



Trends In Postoperative Pain Management By Pediatric Dentists



MCFRAZIER MC , DEAN JA, VINSON LA, SANDERS BJ, ECKERT G.
(Indiana University School of Dentistry/Riley Hospital for Children; Indiana University School of Medicine)

BACKGROUND/PURPOSE

- Pain assessment and management are essential components to ensuring optimal care for pediatric patients.
- It may be difficult to recognize and treat pain because children can differ in their emotional and mental development.
- The consequence of improper pain management can lead to significant negative psychological and physical experiences that can follow these children through development. [1]

Purpose: Opioid use disorder is becoming more of a concern due to risky use of opioids with children and adolescents. The objective of this study is to compare results to data from Murphy et al. (2006) and assess any significant changes in postoperative pain management by pediatric dentists in the last 20 years.

METHODS

- A 16 web-based survey was distributed to all pediatric dentist members of the American Academy of Pediatric Dentistry (AAPD) using Qualtrics®.
- Survey questions included: Demographics, practice type, clinical scenarios, and preferred analgesics.
- The survey was available from January 2024- March 2024
- Comparisons between the survey responses from the current study against the results found in Murphy's 2006 study were performed using Mantel-Haenszel chi-square tests for ordered categorical responses and Pearson chi-square tests for nominal responses.

What is your philosophy toward the way that children experience pain?

