

# Assessment of Impact of Oral Health in Prior to School Age Children who Migrated to the US with Immigrant Parents versus Prior to School Age Children with Non-Immigrant Parents

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## BACKGROUND

- Social and cultural determinants play a large role in the oral health of immigrant families, especially children.
- Cultural background can affect the motivation of individuals as well as their responses to oral health and their behaviors.
- The immigrant population in the US has been affected negatively by social determinants of health (poverty, food and housing insecurity, health care access and educational attainment).
- Children, aged 0-5, their oral health is affected by their parents' knowledge of diet and caries risk as well as their surrounding environment.

## OBJECTIVES

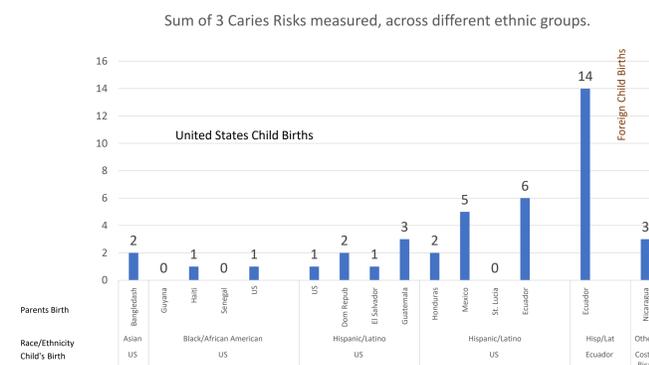
1. Assess the caries risk of children aged 0-5 of children born in a foreign country with immigrant parents compared to children born in the US with immigrant or non-immigrant parents
2. Assess for differences in diet and oral hygiene among the stated population of children

## METHODS

- 9 question survey distributed to parents of patients aged 0-5 at Woodhull Pediatric Dental Clinic in an urban safety net medical center
- DMFT (decayed, missing, filled teeth) score was abstracted from patient's medical record
- Statistical Analysis was conducted using T-testing, Mann Whitney U, Kruskal-Wallis and Friedman testing

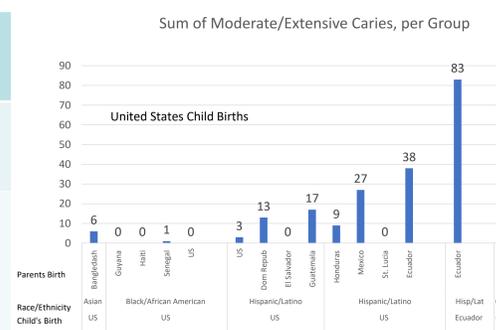
## RESULTS

- Children born in the US were associated with having decreased odds of having high caries risk (DMFT>=1); the mean DMFT score was higher in children that were foreign-born versus US-Born



- The number of caries was significantly higher in children that were foreign-born with foreign-born parents versus children born in the US with foreign or US-born parents
- Increased odds of DMFT score is seen with foreign-born parents but this relationship is not statistically significant

US-Born Parent vs Foreign-Born Parent	p = 0.426 Not significant
US-born child vs Foreign Born Child	p = 0.003 Significant
Foreign born mother and child vs foreign born mother and US born child	p = 0.0005 Significant



- The number of times for toothbrushing and milk intake was not significant depending on the location the child/parent was born (p > 0.05)
- Juice intake was higher in US-born children but not statistically significant (p > 0.05)
- Children that had a caretaker or were in daycare had an increased frequency in toothbrushing behaviors (p = 0.0167)

## DISCUSSION

- The study showed that there is a statistical difference in DMFT score in children aged 0-5 that have immigrated to the US with their parents versus children that were born in the US with immigrant or non-immigrant parents. There is an increased odds ratio of children having a higher DMFT score if the parents are foreign-born, but this is not statistically significant.
- Milk intake, juice intake and toothbrushing frequency were not significant between populations. However, more children who were in daycare/had a caretaker were associated with brushing their teeth more frequently.
- There is a possibility that exposing immigrants longer to US culture or if they were born in the US can have children more responsive to oral health behaviors that have a positive impact on their health.
- One of the limitations of the study was the smaller sample size. Due to the patient population and small time frame, data was only able to be collected from 40 participants. Another limitation is survey bias with the tendency of participants to respond to the study's questions that are not a true reflection of their own beliefs. Recommendations for further studies are recommended.

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