The ADA Practical Guide to Substance Use Disorders and Safe Prescribing

Edited by Michael O’Neil

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The ADA Practical Guide to Substance Use Disorders and Safe Prescribing
Andrew Taylor O’Neil (September 2, 1991–September 9, 2014)

This book is dedicated to Andrew – high-school valedictorian, Eagle Scout with highest honors, naturalist, intellectual, humorist, friend and teacher to all, brother, and most importantly an amazing, caring, giving, and loving son. No parent could ever be more proud of a son than I am of you. You are forever in the hearts of all that ever met you.

Dad
The ADA Practical Guide to Substance Use Disorders and Safe Prescribing

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Health-care practitioners have become inundated by an array of patients with multiple medical conditions that are further complicated by pain/sedation management issues, substance use disorders (SUDs), and worries of drug diversion. Pain management, whether for acute or chronic pain, has become a primary concern for dental practitioners. Practitioners often feel pressured by patient survey results and patients to “overprescribe” controlled substances. With the rise in opioid addiction there has been a significant increase in medication-assisted treatment, including use of methadone and buprenorphine products. These agents have proven efficacy in both the treatment of opioid addiction and pain. However, evidence-based studies evaluating treatment of patients with concurrent opioid addiction and acute or chronic pain are lacking. Opioid or alcohol addiction treatment medications, such as naltrexone, have complicated opioid analgesia in many patients.

The plethora of substances being abused in society today includes household products such as paints and “cleaners” to combinations of heroin, cocaine, and other medicinal agents. Public health risks of medication misuse and substance abuse have reached epidemic proportions. When patients present to the dental practitioner with a history of SUD or recent substance abuse, routine procedures are no longer routine. Dental practitioners treating patients under the influence of substances may put both the patients and themselves at unnecessary risk of complications. Use of routine local anesthetics, such as lidocaine with epinephrine, now has the potential to put the methamphetamine addict in a life-compromising situation. Data supporting definitive management of patients with acute pain and SUD are limited. Recognizing patients with SUD, intervening, and directing them to appropriate treatment require time and expertise.

All dental office staff must now look for drug diversion behaviors on a daily basis. Unknowingly, dental practitioners may become victims of various scams and schemes. Recognition, prevention, deterrence, detection, and reporting of potential criminal behaviors interrupt the daily work flow for many dental practices. Prescription drug fraud and “Dr Shopping” are only two of the many diversion activities dental practitioners must address. A significant rise in prescription fraud has created an
environment of fear and frustrations for prescribers, patients, law enforcement agencies, and local communities.

Dental practitioners must be fully prepared to manage a variety of patients with complex analgesic/sedation needs and SUD and, at the same time, protect themselves and their staff from drug diversion activities.

The purpose of this book is multifactorial:

1. Review basic elements of SUD, acute pain/sedation management, and drug diversion.
2. Provide clinical tools proven to aid in the identification, interviewing, intervention, referral, and treatment of SUD.
3. Summarize evidence-based literature that supports what, when, and how to prescribe controlled substances to patients with SUD (e.g., analgesia, sedation).
4. Discuss key federal controlled-substance regulations that frequently impact dental practitioners.
5. Provide checklists that will help prevent drug diversion in dental practices.

In completing this challenge, dental practitioners will be better prepared to care for patients, protect the community, and safeguard their own practices.

Michael O’Neil
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Michael O’Neil
Introduction

The practice of dentistry has become increasingly complicated by multiple factors, including increasing numbers of patients with substance use disorder (SUD), patients receiving chronic pain medications, and prescription drug-related crime (see Box 1.1). In January 2012, the Centers for Disease Control (CDC) announced that the USA is experiencing an epidemic of prescription drug-related overdoses with the majority of these involving prescription opioids.1 Findings from the 2011 National Health and Aging Trends Study reported bothersome pain afflicts half of the community-dwelling US older adult population and is associated with significant reduction in physical function, particularly in those with multisite pain.2 National Survey on Drug Use and Health (NSDUH) 2012 data indicate that 6.8 million people aged 12 or older are current nonmedical users of psychotherapeutic drugs and that 4.9 million of these were users of pain relievers.3 The NSDUH 2012 data also indicate that the rate of current illicit drug (e.g., cocaine, marijuana, inhalants) use among persons aged 12 or older was 9.2%. In 2012, the NSDUH survey revealed an estimated 22.2 million persons aged 12 or older were classified as having an SUD in the past year (8.5% of the population aged 12 or older). Other results from this

