



Conscious Sedation Training Versus Practice Amongst Recent Pediatric Dental Graduates

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Background

- Patients presenting with dental fear and anxiety is especially common in the pediatric population. Pediatric Dentists are trained in a variation of techniques that are used to manage these patients. In cases where a child is not receptive to non-pharmacological techniques, sedation can be incorporated as a supplemental form of management. Sedation can help increase cooperation, reduce anxiety and discomfort associated with dental treatment.
- Pediatric dentists receive training in sedation during their specialty education training, but evidence suggests that the extent of those experiences may vary widely among training programs.¹
- Findings suggest that the location of practice, quality of sedation training received in residency, and comfort level could significantly influence whether pediatric dentists are utilizing sedation.
- A survey from 2011 was conducted, which examined the thoughts of program directors and students regarding sedation training in advanced pediatric dentistry programs. The study concluded that strategies needed to be created to strengthen consistency of competency in sedation practices across academic training programs.¹
- Nevertheless, there has been no recent data that directly compares conscious sedation utilization immediately post-residency to those who have been in practice.
- The aim of this study is to examine if there is a relationship between the sedation training received in residency and whether it influences using sedation as a management technique afterwards while in practice.

Objectives

- Describe what practicing pediatric dentists' were taught in residency, attitude towards their training, and comfortability with emergency management
- Determine whether these factors are associated with how pediatric dentists choose to practice today
- Analyze trends in pediatric sedations for those who are utilizing it in their practice

Results

Table 1. Demographic Data

		# of Responders	%
Gender	Female	115	55%
	Male	95	45%
Age (years)	20-29	19	9%
	30-39	159	76%
	40-49	30	14%
	50-59	2	1%
Training program	Hospital-Based	123	59%
	University-Based	87	41%
Region of current practice	Northeastern	48	23%
	Southeastern	44	21%
	North Central	31	15%
	Southwestern	49	23%
	Western	38	18%

- A chi-square test of independence showed that there was no significant association between gender and practicing forms of sedation today, $X^2(1, N = 210) = 1.284$ $p = .2571$.
- The proportion of respondents who reported utilizing sedation in their current practice did not differ by program type $X^2(1, N = 210) = 0.006$ ($p > .05$).
- The results showed a significant correlation between those who were practicing in the Southwest region and those who were currently practicing sedation in their workplace. The relation between these variables was significant, $X^2(1, N = 210) = 10.22$; $p = .001$.
- Respondents who trained most frequently with oral sedation in residency were found to significantly be associated with using mostly oral sedation while in practice ($X^2(1, N = 143) = 17.16$, $p < .05$).

What level of sedation are you practicing? (Select all that apply)

Total respondents (N= 143)

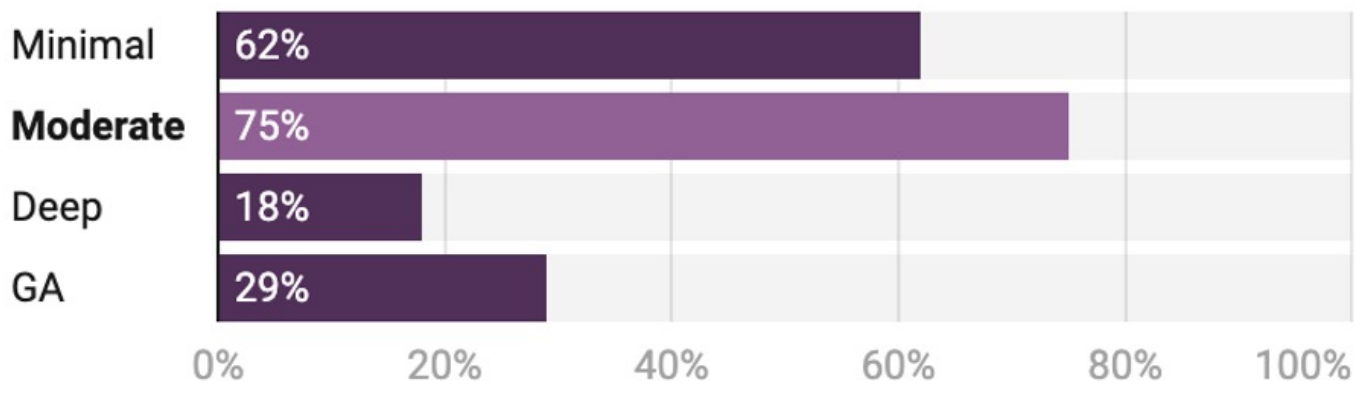


Figure 2.

