



INTRODUCTION

- The American Academy of Pediatric Dentistry suggests a child's dental home should be established by 12 months of age to address anticipatory guidance, prevention, acute or comprehensive oral health care⁽¹⁾.
- The behavior and reaction exhibited by young children at first dental visits is variable. Studies have shown that parent's dental knowledge and responsibility-taking differed between children who were uncooperative for dental visits and those who were cooperative⁽²⁾.
- Child behavior is classified to determine a management approach for the patient's care. The Modified Frankl Behavioral Rating Scale (MFBRs)⁽³⁾ is considered the gold standard for behavior classification. It consists of a four-point scale with two degrees of positive behavior and two degrees of negative behavior⁽³⁾.

OBJECTIVE

- To determine if parent knowledge and attitude towards dental care is related to their child's behavior during their first dental visit at Naples Children and Education Foundation (NCEF) pediatric dental clinic.

MATERIALS AND METHODS

- Convenience sample of 115 randomly selected 3–8-year-old children and their parents who attend dental first visits at the NCEF pediatric dental clinic.
- Inclusion criteria: healthy children and their parents/guardian who present for their initial dental visit at NCEF pediatric dental clinic between May 1, 2021, and December 1, 2021.
- Exclusion criteria: children with special healthcare needs, children presenting to NCEF for their first dental visit related to trauma or an emergency, children presenting to NCEF for an initial visit who were referred from a different dental provider.
- Prior to the appointment, parent completed a survey consisting of 12 questions to collect information on parental demographics, dental knowledge, and parental dental attitude.
- Child's behavior rating for the appointment was determined by the pediatric dental resident who performed the dental evaluation. Providers were randomly assigned and were not study investigators.
- After first visit appointment, sociodemographic information and child behavior rating on the MFBRs were collected from the child's dental chart
- Data was analyzed using Statistical Package for Social Science (SPSS), Version 27.0. Descriptive and bivariate analysis was conducted. Logistic regression analysis was used to identify the main predictors for child behavior.

Table 1: Baseline Demographics of Patient and Parent

Demographics	Frequency (%)
Patient Gender	
Male	51 (44%)
Female	64 (56%)
Parent Gender	
Male	23 (20%)
Female	92 (80%)
Patient Age (in months)*	
Less than 48	53 (46%)
48–59	21 (18%)
60–71	11 (10%)
72+	30 (26%)
Parent/Guardian Age	
= <25	12 (10%)
26–31	43 (37%)
32–37	29 (25%)
38+	31 (27%)

*Children mean age in months (\pm SD) = 56.72 (\pm 23.11)

*Parent/guardian mean age in years (\pm SD) = 33.01 (\pm 6.46)

Parent Dental Knowledge	Frequency (%)
Good	43 (37%)
Fair	43 (37%)
Poor	29 (25%)

