



# Assessment of Knowledge, Attitude and Practice of Rural Population of Wardha District Regarding Oral Cancer- A Study Protocol

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## Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

## Article Information

DOI: 10.9734/JPRI/2021/v33i55B33874

## Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/75621>

Study Protocol

Received 04 October 2021  
Accepted 09 November 2021  
Published 13 December 2021

## ABSTRACT

**Background:** Oral cancer is one of the easily diagnosed cancer as compared to the cancers of other parts of the body as the mouth is easily accessible for self or clinical examination. But, it is frequently diagnosed in advanced stage as the population lack the knowledge about the causes and signs & symptoms of oral cancer. Though many studies are there describing this issue, scanty literature is available relevant to knowledge, attitude and practice regarding oral cancer especially in rural areas which needs attention.

**Aim:** To assess knowledge, attitude and practice of rural population of Wardha district regarding Oral cancer.

**Methodology:** This questionnaire based prospective study will include 1000 subjects who will be able to read and understand the questionnaire. Self-administered questionnaire prepared in local language (Marathi / Hindi) of the rural population of Wardha district will be administered. Questionnaire will be comprised of two parts. First part request demographic information and the second section contain 18 questions regarding knowledge, attitude and practice regarding oral cancer. All the questionnaire responses will be recorded in tabular format and subjected to statistical analysis.

**Expected Results:** In rural area of Wardha District in the Indian state of Maharashtra, there may be majority of the people, still having minimal knowledge regarding oral cancer and its causes

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marking a high percentage when compared to the urban. Thus, this study will be an attempt to evaluate the awareness and access the knowledge of the rural public regarding oral cancer.

**Conclusion:** The knowledge about the risk factors, sign and symptoms of oral cancer amongst the rural population can be useful for the prevention and early diagnosis of oral cancer, and thus reducing the oral cancer burden of the society.

*Keywords: attitude; knowledge; oral cancer; practice; rural.*

## 1. INTRODUCTION

Oral cancer is one of the most fatal health problems faced by mankind today. There is variation in the incidence of oral cancer in different regions of the world and has one of the highest incidences in India constituting around 12% of all cancers in men and 8% of all cancers among women [1]. The possible reasons for high frequency of oral cancer in India could be cultural, ethnic, geographic factors and the popularity of addictive habits amongst Indians [2]. Moreover, in India, the extremely popular use of the smokeless tobacco product called gutkha, renders its population and especially the youth to a greater risk of developing oral precancer and cancer in younger population [1].

Despite recent advances in the detection and treatment of oral cancer, visual accessibility of the oral mucosa and the scientific knowledge on cancer risk factors, oral cancer carries a low survival rate (50%). Earlier diagnosis can greatly increase the patient's chances of survival as the mouth is very accessible for a clinical or self-examination [3].

Oral cancer is one of the easily diagnosed diseases as compared to the other cancers developing in the body as the mouth is easily accessible for self or clinical examination but it is frequently diagnosed in advanced stages. One of the reasons for this may be the lack of information about the causes and knowledge of signs and symptoms of oral cancer among the population [3]. Moreover, the most of the oral cancers are preventable if people know which risk factors they must control or eliminate. In rural part of Wardha district of Maharashtra in India, there are majority of the people, still having minimal or no knowledge regarding oral cancer and its causes making a high percentage when compared to the urban [4]. Thus, this study will be an attempt to target this rural population to assess their awareness and the knowledge regarding oral cancer with the help of a questionnaire and to educate them.

There are many surveys undertaken in the private and government dental and medical colleges to evaluate the patient's knowledge on specific problems but very minimal surveys have been taken place in the rural areas which needs attention [3,5].

Thus, the present study will be undertaken with following aims and objectives.

## 2. AIM

To assess knowledge, attitude and practice of rural population of Wardha district regarding Oral cancer.

## 3. OBJECTIVES

1. To assess awareness regarding oral cancer in rural population
2. To assess the knowledge about early signs and symptoms of oral cancer
3. To evaluate knowledge about risk factors of oral cancer in rural population

## 4. MATERIALS AND METHODS

The study will be conducted after obtaining approval from Institutional Ethics Committee of Datta Meghe Institute of Medical Sciences University, Sawangi (M), Wardha.

**Type of study:** Prospective

**Study design:** Questionnaire- based

**Study population and Sample size:** One thousand subjects visiting to the outdoor patient department (OPD) of Oral Medicine & Radiology for seeking dental treatment and ready to participate in the study.

### 4.1 Inclusion Criteria

- Patients reporting to dental hospital for routine dental check up, above the age of 18 years and willing to participate in the study voluntarily.

- Participant should have at least primary education and should be able to read and understand the questionnaire.

#### 4.2 Exclusion Criteria

- Individuals who are diagnosed with oral cancer at any point of their lifetime.

