Feature Articles:

New Innovations in Opioid Treatment: Buprenorphine

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Welcome To This Compendium

This edition of the NAADAC News is a departure from our regular format. The August/September issue is devoted entirely to the issue of the history, benefits and pitfalls of medication management as a treatment option for people suffering from substance use disorders.

Opioid dependence afflicts almost two million people in the United States each year and only about half of people grappling with dependency receive any form of addiction treatment. When opioids are repeatedly consumed, the regulation of certain neurotransmitters in the brain is altered and results in opioid dependence. These adaptations in the brain impede many opioid dependent clients from discontinuing illicit opioids due to the onset of highly uncomfortable withdrawal symptoms. Medication-assisted treatments for opioid dependence can allow clients to live their lives without illicit opioids and the related withdrawal symptoms. Research indicates that clients who utilize medication-assisted treatments for opioid dependence tend to stay in treatment longer and consume less illicit opioids than their counterparts.

Medication-assisted treatments for opioid dependence are not ideal for all clients. It is the final decision of a specially certified and licensed physician whether or not to prescribe medications, but all members of the multidisciplinary addiction treatment team should contribute to this decision. In addition, opioid dependence treatment is most effective when it is holistic, coordinated and addresses the biological, psychological, social and spiritual components of this disease. Further, by utilizing techniques from Motivational Interviewing, integrating medication-assisted treatments for opioid dependence into a client’s treatment plan can be extremely helpful for clients at any Stage of Change.

This compendium will explore the role of medication-assisted treatments in the treatment of opioid dependence. Our authors provide useful, scientific information concerning opioids and opioid dependence. I hope that this compendium serves as a helpful tool for addiction counselors and other helping professionals understand the impact opioids have on the brain and what this means for subsequent treatment options.

Recognizing that resources are stretched thin by the current economic climate, this compendium also provides continuing education (CE) credits, starting on page 21. You can fill out and return one portion of the CE quiz for three credits, or return the entire quiz for 18 credits.

NAADAC, the Association for Addiction Professionals, understands the need for continuous education and strives to provide addiction-focused professionals with training in current trends to help counselors remain well-informed and pursue best-practices for clients. Many writers and consultants contributed to this issue and I would like to extend my sincerest appreciation to the article contributors: Mark W. Parrino, MPA, Keith W. Crawford, RPh, PhD, Johnny W. Allem, Nancy A. Deming, MSW, LCSW, CCAC-S, Gerard J. Schmidt, MA, LPC, MAC, Carlo C. DiClemente, PhD, ABPP and Cynthia Moreno Tuohy, NCAC II, CCDC II, SAP. I’d also like to thank Veronica Leventhal, Shirley Beckett Mikell, NCAC II, CAC II, SAP, and Misti Storie, MA, from the NAADAC staff.

I would also like to acknowledge the work of the Addiction Technology Transfer Centers, Reckitt Benckiser as well as NAADAC’s affiliates in providing background, resources and support for the NAADAC Lifelong Learning Series.

I hope you enjoy this compendium, and that it serves as a useful tool in your practice.

Donovan Kuehn
NAADAC News Editor

Donovan Kuehn serves as the editor of the NAADAC News and is the Director of Operations and Outreach for NAADAC, the Association for Addiction Professionals. You can connect with him on Facebook at www.facebook.com/donovan.kuehn or at dkuehn@naadac.org.
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History of Methadone Maintenance Treatment in the United States: Current Challenges and Initiatives

By Mark W. Parrino, MPA

There is a rich and dynamic history for the use of medications to treat chronic opioid addiction. At present, there are two principal medications, which are used in the United States and abroad to treat this disease: methadone and buprenorphine. At the outset, it is important to underscore that both are extraordinary and lifesaving medications that should be widely used to treat this chronic disease. There is much more research and literature available in support of methadone maintenance treatment primarily because it has been used since 1965, while buprenorphine has principally been used in the past decade.

There are many compelling media reports focusing on methadone-associated mortality in the United States. While methadone has been used as a maintenance agent to treat chronic opioid addiction for more than 40 years, the phenomenon of using methadone to treat chronic pain is relatively recent, spanning the past decade. There are approximately 260,000 patients being treated in 1,203 registered and certified Opioid Treatment Programs (OTPs) on any given day. Such treatment is available in 46 states, the District of Columbia, Puerto Rico and American territories. According to the federal government, there are more than 700,000 patients who receive methadone as a pain management medication. Recent reports of methadone-associated mortality, according to a number of federal reports, have risen as a direct result of the greater availability of methadone for pain and illicit methadone use in the open market.

Unfortunately, the reports of these methadone-associated deaths compromise the integrity and public trust in our treatment system. This is particularly relevant as the conflict and instability in Afghanistan, as well as a continued influx from other trafficking routes in Mexico, South America and the Golden Triangle in Asia, ensures that illicit heroin will continue to reach American shores.

Another major dynamic is the availability of opioids, which are prescribed by physicians and increasingly available on the illicit market. The American Association for the Treatment of Opioid Dependence (AATOD) has been working with the Denver Department of Health and Human Services on the RADARS® System to better evaluate the impact that such prescription opioid use has had on patient admissions. Since January 2005, approximately 75 programs began participating in this study with more than 28,000 patients completing the initial surveys. Approximately 40% of the patients completing the surveys report that prescription opioid addiction is their primary reason for seeking admission to methadone maintenance treatment. It is safe to say that such addiction has increased the number of people entering treatment both in methadone maintenance programs (OTPs) and physician practices that use buprenorphine to treat chronic opioid addiction.

It is important to set these major and changing dynamics in context before describing the history of methadone maintenance treatment.

History of Methadone Treatment

Methadone maintenance was developed as a treatment for chronic opioid addiction in the metabolic ward of Rockefeller University during the mid 1960s. The research project was conducted at Rockefeller from 1963-64 and the first major article was published in the Journal of the American Medical Association (JAMA) in 1965. The development of methadone maintenance treatment was set against the backdrop of increasing heroin-related mortality as the leading cause of death for young adults in the United States. The number of serum hepatitis cases was also increasing dramatically and untreated heroin addiction was increasingly tied to criminal behavior.

Drs. Vincent Dole and Marie Nyswander were the two principals involved in this study and they were later joined by Dr. Mary-Jeanne Kreek in developing this remarkable and lifesaving medication. The challenges were particularly significant because their theories were more advanced than the scientific techniques of the time. Subsequent scientific developments and brain imaging were able to bear out their original thinking some years later. In one of the earliest articles, published in the Archives of Internal Medicine (1966), Drs. Dole, Nyswander and Kreek underscored the importance of selecting the right medication to treat chronic opioid addiction.

“It must eliminate the euphoric appeal of heroin and the abstinence symptoms that draw addicts back to drug use; it must be sufficiently free from toxic dysphoric effect that patients will continue with treatment; it must be orally effective, long acting, medically safe, and compatible with normal performance at work and at school and with responsible behavior in society.”

Dr. Vincent Dole also discussed the neurological basis in support of methadone maintenance treatment in his landmark article for JAMA in 1988, “Implications of Methadone Maintenance for Theories of Narcotic Addiction.”

“The treatment is corrective, normalizing neurological and endocrinologic processes in patients, whose endogenous ligand receptor function has been deranged by long-term use of power narcotic drugs. While some persons who are exposed to narcotics are more susceptible than others to this derangement and whether long-term addicts can recover normal function without maintenance therapy are questions for the future. At present, the most that can be said is that there seems to be a specific neurological basis for the compulsive use of heroin by addicts and that methadone taken in optimal doses can correct the disorder.”

It is remarkable that more than four decades after the initial research was conducted at Rockefeller University and after hundreds of rigorous scientific studies have been published worldwide, there is still controversy and misunderstanding about the use of this medication to treat chronic opioid addiction. For many non-addiction experts, the question remains over whether opioid addiction is a disease. Many federal and state agencies are also in disagreement about how this treatment should be used. At the federal level, the Department of Transportation still has regulations in force which prohibit a successful and stable methadone maintained patient from having a commercial driver’s license and crossing state lines for the purpose of driving commercial vehicles.

Many of these issues were addressed during a two-day meeting of the National Institutes
of Health (NIH) “Effective Medical Treatment of Opioid Addiction,” which convened during November 1997. The first three recommendations are noteworthy:

- “Vigorous and effective leadership is needed within the Office of National Drug Control Policy (ONDCP) (and related federal and state agencies) to inform the public that dependence is a medical disorder that can be effectively treated for significant benefits for the patient and society.
- Society must make a commitment to offering effective treatment for opioid dependence to all who need it.
- The panel calls attention to the need for opioid dependent persons under legal supervision to have access to methadone maintenance treatment. The ONDCP and the US Department of Justice should implement this recommendation.”

To this day, none of these recommendations from the NIH consensus statement have been executed.

Early Regulatory Interventions

The Narcotic Addiction Treatment Act was passed by Congress in 1974 and defined the “closed-system” in treating narcotic addiction with methadone maintenance in the United States. This Act continues in force to the present day and requires all operating OTPs to be licensed and certified by the federal government, a function currently under the domain of the Center for Substance Abuse Treatment (CSAT) within the Substance Abuse and Mental Health Services Administration (SAMHSA). Methadone maintenance treatment cannot be used by physicians in private practice to treat chronic opioid addiction unless they are specially certified by the same federal agency. It is safe to say that almost all of the methadone maintenance treatment used in narcotic addiction is used through the system of OTPs in the United States. At present, only four states do not have OTPs, including North and South Dakota, Montana and Wyoming. There have been dramatic improvements in the availability of formerly non-methadone treatment states, most recently including Idaho, Mississippi, Vermont and West Virginia.

The Food and Drug Administration (FDA) issued the first methadone regulations in 1972 and they have been amended in 2001 as the FDA transitioned its regulatory oversight responsibility to CSAT.