Box 1.1 Factors Complicating the Practice of General Dentistry

- Chronic pain management.
- Misuse of prescription medication.
- SUD associated with prescription medications.
- SUD associated with illicit substances.
- SUD associated with alcohol.
- Psychiatric disorders (diagnosed and undiagnosed).
- Opioid maintenance treatment programs (methadone, buprenorphine).
- Aging population.
- Polypharmacy (use of multiple medications to treat the same condition).
- Patient criminal activity.
survey are include 2.8 million people were classified as having an SUD of both alcohol and illicit drugs, 4.5 million had an SUD associated with illicit drugs but not alcohol, and 14.9 million an SUD associated with alcohol but not illicit drugs. Overall, 17.7 million had an SUD associated with alcohol and 7.3 million had an SUD associated with illicit drugs.³

The extent of the overlap of pain management, SUD, prescription drug misuse, and drug diversion in the same patient has not been well defined. However, patients commonly present with more than one of these clinical and ethical challenges at any given office visit or hospital admission. Individual motivations and behaviors leading to the abuse, misuse, and diversion of prescription drugs, illicit drugs, and alcohol vary significantly. This chapter will provide an overview of SUD, prescription drug misuse, drug diversion, pain management, and cultural considerations in patients involved in these activities. Key terminology used throughout this book is also defined.

**Definitions**

**Acute Pain**

Acute pain comes on quickly, can be moderate to severe in intensity, and generally lasts a short period of time (e.g., from days up to 3 months). Acute pain is considered a beneficial process, warning of potential harm to the body from injury or medical conditions. Acute pain is most commonly nociceptive, modulated by mediators such as prostaglandins, substance P, and histamines, or neuropathic, characterized by alterations in the transmission pathways of nerves.

**Addiction**

Addiction is a primary chronic disease of brain reward, motivation, memory, judgment, and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social, and spiritual manifestations that frequently result in destructive and life-threatening behaviors.⁴ Addiction is influenced by multiple factors, including, but not limited to, genetics, environment, sociology, physiology, and individual behaviors.

Addiction is characterized by the inability to consistently abstain, impairment in behavioral control, craving, diminished recognition of significant problems in behavior and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death.⁴

**Chronic Pain**

Chronic pain generally refers to intractable pain that exists for 3 months or more and does not resolve in response to treatment. Some conditions may become chronic in as little as 1 month. Chronic pain may be continuous or reoccurring, persisting for months or even a lifetime. While the exact duration and characteristics of acute and chronic pain may overlap considerably depending on a patient’s medical condition, dental practitioners should recognize that specific timelines for the diagnosis of acute versus chronic pain may be integrated into federal and state legislation and into state board regulations to promote safe pain management practices and safe medication prescribing guidelines.

**Drug Diversion**

Drug diversion may be defined as the intentional transfer of a substance, or possession of a substance, or alteration of legitimate medication orders outside the boundaries designated by the Food and Drug Administration, federal Drug Enforcement Administration (DEA),
Drug diversion may involve prescription or over-the-counter (OTC) medications or illicit substances. These illegal activities are usually motivated by financial incentives, SUD behaviors, or other activities, such as sharing medications with the intent to help. Examples include a patient selling or giving their prescription medication to someone else, altering the original information on a prescription without the prescriber’s consent, or theft of medications.

**Drug Misuse**

Drug misuse may be defined as taking a prescribed or OTC medication for nonprescribed purposes, in excessive doses, shorter intervals than prescribed or recommended, or for reasons other than the original intent of the prescription. Examples include doubling the dosage, shortening dosing intervals, or treating disorders for which the medication was not prescribed.

**Opiates and Opioids**

Opiates refer to natural substances derived from the poppy plant. Opioids function in a similar manner to opiates but are either synthetic or partially synthetic derivatives of opiates. For the purpose of this text, the term opioid will be used interchangeably for opiate.

**Prescriber–Patient Mismatch**

Prescriber–patient mismatch is defined as the inconsistency in treatment goals or expectations of treatment between the prescriber and the patient. Examples include analgesia, sedation, or anxiolysis.

