

Source: Journal of Dental Hygiene, Vol. 80, No. 1, January 2006
Copyright by the American Dental Hygienists Association

Development of a Standardized Abrasive Scale: An Analysis of Commercial Prophylaxis Pastes

Karen D Avey, Christina B DeBiase, Marcia A Gladwin, Elizabeth C Kao and Michael D Bagby

West Virginia University

***Purpose.** Currently, no standard abrasive scale exists for dental prophylaxis pastes. Manufacturers determine their definitions of abrasive grit levels. The purpose of this study was to measure resulting surface roughness on bovine enamel of a representative sample of prophylaxis pastes.*

***Materials and Methods.** The study consisted of an eight-item, descriptive survey of prophylaxis paste manufacturers to gather information, a pilot study to determine testing variables, and an actual analysis of bovine tooth specimens. The sample comprised prophylaxis pastes, pumice, and toothpaste. Pumice was chosen as the standard for abrasive testing, and toothpaste was selected because it is recommended as an alternative when performing selective polishing. Equipment was constructed for applying a slurry of abrasives to mounted mandibular bovine incisor specimens at 2500 rpm for five seconds under a load of 145 g. Seven specimens were subjected to testing for each of the 17 prophylaxis pastes, toothpaste, and fine pumice, totaling 133 test specimens. Pretest and posttest surface roughness readings were recorded using a surface roughness tester equipped with a diamond tip stylus. Repeated measures ANOVA was used for statistical analysis to remove the variability from specimen to specimen, so that for each paste the pretest versus the posttest may be evaluated independent of specimens.*

***Results.** Repeated measures ANOVA determined that changes in roughness were significantly different among all pastes ($p < .0001$). A surface roughness scale of current products was developed and results showed that few pastes actually "polished" and created a smoother surface. When comparing individual pastes to fine pumice, two pastes were found to have a significantly higher increase in surface roughness, ten showed no significant difference, and six showed a significant decrease in surface roughness.*

***Conclusions.** These results indicated that very few products polished and created a smoother surface. Clinicians must evaluate individual patients' needs, consider selective polishing, and make evidence-based decisions when choosing a product.*

Keywords: abrasives, selective , polishing, prophylaxis pastes, enamel surface roughness

Acknowledgements

Funding for this project was provided by the West Virginia University School of Dentistry Research Corporation.

Source: Journal of Dental Hygiene, Vol. 80, No. 1, January 2006

Copyright by the American Dental Hygienists Association

Oral Health and Pregnancy: An Intervention Study

Barbara C Bush, Linlee Allen, Andi Lindsey and Sara Skelton

Western Kentucky University

***Purpose.** The research evidence is growing that there is a strong correlation between maternal oral health and adverse pregnancy outcomes. The purpose of this study was to evaluate the effect that an informational brochure about the relationship between oral health and pregnancy, given to pregnant women during prenatal visits, had on their attitudes toward seeking oral health care during pregnancy.*

***Methods and Materials.** This pilot study employed a one-shot case study design to examine these variables. Descriptive statistics were used to provide an understanding of patient attitudes. A facility with 22 different caregivers was selected. Permission was granted to anonymously survey their patients (N=33). Upon checking in for their appointments, the women were handed the brochure and asked to read it and respond to the attached questionnaire. The questionnaire, which was not pretested, consisted of three closed-ended questions. Additionally, the caregivers were questioned regarding their attitudes and practices on the subject of oral health and prenatal care. The caregivers' questionnaire also consisted of three closed-ended questions.*

***Results.** Results of the survey indicate that 81.8% of the patient respondents plan to seek dental treatment during their pregnancy and that the brochure influenced this decision in 42.4% of those surveyed. One hundred percent of those [caregivers?] surveyed (N=13) felt that good oral health care is important during pregnancy. Only 53.8% said they currently incorporate oral health care and its importance into the prenatal care of their pregnant patients. All caregivers surveyed (100%) indicated that they would give this information to their patients if it were made readily available.*