The most significant expansion for methadone treatment in the United States occurred during the early 1970s, following the 1971 appointment of Dr. Jerome Jaffe by President Nixon to be the Director of the Special Action Office for Drug Abuse Prevention (SAODAP). Under Dr. Jaffe’s direction, there was a major expansion in the use of methadone maintenance treatment in the United States. In New York City alone, approximately 20,000 patients were admitted to methadone maintenance treatment between January 1971 and December 31, 1973.

A retrospective study of these methadone maintenance treatment admissions and drug-related arrests were conducted in New York by Dr. Vincent Dole, Dr. Don Des Jarlais and Dr. Herman Joseph. There results were significant in that drug related arrests decreased by 24,000 during the same period with 77,000 fewer burglaries and grand larcenies being reported as well. The reported cases of serum hepatitis also decreased by 1,500 during this 24-month time period. All of these findings were quite remarkable in view of the major health and criminal challenges facing untreated heroin addiction in the United States.

A major challenge to treating patients in methadone maintenance programs came in 1983 as AIDS-related illnesses were identified as a major cause of patient deaths. In an ironic twist of fate, the methadone maintenance treatment system was bombarded by a series of negative articles, particularly the “Deadly Cure” series published by the Fort Lauderdale News/Sun Sentinel in Broward County, Fla., in 1983. As a result of AIDS-related illnesses affecting patients in treatment, methadone maintenance treatment became a public health benefit. All of the research in methadone maintenance treatment clearly demonstrated the benefits to patients in terms of improved health and social functioning and subsequent research clearly demonstrated the financial benefit of four dollars for every dollar invested in treatment. These financial realities have been consistently demonstrated through the years.

One of the major federal reports, which had an impact on changing how methadone treatment would be regulated in the United States, followed the release of the GAO Report on Methadone, published in March 1990 in response to a request from Congressman Charles Rangel, Chairman of the House Select Committee on Narcotic Abuse and Control. The report cited a number of significant findings, initially alluded to in the first chapter of CSAT’s State Methadone Treatment Guidelines (published 1993).

“The federal government’s two primary agencies for researching alcohol and substance abuse issues, respectively, have concluded that methadone is the most effective method for treating heroin addiction…in practice, however, the continued use of heroin that GAO found among patients in 24 methadone maintenance treatment programs indicated that many programs are not effectively treating heroin addiction. The use of heroin by patients in treatment for more than six months range from 1% at one program to 47% at two others.”

It took years for the treatment system to utilize the findings of the GAO Report and the FDA subsequently requested that the Institute of Medicine conduct an evaluation of the existing federal regulations for methadone treatment to offer some recommendations. The findings were published in 1995 and made a series of favorable recommendations, some of which lead to the development of an accreditation-based system for regulating treatment, which would end oversight of methadone treatment by the FDA and move into a more enlightened federal regulation under CSAT. It is useful to cite a major finding, which is included in the Executive Summary of the Institute of Medicine Report: “The effectiveness of methadone treatment of opiate addicts has been established in many studies conducted over three decades. Methadone maintained patients show improvement in a number of outcomes after an adequate dose (usually 60–120mg per day) is established. Consumption of all illicit drugs, especially heroin, declines. Crime is reduced. Fewer individuals become HIV-positive, and individual functioning is improved. These outcomes represent the three objectives of methadone treatment: assisting the individual addict, enhancing public safety, and safeguarding public health. Outcomes serving these objectives are recognized most often by the combined effect of the medication and the counseling provided by a good treatment program.”
The Dynamic Nature of the Treatment Program

For anyone who has either worked or spent time in an opioid treatment program, he or she knows that it is an extremely challenging and dynamic environment. All of the trained, talented and compassionate personnel work to improve the well-being of the patient. The most effective programs are stable in their administration and financing and maintain a cadre of experienced, compassionate and trained personnel. These programs provide clinically therapeutic dosages of methadone and offer comprehensive treatment to the patient, responding to individual needs, including individual and group therapy, in addition to a series of other ancillary services.

It is important to note that there is a huge amount of mythology around methadone treatment. There is no magic period of time where treatment should naturally end. As to the question, “How long should the patient remain in treatment?”, the simple answer is, “As long as the patient continues to benefit from its use.” Imposing any time limit is countertherapeutic and contrary to more than 40 years of rigorous scientific findings and outcome studies. There is no basis to suggest it in a law nor a regulatory policy.

Reports that methadone narcotizes the patient and creates a euphoric high is not accurate. It is true that some patients feel sedation during the dosage build-up period when the patient is introduced to treatment. Once the induction period has concluded and the patient is stable on their daily dosage of medication is no sedative effect. It is not harmful in any way to the organs of the body and does not cause any neurologic deterioration. These continue to be myths held by individuals who do not have sufficient knowledge about the actions of the medication.

If any conclusion can be drawn over the years about the use and effectiveness of methadone for patients, their families and the community, it is that there has never been a sufficient and sustained national public education campaign explaining the benefits of this treatment in treating addiction as a disease. Many in this country still believe opioid addiction is a moral failing.

It is extremely difficult to expand access to treatment for such addiction against the backdrop of such public suspicion and misunderstanding, especially when elected officials mirror these misguided views. Without a sustained public education campaign and proper funding for the treatment system, it is safe to say that expansion will never realize the goal of treating all people who need access to care. There are more than one million heroin users in the United States (8) and there are millions of other opioid addicted individuals who are crossing from dependence to addiction without understanding the dynamics of such change.

It is safe to conclude that stabilized patients represent patients in recovery. There is no reason to exclude these patients from a recovery-based model of care because they continue to use a medication to treat an illness. There is reason to suggest that using methadone and buprenorphine is no different than using any other medication to treat a chronic condition that benefits from continued use of medication and the appropriate ancillary services.

Parrino bio and references, page 23
Opioid Addiction in the U.S.: A Growing Problem

By Keith W. Crawford, RPh, PhD

Opioid addiction is a serious public health problem in the U.S. that is steadily growing in magnitude and severity. While heroin addiction continues to challenge health resources, it is also a major risk factor for transmission of potentially deadly infectious diseases like HIV, hepatitis B and hepatitis C. Equally as troubling is the increase in the numbers of individuals becoming addicted to prescription opioids, prescribed for moderate to severe pain. According to a recent report from National Institute of Drug Abuse (NIDA), the prevalence of opioid addiction in the U.S population increased from 5.4 percent in 2002 to 6.4 percent in 2006. In one NIDA study, 9.3 percent of 12th graders reported using Vicodin and 5% reported using OxyContin in 2004. These statistics highlight the importance of utilizing the most effective strategies for treatment, both pharmacologic and behavioral, to combat this epidemic. There are three currently approved medications for treating Opioid addiction: methadone, naltrexone and buprenorphine.

This article will discuss some of the biology of opioid receptors and the process of addiction and then discuss the pharmacology of buprenorphine and its unique role as a member of our armamentarium against addictions.

Introduction to the Nervous System

The nervous system controls and coordinates the body’s diverse functions. It regulates voluntary actions like walking, eating and writing as well as involuntary actions like circulation and digestion. It provides information to an individual about their environment. All of our senses like sight, sound, balance and touch are received and interpreted through the nervous system. On a higher level, the nervous system directs our cognitive functions (thinking and learning) and controls our emotions and mood. All of these functions necessitate the rapid transfer of information.

The neuron or nerve cell is the basic unit of this communication system. Neurons are long cells that can be compared to a telephone cable. Information travels down this neuron in one direction along this cable-like structure called an axon. At the end of the neuron it branches off and connects with many other neurons by extensions called dendrites. Similarly, each neuron can receive information from many other nerves (figure 1). This creates a highly integrated information network. The signal that travels down a neuron can be amplified or diminished at the end of the cell, thus influencing the intensity of the signal going to other neurons. The neuronal signal is actually a wave of electricity — your body uses electricity in the nerves to send messages. When you have an EKG (electrocardiogram) done, a sensitive instrument measures electrical signals controlling your heart rate. Animals like electric eels and torpedo rays have special organs with very high densities of nerve cells that can discharge with enough power to stun a human and kill smaller animals. But when the electrical signal reaches the end of the neuron, the electricity isn’t directly transferred to the next nerve cell. There is actually a tiny gap between the end of a nerve terminal and the point where it connects to another neuron. The electrical wave causes special chemicals to be released and diffuse across the synapse to the next cell. These chemicals activate (or suppress) the next cell and initiate a new wave of electrical signaling.

Let take a closer look at this event. You may ask, “Why doesn’t the electrical signal just cross over to the next neuron? Wouldn’t that be better?” Well, not necessarily. The gap between two connecting neurons is called a synapse. When the neuron releases chemicals into the synapse to signal to the next neuron, the chemicals very rapidly diffuse across the synapse, literally in thousandths of a second. The synapse provides a remarkable level of control of the signal transmission. The neighboring neuron could be activated by some chemicals and suppressed by other chemicals. The amount of chemical released from the neuron into the synapse can be controlled and regulate the intensity of the signal. The nervous system is highly efficient, adaptable and responsive to humans’ physical needs. These chemicals are called neurotransmitters.

Receptors

How do chemicals that are released in such tiny quantities produce such profound changes on neuronal activity? The actions of the neurotransmitter are specifically focused at specialized proteins (receptors) that recognize the unique structure of the neurotransmitter. Receptors are very specific and only recognize one type of neurotransmitter. When the nerve electrical wave reaches the neuronal terminals and causes the release of neurotransmitter, the neurotransmitter diffuses across the synapse and binds to its specific receptors located on the surface of the membrane of the adjacent neuron. When a neurotransmitter binds to its receptor, the receptor becomes activated. This means that the receptor is going to trigger changes in the activity of the neuron. This could lead to initiating a new electrical impulse or suppressing a new impulse, depending on the type of neurotransmitter. Medications and drugs that have similar chemical structure to neurotransmitters may be able to activate the receptor as well. A compound that activates a receptor is called an agonist of that receptor. It is going to cause some type of a change in neuronal activity through its activation of the receptor. An agonist can be thought of as a key that fits a lock, turns the knob and opens the door. Some medications and drugs...
have a structure that allows them to bind to a specific type of receptor, but their structure does not cause the receptor to produce any actions in the neuron. These compounds simply occupy the receptor but they block the receptor from binding with compounds that can activate it. They are like keys that fit the lock but don’t turn the lock and hence cannot open the door. But as long as this key blocks the lock, the “real” key cannot open the door. The door stays closed. We call this type of compound an antagonist.

