

Forum

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Pain may affect the development and course of opioid addiction, and vice versa.

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Pain Perspectives

Addiction, Pain, & MMT

How common is pain among MMT patients? Does this affect their use of illicit opioids? Is there an influence on treatment success?

Complicated Interactions

Pain and addiction share some common physiologic pathways in the brain, especially those involving opioids, and each may affect the other. That is, the presence of pain may influence the development and course of opioid addiction, and vice versa (Compton and Gebhart 2003).

These interactions may complicate therapy for opioid addiction during methadone maintenance treatment (MMT). For example, opioid-addicted persons appear to have lower tolerance for and greater sensitivity to pain, and this may continue during MMT. Sleep disorders and psychiatric illness often associated with addiction may increase the experience of pain and decrease the effectiveness of pain-relief interventions. Furthermore, opioid medications may lose their analgesic potency in many of these patients, so the management of pain during MMT can be challenging (Compton and Gebhart 2003).

Surprising Prevalence of Pain

Unfortunately, pain is a common phenomenon. Estimates vary, but it appears that roughly 50 to 75 million Americans (about 17%-25% of the population) have persistent pain (JAMA 2003).

Relatively recently, Rosenblum and colleagues (2003) reported on the prevalence and characteristics of pain in a sampling of MMT patients (n=390). Surprisingly, pain was experienced during the prior week by 80% of those surveyed.

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New Frontiers

Overcoming Barriers to MMT

Vermont Launches Its First MMT Program; More Capacity Already Needed

Political Maneuvering Paved the Way

Until late 2002, Vermont was among a small group of states prohibiting methadone maintenance treatment (MMT) for opioid addiction. The others still include: Idaho, Mississippi, Montana, North and South Dakota and Wyoming.

The path toward opening Vermont's first MMT program overcame some difficult barriers, including political maneuvering and community resistance. According to **Mark D. Green, MD**, who joined the Chittenden Center as medical director in July 2003, there are still some rough roads ahead for MMT in Vermont.

Green ventured to largely rural Vermont following several years in New York City, working with some of the great leaders and innovators in the methadone maintenance field, including: Drs. Mary Jeanne Kreek, Elizabeth Khuri, Robert Millman, and others. Although he enjoyed the more rapid pace in New York, Vermont offered a chance to help pioneer a new frontier, of sorts, bringing treatment to new patients who were desperately in need of it.

Green observes that there had been a great deal of experience with treating opioid addiction in Vermont, but it was focused on behavioral therapies. "There was a call for MMT in the state for a long time from within the University of Vermont, championed by psychologist Warren Bickel, PhD, and from substance abuse services throughout the state," Green says. "However, Howard Dean

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Events to Note

For additional postings & information, see:
www.atforum.com

March 2004

Society of Behavioral Medicine
Annual Meeting
March 24-27, 2004
Baltimore, Maryland
Contact: 608-827-7267

April 2004

American Counseling Association
Annual Conference
April 23-27, 2004
Kansas City, Missouri
Contact: (800) 347-6647 ext 222

35th Annual ASAM Medical-Scientific
Conference
April 22-25, 2004
Washington, DC
Contact: 301-656-3920; www.asam.org

May 2004

American Psychiatric Association
Annual Meeting
May 1-6, 2004
New York, New York
Contact: 703-907-7300; www.psych.org

2004 NAATP Annual Addiction
Treatment Leadership Conference
May 15-18, 2004
Tampa, Florida
Contact: 717-392-8480; www.naatp.org.

American Psychological Society 16th
Annual Convention
May 27-30, 2004
Chicago, Illinois
Contact: 202-783-2077;
[www.psychologicalscience.org/
convention/index.cfm](http://www.psychologicalscience.org/convention/index.cfm)

June 2004

The Women's Addiction Conference
June 7-8, 2004
Palm Springs, California
Contact: 800-643-0797;
www.TheWomensConference.org

CPDD (College on Problems of Drug
Dependence) 65th Annual Meeting
June 12-17, 2004
San Juan, Puerto Rico
Contact: 1-800-759-5800

UPCOMING 2004...

AATOD (Amer. Assn. for the Treatment
of Opioid Dependence) Conference
October 16-20, 2004
Orlando, Florida
Contact: 856-423-7222 x350;
www.aatod.org

[To post your announcement in *AT Forum*
and/or our web site, fax the information to:
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www.atforum.com]

A.T.F.

