



## KNOWLEDGE AND AWARENESS ON ORAL MANIFESTATION OF HUMAN PAPILLOMA VIRUS (HPV) AMONG DENTAL STUDENTS

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### ABSTRACT

**Aim:** To assess knowledge and awareness among dental students regarding oral manifestation of HPV infection.

**Background:** The same type of HPV can infect the genital areas which infects the mouth and throat. HPV found in the mouth and throat is called oral HPV. In most cases, HPV infection of all types go away before they cause any health problems. The knowledge and awareness about oral manifestation of HPV seems to be unclear and this was initiated to explore this further.

**Materials and Method:** A questionnaire was circulated among various dental students of different colleges in Chennai. The study population of 100 students completed the questionnaire which consists of 10 questions and requested them to complete the comprehensive, close ended, self administered questionnaire.

**Results:** 37% of students are not aware about oral manifestation of human papilloma virus.

**Conclusion:** Dental students are at high risk of HPV infection and hence an adequate awareness must be spread among them to combat this infection.

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### INTRODUCTION

Oral HPV is a viral infection found in mouth and throat region. There are two types of oral HPV they are low risk types and high risk types. High risk types are the one which causes cancer in the head and neck area. It can be treated by chemotherapy or radiation therapy. Low risk types are the one that causes warts in the mouth and throat. In the head and neck area the cancer are caused at the back of the throat, commonly in the base of the tongue and tonsils. These areas are called as oropharynx. They are also called as oropharyngeal cancer.

Oropharyngeal cancer are a type of oral cancer found in 1% of people, which is HPV type 16. It is found commonly in men than in women. It is three times commonly found in men than in women. Oropharyngeal cancer it is four times in men than in women. Most of the oropharyngeal cancer are due to tobacco and alcohol use. Oropharyngeal cancer is caused by tonsillar HPV infection.

Tonsillar HPV infects the genital area and throat. In tonsillar HPV smokers are at greater risk than the non-smokers. The tonsillar HPV is predominantly transmitted by sexual contact suggest a strong evidence. If there is an increase in incidence of oropharyngeal cancer there is always an increase in prevalence of tonsillar HPV. Generally, tonsillar HPV lesions

are detected during examination or screening by a dentist or a doctor. Certain areas, are hard to see like, areas of the throat, larynx and base of the tongue it is detected by using instruments called laryngoscopes oropharyngoscopes together with small mirrors. Vaccines for tonsillar HPV reduces the risk of infection with subtypes of HPV, which are known to cause cervical cancer and helps in preventing the effect of oropharyngeal cancer linked to the same HPV subtypes which is unknown.

HPV plays a major role in Head and Neck Cancer (HNC)[2]. Oral HPV is always at a higher risk for HPV infected people and HNC[3]. Cancer of the oral cavity, pharynx, and larynx are a heterogeneous group of cancer HNC and it is the sixth most common cancer in the world[4]. HPV usually arises in the oropharynx which includes the base of the tongue and the lingual and the palatine tonsils[5]. In the oral cavity and larynx, HPV occurs due to tobacco and alcohol use[6]. Several risk of different types of cancer are elevated in HIV infected individuals with HNC due to behavioural and biological characteristics, immunodeficiency, and potentially chronic inflammation and immune dysfunction[1].

In the developed countries, the HIV infected individuals with HNC are at an increased risk with HPV associated and HPV unassociated when compared with general population. They are also at higher risk of oropharyngeal or tonsillar cancer when compared with general population[7]. If there is an increased risk of laryngeal, oral cavity and HPV-unassociated

