

## AWARENESS AND KNOWLEDGE OF ORAL CANCER IN RURAL POPULATION

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### Abstract

**Background-** Oral cancer is a major public health problem worldwide. Oral and pharyngeal cancers grouped together are the sixth most common cancers in the world. In a latest estimation, relative incidence of oral cancer around the world is about 263,861 in the year 2008. However, in Portugal the oral cancer was reported to be 6th most common cancer in males, wherein 777 fresh cases and 248 new cases amongst females. **Materials and method-**A questionnaire based descriptive survey carried out in which a total of 300 people were selected from the daily OPD who gave their consent and participated in this survey, this survey included patients who came seeking dental treatment at the institute from the rural areas. The questionnaire carried out which contained 10 questions regarding oral cancer awareness, knowledge and peoples approach towards a patient of oral cancer. **Results** The study population consisted of 44.3% females and 55.7% males with an average age of 34 years (range 12-80 years) 91.9% of the subjects said that they have heard about the oral cancer and 85.8 % people said that the main cause of oral cancer is smoking and chewing habits. **Conclusion-** The final goal of all programs is to decrease the incidence and frequency of disease and improve the effectiveness of treatment modalities. Community health workers, dental surgeons and allied medical professionals should take the initiatives to organize low-cost educational programmes that are designed and launched to reach less privileged groups in our society.

**Keywords-** Awareness, Oral cancer, Self examination, Morbidity

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This article may be cited as: Singh G, Singh P Awareness and Knowledge of Oral Cancer in Rural Population. Int J Com Health and Med Res 2017;3(1):72-76

Article Received: 08-02-17

Accepted On: 23-02-2017

### INTRODUCTION

Oral cancer is a major public health problem worldwide.<sup>1</sup> Oral and pharyngeal cancers grouped together are the sixth most common cancers in the world. Recent trends have shown a decline in the incidence of lip and oral cavity cancers in Australia.<sup>2-3</sup> This decline is in line with the decline in trends of tobacco and alcohol consumption (OECD, 2011). This actually reveals the ever-increasing responsiveness on the consequences of tobacco and alcohol usage and its overall impacts on oral carcinomas and other diseases. Even if the current decline in oral carcinoma prevalence is hopeful, it is still moderately high in contrast with rest of the places on globe. Furthermore, literature has also evidenced that HPV associated pharyngeal carcinomas are increasing at a faster rate in Australia and some other countries in the world.<sup>4</sup> Almost 90% of oral cancers are squamous

cell carcinomas<sup>5</sup>. Smoking, alcohol use, smokeless tobacco products, and HPV infections are the major risk factors, with an attributable risk of oral cancer due to both tobacco and alcohol of 80%<sup>6</sup>. Despite recent advances in the detection and treatment of cancer, visual accessibility of the oral mucosa, and the scientific knowledge on cancer risk factors, oral cancer carries a low survival rate (near 50%)<sup>7</sup>. Earlier diagnosis greatly increases patient's chances of survival as the mouth is very accessible for a clinical or self-examination<sup>8</sup>. However, oral cancer is still frequently diagnosed in advanced stages. The reason may be attributed on the basis of deficit of available information regarding the etiology and knowledge of signs and symptoms of oral carcinomas. Additionally, majority of oral carcinomas may be checked if populace know which risk factors they should eradicate. In Portugal, a study on oral cancer

awareness and knowledge has not been performed. Here in this study the ultimate aim was to examine the relative awareness and knowledge of oral carcinomas in the said hospital population which may perhaps finally aid in the planning of suitable health promotion.

