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Assessment and Treatment of Clients with Substance Use Disorders

An Overview

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The courage to be is rooted in the God who appears when God has disappeared in the anxiety of doubt.

—PAUL TILlich, *The Courage to Be* (1952, p. 190)

From the infant born to a woman addicted to crack cocaine to the older man with an alcohol problem who needs nursing home care, the abuse of alcohol and other drugs is a major health and social problem affecting every segment of our society. The direct or indirect impact of substance use disorders (SUD) is experienced by social workers and other clinicians in all types of settings, and requires each clinician to have some familiarity with the various psychoactive substances, and the assessment and treatment needs of those who experience problems with them. The purpose of this chapter is to provide an overview of the impact of the misuse of alcohol and other drugs on individuals, and to discuss the issues related to clinical assessment and interventions with drug- or alcohol-abusing clients and their families.

Definition of Terms

Every day millions of Americans use alcohol and other psychoactive substances; however, not everyone experiences a problem due to such use. It

is therefore helpful to conceptualize alcohol and other drug (AOD) use as a continuum ranging from nonproblematic experimental and social *use* to substance *misuse* (e.g., using pain medication to get high) or *abuse* (excessive use of a substance that results in a negative impact on the life of the individual and those around him or her), and finally, to AOD *dependence* or *addiction* (which may require physical detoxification, formal treatment, or both). A newer concept is that of “risky users” of addictive substances (The National Center on Addiction and Substance Abuse at Columbia University [CASA Columbia], 2012), which refers to users of alcohol, tobacco, and other substances who are at potential risk of developing “the disease of addiction. . . . Approximately one third (31.7 percent) of the U.S. population ages 12 and older (80.4 million people) are risky substance users” (CASA Columbia, 2012, p. 5).

The potential for addiction of different substances varies greatly; for example, narcotics or crack cocaine have a much higher potential for addiction than alcohol or marijuana. The terms *alcoholism* and *drug addiction* both imply a progressive deterioration of the individual’s social, physical, and mental status.

Although alcohol is an addictive mood-altering drug, traditionally, alcohol abuse and alcoholism were viewed as distinct from, and more acceptable than, abuse or addiction to other drugs (due to a combination of political, historical, economic, and possibly racial factors). During the 1970s, however, clinicians treating patients with alcohol-related problems became aware that many people, especially women and younger men, tended to abuse and become dependent on not only alcohol (in addition to caffeine and nicotine) but also other sedative–hypnotics, such as minor tranquilizers (particularly benzodiazepines) and sleeping medications. Thus, the term *chemical dependency* was coined to indicate the harmful use of alcohol and other sedative–hypnotics, and terms such as *drug abuse*, *substance abuse*, and *addiction* were relegated to illicit substances such as heroin, amphetamines, and marijuana. The growing use of cocaine during the early 1980s changed the clinical picture, as well as the vocabulary in the field. Due to a lack of appropriate treatment facilities, numerous middle-class cocaine abusers, who also tended to use alcohol to cope with the side effects of cocaine, were referred to alcoholism treatment facilities (Washton & Gold, 1987). Moreover, methadone-maintained patients, who tended to increase their drinking as they gave up heroin, were also coming to these facilities. Thus, in spite of the omission of alcohol from most “war on drugs” legislation and the separate federal funding streams for alcohol and drug use research and programs, the line separating “alcoholism/chemical dependency” from “drug abuse” had started to erode, and the treatment for people in both groups began to converge. According to the National Survey of Substance Abuse Treatment Services, by 2010, nearly one-third of the 4.1 million people receiving substance abuse treatment were in treatment for both drug and alcohol problems (Substance Abuse and Mental Health Services Administration [SAMHSA], 2011).

The change in client population led to changes in both the nomenclature and the diagnostic criteria. The fourth revised edition of the American Psychiatric Association's (APA, 2000) *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV-TR) used the term *substance-related disorders* (SRD) to classify all disorders related to the problematic consequences of substance use. The SRD category was further divided into *substance use disorders* (SUD), which included the criteria for diagnosing *substance abuse* and *substance dependence*, and *substance-induced disorders* (SID), which contained 10 disorders. As the term implied, SID included those disorders that were caused or *induced* by the use of a substance; these ranged from substance intoxication or withdrawal symptoms to substance-induced mood, anxiety, psychotic, or sleeping disorders. It was assumed that once a person stopped his or her abuse of or dependence on a substance, these SID would disappear within a relatively short time. Individuals whose psychiatric symptoms did not disappear over time were likely to receive additional diagnoses, variously referred to as coexisting, co-occurring, comorbid, or, to use an older term, MICA (an acronym for "mentally ill, chemically addicted" clients)—all of which referred to individuals having both major *mental illness, including personality disorders*, and diagnosable problems due to the use of *chemicals* or substances.

While, as discussed below, DSM-5 no longer includes the term *substance abuse* as a diagnostic criterion, this concept is and will likely continue to be used as the catchall term for substance use-related problems—and it is in this context that this term is used in this chapter.

The Use of DSM-5 Diagnostic Criteria

According to DSM-5 (APA, 2013), the DSM-IV terminology of *substance-related disorders* (SRD) has been changed to *substance-related and addictive disorders* (SRAD), and includes an additional diagnosis of *gambling disorder*. In the future, SRAD is likely to include other addictive disorders as more behavioral disorders are deemed to have scientific bases for being addictive. One new behavioral disorder being researched for future inclusion is *Internet gaming addiction*.

There are 10 classes of drugs included in DSM-5 under SRAD, and they are listed in alphabetical order: alcohol; caffeine; cannabis; hallucinogen; inhalants; opioids; sedatives (tranquilizers), hypnotics (sleeping medications) and anxiolytics (anti-anxiety medications); stimulants; tobacco; and a category for "other" or "unknown" substances. Substance-induced disorders are no longer a separate category within substance-related disorders, but are included within the diagnosis of each individual substance, as well as under the specific psychiatric diagnosis that they related to. For example, alcohol-induced depressive disorder is now part of *substance/medication-induced depressive disorder* (APA, 2013, p. 175), as well as being coded under *other alcohol-induced disorders* (with the term

“other” referring to it not being related to alcohol intoxication or withdrawal).

The biggest difference between DSM-IV-TR and DSM-5 SUD criteria is the elimination of the separate diagnostic terms *substance abuse* (which called for one positive criteria out of four symptoms) and *substance dependence* (which required a positive response to at least 3 out of 7 criteria) and the use of a single combined category of SUD diagnosed by meeting at least 2 out of 11 criteria. Therefore, according to DSM-5 (APA, 2013), to diagnose an individual with a specific SUD requires that he or she have a problematic pattern of particular substance use (e.g., alcohol, cocaine, etc.) leading to significant impairment, as manifested by 2 or more of 11 symptoms, occurring within a 12-month period. These symptoms, similar to those listed in DSM-IV-TR (APA, 2000), focus on increase or decrease of physical tolerance, withdrawal, time spent on using or searching for a substance, impaired judgment manifested by using a substance when it is physically hazardous or when it affects one’s physical or psychological functioning, impaired ability to fulfill one’s role obligation, using the substance in larger amount than planned, unsuccessful efforts to reduce one’s substance use, and giving up important activities due to substance use. The DSM-IV-TR criterion of recurrent substance-related legal problems, which was a part of the previous diagnosis of substance abuse, has been eliminated and a new criterion of *craving*, or a strong desire or urge to use a substance, has been added. In essence, SUD refers to the compulsive and continued use of a substance despite adverse consequences.

A new major addition in the new DSM is the *severity diagnosis* based on how many positive symptoms out of the maximum 11 are met: no disorder (0–1 symptom), mild disorder (2–3 symptoms), moderate disorder (4–5 symptoms), or severe substance use disorder (6 or more symptoms). The higher end of severity is equivalent to the previous “substance dependence” diagnosis. An individual whose particular substance use causes impairment in his or her functioning but does not meet the full diagnostic criteria for a given substance can be given the diagnosis of “Unspecified (list specific substance, e.g., cannabis, opioid, etc.)-Related Disorder.” Finally, since each substance has its own diagnostic category, there is no diagnosis of “poly-substance” use disorder.

