Addiction on the Streets: Clinical Interventions

Drug dependence or addiction is at the extreme end of the spectrum of substance use disorders. Because substance dependence makes people ill and is both a cause and a consequence of homelessness, Health Care for the Homeless practitioners see a disproportionate number of clients with this disorder. This issue focuses on the relationship between addiction and homelessness, the experience of drug addiction from the perspectives of HCH providers and their clients, an overview of drugs most commonly misused by homeless people, and a summary of established and emerging treatment strategies.

WHAT IS ADDICTION? The terms are variously understood and defined, but there is a clear consensus that drug addiction or drug dependence must be distinguished from drug abuse or misuse (see box). Mirza Lugardo, LMHC, LADC-I, Director of Intensive Family Services for the GB Wells Human Services Center in Southbridge, MA, puts it more succinctly: “Once you get to the point where you wish you could stop but can longer do so,” you have crossed the threshold of addiction.

CAUSES OF ADDICTION As with many health conditions, the causes of addiction are a complicated blend of genetic, psychosocial, and environmental factors. Biologically, addiction is currently understood as a disorder of neurotransmission associated with the effects of certain drugs on particular parts of the brain. Addictive drugs “hijack our natural systems and begin to alter the complex and subtle processes that normally regulate neurotransmission” (Drucker, 2005). Significant scientific advances have been made in understanding the biology of addiction and the neurological effects of addictive drugs. Important as it is to clinical practice, this “disease model” does not fully capture the broad spectrum of drug use patterns or the negative impact of societal preconceptions.

Many drugs can produce adverse outcomes, but most drug users do not become addicted, even users of powerful drugs like heroin and cocaine. We accept, for example, that many people can drink alcohol socially without becoming alcoholics, but resist accepting this range of possibilities for other drugs.

Relying solely on a disease model also masks the reality that drug dependence and societal reactions to it are commonly understood in moral and legal terms, not biological. This reality can be even more damaging than the biological effects of drug use or addiction. “The most serious harm that comes to people using drugs is often not from the drug itself, but from the moral stigma around drug use,” notes Barry Zevin, MD, a physician at the San Francisco Department of Public Health’s Tom Waddell Clinic, who is certified in addiction medicine.

Addiction Defined

Substance Dependence (APA): “Exhibit a substance use pattern which causes some type of impairment, including three of the following within a year:
• Tolerance (need more of the drug to achieve the same effect);
• Withdrawal;
• More or longer use than planned;
• Desire without ability to cut down or control usage;
• Time spent getting, using or recovering from the substance;
• Decrease in social, occupational or recreational activities; and,
• Continued use despite physical or psychological problems caused by use.

...The criteria for Substance Abuse do not include tolerance, withdrawal, or a pattern of compulsive use and instead include only the harmful consequences of repeated use.” - American Psychiatric Association, Diagnostic and Statistical Manual of Mental Disorders

Addiction (NIDA): “A state in which an organism engages in a compulsive behavior, even when faced with negative consequences. ...A major feature of addiction is the loss of control in limiting intake of the addictive substance.”- National Institute on Drug Abuse, The Neurobiology of Drug Addiction

Addiction (AAPA, APS, ASAM): “A primary, chronic, neurobiologic disease, with genetic, psychosocial, and environmental factors influencing its development and manifestations...characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving”- A consensus document from the American Academy of Pain Medicine, the American Pain Society, and the American Society of Addiction Medicine
Chemical dependence can be both a cause and a consequence of homelessness. Homelessness also affects how individuals experience addiction and complicates the recovery process. “It’s much harder to suffer the consequences of dependence when you don’t have stable housing,” observes Nicholas Gideonse, MD, of the Richmond Family Health Center in Portland, OR. Similarly, “it’s very hard to recover from addiction without having a home,” notes Dr. Zevin. “Homelessness is a very helpless situation. You need to start with some hope to begin the process of recovery.”

Recognizing that substance dependence often co-occurs with mental illness is critical to understanding the experience of addiction and recovery for some homeless persons. For example, the extremely high percentage of homeless women who are victims of trauma partially explains their use of addictive substances to help control symptoms of post-traumatic stress disorder.

Drug Use by Homeless Persons Reflects National Trends

A significant proportion of the HCH clientele suffer from drug use disorders; these individuals tend to “get sick faster and worse,” notes Dr. Zevin. He estimates that 75–80 percent of his patients at the Tom Waddell clinic have some form of drug disorder. Zevin asserts that the more knowledgeable providers are about substance use disorders and the more experienced they are in addiction medicine (only a minor part of most medical training), the more effective they will be in helping these patients.