### MATERIALS AND METHOD

A Questionnaire based descriptive study carried out in respective department wherein a total of 300 people were selected from the daily OPD who gave their consent and participated in this survey, this survey included patients who came seeking dental treatment at the institute from the rural areas. The questionnaire contained 10 questions regarding oral cancer awareness, knowledge and people approach towards a patient of oral cancer. A questionnaire based descriptive study carried out

The age group of the participants was 12-80 years. Here in this study, healthy individuals and people with oral habits without any precancerous oral changes who had come seeking dental treatment were included. Patients with precancerous conditions or lesions, patients suffering from oral cancer and those who were not willing to participate were excluded from the study. Participation in the study was voluntary and completely confidential. The questions in questionnaire were based on the awareness among the patients which was designed and modified from questionnaires used in earlier studies. It was prepared in English as well as in the regional language which was easy to understand and respond to the questions. Before onset of the

**TABLE 1 -DISTRIBUTION OF PARTICIPANTS BY SOCIODEMOGRAPHIC PROFILE**

SOCIO DEMOGRAPHIC PROFILE		PERCENTAGE
<b>AGE IN YEARS</b>	<20	40.6 %
	20-30	34.5%
	31-41	8.7 %
	41-50	9.6%
	>50	6.6 %
<b>SEX</b>	MALE	55.7%
	FEMALE	44.3%
<b>EDUCATION LEVEL</b>	ILLITERATE	46.4%
	UPTO PRIMARY EDUCATION	4.8 %
	UPTO SECONDARY EDUCATION	28.7 %
	GRADUATE	12.1%
	POSTGRADUATE	8%
<b>RESIDING AREA</b>	RURAL	100%
	URBAN	00

**TABLE2: LIST OF QUESTIONS WITH THEIR RESULTS IN PERCENTAGE.**

SOCIO DEMOGRAPHIC PROFILE		PERCENTAGE	
1	Have you ever heard about oral cancer?	No	8.1%
		Yes	91.9%
2	According to you what can be the cause of oral cancer?	Smoking, tobacco, chewing	85.8%
		Hereditary	11.9%
		Sexual spread	0.8%
		Blood transfusion	0.2%
3	What do you think oral cancer is a contagious disease or not?	Others	1.3%
		Yes	24%
		No	66.0%
		Don't Know	10%
4	Do you think oral cancer is mainly associated with Smoking and tobacco	Yes of course	3.4%
		No	47.9%
		Maybe	33.7%
		Don't know	15.0%
5	Have you seen anyone who is suffering from oral cancer?	Yes	30.6%
		No	69.4%
6	If yes, what was your reaction toward him/her?	Got scared	44.6%
		Behaved normal	49.6%
		Tried to avoid	5.8%
7	Has any of your family members died or suffering from oral cancer	Yes	10.4%
		No	89.6%
8	Is it curable?	Yes	24.8%
		No	30.2%
		Don't	45.0%
9	Being the general public, what should we do to help them?	Get required treatment	45%
		Support them and get friendly	76.9%
10	Do you think this survey has created awareness in you Regarding oral cancer?	Yes	23.1%
		No	89.6%
			10.4%

survey, an ethical permission was taken from the ethical committee of the Institute. A brief explanation was given regarding the questionnaire before distributing the questionnaire to the patients. An investigator was appointed to clear the doubts of the subjects regarding the questionnaire. The questionnaire was divided into 2 parts, the first

part of the questionnaire was based on the personal information like name, age, sex, education level, residing area and the second part of the questionnaire was based on the questions related with the knowledge and the awareness about oral cancer among patients. The data was analyzed on basis of the response given in questionnaire and the

results were calculated and expressed in the form of percentage and the statistical analysis was done using a Statistical software namely SPSS version 17.0

## RESULTS

The study population consisted of 44.3% females and 55.7% males with an average age of 34 years (range 12-80 years). The questionnaire was mainly having related questions and was pre-tested. All basic alterations were made in beginning with the opening questions to assess the knowledge about oral carcinoma followed with questions interrelated to their understanding with oral carcinoma patients and also regarding people they know suffering from oral carcinoma as well as about the knowledge of treatment of oral cancer. The duly filled questionnaire was collected and was evaluated by the authors. Depending on the patient's knowledge based on the answers, individuals were educated regarding the oral cancer and the patient management. The results of the survey have been depicted below in Table 1 and 2.

