

BE Healthy™

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Boston Public Health Commission

Oral health: An overlooked epidemic

Kenyaree Jones wasn't happy about her first dental appointment. At 10 years old, she had already heard the horror stories.

"They could pull your teeth out," she recalled. "Or they could put braces on you."

Or, as Kenyaree later discovered, they can find cavities. She had four of them, each requiring a filling. And by getting the fillings she prevented more serious problems, such as infection or extraction.

It wasn't fun, but it was a way of teaching valuable lessons. "The [dentist] taught me how to brush my teeth," she said. "I brush every night, but sometimes I forget."

That sort of forgetfulness has generated a veritable growth industry. Increasing each year by

nearly 6 percent, dental services in 2005 alone accounted for almost \$87 billion dollars, according to one recent report analyzing the use and costs of health care services in the United States.

In human terms, the numbers are staggering.

Affecting one in four elementary school children nationwide, tooth decay is the most common chronic disease of childhood — and it gets worse with age. Two-thirds of adolescents have tooth decay, as do an

astounding 90 percent of adults.

It's surprising, then, that oral hygiene was seldom included in national health care discussions. That changed nearly a decade ago when U.S. Surgeon General Dr. David Satcher presented the first-ever report on the oral health of the nation in 2000.

Satcher identified a "silent epidemic" of dental and oral diseases that disproportionately burdened the poor and the elderly.

To combat the problem, Satcher called for a change in public perception of oral disease and implored government health officials to create an effective public policy to improve America's oral health.

Unfortunately, Satcher's report was unable to reverse what appears to be a never-ending problem.

In Massachusetts, according to a recent report by the Catalyst Institute, more than one-fourth of kindergarten children had evidence of tooth decay in 2007. More than 40 percent of third-graders had a problem, the report said, as did one-third of sixth-grade adolescents.

And the numbers for blacks, Hispanics and lower-income families were not good. The incidence in these groups was almost twice that of white and higher-income students from kindergarten to sixth grade.

Tooth decay is caused by bacteria that

Affecting one in four elementary school children nationwide, tooth decay is the most common chronic disease of childhood — and it gets worse with age.



Kenyaree Jones (left), a 10-year-old fourth-grader at Orchard Gardens K-8 School, receives dental hygiene supplies from Kathy Lituri of Boston University through Smart Smiles in Boston Public Schools.

thrive on sugars and starches. Left unchecked, the bacteria produce an acid that eventually dissolves the enamel of the tooth.

Or worse.

The seriousness of oral health problems was underscored last year when 12-year-old Deamonte Driver of Baltimore died from complications caused by tooth decay. The bacteria had spread to his brain and by the time his mother found a dentist — a difficult process without adequate dental insurance — it was too late. Despite two operations and more than six weeks of hospitalization, Deamonte died.

The tragedy not only revealed the seriousness of oral disease, it also raised a slew of questions about the accessibility and affordability of dental services.

For starters, dental insurance is not as common as medical insurance and applies

stringent limitations in coverage. Even those with Medicaid cannot always get the care they need because of the paucity of dentists who accept the state-administered insurance.

Dr. Stephen Colchamiro has seen a lot of cavities during his almost 40 years as the dental director at Brookside Community Health Center in Jamaica Plain. Cavities are "the most common disease, not only of children, but of everyone," he said.

And that's part of the problem. People don't see cavities as a disease.

According to Colchamiro, the most significant factor leading to tooth decay is diet — and sugar is the biggest culprit.

In one extreme case, he said, a mother brought in a 3-year-old baby. Right before the check-up, Colchamiro noticed that the baby's bottle contained soda instead of milk.

Jones, continued to page 4

Avoiding gum disease's slippery slope

Although tooth decay can occur at any age, adults have to be vigilant about another problem that starts in the 30's — gum disease.

The mouth is teeming with bacteria — more than 400 different types — and gum disease is caused by 10 to 15 of them, according to Dr. Nadeem Karimbux, an assistant dean of dental education at Harvard School of Dental Medicine.

A bad taste in the mouth is usually the first sign of gum disease. Bad breath is another. But the most common red flag is bleeding when brushing the teeth or flossing.

"People often think they have brushed too hard, but most of the time, it is due to gum disease," said Karimbux.



Dental hygiene student Tomoko Kusunose examines Dallas Ramos, 6, while his sister Elizabeth, 4, looks on. Both participate in Smart Smiles.