The effect that a drug produces depends on how much of the drug is in the blood and how long the concentration stays at the appropriate level for a response. If the drug remains at the appropriate concentration in the blood, then it can enter the nervous tissue, activate the receptors and produce an effect. But the body chemically changes the drug (usually in the liver) and eliminates it in urine through the kidneys. The half-life of the drug provides a measure of how long the drug circulates.

For most drugs that are abused or used recreationally, the user wants to get the effect of the drug (high, euphoria, rush, buzz) very rapidly. Injecting drugs, smoking or free basing are all ways to get the drug in the blood and to the brain as quickly as possible. These drugs work very rapidly and don’t stay in the blood for long. The good feeling may wear off soon after the drug is taken, making the user want another dose to get the feeling again.

The Opiates

The nervous system produces an array of neurotransmitters that can bind to different families of opiate receptors. Three classes of chemicals called endorphins, enkephalins, dynorphins bind and activate opiate receptors. Among their other functions, they are key modulators of the body’s pain control system. The poppy plant produces a whole assortment of chemicals that bind to these same receptors. Some of the opiates derived from poppy plants include morphine, heroin and thebaine.

The effects of opiates have been known and used for thousands of years in many cultures. When opiates/opioids bind to receptors in the mu-class (mu opiate receptors) they produce euphoria and somnolence. They modulate the pain-signaling neuronal pathways and produce analgesia, or relief from pain. Other clinical uses of opiate compounds include treatment of diarrhea (e.g. diphenoxylate, opium tincture), antitussive (suppression of cough; e.g. codeine, dextromethorphan) and even use as general anesthetics by very potent opiates (e.g. sufentanil, alfentanil).

Opiates are classified as depressants. They suppress neuronal activity, which in moderate doses produces a state of relaxation and calmness. Higher doses decrease alertness and can produce somnolence. During an overdose, they suppress respiration and can cause death. One important mechanism for producing this depressant effect is by suppressing the release of stimulatory neurotransmitters. Located on certain nerve terminals, the activation of opiate receptors decreases the release of norepinephrine into the synapse, decreasing the activation of the neighboring neuron (see figure 2).

Another important pharmacologic effect of the opiate receptor signaling is the activation of brain neuronal pathways that regulate dopamine. Dopamine is an important neurotransmitter because it controls reinforcement of behaviors. Reinforcement is the desire to repeat behaviors that feel good. Activities that make us feel good increase the release of dopamine in the ventral tegmental and nucleus accumbens areas of the brain. Activities that are pleasurable and can make us feel a rush can increase dopamine (like eating delicious foods, sex or gambling). Similarly recreational drugs that produce a high, whether they are stimulants (e.g. cocaine, amphetamines, nicotine) or depressants (alcohol, opiates, benzodiazepines), activate the neuronal pathways that increase dopamine release. With addictions, these pathways are consistently activated and playing a role in driving the addiction. Understanding how to regulate this compound is central to learning how to treat all types of addictions, whether for drugs, gambling or anything else.

Addiction

In a normal functioning brain, the production of neurotransmitters is tightly regulated. The stimulatory neurotransmitter effects are closely balanced with the suppressive neurotransmitter effects. This balance is called homestasis. Drugs and medications usually work on the nerves for a much longer period than the naturally-released neurotransmitters do, but the neurons resume their normal functioning after the effects of the drug wear off. However, when a drug is administered constantly, as in an addiction, the effects last much longer than the brain is accustomed to. The homestasis (balance) is disrupted. For
example, depressant drugs like alcohol, barbiturates or opiates keep the brain constantly suppressed. The normal release of the stimulatory neurotransmitter like norepinephrine is inhibited. The brain attempts to adapt to this constant suppression in a number of ways. It tries to diminish the suppressive effect of the opiate by making their receptors less sensitive to the drug. It also tries to override the suppression by increasing the activity of neurons that release norepinephrine.

After a period of time, these changes become set and the brain has now adapted to functioning “normally” in the continuous presence of opiates. However, this brain isn’t really normal because the levels of neurotransmitters and activity of the receptors are different from that of a non-addicted brain. The changes in the brain structure and chemistry actually define the addiction. Opiates are now required for the brain and when they are removed (abstinence) the brain behaves in a way that shows it is out of balance. Since the brain has adapted to being suppressed by the opiate, which included increasing norepinephrine release, when the opiates/opioids are taken away, the brakes are removed and the brain is now hyperactive. We call this state withdrawal. Withdrawal is a sign that the brain is physically dependent on the drug. So opiate withdrawal presents as a hyperactivity and includes symptoms such as irritability, insomnia, nausea, increased blood pressure and muscle cramps.

New perspectives on addiction have focused on other types of cells in the nervous system. The cells, called glial cells, actually outnumber the neurons in the nervous system by almost ten to one. Among their numerous functions, glial cells release chemicals that promote growth of neurons, provision of nutrition for neurons and enhancement of their signaling functions. Similar to the changes that occur in receptor systems during addiction, the glial cells are also modified and now release chemicals that can cause neuronal inflammation that helps drive the addictive process. Experimental therapies are being investigated that may soon validate glial-targeted strategies as effective interventions for opioid addiction.

Most opiate addicts alternate between being high from the drug and experiencing short term withdrawal which drives their drug seeking behavior. If they are abusing heroin or other short-acting opiates like oxycodone, they get high for a few hours and then crash. In the absence of the opiate the withdrawal symptoms begin to manifest forcing the addict to seek their next dose of drug. This is the pattern or cycle that is typical for opiates with a short half-life. This is displayed in figure 3.

Methadone stays in the bloodstream for a very long time after just one dose. When it is properly used, the concentration of the medication stays within a range where the person isn’t “high” and not experiencing uncomfortable symptoms (see figure 4). This can have a very stabilizing effect, allowing the individual to resume normal functioning. This is an ideal state where behavioral interventions can be implemented to more comprehensively address the addiction. It was thought that the long half-life of methadone would allow patients to be gradually tapered off the medication without precipitating withdrawal, but in many individuals, that has been very difficult to do. Addicts in recovery become dependent on their daily methadone dose.

Buprenorphine is unique among opiates. It has a number of characteristics that contribute to its efficacy in treating addiction. First, its effects at the receptor are different in a couple of important ways. Buprenorphine is classified as a partial agonist. When there are low concentrations of buprenorphine in the blood, it binds to the mu-opiate receptor and stimulates it, just like heroin, methadone, oxycodone or codeine do. It produces euphoria. It produces analgesia and is frequently used in clinical settings as an analgesic. However, as the amount of buprenorphine increases in the blood, the stimulatory effect reaches a ceiling. At higher concentrations, it no longer activates the opiate receptor. You can think of buprenorphine as the key that fits the lock and turns the knob, but the door only opens halfway. This effect is depicted in figure 5. The fact that the effect of buprenorphine no longer activates opiate receptors at high doses gives it an advantage over full-agonists. It is harder to overdose on the medication because the most serious toxicities (suppression of breathing) are blocked at higher concentrations. Buprenorphine will even behave as an antagonist of the opiate receptors at high concentrations, no longer activating the receptor but blocking it.

Another unique effect of buprenorphine is the degree to which it interacts to the receptor; it binds very tightly. Pharmacologists would say that it has a very high affinity for the receptor. Buprenorphine is bound so tightly to the receptor that it’s hard for even high doses of
full-agonist drugs (like heroin) to displace it. Interestingly, like heroin, buprenorphine also has a short half life. At first, this would seem to give the medication a disadvantage in treating opiate addiction. Recall that the long half-life of methadone maintains a steady concentration of opiate in the blood and prevent the sharp fluctuations between being high and acute withdrawal. But while buprenorphine doesn’t stay in the blood for long, its high affinity for the opiate receptor keeps the receptor moderately activated, even when there isn’t much of the medicine in the blood. This reduces the dosing requirement of the drug. Some patients may become stabilized dosing buprenorphine just three times a week.

Another important advantage of buprenorphine is the increased ease in tapering patients off the medication. Its ability to moderately activate the receptor while remaining bound for a long time can allow the receptors too re-equilibrate to a level of normal activity. This can be an important transition back to homeostasis after the body has adapted to the changes of the addicted state.

Patients must be in mild withdrawal before starting buprenorphine. For patients on heroin or another short-acting drug, this may only take a few hours after the last dose, but for a long-acting opiate like methadone, it may be up to two days. Many patients on methadone want to switch to buprenorphine because it offers them a higher potential of being drug free.

**Subutex vs. Suboxone**

Buprenorphine is marketed in a product called Subutex. The tablet is administered sublingually, or placed under the tongue for absorption. Suboxone includes buprenorphine combined with naloxone. Naloxone is an opiate *antagonist*. It is used in emergency rooms to reverse severe respiratory suppression and somnolence from opioid overdose. When the suboxone tablet is placed under the tongue, buprenorphine is absorbed but naloxone isn’t. It has very poor absorption and produces no effect. Since buprenorphine is a partial agonist, it can produce a high but not as intense as a full agonist like heroin. Some addicts may want a more intense high and since they can’t get it sublingually administering buprenorphine, they figure that crushing the tablet and injecting a solution will produce a better high. They’re probably right, but they’re in for a surprise. If the Suboxone tablet is crushed and injected, the naloxone is now able to enter the blood easily. It will displace any opioid/opiates and precipitate an abrupt withdrawal, definitely not the desired effect. Suboxone can be a good choice for those trying to kick their addiction.