***Conclusions.** Results of this study indicate that an informational brochure affects the decision to seek oral health care and that caregivers are receptive to providing this information to their patients if it is readily available. Considering the results of this study and the research evidence that supports the correlation between maternal oral health and adverse pregnancy outcomes, it seems prudent to provide prenatal caregivers with informational brochures that could be distributed to their patients.*

Keywords: Pregnancy, maternal oral health care, prenatal care

Source: Journal of Dental Hygiene, Vol. 80, No. 1, January 2006

Copyright by the American Dental Hygienists Association

Assessing Activity Level of Sigma Phi Alpha Chapters

Claudine Paula Drew

New Jersey Dental School

***Purpose.** Sigma Phi Alpha (SPA), the national dental hygiene honor society, strives to promote, recognize, and honor scholarship, leadership, and service among dental hygiene students and the dental hygiene community at large. The organizational structure includes the Supreme Chapter, with 190 component chapters located in dental hygiene programs in universities and community colleges. SPA sought to determine why some chapters have high activity levels of inducting new members, awarding continuing education credits for courses presented, and financially supporting local scholarship recipients for academic excellence, while other chapters seem to become weaker and non-functioning over time.*

***Methods and Materials.** A questionnaire was developed to determine the current activity levels of SPA chapters, to assess the inactivity of formerly established chapters, and to collect data on why some dental hygiene programs have never petitioned for a chapter. Of the 286 questionnaires mailed to U.S. and Canadian schools, 121 were returned (43%).*

***Results.** Approximately one third of the returned questionnaires (41%) indicated that their component chapters' levels of activity were poor or non-existent. The main reasons given for inactivity were lack of leadership (44%) and no interest (16%), or a combination of the two (28%). The two reasons least given for inactivity were overwhelmed faculty (8%), and a combination of no leader, no meeting place, and no interest (4%).*

***Conclusions.** It was concluded that chapter inactivity resulted mainly from lack of leadership and limited interest. The Supreme Chapter developed strategies for support and activity improvement. These strategies include 1) better identification of inactive chapters; 2) the pairing of a chapter with limited leadership to one with high activity that would lend support; and 3) mentoring or coaching of a potential chapter by either the SPA regional trustees or another local highly functioning chapter.*

Keywords: Honor society, organization activity levels, leadership

Source: Journal of Dental Hygiene, Vol. 80, No. 1, January 2006
Copyright by the American Dental Hygienists Association

A Three-Year Study on the Relationship of an Internal Board Review Course and Dental Hygiene Student Performance on the National Board Dental Hygiene Examination

Rhoda Gladstone, Lisa Stefanou and Cheryl Westphal

New York University College of Dentistry

***Purpose.** The purpose of this study was to determine whether an internal mock board review course (MBC) could help students improve their National Board Dental Hygiene Examination (NBDHE) scores and study skills. This non-credit, pass or fail course was developed as a requirement for graduation.*

***Methods and Materials.** The fall content was based primarily on material from Dr. Esther Wilkins' Clinical Practice of the Dental Hygienist 8th Edition, along with supplemental Internet information. Multiple mock board quizzes were given prior to the end of February, when students must be certified for the spring examination.*

***Results.** Seventy-four students completed surveys at the beginning and end of the fall semester. When three years' worth of MBC scores were compared to actual NBDHE scores, the MBC scores were within five percentage points of the actual NBDHE scores 61% of the time. At the beginning of the MBC, 31% of the students thought they would achieve a score of 90% or above on the NBDHE. At the end of the MBC, student surveys indicated that 5% believed they would achieve 90% or above. Seven percent of the class actually did achieve above 90%, proving that the course successfully showed students the depth of study necessary to score 90% or better. Seventy-nine percent of responding students appreciated the "jump start," early study schedule, and review of background material.*

***Conclusions.** The internal board review course motivated students to study earlier than they would have on their own, and our MBC was able to accurately predict which students were ready to take the NBDHE in the spring semester (70% of the class). Because it is critical to find new and innovative ways to motivate students, further study is ongoing to improve performance for students who did not take the spring NBDHE, and to examine variables that affect student success*

