

Oral Health and Learning

When Children's Oral Health Suffers, So Does Their Ability to Learn

“What amounts to a silent epidemic of dental and oral diseases is affecting some population groups. This burden of disease restricts activities in schools, work, and home, and often significantly diminishes the quality of life.”

Surgeon General David Satcher,
Ph.D., M.D.¹



Lost School Time and Restricted-Activity Days

An estimated 51 million school hours per year are lost because of dental-related illness.²

Students ages 5 to 17 years missed 1,611,000 school days in 1996 due to acute dental problems—an average of 3.1 days per 100 students.³

Children from families with low incomes had nearly 12 times as many restricted-activity days (e.g., days of missed school) because of dental problems as did children from families with higher incomes.⁴

Over one third of Navajo children living on the Navajo reservation in New Mexico and Arizona missed school because of dental-related pain or discomfort.⁵

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Early tooth loss caused by dental decay can result in failure to thrive, impaired speech development, absence from and inability to concentrate in school, and reduced self-esteem.⁶

Students with preventable or untreated health and development problems may have trouble concentrating and learning, have frequent absences from school, or develop permanent disabilities that affect their ability to learn and grow.⁷

Children who take a test while they have a toothache are unlikely to score as well as children who are undistracted by pain.⁸

Poor oral health has been related to decreased school performance, poor social relationships, and less success later in life. Children experiencing pain are distracted and unable to concentrate on schoolwork.⁹

Children are often unable to verbalize their dental pain. Teachers may notice a child who is having difficulty attending to tasks or who is demonstrating the effects of pain—anxiety, fatigue, irritability, depression, and withdrawal from normal activities. However, teachers cannot understand these behaviors if they are not aware that a child has a dental problem.¹⁰



Children with chronic dental pain are unable to focus, are easily distracted, and may have problems with schoolwork completion. They may also experience deterioration of school performance, which negatively impacts their self-esteem.¹¹



Nutrition and Learning

Programs for Improving Oral Health

Left untreated, the pain and infection caused by tooth decay can lead to problems in eating, speaking, and learning.⁹

If a child is suffering pain from a dental problem, it may affect the child's school attendance, and mental and social well-being while at school.¹²

School nurses report a range of oral health problems such as dental caries, gingival disease, malocclusion (poor bite), loose teeth, and oral trauma in children.¹²

When children's acute dental problems are treated and they are not experiencing pain, their learning and school-attendance records improve.¹³

People who are missing teeth have to limit their food choices because of chewing problems, which may result in nutritionally inadequate diets.¹⁴

The daily nourishment that children receive affects their readiness for school.¹⁵

Inadequate nutrition during childhood can have detrimental effects on children's cognitive development and on productivity in adulthood. Nutritional deficiencies also negatively affect children's school performance, their ability to concentrate and perform complex tasks, and their behavior.¹⁶

Oral health care is a critical component of health care and must be included in the design of community programs.¹⁷

Head Start and Early Head Start are examples of programs that provide medical, dental, and nutritional screening, assessment, and referral, and seek to provide every child with the learning experiences necessary to succeed in school.

School-based oral health services can help make preventive services such as fluoride and dental sealants accessible to children from families with low incomes. Services should include screening, referral, and case management to ensure the timely receipt of dental care from community practitioners.⁶

The federal government, through Title V of the Social Security Act, provided the genesis for most state dental public health programs in the country. It is estimated that 90 percent of states' dental programs are funded through Maternal and Child Health Services Block Grants to states.¹⁸

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