

Policy on Substance Abuse in Adolescent Patients

Originating Council

Council on Clinical Affairs

Adopted

2016

Purpose

The American Academy of Pediatric Dentistry (AAPD) recognizes that substance abuse in adolescents is a significant health, social, and familial issue in the United States. The increasing prevalence of substance abuse among adolescents obligates dental personnel to identify behaviors characteristic of active use, recognize clinical signs and symptoms of active use or withdrawal, modify dental treatment accordingly, and facilitate referral to medical providers or behavioral addiction specialists. This policy addresses the harmful effects of alcohol and drug abuse in the adolescent and the dental provider's role in recognition, initiation of appropriate interventions, and referrals.

Methods

This policy is based upon a review of current dental and medical literature, including a literature review through the PubMed®/MEDLINE database using the terms: adolescent substance abuse, substance use in adolescents, alcohol use in adolescents, illicit drug and alcohol use in teenagers, adolescent alcohol and/or drug abuse, prescription drug use/abuse in teenagers, and inhalant use/abuse in teenagers; fields: all; limits: within the last 10 years, humans, English, birth through age 18. The authors agreed upon inclusion of 24 articles that matched these criteria. Papers for review were chosen from this list and from the references within selected articles. Websites and documents from healthcare and public policy organizations, as well as governmental agencies, were reviewed.

Definitions

Binge or heavy episodic drinking: consuming “more than five (alcoholic) drinks per drinking occasion”.¹

Substance abuse: a “maladaptive pattern of substance use manifested by recurrent and significant adverse consequences related to the repeated use of substances;”² individual use of illicit (illegal) drugs or use of legal drugs inappropriately; repeated use of alcohol or drugs to produce pleasure, reduce stress, or alter or avoid reality.³

Substance use disorder (SUD): “a cluster of cognitive, behavioral, and physiological symptoms indicating that the individual continues using the substance despite significant substance-related problems”.⁴

Withdrawal syndrome: “the development of a substance-specific maladaptive behavioral change, usually with uncom-

fortable physiological and cognitive consequences, that is the result of a cessation of, or reduction in, heavy and prolonged substance use”.⁵

Background

Many physical, social, and behavioral changes occur during the adolescent years. The developing adolescent may encounter difficulties and pressures without effective coping skills or maturity. Unfortunately, some teenagers do not have familial, peer, or other support systems to provide help and guidance in adjusting to changes or with decision making. As a result, they may turn to alcohol or drugs to seek comfort and reduce the stresses associated with this erratic time in their lives.⁶

Substances abused by adolescents include alcohol, inhalants, opiates, amphetamines, cocaine, marijuana, barbiturates, benzodiazepines, hallucinogens, and anabolic steroids.^{7,8} In a 2014 survey of eighth, tenth, and twelfth grade students, trends revealed alcohol use at 9.0, 23.5, and 37.5 percent respectively in the previous 30 days.⁹ Prevalence of having been drunk in the past 30 days was reported at 2.7, 11.2, and 23.5 percent.⁹ Use of any illicit drug was reported to be 8.3 percent for eighth graders, 18.5 percent for tenth graders, and 23.7 percent for twelfth graders.⁹ Another recent survey found more than 2.3 million youth aged 12-17 years were current users (i.e., in the past 30 days) of illicit drugs, equivalent to 9.4 percent of adolescents.¹⁰ Current alcohol use was higher, reported at 11.5 percent, corresponding to 2.9 million adolescents, with binge drinking shown to occur in 6.1 percent.¹⁰ Among the same age group, current marijuana use was at 7.4 percent (approximately 1.8 million adolescents). Abuse of prescription drugs (i.e., analgesics, stimulants, anxiolytics, sedatives) for non-medical purposes was reported by 2.6 percent of adolescents.¹⁰ SUD was found to occur in five percent of adolescents, while alcohol use disorders were diagnosed in 2.7 percent of adolescents.¹² Recurrent use of drugs or alcohol causes significant clinical and functional impairment such as health issues, disability, and failure to fulfill important responsibilities at work, school, or home.¹¹

ABBREVIATIONS

AAPD: American Academy Pediatric Dentistry. **SUD:** Substance use disorder.

There is high probability that dental personnel will detect signs of possible substance abuse in their adolescent patient population. Staff should be attentive to similar signs displayed by the parent. Clinical presentations of substance use may include odor of alcohol on breath, odor of marijuana on clothing, impaired behavior, slurred speech, staggering gait, visual hallucinations, disorientation, rhinitis, scratching, physical injuries including lacerations, needle marks, cellulitis, diaphoresis, tachycardia, sensory impairment, and pupillary dilation or constriction.^{8,12} Cognitive and behavioral manifestations may present as mood changes or emotional instability, loud obnoxious behavior, laughing at nothing, withdrawn/depressed affect, lack of communication/silence, hostility/anger/uncooperative behavior, inability to speak intelligibly or to focus, rapid-fire speech, hyperactivity, and unusually elated mood.^{12,13} Perioral and oral signs may include sores around the mouth, continual wetting or licking of lips, clenched teeth, bruxism, trismus, enamel chips or coronal fractures, neglected/poor oral hygiene, multiple cervical carious lesions, gingivitis, gingival ulceration, periodontitis, pale mucosa, leukoplakia, and intraoral burns.^{8,12,14} Adolescents experiencing withdrawal syndrome may demonstrate behaviors such as altered mental status, agitation, irritability, restlessness, increased anxiety or panic, and inattentiveness.^{5,8} Clinical signs and reported symptoms of substance withdrawal include rhinorrhea, tachycardia, elevated temperature, yawning, tremors, hallucinations, and seizures.^{5,8}

