

Preliminary assessment of a New England school based dental program

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Background

- Dental disease is the most common chronic illness for children in the United States although it is preventable. 1
- Children ages 2-5 from low-income backgrounds have a 42% higher caries prevalence compared to children from higher-income backgrounds.² Furthermore, 40% of children are detected to have decay by the time they attend kindergarten.²
- Families from low socioeconomic backgrounds with limited access to oral care are less inclined to secure ample oral health care³ and are prone to having more dental complications than wealthier equivalents ⁵. As a result, children in these communities are at an increased risk of caries incidence, caries prevalence and decreased overall health.¹

Introduction to school based dental programs

- School based dental programs are organized across the globe to aid in the improvement of oral health disparities and improve access to care for school-aged children who are high risk. These programs offer variable services, including oral health education (OHE), oral care screenings, diet counseling and preventative services (fluoride varnish and sealants). Programs are usually free of charge within a public-school setting. Furthermore, the resources provide an important network to families and communities.³
- There are numerous studies pertaining to school based oral health programs and the positive effects on oral hygiene, oral health knowledge and decreased caries prevalence:
 - A cross sectional study on first, second and third grade children in Brazil concluded that oral health preventive programs are key towards gaining adequate hygiene habits.⁴
 - A 2017 study performed on kindergarten, third and sixth grade children at a Massachusetts school school-based prevention programs can lead to an increased prevalence of dental sealants among high-risk populations.⁵
 - A 2021 study in Vietnam concluded that school-based settings are effective at providing preventive care than a community-based approach and found school-based oral health education to be successful in achieving improved oral health behavior and dental hygiene status amongst middle school adolescents at a low cost.⁶
 - A two- year double-blind control trial in India concluded that school-based interventions prevent early childhood caries (ECC) in preschool children from very low socioeconomic backgrounds.⁷

Objective: This project aims to assess a school-based dental program located in New England, which includes preventive as well as restorative treatments.

Methods

Study population:

- Students seen at a New England school-based dental prevention program which also included a school based dental clinic between September 2017 and August 2019
- Students were school aged children ranging from 4-18 years old, in prekindergarten through grade 12
- In total, over 3000 students received over 13000 dental treatments during this time frame

Results and data analysis on this project are pending.

Discussion & Conclusions

- Results of this project are pending; however, future research should aim to better understand the role of school-based programs in community health and the impact for minority and vulnerable populations
- School based programs are a valuable community resource because they support eliminating barriers to care, strengthening oral health education, and provide access to important preventive services

References



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