



Research Article

# A Study To Assess The Knowledge Regarding Risk Factor Of Oral Cancer Among Adults Of Selected Rural Community Of New Delhi

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## I N F O

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### How to cite this article:

Bhattacharya S, Kumari D. A Study To Assess The Knowledge Regarding Risk Factor Of Oral Cancer Among Adults Of Selected Rural Community Of New Delhi. Int J Nurs Midwif Res. 2024;11(4):6-11.

Date of Submission: 2024-10-12

Date of Acceptance: 2024-11-22

## A B S T R A C T

Approximately 1 in 9 people in India is expected to face a cancer diagnosis during their lifetime. Among all the varieties of cancer, oral cancer ranks 6th in the world cancer incidence rate, India has the highest prevalence of oral cancer in the world, states like UP Maharashtra has some of the most cancer cases in India, in which 95% of the oral cancer is related to tobacco use. The objectives of the study were to assess the knowledge about risk factor of oral cancer and to develop and disseminate the information pamphlet among the community. The research design adopted for the study was descriptive design approach, using survey method. The sample subjects comprised of individuals of the rural community in Pul- Pehladpur, random sampling technique was used. The majority of the sample subjects i.e., 58% (58) were Poor Knowledge, 41% (41) were Average Knowledge and 1% (1) were Fully Aware. Majority of sample subjects i.e. 59% (59) are not using tobacco. Majority of sample subjects i.e.56% (56) do not consume alcohol. Sample subjects 44% (44) not done regular brushing. Majority of sample subjects i.e.56% (56) were not practicing flossing. Majority of sample subjects i.e.70% (70) were not getting regular dental checkup. Sample subjects 47% (47) were not wearing denture. Majority of sample subjects i.e.79% (79) are not using any oral appliance. Majority of sample subject i.e. 90% (90) have not been diagnosed with any oral or dental condition. Majority of sample subject i.e. 98% (98) having not experienced any symptoms of oral cancer. Sample subject 43% (43) not storing the tobacco stuff in mouth.

The study concluded that among 100 individuals 58% had poor knowledge, 41% had average knowledge, and only 1% were fully aware of the disease. The findings highlighted widespread misconceptions and a lack of awareness regarding oral cancer's causes, risk factors, transmission, diagnosis, symptoms, treatment, and prevention. This underscores the need for education and initiatives to improve public understanding and adherence to preventive measures against oral cancer

**Keywords:** Community ,Oral Cancer , Population , Prevalence , Tobacco



## Introduction

Oral cancer ranks as the sixth most prevalent malignancy worldwide. In Southeast Asia, it is a significant health concern due to widespread habits such as alcohol consumption, smoking, and betel quid chewing. Despite recent advancements in cancer diagnosis and treatment, oral cancer remains a major challenge.<sup>1</sup> The global incidence of cancer of the lip and oral cavity in 2020 was approximately 3,77,713 new cases and 1,77,757 deaths. Oral cancer is more lethal in males than in women, more prevalent in men and older individuals, and is significantly influenced by socio-economic status.<sup>2</sup> The study of oral cancer is crucial for several reasons: Early detection and prevention, High mortality rate, Increasing incidence, Quality of life, Economic impact, Understanding cancer biology, Development of new treatments, Improved diagnosis. Overall, the study of oral cancer is important for improving our knowledge of the disease developing effective treatments, and reduce the risk of oral cancer in individuals and society.

**Problem Statement:** A study to assess the knowledge regarding risk factor of oral cancer among adults of selected rural community of New Delhi.

## Objectives

- To assess the knowledge about risk factor of oral cancer.
- To develop and disseminate the information pamphlet among the community.

## Assumption

- Oral cancer survivors face various oral problems.
- Oral cancer patients might have some knowledge about oral cancer and risk factors.

## Methodology

The research design adopted for the study was descriptive design approach, using survey method. The sample subjects comprised of individuals of the rural community in Pul-Pehladpur, random sampling technique was used. The structured knowledge questionnaire was used to assess the knowledge regarding risk factors of oral cancer. Experts from the college of Rufaida college of Nursing established the content validity of the tool and pamphlet. The individuals were categorized in the Good, Average and Poor. Range of the score was calculated according to the highest and lowest marks scored by the individual.

## Results

The data was first tabulated and then analyzed in accordance with the objectives of the study, by using descriptive statistics. The analysis of data is presented in 3 sections

### Section I: Demographic Data

#### Section-II: Analysis Of Knowledge Of The Oral Cancer Among Adults

This section deals with analysis and interpretation of knowledge of oral cancer regarding causes, risk factors, transmission, diagnosis, sign and symptoms, treatment and prevention collected through questionnaire from 100 samples.