Adolescent substance abuse frequently co-occurs with mental disorders.^{2,4,6-8} SUD often coexists with psychiatric conditions such as depression, anxiety disorders, attention-deficit hyperactivity disorder, oppositional defiant disorder, conduct disorder, bipolar disorder, post-traumatic stress disorder, bulimia nervosa, social phobia, and schizophrenia.^{2,3,7,15} Substance use may induce the deterioration, emergence, or reoccurrence of psychiatric disorders, or it may work in reducing, masking, or enabling an adolescent to cope with symptoms.^{2,15,16} Behaviors consistent with both SUD and mental disorders may be confusing to dental providers. Professionals must be cautious not to assume clinical signs are associated with substance abuse when, in fact, they are presentations consistent with mental disorders, and vice versa.^{2,6,8,15} Such caution prevents inaccurate diagnoses and judgment or labelling of an adolescent patient, which could lead to emotional harm and diversion from necessary treatment.^{2,15,16}

Dentists are in a position to identify clinical manifestations of substance use, present brief interventions, and provide referrals to medical providers or behavioral health or addiction specialists. They also can assist the patient and family in finding treatment facilities, self-help groups, and community resources which address alcohol and drug abuse specific to adolescents.^{6-8,17,18} When substance abuse is suspected or confirmed, an empathetic, non-judgmental style of discussion facilitates a trusting patient-doctor relationship.⁷ Asking open-ended questions may garner more information as they tend to be less threatening to the patient.⁷ Brief interventions may

include educating the patient and/or family on health risks of use or abuse of alcohol or other drugs, strong encouragement for avoiding drugs and alcohol, motivational interviewing,¹⁹ and initiating referrals for assessment and treatment by other health care providers.^{6-8,17,18} Although the dental practitioner may grant patient confidentiality, he must abide by state laws when treating minors.⁸ Involvement of the parent and other authorities is imperative when substance abuse places the adolescent patient or others in a high-risk or life-threatening situation.^{8,20} In such circumstances, the patient should receive notification when disclosure of confidential information will occur and be provided an opportunity to join the conversation.²⁰

When providing treatment to a patient suspected of substance use, the dentist may need to modify sedation procedures, administration of local anesthetics, and prescribing practices. Administration of nitrous oxide or anxiolytic or sedative medications to an adolescent who is actively using or has a current history of substance abuse can lead to unfavorable drug interactions, over-sedation, or respiratory depression.^{8,17} Use of these agents during remission/recovery from substance abuse can predispose a patient to relapse.^{2,6,8} Dentists should use local anesthetics containing vasoconstrictors judiciously in adolescent patients who abuse stimulant medications such as methylphenidate, amphetamine and dextroamphetamine, methamphetamine, and cocaine. Drug interactions between vasoconstrictors and stimulants can cause tachycardia, hypertension or hypotension, palpitations, hyperthermia, cardiac dysrhythmias, myocardial infarction, and cerebrovascular accidents.^{8,21-23} Dentists should be knowledgeable of the various SUDs (e.g., alcohol, opiate, benzodiazepine) when recommending or prescribing medications. When pain management is necessary, an adolescent with an opioid use disorder should receive non-opioid analgesics [e.g., acetaminophen, non-steroidal anti-inflammatory drugs (NSAIDs)].^{5,8} Prior to prescribing medications that have the potential to be abused, the practitioner should assess adolescent patients with risk factors such as active substance use, past substance abuse, current medications, and a family history of substance abuse.⁶ For patients at high risk, the dentist should consider prescribing alternative medications with less abuse potential, closely monitoring the patient, reducing length of time between visits for refills, prescribing smaller amounts of liquid medications or fewer pills, and educating both patients and parents about proper use and potential risks of prescription medications, including the risk of sharing them with others.⁶

Policy statement

The AAPD recognizes that an increasing number of adolescents abuse alcohol and/or drugs.^{1,10} Providing dental care to adolescents with substance use disorders requires awareness of clinical manifestations and implementation of different treatment approaches. Therefore, the AAPD encourages dental professionals to:

- Gain knowledge of SUD and associated behavioral, physiological, and cognitive effects in adolescents.

- Use a specific adolescent medical history documenting past history, current use, and previous treatments for substance abuse.
- Recognize behaviors, clinical signs, and symptoms of adolescent substance abuse.
- Provide brief interventions to educate the adolescent and his family regarding the risks of substance abuse.
- Provide brief interventions for encouragement, support, and positive reinforcement for avoiding substance use.
- Provide referrals to primary care providers or behavioral health or addiction specialists for assessment and/or treatment of SUD in adolescents when indicated.
- Be familiar with community resources, such as self-help groups and treatment facilities, specific to adolescents with SUD.
- Use local anesthetics containing vasoconstrictors with caution in patients having a stimulant use disorder.
- Limit or decline use of nitrous oxide and anxiolytic or sedative medications in adolescents with SUD.
- Recommend non-opioid analgesics when pain management is necessary.
- Prescribe non-controlled substances or medications with a low potential for abuse.
- Prescribe medications that have the potential to be abused in small amounts or quantities, preferably with no refills.
- Respect patient confidentiality in accordance with state and federal laws.

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