conducted by Chittaranjan National Cancer Institute, Kolkata, India, on 900 people to assess the level of cancer awareness only 8% had experiences any cancer awareness programme conducted by any organization, 37% had heard cancer awareness programme on All India Radio, 36% had viewed awareness programme on Doordarshan/private television channels, 34% had read cancer awareness articles and only 13% had seen cancer awareness posters and hoardings (unpublished findings). The results envisaged a great lacuna in cancer awareness prevailing with the common mass.

The oncologic myths can be managed with effective palliative care services which would identify the misconceptions regarding cancer and help the patients as between health care providers and the community. According to the World Health Organization, majority of the cancer cases are detected only in the advanced stages, when they are untreatable. This has led to devastating consequences especially in developing countries. Educating people and spreading awareness against cancer and more organized network of cancer screening clinics would help to diagnose even an asymptomatic patient at an early stage. An early diagnosis of cancer and proper medical intervention would certainly lead to better prognosis and enhance the chances of disease free survival.

## 3 | CONCLUSION

Dispelling myths about oral cancer is a crucial step in promoting awareness and encouraging proactive measures for prevention and early detection. By staying informed, prioritizing regular check-ups, and adopting a holistic approach to oral health, individuals can contribute to reducing the impact of oral cancer on the population. Remember, knowledge is a powerful tool in the fight against oral cancer, and a well-informed community is better equipped to protect and prioritize their health.

Addressing these myths necessitates multifaceted approaches, including targeted education, public health initiatives, and collaborative efforts among healthcare professionals, researchers, and advocacy groups. By fostering a culture of knowledge dissemination and empowerment, individuals can make informed decisions about oral health practices and seek timely medical attention when necessary.

### Conflict of Interest

The authors declare no conflict of interest.

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