Source: Journal of Dental Hygiene, Vol. 80, No. 1, January 2006

Copyright by the American Dental Hygienists Association

Infrared Technology: An Adjunctive Instructional Medium

Joy Phipps Gall, Kami M Hanson and Cami Gorringer

Weber State University

***Purpose.** The ability to effectively detect the position and location of subgingival dental calculus as part of scaling and debridement procedures is a primary process performed by dental hygienists and, as such, is vital to the periodontal health of dental clients. The purpose of this research is to examine the use of infrared technology (IrT) as an educational adjunct to learning the skill for subgingival calculus detection. It was hypothesized that the use of IrT as a method of augmented feedback would increase students' motor skill acquisition for the detection and removal of subgingival calculus on patients.*

***Methods and Materials.** The research was an experimental, treatment-control group, comparison design, using 30 senior dental hygiene students. The independent variable was the use of IrT for calculus detection, and the dependent variable was the increase in student motor skill acquisition for calculus detection. Methods for data collection included student-patient encounter forms post-scale, a rubric to evaluate performance for subgingival exploratory instrumentation, and a post-treatment student interview.*

***Results.** The analysis of data revealed a non-statistically significant result in comparison of efficacy for calculus removal between groups, $t_{20} = .313$, $P = .76$, 1-tailed and a non-statistically significant result in comparison of exploratory skills, $t_{28} = .611$, $P = .95$, 1-tailed. On the post-treatment interview, 47% supported that motor skills were reinforced with the use of IrT, 67% supported that IrT validated student findings with a hand-held explorer, 60% supported that the IrT identified calculus not identified by student, and 60% felt that use of IrT improved motor skills. However, only 27% noted that the use of IrT actually accelerated motor skill development.*

***Conclusions.** In conclusion, researchers failed to reject the null hypothesis. Qualitative evidence suggests that IrT can have an impact on student motor skill development; however, the research would have to eliminate factors that adversely impacted the usage of the IrT. In addition, it is recommended that researchers include an ethnographic inquiry into the motivations for usage of infrared technology.*

Acknowledgements

Funding was provided by Marriott Research and Development Committee, Dr. Ezekiel R. Dumke College of Health Professions.

A Rural School-Based Oral Health Program

Sherry R Jenkins and Kathy V Geurink

The University of Texas Health Science Center-San Antonio

The purpose of this program is to improve the oral health of school-aged children through the development of a model school-based oral health program integrated into two existing school-based health centers. Recognizing that dental decay is the most prevalent single disease affecting children, and that high-risk populations experience disproportionate amounts of disease, a school-based oral health program represents an ideal mechanism to provide care to children in need. The pilot program represents a model for development and implementation of a comprehensive school-based oral health program in two underserved communities in South Texas. The program is a collaborative effort of the Methodist Healthcare Ministries; the University of Texas Health Science Center at San Antonio Dental School, Department of Dental Hygiene; the Texas Department of Health; community dental clinics; and health professionals, teachers, parents, and administration of the respective schools.

The comprehensive oral health model focuses on the prevention, treatment, and education needs of 9,100 school-age children in two school districts. The prevention component includes annual assessments, sealants, fluoride treatments, mouth guard fabrication for sports, oral hygiene instruction, nutrition, tobacco cessation, and early intervention programs. The treatment component includes essential services such as emergency, diagnostic, preventive, and restorative care. Oral health education was incorporated into the program for children, parents, and teachers. Dental hygiene faculty and students are providing the preventive treatment and educational services to children at the school-based health centers.

This program addressed Healthy People 2010 objectives in the following areas:

- 1. Decrease the percentage of children needing urgent dental care. 1,602 children received treatment in the school clinic, which included urgent care needs. However, the annual assessment in year three showed a 3% increase in urgent care needs because of the increased number of new and emergency patients.*
- 2. Decrease the number of children with untreated tooth decay. Annual assessment and screening of 1,208 children in kindergarten and the second, third, seventh, and eighth grades showed a 9% decrease from year one to year three.*
- 3. Increase the percentage of children with annual dental visits. Annual parent survey of children in kindergarten and the third and eighth grades showed a 2% increase. However, 125 children were seen at the school clinic in year one and 948 children in year three.*
- 4. Increase percentage of children receiving preventive dental services. In year one, 187 children received services and, in year three, 2,464 received services.*
- 5. Improve oral health knowledge of children and school personnel. Pre- and posttests of students in kindergarten and the first, second, and third grades and school personnel indicated a 3% to 17% increase in knowledge.*

Acknowledgements

The first three years of the model program were funded by a grant from the Robert Wood Johnson Foundation, and continuation funding is being provided by Methodist Healthcare Ministries.