The DSM-5 diagnosis of SUD uses two “specifiers” related to remission from substance use and delineating the longer-term outcome of the disorder—they are *in early* and *in sustained remission*. *In early remission* refers to the fact that the individual has not had any of the previously discussed symptoms (with the exception of “craving” or “a strong desire” to use the substance) for at least 3 but less than 12 months (a change from the DSM-IV-TR requirement of 1 month of being symptom-free). *In sustained remission* means that the individual has not met any of the above criteria for the use of the given substance (again, with the exception of craving) for 12 months or more. An additional specifier, *in a controlled environment*, indicates that the individual is not using a substance because he or she is

living in a substance-free environment, such as a therapeutic community or a drug-free prison.

The Scope and Impact of Substance Abuse

An estimated 22.1 million persons in the United States (8.7% of the total population), age 12 or older, were classified as abusing or being dependent on a substance in 2010 (SAMHSA, 2011). The abuse of alcohol and other drugs affects individuals, families, communities, and society as a whole, and causes more deaths, illnesses, accidents, and disabilities than any other preventable health problem today (CASA Columbia, 2012). It is estimated that more than 20% of deaths in the United States are attributable to tobacco, alcohol, and other drug use (Kochanek, Xu, Murphy, Minino, & Kung, 2011). In addition, use of these substances contributes to more than 70 other conditions requiring medical care, including cancer, cardiovascular disease, HIV/AIDS, respiratory disease, cirrhosis, ulcers, pregnancy complications, and trauma (CASA Columbia, 2012). Other associated substance-related social consequences include crime, accidents, suicide, child neglect and abuse, domestic violence, unplanned pregnancies, and lost productivity—all of which cost the U.S. government at least \$468 billion each year (CASA Columbia, 2012; Centers for Disease Control and Prevention [CDC], 2011a).

Unfortunately, only 34% of the federal drug control budget is devoted to treatment of SUD, whereas 50% is spent on the criminal justice system and interdiction (Office of National Drug Control Policy [ONDCP], 2013). Most tragically, of the 23.1 million persons needing treatment for drug or alcohol-related problems, only 2.6 million (or 11.2%) received clinical help in 2010 (SAMHSA, 2011).

Below is a brief overview of the scope and impact of substance abuse as it relates to clinical practice.

The Scope of Alcohol-Related Problems

Despite the U. S. government and media focus on users of illicit drugs, clinically it is important to note that approximately *15 million* individuals manifest an alcohol use disorder, compared to *an estimated 4.2 million* individuals manifesting a drug use disorder (USDHHS, 2011). Thus, it is much more likely that a clinician in a nonaddiction setting will encounter someone with an alcohol-related problem, or their family member, than problematic users of any other substances.

Alcohol abuse is associated with a wide variety of illnesses and social problems, including neurological problems (e.g., dementia), stroke and neuropathy; cardiovascular problems, psychiatric problems, including depression and anxiety; liver diseases, such as hepatitis and cirrhosis; and gastrointestinal problems, including pancreatitis and gastritis. Other associated

conditions include increased risk of cancer of the liver, breast, mouth, throat, esophagus, and colon, and recent research suggests that risky alcohol use may contribute to the physiological process that causes cancer cells to metastasize (CASA Columbia, 2012). Past studies indicated that nearly half of all violent deaths (accidents, suicides, and homicides), particularly of men younger than age 34, were alcohol-related, and alcohol use has been found to be a consistent factor in reports of child physical and sexual abuse, including incest, and in cases of rape and domestic violence (Robert Wood Johnson Foundation, 2001). Up to 60% of sexual offenders drink at the time of the offense, and more than 75% of female victims of nonfatal domestic violence reported that the assailant was drinking or using drugs (Robert Wood Johnson Foundation, 2001).

Alcohol abuse and dependence vary according to age and gender, as well as ethnic and racial factors. Although men consume and misuse alcohol at significantly higher rates than women, this gender gap has decreased, partly due to women's earlier initiation of drinking over time (Gruza, Norberg, Bucholz, & Bierut 2008). Compared with men, women experience significantly shorter time intervals between the initiation of alcohol use and the onset of significant alcohol-related problems and treatment entry, a phenomenon known as "telescoping," which is attributed to a variety of biological, socioeconomic, psychological, and cultural factors that affect women (Greenfield, Back, Lawson, & Brady, 2010).

Regarding racial/ethnic differences, among persons ages 12 or older, whites in 2010 were more likely than other racial/ethnic groups to report current use of alcohol (56.7%); they also had the highest rate (7.7%) of "heavy" or problematic alcohol use, followed by American Indians or Alaskan Natives (6.95%), those of "two or more races" (5.8%), blacks or African Americans (4.5%), and Hispanics or Latinos (5.1%) (SAMHSA, 2011). Asian Americans (a term that encompasses an extremely diverse population) manifest a lower level of alcohol use disorders than other racial and ethnic groups, a finding accounted for by their physiological sensitivity to the effects of alcohol, the so-called "flushing response" (SAMHSA, 2011; Sue, 1987). Socioeconomic factors also correlate with race and gender: Limited education and poverty have been correlated to alcohol dependence in black males but not in white males (Robert Wood Johnson Foundation, 2001). (For a fuller discussion of ethnocultural or gender issues, see Straussner, 2001; Straussner & Brown, 2002; Straussner & Zelvin, 1997).

The Scope of Problems Related to Other Drug Use

Government data indicate that during the 2010 calendar year, an estimated 22.6 million Americans, or 8.9% of the population ages 12 years and older, used illicit drugs (USDHHS, 2011); however, as pointed out previously, not all drug use is problematic. Nonetheless, recent studies indicate that drug use results in increasing serious individual and social problems: "Drug

overdose deaths surpass gunshot deaths in our country, and in 16 states, overdose deaths are a more common cause of accidental death than car crashes. Drugged driving has now been identified at higher levels than alcohol-impaired driving, [while] prescription drug abuse is at record levels” (ONDCP, 2010, p. v). The 2010 National Household Survey on Drug Abuse (NHSDA) found that the most commonly used illicit drugs were marijuana (4.5 million), pain relievers (1.9 million), and cocaine (1.0 million). During the past decade, the number of persons with pain reliever dependence or abuse increased from 1.5 million to 1.9 million, while the number of persons with cocaine dependence or abuse declined from 1.5 million to 1.0 million (USDHHS, 2011).

As in past years, recent national survey data indicate that men have a higher rate of current illicit drug use than women (11.2% vs. 6.8%), and are twice as likely to use marijuana heavily. What is most noteworthy, however, is the disappearance of this gender gap among young people: “the rates of current illicit drug use were similar between males and females aged 12–17 (10.4 percent for males vs. 9.8 percent for females)” (SAMHSA, 2011), while young women (ages 12–17) were more likely than young men to be current nonmedical users of psychotherapeutic drugs (3.7% vs. 2.3%) and nonmedical users of pain relievers (3.0% vs. 2.0%). These findings will have serious implications for gender differences in the future as these young people age.

According to government data, women in the criminal justice system have a particularly high rate of substance use problems: Approximately 60% of state and 43% of federal female prisoners surveyed in 2004 met the criteria for SUD (ONDCP, 2010). Another group with a growing substance abuse problem is older adults: Among adults ages 50–59, the rate of current illicit drug use increased from 2.7 to 5.8% between 2002 and 2010, reflecting the aging of members of the baby boom cohort, whose rates of illicit drug use have been higher than those of older cohorts (SAMHSA, 2011).

One of the most tragic consequences of drug abuse, particularly among those who inject drugs, is the possible transmission of HIV/AIDS. Almost one-fourth of HIV/AIDS-infected individuals in 2007 were intravenous illicit drug users (ONDCP, 2010). This drug–AIDS connection is especially detrimental to communities of color: Nearly half of all new infections in the United States, 45%, were among African Americans, who make up only 12% of the population, while Hispanic Americans, who make up 15% of the population, account for 17% of new infections (People of Color, 2011). While the exact percentage of HIV transmission due to drug use by race/ethnicity is difficult to find, an estimated 14% of the black men and women who were newly infected during 2008 were intravenous drug users (CDC, 2011b).

In addition to AIDS, the use of dirty, shared, and reused needles results in various systemic infections. Illnesses such as anemia, tuberculosis, heart disease, diabetes, pneumonia, and hepatitis are also common among heroin

users, and cocaine use affects the cardiovascular system, resulting in blockages in blood circulation, abnormal heart rhythms, and strokes. Prostitution, a frequent means of support for drug-dependent women, leads to a high incidence of sexually transmitted diseases (O'Connor, Esherick, & Vieten, 2002).