**Substance Abuse**

Substance Abuse is a maladaptive pattern of chemical use (e.g. alcohol, medications, marijuana, cocaine, solvents, etc.) leading to clinically significant impairment or distress, as manifested by one (or more) of the following, occurring within a 12-month period:

- Recurrent chemical use resulting in a failure to fulfill major role obligations at work, school, or home
- Recurrent chemical use in situations in which it is physically hazardous
- Recurrent chemically-related legal problems
- Continued chemical use despite having persistent or recurrent social or interpersonal problems caused by or exacerbated by the effects of the chemical

The substance abuse culture consists of individuals whose sole intent is to alter in any number of ways their mood, psychological sense of well-being, physical sense of well-being, or their personal connection with the world around them.

**Substance Dependence**

Substance dependence may be defined as persistent use of alcohol, other drugs, or chemicals despite having problems related to use of the substance. It is a maladaptive pattern of chemical use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring within a 12-month period:

- Tolerance, as defined by either of the following:
  - a need for significantly increased amounts of the substance to achieve intoxication or desired effect;
  - significantly diminished effect with continued use of the same amount of the substance.
- Withdrawal, as manifested by either of the following:
  - the characteristic withdrawal symptom for the substance (see Chapter 2);
Substance Use Disorders

In May 2013, The American Psychiatric Association redefined terminology previously used in the Diagnostic and Statistical Manual of Mental Disorders Text Revision (DSM-IV TR) guidelines regarding diagnostic classifications of Substance Dependence and Substance Abuse Disorders. SUD in DSM-5 combines the DSM-IV-TR categories of substance abuse, substance dependence and addiction disorders into a single disorder measured on a continuum from mild to severe. Nearly all SUDs are diagnosed based on the same overarching criteria which have not only been combined, but strengthened. (For example, in DSM-IV TR, a diagnosis of substance abuse previously required only one symptom, in DSM-5 a diagnosis of mild SUD requires two to three symptoms from a list of 11 [see Box 1.2]. SUD may be best described as a continuum of substance abuse and the disease of addiction.6

### Box 1.2 SUD Symptoms List
- Taking the substance in larger amounts or for longer than you meant to take it.
- Wanting to cut down or stop using the substance but not managing to be successful.
- Spending a lot of time getting, using, or recovering from use of the substance.
- Cravings and urges to use the substance.
- Not managing to do what you should at work, home, or school because of substance use.
- Continuing to use the Substance, even when it causes problems in relationships.
- Giving up important social, occupational, or recreational activities because of substance use.
- Using substances again and again, even when it puts you in danger.
- Substance dependence.
- Developing tolerance.
- Developing withdrawal symptoms.

Substance Use Disorder, Drug Misuse, Drug Diversion, and Pain Management in the Dental Community

The terms psychological or psychiatric dependency and addiction are often used interchangeably with SUD, the term used in this book. Although the terms chemical, medication, drug, substance, chemical substance, or illicit substances are often used interchangeably, in this book the term substance is used when generally referring to products that are being abused or misused. Differences are only likely to occur based on federal and state classifications or medically accepted use.

Substance Use Disorder

Dental practitioners likely observe many patients at various stages of the substance abuse—disease of addiction continuum known as SUD. Specific patient behaviors may range from
subtle exaggerations of pain severity with the intent to acquire more medications, to patients presenting in an exaggerated euphoric or dissociative state. Although the impact of opioid abuse and misuse on health care has been evaluated, the financial and workload burden of these behaviors has not been well characterized in the practice of dentistry. However, in a comprehensive statewide survey of dentists by O’Neil, 75% of dentists surveyed suspected 1–20% of their patients had a drug addiction or drug abuse disorder and 94% of dental practitioners altered their prescribing practices of opioid analgesics if the patient acknowledged an SUD. These survey results suggest SUD likely impacts patient management and the prescribing practices of dentists.

**Medication Misuse**

Prescription drug misuse has been identified as a significant health-care problem. Individuals self-medicating with prescription drugs outside of the boundaries of the original intent of the prescription appears to be a significant contributing factor in the development of SUD. Recent survey data from the SAMSHA in 2012 indicated 6.8 million Americans aged 12 or older (or 2.6%) had used psychotherapeutic prescription drugs without a prescription or in a manner or for a purpose it was not prescribed in the past month. Individuals may misuse drugs by self-prescribing unused or expired drugs. The impact of self-medicating with prescription drugs by patients for dental procedures or dental pain has not been well described in the USA. Excessive opioid prescribing by dental practitioners has been suggested in the dental literature, and these surveys have reported a wide dosing range of opioid analgesics for identical or similar dental procedures. Multiple factors may influence excessive prescribing (see Box 1.3). Dental practitioners should be aware of prescription medication misuse and abuse behaviors (see Box 1.4). These behaviors are discussed in more detail in Chapter 8. Ultimately, the most effective pharmacological agent, with minimal side effects or adverse effects, should be prescribed with the lowest dose possible for the minimal amount of time to achieve a reasonable effect such as analgesia, anxiolysis, or sedation. The impact of SUD on dental health and the dental community will be discussed in Chapter 6.

