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Views of oral cancer prevention and early detection: Maryland physicians

Maria Teresa Canto[a,*], Alice M. Horowitz[a], Wendy L. Child[b]

[a]*Office of Science Policy and Analysis, National Institute of Dental and Craniofacial Research, National Institute of Health, 45 Center Drive, Building 45, Room 3AN44, Bethesda, MD 20892, USA*

[b]*13102 Brahams Terrace, Silver Spring, MD 20904, USA*

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Abstract

The purpose of this study was to obtain in-depth information on Maryland physicians' knowledge, opinions and practices about oral cancer examinations. The qualitative descriptive study used one focus group conducted in a conference facility and nine one-on-one interviews at private medical offices. A criterion-purposeful sampling was used for selection of participants. Generally, we found low awareness of, and surprise about, Maryland's high oral cancer mortality rates. Physicians were not surprised that they detect more lesions than dentists, although most physicians did not provide oral cancer examinations on a routine basis. Physicians were interested in attending continuing medical education (CME) courses on oral cancer prevention and early detection but only if worked into other CME programs on cancer. They were very interested in having hands-on training on performing an oral cancer examination. These findings will be used to implement educational interventions for Maryland physicians to help increase early detection of oral cancers.

1. Introduction

Annually, more than 30,000 people in the United States are diagnosed with oral cavity and pharyngeal cancers (here after referred to as oral cancers) and approximately 8000 deaths occur [1]. These cancers are found in the lip, tongue, floor of the mouth, soft and hard palate, tonsils, salivary glands, oropharynx, and other less frequent sites [2]. More than 95% of oral cancers occur in persons 40 years of age or older, and the median age at time of diagnosis is 60 [1]. The major risk factors include the use of all forms of tobacco products and alcohol consumption [2].

Although oral cancers represent 3% of all cancers in the United States, they have one of the lowest 5-year survival rates among major cancers (breast, prostate, colon) [1]. Moreover, oral cancers generally are diagnosed at late stages [3] and their surgical treatment can cause facial disfigurement, impaired speech, and malnutrition.

The state of Maryland ranks 27th among all states for incidence of oral cancers but it has the seventh highest overall mortality rate and the sixth highest mortality rate in the nation for males [4]. Recent Maryland data indicates that the majority of these cancers are detected in their late stages [5]. A pilot study in Maryland conducted among 93 physicians and 57 dentists found that approximately 82% of physicians and 17% of dentists did not do a routine oral cancer examination for most of their patients [6]. The state of Maryland's interest in reducing the burden from oral cancers has driven a statewide initiative to assess the knowledge, opinions and practices of health professionals and the public regarding oral cancer to guide future interventions.

One part of the initiative is the assessment of family physicians' knowledge, opinions and practices about oral cancers. In 1999, a survey among members of the Maryland Academy of Family Physicians showed that 15% of respondents provided an oral cancer examination for patients 40 years of age or older at initial

* Corresponding author. Tel.: +1-301-594-5497; fax: +1-301-435-8667.

E-mail addresses: maria.canto@nih.gov (M.T. Canto), alice.horowitz@nih.gov (A.M. Horowitz).

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screening, 11% of respondents provided an oral cancer examination for individuals 40 years of age or older at a recall appointment and only 43% responded that they palpated the lymph nodes in the neck for patients 18 years of age or older [17].

Qualitative research complements data from a survey and explores behaviors, experiences and interactions of individuals in a particular environment [7]. To obtain more in-depth information on why physicians do not routinely perform an oral cancer examination for their adult patients, a qualitative research approach (focus group and one-on-one interviews) were used to learn more about their:

1. awareness, beliefs and opinions regarding oral cancer;
2. training and skills to provide an oral cancer examination; and
3. preferred type of continuing education regarding how to do a comprehensive oral cancer examination.

2. Subjects and methods

The methods used in the study included two types of interviews, one focus group with 10 physicians, and nine one-on-one interviews. Based on epidemiological data from the Maryland Cancer Registry the primary selection criteria were established for the interview participants. The primary criteria were: (1) general physicians, family physicians or internists practicing in the Baltimore Metropolitan Area or the Eastern Shore Region, and (2) physicians who were serving a population with a racial/ethnic mix. The secondary selection criteria were: (1) physicians who were working at least 20 hours per week, and (2) diverse practice settings including private (solo or group practice), hospital outpatient clinic, and managed care organizations. A private firm recruited the participants based on these criteria.

Potential participants were contacted by phone and during this conversation they were briefed on the objectives of and their role in the study. If they agreed to participate, verbal consent was obtained by telephone prior to the focus group or one-on-one interviews.

