Survey: Americans value oral health but knowledge gap remains

Oral health is a top health priority for 64 percent of adults in the United States right now, but even more adults (82 percent) are unaware of the role that infectious bacteria can play in tooth decay, or cavities, according to a new public opinion survey sponsored by Oral Health America and Philips Sonicare.

The survey, conducted by Harris Interactive, is part of the first-ever U.S. National Smile Month, which started May 18 and lasts until June 17. National Smile Month aims to raise awareness of the importance of good oral health habits, including brushing, healthy food choices and regular dental visits. The National Smile Month “Brush for Health!” theme focuses on raising public awareness about the connection between oral care and overall health.

Treating children with special needs

By Juliette Reeves, U.K.
Dental Hygienist, Nutritionist

Children and adolescents with special health-care needs (SHCN) have been defined as “those who have or are at increased risk for a chronic physical, intellectual, developmental, behavioural, or emotional condition and who require health and related services of a type or amount beyond that required by children generally.” Special health-care needs encompass both physical and mental disabilities and long-term chronic illness. This includes such conditions as developmental disabilities, such as autism, mental retardation, cerebral palsy, epilepsy or other incurable neuropathies. Other chronic conditions include rheumatoid arthritis, scleroderma, HIV, cancer or leukaemia. Other health-related problems that can impair the ability to function include conditions such as spina bifida or muscular dystrophy.

The need for oral health care is probably one of the most prevalent unmet health-care needs among children and adolescents with SHCN. Children with SHCN are almost twice as likely to have unmet oral health-care needs as their peers without SHCN across all income levels.

Barriers to oral health care

Maintaining oral health care can be a challenge for many with SHCN and their parents or caregivers. There is also a shortage of paediatric dentists in many areas, and many general dentists can lack specific knowledge and skills required to care for those with SHCN.

New Mexico bound!

ADHA heads to Albuquerque for 85th Annual Session

By Kristine Colker
Managing Editor

M aybe it’s the educational session on acupuncture or the chance to dance the night away at a Route 66 party. Maybe it’s the raffles on the exhibit floor or hearing Debbie Reynolds speak. Or maybe it’s the chance to network with more than 1,000 dental hygienists from across the United States. Whatever your reason, you won’t want to miss the American Dental Hygienists’ Association’s 85th Annual Session being held in Albuquerque, N.M., from June 18-21.

This year, the show promises an array of educational opportunities as well as the chance to see new products up close while interacting with other hygienists, students, educators and clinicians.

Some of the highlights include:

• More than 25 C.E. sessions on a variety of topics, including the application of oriental medicine and acupuncture to dentistry, infection control, women’s health, new periodontal products, tobacco cessation intervention, communication tips and turning entrepreneurial ideas into reality.
• Planetary sessions designed to inspire. On Thursday, June 19, Kary Odiatu, REd, RPE, and Uche Odiatu, BA, DDS, will teach you how to “Live Your Dream” while Tim Prosch lets you in on what patients really think about you, as learned from ADHA research.
• A keynote speech on Saturday, June 21, by Debbie Reynolds, star of such movie musicals as “Singin’ in the Rain” and “The Unsinkable Molly Brown.”
• Two days of exhibits featuring more than 100 companies all ready to help you with any needs you may have. (For added fun, we hear you might want to stop by the Colgate booth from 2-4 p.m. Saturday.)
• Raffles on the exhibit floor and a Southwest artisan fair featuring unique jewelry and crafts found only in Albuquerque.
• A First Timers/Mentor Luncheon where those new to the show are paired with a seasoned veteran who can show them the ins and outs on everything from specific events to ADHA membership to the best way to network.
Ortek Therapeutics Inc. and Stony Brook University say that new data published in the March issue of the “Journal of Clinical Dentistry” demonstrates the effects of a new chewing mint in preventing cavities in children. This investigational product, called BasicMints, was designed to be dissolved and chewed into the biting and approximating surfaces of the back teeth. BasicMints contain CaviStat, an innovative, fluoride-free, cavity-fighting complex.

CaviStat mimics the cavity-fighting benefits of saliva by neutralizing harmful plaque acids and simultaneously promoting the remineralization of the tooth structure. It contains the amino acid arginine, which, when metabolized by certain plaque bacteria, elevates dental plaque pH through alkali generation.

In addition, CaviStat also contains bicarbonate, a buffer in saliva, and calcium carbonate, a poorly soluble calcium salt. The latter provides a source of calcium to prevent tooth solubilization and, under appropriate conditions, favors pH elevation and enhanced tooth mineralization. All of the components of CaviStat are naturally present in the human body.