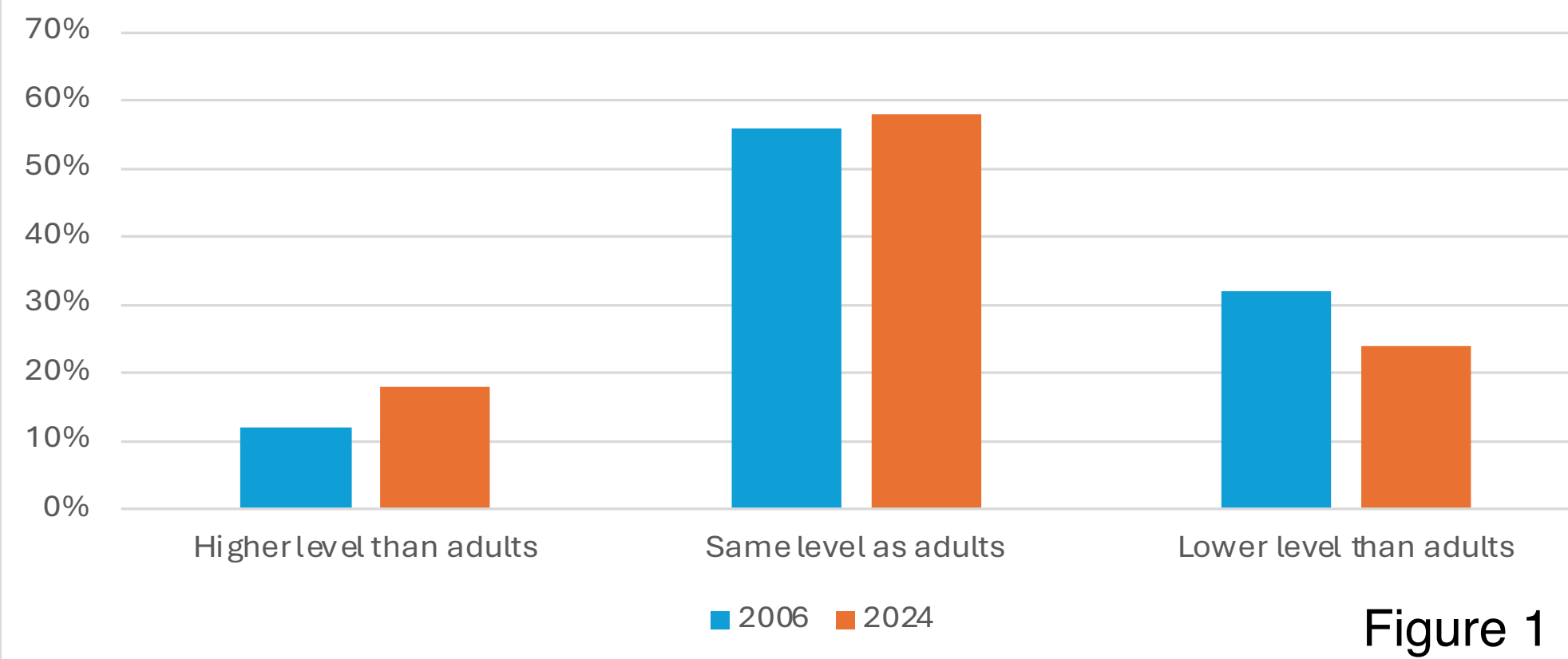


Figure 1

How often do you prescribe prescription pain medications to your pediatric patients for the following procedures involving primary teeth - Multiple Extractions

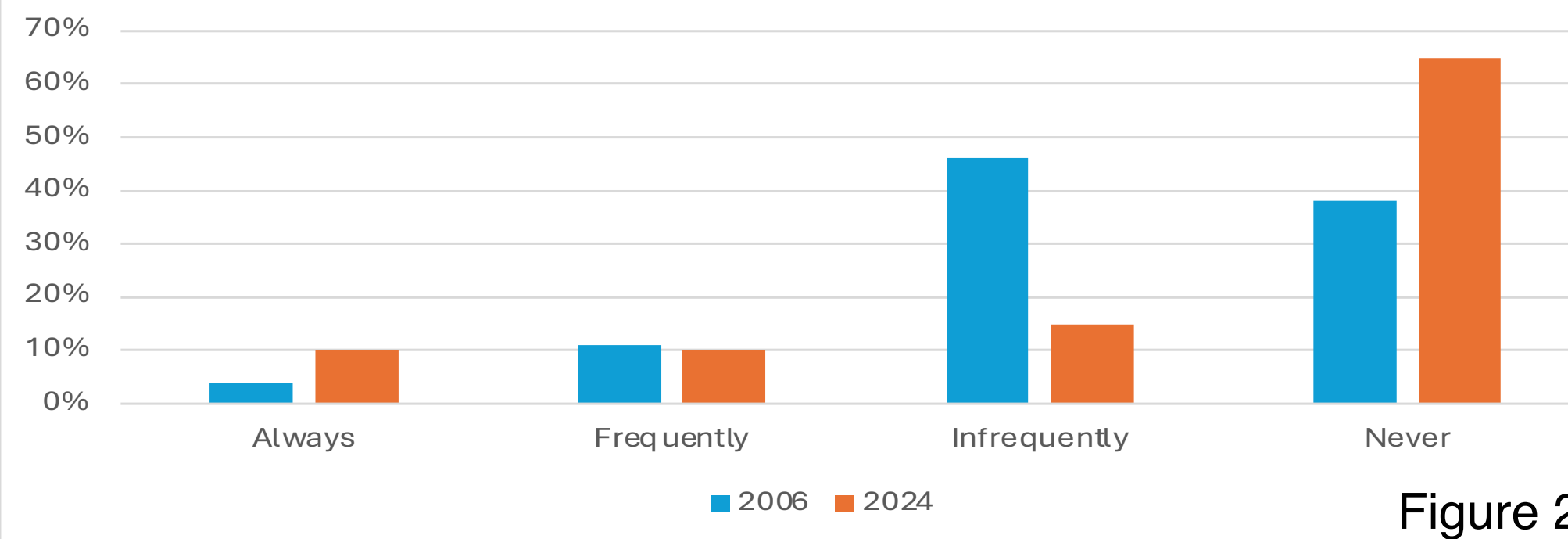


Figure 2

How often do you prescribe prescription pain medications to your pediatric patients for the following procedures involving primary teeth - Dental Trauma.