The focus group was conducted in the evening in Towson in a conference room with an adjacent room for observers and note takers. A one-way mirror separated the two rooms. Participants were informed that note takers and observers were in the adjacent room and that the session was going to be audio recorded before the focus group started. The group discussion lasted 90 min.

The one-on-one interviews were conducted in the Eastern Shore Region at physician's offices during regular office hours because it was difficult to find a date convenient for all physicians. Also, traveling away from their office was too time consuming, disrupting for their office schedule and physicians were on call after hours. The interviewer confirmed a 30-min appointment with each physician. In all one-on-one interviews, both the interviewer and one note taker were present. In addition, interviews were audio recorded. Upon completion of the focus and interviews each participant was paid $150.

The same experienced interviewer conducted both the focus group and one-on-one interviews, which used an interview guide. The interview guide covered Maryland statistics on oral cancer, type of health professionals who most commonly diagnose oral cancer lesions, practices for taking a medical history and screening practices, exposure to oral cancer in medical schools and interest in oral cancer continuing education courses.

Afterwards the group and individual interviews, the original recordings, transcripts and notes were compared to confirm accuracy and completeness of transcripts. The transcript from the focus group and interviews were coded; a total of 23 categories were used in the line-by-line coding. The focus group and interview data were then compared to determine common categories. The information obtained from the focus group and one-on-one interviews were determined to be consistent. Subsequently, the final qualitative content analysis [8] was done and related categories were grouped into themes.

3. Results

Four major themes (lack of awareness of oral cancer statistics, which health professionals diagnose oral cancer most often, assessing risk factors for and early detection of oral cancers and activities to raise awareness of oral cancer among both the public and health care professionals) emerged from the interviews. All reflect the knowledge, opinions and practices related to oral cancer among this group of physicians.

3.1. Theme 1: lack of awareness of oral cancer statistics

Physicians knew that the state of Maryland ranked high in incidence and mortality for other cancers such as lung, breast, colon and prostate but generally had low awareness of the oral cancer statistics in the State. They were surprised by Maryland's high oral cancer mortality rates. The main reason given for their low awareness was the few cases of oral cancer seen in their practices as expressed by:

> [I've] seen several cases but not enough to account for being so high. Never thought about Maryland...

A few participants did not accept the validity of the statistics and did not trust them. They wanted to know how they were calculated and if they were available by county. They pointed out that the statistics were driven by Baltimore City and Baltimore County:

> If you take Baltimore away from Maryland you wouldn't have the incidence.

3.2. Theme 2: which health professionals diagnose oral cancer most often?

Physicians were not surprised that they diagnose more oral cancer lesions than dentists. Physicians' tended to believe that patients are more likely to see them than dentists because generally health insurance coverage does not include dental care. Also, physicians' opinions indicated that patients were afraid of going to a dentist and only associate pain in their teeth or gums with dentists. Some of the comments were:

> ... they come to you [physicians] for lesions... My patients' will come to me first, instead of a dentist. Easier to get into, not going to stick needles, Novocaine.
>
> People associate dentists with teeth first and maybe gums. But when you talk about the tongue and buccal mucosa, they think of [a] doctor. The more educated might go to a dentist, but the average or poorly educated would probably seek out a physician.

Additionally, people go to the physician for other medical problems and during their medical consultation bring up that there is a sore in their mouth or throat:

> They aren't coming just for a mouth lesion. They're coming for hypertension check or thyroid. They say, "By the way, I cut off my finger yesterday with a machine and I have this funny looking thing in my mouth", as they're walking out the door.

Another reason provided by participants to explain why physicians diagnose more oral cancers than dentists was the shift from fee-for-service to managed care and use of a gatekeeper that means that patients must see the primary care physician before being referred to a dentist or specialists. Furthermore, physicians interviewed were more likely to refer suspicious lesions to Ear, Nose and Throat (ENT) specialists than to oral surgeons, which may help explain higher diagnoses of oral cancers by physicians. For example:

> If I see leukoplakia or [other] suspicious lesion, I send [the patient] to [an] ENT first for biopsy ... [I]Rarely start with an oral surgeon.

3.3. Theme 3: assessing risk factors for and early detection of oral cancer

Physicians were highly aware that tobacco and alcohol use are the major risk factors for oral cancers. Their standard practice is to assess patients' risk behaviors such as tobacco and alcohol use and to encourage their patients to stop tobacco use. However, generally they do not talk with smokers and heavy alcohol users about the risks for oral cancer. Oral cancer is discussed mainly with patients who chew tobacco. In addition, several physicians indicated that they often conduct the risk assessment themselves, even if a nurse talked with the patient about their health history and risk behaviors prior to the physician's consultation. Almost none of the physicians in either the Towson focus group or Eastern Shore interviews reported conducting routinely a comprehensive oral cancer examination. They provide a comprehensive oral cancer examination when patients have oral discomfort or other obvious symptoms. Many described brief and incomplete examinations. Comments such as the following were common:

> Almost never do I spend much time looking [in the mouth] unless there is a complaint...
>
> I would be unhappy if [physicians] didn't do a rectal exam. But I was not trained to routinely put my finger in someone's mouth and feel around. I was trained to look. Show me the data that say I need to do that and I will.

