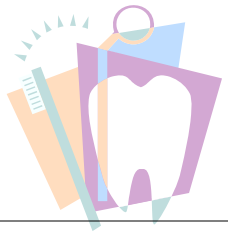
CASE
SCHOOL OF DENTAL MEDICINE

CROWN

Community Research for Oral Wellness Network

Summer 2007



Pediatric and Adolescent Visits in the General Dentist's Office

Josh Jenkins, a first year dental student, analyzed the pediatric and adolescent patient visits from the Direct Observation Study. He examined the procedures and counseling provided to these 559 patients, and compared the frequency of preventive services delivered by provider and patient characteristics. Josh presented his findings at the Dental School's annual Professional's Day on March 12th.

Visits with the dentist (251 visits) or hygienist (308 visits) were directly observed in 120 private offices. Patients visiting the dentist (n=251) were slightly older than hygienist patients (11.2 yrs v. 10.3 yrs; p=.02). Restorations (43%), oral exams (37%), cleanings (17%), sealants (8%), and oral hygiene instruction (OHI, 8%) were the most common procedures in the DDS visit; HYG visits included cleanings (96%), fluoride treatments (69%), OHI (51%), and radiographs (39%). Patients less than 13 years old received more comfort, feedback on their oral health, and fluoride treatments than teens. Among counseling topics, discussions of tobacco use or diet were very infrequent. Hygienists asked patients to make a behavior change (more brushing, less snacking) more often than DDS (63% vs. 17%), but there were no differences by patient age. Dentists' time during the hygiene visit was spent on oral counseling, health education and behavior change requests; some patients (28%) received these counseling messages from both providers during the hygiene visit. During restorative visits, DDS provided self-care counseling, behavior change requests or OHI to 16%, 13% and 1% of patients, respectively. We could not determine if the patient had previously or subsequently seen the hygienist to receive these services.

Conclusions: Approximately 18% of visits to private general dentists are with patients less than 18yrs old. Hygienists provide the majority of preventive counseling through prophy visits; opportunities exist to briefly counsel about self-care during restorative visits. Preventive messages are reinforced or supplemented by the dentist during some HYG visits, so that patients and/or parents receive an enhanced message.

Patient Perceptions of Communication Compared with Observed Communication

Patient-provider communication is a key component in the dental encounter. This analysis examined the relationship between observed interpersonal behaviors and patient's report of perceived communication with the provider. In the direct observation study, behavior checklist codes completed during each observed visit represented directly observed patient-provider interactions during the visit. We categorized 16 interpersonal behaviors into 3 groups modeled after Nuovo et al, 2006 entitled technical (e.g. treatment planning, history taking), activation (chatting, answering patient questions) and health behavior (counseling, health education). The patient's perception of communication was measured by responses to 13 questions on a patient visit questionnaire. w Directly observed behaviors were associated with patient's perception of communication. w Directly observed behaviors were associated with patient characteristics, including patient education, oral health status and visit status. w Patients who reported better oral health received less Technical Behavior and more Activation Behaviors than those with poorer oral health, but Health Behaviors didn't vary. w Effects of individual behaviors on perceived communication could be identified; more time chatting favorably increased perceptions; unexpectedly, more negotiation with the dentist and more health behavior change discussion with the hygienist decreased positive perceptions of communication. (Accepted for presentation at IADR, Toronto, July, 2008)

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Utilizing the Network– Oral Cancer Study

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CROWN Online!

CROWN is now online. If you have not already done so, visit the website for the most up to date information about the network and current research.

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Cancer of the oral cavity (mouth, tongue, and pharynx) is responsible for approximately 30,000 new cases and 7,500 deaths each year in the United States. The 5-year survival rate for patients with advanced cases of oral cancer is 19% compared to 78% for patients with localized disease.

Determining the presence of oral lesions is an essential activity in dental practice. To better estimate the type and frequency of oral lesions presenting in the general dentist's practice, a weekly return study of oral lesions was conducted this past summer in 24 CROWN offices, with the assistance of two 1st year dental students, Dan Smith and Matt Slivka. Dr. Danny Sawyer conducted a 3-hour oral pathology refresher course for 57 providers (dentists and dental hygienists) with each provider receiving a copy of *Oral Soft Tissue Diseases: A Reference Manual for Diagnosis and Management* by JR Newland et al. for reference.

Each provider agreed to screen all patients over a 3-week period for oral lesions and record patient descriptives (age, sex, tobacco use, dentures present) and lesion description on patients who had any type of oral lesion and who provided verbal consent to be included in the study. Providers were given a structured data collection form on which to record their observations. In addition to collecting the oral lesion data, participating dentists and dental hygienists completed questionnaires before and approximately 6 weeks after the oral pathology course on their knowledge, opinions and behaviors regarding oral cancer exams.

Examinations were performed on 2866 adults, 866 (30.9%) of whom presented with 1144 lesions. The most prevalent lesion observed was frictional keratosis (26.4%) followed by amalgam tattoo (14.0%), traumatic ulcers (12.2%) and fissured tongue (8.8%). Twenty-four lesions were classified as leukoplakia and 8 as erythroplakia. Lesions were slightly more prevalent in males (33.9%) than females (31.5%). Seventy-seven percent of lesions were observed in patients >40 years of age and 21.0% were in tobacco users.

Most lesions (40.6%) were detected during a hygienist visit and 19.5% of lesions were detected during restorative visits with the dentist. Two lesions were biopsied, 35 referred to specialists and 72 were treated. Sufficient numbers of oral lesions are present in practices to keep diagnostic acumen sharp.

Dental providers need to be vigilant about detecting oral lesions, especially in tobacco users and hygienists play an important role in alerting the dentist and patient to the presence of oral lesions for observation or further diagnosis.

From the completed questionnaires, the strongest perceived barriers to oral cancer exams were reluctance to perform lymph node palpation (LNP) (26%), lack of time (24%) and inadequate training (22%).

Most providers (90.7%) reported screening their at-risk patients at least yearly, but fewer reported they performed a LNP at each screening (64.8%) or instructed their patients to perform an oral self-exam (63%). After the CE course, providers increased their knowledge scores, reported greater confidence in their ability to perform an oral cancer exam and were less likely to cite inadequate training as a barrier to oral cancer exams.

The full study results were presented in oral and poster form by Dan and Matt at the meeting of the AADR in March, 2006. Both students were American Cancer Society Silber Summer Fellows and the materials for the study were provided by the American Cancer Society through an Ireland Cancer Center Institutional Grant to the study investigator, Dr. Catherine Demko.