The problem is that many people say they think that bleeding is a normal part of brushing or flossing. It's not.

The American Academy of Periodon-

tology makes the point — if your hands bled each time you washed them, you would know something was wrong and do something about it. Some ignore the problem thinking that the infection is minor. Yet, according to the organization, the mass of tissue in your mouth is roughly equal to the mass of skin on your arm from the wrist to the elbow.

Inflammation can be mild, moderate or severe.

Gingivitis is a mild form of the disease and often goes undetected. It develops when plaque, a sticky film of bacteria, forms on the teeth after eating foods high in sugar and starch. Generally, good brushing

removes plaque, but if allowed to remain on the teeth for a few days, it can harden into a substance called tartar, or calculus, which can inflame the gums. Tartar acts as

a reservoir for bacteria and can be removed successfully only through professional deep cleaning.

The longer the plaque and tartar remain on the teeth, the more the gums become inflamed. Untreated gingivitis can progress to periodontitis, a more severe form of gum disease.

Periodontitis is the most common cause of tooth loss among adults. It can weaken the bone holding the teeth in place and cause the gums around the neck of the teeth to recede, thereby loosening the teeth.

To understand how periodontal disease impacts the gum and teeth, Karimbux draws a comparison. Look at how the skin on a finger meets the nail. If the skin begins to pull away from the nail, the nail will loosen. Likewise, as gum disease advances, the area around the tooth gets infected and begins to separate from the neck of the tooth. If the separation continues, a pocket develops allowing the bacteria to spread to the jawbone.

When severe, the bacteria can dissolve the bone of the jaw, which is visible on X-rays.

Ramos, continued to page 4

Good health starts with good oral health

Proper dental care is an important part of a healthy lifestyle. Poor oral hygiene can lead to cavities and periodontal (gum) disease, which in turn can lead to a higher risk of heart disease and diabetes. Pregnant women with poor oral health can also experience an increased likelihood of delivering a pre-term, low birth weight baby. The risk of all of these occurrences can be reduced with good preventive care and diligent home habits.

Bacteria and the food that you eat — particularly sugars and starches — will form plaque on the teeth. The plaque, if left undisturbed, is a major contributor to gum disease or cavities. Cleaning the teeth thoroughly several times per day will help prevent the buildup of plaque.

A basic dental routine should include brushing for at least two minutes twice a day with fluoride toothpaste approved by the American Dental Association, and possibly rinsing with a fluoride or antibacterial rinse once or twice a day. Flossing at least once daily is also essential to remove food particles lodged between the teeth that brushing cannot reach. Some experts recommend flossing before brushing, but the main point is to do both.

A typical routine is to floss in the morning, brush for two minutes, then swish for 30 seconds with an antibacterial or fluoride rinse. Repeat the routine before bed. Ideally, you should brush and floss after every meal, but it is most important to set up a routine you can remember to do each day.

There are many types of toothbrushes on the market. Choose one with soft bristles. Toothbrushes with hard bristles can damage the teeth and gums and wear away the enamel at the gum line, causing gum recession. Any size and shape of toothbrush is fine as long as it feels comfortable in your mouth.

The American Dental Association recommends replacing toothbrushes every three to four months or sooner if the bristles become frayed. It is important to rinse your toothbrush with water thoroughly after brushing to remove remaining toothpaste and particles and to store it in an upright position to air dry.

Some people prefer power toothbrushes over manual

toothbrushes. They are beneficial because they do the vibrating and brushing for you and you don't have to be concerned about that part of the task. Most power brushes have timers, making it easier for people to brush the full two minutes, but they are by no means necessary. Your dentist can show you how to brush properly if you have any questions.

There are many types of floss as well. The bottom line is, as long as you floss, the type doesn't matter, but some flosses can work better for some people. People with old fillings or tight contacts between their teeth may prefer a waxed or Teflon-covered floss to help them get in the tight space and prevent shredding. Some

people prefer to use interdental cleaners — special wooden or plastic picks, sticks or brushes — to clean between teeth. Most people, however, need just regular floss.

Antibacterial mouthwashes can be an important adjunct to your oral care regimen. Some can have a medicinal taste, where others have a more refreshing taste. Although not as important as brushing or flossing, they can still be important tools in helping to keep the plaque in your mouth to a minimum.

