



Assess the Knowledge on Oral Cancer among Attendant of Cancer Patients Attending Regional Cancer Center OPD at JIPMER Hospital, Puducherry

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Abstract

Introduction: The World Health Organization (WHO) defines Oral health as “a state of being free from chronic mouth and facial pain, oral and throat cancer, oral sores, birth defects such as cleft lip and palate, periodontal (gum) disease, tooth decay and tooth loss, and other diseases or disorders that affect the oral cavity”. Cancer of Oral cavity which may occurs in any part of the mouth or throat. Oral cancer may occur on the lips or anywhere within mouth like tongue, floor of mouth, buccal mucosa, hard and soft palate.

Aim: To assess the level of knowledge on oral cancer among the attendant of cancer patients and associate the knowledge on oral cancer with demographic variables.

Results: This study included 297 patient attendants 61.6% of the study participants were males and 38.4 % of them were females who were attended RCC OPD. Among them 3 (1.01%) have excellent knowledge, 56 (18.85%) have very good knowledge, 109 (36.7%) have good knowledge, 102 (34.34%) have average knowledge and 27 (9.09%) have poor knowledge. 185 (62.3%) participants have the family history of cancer and 112 (37.7%) participants do not have any family history of cancer. This study also suggests 35 (11.8%) have the habit of smoking, 37 (12.5%) of them were alcoholic, 2 (0.7%) of them have the habit of smoking and tobacco chewing.

Conclusion: The study concludes that the knowledge on oral cancer is less among patient attendant and there were significant association between family history and personal habits.

Introduction

One word that is even more daunting than the death itself and eats up a person from the inside is Cancer. Every year, about 700,000 new cancer patients get registered with the National Cancer Registry Programme in India.⁽¹⁾ This shows that cancer is one of the major health problems in India at present. Lung and Oral cancer are the

most common types of cancers among men, whereas cervical and breast cancer among women in India. Oral squamous cell carcinoma is the 10th most common cancers worldwide and 6th most common in males.⁽²⁾ In general, chewing tobacco is one of the major reasons of cancer in India. Nearly 50% of all cancers in men and 20% in women are caused by chewing tobacco. At global

level, India has the highest number of oral cancer cases and about 75,000 to 80,000 new cases are added in the list every year.⁽³⁾

Aim

To assess the level of knowledge on oral cancer among the attendant of cancer patients and associate the knowledge on oral cancer with demographic variables.

Material and Methods

A descriptive cross-sectional study was used to analyze the data and to test the hypothesis. The research design adopted for the present study was non-probability sampling technique. The instrument used for data collection consisted of two parts: a demographic proforma and structured interview schedule. Participants fulfilling eligibility criteria were assigned to non-experimental group. A questionnaire (APPENDIX 1) was used to assess the knowledge which was validated through the experts in the field of oncology and nursing. Data collection period for the study was 2 months. The study was conducted after getting written informed consent from the participants.

Results

Age: It reveals that among 297 participants 150(50.5%) of them were in the age of 19-30 years, 65 (21.9%) of them were in the age group of 31-40 years, 52(17.5%) of them were in the age group of 41-50 years, 13(6%) of them were in the age group of > 50 years.

Gender: Among 297 participants 183(61.6%) of them were males and 114 (38.4%) of them were females.

Marital status: Among 297 participants, 178 (62.7%) of them were married, 103 (30.95%) of them were single, 16 (6.95%) of them were widow/widower/divorced.

Religion: Among 297 participants, 244 (82.2%) of them were Hindu, 27(9.1%) of them were Christians, 21(7.1%) of them Muslims and 5(1.7%) comes under the category of others.

Educational status: Among 297 participants, 33 (11.1%) of them were illiterate, 60 (20.2%) of them were primary, 115 (38.7%) of them were secondary, 89 (30%) of them were graduate.

Occupation: Among 297 participants, 54 (18.2%) of them were Farmers, 73(24.6%) of them were labours, 95(32%) of them were government/private employee and 75(25.3%) of them were unemployed.

Income: Among 297 participants, 107 (36%) of them have a monthly family income of Rs.1000-2000, 72 (24.2%) of them have a monthly family income Rs.2001-3000, 53 (17.8%) of them have a monthly family income of Rs.3001-5000 and 65 (21.9%) of them have a monthly family income of > Rs. 5000.

Domicile: Among 297 participants, 171 (57.6%) of them were from rural and 126 (42.4%) of them were from urban.

Family history: Among 297 participants, 185 (62.3%) of them have the family history of cancer and 112 (37.7%) of them doesn't have the family history of cancer.

Personal habits: Among 297 participants, 189 (63.6%) of them doesn't have any bad habits, 35 (11.8%) of them have smoking habit, 37(12.5%) of them have alcohol consumption, 29 (9.8%) of them have the habit of tobacco chewing, 5(1.7%) of them have the habit of smoking and alcoholism, 2(0.7%) of them have the habit of smoking & tobacco chewing.

Source of health information: Among 297 participants, 68 (22.9%) of them were getting the health information from newspapers, 160 (53.9%) of them getting information from television, 9(3%) of them getting health information from radio and 60 (20.2%) from social health workers and friends.

