Survey on the Use of Screening Questionnaires for Sleep Apnea in Pediatric Dentistry

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Introduction

- Obstructive sleep apnea (OSA) is a common condition in children characterized by repeated interruptions in breathing during sleep and can negatively impact growth, behavior, and academic performance (Marcus et al., 2012; Lumeng & Chervin, 2008).
- Early identification of OSA is important, as untreated disease has been associated with neurocognitive and cardiovascular consequences (Marcus et al., 2012).
- Pediatric dentists are uniquely positioned to identify early signs of OSA such as mouth breathing, enlarged tonsils, and craniofacial abnormalities during routine dental visits (AAPD, 2024).
- The American Academy of Pediatric Dentistry recognizes the role of dentists in screening for sleep-related breathing disorders and encourages incorporation of screening into routine clinical care (AAPD, 2024).
- Despite this, many pediatric dentists may not routinely screen for OSA and may be unfamiliar with validated screening tools such as the Pediatric Sleep Questionnaire (Chervin et al., 2000).
- Understanding current screening practices and perceived barriers is essential to improving early detection and interdisciplinary collaboration among dental and medical providers.

Objective

To evaluate pediatric dentists' screening practices for obstructive sleep apnea (OSA), assess familiarity with validated screening questionnaires, examine attitudes toward screening, and identify barriers to implementation.

Methods

A cross-sectional, survey-based study was conducted among pediatric dentists in the United States. A brief, anonymous online questionnaire was distributed via the American Academy of Pediatric Dentistry (AAPD) email listserv using Qualtrics. The survey assessed current OSA screening practices, familiarity with validated screening questionnaires, attitudes toward screening, perceived barriers to implementation, and demographic and practice characteristics. The questionnaire was pilot tested among 3 participants to assess content and face validity. Pilot responses were excluded from analysis. Descriptive statistics were calculated, and associations between variables were analyzed using the chi-square test or Fisher's exact test for nominal outcomes and the Mann–Whitney U test or Kruskal–Wallis test for ordinal outcomes. The Bonferroni correction was applied for post-hoc comparisons. Statistical significance was set at $\alpha = 0.05$ for global tests. Analyses were performed using SPSS 31 (IBM Corp., Armonk, NY, USA).

Results

Characteristics	n	%
Age		
<30	2	1.1
30–39	32	17.5
40–49	50	27.3
50–59	54	29.5
≥60	45	24.6
Years in Practice		
<5 years	28	15.3
5–10 years	22	12
11–20 years	46	25.1
>20 years	87	47.5
Board Certification		
Board certified	153	84.1
Board eligible	20	11
Neither	9	4.9
Practice Setting		
Private Practice	144	78.7
Academic	12	6.6
Hospital-based	14	7.7
Community-based	6	3.3
Other	7	3.8
Practice Location		
Urban	58	31.7
Suburban	111	60.7
Rural	14	7.7
Region		
Northeast	53	29
Midwest	40	21.9
South	49	26.8
West	41	22.4
Medicaid Population		
0–25%	83	45.4
25–50%	36	19.7
51–75%	26	14.2
>75%	38	20.8

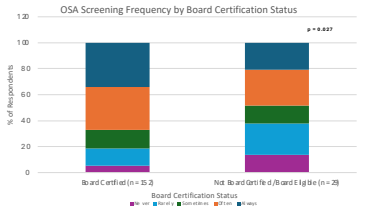

Figure 1. Reported OSA screening frequency by board certification status (p = 0.027).

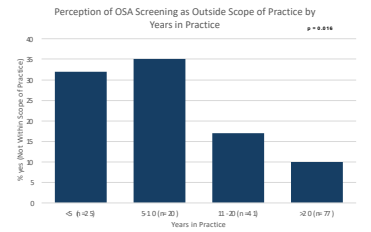

Figure 2. Percentage of respondents reporting OSA screening as outside the scope of practice by years in practice (p = 0.016).

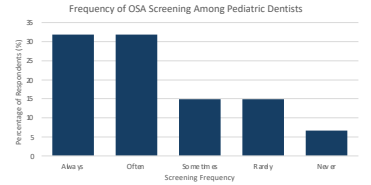

Figure 3. Reported frequency of OSA screening among pediatric dentists (n = 182).

Results (Continued)

A total of 182 pediatric dentists completed the survey. Reported screening frequency significantly differed by board certification status (Fig. 1). The percentage of respondents reporting that OSA screening is outside the scope of practice significantly differed by years in practice. (Fig. 2). Overall reported screening frequency is shown Fig. 3, with most respondents reporting screening either always or often. Approximately 26.6% of respondents reported using validated Screening questionnaires.

Conclusion

OSA screening practices among pediatric dentists showed variability, with screening frequency differing by board certification status. Perception of OSA screening as outside the scope of practice varied significantly by years in practice, with those practicing for shorter durations more likely to report this as a barrier.

Although many respondents reported routinely screening for OSA, use of validated screening questionnaires remained limited, highlighting a gap between clinical practice and use of standardized tools. These findings suggest that while awareness of OSA may be increasing, implementation of evidence-based screening approaches is inconsistent.

Targeted education, increased access to practical screening tools, and greater interdisciplinary collaboration may help address these gaps and improve early identification of OSA in pediatric patients. Findings should be interpreted with consideration of potential response bias associated with self-reported data.

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