Prenatal Impact of Alcohol and Other Drugs

A unique issue among women who abuse alcohol and/or drugs is the prenatal impact of these substances upon their children. National studies show that among pregnant women, 4.4% were current illicit drug users (SAMHSA, 2011). The degree of impact on the fetus due to exposure to alcohol or other drugs is determined by many factors, including the type of substance, the gestation age of the fetus, the route and duration of exposure, the dosage and frequency of drug intake, other substances consumed simultaneously, and environmental factors (Straussner, 2011). Substances used by the mother are transmitted to the fetus during pregnancy and may result in the birth of an addicted baby or a baby with permanent physiological and brain damage, depending on the substance used and the timing of use (Azmitia, 2001; CASA Columbia, 2011; Straussner, 2011). "Heavy" use of alcohol during pregnancy is associated with miscarriage and stillbirth, and is one of the primary causes of severe mental and developmental delays in infants, and fetal alcohol spectrum disorder is the leading known cause of preventable mental retardation (Sokol, Delaney-Black, & Nordstrom, 2003).

Although the impact of paternal drug and alcohol use has not been widely researched, authorities have taken a harsh view of the damages caused to the fetus and the newborn due to maternal abuse of drugs and alcohol. In many states, children who are born addicted or test positive to illicit substances are legally viewed as abused, and hospital workers are required to report such cases to local child welfare agencies (Staton-Tindall, Sprang, Clark, & Walker, 2013). Among the consequences to the mother are imprisonment or mandatory treatment, and foster care placement and the possibility of permanently losing custody of the child.

Substance Abuse by Young People

Unlike the relatively constant rate of alcohol and drug abuse by adults over the years, the use of substances by young people tends to fluctuate over time. Such fluctuation reflects the availability of particular substances, their popularity among certain subgroups, and the nature of governmental data collection (Johnson, O'Malley, Bachman, & Schulenberg, 2010, 2011). Recent surveys indicate that one in eight high school students (11.9%; 1.6 million) have a diagnosable clinical SUD involving nicotine, alcohol, or other drugs (CASA Columbia, 2011). During 2009, the most popular substances used

by young people were (in decreasing order) alcohol, tobacco, marijuana, Vicodin, amphetamines, tranquilizers, cough medicine, salvia, Adderall, sedatives, OxyContin, hallucinogens (including Ecstasy), inhalants, and cocaine (ONDCP, 2010).

The heavy use of alcohol among young people is often viewed as a “gateway” to other drugs; research studies have shown that among youths who drink heavily, 66% were also current illicit drug users, compared to only 4.2% of nondrinkers who were current illicit drug users (Robert Wood Johnson Foundation, 2001).

What is important to note is that despite these upward and downward trends, “this nation’s high school students and other young adults show a level of involvement with illicit drugs which is greater than can be found in any other industrialized nation in the world” (Johnston, O’Malley, & Bachman, 1988, p. 14). More significantly, young people are experimenting with drugs, alcohol, and tobacco at earlier ages, and studies show that the younger they begin, the more likely users are to have substance abuse problems later in life. In 2010, adults ages 21 or older who had first used alcohol at age 14 or younger were more than five times as likely to be classified with alcohol dependence or abuse than adults who had their first drink at age 21 or older (15.1% vs. 2.7%; SAMHSA, 2011).

Such findings reinforce the need for prevention programs whose aim is to postpone the age of initiation into substance use.

Theories of Addiction

Although addiction is increasingly seen as “a primary and often chronic disease of the brain” (CASA Columbia, 2012, p. 20), research and clinical data reveal no single etiological factor that accounts for why some people abuse and become addicted to a substance and others do not. Some of the factors frequently cited are discussed below.

Biochemical and Genetic Factors

Studies on twins, half-siblings, and adopted children of alcoholics (Edwards, Svikis, Pickens, & Dicks, 2009; Goodwin, 1984; Shuckit, Goodwin, & Winokur, 1972) as well as newer research on markers of inherited susceptibility (Begleiter & Kissen, 1995; Clarke et al., 2012; Tabakoff et al., 1988) point to the presence of a genetic factor in the intergenerational transmission of alcoholism, especially in males, whereas neurochemical studies point to the importance of both biochemical and genetic factors in narcotic and cocaine abuse. Studies have found that genetics accounts for between 30 and 75% of the risk for addiction, and according to some authors, genetic factors appear to be stronger drivers than environmental factors in initiation of substance use at an early age (Agrawal & Lynskey,

2008; CASA Columbia, 2012; Clarke et al., 2012). Three important points regarding the genetic component of addiction are agreed upon by studies to date: A family history of addiction is a strong predictor of risk regardless of socioeconomic status; no single gene but rather an interaction of multiple genes with environmental factors leads to increased risk of addiction, and factors that may trigger SUD differ among different individuals.

Familial Factors

According to CASA Columbia (2012), “The nature of the parent–child relationship is key; people who come from families with high levels of parent–child conflict, poor communication, weak family bonds and other indicators of an unhealthy parent–child relationship are at increased risk of substance use and addiction” (p. 24). Studies of the backgrounds of people with alcohol or opiate addictions in treatment indicate that they are more likely to have experienced early separation from one or both parents and tended to receive inadequate care during childhood (Kaufman, 1985). Many were physically, sexually, or otherwise abused during childhood (Dube et al., 2003; Roberts, Nishimoto, & Kirk, 2003) and/or grew up in families with high incidences of multigenerational abuse of alcohol or other drugs. Substance abuse also has been viewed as serving as an important stabilizing force in dysfunctional families (Steinglass, Weiner, & Mendelson, 1971).

Psychological Factors

Psychological explanations of substance abuse encompass various perspectives and include classical and modern psychoanalytic theory; developmental and personality theories; and behavioral, conditioning, and cognitive theories.

According to the classical psychoanalytic view, the individual uses a substance as a defense against unacceptable sexual and aggressive drives. In a letter to his friend Wilhelm Fleiss, Freud described addictions to “alcohol, morphine, tobacco, and the like . . .” as a “substitute and replacement” for the “primal addiction,” masturbation (Freud, 1897/1954, p. 287), and in his description of the case of Dr. Schreber, Freud (1911/1958) posited alcoholism as being a defense against homosexuality. Other early psychoanalysts viewed alcoholism as the result of a fixation in and regression to the oral stage of development (Abraham, 1908/1979), as a response to underlying neurotic conflict between dependence and anger (Fenichel, 1945), and/or as a slow form of suicide (Menninger, 1938).

Modern psychoanalysts, focusing on attachment theories, object relations, ego, and self psychology theories, view the abuse of alcohol and other drugs as (1) resulting from insecure attachment due to interpersonal childhood adversities (Flores, 2004; Mickelson, Kessler, & Shaver, 1997), (2) an

attempt to deal with poor ego development (Khantzian, 1981; Wurmser, 1978), (3) regression to or fixation at the stage of pathological narcissism (Kernberg, 1975), or (4) an effort to overcome a deficiency in the sense of self (Kohut, 1971, 1977). According to this view, alcohol and other drugs provide a “sense of internal homeostasis which substitutes for the basic lack of a sense of integration of self” (Kaufman, 1985, p. 14).

Other psychological perspectives view the abuse of alcohol and other drugs as the following:

- Attempts to “medicate” preexisting emotional problems (e.g., mood, anxiety disorders, or schizophrenia); behavioral disorders (e.g., conduct disorder and attention-deficit/hyperactivity disorder); as well as to cope with borderline, narcissistic, or antisocial personality disorders (Brook, Brook, Zhang, & Koppel, 2010; CASA Columbia, 2012; Khantzian, 1981, 1997).
- Ways of coping with situational stress and trauma, particularly for individuals who develop posttraumatic stress disorder (PTSD), which are common among veterans and individuals in active military duty (CASA Columbia, 2012; Peele, 1998).
- Efforts to diminish anxieties about self-assertion and to obliterate unacceptable feelings of anger and hostility (Kaufman, 1985).
- Ways of expressing unacceptable dependency needs (McCord & McCord, 1960).
- Efforts to compensate for feelings of inferiority or powerlessness (McClelland, Davis, Kalin, & Wanner, 1972).
- Related to personality characteristics such as novelty seeking, field dependence, low frustration tolerance, high impulsivity, or inability to endure anxiety or tension (Leonard & Blane, 1999; Vaillant, 1983).

