

Impact of drug abuse/dependence on dentists

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Drug abuse and dependence are important and complex health problems, and understanding these issues is important for dental patient management. At the same time, dentists, like their patients, could abuse alcohol and other illicit drugs, which would jeopardize their ability to provide optimum dental care. This article reviews

important aspects of drug abuse and dependence, risk factors for dentists, the impact of drug abuse on the dental profession, and various treatment options.

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In 2008, it was reported that approximately 20.1 million Americans age 12 or older had used illicit drugs (a category that includes marijuana, cocaine, heroin, inhalants, hallucinogens, and prescription-type psychotherapeutics) within the past month.¹ Other survey studies have reported the prevalence of alcohol, cigarettes, and illicit drugs abused by health care professionals, including dentists.²⁻⁶ It is important to remember that findings concerning drug and alcohol abuse can vary greatly depending on the region of the country, the survey methodology utilized, and the veracity of the health care professionals surveyed. Most studies rely on a few hundred dentists, and a conservative estimate suggests that 6–10% of dentists display chemical dependency, an amount similar to that found in the general population.^{2,3,5} However, there is limited evidence to suggest that dentists are at a greater risk for abusing alcohol or other drugs than the general public.²

Drug abuse and addiction

Drug abuse describes a maladaptive pattern of chronic drug use that can lead to drug addiction.⁷ Drug addiction is a chronic, relapsing brain disease that is characterized

by compulsive seeking and usage of drugs, despite the harmful consequences of such behavior.⁸ In a previous article, Fung and Giannini addressed some important aspects of drug abuse and dependence, the models and mechanism of drug addiction, and recommendations for patient management.⁹ Briefly, most addictive drugs directly or indirectly stimulate the brain's reward center by increasing the release of dopamine, a neurotransmitter involved in the regulation of emotion, cognition, movement, motivation, and pleasure.^{7,8} Overstimulating the brain reward center with dopamine produces intense euphoria, a sensation that is reinforced by continued drug use.^{8,9}

Risk factors for drug abuse in dentists

The risk factors contributing to drug abuse are complex; they include genetic and environmental influences such as home and family, friends and acquaintances who use drugs, time of drug use, personality (low self-esteem, stress), availability of drugs, method of drug administration, and co-existing mental problems.^{7,8} According to Baldwin *et al*, alcohol abuse is the most common issue confronting dentistry

and it can develop during dental school, as many students start using alcohol and drugs to cope with stress.¹⁰ The majority of dentists practice alone and the stress of managing a solo practice could further contribute to drug abuse.¹¹ Other factors that can contribute to substance abuse include the false sense of invincibility that causes users to believe themselves immune to the addictive effects of drugs, social situations in which drugs or alcohol are offered freely, and socializing with substance abusers.^{5,11,12}

The U.S. Department of Health and Human Services Center for Substance Abuse and Prevention has recognized a number of risk factors within multiple domains.¹ *Domains* are areas that can influence one's life and range from individual personality characteristics to behavior among family, peers, and community.¹³⁻¹⁶ Each domain has associated risk factors. Gender is not an individual personality characteristic; however, men are twice as likely as women to experience problems with drugs.^{14,16,17} Tables 1 and 2 list factors that can contribute to drug use.

Interpersonal and life circumstances can act as trigger events that can and do contribute to the misuse of drugs and alcohol by dentists.

Table 1. Characteristics that could contribute to drug use.^{13,14}

Individual characteristics

- Use of drugs and/or alcohol at an early age (10–11)
- Attention deficit hyperactivity disorder (ADHD)
- Mental health issues (depression, anxiety, and conduct disorders)
- Rebelliousness
- Poor impulse control
- Thinking that drug and alcohol use isn't harmful

Family issues

- Family history of addiction or current use by close or extended relatives
- Little or no parental supervision or monitoring
- Inconsistent or severe punishment
- Daily family conflict beyond normal family fighting (including hostility and physical abuse)
- Lack of concern about child's drug or alcohol use
- Parents who are unaware of their child's use of drugs or alcohol
- Parents who suffer from depression or mental illness