Straight Talk... from the Editor

Your Feedback Can Make a Difference

Everyone's busy these days. Sometimes, however, taking a few minutes to provide feedback regarding *AT Forum* articles (as well as News Updates or Special Reports at our ATForum.com web site) can make a difference.

Followup: MMT & Pregnancy

In response to two separate articles in the last edition of *AT Forum* (Fall 2003, Vol. 12, #4), regarding split methadone dosing and adequate methadone dose during pregnancy, Philip Paris, MD, at Mount Sinai Narcotics Rehabilitation Center in New York City, called our attention to several important studies.

A study by Jarvis and colleagues (*J Addict Dis.* 1999;18[4]:51-61) found that pregnant women in MMT eliminate methadone more rapidly from their systems. Furthermore, methadone has a shorter half-life in these women; it does not last as long. Thus, as other reports have noted, women often need methadone dose increases during pregnancy.

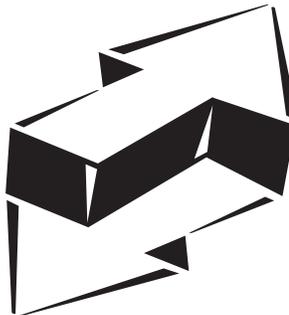
For example, our brief article in the Fall *AT Forum* reviewed recent research by Berghella and associates (*Am J Obstet.* 2003;289:312-317) demonstrating that increasing methadone doses benefits the mothers without harming the newborns.

Splitting the Dose Beneficial

Now it seems the best way to deliver those higher, *adequate* methadone doses is to split the once-daily dose into two or more amounts.

A pair of studies examined benefits of split-dosing during pregnancy, particularly in the 3rd trimester. DePetrillo and Rice (*Int J Addict.* 1995;30[2]:207-217) found that cocaine abuse by women on split-dose regimens declined to only 0.3%; more than 15 times less than in those on once-daily dosing. Earlier, Wittmann and Segal (*Int J Addict.* 1991;26[2]:213-218) had noted that fetuses of women on single-dose methadone exhibited decreases in body movements and longer periods of inactivity. Conversely, results in women on split-doses were more similar to normal controls.

Although benefits of methadone split-dosing seem clear, we wonder how



clinics can be expected to suitably serve their pregnant patients in states like Vermont, where take-home methadone is prohibited [see article in this edition of *AT Forum*], or in states where take-home dose privileges are more restrictive than federal regulations allow.

How to Provide Feedback

We want to thank Dr. Paris for alerting us to the added information for our readers; hopefully, it may be of use in providing better patient care. Accordingly, we want to devote more space in upcoming editions to such feedback from professionals in the field.

Here's your opportunity to be heard. Let us know if there's anything we overlooked in past articles or special reports. How has *AT Forum* helped you to provide better care at your clinic? What new topics would you like to see us cover?

Please keep feedback responses to no more than 300 words, so we can print them without editing. And, be certain to include your contact information in case we have questions.

There are easy ways for you to provide feedback to AT Forum:

- E-mail to the editor directly at ATFeditor@comcast.net;
- Provide your comments on the postage-free feedback card in this issue;
- Write, fax, or e-mail to the *AT Forum* office [info below]; or,
- Visit our web site to comment online.

With so many convenient ways to respond, there are no excuses for not doing so – today.

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A.T.F.

(then governor) had resisted opening an MMT program for fear of attracting increasing numbers of drug-addicted persons to Vermont."

In response to increasing deaths from heroin, and from prescription opioid abuse in particular, Dean had a change of heart, possibly influenced by overwhelming support for an MMT program. Green notes, "During Dean's exit transition the bill approving a methadone program was passed and the new governor, Jim Douglas, made it clear that he was in favor of a methadone program." Chittenden Center opened in October 2002.

Major Limitations Imposed

Unfortunately, there were some major limitations imposed on methadone distribution, above and beyond federal regulations. "One of the stipulations of the Dean-approved bill was that MMT programs must be housed within a major medical center," Green relates. Consequently, Chittenden Center is in an outpatient medical building of the University of Vermont Medical Center in Burlington. It is run primarily by a community mental health service, Howard Center for Community Services, which funds much of the program's operations.

