

Characteristics of Individuals with Oral HPV Positive Results

Val Joseph Cheever DDS; MS; Eric Hon; Andrew J, Gross; Man Hung PhD

Objectives: The Human Papilloma Virus (HPV) is a common sexually transmitted virus, This HPV virus is responsible for 40-80% of Oropharyngeal Cancers. The focus of the study was to assess the characteristics of individuals that have been diagnosed with HPV and to assess oral health related conditions and habits that may be related to behavior associated with risk factors for HPV virus transmission.

Methods: Data were obtained from the NHANES 2015-2016 National Health and Nutrition Survey. Self-reported questionnaires were utilized with a sample group of 4,556 subjects who were evaluated for characteristics associated with an HPV diagnosis and lifestyle behaviors, oral cancer screening and oral health associated with HPV transmission. The data were analyzed using Chi-square test.

Results: The total sample size was 4,546, with an average age of 43 years old (standard deviation = 15 years old), with 52% were females and 48% were males. There was a significantly higher percentage of males tested being positive for Oral HPV than females ($p < 0.05$). Those who smoked tobacco had higher chance of being Oral HPV positive ($p < 0.05$). Those who had oral cancer exam were less likely to be Oral HPV positive than those who did not have oral cancer exam ($p < 0.05$). Of those individuals who had Oral HPV positive laboratory test results, 13.6% had oral cancer exam done. Of those individuals who had Oral HPV negative laboratory test results, 22.1% had oral cancer exam done. Numerous relationships to HPV+ oral cancer are shown.

Conclusions: This study identified demographic and behavioral findings that are associated with increased HPV related oral cancer risk. The identification of risk factors will be vital to the prevention of oral cancer cases. Several unique oral and behavioral findings were uncovered and merit further evaluation.

Keywords: Human Papilloma Virus, Oral Cancer, Cancer Prevention