**Clinical Case**

J.C. is an 64-year-old African American male with a greater than 25 year history of heroin addiction. He was diagnosed with HIV in 1994 and is also infected with Hepatitis C and has hypertension. He started methadone treatment in 2003. A couple years later he got married. His wife wanted him off methadone so he approached his physician about switching to buprenorphine. He was gradually tapered on methadone down to a dose of 30 mg/day. His last dose of methadone was taken on August 30, 2005. On September 1, more than 48 hours after his last methadone dose, he presents to the clinic for buprenorphine induction. However, he still has no signs of withdrawal. Then around 11:20 AM, the patient complains of being feverish and sick. He is nauseous, feels cold, is sweaty and has increased blood pressure (168/95, pulse 70). Five 2 mg tablets of Subutex are taken sublingually, and his blood pressure is measured every 20 minutes. The patient reports almost immediate relief of symptoms. An hour and 20 minutes later, his blood pressure is down to 145/84, pulse=63. He is discharged on a maintenance dose of 10 mg. Soon after, he is switched from Subutex to Suboxone. After two months he is tapered on the following schedule: 11/06/05 8mg QD x 6 wks; 12/15/05 6mg QD x 2 wks, 12/29/05 4mg QD x 2 wks, 1/12/06 2mg QD x 2 wks, 1/26/06 2mg QOD x 2 wks. Eventually, he was tapered all the way down to 2.5 mg QOD and remained stabilized on that dose.

1QD= daily  
2QOD= every other day

As opioid addiction grows as a public health problem in the U.S., addiction professionals need to understand the implications of response and treatment. The statistics show that this challenge is growing, and addiction professionals will need their clinical skills and knowledge to help cope with this troubling disease.

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As opioid addiction grows as a public health problem in the U.S., addiction professionals need to understand the implications of response and treatment. The statistics show that this challenge is growing, and addiction professionals will need their clinical skills and knowledge to help cope with this troubling disease.
People in long-term recovery from the disease of addiction are often suspicious of medicines of any kind, resenting the idea that some newer prescription drugs can assist in the recovery process. In my experience, this suspicion is based on negative drug experiences in the past.

In addition, we often feel that getting chemical relief from the craving for alcohol or other drugs during early recovery is somehow unfair – even cheating. What’s wrong with a little struggle? Isn’t it true that gain comes through pain?

As a person more than a quarter century away from my last drink — and active in advocating for recovery — I have both prided myself on being open to change and hesitated to promote new ideas, practices and medicines because of my own experience and prejudices.

Staying close to newcomers has kept me open to new ideas and fresh thinking. In jails, clubs, rehabs and recovery meetings, I see on a daily basis the value of traditional tools and the need to seek every advantage new science and practice can offer.

Watching recovery work for people fresh from pain reminds me of the resilience of the human spirit and the restorative power of recovery supports. At the same time, I see how our society’s response to addiction is so woefully inadequate.

The truth is that there is no conflict between advancing science and traditional recovery principles. Traditional treatment and recovery practices are still very effective. However, they reach increasingly fewer people and families who suffer. It behooves every person interested in advancing recovery to explore and implement new strategies and practices.

Today, a new generation of medicines are becoming available that reduce craving rising in the limbic brain without mood-altering side effects. They buy time for the individual to reach homeostasis. Time buying medications of any kind, resenting the idea that doctors do not take pills” philosophy. Facts and appropriate professional care are the best guide to individual understanding and individual recovery plans.

• Unfortunately, too many professionals in the healthcare industry still do not understand addiction disease and substance use disorders. While this is slowly changing, many physicians practice inappropriate use of medications. Joseph Perch, MD, a pioneer in addiction treatment, once said (tongue in cheek): “For many doctors, alcoholism is an indication of valium deficiency.”

• Overdependence and unsupported use of medicines in tight budget environments have produced questionable outcomes and unintended consequences. A prime example is the use of methadone, a substitution therapy of high value to many, but hampered by distribution practices without therapeutic supports. Methadone was introduced as an “ancillary agent facilitating recovery,” hardly a reasonable description of many programs.

Fortunately, the growing advocacy movement has not only addressed the discrimination surrounding methadone use, but demanded appropriate recovery supports around use of all medicines.

• “Gas and go” demands of patients and the practical result of under-funded and understaffed treatment facilities lead to lost opportunities and poor results. Pharmaceutical products are developed and sold under very specific practice guidelines. When appropriate supports are not provided for building long-term recovery, the support medicines are blamed for lack of progress.

• Finally, many in recovery believe that 12-step philosophies prohibit use of medicine to assist in healing. This is simply not true. Successful recovery regimens require hard work, personal commitment, relevant information, and appropriate professional and peer support. The “gold standard” for time in initial treatment is 90 days, followed by life changes that continue nurturing recovery principles. The vast majority of intensive treatment programs discharge clients after only 20 to 30 days of treatment. This gap between science and practice would present serious ethical problems if it occurred in other medical settings.

• Medicines that reduce the urge to use alcohol and other drugs, in effect, buy time for appropriate recovery practices to develop and work. Vivitrol (injectable naltrexone), Suboxone (buprenorphine), Antabuse (disulfiram), andCam-pral (acamprosate) are examples of this “time-buying” strategy and have proven effective.

Relief from the physical cravings for alcohol and other drugs is no substitute for the hard emotional and physical work to establish a successful recovery journey. But it makes such work possible for millions of people now missed by our systems of care.

America’s emerging recovery movement is helping improve the quality of recovery support and the access to care long missing in our nation’s health response. We have helped pass a national insurance equity act. We have supported evidence-based screening, brief intervention and referral to treatment (SBIRT) practices. We have engaged in recovery coaching disciplines that strengthen peer support. And we have helped reduce discrimination against medication-assisted recovery.

By accepting and acting on our responsibility to future generations, we are advancing healing closer to the need in every community.

Creating an environment for the mind and body to engage in healing is a time-honored goal and strategy for all health and wellness practices. That is why it is said that doctors do not heal; they enable the body to achieve or return to homeostasis. Time buying medications improve changes for recovery to succeed and bring the possibility of recovery to larger populations afflicted and affected by addiction.

For me, it is not about me any more. It is about my grandchildren. I know where their genes come from. I am not happy to leave them a society where only one out of seven reach a positive outcome to their addiction experience. That is why I continue to learn, work and speak out as a person in long-term recovery for recovery advances. Please join me.

Prejudice is an expensive habit. For individuals and society. With our support, let the healing advance.

Allem bio, page 23
Counseling a Stigmatized Patient Population

By Mark W. Parrino, MPA

I suspect that the majority of people reading this article will have some strong feelings, perhaps negative, about patients who access methadone or buprenorphine treatment for chronic opioid addiction. In spite of the fact that methadone, and more recently, buprenorphine, have been used to successfully treat chronic opioid addiction for more than 40 years, and in spite of overwhelming research demonstrating the efficacy of such medications, there is extraordinary stigma towards the use of these medications.

This stigma is fairly widespread in general society and is also present in addiction treatment experts as well. Generally speaking, stigmas include negative views and attitudes toward what is perceived to be an undesirable group of people.

There have been a number of researchers who have written extensively on this topic, including Drs. Herman Joseph and Charlie Winick. Most recently, William White discussed this issue in addressing the national conference for the American Association for the Treatment of Opioid Dependence (AATOD). White provided a moving and eloquent exploration of attitudes, including his own, towards patients who use methadone or buprenorphine to treat their chronic opioid addiction.

Stigma often meshes with mythology. Many people believe it is counterintuitive to provide a dependency-producing medication in order to treat an addiction. Some representatives from Alcoholics Anonymous (AA) have characterized methadone as “giving a bottle of scotch to a recovering alcoholic.”

At times, stigma and mythology collaborate to denigrate the medication being used to treat an illness because the illness is poorly regarded. Many in our society ignore the research indicating that an opioid addiction is an illness, and prefer to see addiction as a moral failing or a reflection of undisciplined will. These attitudes are shifting very slowly, but attitudes in the alcohol and drug treatment community are still entrenched in old beliefs about using medication to treat chronic opioid addiction.

The National Institute on Drug Abuse (NIDA) funds approximately 95% of the world’s research in treating addiction. It has funded a significant number of studies, which have shown, time and again, the success the patient has experienced during the course of treatment. The Center for Substance Abuse Treatment (CSAT) within the Substance Abuse and Mental Health Services Administration (SAMHSA) has also published extensive Treatment Improvement Protocols (TIP) and other advisories, which combine research with evidence-based practice. Such information has helped to strike down a fair amount of mythology and stigma in the use of medications.

Many people in the addiction treatment community also feel that there should be some time limit if patients need access to medication to treat an illness. A frequent question is “How long should a patient remain in treatment?” The answer is as long as the patient continues to benefit from the ongoing use of such medication. It would be impossible to imagine a psychiatrist treating a chronically depressed patient, who has finally stabilized on an antidepressant, to suddenly terminate the medication to see how a patient might do. Equally impossible would be to imagine a cardiologist suggesting to a stable patient, who had years of coronary disease, that he or she should discontinue the medication which is stabilizing blood pressure. Why is it then that we have such a need to limit patients’ continued use of medication even though they benefit from such treatment? Stigma and misunderstanding are the key ingredients fueling such perspectives.

This stigma affects policy on addiction, from the national level to the views of state policymakers and communities. A number of states still do not provide access to methadone at the present time. Other states have resisted providing access to methadone treatment. One Northeastern state came to mind during a public hearing in 1995 when the use of methadone maintenance treatment for its chronic addicted population was being considered. A senior health official in the state government took the position that the 200 or so patients, who were currently being treated through outpatient detoxification programs, were not really residents of the state. There was no truth to this, but it is an interesting indication of how a state would claim that the patients were not their responsibility since they must have been born in other parts of the Northeast and eventually settled in their state.

This is another example of how stigma can cause individuals to disown the negative and affected group. In the case of the state official, if they could claim that the people in need of such care were not really from their state, then they would not be responsible to provide access to treatment. This is a version of misguided thinking, but based on a stigmatized population. The public health official went on to claim that their public relations would also suffer if people knew that there was heroin addiction in their state. The easiest course was to deny it and not provide access to care.