COMMON STREET DRUGS

Besides nicotine, alcohol and marijuana, the addictive substances most frequently used by HCH clients, are heroin, cocaine and methamphetamine, report HCH clinicians. Consumer Antoinetta Stadlman, who chairs the Advisory Board at a clinic in San Francisco, observes of the residents of her SRO hotel: “the drugs that give them problems, that keep them homeless, that create problems in the building — it’s crack cocaine, speed and heroin.”

These are also the three drugs reported at the highest levels by the Community Epidemiological Work Group (CEWG), which tracks epidemiological trends in drug abuse for the U.S. Department of Health and Human Services. While methamphetamine has recently been targeted by the media and law enforcement, it is not clear whether its actual use is more prevalent than in the past. HCH clinicians also encounter misuse of prescription drugs, including opioids like oxycodone, hydrocodone, and fentanyl, and depressants like benzodiazepines. “That’s a national trend; the number of misused prescription drugs is higher and the number of people using is higher,” says Dr. Gideonse. Dr. Mathews, who co-presented with him at a conference in Albuquerque, NM, have a history of physical or sexual abuse, reports Program Coordinator Maureen Rule, MA, LPCC. Many of the women she has encountered while doing street outreach fear stopping their drug use because it will force them to address their repressed trauma.

Roles that substance use can play in “self-medicating” underlying mental illness include: energizing persons with major depression, reducing manic and depressive symptoms of bipolar disorder, repressing and anesthetizing overwhelming feelings caused by trauma or PTSD, and suppressing voices and other psychotic symptoms associated with schizophrenia (Perret, 2006). Unlike illicit psychoactive substances, many prescribed psychotropic drugs have side effects that some individuals find intolerable, such as irreversible muscular stiffness or impotence. Thus, “street drugs” can play important roles in people’s lives, which must be addressed if recovery is to happen.

Beginning at age 8, Ulysses Maner, Secretary of the HCH National Consumers Advisory Board, used medications and liquor found in his home to cope with the severe physical, emotional, and sexual abuse he experienced as a young child. “I took whatever was around to get me into my dream world — that’s what helped me to survive what happened to me as a child.” His addiction masked not only psychological trauma but also undiagnosed mental health issues he only learned about when he stopped using, two decades later. Maner describes how his trauma affected his recovery: “What happened was, once I put the drugs down, then those feelings would start coming up again. I started feeling like my perpetrator was in the room when I was coming off the drugs.” Going into treatment was a last resort: “I knew I had to do something or I was going to die.”
Treating Clients with Drug Dependence

The prevailing view of substance use as a moral and legal issue often means that treatment approaches are not grounded in evidence-based research and the experience of expert practitioners (Drucker, 2005). This unscientific attitude is especially detrimental for people without homes. For example, both research and practice have demonstrated that permanent supportive housing and harm reduction are key elements of successful treatment for homeless individuals with chemical dependence, and that these strategies save lives (see Zerger, 2002, for a review). Nevertheless, most addiction treatment programs remain abstinence-based, harm reduction programs like safe injection sites and needle exchange programs remain rare, and treatment is often attempted without attention to the client’s housing situation. (See text box for a refreshing example of practice reflecting evidence.) This section provides an overview of some strategies that are known to work and a preview of emerging research.

CLIENT-CENTERED FOCUS Experienced HCH practitioners employ a “no wrong door” approach to care that focuses on individual motivations and needs. As Ms. Stadlman puts it, “Different things work for different people.” HCH providers strive for a client-centered approach to care, to understand what motivates them to use and what role(s) substance use plays in their lives. Dr. Zevin recommends incorporating the widely available CAGE questionnaire into medical screening interviews, and broaching the subject of drug use in a morally neutral manner. He focuses on what, if any, problems substance use might be causing his patients: “Because if it’s not causing somebody problems — and let’s not forget that most substance use doesn’t cause serious problems — then it’s not necessarily a medical issue.” Strategies reviewed in earlier issues of this newsletter — such as motivational interviewing, cognitive behavioral therapy, and stages of change — are highly recommended for uncovering what might work best for individual clients (see Healing Hands, Oct 2003). It is critical, however, that practitioners understand that drug dependence is a chronic, severe, relapsing illness, and that even the best interventions are not always effective. For this reason, all of the

June 2006 HCH Conference workshop on “Emerging Drugs of Abuse,” agrees that prescription drugs, especially pain killers and benzoazepines like Xanax, are becoming much more prevalent. The prevalence of these other opioids as drugs of abuse, while low overall, is increasing in all communities tracked by the CEWG.