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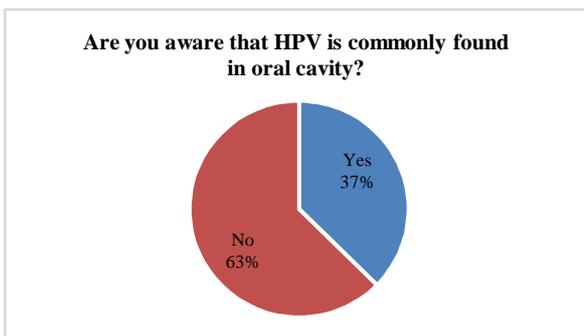
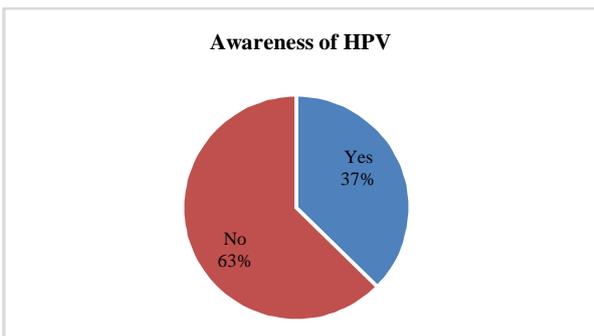
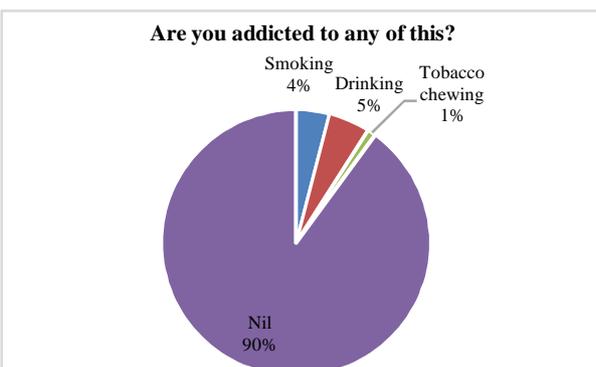
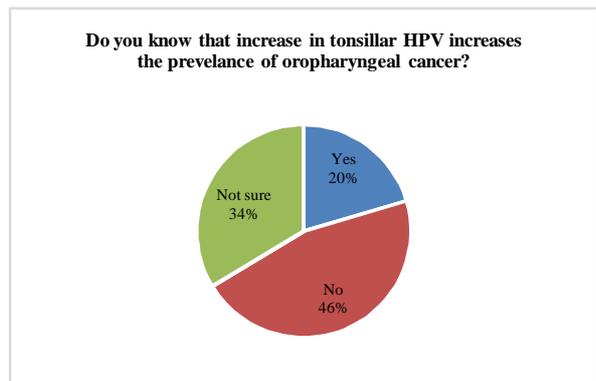
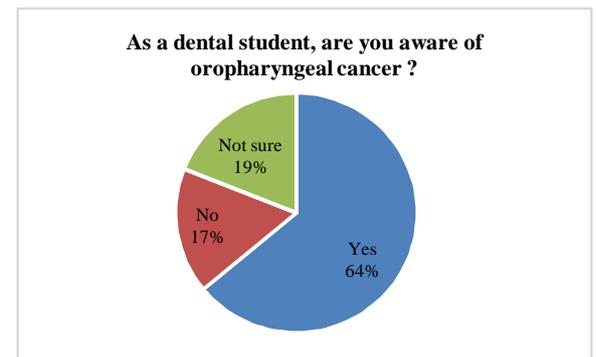
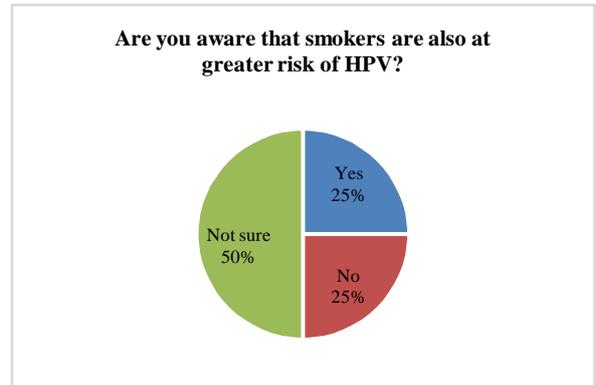
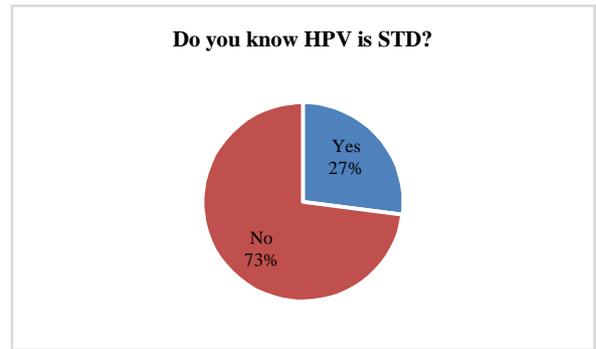
HNCis due to the high prevalence of tobacco use[8]. Oropharyngeal cancer are a type of oral cancer found in 1% of people, which is HPV type 16. It is found commonly in men than in women. It is three times commonly found in men than in women. Oropharyngeal cancer it is four times in men than in women. Most of the oropharyngeal cancer are due to tobacco and alcohol use. Oropharyngeal cancer are a type of oral cancer found in 1% of people, which is HPV type 16. It is found commonly in men than in women. It is three times commonly found in men than in women. Oropharyngeal cancer it is four times in men than in women. Most of the oropharyngeal cancer are due to tobacco and alcohol use. Oropharyngeal cancer is caused by tonsillar HPV infection. Tonsillar HPV infects the genital area and throat. In tonsillar HPV smokers are at greater risk than the non-smokers. The tonsillar HPV is predominantly transmitted by sexual contact suggest a strong evidence. If there is an increase in incidence of oropharyngeal cancer there is always an increase in prevalence of tonsillar HPV. Generally, tonsillar HPV lesions are detected during examination or screening by a dentist or a doctor. Certain areas, are hard to see like, areas of the throat, larynx and base of the tongue it is detected by using instruments called laryngoscopes oropharyngoscopes together with small mirrors. Vaccines for tonsillar HPV reduces the risk of infection with subtypes of HPV, which are known to cause cervical cancer and helps in preventing the effect of oropharyngeal cancer linked to the same HPV subtypes which is unknown.

