Early childhood is the most rapid period of brain and body growth. A child’s best chance for a healthy, productive future is to ensure that they receive all the care and resources they need for optimal development, which includes both medical care and oral health care. Many people understand that young children need regular check-ups with their physicians, but due to the historically disjointed nature of medical care and oral health care in the United States, people do not always realize that early oral health care is as important as regular medical care. While generally preventable, early childhood caries (ECC) — also known as cavities — is the most common chronic childhood disease and is five times as common as asthma.

Left untreated, caries in primary teeth — colloquially known as ‘baby teeth’ — can eventually result in significant pain and life-threatening infection, which may affect children’s growth and general well-being.

The research presented here demonstrates that young children in Arkansas who face significant barriers to receiving routine preventive dental care are at increased risk of fair or poor oral health, and consequently, costly medical services, including hospitalizations. Ensuring that children and families get connected to an oral health home in infancy and toddlerhood is essential to improving the health of Arkansas children.

**Early childhood caries (ECC)** is the presence of one or more decayed, missing (due to caries), or filled tooth surfaces in any primary (baby) tooth in a child younger than age 6 (≤71 months).
Young children in Arkansas face multiple barriers to receiving oral health care

To understand the connections between young Arkansas children’s access to oral health care and oral health status as well as health care utilization, Children’s HealthWatch interviewed parents of 3,397 children under age 4 years between February 2011 and July 2017. Parents were seeking care for their children in the Arkansas Children’s Hospital Emergency Department and primarily had low or moderate incomes — more than 90% of the children had public or no insurance and 60% of the parents did not have education beyond high school. Families came from all over the state — almost one quarter were from areas outside of the Central region of Arkansas. A significantly greater proportion of mothers of children with fair or poor oral health also had fair or poor oral health themselves (57.3%), compared to mothers’ of children with good or excellent oral health (33.2% of mothers had fair or poor oral health). 5

Controlling for insurance and other demographic factors, compared to children with no parent barriers to oral health care, children with barriers to care had higher odds of fair or poor oral health. (Figure 1)

These research findings demonstrate that there are interrelated barriers to oral health care facing low-income families with young children. They include structural barriers, such as a lack of dental insurance coverage and difficulty finding providers who accept the household’s insurance; and access barriers, including difficulties with providers accepting young children and challenges getting to appointments. Rural households with limited modes of public transportation may have a particularly difficult time with access challenges.

Figure 1
Children with barriers to oral health care had higher odds of fair/poor oral health

Figure 2
Children with fair/poor oral health status more likely to utilize health care system

Bars to Care

The following barriers are answer options that parents selected during the Children’s HealthWatch survey.

Structural Barriers
- No insurance
- Problems with acceptance of dental insurance or insurance coverage
- Couldn’t afford copay

Access Barriers
- Unable to make an appointment because dentist/clinic did not see patients of the child’s age
- Problems scheduling appointment/in-office waiting-time too long/office hours inconvenient
- No dentist in the parent’s area or parent did not know where to go to get care
- No way to get there/transportation issues
- Speaks a different language
- Work or family commitments or administrative/paperwork challenges
Young children in Arkansas with fair or poor oral health have more avoidable health care use

Controlling for insurance and other demographic factors, compared to young children with good or excellent oral health, children with fair or poor oral health were more likely to utilize acute care services. (Figure 2)

Children with fair or poor oral health are at greater risk of being sick enough to be admitted from the Emergency Department and to have had one or more hospitalizations since birth. These types of acute care are essential, costly and frequently avoidable. Wherever possible, efforts to reduce the need for such care should be made. The findings presented here suggest that prioritizing access to routine oral health care in early childhood may prevent the likelihood of ECC, ultimately decreasing the need for more advanced care or emergency room visits. Concomitantly, this would reduce pain, trauma, ill health and expense for children and their families and for the state and health care system as a whole. Routine oral health care has been shown to be related to lower health care costs, including cost from hospitalizations.

Policy Recommendations

To address barriers to oral health care and decrease avoidable health care utilization, we recommend:

1. Health care providers conduct oral health risk assessments for infants by 6 months of age
   - The American Academy of Pediatrics recommends that every infant receive an oral health risk assessment from his/her primary health care provider by six months of age. These assessments can help families understand their child’s risk of developing caries, and offer education on infant oral health. Additionally, the American Academy of Pediatrics recommends application of fluoride varnish in the primary care setting every 3–6 months starting when teeth emerge.

2. Parents establish a dental home for infants by 12 months of age
   - When parents establish a dental home, a child’s dental provider can conduct a thorough oral examination, age-appropriate tooth-brushing demonstration and preventive care and fluoride varnish treatment to protect the child’s teeth. Additionally a dental home helps with assessing a child’s risk of developing caries and setting a plan for preventing them as well as ensuring that children are reevaluated on a regular basis.

3. Communities and schools engage families by providing preventive oral health care to preschool children
   - While the majority of school-based dental programs have focused on elementary aged school children, a program in Massachusetts serving preschool children demonstrated success. The BEST (Bringing Early Education, Screening and Treatment) Oral Health Program provided 47 percent (4,678) of Hampden County’s preschool children with preventive dental care, and 50 percent of enrollees showed good or improved oral health at their follow-up dental visit. This could be a model program for Arkansas preschool children.

   - Preschool and school-based dental programs would address a number of access issues, including the lack of dentists in certain areas or families’ uncertainty where to get care, work or family commitments that prevent dental care visits, and transportation issues.

4. Arkansas policymakers enact reforms that reduce barriers to care
   - Increase adoption and participation of non-dental primary care providers’ application of fluoride varnish for young children with public insurance.

   - Ensure that dental coverage qualifies for subsidies in all state health exchanges as an essential benefit just like medical coverage; this will improve the oral health of children across Arkansas.

   - Arkansas is one of 14 states without a dental school, which results in Arkansas residents who pursue a career in dentistry paying costly out-of-state tuition at other schools and accruing considerable debt. We encourage the legislature to consider either the establishment
of a state dental school, or to expand partnerships with regional dental schools in neighboring states which allows for Arkansas residents to qualify for in-state tuition along with financial incentives to practice dentistry in Arkansas’ high-needs areas following program completion.

- Mandatory school-entrance oral health exams: much like vaccines, some states have enacted policies that require an oral health exam. They recognize that unmet oral health needs can impact a child’s ability to learn. 12 states now have some requirement for a dental certificate for school-aged children.14

Conclusion

Oral health care is vital for the whole body, not just the mouth. When a young child is unable to receive routine oral health care, experiences poor oral health, and requires costly health care interventions, we have seriously failed in our efforts to keep kids healthy.

Without concerted efforts to eliminate barriers to oral health care, the ability of young children in Arkansas to have a healthy childhood is diminished. Health care professionals, child care providers, parents, community stakeholders, policy makers, and insurers must work together to acknowledge and engage in interventions to prevent early childhood caries, avoidable acute care utilization, and poor child health outcomes. A commitment to ensure every infant and toddler in Arkansas is able to receive routine preventive oral health care will benefit the future of all Arkansans.

Sources


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ABOUT CHILDREN’S HEALTHWATCH

Children’s HealthWatch is a nonpartisan network of pediatricians, public health researchers, and children’s health and policy experts. Our network is committed to improving children’s health in America. We do that by first collecting data in urban hospitals across the country on infants and toddlers from families facing economic hardship. We then analyze and share our findings with academics, legislators, and the public. These efforts help inform public policies and practices that can give all children equal opportunities for healthy, successful lives.

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