What penetrated this barrier was a young woman who was modestly dressed and had asked to speak at this public hearing. While she did not have any scientific arguments to make, she was persuasive when talking about her family. Her husband was a heroin user and also a fisherman. They had two daughters, aged five and seven, and he was doing well as he stabilized on his dose of methadone during the course of treatment. There was food in the refrigerator and their girls had new clothing. She was not worried about where he was at night since he would come home directly after work. Her family also changed their attitudes towards him and their marriage improved during the course of his care. Her point to the public health panel was that his success in treatment created stability in their lives as well. Ultimately, the state decided to approve the use of methadone to treat chronic opioid addiction.

Stigma in a Therapeutic Environment

Dr. John Caplehorn of Australia conducted a study to evaluate staff attitudes towards methadone maintained patients, drawing both upon a survey of staff in drug-free residential programs in addition to staff in methadone programs. Curiously, the attitudes were not remarkably different and they were fairly negative. In this case, the staff of the program had “absorbed” society’s general antipathy towards the patient in treatment and towards the use of the medication. Most staff favored patients having short term treatment in spite of research that demon-
strated that there were better outcomes when patients remained in treatment for extended time periods. There was also a fundamental misunderstanding of the disease concept of addiction and its neurobiology.

A number of methadone program administrators/directors decided to replicate a version of this study throughout their programs in the United States. Their findings were similar to that of Dr. Caplehorn’s and his associates. In spite of access to training and research information, many of the staff simply did not understand why patients would need access to care for extended periods of time.

Changing Attitudes

If counselors are dealing with patients who are receiving methadone, buprenorphine or Naltrexone to treat chronic opioid addiction, it really is critically important to read the scientific literature, which establishes the evidence to support this treatment. It is not possible to treat the patient properly unless the clinician has a basic understanding of the disease concept of addiction and how medications such as methadone and buprenorphine work neurologically. The basic understanding of this use of medication came from the early work of Drs. Vincent Dole, Marie Nyswander and Mary Jeanne Kreek of Rockefeller University. There was a fundamental change in brain chemistry as the patient used exogenous opioids, such as heroin, for extended periods. This change in brain chemistry necessitated the use of the medication, which would normalize brain function so that the patient would be able to function in society. While there are many more elaborate explanations for this phenomenon, suffice it to say that individuals in the addiction treatment field must understand the science of what we do.

The second challenge is to understand what brings us to the work of treating chronic addiction. Where are our own belief systems, aside from the established scientific literature? It is surprising how many staff have negative views about the treatability of addiction. Some of the research, as referenced above, even found a kind of hopelessness in the views of the staff toward the patients eventually recovering from their addiction through the use of medications such as methadone.

It is also important to examine the individual clinician’s concept of recovery. In the 1980s, a popular magazine in our treatment community discussed the fact that any patient in methadone treatment could not possibly be in a state of recovery. Recovery required complete abstinence in order to move on to the next level of coping with the reality of their addiction. William White spoke about such issues during the recently convened AATOD conference in New York (April 2009) and was able to come full circle to where he was many years ago, reflecting this kind of attitude. Many clinicians are still of the opinion that using methadone and buprenorphine interferes with the individual patient’s ability to respond to the challenges which come through counseling. This is also not the case but is a convenient mythology, which springs from stigmatized views towards the patient and this particular treatment.

Additionally, clinicians need to be careful about the judgments they make about the patients they treat. It is curious to note that many individuals who work in this system and who provide therapy to the patients have never been in therapy themselves. It is fair to state, during my administrative career as the director of a methadone treatment program in New York, many clinical personnel had not come to terms with their own unexamined emotional issues. It was always instructive to note where the clinicians’ unexamined feelings/psychological issues would conflict with a need to provide truly professional and therapeutic care to the patient.

I am not suggesting that every staff member who works in a treatment facility for chronic opioid addiction needs to go through longterm therapy. On the other hand, it is critical to understand the individual’s motivation to work in this field and to be willing to explore the emotional issues that clinicians have in treating a patient, especially when the use of medications, such as methadone and buprenorphine are involved.

This issue is pervasive enough for a number of methadone treatment programs, now called opioid treatment programs (OTPs), to develop their own 12-step programs in the facilities, since their patients generally encountered negative and highly stereotypical attitudes among 12-step groups outside of the facility. Typically, a patient who had revealed their use of methadone was generally shunned and/or criticized during a 12-step meeting. Now, patients who decide to attend the 12-step groups often prefer to remain silent about their treatment rather than risk the inevitable alienation that would follow.

The bottom line is that people who decide to work with this patient population really need to understand what the literature indicates. It is always critical to listen to the patient rather than to impose some unexamined judgment about what the patient needs. Once trust is established, a great deal of effective work can be done with the patient. In this case, the use of medication is simply a tool for treatment. The medication, in and of itself, is not the treatment. Many people talk about the value of comprehensive care and a fair amount of literature has been published which demonstrate that medications, in addition to counseling and other ancillary services, will ultimately improve patient outcome.

Finally, it is important to be internally honest as one enters this field. If you truly believe you cannot understand the benefits of medications in treating chronic opioid addiction and you decide not to research the issue or examine where your own psychological issues may be, then it may be best to choose a different profession.

Parrino bio and references, page 23

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Advocacy in Action!

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Addiction is certainly not a new concept to counselors who have been providing treatment services in West Virginia for the past 40 years. However, the problem of opioid dependence has been a steadily growing concern over the past half decade. There has been a continuous rise in the number of individuals who have become addicted to pain medication through legal access to the medications through prescriptions or diversions from family medicine cabinets or illicit access through pharmacy break-ins and street dealing.

As pain medication addiction grows, local addiction treatment providers have faced an ever increasing demand for treatment. The clients coming into these programs vary from first time consumers with newly acquired but distinct opioid dependence to those with severely significant problems with both long term abuse and dependence. These individuals are often caught in a situation where they can no longer afford their addiction, have been involved in illicit activities that have brought them into contact with the criminal justice system or have been referred from other treatment providers because of the need for more specialized care.

Behavioral health centers, one of the main local providers across the state of West Virginia, often have specialized addiction treatment programs. However, with this new epidemic of opioid dependence and the increasing demand for treatment services, many of behavioral health centers are not prepared for the onslaught of requests for admissions to treatment. In addition to this, many of the centers do not have the staff, nor the sufficient resources, to meet heavy demands. The need to develop specialized treatment services for this population of clients presents some interesting challenges for most addiction program directors.

Valley HealthCare System (VHCS) began its medication-assisted treatment program in conjunction with Advancing Recovery in West Virginia (ARWV). VHCS and three other behavioral health center organizations — Prestera Center for Mental Health Services, Seneca Health Services, and Westbrook Health Services, are working in partnership with the West Virginia Division on Alcohol and Drug Abuse to improve addiction treatment services in the state. This Advancing Recovery project was funded for a period of two years to accomplish the following initiatives: 1) the adoption of a more streamlined engagement and intake process that facilitates prompt client admission to the appropriate addictions treatment program and decreases the initial wait for services; 2) standardizing the Evidenced Based Practice and care surrounding Medication Assisted Treatment (suboxone), reducing the existing barriers to providing these services, and addressing state barriers that impede client access to care; 3) encouraging more physicians to obtain the training and certification that allows them to use office based buprenorphine; and 4) providing educational resources that challenge the cultural perception that abstinence based recovery is the only option while considering more of a harm reduction approach to treatment.

Collectively, the four partnering agencies provide substance abuse services to over 40 percent of the counties in West Virginia and up to 49 percent of the population of the state. “Changes we implement will be far reaching throughout the state,” says Bob Hansen, executive director of Prestera Center for Mental Health Services.

Advancing Recovery in West Virginia (ARWV) is a grant project funded by the Robert Wood Johnson Foundation which awarded the Prestera Center over $350,000 over a two-year period beginning in January 2008 to promote adoption of medication-assisted treatment and behavioral therapies for substance abuse. As part of the grant, the ARWV partnership receives technical assistance from NIATx, a process improvement collaborative based at the University of Wisconsin–Madison.

Medication Assisted Therapy (MAT) is the use of medications, in combination with counseling and behavioral therapies, to provide a whole-patient approach to the treatment of substance use disorders. Research shows that when treating substance-use disorders, a combination of medication and behavioral therapies is most successful. Research supports the effectiveness of this evidence-based practice.

Opiates have become the drug of choice in West Virginia. Second only to alcohol, opiates are the primary substance of use for a significant number of the state’s clients in treatment. The number of opiate addicted individuals has doubled since 2001.

One treatment option, methadone, faces...
some conflicting views. “Clients report being approached to sell their methadone while waiting outside for the clinic to open,” says Genise Lalos, director of addiction services at Prestera Center for Mental Health Services. When it comes to client perceptions, methadone receives positive feedback. Clients say that receiving a prescription for Suboxone from their physician “makes the whole treatment process seem less criminal and more like a regular medical appointment.”

The ARWV team is working to remove several barriers to the use of MAT in the state. A key barrier is financial: most substance abuse clients in the state lack access to health insurance that covers substance abuse treatment. Also, the state’s publicly funded health insurance program does not cover addiction-only related services. This in turn makes medication assisted treatment unattainable for the economically disadvantaged in West Virginia.

Finally, another barrier is the cultural belief that it is wrong to take one drug to replace another. Former treatment approaches based on abstinence that have been used for decades with chronic alcoholism proves to be ineffective with the younger population of opioid addicted clients we’re seeing.

Andrew, a 27-year old recovering opiate addict, recalls the day he walked into Westbrook Health Services, a substance abuse treatment agency in Parkersburg, West Virginia: “I’m a heroin addict and I really need help.”

At 16, Andrew suffered a motorcycle accident that broke both his arms and legs. His physicians prescribed narcotic medication for pain management. While medication helped him with the overwhelming physical pain, Andrew also experienced an added and very welcome relief. “I started to feel comfortable in my own skin for the first time in my life,” he says.

“With the opiates, I had total relief from stress. I was happier in school. Without it, I didn’t want to do anything. I didn’t realize then that I was addicted—and I was only 16.”

When the pain began to subside, Andrew started to lie to doctors to get renewals. The opiates started to take over his life. When he could no longer obtain the medication from his doctors, Andrew started to buy drugs on the street. After being robbed a couple of times, Andrew turned to the Internet. “I learned that doctors could prescribe unlim-

ited amounts over the Internet, and I was spending close to $800 each month on my addiction, using multiple Web sites,” he says.