**MATERIALS AND METHODS**

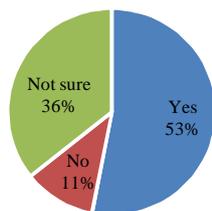
A questionnaire was circulated among various dental students of different colleges in Chennai. The study population of 100 students completed the questionnaire which consists of 10 questions and requested them to complete the comprehensive, close ended, self administered questionnaire.

**RESULTS**

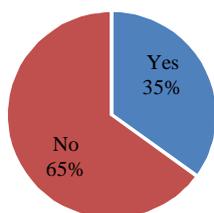
The survey produced the following results:



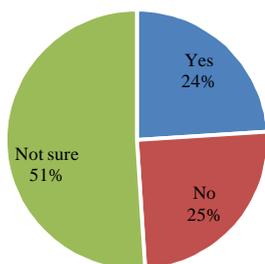
**Do you think HPV infection can be prevented?**



**Are you aware of HPV vaccine ?**



**Where you given HPV vaccination at the age of 11-12 years old?**



**DISCUSSION**

Oral HPV is a virus which is found in mouth and throat region and can be easily transmitted to a person. Especially smokers are at a greater risk than the non smokers which can lead to oral cancer, which may lead to HPV. The risk factors of HPV are smoking, drinking and tobacco chewing. Oropharyngeal cancer is common in older people because it takes years to develop.

According to the above survey, still the Dental students are not aware about oral manifestation of HPV. Only 37% of students are aware about oral HPV. 63% of Dental students are not aware about oral manifestation of HPV. 37% of Dental students are aware that HPV is present in oral cavity and 63% of students are not aware that HPV is present in oral cavity. 27% of students are aware that HPV is STD and 73% of students are not aware that HPV is STD.

25% of students are aware that smoking causes greater risk of HPV and 25% of students are not aware that smoking causes greater risk of HPV and 50% of students are not sure about it. 64% of students are aware about oropharyngeal cancer, 17% are not aware about oropharyngeal cancer and 19% are not sure about it. 20% of students are aware increase in tonsillar HPV increases oropharyngeal cancer, 46% are not aware about increase in tonsillar HPV increases oropharyngeal cancer and 34% are not sure about it. 4% of students are addicted to smoking, 5% are addicted to drinking, 1% are addicted to tobacco chewing and 90% are not addicted to smoking, drinking and tobacco chewing. 53% are aware HPV infection can be prevented, 11% are not aware about preventing HPV infection and 36% are not sure about it. 35% of students are aware about HPV vaccine and 65% are not aware about it. 24% if students are aware vaccination should be given at the age of 11-12 years old, 25% are not aware about it and 51% are not sure about it.

**CONCLUSION**

There by, we conclude that most of the Dental students are not aware of knowledge and awareness on oral manifestation of human papilloma virus among Dental students. This survey has been done to create awareness about the oral manifestation of human papilloma virus- its effects, symptoms and treatment among the Dental students.

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