Mathews reports that his region in Kentucky has the highest rate of prescription drug abuse in the nation. “In the past, you’d smoke your pot, drink your whiskey, and sit in front of the courthouse. Now you smoke pot, drink whiskey, take a pill or two, fall into a coma, and don’t wake up.” A very high proportion of deaths are due to drug overdose, he says; at one point in his small town, it was almost one per week.

One troubling trend has been an increase in overdoses caused by mixing heroin or cocaine with fentanyl, a pain killer 50–100 times more potent than morphine that is frequently used post-operatively. According to the National Institute on Drug Abuse (NIDA) website, this has been especially problematic in Philadelphia, Chicago, St. Louis, and Detroit.

HOMELESS YOUTH Some HCH providers noted an increase in substance dependence among homeless youth. Dr. Mathews’ agency is seeing a growing number of young women ages, 18–25, who are dealing with addictions to prescription drugs — which may be appealing because they seem safer, the dosage is more controllable, and they cause less rapid physical deterioration than other substances. Ms. Lugardo also sees a number of homeless adolescents with addictions, primarily to marijuana, and surmises that many use this drug to cope with frustrations at school stemming from undiagnosed ADHD or learning disabilities.

REGIONAL TRENDS Regional differences in drug use are also evident. In Appalachia, HCH providers are far more likely to see “downers” like marijuana, opiates, and benzos, rather than stimulants like crack or methamphetamine. “That’s the way it’s been for generations,” says Dr. Mathews. In San Francisco, Dr. Zevin observes more overt drug use on the streets — smoking crack and injecting heroin. One explanation is that rising real estate values in even the most rundown neighborhoods are making crack houses obsolete. Monte Hanks, Wasatch Homeless Health Care, says his HCH clinic has seen individuals addicted to alcohol-based mouthwash. All of these providers concur that ultimately and most unfortunately, their clients are apt to use “whatever’s available and whatever’s cheap on the street.”

The chart on p. 5 summarizes the most common substances mentioned here, along with ingestion methods, street names, short-term effects, and signs and symptoms of use and addiction. This information comes from the National Institute of Drug Abuse online chart of Commonly Abused Drugs (www.nida.nih.gov) and from a website on addiction treatment (www.addictionca.com). Both websites provide additional detailed information on these and other drugs not mentioned in this article.

A MODEL THAT WORKS

Recovery Kentucky is an initiative which will create a dozen housing recovery centers across the state — two in each of the congressional districts (one for men, one for women). This model of supportive housing and recovery program has been shown to help people with highly complex needs to live more productive lives. The U.S. Department of Health and Human Services declared this “A Model That Works.” The rationale behind this initiative was stated this way: “Without a stable place to live and a support system to help them address their underlying problems, most homeless people who also suffer from substance abuse and addiction bounce around between shelters, public hospitals, psychiatric institutions and detoxification centers. It is estimated that the Recovery Kentucky initiative will save Kentuckians millions in tax dollars that would have been spent on emergency room visits and jail costs.” (http://www.kyhousing.org/; see also Healing Hands, December 2003, for a discussion of supportive housing programs.)
HCH providers interviewed by Healing Hands employ harm reduction strategies, which focus on reducing adverse health and social consequences of their clients’ drug use.

“DON’T EVER GIVE UP” Consistent with a client-centered approach is the practice of seeing clients even when they are using: “We’ll treat people who are drunk or high as long as they’re coherent and behaving themselves,” says Monte Hanks. Consumers concur that this approach is constructive to recovery. Ms. Stadlman urges, “When people make up their minds to ditch the stuff and they go to the clinic or whatever, there needs to be a space for them, right then and there.” Ms. Lugardo suggests, “It creates a more positive, engaging, trusting relationship to allow the patient to come in regardless, whether sober or not.”

Mr. Maner vividly remembers visiting the local HCH clinic while he was still using, and comments with awe, “Even when I was in my using time they’d see me. They never turned me away. If I stunk, they didn’t care. If I worked the streets, they didn’t care. They even hugged me!” Indeed, when asked what advice he would give other HCH practitioners, he said, “Don’t ever give up. You just never know.” He is living proof of what Ms. Lugardo often reminds herself: “People do get better; they do get on their feet.”