A study funded by Ortek Therapeutics showed that after one year children who were given BasicMints with CaviStat had 62 percent fewer cavities in their molars than did children in a placebo group.

CaviStat was developed, clinically tested and patented by researchers in the department of oral biology and pathology at the State University of New York at Stony Brook and exclusively licensed to Ortek.

Ortek plans to submit an investigational new drug application to the U.S. Food and Drug Administration later this year. BasicMints are not currently approved for use in the United States. Cavities are the most prevalent disease in children, with almost half having a cavity by second grade and 80 percent having one by the time they graduate from high school. Roughly 90 percent of cavities occur on the biting surfaces of back teeth. By chewing BasicMints and packing CaviStat into these vulnerable surfaces, protection is focused where most cavities form.

Source: Ortek Therapeutics Inc.

Study shows CaviStat may help prevent childhood caries

New treatment for cavities?

A new study shows that chewing CaviStat can help prevent childhood cavities by neutralizing harmful plaque acids and promoting the remineralization of the tooth structure.

CaviStat contains the amino acid arginine, which, when metabolized by certain plaque bacteria, elevates dental plaque pH through alkali generation.

In addition, CaviStat also contains bicarbonate, a buffer in saliva, and calcium carbonate, which helps stabilize the pH and enhances tooth mineralization. All of the components of CaviStat are naturally present in the human body.

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Source: Ortek Therapeutics Inc.
Many children lack a centre point from where coordinated, comprehensive and ongoing oral health care is provided. Often adolescents with SHCN can “fall through the net” when their care is transferred from the paediatric dentist or clinic to that of the general dentist.

**Oral health status**

Although the overall oral health of the general population is improving, disparities still exist in oral health needs among certain special needs groups. Individuals with mental retardation (MR), for example, have worse oral health outcomes and oral hygiene compared with the general population. Dental problems are among the top 10 limiting secondary conditions among adults that MR. Traci et al. found the estimated prevalence rate of oral hygiene problems was 451 per 1,000 individuals with MR. Oilo et al. examined the dental health of 3,622 disabled individuals aged 0-16 years living in the community. An average DMFT score of 6.4 was found among individuals with Down syndrome and an average DMFT score of 6.75 among individuals with other aetiological factors.

**Risk factors**

Oral hygiene A number of factors may predispose an individual with SHCN to oral pathologies. The oral hygiene among individuals with MR has been shown to be consistently poor compared with individuals in the general population. Those with MR often have impaired physical coordination and cognitive sequencing skills that limit independence in task completion. Medication Other factors include a lack of saliva as a side effect to multiple medication use or the high sugar content of some medicines. Systemic factors The very nature of the child’s disability may also predispose to oral health problems, such as individuals with Down syndrome who may be more susceptible to gingivitis and other periodical diseases because they are thought to have underlying abnormal immunologic responses. Oral trauma Trauma to the face and mouth occur more frequently in people who have mental retardation, seizures, abnormal protective reflexes or muscle incoordination. Self-mutilation in children with MR may involve the oral and orofacial tissues where the lips or tongue may be chewed.

**Strategies for oral health care**

A number of strategies that can be implemented by the general dentist and his team have been recently suggested by the National Maternal and Child Oral Health Resource Centre. These include:

- Work with parents and care givers to promote self care, healthy diet and access to regular dental care.
- Educate the whole dental team in assessment, prevention and early intervention methods such as oral hygiene advice, dietary advice, regular screenings and topical application of fluoride varnish or calcium enriched gel where needed.
- Be willing to coordinate care with specialists or other health care professionals.
- Offer practical help and recommendations to aid in oral hygiene maintenance such as the use of power toothbrushes and other appropriate oral hygiene aids, mouthwashes and toothpastes.

Providing oral care to patients with developmental disabilities, however, may simply require adaptation of the skills we use every day. In fact, most people with mild or moderate developmental disabilities can be treated successfully in the general practice setting. Keeping our knowledge base up to date will enable us to provide appropriate care for the special health care needs child.

Juliette Reeves is an experienced dental hygienist and qualified nutritionalist. She regularly writes for Smile-on.com, and has a regular column in Dentistry magazine. Reeves also has written a number of post-graduate training modules in nutrition and oral health for the dental profession. She divides her time between a busy family practice in Wimpole Street (London) and writing, researching and lecturing in nutrition and oral health. Visit her Web site at www.perio-nutrition.com.

**A complete list of references is available from the publisher.**