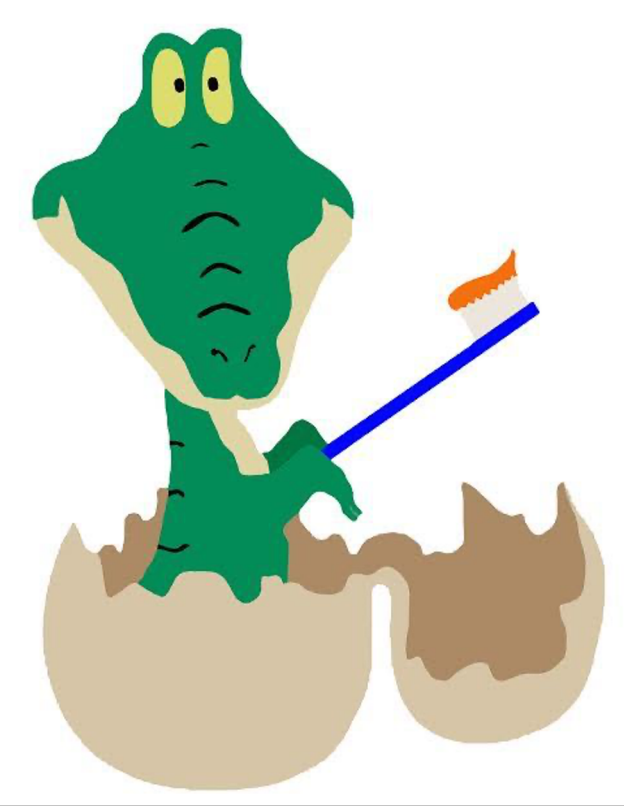


# Retention of Parental Oral Health Knowledge Before and After Educational Intervention

Fischer K, Dávila M, Gorman S, Governale L  
Department of Pediatric Dentistry, University of Florida, Naples, Florida



## INTRODUCTION

- Early childhood caries (ECC) is defined as “the presence of one or more decayed (non-cavitated or cavitated lesions), missing (due to caries), or filled tooth surfaces in any primary tooth in a child 71 months of age or younger.”
- Previous studies have shown a relationship between early childhood caries, pain, missed school time, reduced school performance, missed work for parents and interruptions in activities of daily living.
- About 28% of children ages 2-5 years are affected by early childhood caries.
- Early childhood caries can be prevented through modifiable behaviors such as increasing knowledge about caries and promoting healthy home habits.
- A recent study conducted using a promotora model showed an impact in the parent's knowledge regarding their child’s oral health.
- Specifically, using a promotora model for parent's oral health education has shown that education is one of the main tools to increase parent's knowledge.
- There are a limited number of studies assessing the retention of oral health knowledge.

## OBJECTIVE

- The purpose of this study was to determine the retention of oral health knowledge of the parents of children who had a dental appointment at Naples Children Education Foundation (NCEF) Pediatric Dental Center before and after an educational Intervention.

## MATERIALS AND METHODS

- Study type: Quasi-experimental design
- Setting: Naples Children Education Foundation (NCEF) – Pediatric Dental Center
- Participants: Ninety-two (92) parents completed the first questionnaire and 69 completed the questionnaire after the educational intervention
- Questionnaire: A 5-item questionnaire was administered before and 3-6 months after the educational intervention. The questionnaire was designed to explore what parents knew and retained about the etiology of caries, caries transmission and the prevention of caries
- Selection Criteria: Parents who had a child less than 6 years of age who was a patient at the NCEF-Pediatric Dental Center was selected for the study.
- Descriptive analysis of the variables and mean comparison analysis was conducted using SPSS version 27.0.
- Approved by the University of Florida Health Science Center (IRB Protocol #IRB202002836

## RESULTS

Demographics	Frequency	Percentage (%)
<u>Age</u>		
≤ 2yo	14	15
3-4 yo	44	48
5-6 yo	34	37
Total	92	100
<u>Caries Risk Assessment</u>		
High	78	85
Moderate	10	11
Low	4	4
Total	92	100

Table 1. Baseline Demographic Information

Knowledge by Question	Frequency (%) <u>Before</u> <u>Intervention</u>	Frequency (%) <u>After</u> <u>Intervention</u>
<b>Cavities are caused by germs</b>		
Yes	59 (64%)	61 (90%)
No/Unsure	33 (36%)	7 (10%)
<b>A child should stop drinking from a baby bottle by age 1 year</b>		
Yes	63 (69%)	62 (91%)
No/Unsure	29 (31%)	6 (9%)
<b>Baby teeth are important</b>		
Yes	67 (73%)	68 (99%)
No/ Unsure	25 (27%)	1 (1%)