Source: Journal of Dental Hygiene, Vol. 80, No. 1, January 2006

Copyright by the American Dental Hygienists Association

A Comparison of the Academic Performance of Dental Hygiene Certificate and Baccalaureate Students

Holly C Rice and Stewart Turner

University of Texas Health Science Center at Houston, Dental Branch

In 2004, the School of Dental Hygiene at The University of Texas Health Science Center at Houston graduated the first class of dental hygiene students with baccalaureate degrees. The purpose of this study was to compare the academic performance of students in the certificate and the baccalaureate programs. The seventy-four participants were drawn from the students in a dental hygiene program at a dental school. The class of 2004 had ten BS and twenty-six certificate students. The class of 2005 had twenty-two BS and sixteen certificate students. The pre-requisite grade point averages and the cumulative grade point averages of students were compared using an analysis of covariance (ANCOVA) to determine differences. The ANCOVA yielded an F-ratio of 0.071 (Class of 2004 at the end of two years) that was not statistically significant ($p = 0.791$). The results obtained from the ANCOVA yielded an F-ratio of 0.036 (Class of 2005 at the end of one year) that was not statistically significant ($p = 0.850$). The pre-requisite credit hours and the cumulative grade point averages were compared also using ANCOVA. The ANCOVA yielded an F-ratio of 0.482 (Class of 2004 at the end of two years) that was not statistically significant ($p = 0.493$). The ANCOVA yielded an F-ratio of 0.102 (Class of 2005 at the end of the first year) that was not statistically significant ($p = 0.751$). No differences between the academic performance of students in the certificate and the BS programs of the class of 2004 or 2005 were found. It could be concluded from this study that students in the certificate program and the BS program performed similarly. Since the BS program has only been available since 2002, further studies are planned. Permission to conduct this study was obtained from UTHSC Committee for the Protection of Human Subjects

Source: Journal of Dental Hygiene, Vol. 80, No. 1, January 2006

Copyright by the American Dental Hygienists Association

Achieving Autonomy in Dental Hygiene Practice through a School-Based Oral Health Program

Faith Y Miller, Charla J Lautar, Jennifer M Meyer and Dwayne G Summers

Southern Illinois University in Carbondale

***Purpose.** Ensuring that all Americans have access to quality oral health care has become the primary focus of local, state, and federal government agencies; and the issue has also been placed on numerous legislative agendas. The purpose of the school-based project at the Southern Illinois University Carbondale (SIUC) Dental Hygiene Program (DHP) was to assist in meeting the goals outlined in the Oral Health in America: The Report of the Surgeon General, Healthy People 2010 (HP 2010), the Illinois Oral Health Plan (IOHP) and A National Call to Action to Promote Oral Health. Dental hygiene (DH) students play a significant role in meeting current access issues. Recent legislation in Illinois has allowed registered dental hygienists (RDHs) to practice under the general supervision of a dentist.*