Other restrictions also were mandated. "There are absolutely *no take-home doses of methadone allowed*, regardless of patient tenure in the program or even if they come to us from out of state programs where they had take-home privileges," Green says. "We're actively moving forward with a protocol to implement take-homes, but these allowances will still be more conservative than federal guidelines and involve closer scrutiny of patients to prevent diversion."

Rx Analgesics A Continuing Problem

Methadone diversion is a major concern, since there already is illicit methadone in the community derived from methadone prescribed for pain or brought in from out of state. Green believes prescription opioid abuse – in general, not just involving methadone – is a larger problem than heroin.

"All of our current patients at Chittenden started with prescription opioids of one sort or another," he observes, "and a majority remained on those drugs until the time of admission." Green estimates that up to 40% had transitioned to heroin, to some extent, but heroin in Vermont comes up through other New England states, so it is diluted in potency and higher priced than elsewhere.

According to Green, up to a quarter of patients may have become involved with opioids due to pain conditions, as opposed to purely recreational use. Therefore, he and his staff also need to deal with the pain disorders.

In fact, some patients' addiction problems came to light when local physicians treating them with opioids for pain discontinued the medications. These doctors realized the patients were becoming drug dependent but didn't know how to deal with the problems. Therefore, the patients were left to find alternate sources of opioids or switch to heroin, in some cases.

Significant Treatment Shortfall

Another major barrier Green and his staff still face is in the number of patients they can manage. Due to the everyday pick-up requirement, they can only serve a little more than 100 patients at present. Meanwhile, there are an estimated 2,500 to 3,000 persons needing treatment for opioid addiction in Vermont, a state with a total population of only 617,000 persons (2002 estimate).

Green says they have about 150 persons actively waiting to enter the MMT program. "There probably would be more on that list, but many prospective patients believe it would be futile to even sign up."

Exacerbating the treatment slot shortage, postpartum women who were maintained on methadone by the obstetrics department at the Medical Center during their last months of pregnancy have first priority for methadone treatment slots. "Consequently, these women account for 30% of patients at Chittenden," Green notes, "and this group may eventually account for half the clinic population. This brings with it a whole range of challenges in dealing with the special problems and needs of these patients."

Green further notes that his clinic has very high retention rates, so treatment slots do not become available very often. One reason is intensive counseling provided by a committed staff, coordinated by Marne Stothart; another, may be Green's insistence on adequate methadone dosing. "There are no restrictions on dosing levels at Chittenden," he says, "the average dose is greater than 100 mg/d. And, I haven't had resistance to higher doses rising above 150 to 200 mg/d when it seems necessary and appropriate for stabilization."

One option for managing more patients may include using buprenorphine in some cases, which would not require daily clinic attendance. Green is not in favor of transitioning patients from methadone to buprenorphine as a way of increasing MMT slots; although, this therapy may be appropriate for certain patients who do not do well on methadone or have excessively long distances to travel.

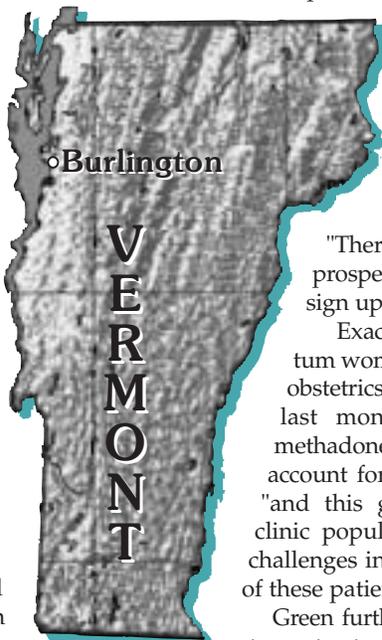
On the downside, Green is concerned that more liberal prescription of buprenorphine could result in greater diversion of that drug. Such misuse of buprenorphine might then be used to make a case against take-home methadone and everyone would lose in the long run.

NIMBY Alive & Well

Pressure is mounting to open a second program in the state; yet, discussions have been going on for months. Despite high levels of need for opioid-addiction therapy and all of the restrictions to safeguard methadone distribution, NIMBY (Not In My Backyard) sentiments are alive and well in Vermont. Green says they have some patients traveling 5 hours each day to receive methadone because their communities have resisted opening new clinics.

