

## Purpose

To assess dental hygiene practices among children aged 8-14 years in an underserved community in the South Bronx, NY. We aimed to identify gaps in oral health behaviors to inform targeted preventive interventions.

## Introduction

- Oral health is critical in school-age children, with proper brushing, flossing, and routine dental visits preventing caries, gum disease, and impacts on speech, and academic performance.
- Preventable oral disease remains prevalent in underserved urban populations due to gaps in education, access, and preventive care.
- Global studies (Jordan, China, Saudi Arabia) report high rates of caries and gingivitis, low flossing and fluoride use, and strong links between poor oral health, socioeconomic status, and limited education.
- The South Bronx faces significant disparities, with predominantly Black and Latino populations and >40% of children living in poverty, contributing to increased oral health risks.

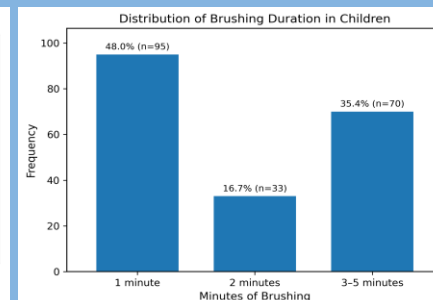
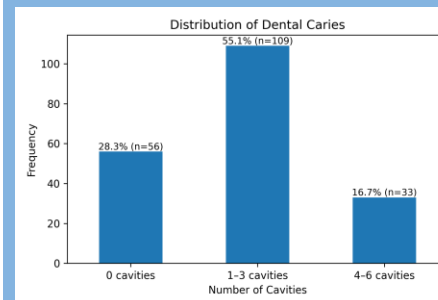
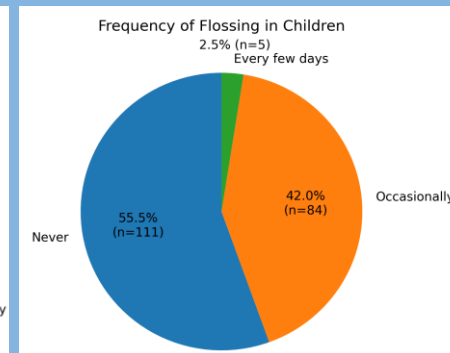
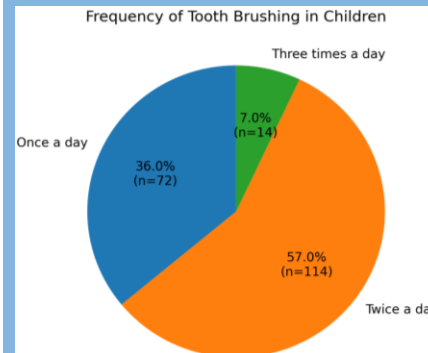
## Methods

- Legal guardians of children aged 8–14 years at BronxCare Health System pediatric dental clinic completed an anonymous survey assessing caregiver demographics and child oral hygiene behaviors over a 6-month period.
- Surveys were administered in English and Spanish.
- Primary outcomes: brushing frequency, flossing frequency, and routine dental visits.

## Results

Demographics (n = 200)

- Mean age of 10 years (SD 1.96)
- 51% were female
- 51% Hispanic, and 36.5% Black/African American
- 60% of caregivers had not completed high school
- 60% of parents report their children visit the dentist at least every 6 months



## Discussion

- In our study, 36% brush once per day and 55.5% never floss, indicating a deficiency in comprehensive hygiene practices, consistent with global trends in underserved pediatric populations.
- Despite 60% reporting routine dental visits, 16.7% of participants had  $\geq 4$  cavities, highlighting unmet preventive needs and reinforcing that access alone is insufficient without effective education and behavior change.
- With 60% of parents not completing high school, limited oral health literacy may contribute to inadequate hygiene behaviors and increased disease burden.
- Findings align with global data and emphasize the need for targeted interventions, including school-based programs, caregiver education, and preventive strategies (fluoride use, flossing instruction).

## Conclusions

- This study focused on a vulnerable population, consisting of a minority-majority demographic, where the majority of parents had not completed high school
- Despite high reported rates of twice daily tooth brushing and routine dental visits, flossing was uncommon among children in this underserved population.
- These findings highlight a gap in oral hygiene behaviors and underscore the need for targeted, income-sensitive interventions.

## Acknowledgments

Special thanks to the families who attend our clinic and took the time to complete this oral hygiene survey and the BronxCare faculty for their support in this research effort.