



Dr. Stephen Silberman and Neva Penton-Eklund are conducting examinations as part of the children's health care initiative.

Research focuses on brighter smiles for kids

Children at childcare centers in Tunica, Greenville and other Delta locations are helping researchers learn more about one of the nation's biggest childhood-health problems—decay in primary, or baby, teeth known as early childhood caries.

By Bob Ratliff

Students at 16 Delta childcare and Early Headstart Centers, along with their parents and teachers, are participating in a two-year oral health care initiative funded by a grant from the federal Agency for Healthcare Research and Quality.

“Children in the rural South face some specific health challenges, including those related to oral health care,” said MAFES social scientist and Social Science Research Center Family and Children Research Unit coordinator Linda H. Southward. “A recent report by the U.S. Surgeon General cited oral disease, especially early childhood caries, as one of the nation's greatest preventable childhood-health problems.”

In the children's oral health care initiative, Southward and Mississippi State University research psychologist Elisabeth Wells-Parker are leading a group of health researchers that includes scientists from the Center for Child Health Research of the American Academy of Pediatrics, the Departments of Diagnostic Sciences and Pediatric Dentistry at the University of Mississippi Medical Center's School of Dentistry, Columbia University School of Dentistry and Oral Surgery, and the Children's Dental Health Project in Washington, D.C.

“The grant makes possible a research network of childcare centers to conduct oral health assessments of preschool children in the Delta,” Southward said. “Some of the country's leading pediatric dentists are consultants for the project.”



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L I N D A S O U T H W A R D

The social scientists and dental professionals have developed a questionnaire for parents and daycare workers to determine behaviors and practices that play a role in early childhood caries.

“A lot of research is available for adults and older children, but there is very little information for preschool children,” said Dr. Stephen Silberman, professor and chairman of the Department of Diagnostic Services at the University Medical Center’s School of Dentistry in Jackson.

Silberman and Dr. Neva Penton-Eklund are conducting examinations of children at the participating Delta daycare centers. Penton-Eklund is an assistant professor of pediatric dentistry at the UM School of Dentistry.

The health-history questionnaire for parents and daycare workers, however, is the first step in making a caries risk assessment, Silberman added.

“We want to find out the parent’s oral health history,” he said. “We’re also asking the parents and childcare center personnel about what the children eat and drink.”

Information on eating and drinking habits is important because prolonged and frequent exposure to sugary liquids such as formula, milk, juice or sodas is a leading cause of early childhood caries.

The results of the research being conducted by the MSU and UM scientists will help parents and other care providers avoid practices that cause caries, according to Columbus dentist Dr. David Curtis, one of the consultants for the oral health care initiative.

“Dental caries is the most prevalent chronic disease of children, five times more common than asthma,” he said. “Oral disease results in more missed school days than any other single chronic disease.”

Curtis, the current president of the American Academy of Pediatric Dentistry (AAPD), added that the daycare center

research is important in educating individuals responsible for children’s oral health care.

“The importance of the research really boils down to intervention and prevention,” he said. “At the AAPD, we believe proper education and training of primary caregivers, including parents, daycare workers and teachers, can result in a significant improvement in oral disease in children, but we need more data to support that supposition.”

The research in the Delta will provide important information for education and training programs, according to Southward.

“Finding ways to prevent health problems before they begin is a primary goal,” she said. “Mississippi has some of the worst health outcomes in the nation, and what we learn here can have far-reaching implications for the state and the nation.”

MAFES social scientist Linda Southward and Dr. David Curtis prepare questionnaires for use in the project.



Jim Lytle