

BACKGROUND

Dentists experience a multitude of stressors throughout their work environment including practice management, dentistry itself, finances, equipment failure, time-related pressures, and staffing issues. A differentiating factor between pediatric dentists and other dental specialties is anxiety and behavior levels of pediatric patients.¹ Prolonged stressors can put dentists at a higher risk for chronic occupational stress and burnout. Studies have revealed that burnout may lead to depression.² Depression is one of the most common mental health disorders within the United States. Symptoms of depression can vary from mild to severe. Symptoms include sad, anxious or empty mood, feelings of hopelessness, guilt, worthlessness or helplessness, and loss of interest or pleasure in activities that once were enjoyed.³ This disabling disease can have a significant impact on a person's quality of life. An estimated 8.4% of adults in the United States had at least one depressive episode.⁴ Along with depression, anxiety has also been observed frequently in dentists.² Generalized anxiety disorder (GAD) is characterized by persistent and excessive worry and tension, even when it may not be warranted. Symptoms of GAD may make it difficult to carry out normal daily activities. The purpose of this study is to compare the mental health of pediatric dentists to that of the general population in the United States using validated assessment tools for Generalized Anxiety Disorder and Depression.

MATERIALS and METHODS

Approval to conduct the study was granted by UTHSCSA Institutional Review Board. Contact details of pediatric dentists were obtained from the Directory of the American Academy of Pediatric Dentistry (AAPD). An online survey composed of the GAD-7 (Generalized Anxiety Disorder-7)⁵ and PHQ-9 (Patient Health Questionnaire-9)⁶ questions was sent via email to the American Academy of Pediatric Dentistry listserv of pediatric dentists. Each survey contained questions regarding the frequency of symptoms of anxiety and depression experienced over a 2-week period. Results from the survey were compared to recent National Center for Health Statistics (NCHS) data reports describing anxiety and depression rates among U.S. adults based on GAD-7 and PHQ-9 scores.

RESULTS

Response rate to this survey was approximately 5% (n = 367). Prevalence of mild, moderate, moderately severe, and severe depression was 27.5%, 13.9%, 4.4%, and 1.9%, respectively. Scoring above the moderate range is considered clinically significant for depression.⁶ Prevalence of mild, moderate, and severe anxiety was 32.5%, 15.2%, and 5.1%, respectively. 47.2% had minimal or no anxiety. Overall, there were significantly higher rates of both anxiety and depression symptoms ($P < .001$) in pediatric dentists compared to the U.S. adult population.^{7,8} 31 participants (8%) responded affirmatively to question 9 on the PHQ9 regarding thoughts of hurting yourself or contemplating suicide.

CONCLUSIONS

There may be higher rates of Generalized Anxiety Disorder and Depression among pediatric dentists when compared to the general population of adults in the United States. At least 8% of respondents, who had a score higher than 0 on question 9 of the PHQ9, require further evaluation for depression. Drawbacks of this study include possible bias in that pediatric dentists who are familiar with or interested in mental health may be more likely to respond. Response rate was relatively low for this study.

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PHQ-9 Score	Depression Severity	Proposed Treatment Actions
0-4	Non – Minimal	None
5-9	Mild	Watchful waiting; repeat PHQ 9 at follow-up
10-14	Moderate	Review treatment plan if not improving in past 4 weeks; Consider discussion of additional support such as pharmacotherapy
15-19	Moderately Severe	Consider adjusting treatment plan and/or frequency of sessions; Discuss additional supports such as pharmacotherapy; For SonderMind Anytime Messaging clients, consider converting from asynchronous to synchronous therapy channels
20-27	Severe	Adjust treatment plan; focused assessment of safety plan and pharmacotherapy evaluation/ re-evaluation; If emergent then refer to higher level of care; Likely Not a candidate for asynchronous/text therapy

Figure 1: Proposed Treatment Action by PHQ9 Score⁹

Score	Risk Level	Intervention
0-4	No to Low Risk	None
5-9	Mild	Provide general feedback, repeat GAD-7 at follow up, consider adjusting treatment plan if not improving in last 4 weeks
10-14	Moderate	Further evaluation recommended; For active treatment plans consider adjustment; For text therapy clients monitor for synchronous therapy
15+	Severe	Adjust treatment plan; focused assessment of safety plan and pharmacotherapy evaluation/ re-evaluation; If emergent need then consider referral to higher level of care; Client is not a good candidate for text therapy/asynchronous

Figure 2: Proposed Treatment Action by GAD7 Score⁹