***Significance.** To close the gap in the disparities concerning access to care, DH students have been utilized in multiple settings beyond the traditional and institutionally-based dental hygiene clinic. DH students are being used to staff school-based dental sealant programs as well as safety-net clinics serving a more diverse population including those clients with special needs. Since the students are still matriculating through school, relaxation of the supervision laws have increased the opportunities for those needing the most care to be seen and subsequently treated in facilities or remote sites by DH students who are supervised by the RDH. To date, the Dental Sealant Grant Program (DSGP) at SIUC has seen well over 250 what is considered at-risk, low-income children, placed approximately 400 sealants and has established a referral system for children requiring urgent or routine care through the campus-based Community Dental Center (CDC) and the Illinois Children's Health Foundation (ICHF), which is an extension of the CDC. Both clinics utilize DH students as primary clinicians, supervised by the DH program faculty. This approach to treatment, lends itself to meeting the oral health needs of the population through effective collaborations and partnering with entities within the community that continually seek such services as highlighted in the Surgeon General's Report on Oral Health, in addition to the IOHP. **Conclusion:** The SIUC DSGP employs the utilization of dental hygiene students under the general supervision of the RDH. The school-based oral health program can serve as one small step towards achieving autonomy in dental hygiene practice.*

Source: Journal of Dental Hygiene, Vol. 80, No. 1, January 2006
Copyright by the American Dental Hygienists Association

A Pilot Study of the Effects of a Natural Mineral Dietary Supplement on Gingival Health and Dentinal Hypersensitivity

Ellen J Rogo, Kathleen O Hodges and Anita Herzog

Idaho State University

***Purpose.** A natural mineral dietary supplement containing 3.6 mg/liter of fluoride and other minerals (pH 9.6) was studied to determine the effects of drinking the product on dentinal sensitivity and gingival health. The company distributing the supplement, had received unsolicited claims of improvement of oral health and tooth sensitivity from individuals who consumed the product. This pilot study evaluated the clinical validity of the anecdotal claims.*

***Methods and Materials.** Subjects included in the study had minimum levels of dentin sensitivity and gingival inflammation. The investigation was a quasi-experimental pretest design with repeated posttest measurements at four and eight weeks. A randomized, controlled, double-blind approach was used. The experimental and control groups followed the same regimen for drinking and swishing the product, with the only difference being the contents in the bottle (the supplement or a placebo containing de-ionized water). Dentin sensitivity was measured on a visual analogue scale from 0 to 10, using an explorer to determine tactile sensitivity and a blast of air to determine evaporative sensitivity. The Gingival Index (GI) was used to measure gingival inflammation. These data were analyzed using ANOVA and a post-hoc probing technique to determine within and between group differences, at a P=0.05 level.*

***Results.** Both groups experienced a statistically significant decrease in tactile and evaporative sensitivity over the eight-week study; however, the differences between groups were not significant. No significant differences were found in regard to gingival inflammation.*

***Conclusions.** The natural mineral dietary supplement and the de-ionized water were equally effective in reducing dentin sensitivity, and neither product had an effect on gingival inflammation.*

Acknowledgements

Funding for this project was provided by the National Medical Device Survey (NMDS).

Source: Journal of Dental Hygiene, Vol. 80, No. 1, January 2006
Copyright by the American Dental Hygienists Association

Kentucky's Oral Health Wellness and Disease Prevention Program: An Innovative Partnership

Sharlee M Shirley

University of Kentucky

Developing unique and varied partnerships to reach at-risk kids and communities is key to tackling current and future oral disease. According to the 2001 Kentucky Children's Oral Health Profiles, in which 5,603 third- and sixth-grade children in Kentucky's public schools were screened, 28.7% had untreated tooth decay. The Kentucky Oral Health Wellness and Disease Prevention Program began with an objective to develop a statewide 4-H camp program focusing on oral health wellness, disease prevention, tobacco education, and the promotion of oral health professions among preteen and teenage campers.

The University of Kentucky College of Dentistry, Division of Dental Public Health, agreed to collaborate with the 4-H program at the College of Agriculture Extension Service by providing a research title faculty member to develop and implement the pilot 4-H camp program for four camps in the summer of 2003. The overwhelming success of the pilot 4-H camp initiative in 2003 led to the program expanding to nine camps in 2004. More notable, however, it precipitated a unique partnership between the two colleges. The jointly appointed faculty member focused on developing oral health wellness and disease prevention resources for extension agents to use on a county-by-county level to educate, promote oral wellness, remove barriers to access, and create a pipeline of oral health professionals from rural communities.