Politics also comes into play. The gubernatorial election is every 2 years, so candidates are constantly campaigning and reluctant to go against the sentiments of local communities on the MMT issue.

"In a rural state, without hot spots of opioid addiction and its associated crime or morbidity, it may be easy to look the other way," he concedes. "However, we have double the national aver-



age of high school youngsters illicitly using opioids, primarily prescription drugs, so this is a growing problem."

Cautiously Optimistic Outlook

Funding for new MMT programs is not an obstacle, Green acknowledges. Vermont has one of the most comprehensive mental and behavioral healthcare parity programs [see *Sidebox*], and he is impressed with the level of community resources for the treatment of addictions.

He gives talks in local communities throughout the state on a regular basis to help educate them about addiction and the effectiveness of methadone maintenance. He also teaches medical students and residents, and his advocacy articles have appeared in local newspapers.

Overall, Green says he is optimistic about the growth of MMT in Vermont and that take-home methadone to some extent will become a reality some day. However, he has had to adapt his expectations to the slower pace of a rural state.

News Update

As this edition of *AT Forum* went to press, the Vermont legislature was expected to approve a bill eliminating the requirement that MMT clinics be located in hospitals, thus paving the way for additional clinics. The bill also would allow take-home doses of methadone.

A.T.F.

Healthcare Parity Laws Only A First Step for Addiction Treatment

Parity Must Be Mandated & Enforced to be Effective

In 1996, the federal government enacted the Mental Health Parity Act, a limited law prohibiting discrimination in insurance coverage for mental versus physical healthcare. Historically, health insurers have been reluctant to cover mental health and substance abuse treatment on the same basis as general medical and surgical services.

At the same time, employers have been concerned that health insurance costs would skyrocket. And, health-care providers and consumers have feared that parity could accelerate the trend toward managed behavioral health services.

Many states have concluded that improving access to addiction treatment by mandating parity would save taxpayers money. However, as of last November (2003), 38 states had passed laws mandating some form of parity coverage, but only 7 states also required parity for addiction treatment.

According to one study, requiring coverage of addiction and mental illness on a par with other illnesses raised insurance premiums just 0.2% annually (Curley 2003). However, some health plans failed to comply with state laws governing insurance coverage for

addiction, so enforcement of parity laws was problematic.

Vermont Parity Law Deemed Successful

The Vermont Parity Act, which took effect in 1998, is considered to be one of the most comprehensive such laws in the nation. It requires insurance companies to provide coverage for mental health services, including addiction treatment, on a par with physical health care. All employers are affected, regardless of size (except those who are self-funded).

A SAMHSA-funded study (Rosenbach and Lake 2003), found that Vermont's parity law was successful in controlling costs. In fact, mental health and addiction treatment spending dropped by up to 18%.

Managed care was an important factor in making parity affordable; however, it may have initially reduced access and utilization for some services and beneficiaries. While consumers paid less for substance abuse or mental health treatment, the percentage of users accessing such services per 1,000 insurance plan members significantly decreased.

Under managed care, only a limited number of outpatient treatment sessions were allowed at one time.

Providers had to set goals and document progress for approval of more sessions. Also, despite a need for methadone maintenance treatment services, and a mechanism for funding, there is still a severe shortfall in available treatment slots.

The SAMHSA-sponsored report concluded that consumers in Vermont may have been unaware of the new parity laws, so they did not take full advantage of available services. In general, it appears that obtaining parity in insurance benefits is only a first step toward improving coverage of mental health and substance abuse treatment. Adequate and effective delivery of services to those who need them requires much more effort.

Curley B. Parity is cheap, but must be mandated and enforced. *JoinTogether Daily News Updates*. November 13, 2003.

Rosenbach M, Lake T. *Mental Health and Substance Abuse Parity in Vermont: What Did We Learn?* Princeton, NJ: Mathematica Policy Research, Inc.; Issue Brief. 2003;1. Available at: <http://www.mathematica-mpr.com/3rdLevel/vermontparity.htm>.

A.T.F.

Clinical Concepts: Methadone & Mood

Prevailing Puzzles

Co-occurring drug addiction and mood disturbances result from complex biological, psychological, and environmental influences. Yet, the question of which came first – addiction or mental disorder – often is a chicken-egg sort of enigma.