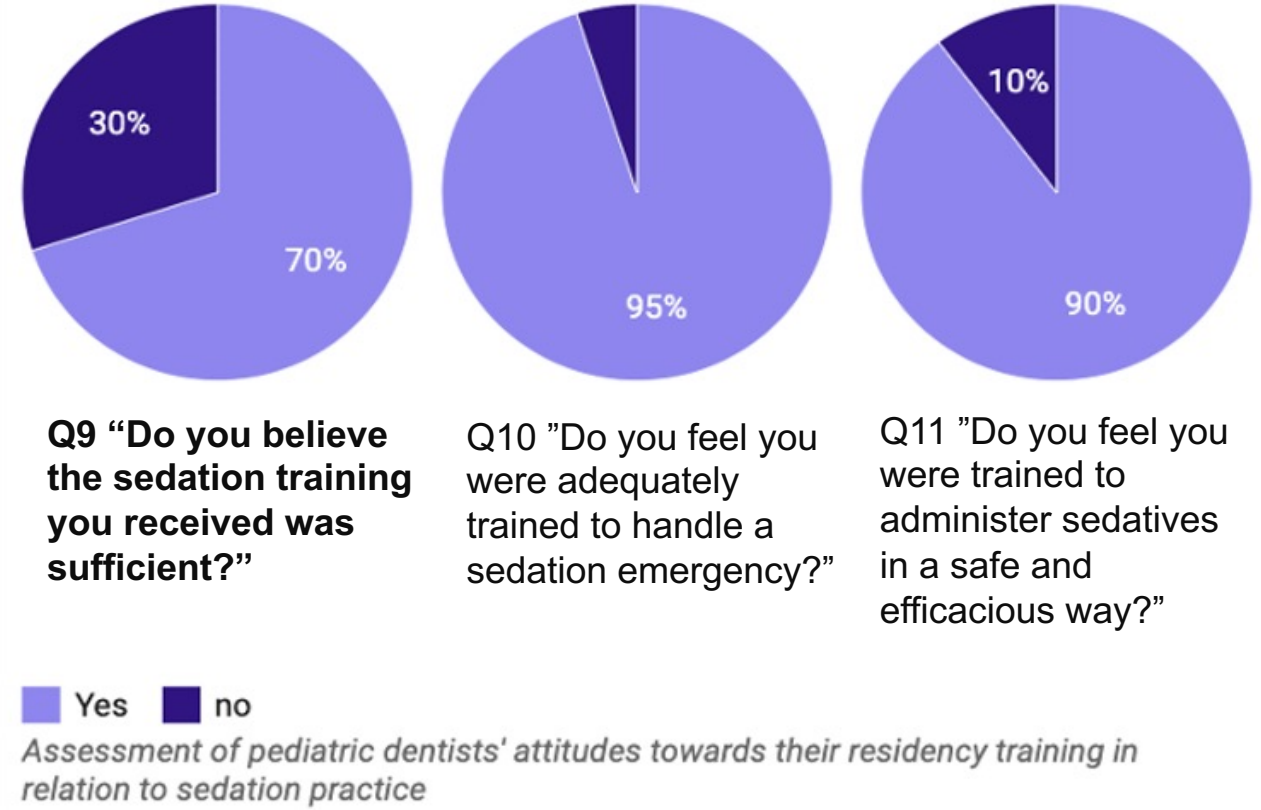
