



THE TIPPING POINT IN THE DIABETES PANDEMIC — ARE WE THERE YET?



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In most epidemics, there is usually a moment of critical mass, a threshold, or boiling point. Some call this the “tipping point” — the point in time when something happens to dramatically alter the trend in the incidence of disease. For the pandemic of diabetes we can only hope it has reached its “tipping point.” Diabetes now affects nearly 7% percent of the United States population which includes 21 million Americans, 6 million of whom do not know they have diabetes. This number was recently revised from the 2002 estimate of diabetes by an additional 2.6 million people. Another 41 million Americans are pre-diabetic, which significantly increases their risk of developing type 2 diabetes as well as heart disease and stroke. With the proportion of heart disease deaths resulting from diabetes projected to increase from 21% to 29% over the next 25 years, the fallout on the incidence of cardiovascular related deaths is nothing short of mind-boggling.

For at least a quarter of a century, research on diabetes and its relationship with other diseases and conditions has provided substantial knowledge for the prevention and treatment of the disease and its associated complications. Indeed, getting information about diabetes is not the problem. Governmental agencies have provided the most up-to-date surveillance of related epidemiologic trends, numerous nonprofit organizations have disseminated guidelines on diabetic management, and continuing education courses (both in medicine and dentistry) offer courses on diabetes management on a consistent basis. However, knowledge alone is insufficient for research to be translated and implemented into everyday practice, and this is where we must start. Evidence suggests that physicians are overwhelmed in implementing standards of care for diabetic management. Other research draws into question dentists’ and periodontists’ willingness to become involved with active management of diabetic patients. To that end, affecting a “tipping point” in the diabetes pandemic will require a transformation of the healthcare professions that necessarily begins with a willingness to become involved in the prevention and active management of diabetes. This transformation must be equally embraced in medicine and dentistry.

This issue of *Grand Rounds* is dedicated to jump starting that transformation. Moritz and Mealey’s literature review will help readers develop a greater understanding of the bi-directional relationship between diabetes and periodontal disease, including the role of inflammation, altered host response and insulin resistance in mediating this relationship. Ryan, Carnu, and Tenzler have contributed four case studies that offer excellent recommendations for the care of diabetic patients with periodontal disease. These case studies are graphic illustrations of what happens when the unique needs of diabetic patients are neglected and poignant clinical examples which justify why treatment of periodontal disease in diabetic patients should be covered by medical insurance. And finally, a nurse and dental hygienist (Small and Hein) team up to propose a novel collaborative strategy for prevention. This paradigm shift utilizes a syndemic approach to provide a clearer picture of what forces are causing chronic inflammatory diseases and conditions to cluster together and a blueprint for opportunities for transdisciplinary interventions.

We want to thank the many dental and medical practitioners and members of the industry who have congratulated PennWell on the inaugural issue of *Grand Rounds* released in February. In addition, we are very excited to announce that America’s Health Insurance Plans (AHIP) has requested that articles from *Grand Rounds* be posted on one of their websites, www.HealthDecisions.org. As the voice of the insurance industry, AHIP is a national association representing nearly 1,300 member insurance companies that provide health insurance coverage to more than 200 million Americans. According to Tom Meyers of AHIP, *Grand Rounds* was chosen because of the credibility of its content. We are very pleased and thank AHIP for the opportunity to expand the reach of *Grand Rounds* — yet another way to bring to the forefront the science of oral systemic medicine.

Sincerely yours,

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