Table 1: Distribution of respondents in relation to socio-demographic variables

Variables	Category	Frequency	Percentage
Age	19-30 years	150	50.5
	31-40 years	65	21.9
	41-50 years	52	17.5
	> 50 years	30	10.1
Gender	Male	183	61.6
	Female	114	38.4
Marital status	Married	178	59.9
	Single	103	34.7
	Divorced/widow/widower	16	5.4
Religion	Hindu	244	82.5
	Christian	27	9.1
	Muslim	21	7.1
	Others	5	1.7
Educational status	Illiterate	33	11.1
	Primary	60	20.2
	Secondary	115	38.7
	Graduate	89	30
Occupation	Farmer	54	18.2
	Labour	73	24.6
	Private/government employee	95	32
	Unemployed	75	25.3

Income	Rs 1000-2000	107
	Rs 2001-3000	72
	Rs.3001-5000	53
	> Rs. 5000	65
Domicile	Rural	171

	Urban	126
Family history of cancer	Yes	185
	No	112
Personal habits	None	189
	Smoking	35
	Alcoholism	37
	Tobacco & tobacco products	29
	Smoking & alcoholism	5
	Smoking, alcoholism & tobacco products	0
	Smoking & tobacco	2
	Alcoholism & tobacco	0
	Source of health	Newspaper

information	Television	160
	Radio	9.0
	Friends /social health worker	60
Income	Rs 1000-2000	107
	Rs 2001-3000	72
	Rs.3001-5000	53
	> Rs. 5000	65
Domicile	Rural	171
	Urban	126
Family history of cancer	Yes	185
	No	112

Personal habits	None	189
	Smoking	35
	Alcoholism	37
	Tobacco & tobacco products	29
	Smoking & alcoholism	5
	Smoking, alcoholism & tobacco products	0
	Smoking & tobacco	2
	Alcoholism & tobacco	0
Source of health information	Newspaper	68
	Television	160
	Radio	9.0
	Friends /social health worker	60

Table 2: Distribution of level of knowledge on oral cancer among patient attendant attending in RCC OPD

Overall percentage	Participants	
	No	Percentage
Poor < 19 %	27	9.09%
Average 20-39 %	102	34.34 %
Good 40-59 %	109	36.7 %
Very good 60- 79 %	56	18.85 %
Excellent > 80 %	3	1.01 %

Discussion

The study was descriptive in nature. A total 297 attendant of cancer patients were selected from RCC OPD at JIPMER by convenient sampling technique. After selection of samples, self-structured questionnaires were administered. The instrument consists of 2 parts: Socio-demographic variables and Multiple-choice questionnaires for assessing the knowledge on oral cancer the first objective was assessing the knowledge on oral cancer among the attendants of the cancer patients attending RCC OPD at JIPMER. The level of knowledge on oral cancer was assessed, out of 297 attendants, 27(9.09%) attendants had poor knowledge, 102 (34.34) attendants had average knowledge, 56 (18.85%) attendant had very good knowledge and 3 (1.01%) attendants had excellent knowledge. The mean value for the knowledge on oral cancer among the attendants was 8.29. Moles DR et al (2011) conducted a meta-analysis measures for oral cancer and pre cancer studies in U.K. results The pooled weighted value of Sn from the seven studies was 0.796.⁽⁴⁾ From the SROC, the corresponding value of Sp at this level of Sn was 0.977 (95% CI 0.941, 0.991). When Sp was held at 0.977, the corresponding value of Sn from the SROC was 0.796 (95% CI 0.594, 0.912). Greenwood M et al (2001) conducted a study to

compare the knowledge of oral cancer and related issues of general dental and general medical practitioners.⁽⁶⁾ results The response rate was 68.1% for GDPs and 71.9% for GMPs. Dental practitioners were significantly more likely to have diagnosed cases of oral cancer than medical practitioners (OR = 2.68, 95% CI 1.6, 4.4). Important differences arose between the groups in terms of risk factor knowledge and clinical examination.

The second objective was to associate the knowledge on oral cancer with socio-demographic variables among the attendant of cancer patients attending RCC OPD at JIPMER. The association between the level of knowledge regarding oral cancer among attendants in regards of age, gender, marital status, educational status, occupation, domicile, family history of cancer, and source of health information, it has been identified that there is an association of knowledge with age, educational status, and source of health information with p value of 0.049, 0.00, 0.025 respectively, findings of present study mean 8.29 and standard deviation 3.413.

Conclusion

From this study, among 297 cancer patient attendants who participated in the study 109

(36.7%) have good knowledge, 102(34.34 %) have average knowledge, 56(18.85%) have very good knowledge, 27(9.09%) have poor knowledge and 3 (1.01%) have excellent knowledge. It was found who had history of tobacco chewing, smoking habits and alcohol consumption was found poor knowledge about the causes of oral cancer. 185 (62.3%) participants have the family history of cancer. They are more prone to get cancer in future. The results were statistically significant.

5. Greenwood M, Lowry RJ. Primary care clinicians' knowledge of oral cancer: a study of dentists and doctors in the North East of England. *Br Dent J.* 2001 Nov 10;191(9):510-2.