Table 2. Factors that can contribute to drug and alcohol use.^{13,14,16}

Peers

- Having favorable attitudes toward drug or alcohol use
- Using drugs and alcohol as early as age 10
- Being rebellious
- Encouraging gang involvement

Community

- Easy availability of alcohol and drugs
- Lack of investment in neighborhood resources
- Attitudes toward drug and alcohol use
- Poverty

Top risk factors

- Problem behavior at an early age
- Favorable attitudes toward problem behavior
- Family conflict
- Academic failure in elementary school

Interpersonal and life circumstances include dissatisfaction with career choices, domestic breakdown, low professional or self-esteem, obsessive-compulsive and perfectionist behavior, the fear of causing pain, difficulty with interpersonal relationships, and unusual stresses at work.¹⁸ Dentists with one or more childhood risk factors and one or more interpersonal factors are at high risk of substance abuse to cope with the stress and anxiety of their profession.¹⁸

Detecting substance abuse

It is very difficult to work in close proximity with someone and not notice signs and symptoms of change. Most professionals try to respect their co-workers' privacy and do not probe into the personal affairs of others. However, there are signs and behavioral traits that should increase one's level of concern. The pattern of abuse does not develop overnight; for this reason, a sustainable change in behavior might not be obvious. It is important to

monitor and document incidents so that this information will be available when discussing these concerns with a friend or colleague.

Those who have worked with individuals who have substance abuse problems agree that the user's first response is denial.¹⁸ A person in denial will try to convince others that their assessments are wrong or misguided. Denial can take a more aggressive form when the user verbally attacks his or her accusers, claiming that these suspicions will hurt the user professionally. To help a friend/colleague address his or her problems, it is important to document the dates and times when staff expressed concerns and when the identifiable signs of substance abuse were noted. Behavioral signs could include changes in daily activity, loss of reliability, mood changes, citations for impaired driving, and the self-prescribing of mood-altering medications. Signs of abuse include the smell of alcohol, tremor, slurred speech, ataxic gait, and sloppy appearance.¹⁸

Abused substances

Kenna and Wood have reported that alcohol is the substance abused most frequently by dentists.² In this survey, dentists reported that alcohol was offered frequently by friends or colleagues in social settings.² Other substances of abuse include cigarettes; marijuana; major opiates such as morphine, fentanyl, meperidine, hydromorphone, and oxycodone; minor opiates such as hydrocodone and codeine; and anxiolytics such as alprazolam and diazepam.^{2,12} In a 2006 study by Baldwin *et al*, students of the health profession self-reported that alcohol was by far the most commonly abused substance.¹⁰

According to a 2010 article in *AGD Impact*, 10–12% of the general population is addicted to alcohol or drugs at some point in their lives.¹⁷ By comparison, the prevalence rate among dentists and physicians is believed to be 12–19%.¹⁷ Their drugs of choice are typically alcohol, opiates (mainly

hydrocodone and oxycodone), and nitrous oxide.¹⁰ According to the ADA Dentist Health and Wellness Committee, alcohol is the drug of choice for 37% of dentists with substance abuse problems, while 31% use prescription drugs (opiates), 10% use street drugs, and 5% use nitrous oxide.¹⁹

The impact of drug abuse on the dental profession

Obviously, impaired dentists are unable to deliver the best dental care to their patients. Dentists who become aware of and are sure of a colleague's chemical dependency have a professional and ethical responsibility to intervene in a constructive manner. Such interventions can involve discussing the issue with the addicted dentist, offering help if possible, and reporting the dentist to the state dental society wellness committee.