AT Forum last addressed this puzzle about 5 years ago (Leavitt 1998), noting that it is sometimes unclear whether afflicted persons are trying to self-medicate pre-existing mental disorders with psychoactive substances or whether they become mentally disturbed because of the personal and social upheavals resulting from addiction lifestyles. Furthermore, what have been called "substance-induced mood disorders" (APA 2000) also refer to the depression and/or mania resulting from repeated drug intoxication and withdrawal episodes (Myrick and Brady 2003).

For persons in methadone maintenance treatment (MMT) with co-occurring opioid addiction and mental disorders – referred to as *dual diagnosis* – an important question is whether methadone itself might either improve or worsen disturbances of mood. And, under what circumstances?

Comorbidity Commonplace

Dual diagnoses of opioid addiction and mental disturbances are common. The lifetime prevalence of any affective disorder in opioid-dependent individuals is about 74%, with more than half experiencing major depression (Brady et al. 2003).

In a large survey of MMT patients, Broomer et al. (1997) found psychiatric problems in nearly half (47%) of the subjects, with major depression in 16%. These persons also were likely to abuse other substances, with cocaine being most prevalent (44%).

Another report claimed that up to 90% of opioid-dependent persons in treatment may have a co-occurring mental disorder (Ferrando 1997). Dual diagnoses were particularly high in HIV-positive patients, with 80% of them needing treatment for depressive symptoms at some point during MMT.

Chronic, excessive use of opioids may unmask genetic predispositions to mood disorders. It also appears that intoxication or withdrawal from opioids can mimic affective illnesses. This can make accurate diagnoses and differentiation between substance-induced mood states, situational emotional disorders that resolve on their own, and more serious primary mental illness difficult (Myrick & Brady 2003).

Hazards Of Opioid Withdrawal

A goal of MMT is to pharmacologically stabilize patients, thereby providing

opportunities to normalize health and social functioning, including mental health. The extent to which this is achievable may hinge on the degree to which methadone prevents opioid withdrawal symptoms from one dose to the next.

Clinical research has found that relatively small changes in serum methadone level (SML) might translate into large changes in withdrawal symptoms that provoke mood disturbances. Moreover, some patients appear to be more sensitive to SML variations than others – often called, "non-holders" – which is often related to a more rapid decline in methadone concentration from peak to trough during the dosing period (Dyer et al. 1999; Price et al. 1975).

Of particular concern, uncomfortable withdrawal symptoms may lead to illicit drug or alcohol use and poor treatment outcomes. And the perceived severity of withdrawal may be complicated by mood changes such as depression, anger, and/or anxiety which combine to intensify drug craving.

Methadone Level Affects On Mood

To assess effects of SML changes on mood, Dyer and colleagues (2001) compared mood state changes in MMT patients versus drug-free control subjects during a 24-hour period. They recruited 18 patients stabilized in MMT (mean methadone dose, 65 mg/d; range 7.5-130 mg/d) and these subjects were contrasted with 10 controls who had not taken any psychoactive drug within 2 months of the study.

Throughout the day, at multiple time points, subjects completed a Profile of Mood States questionnaire, which measured 6 affective states: depression, anger, tension, vigor, fatigue, and confusion. As a global measure, a Total Mood Disturbance (TMD) score was derived by summing all scores, but weighting vigor negatively.

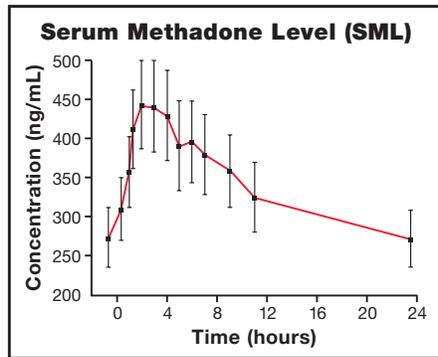


Figure 1. Mean (\pm SEM) serum methadone levels (SMLs) during 24-hour period in 18 MMT patients.

Figure 1 depicts the average serum methadone level for all MMT patients during the study. It follows an expected curve, with SML peaking at about 3 hours after dosing.