The majority of the sample subjects i.e., 58% (58) are Poor Knowledge, 41% (41) are Average Knowledge and 1% (1) are Fully Aware according to knowledge score.

### Section III

#### Risk Assessment

**Table I. Frequency and Percentage Distribution of Demographic Data Among Community Individuals**

N=100

| S.No | Demographic DATA   | Frequency | Percentage (%) |
|------|--------------------|-----------|----------------|
| 1    | <b>Age</b>         |           |                |
|      | 18-25              | 28        | 28%            |
|      | 26-35              | 17        | 17%            |
|      | 36-45              | 31        | 31%            |
|      | 46 and above       | 24        | 24%            |
| 2    | <b>Gender</b>      |           |                |
|      | Male               | 48        | 48%            |
|      | Female             | 52        | 52%            |
|      | Transgender        | 1         | 1%             |
|      | Other specify..... | 0         | 0%             |

| 3  | Religion                |    |     |
|----|-------------------------|----|-----|
|    | Hindu                   | 61 |     |
|    | Christian               | 19 |     |
|    | Islam                   | 19 |     |
|    | Others, Specify.....    | 1  |     |
| 4. | Educational Status      |    |     |
|    | Illiterate              | 24 | 24% |
|    | Primary                 | 23 | 23% |
|    | Secondary               | 21 | 21% |
|    | Senior secondary        | 10 | 10% |
|    | Diploma /Graduate       | 17 | 17% |
|    | Post graduate and Above | 5  | 5%  |
| 5  | Marital Status          |    |     |
|    | Unmarried               | 40 | 40% |
|    | Married                 | 54 | 54% |
|    | Separated               | 1  | 1%  |
|    | Divorced                | 4  | 4%  |
|    | Widow                   | 1  | 1%  |
| 6  | Occupation              |    |     |
|    | Unemployed              | 42 | 42% |
|    | Business                | 21 | 21% |
|    | Private job             | 19 | 19% |
|    | Government job          | 1  | 1%  |
|    | Student                 | 17 | 17% |
|    | Others, Specify.....    | 0  | 0%  |

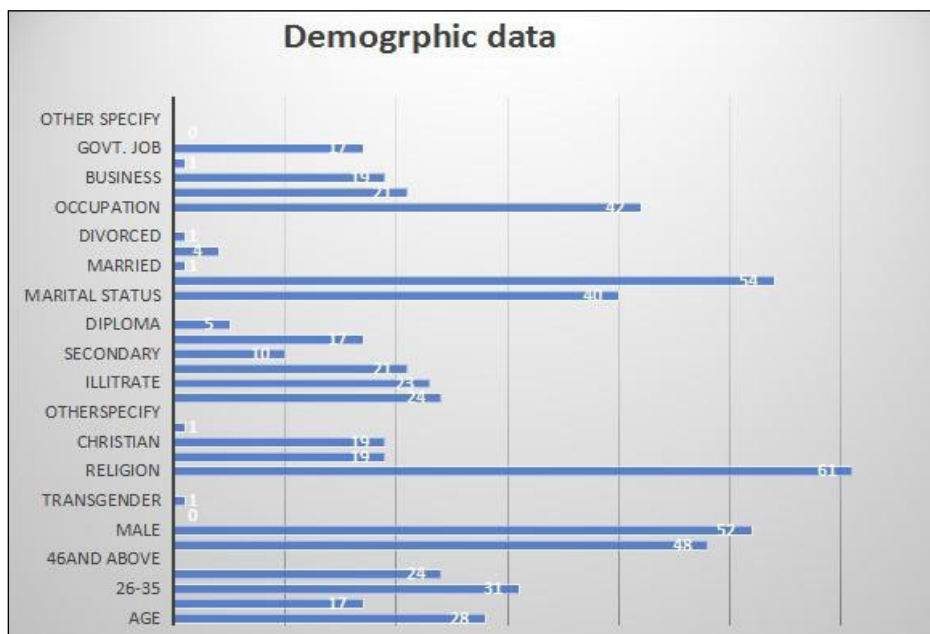
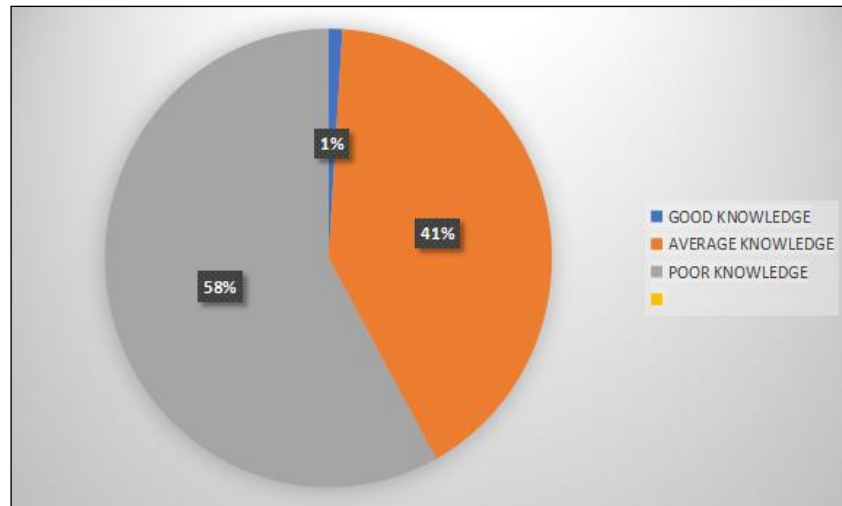