The ADA's Principles of Ethics and Code of Professional Conduct (Code)

declares that: "It is unethical for a dentist to practice while abusing controlled substances, alcohol or other chemical agents which impair the ability to practice. All dentists have an ethical obligation to urge chemically impaired colleagues to seek treatment. Dentists with first-hand knowledge that a colleague is practicing dentistry when so impaired have an ethical responsibility to report such evidence to the professional assistance committee of a dental society."¹⁹

The biggest impact of drug abuse in the dental profession is on the family, staff, and practice of the user.¹⁷ Patients also can be affected, especially if the dentist is required to be away from the practice for drug treatment. However, the majority of patients in a group

practice could be reassigned without knowing anything about the dentist's absence beyond a health issue. Solo practitioners who choose or are required to receive extended treatment will need to procure the services of fill-in dentists or close the office for a period of time.

Once a dentist accepts or is required to undergo treatment, his or her family and staff could have emotional issues that need to be addressed. Staff who experience anxiety attacks or strong negative emotional reactions of anger, fear, shame, or guilt due to the dentist's behavior (or the loss of income, trust, and/or respect resulting from that behavior) may wish to undergo counseling.

When a dentist undergoes treatment for substance abuse, his or her family should be involved with both treatment and counseling. Family members need to identify, confront, and change the environment that allowed the dentist to maintain the addiction. Treatment of addiction is a process that will last for the rest of the addict's life.

Treatment options

Once an alcohol or drug problem is suspected, the addicted dentist can get help to figure out the most effective type of treatment.²⁰ These options include peer-assisted programs, diversion programs, and multidisciplinary programs.

Peer-assisted programs consist primarily of trained volunteer dentists who provide information, resources, and non-judgmental support for impaired colleagues. These programs also allow a colleague, employee, family member, or patient to seek help for a dentist without bringing the dentist to the attention of the licensing board. ADA or state well-being programs are designed to direct and guide impaired dentists into treatment.

Diversion programs allow dentists to avoid sanctions, provided that they follow the program's recommendations of treatment and mandatory testing. Multidisciplinary programs are formal programs in which a court usually mandates a state agency to monitor the addict for signs of use. Dentists have a higher rate of success when treated by a peer group that seeks to reduce shame and break patterns of denial. The highest recovery rates are achieved when adequate treatment is combined with long-term professional mentoring.¹⁷

Depending on the degree of addiction, family structure, peer support, and whether any laws were broken, treatment can be dictated by law or designed by professional counselors specializing in addiction. Some of the more common research-based treatment components include detoxification and medically managed withdrawal, long-term residential treatment, short-term residential treatment, outpatient treatment, and individualized or group drug counseling.

It is important to remember that abstaining from alcohol and drugs is a lifelong commitment to sobriety. It is important for national and state dental associations to develop policies that emphasize prevention, intervention strategy, treatment, and the rehabilitation of dental professionals who abuse alcohol or other drugs.

Summary

It is important for all dental personnel to know and understand the risk factors of alcohol and drug addiction. It also is important to understand when a dentist or staff member is under stress. There can be a fine line between looking for symptoms of use and observing uncharacteristic behavior; however, health care providers who are

aware of the symptoms of drug and alcohol use can confront addicted colleagues with confidence and in a non-judgmental, supportive manner. One should be prepared to deal with denial, anger, and threats, not only from the person being confronted, but also from enabling family members and/or staff. If the addicted dentist is in such denial that he or she refuses to listen, it may be necessary to contact a state well-being committee to break down the barriers that lead to addiction. If all of these attempts fail, concerns can be brought to the state dental board.

Once a person with an addiction accepts the presence of this disease and expresses a desire to change, treatment can begin. Treatment should be designed for each individual by professionals with experience in treating drug and alcohol abuse. The design of each program depends on the patient's level of addiction and compliance, the family's willingness to send the addict into therapy, the availability of people who can hold the individual being treated accountable for his or her actions, and the accessibility of organizations that can provide counseling to the addict and his or her family. Treatment that involves accountability and support will require a lifetime of work. Individual and/or family counseling may be necessary for a prolonged period of time. Only through awareness and the willingness to get involved

as professionals will it be possible to help addicted health care providers receive the treatment they need to overcome their disease.

Disclaimer

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