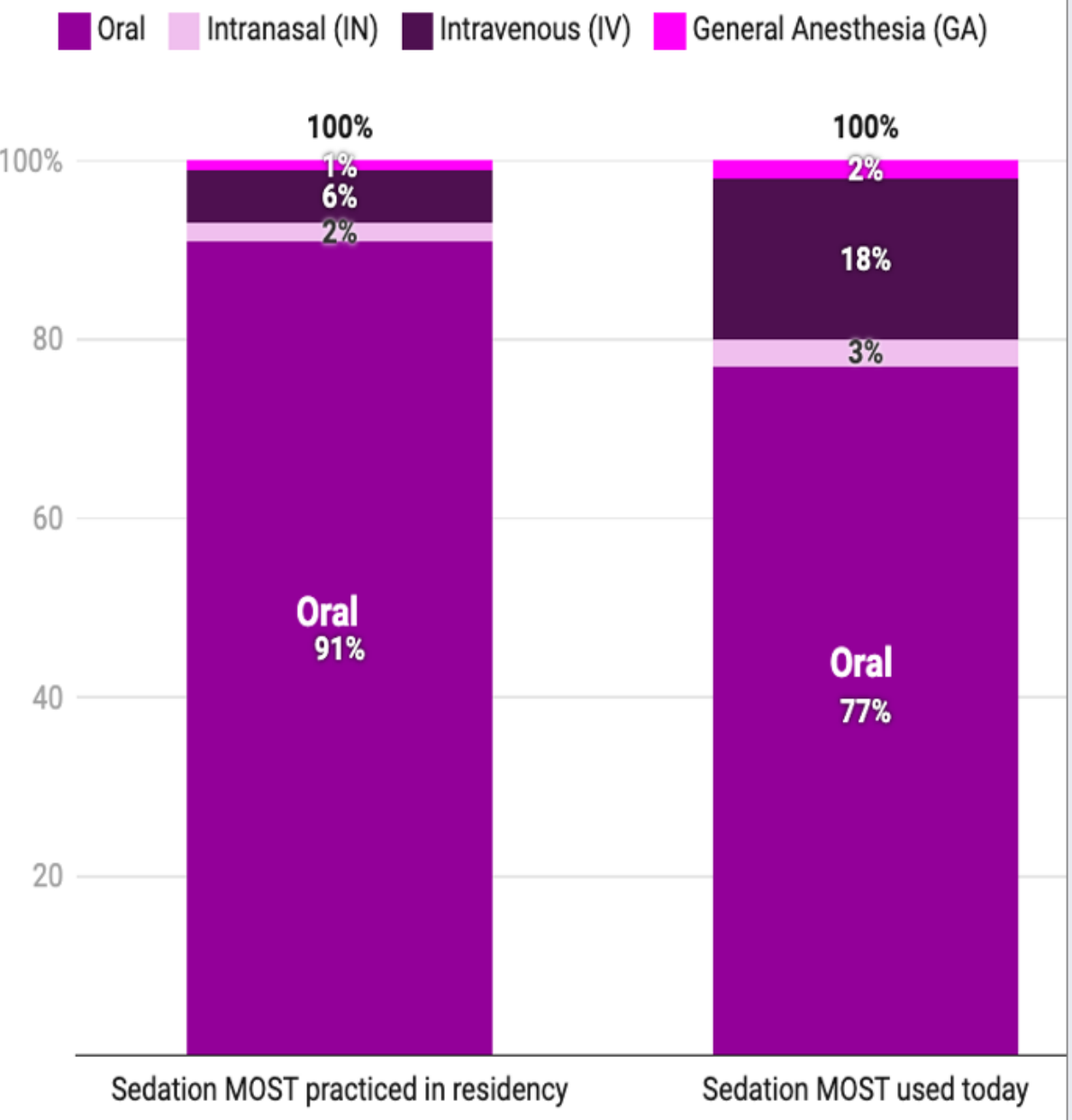


