

Oral and Pharyngeal Cancer Control through Continuing Education

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Abstract A standardized continuing education course was developed to determine if behavior in dental practices could be modified to improve office participation in oral and pharyngeal cancer control through early detection and tobacco-use cessation.

Keywords Oropharyngeal cancer · Behavior modification · Continuing education · General dentists

Introduction

There are more than 35,000 new oral and pharyngeal cancers (OPCs) diagnosed each year in the USA [1]. This represents an increase during the past few years. While tongue is the most common site, malignancies of the tonsillar region are increasing. Unfortunately, in spite of advances in surgery, radiation, and chemo-targeted therapies, the 5-year survival rate remains about 60%. Because of the poor outcomes, it is important that dental professionals fully participate in OPC control in order to improve both survival and cure rates through routine oral cancer examinations. OPC

is a recognized tobacco-attributable disease. Decreasing tobacco use and increasing dentists' practice of tobacco use intervention is essential to reducing the incidence of OPC as well as other tobacco-related oral conditions.

Many studies [2–6] indicate a lack of knowledge by dentists regarding the prevention and diagnosis of OPC, precluding optimal participation in OPC control. In an attempt to improve 5-year survival rates through prevention and early diagnosis by dentists, a 5-year NCI cancer education grant was initiated. The purpose was to determine if exposure through continuing education courses could effectively modify dental behavior regarding “early detection” and “tobacco-use cessation.” The long-range goals were to increase the number of dentists who counsel patients about tobacco cessation and practice early detection of OPC to help achieve the Public Health Service's goal for Healthy People 2010.

Two 3-h standardized education modules were designed to address tobacco-use cessation and early OPC detection. The tobacco module covered the following topics: forms of tobacco; nicotine dependence; a patient approach utilizing the Public Health service five A's guidelines (ask about tobacco use, advise to quit, assess readiness, assist in quit attempt, and arrange follow-up); the five R's (relevance, risks, rewards, roadblocks, and repetition) for enhancing patients' readiness to quit; pharmacotherapy to assist in quitting tobacco use; and information on online cessation and quitline referrals. The OPC detection module covered epidemiology, differential diagnosis, early signs and symptoms, premalignant oral lesions and cancer, adjunctive techniques to accelerate biopsy (the gold standard for diagnosis), and management.

The education modules were presented in 64 continuing education courses in the ten Public Health districts across the USA between October 2003 and November 2006. The

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faculty included 20 experienced dental professionals with expertise in these areas. All of the lecturers attended a calibration exercise to establish presenter consistency.

Program attendees completed a brief on-site pre-course 21 question test in order to establish a baseline for their understanding of tobacco-use cessation and cancer detection. The questions covered attitudes, knowledge, and behavior (office practices). This was followed in 6 months by the same test to determine changes possibly based upon course attendance.

To isolate the effects of attending the CE course from the effects of change that might be due to other events occurring during the 6-month follow-up period, the program attendees were compared with a control group who did not attend the course, but responded to the test questionnaire at baseline and 6 months later. They were matched by age, gender, and geographic location from a master list of general dental practitioners.

A comparison was also made with a random sample of dentists from the American Dental Association's masterfile who did not attend the baseline course, but who contemporaneously completed the test with the start of the study. Comparisons of the random sample with the sample of attendees and controls were used to assess possible selection factors /bias that stimulated dentists to take a CE course and the generalizability of study results to the broader population of dentists.

The study design, collection of data, evaluation of responses, and quality control were conducted by the Health Policy Resource Center of the American Dental Association specializing in epidemiology and statistics.

The results of this study are summarized in the following two papers, describing “prevention through tobacco-use

control” and “early detection of OPC”. The positive response creates the possibility that through continuing education programs dentists can make a difference in meeting public health service objectives for cancer control.

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