Fluoride rinses can also be important, particularly if you are prone to getting cavities. Use of a fluoride mouth rinse in addition to fluoride toothpaste can give you additional cavity-fighting protection. It's easiest to use the fluoride rinse before bedtime, because you are advised not to eat or drink for 30 minutes after you've swished.

It is advisable for most people to visit their dentist for a cleaning and an oral examination once every six months. Some people with excess plaque or people more prone to periodontal disease may need more than two visits each year. Your dentist can advise you how often you need to come in for cleaning or tell you if any additional periodontal treatment is necessary.

When it comes to oral care, it is best to remember that flossing is cheaper than a filling. And a filling is cheaper than a crown, and a crown is cheaper than an implant. The best thing you can do to prevent expensive dental procedures is start with a daily oral health care routine. Toothpaste, dental

floss and a little diligence are more cost-effective than dental surgery. And with dental health so closely linked to your overall health, you have every reason to keep your mouth healthy.

For a prettier smile, keep your diabetes under control

Diabetes affects millions of Americans each year and approximately 11.4 percent of African Americans 20 years of age or older. One of the lesser-known aspects of diabetes is its link to oral health. Diabetes can leave a person more vulnerable to oral infections than people without the disease. These infections can be uncomfortable and make a person's diabetes more difficult to control.

Diabetes poses a threat to a person's oral health by lowering a person's resistance to infection. The mouth already harbors all kinds of infection-causing bacteria, and diabetes tends to inhibit the body's ability to defend against periodontal diseases. Periodontal diseases are infections of the gums and the bone that hold teeth in place. Diabetes may lower the body's resistance to infection by inhibiting the circulation of blood to the gums and other parts of the body. This makes those areas more prone to infection because the loss of blood reduces the body's ability to fight off any infection.

Another side effect of diabetes is a decrease in saliva production. Without the presence of saliva to wash away bacteria and plaque, tooth decay and plaque buildup may occur. If plaque is not removed regularly by brushing and flossing, it can turn into hardened tartar that sits along the gum line. This can lead to constant inflammation and oral infection. A third problem associated with diabetes is high glucose levels in saliva. This too can increase the strength and number of bacteria that threaten dental health.

The need for proper dental care is especially high for people living with diabetes, because oral infections have been linked to an increased risk of heart disease as well as a decrease in the control of their diabetes. Research has shown that people who have periodontal disease are almost twice as likely to suffer from coronary artery disease as those who don't.

Experts agree that one of the most important measures people with diabetes can take to protect their health is to practice preventive oral health care. That means professional teeth cleanings, regular dental checkups every six months or according to your dentist's recommendations, brushing twice a day with a fluoride toothpaste, and either flossing or using an interdental cleaner once a day.

If you notice any of the following signs or symptoms, contact your dentist as soon as possible:

- gums that bleed easily
- red, swollen or tender gums
- gums that have pulled away from the teeth
- pus between the teeth and gums when the gums are pressed
- persistent bad breath or bad taste in the mouth
- permanent teeth that are loose or separating
- any change in the way your teeth fit together when you bite
- any change in the fit of partial dentures.

People with diabetes should also ask their insurance provider about special benefits and coverage items for which they might be eligible. For instance, Blue Cross Blue Shield of Massachusetts (BCBSMA) Dental Blue members who have diabetes receive additional benefits, such as more frequent cleanings and enhanced coverage of other periodontal services. Those members that also have medical coverage through BCBSMA are invited to enroll in the insurer's disease management program for diabetes, which helps them coordinate their diabetes care.

According to the American Dental Association, the most common oral health problems associated with diabetes are:

- tooth decay
- periodontal (gum) disease
- salivary gland dysfunction
- fungal infections
- lichen planus and lichenoid reactions (inflammatory skin disease)
- infection and delayed healing
- taste impairment.

To learn more, visit the website of the American Dental Association at www.ada.org or the American Diabetes Association website at www.diabetes.org. Your dentist and your primary care physician are good resources for getting answers to your specific questions and concerns.



Healthy teeth, healthy you.

Keeping your teeth healthy is about more than a pretty smile. Oral health is an important part of your overall health.

Gum disease is linked to cardiovascular disease and premature births, and can make controlling diabetes more difficult. So take care of yourself by brushing and flossing daily. And limit your intake of sweet, starchy, or sticky foods.

