Prenatal Dental Care and Subsequent Preventive Oral Health Care in Urban American Indian and Alaska Native Children

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Purpose: The purpose of this research is to determine if prenatal dental care is associated with a child receiving preventive dental care. The study population is urban American Indian/Alaska Natives (AI/AN) and this population was chosen for study because AI/AN children are known to experience the highest rates of dental disease --five times the U.S. average for children 2-5 years of age.

Methods: Mother /child couples were identified during the calendar years of 2003-2005 from one urban Indian health organization. The study design is a retrospective cohort using a data set of mother/child pairs and claims data. A single record of data was generated with the number of medical and dental visits for each mother-child couple. Of the women who had prenatal medical services during this time period we determined what proportion received prenatal dental care and what proportion of children born to them during the years 2003- 2005 received preventive dental care.

Results: There were 153 AI/AN mother/ child pairs that were included in the study population. A statistically significant association was found between a mother's preventive dental utilization and that of her child. Children were three times as likely to make a preventive dental visit if they had a mother that made a preventive dental visit.

Conclusions: Because of the high rate of dental disease in the AI/AN population, it will be important to document this association of prenatal and dental visits. The mother's role in modifying transmission of dental caries is critical to preventing dental disease. A sound understanding of oral health intertwined in the pregnant mother must continue throughout a child's early years.

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