According to learning and behavioral theories, substance abuse is a conditioned behavioral response that results from positive reinforcement following initial alcohol or other drug use. Although drug use originally may have been motivated by a desire for the pleasurable effects, the aversive consequence of taking a substance may be equally as reinforcing under certain environmental conditions (Littrell, 2001). Moreover, withdrawal signs could be conditioned to specific environmental cues. Expectancy, modeling, imitation, and identification also may play a role in substance abuse (Marlatt, Baer, Donovan, & Kivlahan, 1988).

Cognitive-behavioral theorists such as Albert Ellis (Ellis, McInterney, DiGiuseppe, & Yaeger, 1988) and Aaron Beck (Beck, Wright, Newman, & Liese, 1993) have focused on the mental schemas or distorted cognitive beliefs about self and others. Such distorted or irrational beliefs make it difficult for the individual to respond appropriately to certain triggers; absence of the ability to respond appropriately, in turn, leads to a chain of

negative behaviors and consequences, including substance abuse (see Liese, Chapter 10, this volume).

Environmental and Sociocultural Factors

Numerous environmental, social, cultural, and economic factors have been linked to substance use and abuse, including the increasing availability of various substances; exposure opportunity (Wagner & Anthony, 2002), whereby young people who are using one substance, such as marijuana, are shown to be more likely to expose themselves to more harmful drugs; a paucity of alternatives to a meaningful life or source of income, particularly among minority populations in inner-city communities; the influence of peer groups and the mass media (CASA Columbia, 2012); and social acceptance, even cultural idealization, of various substances.

Studies of female substance abusers, particularly those in lower socioeconomic classes, show a high correlation between substance abuse by women *and* their spouses or boyfriends, suggesting women's emotional as well as economic dependence on men as a factor in substance abuse (Straussner & Attia, 2002).

Multifactorial Perspective

Each theory of substance abuse has implications for both prevention and treatment; however, the etiology of alcohol and other drug abuse and addiction still remains empirically unsubstantiated and debatable. According to CASA Columbia (2012), “whereas biological, psychological and environmental factors—such as impairments in the brain’s reward circuitry, compensation for trauma and mental health problems, easy access to addictive substances, substance use in the family or media and peer influences—play a large role in whether an individual starts to smoke, drink, or use other drugs, genetic factors are more influential in determining who develops the disease of addiction” (p. 8).

Most likely, substance abuse and dependence result from a combination of factors, including biochemical, genetic, familial, environmental, and cultural ones, as well as personality dynamics. Therefore, it may be best to view substance abuse as a dynamic, multivariate syndrome, in which multiple patterns of dysfunctional substance use occur in various types of people, or within the same person at different times in his or her life, with multiple prognoses requiring a variety of appropriate interventions.

Psychopharmacology

Every individual who takes a mind-altering substance in sufficient quantity experiences a physiological reaction or a state of intoxication. Moreover,

many substances, if taken in large doses over a long period of time, lead to addiction or physiological dependence, regardless of the individual's predisposing characteristics. Thus, it is important to understand the physiological impact of drugs on the human brain and body. Of the various ways of categorizing the numerous substances available today, the most useful classification is based on their effect on the central nervous system.

Central Nervous System Depressants

This category includes alcoholic beverages, barbiturates, and nonbarbiturate sedative-hypnotics (antianxiety and sleeping medications) such as Amytal, Luminal, Tuinal, Doriden, Quaalude, Placidyl, Noludar, Nembutal, and Seconal; benzodiazepines (minor tranquilizers), such as Librium, Valium, Xanax, Ativan, Restoril, Tranxene, Dalmane, and Serax; anesthetics, such as chloroform, ether, and nitrous oxide; volatile solvents, such as toluene, xylene, and benzene; and low doses of cannabinoids, such as marijuana and hashish. These drugs slow down, or sedate, the excitable brain tissues. Such sedation affects the brain centers that control speech, vision, coordination, and social judgment. The individual also experiences increased agitation and excitability when coming off these drugs—a withdrawal effect commonly known as a *hangover*.

Individuals under the influence of alcohol or other central nervous system (CNS) depressants are likely to exercise poor judgment, which is often manifested in inappropriate and even destructive behavior. Whereas low doses of a CNS depressant, particularly alcohol, block the usual inhibitions, making the person appear to be relaxed or unreserved, high doses slow down the heart rate and respiration, produce lethargy and stupor, and may result in death. Numerous descriptions of deaths among young people resulting from ingestion of massive amounts of alcohol in short periods of time have been reported in the popular press.

Another dangerous situation arises from the potentiating effect of combining two or more substances within this category. Thus a combination of alcohol with Valium or any other sedative-hypnotic is a common cause of purposeful or accidental overdose, particularly among women.

Central Nervous System Stimulants

This category includes amphetamines and methamphetamines (known variously as Speed, Ice, Crystal Meth, Crank, Fire, Glass); cocaine and crack; prescription drugs such as Dexedrine, Ritalin, and Adderall; and caffeine and nicotine. In varying degrees, these drugs increase or speed up the function of excitable brain tissues, resulting in energized muscles, increased heart rate and blood pressure, and decreased appetite.

Low doses of amphetamines are commonly used by people wishing to stay awake, such as students and truck drivers; however, when coming off

these drugs, users experience exhaustion and “crash” or fall asleep. Large doses of stimulants such as amphetamines and cocaine can produce acute delirium and psychosis. At times, the psychotic symptoms can be difficult to distinguish from schizophrenia and may include hallucinations, paranoia, and hypersexuality. The use of cocaine also may lead to a variety of other toxic effects, including severe feelings of depression and sudden heart attack. Suicidal and violent behavior under the influence of amphetamines and the more potent forms of cocaine, such as crack, have been noted by researchers and clinicians.

Narcotics or Opiates

These drugs decrease pain by binding to specific receptors in the brain. This category includes opium and its derivatives, such as morphine, heroin, codeine, and paregoric, as well as synthetic drugs such as methadone (Dolophine) and buprenorphine (marketed as Subutex or Suboxone, a combination of buprenorphine and naloxone), fentanyl, Demerol, Darvon (recently banned by the U.S. government), Prinadol, Lomotil, Talwin, Percodan, Percocet, OxyContin, and Vicodin, all of which tend to serve as narcotic analgesics.

The pharmacological action of opiates generally tends to have a sedative and tranquilizing effect. However, unlike the users of sedative substances, narcotic users do not usually experience poor motor coordination or loss of consciousness. The individual who abuses opiates is more likely to experience a state of stuporous inactivity and dwell in daydreaming fantasies. Due to the physical agitation caused by withdrawal and the psychological panic related to anticipation of withdrawal symptoms, antisocial behaviors may occur during drug-seeking behavior or actual withdrawal.

Psychedelics/Hallucinogens

These drugs produce gross distortions of thinking and sensory processes, thereby inducing a psychosis-like state that often includes visual hallucinations. Included in this category are the “alphabet drugs,” such as LSD (lysergic acid diethylamide), PCP (phencyclidine), DOM or STP (2,5-dimethoxy-4-methylamphetamine), mescaline, psilocybin, and large or highly potent doses of cannabinoids or marijuana.

Psychedelics are not physiologically addictive; however, they have been reported to precipitate psychosis in some vulnerable individuals. They also result in feelings of extreme anxiety and misperception of reality, particularly for users of PCP (also known as “Angel Dust”), who frequently experience distorted body image, depersonalization, depression, and hostility that may be expressed through violence (Waldinger, 1986).

It is important to note that the marijuana used today is much more potent than that used during the 1960s and 1970s. Frequent use of marijuana by adolescents and young adults has been correlated with the

development of the so-called “amotivational syndrome,” a non-empirically based concept characterized by passivity and lack of ambition leading to poor school and work performance and personality deterioration (Alexander, 2003).