SAFE WITHDRAWAL The ability to help clients through dangerous, even life-threatening withdrawal is another “essential skill for HCH providers,” Zevin says. Safe and effective medical detox is not uniformly available across the country; providers may need to advocate for it in their community to save clients’ lives.

MAINTENANCE THERAPIES FOR OPIATE ADDICTIONS 
These HCH providers unanimously recommend “pharmaceutical assists” as a useful and effective harm reduction strategy. Dr. Zevin considers maintenance therapies “the best single intervention” available for those addicted to opiates. His strongest advice to anyone working with such clients is to increase efforts to access these treatments in their communities. Following is a brief description of therapies that have shown the most promise for homeless persons.

Agonist Maintenance Treatment: Methadone and Buprenorphine act on the same targets in the brain as heroin and morphine; they block the drug’s effects, suppress withdrawal symptoms, and relieve craving for the drug. These are long-acting, synthetic opiate medications administered orally for a sustained period. Methadone has been around for 30 years, but is not without controversy because it does not preclude heroin use and methadone can itself be addictive. In some areas, deaths from methadone overdose have surpassed those from heroin. Nevertheless, methadone therapy has a “proven track record with homeless people,” says Dr. Gideonse. Buprenorphine, a more recent medication, can also be effective for maintenance among homeless persons addicted to opiates (Wright and Tompkins, 2006). To be most effective, opiate agonist maintenance programs should include counseling and provision of or referral to other needed medical, psychological, and social services.

Methadone continues to be available only in specialized methadone clinics, which is somewhat problematic because it exposes clients to others at risk, and requires them to return to the clinic as often as daily. In contrast, Buprenorphine can be administered by qualified physicians in general medical settings as a result of the Drug Addiction Treatment Act (DATA) passed in 2000. According to the American Association for the Treatment of Opioid Dependence (www.aatod.org), both types of treatment are being used by increasing numbers of patients with prescription opioid dependence. Costs of these treatments are prohibitive, however (~$300/month); and only 27 states in the U.S. permit Medicaid to pay for methadone services.

OTHER PHARMACOTHERAPIES Four U.S. FDA-approved pharmacotherapies for the treatment of alcohol dependence are currently available: disulfiram (Antabuse), oral naltrexone (ReVia), acamprosate (Campral), and an extended-release injectable suspension formulation of naltrexone (Vivitrol). Use of these medications to treat chronic, severe alcoholism in homeless patients remains problematic, in part due to adherence requirements, but can be effective for some patients. Another recent article (Pettinati and Rabinowitz, 2006) reviews emerging treatments, best practices for prescribing available medications, and the latest innovations in pharmacotherapy, though it is not homeless-specific.

Naloxone is a very short acting opiate antagonist used to reverse overdoses. A recent international review of interventions for homeless persons cites evidence that peers giving Naloxone to others they see overdosing can reduce drug-related deaths (Wright and Tompkins, 2006).

No proven pharmacological tools for stimulant use, such as cocaine, are currently available. Recent research, however, suggests that disulfiram may reduce cocaine use by some cocaine-addicted individuals (Baker et al., 2006; Suh et al., 2006). This and other emerging strategies, including a cocaine vaccine that slows entry of the drug into the brain, have shown promise but require more controlled clinical trials; several strategies specific to cocaine addiction are reviewed in Sofuoglu and Kosten, 2006.

NONPHARMACOLOGICAL APPROACHES Researchers continue to test innovative approaches in the care of homeless persons with substance use disorders. A few examples include: the use of cell phones for cocaine-addicted homeless patients in treatment to track using episodes and cravings (Freedman et al., 2006); managed alcohol administration in a shelter setting for chronically homeless individuals.
which decreased emergency department visits and police encounters (Podymow et al., 2006), and some evidence that monetary incentives and voucher-based reinforcement therapy reduce substance use by homeless persons with drug dependence (Lussier et al., 2006). Moreover, although research on the effectiveness of legal interventions such as drug courts is rare, they have the unique advantage over traditional treatment strategies of assuming that relapse will occur (Shavelson, 2003), consistent with the Stages of Change model of recovery.

