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Dentistry for Diabetics™

From Your Dentistry for Diabetics (DFD) Professional
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Informed

The truth about the diabetic & oral care

The Great Healthcare Debate

As this newsletter is being written, the debate over healthcare reform is in full swing. Political parties are pointing fingers. Passions are running high. Citizens all over the country are tuned in – And every ethnicity, age group and region of the United States seems invested in the outcome.

At the center of it all, as you already know, is the question of how healthcare should change to provide the right amount of coverage and care for the largest number of citizens … while lowering costs.

A rapidly aging US population puts diabetes care at the center of the debate. With as many 80 million Americans living with or at risk for diabetes — management and prevention may be one key to lowering costs while improving care for millions. . . .

Did You Know?

For patients with diabetes, 51.6% cite cost as the reason they do not participate in preventive oral care. While just 39.7% of systemically health individuals say cost is their reason.

The Great Healthcare Debate and Diabetes

When it comes to diabetes, the statistics speak for themselves.

- It is estimated that 7% of the United States population, or **20.8 million people**, have been diagnosed with diabetes (another 5.6 million go undiagnosed).
- Another **57 million are at risk** of developing diabetes it.
- According to the National Diabetes Information Clearinghouse (2005), **1.5 million new cases** of diabetes were diagnosed in Americans over the age of 20, **annually.**[1]

What is clear to practitioners, though it may not be clear to our politicians, is that prevention and early detection should play a large role in reducing healthcare costs – especially for those at risk for or living with diabetes.

And so, *Informed* asks the question — with all we know about how oral health impacts the advance and manageability of diabetes – where will dentistry fall in the great healthcare debate? Will more Americans, especially those over 35, begin visiting their dentists more regularly? Will they be referred more often to a dentist specifically trained in the care of diabetes? Will public and private insurers cover oral health treatment?

. . . Who Will Decide?

During the last year, *Informed* has looked at the various connections between diabetes and oral disease. We've reported the latest findings from leading researchers in the field of oral health and diabetes. We've heard from health care practitioners, including cardiologists, dentists and primary care physicians. We've even chronicled policy changes from a leading health insurer that added oral health treatments to their overall healthcare plan – because they were realizing cost savings and patient health improvement when oral disease was addressed as part of an overall health care plan.

In fact, a collaborative study between the University of Michigan School of Dentistry and Blue Cross Blue Shield of Michigan reported 3% - 8% cost savings per individual, who received regular dental care each year compared to those who did not receive preventive or periodontal services.[2]

Carl Stoel, DDS, a senior dental consultant at Blue Cross Blue Shield of Michigan, had this to say about the findings, "So far, we've found that when diabetic patients are good dental patients, there's a substantial savings on the medical side."

Also, according to JAMA, who first reported those results in 2008, the cost savings that were seen were related to the following diabetes-related complications: peripheral vascular disease, coronary heart disease, congestive heart failure, cardiovascular disease, and chronic kidney disease.

These findings seem to suggest – a clear, causal relationship between diabetes and oral health.

Still, a large number of dentists and physicians continue to operate in isolation – treating patients vigorously . . . . But separately.

Check it out

When patients with diabetes were asked if they had ever been told by a health care professional they should take extra preventive oral care measures, 67.7% said "No".

— DIABETES AND ORAL HEALTH PROMOTION: A SURVEY OF DISEASE PREVENTION BEHAVIORS; Journal of the American Dental Association., 2000. Vol. 131, No. 9, 1333-1341.

The question is – why?

Why with the preponderance of evidence pointing so strongly to an integrated treatment program as the most beneficial approach for the patient — do dentists and physicians and internists still segregate their treatment programs?

While you ponder that question, allow us to challenge a few assumptions that may make this scenario still possible in the 21st century.

For many years, both physicians and dentists believed there was no compelling evidence that oral health is a contributor to diabetes. While research often suggested a powerful, two-way relationship between the two, it fell short of directly linking them as risk factors.

However, a 2008 research study out of Columbia University found what is perhaps the strongest evidence yet that oral disease may lead to diabetes. The study, lead by Ryan T. Demmer, PhD, MPH, associate research scientist in the department of epidemiology at Columbia, and Moise Desvarieux, MD, PhD, associate professor in the department of epidemiology at Columbia University, asserts that **periodontal disease may actually lead to diabetes.**[3]

Specifically, the study found that patients with gingivitis (a mild form of gum disease that is often a precursor to periodontal disease) increased their odds for developing incident diabetes by 40% ($P<0.05$). Those odds increased to more than 50% among participants with periodontal disease ($P<0.05$), when compared with periodontally healthy participants.[4] Those results remained, after multivariate adjustment for potential confounders including age, smoking, obesity, hypertension and dietary patterns.