Remember, your dentist is your best ally in the fight against tooth decay, so visit your dentist at least twice a year for checkups and professional cleanings.



MASSACHUSETTS

Blue Cross Blue Shield of Massachusetts is an Independent Licensee of the Blue Cross and Blue Shield Association

Oral health

Questions & Answers

1. Is fluoride beneficial to adults as well as children?

Yes. Fluoride forms a protective outer coating around the teeth to protect against harmful acids that cause decay. Fluoride is especially important as children's teeth develop because it becomes incorporated into the permanent structure of the teeth and provides protection later in life. In adults, it is incorporated into the surface of teeth, making them more resistant to decay. Fluoride is naturally present in all water and is now added to toothpastes and mouthwashes for extra benefit.



Joseph R. Betancourt, M.D.
Director of the Disparities Solutions Center, Massachusetts General Hospital

2. Why is flossing essential to good oral hygiene?

Flossing removes the plaque and bacteria that form between the teeth and under the gum lines in areas where regular brushing can't reach. Plaque, the white sticky film we feel on our teeth, is composed of bacteria that when mixed with the sugars we eat (from candies and cookies) create harmful acids that attack the teeth and gums. Over time, the acids can cause tooth decay and gum infections, which can result in tooth loss. Flossing regularly prevents the buildup of plaque and tartar, and diminishes the risk of cavities and inflammation.

3. Why does smoking increase the risk of gum disease?

Research shows that smokers are four times more likely to have gum disease than non-smokers. Smoking and chewing tobacco decrease your body's ability to fight infection, making you more susceptible to the bacteria found in plaque that leads to gum disease. Additionally, it is believed that smoking can cause your gums to recede and can cause bone loss, worsening the effects of oral infections. Smoking is also thought to impair blood flow to the gums which affects wound healing.

4. Do sealants, the plastic coating placed on the back teeth, have to be replaced periodically?

Sealants help prevent tooth decay by covering the small pits and grooves of the back teeth, where a high percentage of decay occurs. Because sealants are usually applied to the tops — or chewing surfaces — of the molars, they wear down over time and need to be replaced. In general, sealants last about five years. It is important to have your sealants checked periodically by your dentist for damage (they may be chipped by hard foods) and for regular wear and tear from chewing.

5. Why do experts believe there is a link between gum disease and cardiovascular disease?

Some experts believe that the bacteria causing gum disease can enter the blood stream and cause inflammation and plaque buildup in the arteries leading to the heart and the brain, increasing the risk of a heart attack or stroke. But gum disease is preventable with good oral health and hygiene, so speak to your dentist about the best ways to prevent gum disease.

6. Is there a particular brand of toothpaste a person should buy?

Not necessarily. Look for brands that contain fluoride and are approved by the American Dental Association. Toothpastes that claim to reduce plaque buildup, help decrease sensitivity or whiten teeth have become more popular, but the main ingredient to look for is fluoride.

7. Is tooth decay reversible?

If a cavity is found early, sometimes a dentist can reverse or prevent further decay by applying a fluoride treatment. In general, though, decay cannot be reversed, but it can be stopped and treated (fillings, crowns, etc.) to prevent the decay from worsening. The good news is tooth decay can be prevented with good oral health and hygiene. The American Dental Association recommends that everyone brush at least twice a day and floss at least once a day, and visit their dentist regularly for regular cleanings and exams.

8. Is tooth loss a natural part of aging?

Tooth loss, usually caused by severe tooth decay and gum disease, is not a natural part of aging. In fact, studies show that seniors today keep more of their natural teeth than before. With good oral health and regular visits to your dentist, your teeth can last a lifetime.

Marina C. Cervantes of the Disparities Solutions Center participated in the preparation of these responses.

Risk factors of gum disease

- Heredity
- Poor oral health habits
- Tobacco use and substance abuse
- Diabetes
- Older age
- Decreased immunity, such as that occurring with HIV/AIDS
- Poor nutrition
- Certain medications
- Hormonal changes, such as those related to pregnancy
- Lower socioeconomic status

A closer look

Your mouth is the window to your body's health. The state of your oral health is an indicator of your overall health, which is why daily brushing and flossing are so important. Poor oral hygiene can cause tooth decay and inflammation of the gums. If left untreated, the inflammation can lead to tooth loss, which impacts a person's nutrition, self-esteem and appearance. Inflammation of the gums is also linked to serious systemic illnesses — heart disease and stroke, diabetes, low birth weight babies, osteoporosis and respiratory problems. Tooth decay and gum disease are largely preventable through good oral health habits.