Andrew kept this up for the next two to three years. His family intervened at one point. “I went through detox when I was 20 but began to use immediately once I got out.”

Trying to beat his addiction, Andrew would attend three 90-day residential treatment programs and make several attempts at methadone treatment in the next several years, only to go back to using.

“I also went to 12-step meetings, even when I was still using,” says Andrew. “I was just trying to grab on to anything that would help me get my life back.”

Yet by age 24, Andrew had started shooting heroin. It was less expensive and more readily available than the prescription meds he’d been using.

When Andrew walked into Westbrook, he was homeless and extremely sick. “I had no family or friends to turn to. Everybody was tired of me. I really felt like I was going to die.”

Westbrook was able to offer Andrew help immediately with its medication-assisted treatment (MAT) program. Andrew began to take Suboxone, an FDA-approved medication for the treatment of opioid dependence approved for office-based use. Suboxone works by binding to the same receptors as other opioid drugs. It mimics the effects of other opioids by alleviating cravings and withdrawal symptoms. This allows the individual to address the psychological reasons behind their opioid use.

Combined with individual and group therapy, Suboxone has proven to help people with opioid dependence reduce their illicit drug use and remain in treatment. The medication also suppresses withdrawal symptoms and decreases cravings.

With the passage of DATA 2000, which allows for the prescribing of this medication in an outpatient setting, it affords more privacy of care and takes away some of the stigma that has been attached to opiate treatment programs around diversion and related criminal activities.

While West Virginia in many respects may lag behind the rest of the nation in overall resources, there is a huge advantage to our size when looking at the development of statewide treatment programs. Behavioral health center providers band together and attack the problems that commonly affect their centers. By cooperatively working together in these efforts, especially with the ARWV, they have created not only a model that can be replicated across the state but added a needed resource right now for those suffering from opioid dependence and in need of a new, original and bold approach to addiction treatment.

New innovations to the provision of care are always going to be needed. West Virginia has shown that in working together they have been able to bridge the treatment gaps and offer these opioid addicted clients fresh hope for long term recovery from their addiction.
Recently NAADAC sent out a call to its members for comments about their experiences with the use of medications in the treatment of opioid dependence/abuse. Responses reflected the complicated array of attitudes that counselors have about medications currently being used with opioid dependent patients and the complex role of medications in the process of recovery. This article will highlight and organize comments from counselors and discuss the issues facing the profession regarding the use of medications in the treatment of opioid dependence and of substance abuse in general.

For the most part, ambivalence and enthusiasm were the most prevalent attitudes of counselors in the survey. A number of counselors continue to believe that medications are inherently problematic for recovery, particularly with those whose actions mimic opioids, such as Methadone (agonist with longer duration of action) and Buprenorphine (partial agonist). However, the majority believe that there is a role for these medications when prescribed and administered properly in the context of a more complete protocol of psychosocial treatment and community support systems. In fact, some counselors were very enthusiastic about the real and potential benefits of medications that treat withdrawal and/or support abstinence from heroin and other abused opiates and offered compelling case reports of individuals who have benefitted from these medications in the context of a comprehensive treatment protocol.

The profession has come a long way from believing that any psychoactive medication is a drug of abuse and demonizing any attempt to use medications to assist the opioid dependent patient in living a better life and recovering from his or her addiction.

The profession has come a long way from believing that any psychoactive medication is a drug of abuse and demonizing any attempt to use medications to assist the opioid dependent patient in living a better life and recovering from his or her addiction.

1. Prescribe and administer all opiate medications wisely.
2. Use opioid detoxification and replacement medications with an understanding of the larger personal recovery process of the individual and in the context of a comprehensive, multidisciplinary treatment plan.
3. Understand clearly what each medication can do along with its side effects and avoid common misconceptions.
4. Implement policies for administration of these medications and training of physicians and counselors that promotes mutual respect, cooperation and feedback and demands integrated and comprehensive treatment protocols.

It is the hope of the authors and most of the counselors who responded to this survey that these considerations lead to a more effective delivery of beneficial medications that can improve the recovery trajectory of opioid dependent patients.

Prescribe and administer all opiate medications wisely.

Heroin as an illegal drug of abuse poses significant health and societal problems. However, the counselors were very concerned about the proliferation of abuse of opiate receptor designed prescription medications and the resulting impact on the treatment process. The street presence of these legitimate pain medications and the increasing availability of methadone and buprenorphine to individuals not in treatment threaten the recovery community as well as individuals in recovery. Recovering opiate addicts have a history of avoiding pain by using a numbing substance rather than active coping. Counselors view the easy availability of these substances, often diverted from legitimate sources, as a constant threat to recovery, particularly for those individuals whose recovery is fragile.

Training for physicians in addiction and recovery, as well as in the effective use of medications and other strategies for pain control seems to be an important way to reduce these concerns. Supply reduction strategies of national drug control policies should focus on illegal access to prescription medications and not simply the poppy fields in Columbia and Afghanistan. In addition, there were also concerns expressed about the use of opioid medications with returning veterans from the Iraq and Afghanistan wars who are suffering from post-traumatic stress disorder (PTSD) and a host of physical disabilities as well as non combat-related distress. Certainly there is a legitimate and important role for effective pain medications and studies indicate that many individuals who use these medications as prescribed do not become addicted. However, use of opioids — particularly continued use with individuals prone to addiction — and the presence of prescription narcotics on the street represent a clear and present threat.
danger for creating a non-heroin based cohort of addicted individuals as well as multiple drug opiate addictions that can be more resistant to treatment and recovery.

Use opioid detoxification and replacement medications with an understanding of the larger personal recovery process of the individual and in the context of a comprehensive, multidisciplinary treatment plan.

A number of counselors expressed concern about how opiate treatment medications are being misused by addicted individuals and distributed by providers. Diversion of the medications onto the street for sale was not the only major issue complicating the lives of addicted individuals in recovery according to our respondents. Medications seem to be used at times for a respite rather than recovery. “Methadone therapy is not reliably controlled,” complained one counselor who described a very active black market for substitution drugs. Others thought that often both methadone and buprenorphine (suboxone or subitex) are dispensed without sufficient consideration of the readiness and motivation of the addicted individual for recovery and given to individuals disengaged from a comprehensive treatment protocol. Providers of medications are often focused on the biological aspects of addiction and underestimate the psychological, social and spiritual dimensions of the disease and the recovery.

On the other hand, there were a number of success stories shared by counselors. Some described personal success using these medications; others described how these medications provided the needed tool for some of their clients to enter the realm of recovery. There are certainly a number of success stories out there that describe proper and effective use of these medications. Methadone helped one heroin-addicted family member through a difficult pregnancy and delivery of a healthy child. Suboxone was the right “tool” for another counselor currently in her fifth year of recovery after eight years of active addiction and a failed attempt to use methadone. During the nine months she used Suboxone before tapering off, she completed an intensive treatment program and became involved in mutual help. However, she is careful to delineate the role of Buprenorphine as a tool and clarifies for clients who say “it’s a miracle” that “No, you are the miracle, that is just a pill.”

Successful use of methadone and suboxone seem to be closely connected to the protocol used in the delivery of those medications. A number of responders sent along detailed protocols of suboxone or methadone assisted therapy. These protocols tended to use a team approach in which medications were linked and sometimes contingent on attending psychosocial treatment. They had structured time-frames for an initial period of treatment lasting for 30 to 90 days, then a continuing supportive treatment typically for up to a year or longer. The array of treatment components typically consisted of monitoring of urine, group and individual therapy, positive and reasonable expectations about the role to the medication in the recovery. These clinic protocols, as well as some that were designed for specific needs of minority patients, seem to have success when offered in an organized, multidisciplinary setting with structure and set expectations for obtaining, using and most often tapering off the medication. Without a structured protocol and a team approach, it seems highly likely that providers will offer the medication without any treatment referral making sporadic medication use, diversion of the medications and failed recovery the probable outcome. There were numerous complaints from counselors about how some of their patients had been discouraged from tapering off their methadone, the profit business motive interfering with the delivery of both psychosocial treatments and medications (at times precipitously terminated because of lack of money, and the ongoing dilemma of how poor patients can pay for medication services.

Understand clearly what each medication can do along with its side effects and avoid common misconceptions.

One of the strongest and longest of the responses stated that the success of medication therapy hinged directly on the attitudes of the counselors. Doubts about the use of any medications, stigma about being weak if you need to use medications, subtle and not so subtle messages that these medications will not be helpful and insinuating that medications always interfere with recovery efforts clearly undermine any potential benefits of these medications. We received a number of testimonials of the value of both methadone and buprenorphine when using a comprehensive recovery-oriented protocol with clients who ultimately achieved complete abstinence or at minimum substantial recovery of their lives. It is evident that reactions to inappropriate and inadequate use of these medications should be separated from their successful and comprehensive use, as there are numerous examples of successful use and successful recovery experienced by many of the respondents in our survey.

There were a few comments that seemed to be questions about the medications and how they are used, so we asked some consultants to answer the questions and summarized their responses. Both methadone and buprenorphine can be abused and diverted, but adding naloxone to the buprenorphine seems to decrease abuse potential somewhat. Although buprenorphine is not currently labeled for use in adolescents, there are studies underway that should provide guidance to clinicians on this. Depending on the insurance plan of the individuals being treated, reimbursement for buprenorphine can be obtained from private insurers, Medicaid and other types of insurers but the key is whether the client’s plan includes this coverage.