Table 2. Knowledge of Parents/Guardians Before and After Intervention by Question

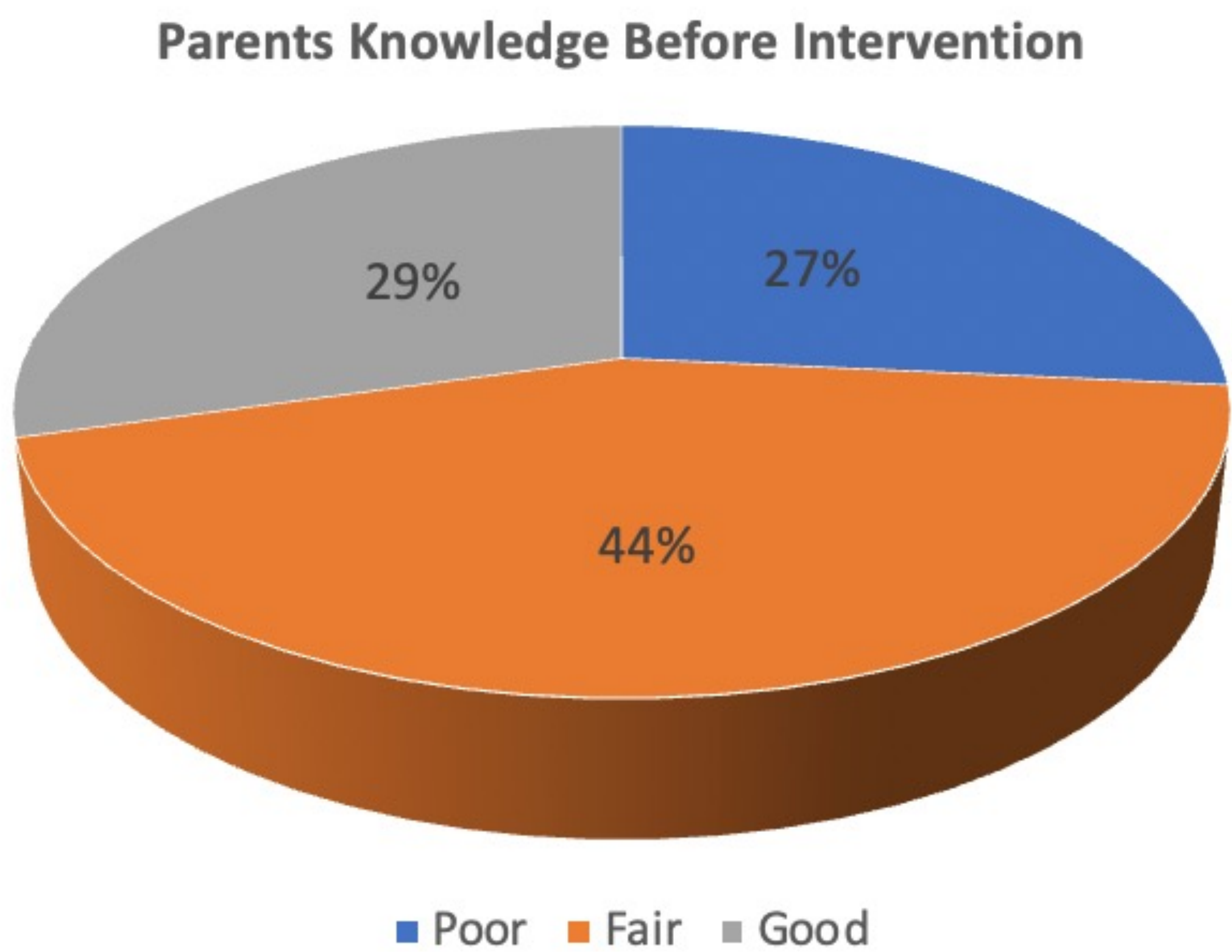


Figure 1. Total Knowledge Before Intervention

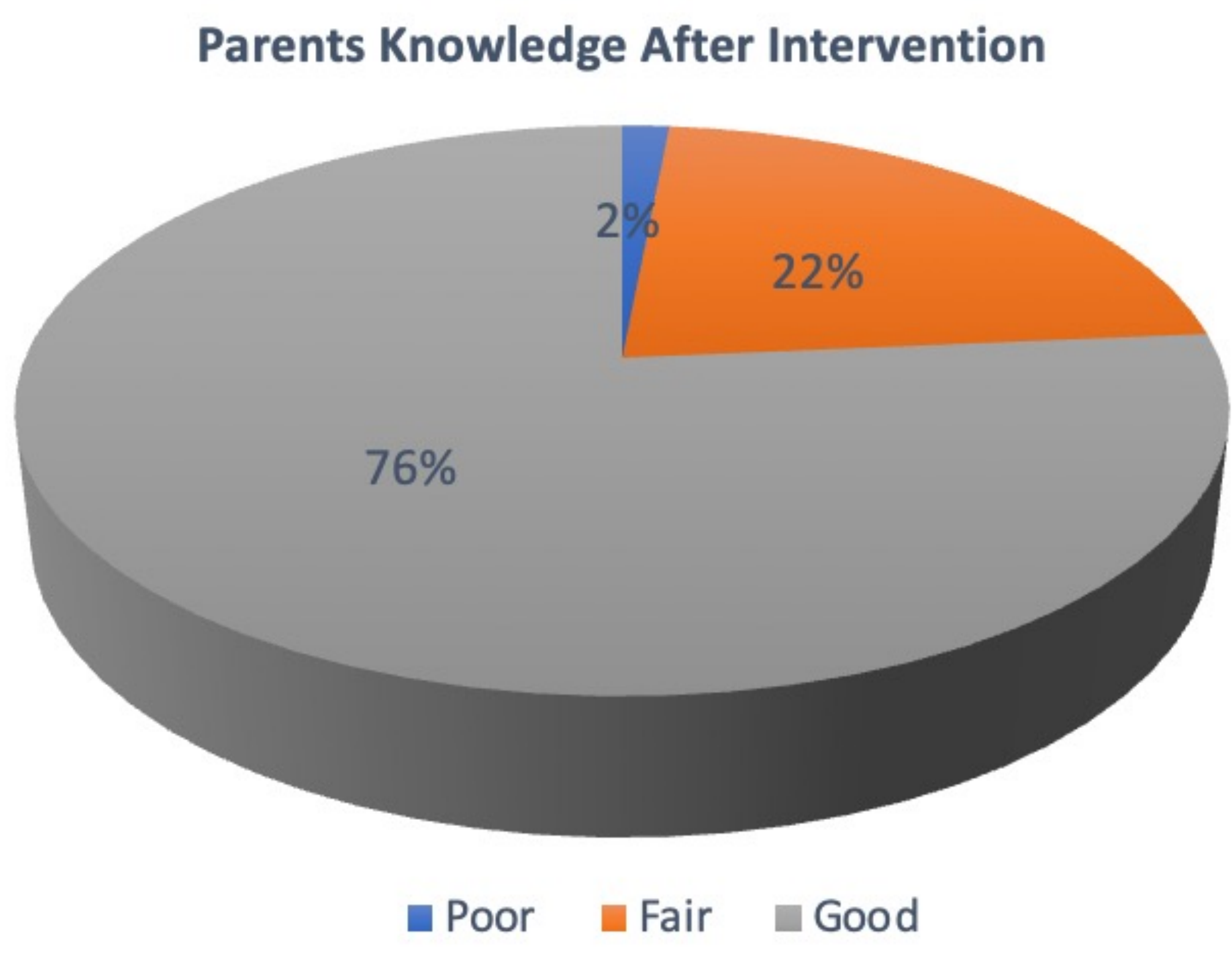


Figure 2. Knowledge After Intervention

Retention of Parental Knowledge	Mean (±SD)	95% Confidence Interval of the Difference	t-Test	p-value
Before/ After Intervention	-1.265 (±1.180)	-1.60, - 0.97	-8.841	0.000

Table 3. Mean Comparison Before and After Intervention

## CONCLUSIONS

- There was an improvement of the retention of oral health knowledge following the educational intervention
- Majority of parents had good oral health knowledge following the educational intervention
- There was a statistically significant difference in the retention of oral health knowledge of the parents/guardians before and after the educational intervention
- There is a need to continue providing oral health education to parents of children at the NCEF Pediatric Dental Center that are at high risk for caries