Adolescent Awareness of Risk Factors Associated with Head and Neck Cancer vs Lung Cancer

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INTRODUCTION

The impact of a head and neck cancer diagnosis can be devastating to patients and their families. Cancer (CA) in this area includes tumors that arise in the nasal cavity, sinuses, lips, mouth, salivary glands, throat, cervical soft tissues, pharynx and or larynx. Approximately 39,250 new cases will be diagnosed; of these new diagnoses 11,090 will die from cancer related issues. An encouraging fact is that cancer of the head and neck is treatable. The key is early detection. The two most common risk factors for head and neck cancer (HN CA) are tobacco usage and alcohol consumption. While these risk factors are well known to those in the medical field, the wider public is still under informed of the correlation. It is well documented in the HN CA literature that the majority of the at-risk population mainly associate only tobacco with oral cancer, and are also unaware that oral cancer screening exams exist. However, most of these studies have looked at risk factor assessment and correlation in adult populations, while less attention has been directed towards the adolescent and child population.

METHODS AND MATERIALS

Patients were given a questionnaire at a community health screening which focused on general Otolaryngologic and Head and Neck Cancer exams. The study population was families residing at a transitional shelter. The questions were structured for a school-aged reading and comprehension level. Participants completed the questionnaires while awaiting their health screenings. The study was conducted over a period of one day, and there were a total of 139 participants.

RESULTS

When looking directly at the study population of interest (those under 18 years), the data revealed that 82.4% of respondents were aware of the association of lung cancer and tobacco, while only 15.7% were able to make a similar association with HN CA. When these figures are compared against the older respondents, it is seen where the older groups had greater awareness of the association, with 93% being aware of tobacco’s effects and lung cancer. The awareness of tobacco and HN CA in the older population was almost double that in the group of adolescents, where 30% of the respondents over 18 years old were able to make the association.

DISCUSSION

Our data in this most recent study are fairly consistent with prior studies from our institution which have sought to evaluate a population’s awareness of tobacco being a risk factor for HN CA. We previously reported that only 19.9% of an adult screening population was aware that tobacco can cause HN CA, while 71.2% were aware of its implications on lung cancer. This is comparable to our most recent figures in analyzing a youth (age<18 years) population. As seen above 84.3% of those under 18 years old were not aware that tobacco caused HN CA in our survey, while only 17.6% of that population wasn’t aware of tobacco causing lung cancer. The data suggest that older individuals are more likely to know the association of HN CA and tobacco, as the data revealed 15.7% of those surveyed under 18 years old knew this, while over 30% aged over 18 years were aware of the association. While it can be expected that an older population will be more informed, these figures represent an opportunity to convey this knowledge earlier to an at risk population. This is particularly important because of the well known cumulative effects of tobacco on upper aerodigestive malignancies. Additionally, the rates of tobacco usage amongst teenagers has been increasing, thereby increasing their risk of developing HN CA.

CONCLUSIONS

We have demonstrated that awareness of risk factors for HN CA in a population younger than 18 years of age is significantly less than awareness of risk factors for lung cancer in the same population. While other studies have evaluated this concept in adult populations, there is less data investigating this in a general youth population. We have demonstrated that lung cancer awareness is more abundant than HN CA awareness in a population younger than 18 years of age.