The initial findings of the Kentucky Oral Health Wellness and Disease Prevention Program indicate that networking conducted between non-traditional partners can produce original, expectantly sustainable programs that benefit all counties of the Commonwealth and each family within, while leading the country in innovative approaches to oral health wellness, education, and disease prevention.

Medication Compliance in the Older Adult Patient

Adele Spencer and Maureen Tsokris

Farmingdale State University of New York

Purpose. The purpose of this study was to determine the level of medication compliance in the older adult dental patient. The ultimate goal of the research was to promote awareness among dental hygiene practitioners of the number of prescription, over-the-counter, and herbal medications used by this population.

Methods and Materials. Self-report questionnaires were distributed randomly to older adults, with the median age range of 76 to 84, attending local community meetings (n=114). All responses were anonymous. A statistical package (SPSS version 12.0, Chicago, IL) was used to execute basic descriptive statistics including frequency distribution, percentages, means, and standard deviations.

Results. Of the 115 surveys distributed, one survey was rejected. Among the respondents, 93% reported taking prescription medication, 63% reported taking over-the-counter drugs, and 23% reported taking herbal medications. Twenty-nine percent took four to six medications daily, and 21 % took more than seven medications daily. Nearly one quarter of the respondents surveyed reported that they had missed a dose, while 15% stated that they had stopped taking medication before their prescription was completed. Similarly, 14% responded that they had forgotten to fill or refill a prescription, while 13% stated they had taken less medication than prescribed. Of significance to oral health practitioners, 35% of respondents indicated that their dentists or dental hygienists did not ask them when they last took their medications.

Conclusions. It can be concluded from this study that older adult dental patients are utilizing large numbers of prescription, over-the-counter, and herbal medications; and that medication compliance issues relative to the practice of dental hygiene exist.

Source: Journal of Dental Hygiene, Vol. 80, No. 1, January 2006

Copyright by the American Dental Hygienists Association

Stroke Risk Assessment in a Southeastern University Dental Hygiene Facility

Barbara G Tanenbaum and Suzanne M Edenfield

Armstrong Atlantic State University

***Purpose.** The purpose of this study was to identify significant stroke risk factors, which may assist dental hygiene students in educating the clinic population on methods of stroke prevention. The southeastern United States is referred to as the "Stroke Belt," with Georgia having a 14% higher rate of cardiovascular death and the sixth highest mortality rate among the 50 states. It is postulated that the death rates attributed to this disease are associated with preventable risk factors such as hypertension, diabetes, cigarette smoking, cardiovascular disease, atrial fibrillation, and lack of physical activity.*

***Methods and Materials.** Because statistics reveal a disproportionately high incidence of stroke in this region of the country and risk factors have been identified, this study was conducted on a southeastern Georgia population at the Armstrong Atlantic State University (AASU) campus. The dental hygiene department clinic served as a screening facility for the American Stroke Association's Southeast Affiliate Operation Stroke project, with services predominately utilized by persons with low income, no insurance, and/or lack of regular health care. Utilizing a written survey for stroke risk assessment and descriptive statistics, data was analyzed to determine age, race, gender, and quantifiable stroke risk factors.*

***Results.** Using one-way ANOVA statistical analysis, the data demonstrated that, of the 144 surveyed, a higher percentage of subjects with a history of diabetes had a moderate stroke risk; whereas a larger percentage of non-diabetics was at low risk. Additionally, subjects who were smokers or had cardiovascular disease or atrial fibrillation were at a significantly greater risk of stroke. Subgroup analyses revealed significant differences between groups in the prevalence of risk factors, suggesting that blacks, even those on blood pressure medicine, had a significantly higher blood pressure ($P < .046$) than whites. However, because this number of subjects was low ($n=5$), one should be cautious in drawing conclusions. Additionally, the data indicated no significant differences between gender on any of the risk factors.*

***Conclusions.** Based upon the results, educational information pertaining to stroke risk factors was incorporated into the curriculum in an effort to reduce the stroke incidence in the population utilizing the AASU dental hygiene clinic.*

Source: Journal of Dental Hygiene, Vol. 80, No. 1, January 2006

Copyright by the American Dental Hygienists Association

Oral Cancer Prevalence in Virginia

Karin C Loftin, Michele Darby, Stacey Plichta, Sophie Thompson, Shreeram Kumar and Louis Abbey

Karin C. Loftin, PhD; Michele Darby, BSDH, MS; Stacey Plichta, ScD; and Sophie Thompson, MHS, CT (ASCP) (IAC), are professors at Old Dominion University. Shreeram Kumar, PhD(c), is a doctoral student at Old Dominion University. Louis Abbey, DMD, is a professor at Virginia Commonwealth University.