Table 3: Parent Overall Dental Oral Health Knowledge Score

RESULTS

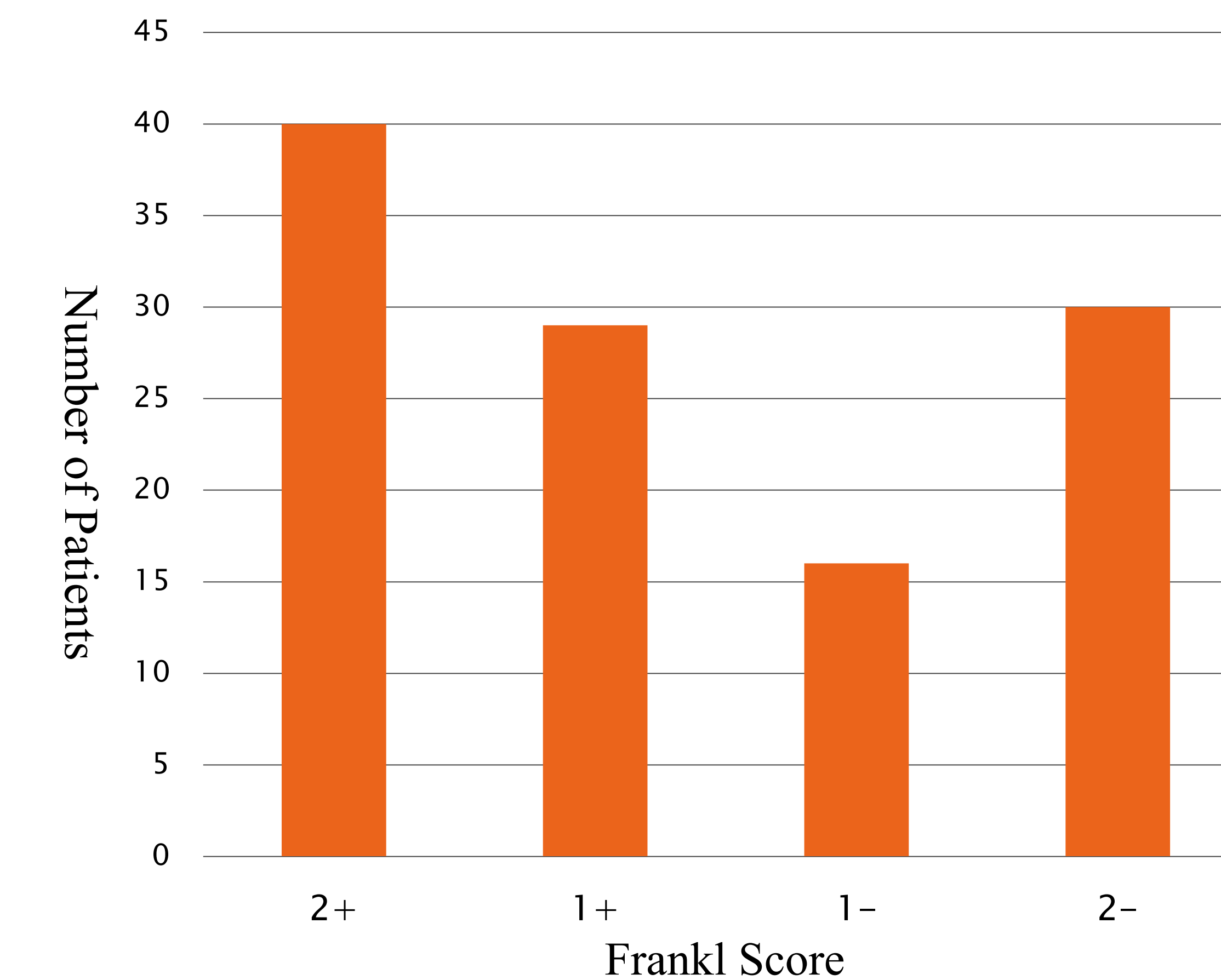


Figure 1: Patient Behavior Based on Frankl Behavior Scale

Variable	Value Chi-Square	df	P-value
Patient Age	21.19	9	.012
Parent Dental Attitude	12.97	6	.043
Parent Past Dental Experience	35.33	9	0.00

Table 4: Bivariate Analysis to Determine Predictors of Child Behavior

Survey Questions	Frequency
Parent Dental Anxiety	
High	14 (12%)
Moderate	40 (35%)
Low	61 (53%)
Parent Dental Fear	
Yes, Very Afraid	2 (2%)
Yes, Slightly Afraid	21 (18%)
No, Not Afraid	68 (59%)
Neutral	24 (21%)

Table 2: Parental Responses for Overall Dental Fear and Anxiety

Predictor Variables	Odds Ratio (OR) Estimate	95% Confidence Interval (CI)
Patient Age	1.03*	1.01–1.05

* Reference Group: Lower patient age (in months)

Table 5: Predictors for Child's Behavior at First Dental Visit Using Multiple Logistic Regression Analysis

CONCLUSIONS

- This study did not find a significant relationship between child's behavior at the first dental visit and the level of parent dental health knowledge
- Previous parental dental experience was found to be a predictor for child's level of cooperation
- The association between age of the child and behavior at the dental visit was significant