Figure I. Bar Graph Showing Percentage Distribution of Demographic Data

**Table 2. Frequency and Percentage Distribution of Community Individuals Based on Structured Knowledge Questionnaire Regarding Risk Factors of Oral Cancer**

N=100

| Category          | Score Range | Frequency (F) | Percentage (%) |
|-------------------|-------------|---------------|----------------|
| Good knowledge    | 16-20       | 1             | 1%             |
| Average Knowledge | 11-15       | 41            | 41%            |
| Poor Knowledge    | 0-10        | 58            | 58%            |

**Figure 2. Pie Diagram Showing Percentage Distribution Regarding Knowledge of Oral Cancer****Table 3. Frequency and Percentage Distribution of Community Individuals Regarding Risk Assessment of Oral Cancer**

N=100

| S.No | items                                       | Frequency (F) | Percentage (%) |
|------|---|---------------|----------------|
| 1.   | <b>Do you currently use tobacco?</b>        |               |                |
|      | Yes   | 41            | 41%            |
|      | No  | 59            | 59%            |
| 2.   | <b>Do you consume alcohol?</b>              |               |                |
|      | Yes   | 42            | 42%            |
|      | No  | 58            | 58%            |
| 3.   | <b>Do you practice regular brushing?</b>    |               |                |
|      | Yes   | 56            | 56%            |
|      | No  | 44            | 44%            |
| 4.   | <b>Do you practice flossing?</b>            |               |                |
|      | Yes   | 44            | 44%            |
|      | No  | 56            | 56%            |
| 5.   | <b>Do you get regular dental check ups?</b> |               |                |
|      | Yes   | 30            | 30%            |
|      | No  | 70            | 70%            |
| 6.   | <b>Do you wear denture?</b>                 |               |                |
|      | Yes   | 53            | 53%            |
|      | No  | 47            | 47%            |

|     |   |    |     |
|-----|---|----|-----|
| 7.  | Do you use any oral appliance?  |    |     |
|     | Yes   | 21 | 21% |
|     | No  | 79 | 79% |
| 8.  | Have you ever been diagnosed with any oral or dental condition (e.g., gum disease, oral lesions)? |    |     |
|     | Yes   | 10 | 10% |
|     | No  | 90 | 90% |
| 9.  | Have you experienced any symptoms of oral cancer in the past six month?                           |    |     |
|     | Yes   | 02 | 02% |
|     | No  | 98 | 98% |
| 10. | Storing the tobacco stuff in mouth can be a cause of oral cancer?                                 |    |     |
|     | Yes   | 57 | 57% |
|     | No  | 43 | 43% |