Purpose. Oral and pharyngeal cancer affects 30,000 Americans a year and kills one fourth of those diagnosed. The primary risk factors for oral cancer are past or present cigarette and tobacco usage, and alcohol consumption in conjunction with tobacco use. Even though the prevalence of oral cancer is relatively low in the younger age groups, this group is most likely to benefit from intervention programs designed to change risky behavior such as smoking, and to prevent oral cancer in the later years. The goal of the study was to identify high-risk target areas for an oral cancer prevention program in Virginia.

Methods and Materials. The specific objectives were to analyze the 1986 to 2001 Oral Biopsy Database from the Virginia Commonwealth University School of Dentistry for diagnosed cases of oral cancer. To test the hypothesis that Hampton Roads, Virginia would be a high-risk target area, diagnoses were correlated with the 11 zip-code regions in Virginia to identify specific geographical areas with high numbers of oral cancer cases. The oral cancer data set consisted of 4,712 cases. Frequencies and cross-tabulations were calculated for all the variables using Statistical Package for Social Scientists software (SPSS Inc., version 10.1, Chicago, IL).

Results. Results indicated that the Hampton Roads region had the second highest number of squamous cell carcinomas, with 231 total cases. The Richmond area had 435 cases, almost twice as many.

Conclusions. Therefore, Hampton Roads and Richmond are high-risk target areas that would benefit from an aggressive oral cancer prevention and intervention program in its public schools.

Source: Journal of Dental Hygiene, Vol. 80, No. 1, January 2006
Copyright by the American Dental Hygienists Association

Implementing Survey Research into Strategic Planning Activities in Idaho to Advance the Science and Practice of Dental Hygiene

Kathleen O Hodges and Kristin H Calley

Idaho State University

***Purpose.** For strategic planning, the Idaho Dental Hygienists' Association uses survey methodology to identify the opinions and concerns of dental hygienists. This study aimed to assess dental Hygienists' opinions about advanced dental hygiene practice and legislative activities.*

***Methods and Materials.** In 2002, a coded questionnaire was mailed to Idaho dental hygiene licensees (N = 865). Section I addressed demographic characteristics. Section II surveyed professional concerns, illegal practice, and legislative activities. Respondents were asked to rank 14 professional issues by selecting their top five concerns about dental hygiene practice. Also, respondents were asked if they supported expanding the scope of practice and if they would provide care in alternative practice settings. Data were analyzed using frequency distributions and nonparametric tests of association.*

***Results.** A 60% (N = 519) response rate was obtained after two mailings. Three professional issues were ranked as follows: 1) the national trend to reduce entry-level education (64.9%), 2) dental assistants performing dental hygiene services (61.1%), and 3) legalizing self-regulation (49.8%). Also, 90.9% (n = 460) of respondents supported the expansion of the practice act to improve access to care. Unsupervised practice in public health settings was most important (95.4%), and local anesthesia administration under general supervision was second most important (88.9%). Unsupervised practice in all settings was ranked third most important (85.2%), and providing restorative services was the fourth most important (81.7%) practice act expansion identified. Eighty-nine percent supported having a bachelor's degree to provide unsupervised care. Data were used to support the 2004 legislation to expand the dental hygiene practice act.*

***Conclusion.** It is vital for state professional associations to utilize information from licensees for strategic planning and legislative efforts. Idaho dental hygienists are concerned about maintaining quality education, expanding access to care to the underserved, providing restorative services, and educating dental personnel about state laws.*

Acknowledgements

Funding for this project was provided by an ADHA Kaleidoscope Grant.