Poly-pharmacy, specifically the practice of prescribing benzodiazepines concurrently with buprenorphine, is not contraindicated but should be done with extreme caution since animal studies indicate that the patient may be more susceptible to respiratory depression when these are taken together. There is insufficient data to support the notion that buprenorphine is better at getting rid of excess opiate receptors in the brain. As to what can be done to help doctors deliver these medications appropriately, the American Society of Addiction Medicine (ASAM) and other medical providers are working with various organizations of doctors to provide appropriate training. In addition, the Drug Enforcement Administration (DEA) is currently visiting physicians who provide buprenorphine treatment and reviewing their practices for compliance with lawful delivery of this medication. A critically important topic for the entire profession is the confusion between appropriate and inappropriate use of pain medication both in terms of under medicating some legitimate pain control cases and in the potential for addiction in some vulnerable individuals. Physical dependence will occur in anyone who receives high doses of opioids for an extended period of time, but this is not the same as meeting the diagnostic criteria for substance dependence. Medicating pain with the
vulnerable patient requires both addiction and pain specialists to work closely together.

Implement policies for administration of these medications and training of physicians and counselors that promotes mutual respect, cooperation and feedback and demands comprehensive and integrated treatment protocols.

There were a number of comments and concerns about the policies and procedures used for the administration of these opioid treatment medications. Many counselors were comfortable with the use of medications for assisting with the early phases of recovery but most were wary of protocols that do not allow medicated individuals multiple opportunities to become totally substance free. Some report patients being actively discouraged from weaning off the medication and others being weaned off in three days when they were no longer able to pay for the medication. Policies about the protocols that are optimal for recovery should be developed that take into account that some opiate addicted individuals may need low doses of medications to protect them from relapse to opiate use but also recognize the fact that both methadone and buprenorphine have abuse potential. Most counselors would like to see protocols for use that allow for discontinuation after a period of time when the individuals has been able to achieve some stability and self-confidence.

What seems clear from the comments is that there is a need for communication, cooperation and mutual respect between providers of medication assisted recovery and addiction counselors and other psychosocial treatment providers. Overdependence on or underuse of opiate treatment medications are polar perspectives that need to be bridged. Medications seem to have been used successfully by many addicted individuals but also have been abused and misused by many: any effective tool can be used well or poorly. The challenge to the field is to work together from different perspectives to find the most appropriate, effective and accessible ways to integrate these medications into opiate treatment without creating camps that alienate and isolate the biological, psychological, social and spiritual dimensions of recovery. The ultimate goal is to find the best and most successful set of tools that can be used by this specific opiate addicted individual to overcome the destructive grasp of his or her addiction.

Conclusion
We would like to thank all of the individuals who have shared their thoughts and experiences with us and contributed to this article. While the authors take responsibility for any errors, the responders should get the credit for the insights and recommendations included in this article. The comments of the counselors reinforce for us several key points about recovery. There are no short cuts or simple solutions to opiate addiction. Recovery takes motivation, determination, commitment, planning, courage, support and sustained effort over time and across situations. Opiate addiction involves biological/physiological, psychological/spiritual and social elements that need to be addressed by a comprehensive array of client activities and processes of change as well as by multiple provider strategies. Medications offer hope and help to opiate addicted individuals when used to assist them to regain self control, self respect and social support within a comprehensive and complete recovery perspective that addresses all the problems and needs of these individuals.
Opioid Replacement Therapy: CE Credit Quiz

Earn continuing education credits by taking this quiz on the articles that begin on page 6 of this issue. A grade of 70% or above will earn you a Certificate of Completion for two nationally accredited continuing education hours. This is an open-book quiz. After reading the articles, complete the quiz by circling one of the multiple-choice answers for each question. Please give only one response per question. Incomplete answers will be marked as incorrect. Each section is worth three continuing education (CE) credits or complete the entire quiz for 18 credits. Send a photocopy of these two pages along with your payment of $99 for 12 CEs (NAADAC members) or $125 for 12 CEs (nonmembers). Please complete the information sections below and print clearly.

CONTINUING EDUCATION QUIZ

History of Methadone Maintenance Treatment in the United States (3 CEs)
1. Approximately how many clients are being treated each day at registered and certified opioid treatment programs (OTP)?
   a. 150,000
   b. 185,000
   c. 260,000
   d. 295,000
2. Heroin is primarily trafficked into the United States via
   a. Mexico
   b. South America
   c. Asia's Golden Triangle
   d. all of the above
3. Methadone maintenance was developed as a treatment for chronic opioid addiction in the
   a. 1950s
   b. 1960s
   c. 1970s
   d. 1980s
4. The Department of Transportation prohibits clients being maintained on methadone from having a commercial driver's license.
   a. True
   b. False
5. Methadone maintenance treatment cannot be used by physicians in private practice to treat chronic opioid addiction unless they are specially certified.
   a. True
   b. False
6. Which of the following states do NOT permit opioid treatment programs (OTP)?
   a. Tennessee
   b. Utah
   c. Montana
   d. New York
7. __________ is primarily responsible for the major expansion in the use of methadone maintenance treatment in the United States.
   a. Dr. Robert Newman
   b. Dr. Jerome Jaffe
   c. Bill Clinton
   d. Caroline Harris
8. Retrospective studies of methadone maintenance treatment showed decreases in which of the following areas?
   a. drug-related arrests
   b. burglaries and grand larcenies
   c. reported cases of serum hepatitis
   d. all of the above
9. For every dollar invested in opioid treatment, ________ of financial benefit to society results.
   a. $3
   b. $4
   c. $5
   d. $6
10. How long is methadone's half-life?
    a. 4–8 hours
    b. 12–20 hours
    c. 24–36 hours
    d. 48–72 hours

Opioid Addiction in the U.S.: A Growing Problem (3 CEs)
1. In 2006, what percentage of the U.S. population was dependent on opioids?
   a. 5.4%
   b. 6.4%
   c. 7.2%
   d. 8.6%
2. Which medication is NOT currently approved to treat opioid addiction?
   a. naltrexone
   b. buprenorphine
   c. diazepam
   d. methadone
3. The gap between two connecting neurons is called a
   a. neurotransmitter
   b. deficiency
   c. bridge
   d. synapse
4. A compound that activates a receptor is called an agonist of that receptor.
   a. True
   b. False
5. A compound that binds to a receptor but does not activate it is called a(n) __________.
   a. sleeper neuron
   b. agonist
   c. antagonist
   d. drug
6. When opioids bind to receptors in the mu-class, they produce which of the following effects?
   a. euphoria
   b. somnolence
   c. pain relief
   d. all of the above
7. Opioids are classified as hallucinogens.
   a. True
   b. False
8. At high doses, buprenorphine acts like an antagonist and no longer activates the opioid receptor.
   a. True
   b. False
9. What does the author mean by stating that buprenorphine has a “high affinity” for the opioid receptor?
   a. It really likes the receptor.
   b. It binds tightly to the receptor.
   c. It causes a euphoric effect.
   d. It goes activates the receptor forever.
10. Suboxone includes buprenorphine combined with
    a. naltrexone
    b. methadone
    c. naloxone
    d. oxycodone

Medicine to Advance Recovery (3 CEs)
1. Traditional treatment and recovery practices do not reach all the individuals and families who suffer from substance dependence.
   a. True
   b. False
2. Medications for substance dependence can help individuals build:
   a. new thinking patterns
   b. new behaviors
   c. new use of their physical, mental and spiritual resources
   d. all of the above
3. Which of the following is the best guide to individual understanding and recovery plans?
   a. input from a significant other
   b. appropriate professional care
   c. employer recommendations
   d. medications
4. Twelve-step philosophies prohibit the use of medications to assist in recovering from substance dependence.
   a. True
   b. False
5. Which of the following is NOT used to help treat substance dependence?
   a. Antabuse (disulfiram)
   b. Campral (acamprosate)
   c. Suboxone (buprenorphine)
   d. Valium (diazepam)
6. How many substance dependents reach a positive outcome to their addiction experience?
   a. 1 out of 7
   b. 2 out of 5
   c. 3 out of 10
   d. 5 out of 9
7. What does the author mean by “time buying medications”?
   a. Insurance will pay for longer treatment if taking these medications.
   b. A tool to allow for appropriate recovery practices to develop and work.
   c. The individual will live a longer life if taking these medications.
   d. The individual will require longer treatment if taking these medications.

Counseling a Stigmatized Patient Population (3 CEs)
1. Methadone has been successfully used to treat chronic opioid addiction for more than ______ years.
   a. 25 years
   b. 35 years
   c. 40 years
   d. 50 years
2. Feelings of stigma include negative views and attitudes towards what is perceived to be an undesirable group of people.
   a. True
   b. False
3. Opioid addiction is a __________.
   a. moral failing
   b. illness
   c. reflection of undiscovered will
   d. result of a genetic mutation
4. Methadone can rot an individual's teeth and decay bone marrow.
   a. True
   b. False
5. How long should a client continue taking medications for opioid dependence?
   a. no longer than 90 days
   b. for the rest of his/her life
   c. only while in an inpatient setting
   d. as long as the client continues to benefit from the ongoing use of such medications

Quiz, cont. on page 22
CONTINUING EDUCATION QUIZ

Quiz, from page 21

6. Medications like methadone and buprenorphine can be helpful in stabilizing clients by allowing them to:
   a. work
   b. reengage in important relationships
   c. stay out of the drug trade
   d. all of the above

7. A fundamental change in brain chemistry results from
   a. legitimate prescriptions
   b. low motivated clients
   c. not enough providers
   d. magic pills

8. Using medications like methadone and buprenorphine interfere with a client's ability to respond to challenges which come through counseling.
   a. True
   b. False

9. Medications like methadone and buprenorphine are
   a. the most effective way to treat opioid dependence
   b. should be used without additional treatment
   c. intended to be one tool to treat opioid dependence
   d. magic pills

10. Individuals taking methadone or buprenorphine could encounter negative and highly stereotyped attitudes in some 12-step meetings.
    a. True
    b. False

Suboxone Treatment in the Community Behavioral Health Setting (3 CEs)

1. People are acquiring prescription opioids by
   a. legitimate prescriptions
   b. diversions from family medicine cabinets
   c. pharmacy break-ins and street dealing
   d. all of the above

2. Which of the following is NOT an initiative of the Advancing Recovery Project?
   a. the adoption of a more streamlined engagement and intake process that facilitates prompt client admission to the appropriate addiction treatment program
   b. encouraging more physicians to obtain the training and certification that allows them to use office-based buprenorphine
   c. identifying the number of people in need of these services
   d. providing educational resources that challenge the cultural perception that abstinence-based recovery is the only option while considering more of a harm reduction approach to treatment