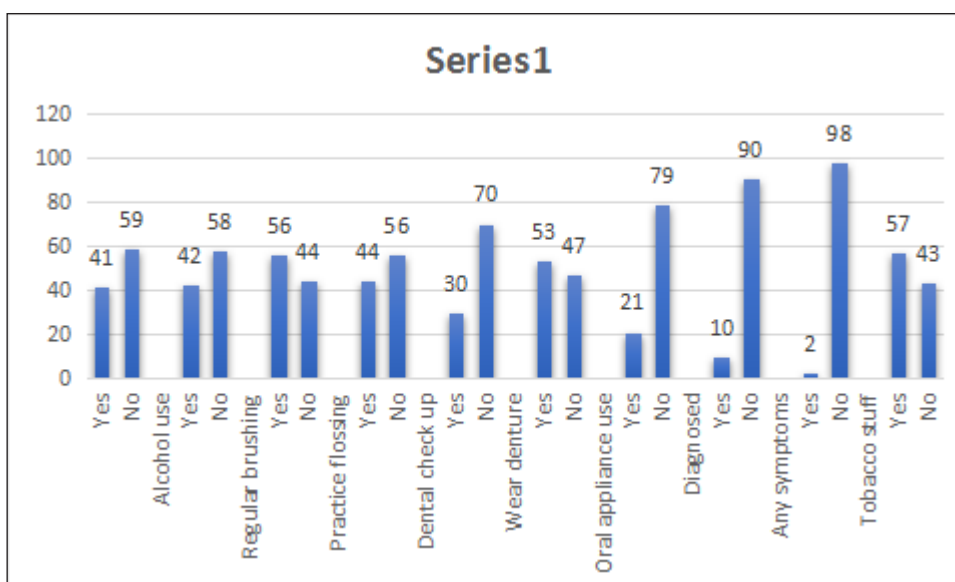


Figure 3. Bar Graph Showing the Percentage Distribution of Knowledge Regarding Risk Factors of Oral Cancer

### Discussion

The present study reveals that the subject (community people) taken from selected community. According to recent statistics, 58% of individuals have poor knowledge about oral cancer, 41% possess average knowledge, and only 1% are fully aware of it.

The findings of the current study align with those of Vikas Fotedar, Shaylee Fotedar, and colleagues, who conducted a study to assess the knowledge, attitudes, and practices regarding oral cancer among undergraduate medical students at Indira Gandhi College in Shimla, India. This study surveyed 186 medical students from their third to fifth years, with a response rate of 96.5%. Overall, the students had a good understanding of oral cancer, with female students showing slightly higher knowledge levels than male students. Students in their fifth year (interns) had the highest levels of knowledge. However, there were concerns

regarding their understanding of oral cancer risk factors. Approximately 66.6% of participants disagreed or strongly disagreed that their knowledge about the detection and prevention of oral cancer was sufficient. Furthermore, 94.6% of respondents agreed or strongly agreed that more training and knowledge were required regarding oral cancer.<sup>3</sup>

The findings of the current study are not congruent with those of Hemantha K. Amarasinghe, Udaya S. Usgodaarachchi, and colleagues, who conducted a similar study in Sri Lanka. This community-based cross-sectional survey was conducted in Sabaragamuwa Province, where 1,029 individuals aged 30 and above were interviewed over a period of one year starting in November 2006. The study found that 84% of the participants were aware of oral cancer, but only 23% were familiar with OPMDs. Awareness was particularly low in lower socioeconomic groups. A large number of participants were not knowledgeable about the

symptoms of oral cancer and OPMDs. For example, 32% of participants were unaware that chewing betel quid posed a risk, 65% did not know that smoking tobacco was a risk factor, and 81% were unaware of the dangers of heavy alcohol consumption. In total, 76% of the participants lacked awareness of the risks associated with frequent use of areca nut. The majority of individuals who smoke, chew betel quid, or consume alcohol are often unaware that these behaviors significantly increase their long-term health risks.<sup>4</sup>

### Limitation

- Samples age criteria was above 18 years and above
- The study was conducted on a small sample of selected community in New Delhi
- The subjects were reluctant to fill the questionnaire. Questionnaire was developed in English language so further explanation was needed to help them understand.

### Recommendation

On the basis of findings of the study the following recommendations were made:

- The study can be replicated on larger samples of oral cancer patients in different setting for making broad generalization.
- A Comparative study can be conducted to identify the knowledge of oral cancer between illiterate and literate adults.
- An evaluative study can be conducted to analyse the efficacy of informational booklet develop for oral cancer among adults.
- An explorative study can be conducted to determine the coping mechanisms prevalent among the oral cancer patients.
- A study can be done to identify the factors influencing compliance in oral cancer and devise strategies to improve compliance.

### Conclusion

This study highlights widespread misconceptions and a lack of awareness regarding oral cancer's causes, risk factors, transmission, diagnosis, symptoms, treatment, and prevention and emphasises the need for education and initiatives to improve public understanding and adherence to preventive measures against oral cancer.

**Source of Funding:** None

**Conflict of Interest:** None

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