

# Awareness of Oral Cancer in Rural Bangalore Population: A Questionnaire Based Study

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## Abstract

**Introduction:** To estimate the awareness of oral cancer in rural Bangalore population we have conducted a questionnaire based survey at community camp.

**Material and method:** The questionnaire was prepared and distributed to the patients attending the dental camp. The questions were designed to determine the level of knowledge about oral cancer, its risk factors and signs.

**Result:** Total of 446 patients had responded to the questionnaire. Out of 446 responders 54 patients (12.10%) know about oral cancer or heard of oral cancer. Sixty five patients (14.57%) had correctly answered the question for causes of oral cancer. Thirty seven patients (8.29%) know about some signs of oral cancer. Eighty six patients (19.28%) think that oral cancer is preventable by avoiding consumption of tobacco, pan, gutkha, smoking etc. and 147 patients (31.61%) know whom to consult regarding queries of oral cancer.

**Conclusion:** The present study revealed several aspects of public uncertainty and ignorance with regard to the causation of oral cancer which need to be emphasised in future public education programmes, particularly using mass media.

**Keywords:** Oral Cancer, India, Awareness

## INTRODUCTION

It was estimated that Cancer prevalence in developing country like India is of around 2.5 million, with moreover 8 lakhs new cases and 5.5 lakhs deaths occurring each year due to this disease.<sup>1</sup> Oral cancers are more common than leukemia, melanoma, cancers of the liver, brain, thyroid, kidney, stomach, ovary or cervix.<sup>2</sup> The five-year survival rate for all oral cancers is only 54 percent. Majority of oral cancers arise from longstanding premalignant lesions. Lack of awareness about oral cancer and its risk factors are primary reason for delayed presentation. An estimate according to National Cancer Control Programme shows that the total cancer burden in India for all sites will increase from 7 lakhs new cases per year to 14 lakhs by 2026.

Oral cancer occurs on all sites in the oral cavity: tongue, lips, floor of the mouth, soft palate, tonsils, salivary glands and oropharynx. Risk factors for oral cancers include use

of tobacco products and alcohol, exposure to the sun (lip cancer), dietary factors and exposure to carcinogens in the workplace. tobacco use is responsible for 90 percent of these cancers;<sup>3</sup> and heavy smokers who are older than 40 years of age and use alcohol are at the highest risk. Epidemiologic findings highlight the disproportionate incidence, mortality and morbidity associated with oral and pharyngeal cancers in Indian population.

To estimate the awareness of oral cancer in rural Bangalore population we have conducted a questionnaire based survey at community camp conducted by KLEs' Institute of Dental Sciences, Bangalore.

## MATERIAL AND METHOD

The questionnaire was prepared and distributed to the patients attending the dental camp.

The questions in questionnaire were as follows.

1. Do you know about oral cancer?
2. What causes oral cancer?
3. What are the signs of oral cancer?
4. Can you prevent oral cancer?
5. Whom do you ask for suggestion, indications, conformation and treatment of oral cancer?

These questions were designed to determine the level of knowledge about oral cancer, its risk factors and signs. Total of 446 patients had responded to the questionnaire. The data was tabulated and results were drawn.

## RESULTS

Out of 446 responders 54 patients (12.10%) know about oral cancer or heard of oral cancer. Sixty five patients (14.57%) had correctly answered the question for causes of oral cancer by giving answers like tobacco, pan, gutkha, smoking etc. Thirty seven patients (8.29%) know about some signs of oral cancer. Most of them had answer wound in the mouth but none of them know about premalignant lesions. Eighty six patients (19.28%) think that oral cancer is preventable by avoiding consumption of tobacco, pan, gutkha, smoking etc. And 147 patients (31.61%) know whom to consult regarding queries of oral cancer and given answer like doctor or dentist.

Oral cancer awareness in rural population	Number	%
Knowledge about oral cancer	54	12.10
Knowledge about causes oral cancer	65	14.57
Knowledge about signs of oral cancer	37	8.29
Knowledge about prevention of oral cancer	86	19.28
Knowledge about consultation for oral cancer	147	31.61

## DISCUSSION

It was given that 85% of head and neck cancers are readily visible, oral cancer screenings are an inexpensive, safe and non-invasive method of detection.<sup>4</sup> Oral cancer screenings also may provide an excellent opportunity for raising public awareness and providing patient education and counselling regarding behavioural risk factors and how to reduce them. Since people older than 40 years of age who use alcohol and tobacco are at the highest risk of developing oral cancers, in which screening this high-risk cohort is of paramount public health importance.

According to National Cancer Registry Programme 1981-2001

- 97.8 (Bangalore) to 121.9 (Delhi) cancer cases per 1,00,000 population – urban males (age adjusted incidence rate)
- 92.2 (Bhopal) to 135.3 (Delhi) cancer cases per 1,00,000 population – urban females (age adjusted incidence rate)

- 46.2 (Barshi) cancer cases per 1,00,000 population – rural males (age adjusted incidence rate)
- 57.7 (Barshi) cancer cases per 1,00,000 population – rural females (age adjusted incidence rate)
- 1 in 15 men and 1 in 12 women in the urban areas could develop cancer in their lifetime
- Age adjusted incidence rate of oesophageal cancer in women of Bangalore is one of the highest (8.3 per 1,00,000) in the world.
- Cancer of tongue in males at Bhopal (8.8 per 1,00,000) is highest in all continents
- 75-80% patients are in advance stage of the disease at the time of first attendance to the doctor.

This data shows the highest prevalence of oral cancer in India. There is a clear need to inform and educate the public in matters relating to the known risk factors.

Several questionnaire-based surveys of UK dentists have shown consistently that few dentists routinely inquire about the smoking and drinking habits of their patients and even when they enquire they rarely include such information in patient's clinic records.<sup>5-8</sup> Sensible drinking, cessation of tobacco and inclusion of fresh fruits and vegetables in the diet are the cornerstones of cancer prevention. Dentists are in a strong position to motivate their clients on tobacco cessation and alcohol moderation. Cancer fatalism often plays a pivotal role in people either not accepting professional advice on avenues for prevention or arriving too late for therapy. Cancer fatalism needs prompt identification<sup>9,10</sup> and there is a duty of healthcare providers to offer information on how early therapy saves lives. Forty-three per cent of the public surveyed was of the opinion that whether an individual develops cancer is a matter of chance. Education of the public, most importantly youth population, may help to bring out change in the common attitude that cancer affliction is a matter of chance.

There is now sufficient scientific evidence to conclude that cancer of the mouth and pharynx is largely related to life style.<sup>11</sup> In our study 19.28% of people think that cancer is preventable This positive approach needs to be harnessed by providing the basic factual information about oral cancer, thereafter allowing people to make their choices which are more likely to be healthier ones. The earlier detection of oral cancer by opportunistic screening should afford patients with greater survival rate and more certainly less radical treatment. Although there is a great deal of professional educational material about oral cancer, we lack suitable material for public use.

Media presentations through magazine and newspaper articles, while reaching only certain sections of the

population, will at least target some of those people not seeking regular medical/dental care. A further recourse is through television, where AIDS and drug messages seem to have found their goal.

## CONCLUSION

The present study revealed several aspects of public uncertainty and ignorance with regard to the causation of oral cancer which need to be emphasised in future public education programmes, particularly using mass media.

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