Signs and symptoms

Periodontal, or gum, disease is often silent. People are unaware of its existence until advanced stages when the symptoms can include:

- Red, swollen or tender gums or other pain in your mouth
- Bleeding while brushing, flossing, or eating hard food
- Gums that are receding or pulling away from the teeth, causing the teeth to look longer than before
- Loose or separating teeth
- Pus between your gums and teeth
- Sores in your mouth
- Persistent bad breath or a bad taste in your mouth
- A change in the way your teeth fit together when you bite
- A change in the fit of partial dentures

Source: American Academy of Periodontology

Healing the racial divide in health care

Dr. Joseph Betancourt wrote the book on health care disparities. Now he's trying to erase them.

When Joseph Betancourt was in medical school, he often saw children acting as interpreters for family members who did not speak English. Originally from Puerto Rico, and as the only Spanish-speaking medical student on his team, he had to interpret for hospitalized patients.

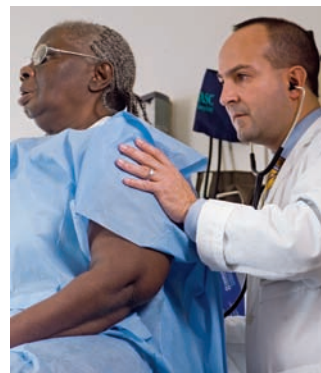
Years later, Joseph Betancourt, MD, MPH, co-authored a landmark study by the Institute of Medicine that found striking inequities in health and health care for racial and ethnic minorities across the US.

When Massachusetts General Hospital president Peter Slavin, MD created the Disparities Solutions Center at MGH, he chose Dr. Betancourt to lead it. "It is time to move from diagnosing the problem to treating it," said Dr. Slavin.

The MGH Center is the first hospital-based Disparities Solutions Center in the country to move disparities beyond research into policy and practice. It has \$3 million in support from MGH and Partners HealthCare.

The Disparities Solutions Center will:

- advise MGH in its efforts to identify and address racial and ethnic disparities in care;
- develop and evaluate customized solutions to



eliminate disparities in the health care community in Boston and beyond;

- educate, train and expand the number of leaders working to end disparities nationwide.

Perhaps most important, the center will transfer what it learns to hospitals and health centers, community groups, insurers, medical schools, educators, government officials, and of course, physicians and nurses across the country.

One of the Center's first efforts is the new Diabetes Management Program at the MGH Chelsea Health Care Center, where more than 50 percent of patients are Latino. Latinos are more likely than whites to die from diabetes complications including kidney failure, blindness, heart disease, and amputations.

MGH Chelsea health professionals will help patients control their diabetes, get regular screenings, and prevent complications through telephone outreach, individual coaching, and group education sessions in English — and Spanish.

Translating talk into action is what Dr. Betancourt has been doing all his life.

More information at Boston Public Health Commission at www.bphc.org

BRIGHAM AND WOMEN'S HOSPITAL

PARTNERS
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Quite naturally, the toddler had four cavities.

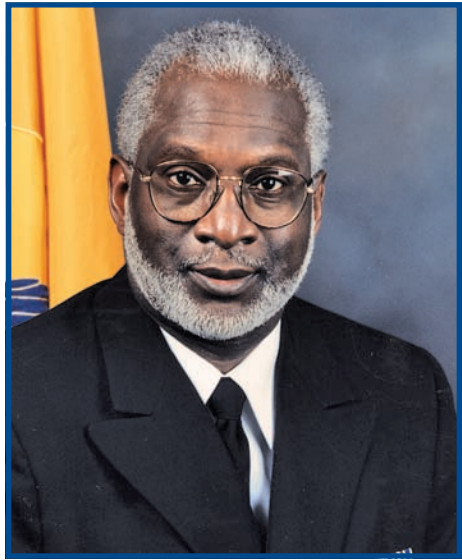
A more common enemy is sugared cereal. "It's the worst," he said. "It has more sugar than M&M's. So every time a child eats sugared cereal for breakfast, it's like giving them candy for breakfast. And kids don't have it just for breakfast — they eat cereal for lunch, snacks and supper."