**COMMON STREET DRUGS**

<table>
<thead>
<tr>
<th>SUBSTANCE</th>
<th>HOW IT'S TAKEN</th>
<th>WHAT IT'S CALLED</th>
<th>WHAT IT DOES</th>
<th>SIGNS AND SYMPTOMS</th>
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<tbody>
<tr>
<td><strong>Cannabinoids</strong></td>
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<tr>
<td>Marijuana (I)**</td>
<td>Swallowed, smoked</td>
<td>Blunt, dope, weed, pot,</td>
<td>Euphoria, slowed thinking and reaction time, confusion, impaired balance and</td>
<td>Dilated pupils, bloodshot eyes, sleepy appearance, dry</td>
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<td></td>
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<td>ganja, skunk</td>
<td>coordination</td>
<td>mouth, discolored fingers, increased heart rate,</td>
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<td>increased appetite/craving sweets</td>
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<td><strong>Depressants</strong></td>
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<td>Benzodiazepines (IV)</td>
<td>Swallowed, injected</td>
<td>Ativan, Halicon, Valium</td>
<td>Reduced anxiety, feeling of well-being, lowered inhibition, slowed pulse and</td>
<td>Sedation, drowsiness, confusion, impaired</td>
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<td></td>
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<td>candy, downers, tranks</td>
<td>breathing, lowered blood pressure, poor concentration</td>
<td>coordination, memory, judgment</td>
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<td><strong>Opioids and Morphine Derivatives</strong></td>
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<td>Heroin (I)</td>
<td>Injected, Sniffed/ Snorted, Smoked (White or brown powder)</td>
<td>Smack, Junk, H, Ska, Brown sugar, Dope, White horse, Chiva/Chieva (Spanish)</td>
<td>Pain relief, euphoria, drowsiness</td>
<td>Nausea, constipation, confusion, dry mouth, droopy</td>
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<td>appearance, signs of injections, shallow breathing,</td>
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<td>runny nose, constricted pupils</td>
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<td>Oxycodone (II)</td>
<td>Crushed and then ingested, snorted, or diluted in water and injected (round tables, capsules or liquid)</td>
<td>OxyContin, Oxy, O.C., killer</td>
<td>Quick, powerful, heroin-like high</td>
<td>Slow breathing, small pupils, dizziness, weakness,</td>
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<td>cold/clammy skin, nausea, vomiting, confusion</td>
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<td>Fentanyl (I, II)</td>
<td>When prescribed – administered via injection, transdermal patch, or lozenge form. If mixed in clandestine lab, may be mixed in powder form with or in lieu of heroin</td>
<td>Actiq, Duragesic, Sublimaze, Apache, China girl, dance fever</td>
<td>Typically used to treat patients with severe pain or to manage pain after surgery; Mixed with heroin or cocaine amplifies their potency.</td>
<td>(Most frequently mixed with heroin or cocaine to enhance the effects.)</td>
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<tr>
<td>Hydrocodone (II)</td>
<td>Swallowed</td>
<td>Vicodin, Vike, Watson-387</td>
<td>Similar to effects of heroin: pain relief, euphoria, drowsiness</td>
<td>Irritability, nausea or vomiting, diluted pupils, chills, fever, sweating, depression</td>
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<td><strong>Stimulants</strong></td>
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<td>Cocaine (II)</td>
<td>Injected, Smoked, Snorted</td>
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<td>Exhilaration and energy; increased heart rate, metabolism</td>
<td>Rapid or irregular heartbeat; reduced appetite or weight loss; nervousness; insomnia; nosibleness; perspiration or chills; runny nose or frequent sniffing</td>
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<tr>
<td>Methamphetamine (II)</td>
<td>Injected, Swallowed, Smoked, Snorted (crystalline powder)</td>
<td>Chalk, crank, speed, go fast, ice, meth, crystal, fire</td>
<td>Aggression, violence, psychotic behavior</td>
<td>Decreased appetite or weight loss, rotting teeth, picking at skin (&quot;meth bugs&quot;), diluted pupils, paranoia, extreme rise in body temperature, uncontrollable movements (twitching, jerking)</td>
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**Schedule I and II drugs have high potential for abuse – require storage security and have quota on manufacturing, etc. Schedule I drugs are available for research only; Schedule II are available only by prescription (unrefillable) and require a form for ordering. Schedule III and IV drugs are available by prescription, may have five refills in 6 months, and may be ordered orally. Most Schedule V drugs are available over the counter. Note: Taking drugs by injection can increase the risk of infection through needle contamination with staphylococci, HIV, hepatitis, and other organisms. This chart incorporates information from the following websites: www.nida.nih.gov and www.addictionca.com


16. Wright NM, Tompkins CN. How can health services effectively meet the health needs of homeless people? The British Journal of General Practice, 56(525):286–293, April 2006.


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