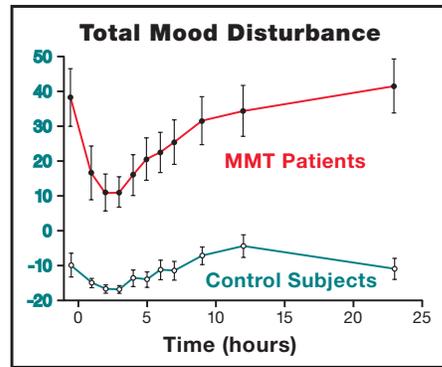


Figure 2. Mean (\pm SEM) Profile of Mood States composite scores for 18 MMT patients (top line) versus 10 drug-free controls (bottom line) during a 24-hour period. The higher the score, the greater the mood disturbance.

Figure 2 plots the average global TMD scores for the 2 groups. At all time points, the MMT group had significantly greater mood disturbance than controls.

For MMT patients, mood scores were significantly and inversely related to the SML. As methadone concentration increased, mood disturbance diminished, although nowhere near the level of the control subjects. The major factor influencing elevations in mood disturbance among controls over time appeared to be fatigue, which might be expected.

In a subgroup of MMT patients categorized as methadone "nonholders" there was significantly greater mood disturbance – more depression, anger, and tension – compared with other patients. Nonholders were considered to be stabilized on methadone but still regularly experienced withdrawal at the end of each dosing interval. They had more rapid declines in the SML curve from peak to trough levels.

In comparison with the relatively stable and placid mood states of control subjects, MMT patients started the day at much higher levels of mood disturbance, which then varied in intensity directly in proportion to serum methadone level.

Much More To Learn

In this study, as with many others, there is a question regarding adequacy of methadone doses. Why were MMT patients still apparently experiencing withdrawal and emotional duress at the end of the dosing cycle?

Although Dyer and colleagues (2001) believed the patients were stabilized in MMT, the average 65 mg/d dose and trough SML of about 275 ng/mL might have been marginally therapeutic for many patients (Leavitt 2003a). This seems to be

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Clinical Concepts

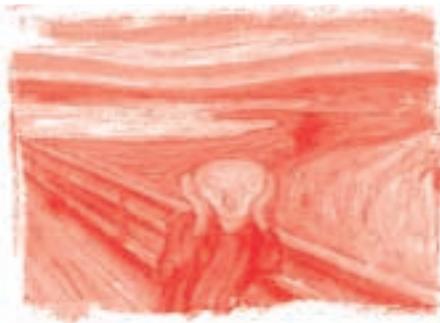
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corroborated by the fact that many of the MMT subjects tested positive for marijuana, illicit opioids, amphetamines, and/or barbiturates.

Would patients have benefitted from split-dosing, which would be expected to even out the large peaks and valleys of methadone during the day and day-to-day? Indeed, Dyer et al. commented, "Once-daily dosing may not be suitable for those methadone patients who experience a significant mood disturbance in the latter part of the interdosing interval." Merely increasing the once-daily dose would not be a solution, as it would only boost the peak SML and possibly increase undesirable side effects (e.g., sedation or fatigue; Leavitt 2003b).

A particular difficulty, noted by Dyer and colleagues, is differentiating underlying primary mood disorders from the disturbances associated with changes in SML and consequent opioid-withdrawal effects. This would be especially crucial in patients who are "nonholders" to begin with, since their primary problem may relate to a more rapid metabolism of methadone (possibly influenced by comedications or other interacting substances; see Leavitt 2004).

This raises the question of whether mood swings during the day would be even more pronounced in patients with pre-existing depression or other mood dis-



turbances. That is, patients who are already depressed or tense may be more sensitive to alterations in SML during the day. Further research exploring this subject seems warranted.

Finally, there is a question regarding potential antidepressant and/or anxiolytic medicinal effects of methadone itself when administered at adequate doses. Unique pharmacodynamic actions of methadone – enhancing serotonin and norepinephrine levels, while blocking glutamate activity – have suggested beneficial effects for countering depression or anxiety in some patients (see *Technical Note* side box). This, also, seems worthy of future research.

Thus, even after the many decades since methadone's development and use in MMT, there is much to learn about this medication. This is especially evident when considering possible benefits to be gained by adequate methadone dosing in patients with common comorbidities of opioid addiction and mental illness.

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A.T.F.

Technical Note: Methadone An Antidepressant?