Recommendation for further research

- 1) A study can be conducted among general public in different settings.
- 2) A study can be conducted to assess the knowledge of staff nurse to prevent oral cancer.
- 3) A comparative study can be conducted to assess the knowledge among urban and rural population.
- 4) A similar study can be conducted among college students other than health professional.
- 5) A study can be conducted to assess the knowledge of factory labours at various settings.

References

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2. Warnakulasuriya S. Global epidemiology of oral and oropharyngeal cancer *Oral Oncol* 2009. Apr-May;45 (4-5): 309 – 16.
3. <http://www.matchinggrants.org/global>
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Appendix A
Socio Demographic Variables

Note: Please put a tick mark () against appropriate answer

1. Age:

- a) 19-30years
- b) 31-40 years
- c) 41 - 50years
- d) > 51 years

2. Gender:

- a) Male
- b) Female
- c) others

3. Marital status:

- a) Married
- b) Single
- c) Divorced/ Widow/Widower

4. Religion:

- a) Hindu
- b) Christian
- c) Muslim
- d) Others

5. Educational status:

- a) Illiterate
- b) Primary
- c) Secondary
- d) Graduate

6. Occupation:

- a) Farmer
- b) Labour
- c) Government employee / Private employee
- d) Unemployed

7. Monthly income:

- a) Rs.1000-2000
- b) Rs.2001-3000
- c) Rs.3001-5000
- d) >Rs.5000

8. Domicile:

- a) Rural
- b) Urban

9. Family history of cancer:

- a) Yes
- b) No

10. Personal habits

- a) nil
- b) Smoking
- c) Alcoholism
- d) Tobacco products
- e) Smoking &alcoholism
- f) Smoking, alcoholism & tobacco products
- g) Smoking &tobacco products
- h) Alcoholism & tobacco products

11. Source of health information's

- a) News paper
- b) Television
- c) Radio
- d) Social health worker/Friends

Questionnaires**Note: please put a tick mark () against appropriate answers:**

1. Cancer is _____
 - a. Infectious disease
 - b. Abnormal multiplication of cells
 - c. Curse by God
 - d. Don't know
2. Oral cavity includes _____
 - a. Lips
 - b. Tongue
 - c. Buccal mucosa
 - d. All the above
3. Oral cancer is caused by _____
 - a. Smoking
 - b. Alcoholism
 - c. Exposure to sun
 - d. All the above
4. Oral cancer is common among _____
 - a. Males
 - b. Females
 - c. Common for both males and females
 - d. Children
5. The higher incidence of oral cancer is among _____
 - a. Children
 - b. Teenager
 - c. Adult
 - d. Older adult
6. In oral cavity which part is most commonly affected by cancer _____
 - a. Lips
 - b. Gums
 - c. Tongue
 - d. Buccal mucosa
7. The most common cause which is responsible for white patch in oral cavity is _____ -
 - a. Alcoholism
 - b. Smoking & tobacco use
 - c. Poor oral hygiene
 - d. All the above
8. Most common cause for lip cancer is _____
 - a. Exposure to sun
 - b. Alcoholism
 - c. Malnutrition
 - d. Poor oral hygiene
9. Pre - cancerous lesions are _____
 - a. White patches
 - b. Red patches
 - c. Both a & b
 - d. White patches only
10. Early detection of oral cancer is by _____
 - a. Regular dental check up
 - b. Self-examination of oral cavity
 - c. Blood testing
 - d. A & b
11. Signs and symptoms of oral cancer includes all except _____
 - a. Bleeding in mouth
 - b. Loose tooth
 - c. Chronic sore throat
 - d. Headache

12. The person should consult the doctors, if following symptoms persists _____
 - a. Pain while swallowing
 - b. Mouth sore
 - c. Jaw and ear pain
 - d. All the above
13. The cessation of smoking can reduce the risk of _____
 - a. Oral cancer
 - b. Cancer lung
 - c. Cancer larynx
 - d. All the above
14. The following risk factors are preventable except _____
 - a. Smoking & tobacco use
 - b. Alcohol use
 - c. Oral sex
 - d. Genetic factors
15. Self-examination of mouth includes looking carefully at the _____
 - a. Roof of the mouth,
 - b. Back of the throat
 - c. Inside of the cheeks & lips
 - d. All the above
16. Prevention of oral cancer includes all except _____
 - a. Limit smoking & alcoholism
 - b. Regular dental check up
 - c. Antioxidant rich foods
 - d. Junk foods
17. Oral cancer is not treated earlier can spread to _____
 - a. Lungs
 - b. Bladder
 - c. Kidney
 - d. Skin
18. Vitamin A rich foods include all except _____
 - a. Papaya
 - b. Mango
 - c. Green leafy vegetables
 - d. Pulses
19. The food which is rich in Vitamin C are _____
 - a. Capsicum
 - b. Citrus fruits
 - c. Broccoli & cauliflower
 - d. All the above
20. Vitamin E rich food includes all except _____
 - a. Sunflower oil
 - b. Nuts
 - c. Shell fish
 - d. Milk