#### 4.3 Proposed Intervention

Self- administered questionnaire prepared in the local language (Marathi / Hindi) of the rural population of Wardha district will be given to randomly selected participants. A modified version of previously published questionnaires in the format of multiple choice questions will be used [3,5]. Questionnaire will be comprised of two parts. First part request demographic information and the second section contain 18 questions regarding awareness, knowledge, risk factors and patient's assumption of oral cancer. These 18 questions are subdivided into general awareness questions, questions related to signs and symptoms and questions regarding knowledge about risk factors of oral cancer.

#### 4.4 Data Collection Procedure

All the questionnaire responses will be recorded in tabular format.

#### 4.5 Plan of Analysis

The collected data will be analyzed by estimating the mean Scores, SD and % of Correct Responses for Individual Questions for the whole Sample. Data will be analyzed by using descriptive statistical methods. P-value  $\leq 0.05$  will be considered as significant.

The final conclusion will be drawn to explore attitude, knowledge and practice about oral cancer amongst the rural population of Wardha district.

### 5. DISCUSSION

Lack of public awareness has been considered to be a potent barrier for early detection of cancer. The educational measures like a better awareness, knowledge about signs and associated risk factors of oral cancer amongst the rural population can be useful for the prevention and early diagnosis of oral cancer,

and thus reducing the oral cancer burden on the society.

The results of the study by Shah SP, Praveen BN [6] revealed uncertainty and ignorance of the rural population regarding the etiology of oral cancer. Thus, they have suggested conduction of public education programs to make the people aware about the root cause of the disease [6].

Similarly, Gopal KS, Duraiselvi P [7] also noted a lack of public knowledge and need for more structured awareness programs. They have mentioned about the importance of regular oral examination among the people [7].

Nimma VL et al [8] reported non satisfaction regarding the awareness of south Indian population regarding oral cancer [8]. However, in their study 79.6% of people think that cancer is preventable.

Zachar JJ et al [9] identified an essential avenue to allow a more targeted approach in future campaigns to increase education [9].

Similarly, a number of studies reported about the various risk factors for development of oral cancer and lack of knowledge of the people regarding the same [10-13].

### 6. CONCLUSION

Despite the fact that oral cancer consequences can be, prevented, treated, and controlled, there exists a significant gap in the Indian public's knowledge, attitudes, and behaviors. Efforts must be made to bridge this gap between research, development and public awareness. A need for further dissemination of information on this issue and its associated risks is required especially in rural population.

### CONSENT AND ETHICAL APPROVAL

As per international standard or university standard guideline participant consent and ethical approval has been collected and preserved by the authors.

### COMPETING INTERESTS

Author has declared that no competing interests exist.

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**QUESTIONNAIRE TO BE COMPLETED BY THE PARTICIPANT**

**Oral Medicine and Radiology**

**Survey on attitude, knowledge and practice of the rural population of Wardha district regarding oral cancer**

**Case no:**

**Date:**

Name of participant-

Age: Gender: M F

Address:

Phone number:

Education

Occupation

Approx. income / year

Habit history: Type of habit - tobacco/smoking/alcohol/snuff

Duration:

Frequency

**Please tick the correct responses (Yes/ No) to the following:**

**Questions on knowledge, attitude and practice about oral cancer**

1) Have you heard about oral cancer?

a) Yes

b) No

2) Do you think that the oral cancer spreads from person to person through touching?

a) Yes

b) No

c) Don't Know

3) Do you think that the oral cancer spreads by sharing clothes & utensils of patient suffering from oral cancer?

a) Yes

b) No

c) Don't Know

4) Is the prevention of oral cancer possible?

a) Yes

b) No

c) Don't Know

5) Do you think oral cancer is curable?

a) Yes

b) No

c) Don't Know

6) Has any of your family members died or suffering from oral cancer?

a) Yes

b) No

7) Have you come across anyone suffering from oral cancer?

a) Yes

b) No

8) ) If yes, what was your reaction when you saw him/her first?

a) Got scared

b) behaved normal

c) Tried to avoid

9) Being the general public, what should we do to help patients suffering from cancer?

- a) Get required treatment  b) Support them & get friendly

**Questions on the knowledge about signs -symptoms of oral cancer**

10) Oral cancer can occur as under.

- a) Growth  b) Non healing ulcer   
c) White or red patch  d) All of these

11) Oral cancer may cause loosening and exfoliation of teeth.

- a) Yes  b) No

12) Oral cancer is usually painless.

- a) Yes  b) No

13) Oral cancer may cause neck swelling.

- a) Yes  b) No

**Questions about the knowledge about risk factors of oral cancer**

14) What do you think is the cause of oral cancer?

- a) Adverse habits  b) Hereditary   
d) Sexual spread  e) Blood transfusion

15) Does the risk of oral cancer increase with age?

- a) Yes  b) No

16) Do you think this survey has created awareness in you regarding oral cancer?

- a) Yes  b) No

17) Do you regularly visit the dentist?

- a) Yes  b) No

18) Do you think that, you should visit to a dentist as early as possible if you notice any abnormality in mouth?

- a) Yes  b) No

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*Peer-review history:*  
*The peer review history for this paper can be accessed here:*  
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