



CAN SHARED RESPONSIBILITY FOR PREGNANCY OUTCOMES REVERSE THE LEGACY LINK?



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Evidence to support the link between periodontal disease and the potential for serious consequences to systemic health has provided us with new opportunities for intervention of interrelated inflammatory diseases and conditions. Yet, the opportunity to make the most significant difference may be in addressing “the legacy link”. By applying what we have learned about the association of periodontal diseases and the risk for adverse pregnancy outcomes, we may have the opportunity to touch two lives — the life of the mother and the life of the child. Indeed, the science in support of medical-dental guidelines related to oral healthcare in pregnancy has evolved. These guidelines provide the potential to reverse the risk of adverse pregnancy outcomes for multiple generations, thereby providing a lasting legacy of healthcare.

This holds great promise for the field of obstetrics. With the steady increase of overall preterm birth (PTB) rate in the United States, new models of care are well overdue. Today, about 10% of all births are preterm, with the frequent aftermath of serious functional abnormalities such as asthma, low IQ, cerebral palsy, and poor motor skills which often convey lifelong limitations for premature infants. Approximately one-half of all preterm deliveries present with an unknown etiology. It is hypothesized that maternal infection and inflammation may play a primary role in many of these unexplained preterm deliveries. The imperative for enlisting dental professionals in the fight to extend gestation stems from scientific evidence implicating bacterial organisms associated with periodontal diseases in triggering a cascade of immunoinflammatory events which may eventuate PTB.

What could be the magnitude of impact on the incidence of adverse pregnancy outcomes and prematurity if medical and dental providers began to share knowledge and collaborate to achieve the best possible outcomes of prenatal care? The authors who contributed to this issue of *Grand Rounds in Oral-Systemic Medicine™* are all committed to finding that answer. We are particularly honored to have Dr. Renee Samelson, a highly respected obstetrician, weigh in on the importance of oral health during pregnancy in her guest editorial. Samelson was among those who spearheaded New York State Department of Health’s recently released practice guidelines on Oral Health Care during Pregnancy and Early Childhood, the first guidelines to discuss the role of both medical and dental providers in caring for the oral health of pregnant women. Dr. David Paquette’s cut-to-the-chase review of the literature related to periodontal disease and adverse pregnancy outcomes will provide readers with a comprehensive look at the present state of this research. Case studies contributed by a private practice periodontist, Dr. Steven Kerpen, in collaboration with a highly respected neonatologist, Dr. Adiel Fleischer, demonstrate the rationale for proper oral evaluation and appropriate referral of pregnant women at risk from oral inflammation. And finally, academic nursing and dental hygiene professionals, Witt, Kelly, and Williams, team up to propose a collaborative approach to preconceptional care aimed at decreasing the risk for preterm labor and birth. Their work in this area presents a very compelling rationale for transdisciplinary care specific to obstetrics.

We believe that these authors’ contributions to this special issue of *Grand Rounds* will provide our readers with convincing evidence of the risk periodontal diseases pose during pregnancy, and a vision for future models of care that show promise in dramatically decreasing the rate of adverse pregnancy outcomes. For future generations of women who may be at greater risk for complications of pregnancy, and their offspring who may be at risk for PTB, we must embrace these new models of collaborative care, and with this commitment, perhaps provide one of the greatest promises yet in reversing the legacy link.

Sincerely yours,

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