Designer and Club Drugs

Also commonly used by young people are the so-called “designer,” or look-alike, drugs, such as MPTP (1, methyl-4-phenyl-1,2,3,6-tetrahydropyridine) and China White, which are synthesized in clandestine laboratories and resemble highly potent doses of amphetamines or narcotics in their impact. Currently, one of the most widely used club drugs is MDMA (methylenedioxyamphetamine) or Ecstasy (also known as XTC, X, Adam, or Lover’s Speed). Other club drugs include GHB (gamma hydroxybutyrate; Grievous Bodily Harm, G, Liquid Ecstasy, Georgia Home Boy), Rohypnol (Roofies, Rophies, Roche, Forget-Me Pill), and ketamine (Special K, K, Vitamin K, Cat Valiums). Among the newest popular substances are the so-called “Bath Salts,” which have effects similar to amphetamine and cocaine.

The chemicals found in club drugs vary widely depending on manufacturing sources. Contaminants in these drugs have resulted in negative physical and psychological reactions in some young people. Moreover, since some of these substances tend to be colorless, tasteless, and odorless, there have been numerous reports of club drugs, particularly Rohypnol, being added to beverages of individuals without their knowledge, who then become victims of sexual assaults (see www.drugabuse.gov/drugs-abuse/club-drugs for a fuller discussion).

Combinations of Drugs

Various combinations of drugs—such as heroin and cocaine (commonly referred to as *Speedball*), cocaine and alcohol or marijuana, cocaine and PCP, methadone and alcohol or cocaine, tranquilizers and alcohol, and so forth—are frequently used to counteract the side effects of any one drug or to increase the impact of the drugs synergistically.

As can be seen from the previous discussion, the various substances have a differential impact on a person’s mood and behavior, regardless of his or her premorbid personality. Thus, familiarity with the impact of the various substances on behavior and thinking processes is a crucial aspect of clinical assessment and treatment.

Clinical Interventions

Although fewer than one-fourth of those individuals who need help for their substance abuse or dependence ever get treatment, those who do

obtain treatment do get better, with outcomes that are similar to those of other chronic health conditions (CASA Columbia, 2012; McLellan, Lewis, O'Brien, & Kleber, 2000).

Clinical intervention with substance abusers, as with all clients, begins with a comprehensive assessment, followed by appropriate intervention approaches that include some or all of the following:

- Identifying the kinds of substances being abused, and the degree of physical and psychological dependence.
- Assessing the degree to which these substances interfere with daily life.
- Motivating the abuser to obtain appropriate treatment.
- Helping the abuser achieve recovery.
- Monitoring ongoing recovery.
- Helping family members and significant others understand substance abuse and its impact on them.

Screening and Assessment

Screening attempts to identify people whose substance abuse problems are not clearly evident, whereas assessment is undertaken once a problem is more apparent. *Assessment* is an ongoing, interactive process that consists of several important tasks, including (1) determining a formal diagnosis, (2) ascertaining the severity and impact of substance abuse on the user and those around him or her, (3) establishing a baseline of the patient's condition for future comparison, (4) providing a guide to treatment planning and the patient's progress in treatment, and (5) evaluating the impact of environmental influences and appropriate preventive efforts. A comprehensive assessment may include a medical examination, clinical interviews, collateral information, and data obtained through a variety of formal instruments (U.S. Department of Health and Human Services [USDHHS], 1991a).

The first task in screening and assessing people who abuse drugs or alcohol is to avoid stereotyping them. As noted, there are tremendous variations in the background and characteristics of substance abusers, in the kinds of substances being abused, and in the impact of these chemicals on the users and their significant others. Nonetheless, certain characteristics and behavioral patterns *are* common to many substance abusers and provide basic assessment clues.

All clients whose behavior is highly volatile and unpredictable or whose history indicates interpersonal, occupational, financial, and/or legal problems should be questioned about possible SUD. Whereas some individuals may readily admit to their substance abuse, others may not. It is often helpful to obtain factual information from family members or other relevant sources, to conduct urine or other screenings, as well as to rely on behavioral clues such as a runny nose, wearing long sleeves in the summer

to cover up needle marks, or the smell of alcohol on the breath (especially, early in the day).

Due to the biopsychosocial impact of substance abuse, abusers of alcohol and other drugs tend to rely excessively on defense mechanisms such as denial, projection, and rationalization (Flores, 2004). Because defense mechanisms are unconscious, substance abusers are often unaware of the full impact of the substance abuse on their lives. Thus, it is up to the worker to ask the “right” questions in order to form an appropriate assessment.

Given that most people in this society drink, it is less threatening to start with questions about alcohol consumption before gathering data about illicit drugs. It is also important to obtain information about the onset of substance use. Clinically, it is helpful to conceptualize the person as developmentally arrested at the age at which the substance abuse (not just *use*) first began, regardless of current chronological age, because there are profound developmental differences between an individual who started abusing alcohol and/or smoking marijuana heavily at age 13 and one who did so at age 23.

The following set of questions can be used as part of an initial assessment:

1. “What do you usually drink?”
2. “How much do you drink a day/week?”
3. “How old were you when you had your first drink?”
4. “How old were you when you started drinking on a regular basis?”
5. “Are you now drinking more/less than a year ago?” [testing for increase–decrease in tolerance]
6. “Have you ever used?” [insert substance a–k]? “How much? How often? When did you start? Date of last use? Source of supply? Method of use (i.e., smoking, injecting)?”
 - a. marijuana
 - b. heroin
 - c. methadone
 - d. cocaine/crack
 - e. amphetamines/methamphetamines/uppers
 - f. sleeping medication (what kind?)
 - g. tranquilizers/downers (what kind?)
 - h. pain medication (what kind?)
 - i. club drugs (what kind?)
 - j. other medication/drugs obtained from family/friends or on the street
 - k. other medication/drugs obtained from a doctor
7. “Have you ever tried to stop your alcohol/drug use? What happened?”

8. "Have you ever been in treatment for substance abuse? Where? When? For how long? What happened?"
9. "Have you ever attended an Alcoholics Anonymous (AA) or Narcotics Anonymous (NA) meeting (or any other self-help group)? How did you feel there?"
10. "Does/did your mother/father drink too much?"
11. "Does/did your mother/father use drugs? What kind?"
12. "Does your spouse/boyfriend/girlfriend drink a lot/use drugs? What kind?"
13. "Has anyone ever complained about your use of alcohol/drugs?"
14. "Have you ever been in any kind of legal trouble because of your use of alcohol/drugs?"
15. "Do you think that you have a problem with drugs/alcohol?"

Answers to these questions can provide a rough assessment of substance abuse. A growing number of clinicians also use standardized screening and assessment instruments (King & Bordnick, 2002). Among the most frequently used instruments are various versions of the CAGE (Cut down, Annoyed, Guilty, Eye-opener) for assessing alcohol-related problems, and the CAGE-AID (Adapted to include Drugs; Brown & Rounds, 1995; Mayfield, McLeod, & Hall, 1974), the SASSI (Substance Abuse Subtle Screening Inventory; Miller, 1997), several versions of the MAST (Michigan Alcohol Screening Test; Selzer, 1971), including SMAST, the shorter version of MAST, and one designed for geriatric population (MAST-G), the AUDIT (Alcohol Use Disorders Identification Test; Babor, de la Fuente, Saunders, & Grant, 1992), the DAST (Drug Abuse Screening Test; Maisto, Carey, Carey, Gordon, & Gleason, 2000; Skinner, 1982), the CRAFFT (Car, Relax, Alone, Forget, Friends, Trouble, for assessing adolescents; Knight et al., 1999), and the ASI (Addiction Severity Index; McLellan et al., 1992).

During the past decade, there has been a growing recognition of the need for universal screening for substance use in all health care settings. Consequently, the Screening, Brief Intervention, and Referral to Treatment (SBIRT) model is rapidly being introduced throughout the United States, spurred by federal funding (Madras et al., 2009).

SBIRT consists of three major components (SAMHSA, n.d.):

1. Screening, which, as indicated earlier, calls for assessment of risky substance use behaviors using standardized screening tools.
2. Brief Intervention, which consists of a brief discussion with a patient that points out his or her risky substance use behaviors and provides feedback and advice about it, and
3. Referral to Treatment for those patients whose screening indicates need for additional services.

(More extensive information regarding SBIRT can be obtained at www.samhsa.gov/prevention/sbirt/sbirtwhitepaper.pdf.)

