

Attention to Detail

Links Between Attention-Deficit/ Hyperactivity Disorder and Oral Health

Approximately 8.7 million adults in the United States aged 18 and above have a diagnosis of attention-deficit/hyperactivity disorder (ADHD). ADHD is usually diagnosed in childhood, and approximately one-third of the 7 million children who are diagnosed with ADHD carry this diagnosis into adulthood, while the remaining adults are diagnosed after the age of 18.

ADHD is marked by patterns of difficulty paying attention (inattention), trouble sitting still (hyperactivity); challenges with self-control (impulsivity), problems with sensory overload, or a combination of these issues. For some adults, these challenges may create difficulty with everyday oral health-related tasks, such as toothbrushing, flossing, and keeping track of regular dental appointments.

Medications used to treat ADHD can produce damaging oral health side effects, including xerostomia (dry mouth), which is linked to increased tooth decay. These medications can also cause oral health side effects such as dysphagia (difficulty swallowing), stomatitis (inflammation of the lips or in the mouth, sometimes including sores), and gingivitis (swelling of the gums).

While children with ADHD can be at a greater risk of poor oral health than children without ADHD, little is known about the oral health of adults with ADHD. The nationally representative, annual State of Oral Health Equity in America survey asked

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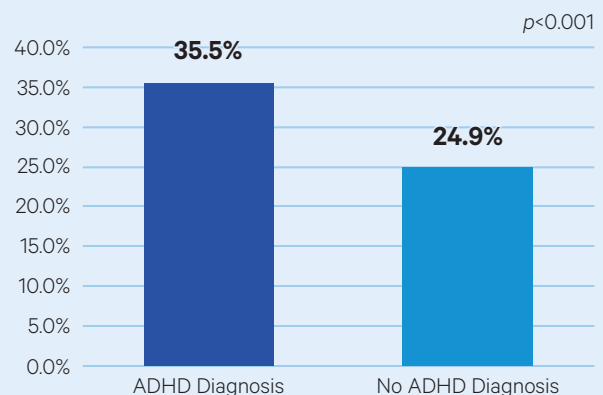
adults whether they had ever been diagnosed with ADHD and other questions related to their oral health. Findings from this survey show that adults with ADHD are at greater risk for poor oral health than adults without ADHD.



More adults with ADHD rated their oral health as fair/poor compared to adults without ADHD (35.5% vs. 24.9%).

When taking other demographic variables into consideration (such as gender, age, race and ethnicity, employment, and access to dental insurance), adults with an ADHD diagnosis were significantly more likely to rate their oral health as fair/poor compared to adults without ADHD. This finding mirrors that of other research, which has found significantly lower levels of self-rated oral health in adults with ADHD.

Fair or Poor Self-Rated Oral Health by Adults With and Without an ADHD Diagnosis

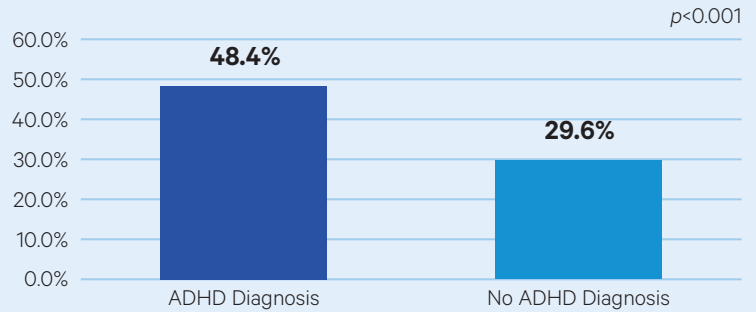




Compared to adults without ADHD, more adults with ADHD report being embarrassed by their teeth or mouth very often, often, or occasionally (48.4% vs. 29.6%).

Adults with ADHD have been shown in other research to have [poorer oral health-related quality of life](#) — including feeling embarrassed due to their oral health — compared to those without ADHD.