## DISCUSSION

Oral cancer is one of the easily diagnosed disease when it is compared to the other types of cancers which develops in the body, yet the awareness among the general public specially in the rural population is minimal leading to the presentation of oral cancer in their terminal stages. There have been many surveys took place in the private and government dental and medical colleges<sup>9,10</sup> to evaluate the patient's knowledge and awareness on problems regarding the oral health but very minimal surveys have been taken place in the rural areas which needs attention. In one of the study it has been explained that physical, psychological, social and economic state of an individual, to find out the affected strata<sup>11</sup>. The highest number of oral cancer patients belongs to weaker socioeconomic section with lack of awareness and having misconceptions about oral cancer. According to the present study majority of the group seemed to be aware regarding oral cancer and cancer patients, with holding few number of subjects deprived of basic knowledge. 8.1% of the people had never heard about oral cancer in the authors study group, some of them said the cause of oral cancer was hereditary while a negligible number said that sexual spread and blood transfusion are one of the causes of oral cancer. On being asked if oral cancer spreads by sharing

clothes and utensils a same number of the people said that they do not know while a small but significant no. of subjects said yes. N.B.Ramachandra<sup>12</sup> in his paper explains that apart from chewing habits, illiteracy is one of the major causes for rise in oral cancer incidences. Authors had put forward a question regarding prevalence and incidences of oral cancer in AIDS patients, some of the participants were confused while, on the other hand few of them said they did not know, a small no. of group of people said yes it is mainly seen in AIDS patients. Das et al<sup>13</sup> in his article focused on the increase in efforts to expand the resources to provide the education and increase the awareness of cancer prevention to the people and health care providers with an unprecedented level of cooperation among government, international agencies and nongovernmental organizations, international foundations, health care system and local institutions. The authors wanted to evaluate the social stigma towards patients suffering from oral cancer. A part of the population has come across someone suffering from oral cancer, but still there is a lack of awareness among the rural population. When asked on how they reacted when they came across a patient suffering of oral cancer, some of them said they got scared while few of them said they tried to avoid the patient who is suffering from oral cancer. This shows that there have been deaths of patients or people presently suffering from oral cancer in and around the surveyed area. Argerakis GP<sup>14</sup> explained it on the basis of grim functional disabilities like as speech impairment, mastication-swallowing difficulties, in conjunction with facial deformity. With no skilled rehabilitation intervention, their emotional, social, economic, and physical well-being will be greatly affected. According to him despite better treatment methods and higher survival rates, we have not sufficiently changed the attitudes toward the cancer rehabilitation. The same social stigma has stubbornly lingered, together with the fears of uncertainty, morbidity, and unpredictability. To help the patient recover old skills and pleasures, we must overcome these hurdles and make them feel like a useful human being without any stigma attached, without undue fears and pressures but with a sense of being needed and wanted, that is what life is all about. The study regarding the oral cancer are enormous, awareness programs are initiated in various schools and colleges for the wellbeing of the students and general public in the form of treatment camps, oral screening camps, cancer awareness lectures and questionnaires. The

results of such type of studies have helped in providing minimal knowledge among the public. According to the authors; presentations regarding oral cancer have to be divided depending on different groups like for the school students, for the general public, and for the cancer patients. According to the authors such divisions help in addressing specific problems among the different groups and providing a better health support education and awareness. Questionnaire regarding various health aspects specially oral cancer should be rearranged, distributed and knowledge evaluated in every treatment and screening camp conducted by the medical or dental colleges or any associations or agencies, the patients or public should be identified with the least scores and should be educated on the same day in the form of group discussion or presentations which will help in creating the awareness in the camp. The authors of the present study formatted the questionnaire for the general public in the rural population in order to evaluate their knowledge and to educate them about this dreadful disease. According to the authors the prime duty of the health providers is not only to provide better treatment but also to educate the patient after looking at the pros and cons from the patients feedback.

## CONCLUSION

India is constituted of more than 80% of the population from the villages and is not only socially and economically deprived but also do not get medical facilities as compared to small towns and cities. The final goal of all programs is to decrease the incidence and frequency of disease and improve the effectiveness of treatment modalities. They should be educated and positively encouraged to participate in educational programs like oral cancer prevention with the hope of minimizing the incidence of this dreadful disease. Community health workers, dental surgeons and allied medical professionals should take the initiatives to organize low-cost educational programmes that are designed and launched to reach less privileged groups in our society.

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**Source of support:** Nil

**Conflict of interest:** None declared

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