Whatever format is being used, it is crucial that all assessment questions be asked in a nonjudgmental manner. The clinician needs to remember that once individuals start abusing substances such as alcohol, opiates, or cocaine, they often become addicted to them. They cannot just stop using the drug or drugs through willpower alone. They should not be condemned or made to feel guilty for their dependence on a chemical any more than a client would be condemned for having an uncontrolled medical condition. It is also essential for the clinician to be attuned to perceiving the severe feelings of worthlessness and self-hate, and the expectations of scorn and rejection that often lie beneath the grandiose self-presentation of many substance abusers.

Also important in assessment is the differential biopsychosocial effects of various substances. The use of an illicit substance such as crack, with its 30-second high and immediately recurring craving, will have different emotional, legal, financial, and social sequelae than drinking a legally obtained bottle of scotch (Straussner, 2011).

Last, it is important to be cognizant of the fact that substance abuse is a “family disease”—that although a client may not be the one who abuses alcohol or other drugs, he or she may be the spouse or child of a substance abuser and thus a part of a substance-abusing family system (Straussner, 2011). Assessing the impact of familial substance abuse on mental health and daily functioning is an important intervention with all clients, regardless of their presenting problems.

An important assessment area is differentiating between substance abuse and other psychopathology. Individuals with a diagnosis of SUD also may be diagnosed with a comorbid major psychiatric condition and/or have an underlying personality disorder, necessitating a comprehensive psychiatric assessment in addition to assessment of their substance abuse. (For further discussion of coexisting diagnoses, see Scheffler, Chapter 16, this volume.)

Motivation for Treatment

A comprehensive assessment must include an exploration of clients' motivation for treatment, as well as their readiness for change. In general, substance abusers do not enter treatment voluntarily. Due to the effects of alcohol and other drugs on the brain, and the extensive use of denial and other defenses, substance abusers often need to be pushed into treatment. Although a highly motivated client is generally more likely to make better use of treatment, recovery from substance abuse is not always dependent on whether the initial contact with treatment was voluntary. In fact, a few older studies show that some individuals who are coerced into treatment may have an even better recovery rate than those who enter voluntarily (Lawental, McLellan, Grissom, Brill, & O'Brien, 1996; Mark, 1988).

What is currently helpful to many clinicians is the concept of *stages of change*. First conceptualized by Prochaska, DiClemente, and Norcross

(1992) in dealing with smoking cessation, the stages of change model posits that, for most people, a change in behavior occurs gradually, with the patient moving from being unaware or unwilling to make a change (precontemplation), to considering a change (contemplation), to deciding and preparing to make a change. Determined action is then taken and, over time, attempts to maintain the new behavior occur. Relapses, which are viewed as almost inevitable, can occur at any stage and become part of the process of working toward lifelong change. This perspective helps to minimize unrealistic expectations of quick change and is more effective in keeping clients in treatment and supporting their efforts toward recovery (see Hanson & El-Bassel, Chapter 6, this volume, for more details).

Miller and Rollnick's (1991) five principles of *motivational interviewing* provide a useful framework that helps motivate clients to move from one stage of change to another. The five general principles are (1) expressing empathy, (2) developing discrepancy, (3) avoiding argumentation, (4) rolling with resistance, and (5) supporting self-efficacy. The goal of motivational interviewing is to ignite motivation for change, despite the fact that a client may enter treatment due to external pressures. It is the job of the clinician to provide feedback to the client that illustrates the discrepancy between the client's ability to achieve the desired goals and his or her continuing use of substances. To be effective, such feedback must be given within an emphatic environment that avoids argumentation or direct confrontation of resistance, and one that supports self-efficacy (i.e., the client's belief in his or her own ability to make changes; Straussner & Attia, 2001). Studies show that the more caring approaches of "motivational interviewing" are more effective than the traditional confrontational approaches (Rollnick, Miller, & Butler, 2008).

Treatment Facilities and Approaches

An important task for clinicians is to determine appropriate forms of treatment for clients with substance use problems. Workers need to be aware of the various treatment options available for these clients in their community and, if at all possible, the quality of these services (Magura, 2000). The most important treatment approaches include the following.

Detoxification

Detoxification is the first step in the treatment of patients who are physically addicted to opioids, alcohol, barbiturates or other sedative-hypnotics, and amphetamines. It is not required for cocaine/crack abusers or for marijuana smokers. Physical dependence or addiction is defined primarily by signs of *withdrawal*: the presence of symptoms that appear when the intake of a given substance is terminated. Frequently, these symptoms are

the opposite of the signs of acute intoxication. The withdrawal symptoms from stimulants such as amphetamines include severe depression; symptoms of withdrawal from sedative-hypnotics such as alcohol, which occur 6–48 hours after cessation of alcohol consumption, may include sweating, anxiety, and agitation. Alcohol withdrawal abates after 2–5 days; however, it may be complicated by grand mal seizures and progress to delirium (known as *delirium tremens*, or DTs).

Although withdrawal from opiates has been given much publicity, it is not life threatening, as it can be from severe alcohol, Xanax, or barbiturate addiction. Opiate withdrawal has been compared to “a one-week bout with influenza” (Waldinger, 1986, p. 315).

Traditionally, detoxification has been conducted on medical or psychiatric inpatient units to allow careful monitoring of physical status and to prevent potentially lethal withdrawal reactions. Inpatient detoxification treatment also increases the likelihood that the patient will undergo a comprehensive assessment and develop a greater acceptance of further treatment. Managed care has promoted an increasing use of detoxification that is provided in outpatient settings or by physicians in private practice. Heroin addicts can be detoxified on an outpatient basis with the help of chemicals such as clonidine or decreasing doses of methadone or buprenorphine. Some drug users also detoxify themselves—go cold turkey—in a range of ways.

Rehabilitation Treatment Programs

Detoxification is usually only the beginning of the recovery process. When substance abusers give up their chemicals, they may experience a prolonged period of physiological and psychological withdrawal. Moreover, the lives of many substance abusers revolve around the process of obtaining drugs or alcohol; this focus provides a daily routine, as well as relationships with other substance abusers, both of which must be replaced if the individual is to maintain a substance-free existence. Furthermore, since substance abusers often medicate unpleasant feelings such as anxiety or depression, these feelings are likely to surface or worsen when the substance is removed.

To address these challenges, short- and long-term inpatient and outpatient rehabilitation programs and drug-free residential therapeutic communities (TCs) are invaluable. In these structured settings, substance abusers can examine the impact of alcohol and/or other drugs on their lives, their ability to relate to other people, and the necessary lifestyle changes they must make if they want to recover from substance abuse. Although cocaine and crack users do not require detoxification, they do require ongoing outpatient counseling and, at times, antidepressants or other medications. Currently, much of the treatment is provided via intensive outpatient rehabilitation programs.

Also available in some communities are day treatment programs and

part-time residential facilities, such as halfway and quarter-way houses, and substance-free housing. Such programs and facilities are of particular value to those who have limited social and vocational supports, such as a young adult addicted to heroin or an older person with a long history of alcohol use problems.

Pharmacotherapy and Complementary and Alternative Treatment Approaches

Medications can help diminish the cravings for drugs and assist clients in reestablishing normal brain functioning. For opiate addiction, the most commonly used medications, or opiate substitution therapies, are methadone and buprenorphine.

The utilization of methadone maintenance programs can lead to better prognosis for rehabilitation and allow people addicted to narcotics and other opiates to avail themselves of services such as individual or group counseling and educational or vocational training; they can also help people improve the overall quality of their lives once the daily concern about obtaining drugs is alleviated. Moreover, the potential for becoming infected with HIV is an important factor in referring intravenous narcotic users clients to methadone maintenance programs (see Friedman, Chapter 4, this volume). However, it is crucial to note that methadone is more addictive and more difficult to withdraw from than heroin, and methadone maintenance programs vary greatly in their provision of supportive and social services. Therefore, it is important to help clients determine whether a particular program is likely to be effective in meeting their needs.

Buprenorphine (also known as “bup,” or as the prescription drugs Subutex and Suboxone, the latter being a combination of buprenorphine with naloxone, which makes it less likely to be misused) is the newest substitution medication for opiate addiction. In 2000, Congress passed the Drug Addiction Treatment Act (DATA), which allows qualified physicians in private practice to prescribe buprenorphine for opioid treatment for up to 100 patients per physician (the patient number was limited in order to avoid the establishment of “buprenorphine mills”). Although the impact is still unclear due to the limited number of prescribing physicians, DATA 2000 created a paradigm shift by bringing opioid addiction treatment into mainstream, office-based medicine (Kakko et al., 2007; Straussner, 2012).