According to the American Diabetes Association

- **Only 37 percent of adults with diagnosed diabetes achieved an A1C of 7%**
- **36% achieved blood pressure target of 130/80 mmHg**
- **Just 48 percent reached the standard for cholesterol – 200 mg/dl**
- **ONLY 7.3% of the diabetic subjects achieved all three treatment goals at once.**

— Standards of Medical Care in Diabetes—2007; Diabetes Care, American Diabetes Assoc. 2007. **Vol. 30 (Suppl. 1); S4-S33**

Demmer went on to conclude that the link between the two diseases may be due to inflammation resulting from the bacterial infections that often contribute to clinical periodontal diseases.

Serge Jabbour, MD, FACP, FACE, associate professor of clinical medicine in the division of endocrinology, diabetes and metabolic diseases at the Jefferson Medical College of Thomas Jefferson University, supported those findings.

Jabbour believes the results from the study by Demmer and Desverieux not new. Rather they are a confirmation of what many research studies have suggested since the first oral health studies back in the 1950s.

Did you know?

. . . Yet, when those subjects were asked the questions, "Does your dentist know that you have diabetes?" 88.8% said "Yes". This suggests that a large number of dentists either are unaware of the increased risk of oral health sequelae associated with diabetes, or they are not counseling patients adequately on the subject.

— DIABETES AND ORAL HEALTH PROMOTION: A SURVEY OF DISEASE PREVENTION BEHAVIORS; Journal of the American Dental Association., 2000. Vol. 131, No. 9, 1333-1341.

For patients with diabetes, 51.6% cite cost as the reason they do not participate in preventive oral care.

While just 39.7% of systemically health individuals say cost is the reason they do not receive regular, preventive oral care.

In the November 10, 2008 issue of Endocrinology Today, Jabbour was asked his opinion of the findings from Demmer and Desvarieux. He said, "These are very interesting data, now adding another risk factor to the long list of risk factors for type 2 diabetes. The results, however, are not completely unexpected, since there was a link between both diseases already discussed in previous studies."

DentistryForDiabetics®, a national organization of dentists trained in the care of patients at risk for and living with diabetes, says that based on clinical observation, treatment for oral health diseases including xerostomia, periodontitis and oral candida is often the missing ingredient in treatment and prevention of diabetes.

In addition, in 2008 began recommending that physicians ask their patients when they saw a dentist last. If it has been more than a year, the ADA suggested the physician recommend the patient for oral evaluation.

What may have prompted that recommendation was the 2008 Congress of the American Diabetes Association. In that meeting, the ADA invited a panel of oral health experts to address the question of the oral health-diabetes connection.

Dr. Maria Ryan, DDS, PhD, professor of oral biology and pathology, and director of clinical research at the School of Dental Medicine at Stony Brook University in New York, who participated in the panel and also presented recommended that collaboration between physician and dentist must be two-way in order to be its most effective.

IN SUM

Whatever the outcome of the healthcare debate, the fact remains that prevention and management are at the core of both cost reduction and improvements in care for the growing population of patients at risk for and living with diabetes.

Physicians and dentists have an opportunity to affect both through a collaborative and syndemic approach to treatment and long-term care.

The question still remains, how can physicians and dentists work together to achieve both outcomes.

Find out what resources are available:

- http://www.diabetes.org/
- http://www.dentistryfordiabetics.com/

1. National Institute of Diabetes and Digestive and Kidney Diseases. National Diabetes Statistics fact sheet: general information and national estimates on diabetes in the United States, 2005. Bethesda, MD: U.S. Department of Health and Human Services, National Institute of Health, 2005.
2. Tracy Hampton. **Studies Probe Oral Health Diabetes Link, JAMA. 2008;300(21):2471-2473 (doi:10.1001/jama.2008.721)**
3. Demmer RT, Jacobs DR, Desvarieux M. Periodontal disease and incident type 2 diabetes. *Diabetes Care*. 2008;31:1373-1379.
4. Ibid.

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