

PEDIATRIC ORAL HEALTH

Preventive oral health care lags behind the need



BACKGROUND

Left untreated, caries can affect quality of life and academic performance for children. Although the prevalence of caries in the primary teeth of preschoolers is less than in the past, the prevalence of having no caries in the permanent teeth of children and adolescents has not changed. Critical to the reduction of caries in children and adolescents are preventive oral health care, early detection, and proper management. However, significant gaps exist in the access to preventive oral health care for certain subpopulations of children. Healthy People 2020 has stated the objective of improving low-income children's access to oral health care in general, but little is known about the specific preventive care services this population currently receives. In 2016 the National Survey of Children's Health (NSCH) first sought data on the specific preventive services children receive. The prevalence of children's access to preventive oral health care and the receipt of specific services as well as children's oral health status were studied. In addition, associations were sought between preventive health care and oral health status relative to child-level, family-level, and health care-specific characteristics.

METHODS

The data from the 2016 NSCH were analyzed for a population of 50,212 children. Among the outcome measures were parent-reported measures of preventive health care. This included preventive dental visits, prophylaxis performed, instructions given on tooth brushing and oral health care at home, fluoride treatments, and placement of sealants. Measures of oral health status were fair or poor tooth condition and frequent or chronic trouble with carious teeth and caries over the preceding year.

RESULTS

Characteristics of the Population

The sample included about 25% Hispanic or Latino and 13% non-Hispanic black children. About 20% of the children had special health care needs. Fifty-seven percent of the children age 2 to 17 years were privately insured and 31% were publicly insured. Nearly half (about 43%) came from households at <200% of the federal poverty threshold and were considered low-income families. Twenty-nine percent had a high school education or less. Eight percent of the children had a parent in fair or poor general health, while 5% had a parent in fair or poor mental or emotional health.

Preventive health care visits over the past year had occurred for 80% of the population, with 72% having a personal physician or

nurse. With respect to usual source of care for sickness, about 70% went a physician's office and 21% had no specific place.

Oral Health Care Statistics

Parents or caregivers reported that about 82% of the children had a preventive dental visit in the previous year. When specific services delivered to the children were surveyed, 75% had prophylaxis, 44% received instructions on tooth brushing or oral care, 46% had fluoride treatments, and 21% of the children age 6 to 17 years had sealants placed. Oral health care was reported to be fair to poor in 5.7% of the children, and 12% had problems with caries in the past.

Preventive oral health care services were delivered less often to children age 2 to 5 years. The prevalence was less for preventive dental visits in 22%, for prophylaxis in 33%, and for fluoride treatment in 23% when these young children were compared to those age 16 to 17 years. However, prevalence of delivery of services was low for children all ages.

Children with disabilities based on the receipt of medication alone or medication plus increased need for services had a slightly higher prevalence of preventive oral health care than children without disabilities. Compared to non-Hispanic white children, non-Hispanic black children had a lower prevalence of preventive oral health care. Not having health insurance was compared to having private insurance and showed a lower prevalence of

Clinical Significance

Primary care has an important role in supporting the delivery of preventive oral health care. Children who had a personal physician or nurse were more likely to receive a preventive dental checkup and specific preventive dental services than children who had no consistent health care provider. In addition, primary care physicians can come alongside dentists to educate parents about using preventive measures at home, including proper tooth brushing techniques and checking for caries. This would allow early diagnosis in young children, which is associated with better oral health as the child ages. Current care levels are less than desirable for children with lower socioeconomic backgrounds. Dentists should consider the many ways they can work with parents and caregivers as well as primary health care providers to promote access to preventive oral health care for all children.

receiving most preventive oral health care measures. In addition, children with a lower prevalence of oral health care were more likely to belong to a family that had lower household income, lower household education level, and non-English language use in the household. Interestingly, having a preventive dental visit in the previous year was associated with an increased likelihood of having carious teeth or caries.

DISCUSSION

This snapshot of the use of preventive oral health services for children identified several factors that are associated with poor access to care. Included in these factors are age 2 to 5 years, lower socioeconomic status, lack of health insurance, lower income and lower education levels of the parent, non-Hispanic black ethnic group, and not speaking English at home. Having a disability that required medication or an

increased need for help was associated with a higher prevalence of preventive oral health care compared to not being disabled. In addition, having a preventive health care visit and a personal physician or nurse increased the likelihood that the child would have a preventive dental visit and receive specific preventive dental services.

Lebrun-Harris LA, Canto MT, Vodicka P: Preventive oral health care use and oral health status among US children. *J Am Dent Assoc* 150:246 -258, 2019

Reprints available from LA Lebrun-Harris, Office of Epidemiology and Research, Maternal and Child Health Bureau, Health Resources and Services Administration, US Dept of Health and Human Services, 5600 Fishers Ln, 18N-142, Rockville, MD 20857; e-mail: lharris2@hrsa.gov