Although less extensively used than methadone, opioid antagonists such as naltrexone, which prevent addicts from experiencing the effects of narcotics, have been utilized by a growing number of treatment facilities. Unlike methadone, naltrexone has no narcotic effect of its own and is not physiologically addictive. Under the brand names Revia and Vivitrol, it also is being used to treat people with alcohol dependence (Srisurapanont & Jarusuraisin, 2005).

Another medication that is sometimes used to help people who abuse

alcohol is disulfiram, commonly known as Antabuse. It blocks the normal oxidation of alcohol, so that acetaldehyde, a by-product of alcohol, accumulates in the bloodstream and causes unpleasant, and at times even life-threatening, symptoms, such as rapid pulse and vomiting. These distressing symptoms serve as a conscious deterrent—an experienced negative reinforcement—to drinking while the person is using Antabuse.

The value of long-term utilization of any one of these chemical substitutes is still a matter of debate. By and large, they should be viewed as useful adjuncts to other forms of psychosocial interventions, but not as a total treatment by themselves.

A number of substance abuse settings and clinicians have incorporated complementary and alternative treatment approaches, some of which have been shown to be more effective than others (see Fenster & Temme, Chapter 11, this volume). Among these are acupuncture treatment during the withdrawal process and the early phase of rehabilitation treatment, yoga, and the one with most positive research outcomes, mindfulness meditation (Bowen, Chawla, & Marlatt, 2011).

Outpatient Individual Therapy or Counseling

Generally, outpatient psychodynamically oriented individual psychotherapy is not recommended until the person is secure in his or her abstinence from chemicals, because the anxiety aroused during treatment may lead to the resumption of alcohol or drug use. Moreover, conducting individual counseling or therapy with an active substance abuser is questionable due to the impact of the chemicals on the brain and the possibility of black-outs (i.e., memory loss while intoxicated). However, if a client has stopped using substances or is making serious efforts to diminish his or her drug and alcohol use, cognitive-behavioral, ego-supportive counseling, or a self psychological approach (Levin, 1987) can be useful.

Because chronic substance abusers usually substitute a chemical for human contact, a crucial part of treatment is the establishment of a non-threatening relationship with a caring and consistently reliable individual. The goal of individual treatment is to enhance patients' self-image and provide needed ego support, so that they can begin to examine their use of chemicals and their current feelings and behavior.

The view of substance abuse as a disease is invaluable in helping people who abuse drugs and alcohol to alleviate often experienced feelings of guilt, without absolving them from responsibility for their future behavior. This perspective also diminishes the usually negative countertransference reactions of workers. Motivational interviewing, mentioned earlier, is both an interviewing technique and a treatment approach (Miller et al., 1999; Miller & Rollnick, 1991). The client's motivation for change is assessed and encouraged, while the therapist builds a strong and trusting relationship.

Twelve Step Facilitation Therapy (TSF) is a brief, structured approach

to facilitating early recovery from alcohol and drug abuse. Implemented in 12–15 individual client sessions, the intervention is grounded in the behavioral, spiritual, and cognitive principles of the fellowships of AA and NA. Accepting that addiction is a chronic, progressive disease over which one is powerless, that life has become unmanageable, and that surrendering to a higher power and being actively involved in 12-step fellowships are central principles in TSF (National Registry of Evidence-Based Programs and Practices [NREPP, 2008]).

An alternative to the mainstream addictive/disease approach is solution-focused therapy. Specific techniques might involve (1) asking for exceptions to the problem (“When is the last period of time you were not drinking? What was different about that time?”); (2) use of scaling questions (“On a scale of 1 to 10, with 10 being the most motivated, where would you rate your motivation to change your marijuana use patterns?”); and (3) use of coping questions (“How did you manage to get your children dressed and to school yesterday, after all you’ve told me about your difficulties?”). This approach focuses on the client’s strengths and past successes in dealing with problems, and on acceptance of the client’s definition of the problem and immediate goals (see Shafer & Smock Jordan, Chapter 9, this volume, for a fuller discussion).

There are a great number of cognitive and behavioral therapies currently utilized in the treatment of substance abuse, and these are probably the most universally agreed upon individual approach to treating SUD. In general, cognitive-behavioral therapy (CBT) attempts to reduce self-defeating behavior by modifying cognitive distortions and maladaptive beliefs and by teaching techniques of thought control. Based on the premise that negative thoughts and beliefs influence emotion and behavior, CBT is a collaborative, active, and highly structured approach that utilizes a series of strategies to enhance self-control. CBT teaches the patient to pay attention to his or her thinking and to cravings and substance-seeking behaviors, to identify high-risk situations that can compromise one’s recovery, and to develop effective relapse prevention strategies (Carroll & Onken, 2005). Cognitive-behavioral therapies with the strongest evidence for effectiveness include Contingency Management Therapy (CMT); Motivational Enhancement Therapy (MET); and TSF Therapy (NREPP, 2008).

Harm reduction is both a treatment philosophy and a treatment approach. Originating in Europe, it was initially adapted in the United States in the 1980s to minimize the transmission of HIV among injection drug users. It refers to a range of pragmatic and evidence-based public health policies designed to reduce the harmful consequences associated with drug use. In general, harm reduction in the United States includes needle exchange programs and opioid substitution therapy. As a treatment approach, harm reduction has been applied to private clinical treatment, in which the focus is not on complete abstinence but on engaging clients in a

therapeutic relationship, without getting into a power struggle over preordained goals set by the therapist (Denning & Little, 2011; Tatarsky, 2002). In essence, this approach is in line with traditional social work values of “starting where the client is,” then figuring out mutually agreed upon goals (see Seiger, Chapter 7, this volume).

In addition to these, other approaches to helping individuals with SUD include trauma-focused approaches, such as adaptation of Seeking Safety by Lisa Najavits (2002; see also Wiechelt, Chapter 8, this volume), and treatments focused on a range of co-occurring disorders, such as borderline personality disorders (Linehan et al., 1999).

Group Interventions

Group counseling and group activities appear to be the treatment of choice for many substance abusers. Group therapy with fellow recovering substance abusers provides helpful peer interaction and support, as well as useful confrontations of substance-abusing patients with the consequences of their attitudes and behavior (Flores, 1996; Wenzel, Liese, Beck, & Friedman-Wheeler, 2012). The value of separate groups for substance-abusing women has been noted by many clinicians (Beyer & Carnabucci, 2002).

Activity groups focused around the arts, cooking, program planning, sports, and so forth, allow for social interaction, the development of a variety of essential life skills, and sublimation of self- and other-destructive feelings. Psychodrama groups are particularly helpful for patients, because they provide a forum in which repressed feelings can be concretized and expressed and “unfinished business” resolved (Dayton, 2011).

Self-help “12-step” programs, such as AA, NA, Pills Anonymous (PA), and Cocaine Anonymous (CA), have proven to be particularly helpful, and are free and available in every community. These groups provide continuously available support and help to replace drinking and drugging companions with a new group of peers with whom the substance abuser can identify. Self-help groups allow members not only to receive help but also to help others, thereby enhancing self-esteem (Straussner & Spiegel, 1996; see also Fewell & Spiegel, Chapter 12, this volume).

It is strongly recommended that all clinicians attend a few “open” meetings of the various self-help groups, especially AA. At times, it may be helpful to escort a substance-abusing patient to a meeting or to encourage the client to call, in the presence of the worker, the main number of the self-help group and ask for help. Workers also can request a 12-step group to conduct an institutional meeting for clients at the worker’s agency.

In addition to 12-step groups, other self-help groups for substance abusers can be utilized when appropriate; these include Women for Sobriety, SMART Recovery (Self-Management and Recovery Training), Social Workers Helping Social Workers, and Double Trouble in Recovery groups for those with dual diagnoses.

Psychoeducational Approaches

Didactic education is an effective strategy in the treatment of substance abuse. Lectures and discussion on topics such as the signs and symptoms of substance abuse and addiction, the addiction cycle for specific substances (e.g., cocaine, with its euphoric binges and depressive crashes), relapse prevention, the impact of substance abuse on the family, effective communication skills, coping with stress, human sexuality, and assertiveness training provide cognitive, non-ego-threatening understanding of the dynamics of substance abuse and practical information about how individuals and families can help themselves. Such a psychoeducational approach also can be provided in settings that are not specifically connected to substance abuse treatment and may include individual, group, or family treatment modalities.

