

Improving oral health care during pregnancy

It is widely known that risks for common oral diseases increase during pregnancy due to physiologic and hormonal changes. The old wives' tale that a woman will lose a tooth for each childbirth is not entirely unfounded. Caries and periodontal diseases are more prevalent in pregnant women and likely contribute to tooth loss during pregnancy. It has also been shown that oral diseases, especially periodontal diseases, are associated with negative pregnancy outcomes such as preterm birth and low birth-weight. Oral bacteria responsible for dental caries are also readily transmissible from the mother to the newborn, which increases the risk of early childhood caries. Access to and utilization of dental care before and during pregnancy and immediately after delivery is therefore critical not only to the mother's oral health but also to the wellbeing of the newborn.

There is ample evidence that preventive and therapeutic dental care during pregnancy is safe, and state and national guidelines for diagnosis and treatment of dental diseases have been established for all stages of pregnancy. Yet we have found a troubling number of pregnant women visiting our urgent care clinic due to complications of untreated dental diseases. In a relatively limited geographic area served by our urgent care clinic, women at various stages of pregnancy make on average 200 emergency dental visits per year due to acute infections associated with caries and periodontal lesions. Tooth extractions are the most common treatment in these patients.

A recent report from the New York State Pregnancy Risk Assessment Monitoring System showed that less than half of the pregnant women received preventive dental care and many visited dentists for a dental problem during pregnancy, especially in racial and ethnic minorities and those who received no college education. Existing and emerging research evidence also indicated that vertical transmission of pathogenic bacteria from mother to child was associated with poor oral health in early childhood.

To improve oral health care of pregnant women and newborns, we have established a specialty dental care clinic that focuses on prenatal and perinatal dental care of the expectant

mother and the newborn. Our mission is twofold: to improve dental service utilization and prevent dental diseases in pregnant women in the prenatal period and minimize the negative effects of oral infectious diseases on pregnancy outcomes; and to interrupt transmission of pathogenic oral bacteria from the mother to the newborn in the perinatal period and minimize the risks of early childhood caries and other transmissible oral diseases.

Barriers to dental service utilization by pregnant women are multifaceted and complex. Besides financial constraints and shortage of dental providers for the underserved population, the lack of awareness of increased needs for preventive dental care during pregnancy may play a major role in the underutilization of available dental services. Though the Medicaid assistance program covers a wide range of preventive and therapeutic dental services for pregnant women, few utilize the program. The classic separation of dentistry from medicine in the United States does not favor an integrated care model that covers both oral health and general health. Health care workers involved in prenatal care, including family physicians, obstetricians/gynecologists, midwives, and nurses, generally lacked training in oral health problems and usually had little or no experience in collaborating with dental practitioners in prenatal dental care.

To allow better integration of dental care into the prenatal care network, it is essential to incorporate oral health into the training programs for all health professionals involved in prenatal care and allow dental care providers to be an integral part of the prenatal care team. We propose that training programs in family medicine, obstetrician/gynecology, and nursing include meaningful rotations in dental urgent care clinics and prenatal dental clinics and add competency requirements in recognizing and managing common oral diseases by the trainees, and that prenatal dental clinics be established in academic dental institutions when feasible and become an integral component of the prenatal care network.

Though guidelines for dental care during pregnancy have existed for many years and such guidelines provide unequi-



vocal evidence that dental exams and treatments are safe throughout pregnancy, many dental practitioners remain uncomfortable or unwilling to treat pregnant women. Besides the obvious reason of doing anything possible to avoid involving themselves in any potential negative pregnancy outcomes, we consider that the root cause for such avoidance is the lack of adequate interprofessional training for dental professionals to competently manage oral diseases in pregnant women. It is therefore important for pre- and postdoctoral dental training programs to include rotations in prenatal dental clinics as part of the special care training curriculum.

In summary, adequate utilization of preventive and therapeutic dental services during pregnancy is essential for oral health outcomes of the mother and the newborn. It takes concerted efforts by all health care providers involved in prenatal and perinatal care to establish an interprofessional model that makes dental care an essential component of the prenatal care network to improve the oral health outcomes of the expectant mother and the newborn.

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