Aside from its well-known agonist activity at mu-opioid receptors, methadone exerts antagonistic (blocking) activity at N-methyl-D-aspartate (NMDA) receptors (Gorman et al. 1997), which helps counteract opioid tolerance development (Davis and Inturrisi 1999; Eap et al. 2002; Manfredi et al. 2003). The NMDA receptor is a target for glutamate, a primary excitatory neurotransmitter in the brain that also has been implicated in cocaine, alcohol, and nicotine addiction.

Blockade of the NMDA receptor can decrease neuronal excitability, enhance neural plasticity, and reduce seizure activity, which makes it of interest in developing therapeutic agents (Davis and Inturrisi 1999). Potential beneficial effects of methadone in modulating the glutamate system require further investigation.

Of special interest, methadone also inhibits the reuptake of both norepinephrine and serotonin (Codd et al. 1995; Eap

et al. 2002), and medications with this effect have been important in treating depression. Methadone's possible anxiolytic and/or antidepressant properties, especially at adequate therapeutic doses, have not been thoroughly explored. However, some authors have commented on methadone's beneficial effects on depression (Humenuik et al. 2000; Payte et al. 2003; Rounsaville et al. 1983).

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A.T.F.

Pain Perspectives Continued from Page 1

More than a third of all patients suffered from chronic, severe pain, defined as pain of moderate to severe intensity persisting for more than 6 months.

Among those MMT patients with chronic, severe pain, nearly two-thirds said their pain greatly disrupted physical and psychosocial functioning. About one-third reported having used illicit drugs (primarily opioids) and/or alcohol to self-medicate their pain, and a majority of them also had been prescribed pain medications by physicians. Many reported that pain was a reason for first using drugs.

Factors that seemed to significantly contribute to the MMT patients' pain conditions included: age, chronic illness, lifetime psychiatric illness, psychological distress, and time in MMT. Why increasing time in treatment might correlate strongly with persistent pain complaints was unexplained by the study.

However, some authors have somewhat skeptically suggested that the Rosenblum et al. research may depict potential problems with the *over-treatment* of pain in some MMT programs. Streltzer and Kosten (2003) expressed concerns regarding two possibilities: 1) methadone, itself, might increase sensitivity to pain, or 2) when opioid analgesics also are prescribed for pain in these patients, they "...may learn that it is easier, safer, and cheaper to obtain opiates by complaining of pain than by procuring them from illicit sources."

However, Roeseblum's group retorted that there is no clinical evidence to support such propositions. Rather, patients with genuinely chronic pain may be reluctant to leave MMT, "given the likelihood of relapse and the challenge of daily 'hustling' for street drugs" (Portenoy et al. 2003). Denying opioid analgesia to patients who might benefit from them could subvert the goals of MMT by precluding achievement of a more functional, pain-free life.

Where does all the pain come from? Some authors have suggested that MMT patients may have high rates of acute and chronic pain resulting from injuries associated with past intoxication episodes or risk-taking behaviors (Brands et al. 2004). In addition to this, other studies have suggested that arthritis, headache, and lower back pain are prevalent pain diagnoses in persons addicted to opioids (Mertens et al. 2003).

Body aches and pains, depression, and anxiety frequently coexist (Manning 2002). Furthermore, dual diagnoses of psychiatric

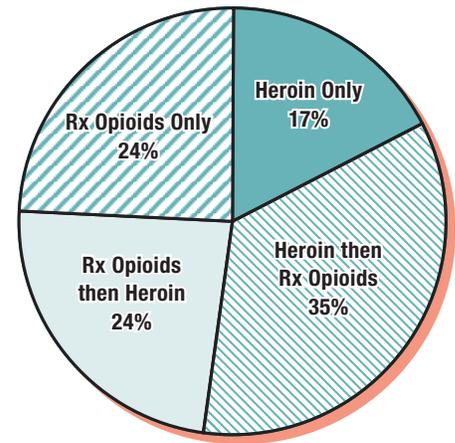
disorders and substance abuse/addiction are common (see "Methadone & Mood" in this edition of *AT Forum*). Therefore, triple-diagnoses – pain, psychiatric disorder, addiction – might be expected in many MMT patients.

Rx Opioids Problematic

As if in followup to the Rosenblum et al. study, a Canadian group headed by Brands (2004) recently reported on prescription opioid abuse among patients entering MMT (n=178). At admission most patients (83%) had been using prescription opioids at higher than therapeutic dosages, with or without heroin.

