UTHealth Houston School of Dentistry

Purpose: The purpose of this study was to explore the relationship between parental acceptance of protective stabilization (PS) for patients with special healthcare needs (SHCN) compared to healthy children, and to understand factors that influence parental perceptions and acceptance of PS. Methods: Parents completed a survey regarding demographic information, the acceptance of PS under different circumstances after watching a video of its use, and if their opinion changed after viewing an explanation of the objective and selection criteria for PS. Parents were asked if their acceptance of PS was influenced by treatment urgency, child's medical complexity, fear and anxiety, and cooperation. An open-ended question allowed parents to share any concerns about PS and barriers to dental care for their child. Statistical analysis with ANOVA was completed. P<.05 was considered significant. **Results:** Eighty-nine parents participated in the study. PS was more acceptable for ages 13-18 compared to ages 3-6 (P<.001) and ages 7-12 (P<.05). Parents of children with PS experience were more accepting (P<.05) and 42/89 parents stated their opinion of PS improved after the video explanation. Conclusions: Parental acceptance of PS varied based on prior PS use and circumstances such as type of treatment, patient's age, fear, and cooperation. Demographics and the child's health status did not significantly influence acceptance. Parents should be provided a thorough explanation of PS and its indications for better understanding.

BACKGROUND

- Practicing behavior guidance techniques (BGTs) with children with SHCN can be challenging in the dental setting. Several factors contribute to this difficulty and can cause the child to practice resistance against the dental staff, making it difficult to complete treatment conventionally.¹
- Protective stabilization (PS) is an advanced BGT that involves restricting the patient's mobility to decrease the chance of injury while completing treatment. The utilization of this BGT remains controversial
- A study revealed that the use of a Papoose board during dental procedures had no significant effect on vital signs (blood pressure, heart rate, and oxygen saturation).¹
- Another study found that PS use can soothe SHCN children. When anxiety is induced, PS is considered a sensory adaptation technique that utilizes deep touch pressure to comfort and stabilize patients.²

The purpose of this study was to evaluate parental acceptance of protective stabilization in pediatric dentistry, identify factors that affect its acceptability and compare acceptance rates between parents of healthy children and those with <u>SHCN</u>

METHODS

- This study was approved by the UTHealth Houston Institutional Review Board.
- Parents were shown a vignette of protective stabilization use an to rate the acceptability of the BGT using a visual analog scale
- Parents were asked to rate acceptability using four factors (Figu if their child had prior experience with PS.
- There was a free response section which allowed parents to express any concerns with the BGT and if they had a SHCN child, what barriers they faced, if any, in finding dental care.
- At the end of the survey, parents watched a video explaining indications, objectives, and precautions to PS use then was asked if their opinion improved, stayed the same, or worsened.
- Statistical analysis with ANOVA was completed; P < .05 considered significant.

Figure 1: Visual Analog Scale

2	

Not Acceptable

Dental treatment	Age of child	Fear/Anxiety	Cooperation
Recall	<2 y.o.	None	Freely cooperates
Planned restoration	3-6 y.o.	Minimal	Cooperates w/ prompting
Urgent care	7-12 y.o.	Moderate	Uncooperative
	13-18 y.o.	Severe	

Figure 2: Parents were asked their acceptance of PS based on these factors

Factors Influencing the Parental Perceptions and Acceptance of Protective Stabilization

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ABSTRACT



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(Figure 1).
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Visual Analog Scale

Completely Acceptable

fear, and cooperation.

Urgent care vs Recall

Ages 13-18 vs Ages 3-6

Ages 13-18 vs Ages 7-12

None vs Severe

Minimal vs Severe

Uncooperative vs Freely cooperates

Uncooperative vs Cooperates w/ prompting

Fear/Anxiety Level

Cooperation of Child

These results are significant for providers, as it is important for them to understand parents' concerns about these BGTs and what influences their acceptance of them.

A majority of parents' views on PS improved after a detailed explanation of its indications and objectives. Thus, providers should take the time to thoroughly explain unfamiliar BGTs and treatments.

Limitations:

<1e-04

< 0.001

< 0.0209

0.00125

0.00938

<1e-04

<1e-04

- Small sample size
- The Hispanic population was categorized into English- and Spanish-speakers, potentially overlooking distinctions among those who spoke both languages.

Further research should focus on obtaining a larger sample size for each ethnicity and SHCN, as well as other factors that could influence parental acceptance.

CONCLUSIONS

1. Parental acceptance of PS varied based on prior PS use and circumstances such as type of treatment, patient's age,

2. Demographics and the child's health status did not significantly influence acceptance. 3. Parents should be provided a thorough explanation of PS and its indications for better understanding.

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