3. Medication-Assisted Therapy (MAT) is the use of medications, in combination with counseling and behavioral therapies, to provide a whole-client approach to treatment of substance use disorders.
   a. True
   b. False

4. Research shows that medications to treat opioid dependence are more effective than traditional therapies.
   a. True
   b. False

5. After alcohol, what is the primary substance of abuse for most clients in treatment in West Virginia?
   a. benzodiazepines
   b. LSD
   c. opioids
   d. marijuana

6. The number of opioid-dependent individuals has __________ in West Virginia since 2001.
   a. doubled
   b. tripled
   c. stayed constant
   d. reduced

7. What is the key barrier to accessing MAT in West Virginia?
   a. not enough interest
   b. low motivated clients
   c. not enough providers
   d. lacking access to health insurance that provides this benefit

8. Research shows that Suboxone can __________.
   a. reduce illicit drug use
   b. help clients stay in treatment
   c. return clients to normal functioning in society
   d. all of the above

9. Suboxone is designed to suppress withdrawal symptoms and decrease cravings of opioids.
   a. True
   b. False

10. What did the passage of DATA 2000 allow?
    a. the adoption of a more streamlined engagement and intake process that facilitates prompt client admission to the appropriate addiction treatment program
    b. the prescribing of buprenorphine in an outpatient setting
    c. the collection of data related to opioid users
    d. the release of funds to provide free, clean needles

Mixed Messages: Medications and Recovery from Opioid Dependence (3 CEs)

1. According to responses based on a NAADAC member survey, the majority believe that:
   a. medications have no purpose in addiction treatment
   b. medications are harmful to patients
   c. medications are not effective medications to utilize in their practices
   d. all of the above

2. Buprenorphine is a __________.
   a. full agonist
   b. partial agonist
   c. full antagonist
   d. partial antagonist

3. Physical dependence will occur with anyone who consumes high doses of opioids for an extended period of time.
   a. True
   b. False

4. Which of the following was NOT a key recommendation resulting from the NAADAC member survey?
   a. Promote the use of methadone and other medications to all clients dependent on opioids
   b. Use opioid detoxification and replacement medications with an understanding of the larger personal recovery process of the individual and in the context of a comprehensive, multidisciplinary treatment plan
   c. Understand clearly what each medication can do along with its side effects and avoid common misconceptions
   d. Implement policies for administration of these medications and training of physicians and counselors that promotes mutual respect, cooperation, and feedback and demands integrated and comprehensive treatment protocols

5. Recovering opioid dependents have a history of avoiding pain by using a numbing substance rather than active coping.
   a. True
   b. False

6. On which dimension of addiction and recovery are providers of medications focused primarily?
   a. social
   b. psychological
   c. biological
   d. spiritual

7. It is impossible for methadone or buprenorphine to be abused or diverted.
   a. True
   b. False

8. What other treatment components are typically paired with use of methadone and/or buprenorphine?
   a. monitoring of urine
   b. group and individual therapy
   c. positive and reasonable expectations about the role of the medication in recovery
   d. all of the above

9. There are numerous examples of successful use and successful recovery described by many of the respondents of the NAADAC member survey.
   a. True
   b. False

10. Prescribing benzodiazepines concurrently with buprenorphine is contraindicated due to indications that the client may be more susceptible to respiratory depression when taken together.
    a. True
    b. False

PLEASE PRINT CLEARLY AND MAIL WITH PAYMENT TO:

NAADAC, The Association for Addiction Professionals, CE Quiz, 1001 N. Fairfax Street, Suite 201, Alexandria, VA 22314

Name ________________________
Address ________________________
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Type of License/Certification ________________________

Make checks payable to NAADAC, The Association for Addiction Professionals. Please allow three to six weeks for notification of your results and your Certificate of Completion. You may want to keep a copy of this quiz as a record for your licensing board. NAADAC, The Association for Addiction Professionals is an approved provider for continuing education home study (Provider #189). NAADAC maintains responsibility for the program.

I certify that I have completed this quiz without receiving any help in choosing the answers.

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Authorized Signature ________________________
References

1. Dole, V.P.; Nyswander, M.; and Kreek, M.J., Nar­buprenorphine and others considered vital to
in Pharmacology from the Uniformed Services
Center (AETC). Dr. Crawford has published
ments for HIV disease. He received a BS degree
Medical and is currently serving as the principal investigator of
h the Howard University site of the Pennsylvania
Atlantic AIDS Education and Training
Crawford bio and references, from page 12

Keith Crawford, PhD, is a
clinical pharmacist who con­ducts basic science research and
clinical research in pharmacol­ogy. Dr. Crawford is an assis­tant professor in the department of pharmacology at Howard
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Mid-Atlantic AIDS Education and Training Center (AETC). Dr. Crawford has published research in pharmacology related to tumor bi­ology, treatments for cancer and potential treatments for HIV disease. He received a BS degree in Biology from Cornell University, a BS in Pharmacy from Temple University and a PhD in Pharmacology from the Uniformed Services University of the Health Sciences.

Crawford bio and references, from page 12

Mark W. Parrino, MPA, is
President of the American Association for the Treatment of Opioid Dependence (AATOD), located in New York City. Parrino has been a national advocate for sound public policy and best practices in clinical care for addiction treatment involving medications such as methadone, buprenorphine and others considered vital to recovery.

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Deming / Schmidt bios and references, from page 17

Nancy A. Deming, MSW, LCSW, CCAC-S, is the Divi­sion Director of Chemical Dep­endency Services for Valley HealthCare System in Morgan­town, W.V., and serves as the Mid-Atlantic Regional Vice­President for NAADAC, the Association for Addiction Professionals.

Gerard J. Schmidt, MA, LPC, MAC, is the Chief Operations Officer for Valley HealthCare System in Morgantown, W.V. and serves as a Clinical Affairs Consultant for NAADAC. He also serves as the Chair of the NAADAC Public Policy Com­mittee.

References

2. Ibid
5. 2007 National Survey on Drug Use and Health, Office of Applied Studies, Substance Abuse and Mental Health Services Administration.

Parrino bio and references, from page 15

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References


Parrino bio and references, from page 8

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DiClemente / Tuohy bios, from page 20

Carlo C. DiClemente, PhD, ABPP, is a Professor of Psychology at the University of Maryland, Baltimore County and co-author of Stages of Change.

Cynthia Moreno Tuohy, NCAC II, CCDC III, SAP, is the Executive Director of NAADAC, the Association for Addiction Professionals and former Executive Director of the Mid-Atlantic Addiction Technology Transfer Center.
UPCOMING EVENTS

September 1 – 30, 2010
Recovery Month
Events Nationwide
For more information on events, please visit www.naadac.org or recoverymonth.gov.

September 8 – 11, 2010
National Conference on Addictive Disorders
Washington, DC
Sponsored by NAADAC
Visit the nation’s capital, earn over 30 education credits and network with addiction professionals from around the nation. Optional advocacy track provides training and outreach with the nation’s legislators.
For more information on the conference, please visit www.naadac.org.

September 11 through 18, 2010
Exam Dates for the September 2010 NCAC I, NCAC II, MAC, ASE, Nicotine Dependence Specialist and Basic Exam
Across the nation
For credential descriptions, visit www.naadac.org. The Professional Testing Company administers testing for the NAADAC National Certification Commission.
For more information on the exam, please visit www.ptcny.com/clients/NCC.

September 16 – 18, 2010
New Mexico Recovery Professionals Association (NMRPAA) Conference
This three-day conference will feature Conflict Resolution in Recovery with Cynthia Moreno Tuohy.
For more details on the conference, please visit www.naadac.org or contact dkamp@naadac.org.

September 20, 2010
Addiction Professionals Day
Celebrate the work performed by addiction professionals! Founded in 1992, NAADAC held its first Addiction Professionals’ Day (originally called National Alcoholism and Drug Abuse Counselors Day). This day was established to commemorate the hard work that addiction services professionals do on a daily basis.
For more information, visit www.naadac.org.

October 2 – 4, 2010
Keeping It Real 2010 Conference
Baltimore, MD
Join the Central East ATTC and The Danya Institute to address street-level intervention strategies for addiction, HIV/AIDS and hepatitis.
For more details, please visit www.nattc.org/regcenters/index_centraleast.asp.

October 8 – 9, 2010
Association of Addiction Professionals of New York (AAPNY) Training
Orangeburg, NY
Join AAPNY for a two-day event featuring Dr. Carlo DiClemente and Motivational Interviewing.
For more details, visit www.naadac.org or contact dkamp@naadac.org.

October 15, 2010
Application Deadline for December 2010 NCAC I, NCAC II, MAC, ASE, Nicotine Dependence Specialist and Basic Exam
Across the nation
The Professional Testing Company administers testing for the NAADAC National Certification Commission.
For details on fees or to download an application form, visit www.ptcny.com/clients/NCC.

October 21 – 22, 2010
U.S. Department of Transportation Substance Abuse Professional Qualification and Re-Qualification Seminars
Alexandria, VA – NAADAC National Office
This session will explain new regulations, address common questions faced by professionals and lead participants through the assessment and screening process.

November 10 – 13, 2010
NAADAC Southwest Regional Conference
Las Vegas, NV

November 18 – 20, 2010
Conflict Resolution in Recovery Seminars
Alexandria, VA – NAADAC National Office
Developed in partnership by NAADAC and Danya International, this is a therapeutic resource that is skilled-based and focused on the brain; how it works in conflict and how to affect the quality of recovery in relationships.

December 4 through 11, 2010
Exam Dates for the December 2010 NCAC I, NCAC II, MAC, ASE, Nicotine Dependence Specialist and Basic Exam
Across the nation
For credential descriptions, visit www.naadac.org. The Professional Testing Company administers testing for the NAADAC National Certification Commission.
For more information on the exam, please visit www.ptcny.com/clients/NCC.