3.4. Theme 4: activities to raise awareness of oral cancer

Physicians agreed about the importance of raising awareness about oral cancer among the public and health care professionals. They were interested in some type of continuing medical education (CME), but only if it was part of another CME program, rather than a standalone or lengthy course.

> It's an important topic... I would like to see CME on that—maybe not a whole course, but as part of course on primary care review.
>
> ...something like the review I attended of doing a thorough breast exam. Local HMO sponsored a seminar in different locations around the state about 3 years ago. Included demo [demostration] of best way to do [an] exam.

Physicians' clearly stated that they have to see a benefit for the patients to do the examination and that placing oral cancer in context with other conditions they screen or examine will help in catching their attention.

For example:

> One thing that struck me is that it's more common than cervical cancer. We all absolutely screen for that. It takes at least a couple of minutes to do the Pap. Telling me oral cancer is a comparable risk inspires me to spend more time...

4. Discussion

Physicians' involvement in oral cancer prevention and early detection is extremely important to reduce morbidity and mortality from oral cancers because individuals at high risk will visit them more often than a dentist [9,10]. But physicians were skeptical about oral cancer statistics (prevalence, incidence and mortality) and had the incorrect assumption that oral cancer was rare in Maryland.

Because physicians' claimed oral cancer is not prevalent as other cancers (i.e. breast cancer or prostate), they saw no benefit in doing a routine oral cancer examination in the absence of oral discomfort or other symptoms. This practice and belief show a misconception about oral cancer because in early stages oral cancer is painless and asymptomatic [2]. In addition, early lesions are small and to identify them a careful examination is required.

Overall, these physicians' views indicated that their involvement in performing an oral cancer examination is dependent on them perceiving a benefit for their patients. Reimbursement for oral cancer examinations was unimportant in their decision to conduct an oral cancer examination. The most important reasons mentioned were the benefits for the patients and risk of the disease. A suggestion discussed during the interviews to draw physician's attention was to compare the impact of oral cancer morbidity and mortality to other cancers with established screening protocols. The example they mentioned was cervical cancer that has a lower mortality than oral cancer. Cervical cancer is screened for routinely although the screening for cervical cancer (Pap smear) is more time consuming and inconvenient for the patient than the screening for oral cancer.

In general, physicians need more information about how to conduct a comprehensive oral cancer examination. Their knowledge about this examination was based on their medical training and it varied greatly; it was related to whether or not the physician has completed an ENT or oncology rotation or their residency experience and the location where training was received. A complete examination of the mouth should be part of medical education and training. In 1995, a study of 86 United States medical school curriculums for the course on health history and physical diagnosis indicated that the coverage of oral cancer information and examination was brief and incomplete [11]. It is not surprising that oral cancer was only discussed with patients that indicated use of smokeless tobacco (chew or snuff). This practice indicates a misconception because in the United States, smoking tobacco is a major risk factor for oral cancer and more of a problem than chewing tobacco. The Guide to Clinical Preventive Services recommends appropriate counseling for those persons who smoke cigarettes, pipes, or cigars, and use alcohol, in addition to counseling for those that use chewing tobacco [12]. Participants do assess patient risk behaviors, especially use of tobacco and alcohol, but do not mention that these habits are a risk factor for oral cancer.

Physicians were clear that a continuing education course simply on oral cancer would not draw interest among their peers. The subject of oral cancer must be incorporated into a conference or other forum that physicians are already likely to attend. But they were very interested in hands-on training on how to conduct an oral cancer examination.

The combination of different qualitative research methods (triangulation) [13–15] with findings from the survey of Maryland family physicians conducted in 1999 [17] strengthens [16] the assessment for these health care providers. The survey of Maryland family physicians found that only 14.8% of the participants provided an oral cancer examination in the initial visit to all of their patients. The qualitative portion of the assessment provided insight into why the oral cancer examination is not a priority in their practices. In addition, more specific information was collected from the focus group and interviews for the design of continuing education interventions, and on how to include oral cancer early detection in their practices. Findings from the qualitative and quantitative studies are very valuable and an essential part of the statewide program of oral cancer prevention and early detection.

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