Four groups were identified (*see Pie Chart*): a) those using heroin only, b) heroin first, plus prescription opioids subsequently, c) prescription opioids initially, then heroin later, d) prescription opioids only. Thus, heroin was involved to some extent in 76% of cases, which still leaves a noteworthy proportion of patients in MMT exclusively due to prescription opioid addiction. These results also are supported by a recent *AT Forum* reader survey (*see Side Box*).

The majority of patients dependent on prescription opioids, as well as most who used prescription opioids initially then heroin, were more likely to have started opioid use due to ongoing pain problems.



Most of them (61%) had received at least some of their opioids via prescription and were involved in psychiatric treatment.

Of interest, patients who used prescription opioids exclusively or initially exhibited significantly greater retention in treatment during a two-year period. These patients also were considerably older and started opioid abuse later in life, compared with those who used heroin only or initially.

Furthermore, patients who started on prescription opioids or used them exclusively had significantly higher rates of chronic pain prior to MMT. So, as noted

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Reader Survey: Agony & Opioid Addiction

A reader survey in the Summer 2003 edition of *AT Forum* (Vol. 12, #3) focused on chronic pain in MMT patients, its treatment, and the sort of opioid drugs patients are abusing when they enter treatment. There were 90 responses via feedback cards or at the ATForum.com web site.

On average, 75% of patients entering MMT were addicted to heroin, which is consistent with the findings of Brands et al. (2004; *see main article in this edition*). *AT Forum* readers noted that other opioids also were implicated as important in many patients, including: oxycodone (mean 15%), hydrocodone (16%), and other (17%). Dilaudid and OxyContin were most commonly mentioned in the "other" category. This survey did not measure rates of simultaneous addiction to multiple opioids.

Respondents further noted that 23% of their MMT patients also were being treated for chronic pain. This was significantly less than the 37% reported by Rosenblum et al. (2003, *see main article*); although their survey asked how many patients experienced chronic pain in the prior week, rather than how many were being actively treated for those conditions.

Only 17% of *AT Forum* survey respondents indicated that pain management was handled at their MMT clinics. This suggests that the vast majority of MMT patients with pain conditions might be seeing outside specialists for these problems. Whether or not this is a favorable trend seems worthy of further discussion between leaders in the pain management and addiction treatment fields.

In summary, this survey confirms other research demonstrating that pain is a noteworthy problem among MMT patients, and many are entering treatment today for addiction to opioids besides or in addition to heroin. However, it should be noted that while *AT Forum* surveys are usually accurate in depicting trends, data collection procedures are not scientifically rigorous.

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above (Portenoy et al. 2003), these persons might have been more reluctant to leave treatment.



Barriers to Pain Treatment

Rosenblum et al. (2003) stressed that *undertreatment* of pain is an important concern in persons with addiction, and there are many barriers to effective pain management in these patients. Some include: misguided institutional practices, inadequate physician training, reluctance to provide adequate pain medications (especially opioids) to chemically dependent persons, a reluctance by MMT patients to seek care due to stigma and fear of drug relapse and clinicians' fears of regulatory sanctions.

Yet, the findings of research described above point to the need for competent pain management in MMT populations. In some cases, however, it seems possible that patients might have been referred to MMT programs for problems that might be described as "pseudoaddiction" – that is, aberrant opioid-seeking behaviors due more to the unavailability of adequate pain medication than to true addiction.

Brands et al. (2004) observed that pain doctors have little understanding of addiction or how to manage pseudoaddiction. Meanwhile, specialists in addiction medicine often have limited training in the assessment and management of persistent pain. This is not surprising, considering that medical schools and internships provide very little in the way of education regarding either pain or addiction (JAMA 2003).

At one time, MMT was reserved exclusively for treating heroin addiction. Certainly, this has changed over the years; the Brands et al. study clearly demonstrates that a significant proportion of patients are being treated for addiction to opioids other than heroin, and this also is supported by the *AT Forum* reader survey (*Side Box*). Unfortunately, studies to date have not fully examined the influence of

Undertreatment of pain is an important concern in persons with addiction, and there are many barriers to effective pain management in these patients.

persistent pain and prescription opioid abuse on MMT outcomes over time. Meanwhile, better communication between pain management and addiction treatment specialists should be encouraged.

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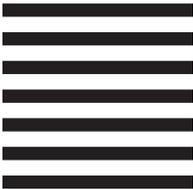
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