

Provider Confirmation Reduces Parental/Guardian Anxiety Prior to Oral Sedation Appointments

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Background

Fear and anxiety regarding oral conscious sedation (OCS) for dental procedures are common among parents and guardians of pediatric patients. Elevated anxiety levels can adversely affect parental decision-making, compliance, and overall satisfaction with the dental care process. Additionally, high parental anxiety can contribute to increased anxiety and discomfort in pediatric patients, potentially complicating the sedation process itself.

Effective communication between healthcare providers and parents/guardians has been shown to alleviate anxiety across various medical and dental settings. Studies suggest that pre-operative counseling, particularly when individualized and delivered by a familiar provider, can significantly reduce patient and parental anxiety^[1,2]. However, research specifically examining the impact of provider confirmation calls prior to OCS appointments in pediatric dentistry is limited.

Purpose

The purpose of this study is to determine whether provider confirmations prior to oral sedation appointments can reduce parental/guardian anxiety.

Methods

This study utilizes a prospective, pre-post survey design. A total of 73 parents/guardians of pediatric patients scheduled for OCS at a pediatric dental residency clinic in Hazel Park, MI were surveyed via telephone by the PI prior to their child's appointment.

During the telephone survey, parents were asked to rate their own fear and anxiety on a scale of 1-7 (1 = low/none, 7 = high). Following the initial rating, parents were provided the opportunity to ask questions and express concerns related to OCS, which were addressed by the PI. Parents were then asked to rate their anxiety level a second time using the same 1-7 scale. Demographic information including parent's age, gender, child's age, and gender were collected. Participants were deidentified, and responses were assigned a participant ID number at the initiation of the survey. No master list was maintained to ensure confidentiality.

Data was analyzed using paired t-tests to compare anxiety scores before and after the confirmation call. Stratified analyses was performed based on child's age, child's gender, parent's age, parent's gender, whether their child had previously undergone sedation, and number of questions asked during the phone call.

Results

Parent and Child Demographic Characteristics			
Variable	Mean (SD)	Range	
Child Age	3.86 (0.90)	3 to 6	
Parent Age	30.9 (5.35)	20 to 44	
# of Questions Asked	0 (78.1%), 1 (9.6%), 2 (8.2%), 3 (4.1%)		
Child Gender	Male: 31	42.47%	
	Female: 42	57.53%	
Parent Gender	Male: 11	15.07%	
	Female: 62	84.93%	
Child's First Sedation	Yes: 57	78.08%	
	No: 16	21.92%	

t=9.10, p<0.0001

The mean is lower for post-conversation anxiety levels, which suggests that anxiety decreased after the provider confirmation call.

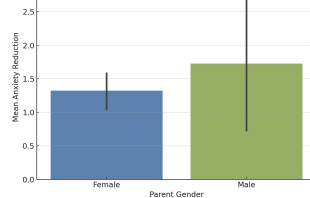
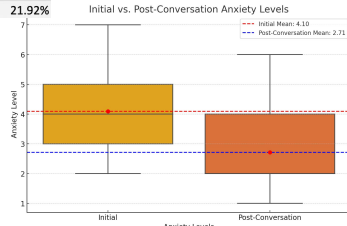


Male parents/guardians showed a greater reduction in anxiety than females, suggesting a greater benefit from the provider confirmation call. However, there is no statistical significance.

p=0.495

Correlation between # of questions asked and anxiety reduction: not significant (r=-0.039, p=0.747)

Correlation between child having previously undergone OCS and anxiety reduction: not significant (r=0.058, p=0.624)



Discussion

The results of this study support the hypothesis that provider confirmations prior to oral sedation appointments can reduce parental/guardian anxiety. After speaking with their child's sedation provider, parents generally reported lower anxiety levels, as evidenced by statistically significant reductions in anxiety ratings (t=9.10, p<0.0001).

The observed reduction in anxiety is consistent with previous research highlighting the importance of pre-procedural communication and reassurance. Şenol, et al.^[1] found that providing detailed information and addressing concerns directly led to improved parental satisfaction and reduced pre-operative anxiety. Similarly, Afzal, et al.^[2] demonstrated that standardized pre-operative communication effectively minimized parental anxiety in pediatric surgical settings.

Future research could expand upon these findings by exploring the impact of additional communication tools such as written resources, multimedia education, or follow-up calls. Additionally, stratifying results based on demographic characteristics, such as the child's age and medical complexity, may provide deeper insights into the most effective methods for anxiety reduction.

Conclusions

The findings of this study suggest that implementing provider confirmation calls as part of routine pre-sedation protocols could significantly improve the parent/guardian experience in pediatric dental clinics. By actively addressing parental concerns and providing reassurance prior to appointments, providers can reduce anxiety, enhance communication, and increase overall satisfaction. Improved parental confidence may also contribute to smoother procedural experiences for pediatric patients, potentially enhancing the effectiveness of oral sedation.

Incorporating this approach into standard practice may be beneficial for anxious parents, which in turn may help reduce their child's anxiety^[3]. Training residents and dental providers to consistently implement pre-appointment confirmation calls could be a low-cost, high-impact intervention that benefits both patient care and parental satisfaction. Additionally, this interaction provides an opportunity for providers to clarify misconceptions and emphasize safety measures, which are essential components in building parental confidence.

References

1. Şenol S, et al. 'Preoperative information helps my child and I experience less anxiety and fear': A grounded study examining parents' opinions and expectations. *Journal of Pediatric Nursing*. 2024; Nov-Dec 79: e86-e92.
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3. American Academy of Pediatric Dentistry. Behavior guidance for the pediatric dental patient. The Reference Manual of Pediatric Dentistry. Chicago, Ill.: American Academy of Pediatric Dentistry; 2024:358-78.