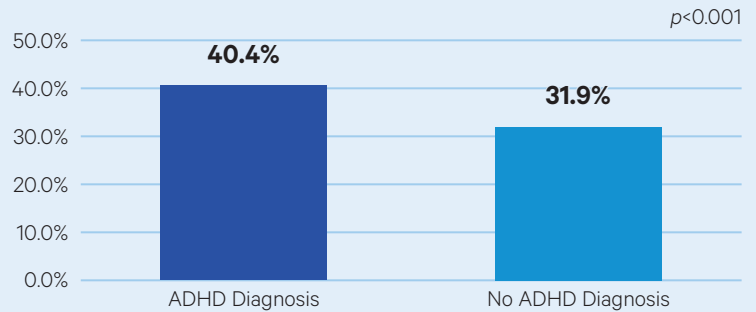
Reports of Feeling Embarrassed About Oral Health Very/Fairly Often or Occasionally by Adults With and Without an ADHD Diagnosis



More adults with ADHD report not having visited a dentist in more than a year compared to adults without ADHD (40.4% vs. 31.9%).

As some adults with ADHD experience difficulty keeping track of schedules, some research suggests that [missing dental appointments may be a sign of ADHD](#).

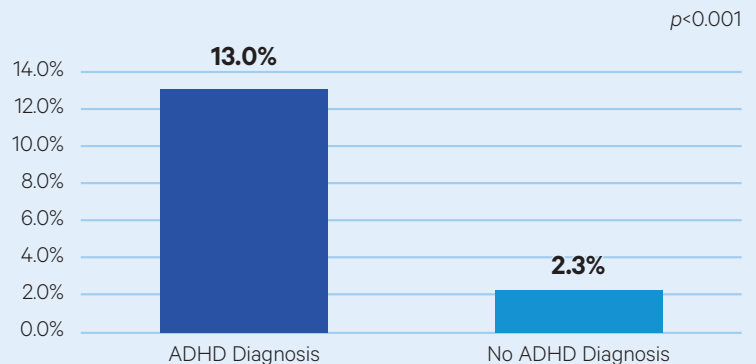
Reporting a Most Recent Dental Visit of More Than One Year Ago by Adults With and Without an ADHD Diagnosis



Compared to adults without ADHD, more adults with ADHD report having visited an emergency department (ED) for dental care in the prior year (13.0% vs. 2.3%).

When other demographic variables are considered, adults with ADHD are significantly more likely to report having had a dental-related ED visit in the past year. Adults visit the ED for non-traumatic dental conditions for many reasons, including a [lack of dental insurance coverage](#), [limited access to dental providers](#), and [having lower income](#). ED visits for non-traumatic dental care costs the US health care system an [estimated \\$1 billion each year](#).

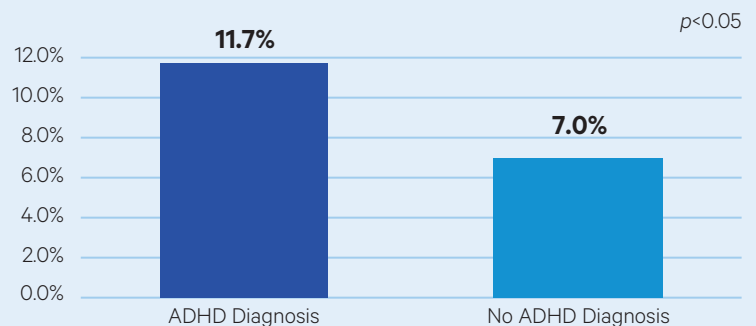
Reports of Emergency Department Visits for Dental Care in Last Year by Adults With and Without an ADHD Diagnosis



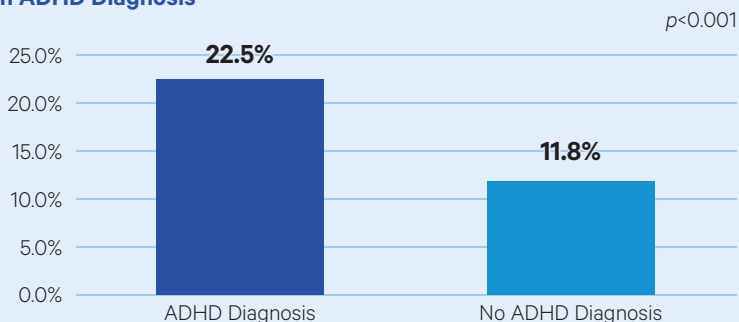
A higher percentage of adults with ADHD report having experienced discrimination in an oral health care setting (11.7%) compared to adults without an ADHD diagnosis (7.0%).