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**Box 1.3 Potential Influential Factors of Excessive Prescribing**
- Limited guidelines for appropriate drug and dosage selection for specific disease states or dental procedures.
- Subjectivity of individual patient or dentist’s perception of pain severity.
- Patient assertiveness or aggressiveness toward prescriber.
- Complicated patient pathology.
- Lack of knowledge of pharmacologic principles and treatment options.
- Prescriber–patient mismatch.
- Provider availability.
- Patient or prescriber convenience.

**Box 1.4 Common Prescription Drug Misuse and Abuse Behaviors in Dental Patients**
- Requesting refills or running out of medications early.
- Repeated frequent or unnecessary office visits.
- Obvious powder or tablet fragments in nostrils.
- Impaired patients at initiation of office visit.
- Request from members of the family (spouse, parent) or patient’s friends (boyfriend, girlfriend) for more medications.
- Family members or patient friends demanding to be present when asking for medications (excluding young children).
- Patients reporting multiple allergies to only less potent opioids and nonsteroidal anti-inflammatory drugs (NSAIDs).
Clinical Consideration
Prescribing of any medication requires comprehensive patient histories, examinations, screening prior to prescribing or dispensing medications, and patient education regarding medication misuse.

Alcoholism
Alcohol-related SUD is the most common of all SUDs in society today. In 2012, the NSDUH found that slightly more than half (52.1%) of Americans aged 12 or older reported being current drinkers of alcohol. This information translates to an estimated 135.5 million current drinkers in 2012. Other results in this same survey indicated nearly one-quarter (23.0%) of persons aged 12 or older were binge alcohol users in the 30 days prior to the survey. This translates to about 59.7 million people. Heavy drinking was reported by 6.5% of the population aged 12 or older, or 17.0 million people. The cost of excessive alcohol consumption in the USA in 2006 reached $223.5 billion according to the CDC in a 2006 study. The CDC defines excessive alcohol consumption, or heavy drinking, as consuming an average of more than one alcoholic beverage per day for women, and an average of more than two alcoholic beverages per day for men, and any drinking by pregnant women or underage youth. The exact costs of alcohol abuse and addiction to the dental health-care system have not been well elucidated. Because many dental patients are seen routinely for preventive as well as treatment services, dental practitioners may have the greatest opportunity to recognize potential alcohol SUD behaviors. This recognition at a minimum should result in a recommendation or referral to a local substance treatment center, substance abuse counselor, or primary-care physician for evaluation. See Box 1.5 for common signs and symptoms of potential alcohol-associated SUD. Chapter 2 will discuss the diseases of alcoholism and other SUDs.

Box 1.5 Common Signs and Symptoms of Potential Alcohol-Associated SUD
- Alcohol odor on breath or clothes during normal day hours.
- Slurred speech.
- Oversedation before office procedures start.
- Clumsiness, imbalance while walking.
- Unexplainable loud and argumentative behavior.
- Reduced effects of anesthetics during procedures.

Drug Diversion
Drug diversion presents in various forms, from simple self-prescribing and using someone’s leftover prescription medications, to criminal activity to acquire more medications to sell or abuse. The penalties and punishments for these behaviors vary significantly.

Box 1.6 Common Types of Drug Diversion
- Counterfeit medications/misbranding.
- Robbery/burglary.
- Trafficking/transport of illegal medications.
- Prescription forgeries (written or verbal)
- Sharing prescription medications.
- Internet scams avoiding state, federal, and national drug control regulations.
- Fraudulent or “fake” patient schemes, injuries, or complaints.
- Selling prescriptions or prescription medications.
- Personnel/office staff theft of medications from offices, hospitals, stock supplies.
- Doctor/dentist/pharmacy shopping with intent to deceive.
- Knowingly overprescribing medications by prescribers.
- Health-care fraud.
- Extortion/coercion.
- Self-prescribing leftover medications/misuse.