Colchamiro stresses that although sugar in itself is harmful, the amount of time it remains in contact with the teeth is the key. Chewing gum and hard candies are some of the worst transgressors — they stay in the mouth too long, constantly coating the teeth.

The lack of oral hygiene can also spread into the classroom. According to Colchamiro, pain from tooth decay limits one's ability to learn. Children can lose school days because of dental pain. It can also impact their nutrition and self-esteem.

The news is not all bad, however. The introduction of fluoride to drinking water since World War II has been called by the Centers for Disease Control and Prevention "one of the 10 great public health achievements of the 20th century." For every dollar spent on water fluoridation, as much as \$38 is saved in tooth decay treatments.

Another major achievement is the introduction of dental sealant, a plastic material used to line the pits and fissures of the molars of children where decay is most likely to form. Sealants form a barrier between the surface of



David Satcher, M.D., Ph.D.
Surgeon General of the United States
February 1998 through January 2001

the tooth and bacteria, thereby preventing the onset of cavities. Sealants are 100 percent effective, especially when reapplied periodically.

Massachusetts is doing its part. Almost 60 percent of the state's population receives fluoridated water, and in 2007, 46 percent of third-graders and 52 percent of sixth-graders had at least one dental sealant.

Additional good news is that dental decay is largely preventable through a regimen of good hygiene and lifestyle changes. Brushing the teeth with fluoride toothpaste at least twice a day — in the morning and before bed — and flossing daily can significantly reduce or prevent cavities. Flossing dislodges food between the teeth that a toothbrush cannot reach.

Healthy eating, not smoking and regular exams and deep cleaning by the dentist are also important.

Good oral hygiene should start early. Parents should wipe the gums of their infants with a Q-tip or damp gauze pad, and start brushing their children's teeth as soon as they erupt. Generally, visits to the dentist should begin at age 3, but pediatric dentists hope to first see children around

the age of 1.

After 40 years, Colchamiro still remains positive. "Tooth problems can be prevented," he said.

And that is exactly what Kenya Testamark said she hopes for her daughter, Kanyaree Jones, a fourth-grader at Orchard Gardens K-8 School.

When her daughter brought home papers from the school requesting parental consent, Testamark said she jumped at the chance to provide her daughter with dental care.

Orchard Gardens participates in Smart Smiles, a preventive dental program offered in the Boston public schools. Services are provided by dental health professionals from Boston University Goldman School of Dental Medicine.

"When the school made the offer, I jumped on it," Testamark said. "I welcome any opportunity that improves the health of my child. You benefit

in the long run. They [Smart Smiles] do a good job. You can't ask for more."

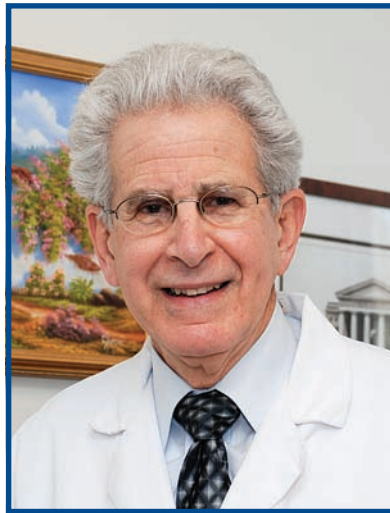
Testamark is 35 years old and knows about the importance of oral hygiene.

She has had teeth removed and now wears removable partial dentures. She brushes after every meal to prevent decay from forming around the clasps.

That's a few minutes every day she says she does not mind taking. But she readily admits that she has to remind her daughter to brush at times.

Colchamiro points out that many parents are strict with their children in terms of daily brushing, especially if they themselves had teeth removed at a young age. They don't want their children to suffer the same consequences.

"She remembers it in the morning, but at night she sometimes forgets," Testamark said. "You have to be on it."



Stephen Alan Colchamiro, D.M.D.
Dental Director
Brookside Community Health Center

Ramos

continued from page 1

The problem is that there usually is no pain. Also, it takes years for this condition to progress. The disease can go into remission and resurface again depending on the strength of the immune system. Sometimes the body can fight it; other times not.

Gum disease starts around the age of 35 to 40.

"Generally, it is estimated that 85 to 90 percent of the adult population has some form of gum disease," said Karimbux.

Some people are impacted more than others. Those who lack access to good oral care and those of lower socioeconomic levels tend to have a higher incidence.