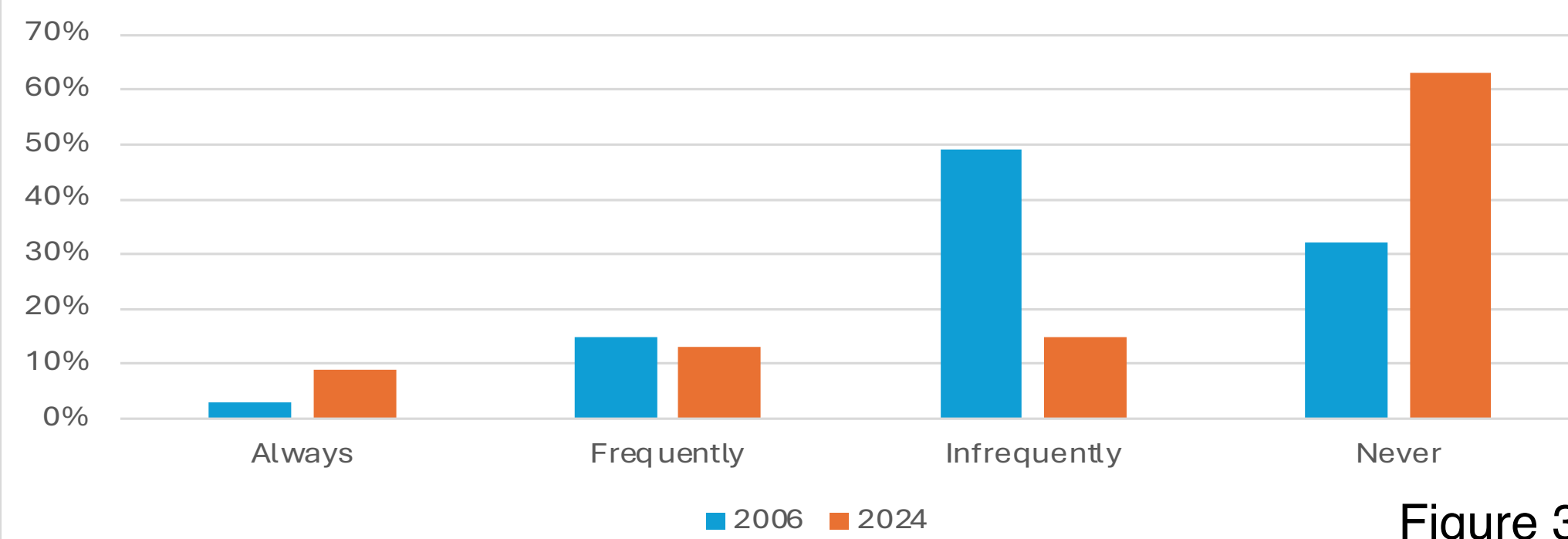


Figure 3

RESULTS

- Responses were received from 353 participants (5%).
- The frequency of recommending or prescribing post-operative analgesics when IV analgesics are given during GA is more common now ($p < 0.0001$) compared to 2006, but no difference when IV analgesics are not given during GA ($p = 0.711$).
- Higher percentage of believe that children experience pain at a higher level than adults now compared to 2006 ($p = 0.015$).
- The frequency of recommending post-operative OTC analgesics is more common now for single extractions ($p = 0.002$), multiple extractions ($p = 0.001$), simple restorative ($p = 0.001$), invasive restorative ($p = 0.004$), and dental trauma ($p < 0.001$).
- The frequency of prescribing prescription pain medications is more common now for multiple extractions ($p = 0.040$) and dental trauma ($p = 0.012$), with no differences between time points for single extractions ($p = 0.817$), simple restorative ($p = 0.954$), or invasive restorative ($p = 0.157$).
- A higher proportion in the current study offer/recommend post-operative analgesics to pediatric patients to be taken before surgical medications wear off compared to the 2006 study ($p = 0.005$).

DISCUSSION/CONCLUSIONS

The results from the survey suggest:

- Pediatric dentists believe that children experience pain at the same level as adults or even higher now.
- Recommendations for OTC analgesics are more common now by pediatric dentists. However, more pediatric dentists are recommending opioids following multiple extractions and dental trauma as compared to 2006.
- Since general dentists still treat a significant number of children in the US, future research should explore the differences in pain management by general dentists who treat children versus pediatric dentists.