Social Supports

Substance-abusing patients usually experience various social problems. Thus, the provision of financial and social supports—including adequate housing, vocational rehabilitation programs, and legal assistance—is an essential aspect of helping this population.

The Recovery Model

The peer-focused recovery model has an interesting history, beginning with its origin in 12-step approaches (or even earlier in the various alcohol recovery movements of the 19th century), its move into mental health, and now its return to substance abuse via the growing emphasis on co-occurring disorders. As defined by a panel of substance abuse experts, *recovery* is viewed as “a voluntarily maintained lifestyle comprised of sobriety, personal health and citizenship” (McLellan, 2010, p. 109). This definition reinforces the concept of sobriety, and not just abstinence or stopping the use of a substance, as well as citizenship, which is based on the British notion of “participating in the rights and responsibilities of social life” (p. 112). It thus includes not only professional treatment but also client involvement and responsibilities. The recovery notion provides a bridge between the traditional abstinence philosophy and the newer harm reduction approach (Straussner, 2012).

Stages of Treatment

As is the case with any other client population, treatment of clients with substance abuse problems is an ongoing process that can be conceptualized as having a beginning; a middle, or working phase; and an ending, or termination stage.

The beginning phase involves assessing current substance use, focusing on the steps needed to achieve abstinence, and establishing a therapeutic alliance. In addition to acceptance and nurturing, clinicians treating substance abusers may need to “lend their ego” to these clients, whose judgment and reality testing have been impaired by the use of chemicals, as well as dysfunctional maturation. Direct advice giving and limit setting may be crucial during this stage, as is the use of collaterals, such as family members or friends, to obtain information and to provide emotional, social, and economic support for the client.

An important aspect of the beginning phase of treatment is educating clients about the psychophysiological impact of various substances, so that they can, for example, differentiate between a depression caused by withdrawal from a stimulant and one due to unexpressed rage at a loved one. Clinicians also need to help clients make proper use of self-help groups, because these groups can provide advice and support between sessions and/or upon termination of formal treatment. The beginning stage of treatment also may require extensive interdisciplinary collaborations and referrals. Finally, the clinician must pay close attention to the use of self and transference and countertransference reactions. Interventions should be guided by clients’ needs and abilities, not by the clinician’s need to rescue clients or anger at clients for not living up to his or her expectations.

Once a client is able to achieve abstinence, the work, with the same or a different clinician, moves into middle phase of treatment. During this stage, issues such as unresolved grief over loss of loved ones, depression, guilt, shame, psychological mourning for the lost substance, and a sense of loss over wasted years need to be addressed. For some, the middle phase may involve dealing with early life traumas, including physical and sexual abuse; confusion about sexuality and role identity; examining and modifying dysfunctional patterns of defense and coping mechanisms; and improving interpersonal relationships. During this phase, clients need to learn both how to accept and how to prevent slips and relapses, as well as how to develop the ego function of *adaptive regression*—that is, how to relax, play, and have fun without alcohol or other drugs. Last, they need help in learning how to forgive themselves and others.

The final phase of treatment, the process of planned termination, may require helping patients cope with the separation and loss of the treatment relationship, without regressing to the use of substances.

Special Treatment Issues and Special Populations

Space limitations preclude a comprehensive discussion of the numerous treatment issues and the unique treatment needs of various substance-abusing populations. For example, clinicians need to take into account the life

cycle stages of clients and to realize that both assessment and intervention with an alcohol-abusing 17-year-old male will differ from that with a 67-year-old alcohol-abusing man (see Freshman, Chapter 17, and Farkas, Chapter 18, this volume). The issue of gender also has to be addressed differentially (see Pape & Sarabia, Chapter 19, this volume), as does that of patients with co-occurring disorders.

Treatment of minorities, particularly African American clients, needs to take into account that they are more likely to enter treatment through the courts than through formal intervention processes or 12-step programs. They are more likely to access treatment much later and thus have a more difficult recovery process.

Ethnocultural norms and values need to be taken into account in treatment planning and relapse prevention with each client (see Straussner, 2001), as do issues of sexual identity and sexual behavior, including the need for safe sex. The special needs of substance-abusing gay, lesbian, and transgender clients need to be addressed (see Senreich & Vairo, Chapter 20, this volume). Last, we need to remember that substance abuse, “like many other medical problems, is a chronic disorder in which recurrences are common and repeated periods of treatment are frequently required” (USDHHS, 1991b, p. 4).

The Impact of Substance Abuse on the Family

Life with a substance-abusing family member is typically full of inconsistency and unpredictability, resulting in a chronic state of crisis. Legal and financial problems, serious illnesses, and various accidents are common occurrences that intrude on family life. When the substance abuser is a parent, dysfunctional cross-generational alliance and role reversal (i.e., children assume parental roles and responsibilities) are frequently seen (Straussner, 2011). Child neglect and, in more disturbed families, violence between parents, child abuse, and incest, are some of the consequences and correlates of substance abuse; indeed, substance abuse is present in at least two-thirds of the families known to public child welfare agencies (Staton-Tindall et al., 2013). Studies highlight the need to address the intergenerational cycle of substance abuse and child abuse if effective progress is to be made on either problem.

The impact of substance abuse on the family has additional intergenerational repercussions: The sons of alcoholic fathers are four times more likely to become alcohol dependent, and the daughters of alcoholic parents are three times more likely to do so. Moreover, the daughters of alcoholic fathers are also more likely to marry alcoholic men. Intergenerational repercussions also exist for families with parental opiate and other drug addiction (CASA Columbia, 2011).

Intervention with Family Members

Couple and family therapies, including multifamily groups, are effective treatment modalities for families with substance abusers who are already chemically free or working on their recovery. A research-based, family-oriented treatment approach called Community Reinforcement and Family Training (CRAFT; Miller, Meyers, & Tonigan, 1999) involves the following eight components:

1. Increasing family members' own motivation to change using techniques such as questioning them about how their lives have changed for the worse due to the addicted member's substance abuse.
2. Teaching communications skills that allow the nonusing member to give nonantagonistic feedback and encouragement to the substance abuser.
3. Increasing the couple's/family's positive interactions.
4. Focusing on the nonreinforcement of drug use by teaching the family member to ignore the addict when he or she is using a substance.
5. Initiating activities that interfere and compete with addicted member's substance use.
6. Developing outside activities and reinforcement for the addicted person.
7. Making plans for escaping possibly dangerous situations, such as family members with potential for violence.
8. Helping family members plan to introduce the idea of treatment at the right moment.

It is also beneficial to refer family members to mutual-help groups such as Al-Anon, Pill-Anon, Co-Anon, or Nar-Anon. These groups help adult family members examine their own role in "enabling" or perpetuating the behavior of the addicted person and obtain support from others in the same circumstances. These groups are particularly useful for parents and spouses of substance abusers.

Adolescent children of alcohol- and narcotic-abusing parents may benefit from self-help groups such as Alateen and Narateen. Adult Children of Alcoholics (ACOA) groups are extremely helpful for mature adolescents and adult children of alcoholics, as are the Codependency Anonymous (CODA) groups that help people identify and work on their unmet dependency needs.

Intervention with latency-age and adolescent children of substance abusers must focus on not only how to say "no" to their own substance use and abuse but also how to help the children recognize and understand

familial substance abuse and its impact on them and other family members (Fenster, 2011). Extensive literature, written specifically for children and adolescents, which can be obtained from Al-Anon, Nar-Anon, and the National Association for Children of Alcoholics (see www.nacoa.org), is extremely valuable in helping children begin to understand what has happened to them and possibly prevent the pattern from repeating itself in the next generation.

Clinicians also must be aware of their own countertransferential reactions to families of substance abusers, particularly in view of the fact that many in the helping professions are themselves affected by familial substance abuse (Straussner, 2012).

Conclusion

Helping clients who abuse substances and their families is a difficult, challenging, yet highly rewarding task that requires a variety of treatment modalities and intervention approaches, and calls upon the clinician to be an astute diagnostician, therapist, educator, advocate, and educated consumer of never-ending research data. Most of all, it requires a clinician who is sensitive to the impact of substance abuse on these individuals and those close to them, who can appreciate the strengths and the courage that these clients present, and who can provide hope for a better tomorrow.

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