Gum disease is no minor infection.

Periodontitis is not confined to the mouth — the inflammation can enter the bloodstream and wreak havoc on the cardiovascular system. Inflammation is linked to the formation of plaque in the arteries of the heart and brain that can result in a heart attack or a stroke.

Periodontitis is also linked to premature birth, low birth weight and respiratory conditions. Its impact on diabetes is well documented.

"It works both ways," Karimbux said. "Uncontrolled periodontal state can affect diabetes. But deep cleaning of the teeth can improve a diabetic state. It's a two-way street."

Periodontitis is on the rise. The incidence is increasing largely because people are living longer and keeping their teeth longer. Other things happen with age — medications have an impact; the flow of saliva,

which protects the mouth, decreases; and the immune system becomes diminished.

And that is why Elena Ramos has to be particularly vigilant.

For her part, Ramos walks the walk. She makes sure her children — Elizabeth, 4

and Dallas, 6 — get good dental care. Both participate in Smart Smiles at Orchard Gardens K-8 School and receive care from dental health professionals from Boston University Goldman School of Dental Medicine. Smart Smiles is a preventive dental program sponsored by the Massachusetts Coalition for Oral Health.

Ramos herself goes to her dentist regularly for check-ups and cleanings.

And for good reason. Ramos has another problem. About 12 years ago, she was diagnosed with lupus, an autoimmune disease common among women of color.

Lupus is an inflammatory disease that can impact a number of organs in the body, including the skin, joints, heart, lungs, blood, kidneys and brain.

People with lupus are also prone to sores and infections in their mouths. According to the Lupus Foundation of America, about 95 percent of lupus patients suffer from some type of oral health problem, and

periodontitis is one of them.

It's the inflammation that causes concern, especially as Ramos gets older.

Without proper management of cavities and gum disease, Ramos would increase her risk of inflammation and

infection. While a strong immune system tries to fight bacteria, a compromised one — such as one impacted by lupus — is not so successful. In addition, steroids that are used to treat lupus reduce saliva's ability to protect the mouth from bacteria.

People with lupus face an additional problem. While gum disease alone increases the possibility of cardiovascular disease, lupus can do the same.

Ramos is well aware of her risks. She admits that she has experienced swelling

of the gums from time to time, and last year, she was diagnosed with high blood pressure. Fortunately, she has been able to keep her disease under control and she wants to keep it that way.

"I go every three or four months to be examined," said Ramos.

Karimbux adds a note of caution. Periodontitis is not always preventable, but deep cleaning can slow it down.

"Progression can be slowed down with good oral hygiene and regular maintenance appointments with your periodontist (gum specialist)," said Karimbux.

A knack for snacks

The foods you eat have an impact on your oral health. Foods high in sugar and starches combine with bacteria in your mouth to create acid, which can lead to tooth decay and cavities.

SOME SNACKS ARE BETTER FOR YOUR TEETH ...



Fruits



Raw veggies



Low-fat yogurt



Nuts

SOME ARE NOT.



Sugared drinks



Candy



Dried fruits



Desserts

Regardless of your choice of snacks, if you brush after you eat, you reduce your risk of tooth decay and gum disease.

Brush your way to good health

The good news is that cavities and its consequences — infections and extractions — are largely preventable by following a sound regime of oral health. Gum disease can also be prevented or controlled.

- Brush your teeth at least twice a day with toothpaste that contains fluoride.
- Use floss or an interdental cleaner at least once a day to remove food and bacteria between your teeth and below the gum line.
- Have dental sealants applied if applicable to protect the back teeth from bacteria.
- Don't smoke. Tobacco can exacerbate gum inflammation.
- Eat a balanced diet and minimize snacks high in sugar and starches.
- Schedule regular visits to your dentist for professional cleanings and oral examinations.



Free dental screenings

When: Monday, February 9
Where: 2181 Washington Street (Dudley Square)
Time: 9 a.m. – noon
Event: Kool Smiles Children's Dentistry
Call 617-460-1266 for more information

When: Saturday, March 14
Where: Seaport World Trade Center
Time: 10 a.m. – 4 p.m.
Event: Boston Diabetes EXPO
Call 888-DIABETES (342-2383) for more information



Nadeem Karimbux, D.M.D., M.M.Sc.
Assistant Dean
Office of Dental Education
Harvard School of Dental Medicine