Individuals [experiencing discrimination in oral health care](#) are less likely to plan to seek dental care in the coming year compared to those not experiencing such discrimination.

Reports of Experiencing Discrimination in an Oral Health Care Setting by Adults With and Without an ADHD Diagnosis



Reports of High Dental Anxiety by Adults With and Without an ADHD Diagnosis



More adults with ADHD report experiencing high dental anxiety compared to adults without ADHD (22.5% vs 11.8%).

When other demographic variables are considered, adults with ADHD are significantly more likely to experience high dental anxiety compared to adults without ADHD. In another study comparing adults with and without ADHD, those with ADHD reported [significantly higher levels of dental anxiety](#).

These survey findings suggest that adults with ADHD face more risks to their oral health than adults without ADHD.

Adults with ADHD in this survey rated their oral health as fair or poor and were embarrassed about the state of their oral health in greater numbers than those without ADHD. They also reported visiting a dentist less often, but more often seeking dental care through an ED, experiencing discrimination in the oral health care setting, and experiencing high levels of dental anxiety. [Oral health providers](#) should be aware of the oral health risks faced by their adult patients with ADHD. They should also engage in ongoing discussions with their patients about good oral health habits, medication side effects, and any concerns patients may have about dental treatment. While not all adults with ADHD have poor oral health, it is important for oral health professionals to be aware of the potential oral health challenges associated with ADHD and collaborate with their patients to help them achieve optimal oral health.

Methodology

The State of Oral Health Equity in America (SOHEA) survey is a nationally representative survey of consumer and patient attitudes, experiences, and behaviors related to oral health. It was designed by CareQuest Institute for Oral Health. The survey was administered in January and February 2023 to adults aged 18 and older by NORC at the University of Chicago as part of the AmeriSpeak panel. AmeriSpeak is a probability-based panel designed to be representative of the US household population. Randomly selected US households were sampled using area probability and address-based sampling, with a known, nonzero probability of selection from the NORC National Sample Frame. Sampled households were contacted by US mail, telephone, and field interviewers. A sampling unit of 18,521 was used, with a final sample size of 5,240 for a survey completion rate of 28.3% and a final weighted cumulative response rate (through all phases of panel recruitment, retention, and survey completion) of 4.4%. All data presented account for appropriate sample weights.

An ADHD diagnosis was determined by a “yes” response to the question, “Have you ever been diagnosed with attention-deficit/hyperactivity disorder (ADHD)?” To assess self-rated oral health, respondents were asked, “In general, how would you rate your oral health (state of your teeth, mouth, and gums)? (excellent, very good, good, fair, or poor).” Respondents were also asked, “How often in the last year have you been self-conscious or embarrassed because of your teeth, mouth, or dentures? (very often, fairly often, occasionally, hardly ever, never).” Dental anxiety was assessed using the [Modified Dental Anxiety Scale \(MDAS\)](#); adults scoring 19 or above on the MDAS were considered to have high dental anxiety. Crosstabs with chi-square analyses compared percentages of responses between those with and without an ADHD diagnosis, and logistic regression analyses examined the likelihood of responses when accounting for ADHD diagnosis, age, gender, race/ethnicity, employment, and access to dental insurance. Results presented are statistically significant at the $p < 0.05$ level. While the cross-sectional nature of these data does not allow for causal conclusions to be drawn, future research should focus on examining underlying factors (e.g., stigma, discrimination, other socioeconomic factors) that may help further explain these findings.

Suggested Citation:

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