Figure 3.

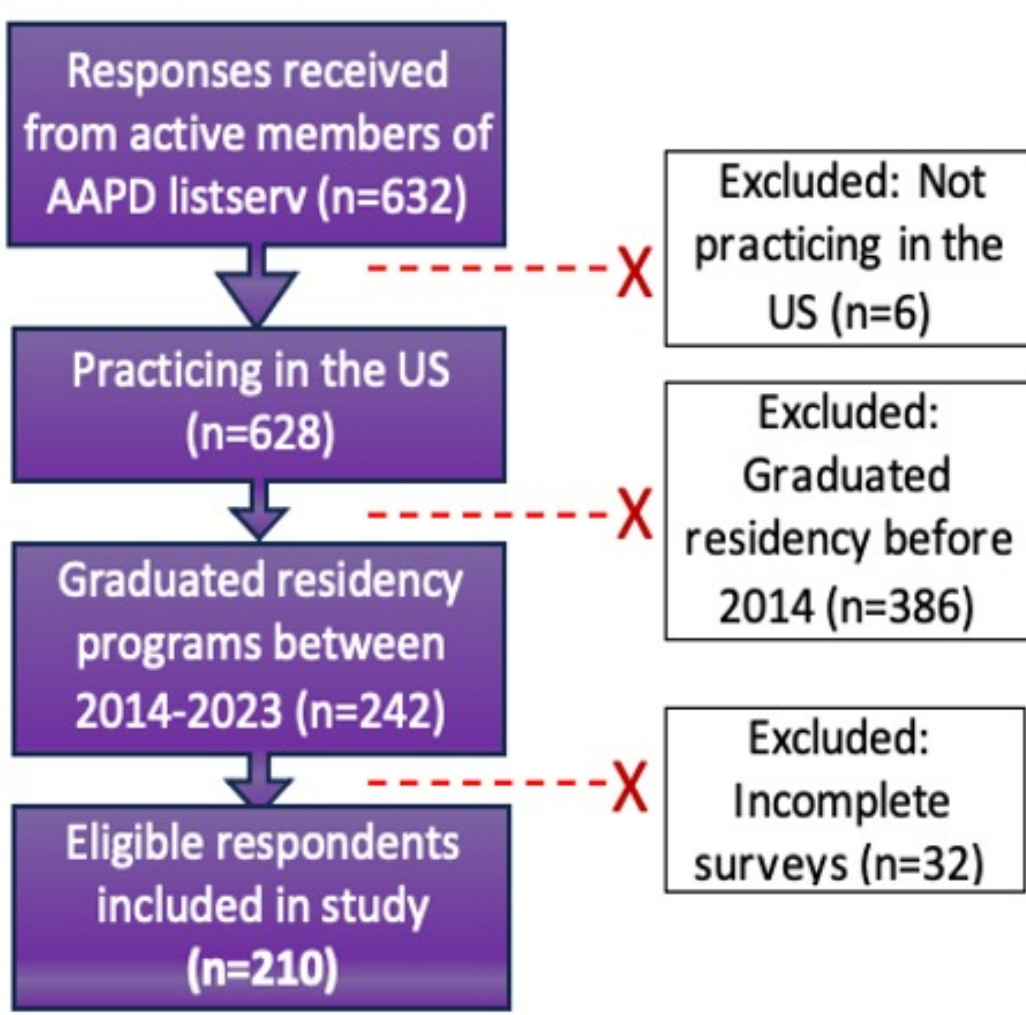
Sedation MOST Used in Residency vs Today



Methods

- 31 question survey was made available through Qualtrics
- Obtained listserv of members sourced from the AAPD
- Survey delivered electronically to all the American Academy of Pediatric Dentistry members
- Responses were anonymous
- The acquired data was analyzed via chi square tests
- In addition to this descriptive data, inferential data was obtained

Figure 4. Inclusion and Exclusion Criteria



Summary

- The most common reported form of sedation taught in pediatric dental residency was oral sedation.
- Selecting "Yes" to Question 9, "Do you believe the sedation training you received was sufficient," suggests a significant relationship with those who use practice sedation in their workplace today.
- Out of the 210 surveys included in this study, only 68% are using a form of sedation where they work.
- 34% of those not using sedation in practice stated it was because they were not comfortable performing sedation.
- Those who work in the Southwest region were found more likely to use sedation in their office than any other region.

Table 2. Q15 "Do you currently use any form of sedation in your practice or in the office you work at?"

Response	Respondants	%
Yes	143	68
No	67	32

Why are Pediatric Dentists not using sedation methods in their workplace? N=67			Figure 5.
Office/practice do not allow	15	22%	
Personally not comfortable performing sedation	23	34%	
Sedations assigned to someone else in office, another provider	8	12%	
Sedations referred out to another office	7	10%	
Other	14	21%	

Respondents who selected "No" to Q15 were asked to elaborate on why they were not practicing sedation after residency

References

- Wilson, S., & Nathan, J. E. (2011). A survey study of sedation training in advanced pediatric dentistry programs: thoughts of program directors and students. *Pediatric dentistry*, 33(4), 352-359.
- Allen, S. C., Bernat, J. E., & Perinpanayagam, M. K. (2005). Survey of sedation techniques used Among pediatric dentists in New York State. *The New York state dental journal*, 72(5), 53-55.