ADDICTION TREATMENT

Forum

THE QUARTERLY NEWSLETTER FOR CLINICAL HEALTH CARE PROFESSIONALS ON ADDICTION TREATMENT

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Pain in MMT patients is a significant problem affecting quality of life and outcomes of addiction treatment.

IN THIS ISSUE

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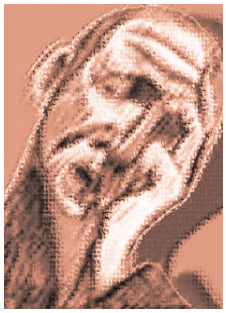
Clinical Concepts

Perils of Pain in MMT Updated Evidence



Discussions of pain conditions in patients in methadone maintenance treatment (MMT) programs and how to achieve effective pain management are not new. The subject was featured in *AT Forum* a decade ago (Winter 1996;5[1]) and more recently (Spring 1998;7[2]; Winter 2004; 13[1]; and Summer 2005;14[3]) — all are available for review at ATForum.com.

This also was a 'hot topic' at the recent American Association for the Treatment of Opioid Dependence (AATOD) Conference in Atlanta. Increasing abuse of opioid pain-relievers (analgesics) combined with the persistent stigma surrounding MMT in general have greatly complicated pain management in this patient population, as was noted by many speakers and Conference attendees. Apparently, even after all that has been said and written, the perils of pain in MMT still present challenges for patients and staff alike.

New research and commentary reported in the literature add further perspectives for dispelling some misconceptions behind the mistreatment of pain during MMT. Along with that, there have been some suggestions that MMT patients actually may be more sensitive to pain, which has implications for effective pain control. Although the discussion below focuses on methadone, it should be noted that the same general principles apply in patients administered buprenorphine for opioid-addiction therapy.

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Research Roundup

Recent Perspectives on Addiction Treatment

CalTOP Reinforces $1-to-$7 Cost-Benefit Ratio

An often-cited examination of California addiction treatment programs in 1994 – the CalDATA study – found that for every $1 invested in treatment there was a benefit to society of $7. Now, a recently published successor to that study found an identical cost-benefit return-on-investment (Ettner et al. 2006).

The CalTOP (California Treatment Outcome Project) study examined 43 substance abuse treatment providers in 13 California counties, and surveyed more than 2,500 patients. Data were collected between 2000-2001 and included a 9-month followup assessment.

On average, substance abuse treatment cost $1,500 per patient and was associated with a monetary benefit to society of $11,500 – a greater than 1-to-7 cost-benefit ratio. The benefit was divided across several factors, including: 65% attributed to cuts in crime, 29% to increased income of patients, and 6% due to reduced medical and behavioral healthcare costs.

Monetary benefits were based on a comparison of costs each patient incurred prior to treatment with costs after treatment, so each patient served as their own "control subject" and averages across all subjects were calculated. Total costs related to crime and incarceration decreased by about $7,500 per person treated, while employment earnings increased by roughly $3,400.

Other studies have identified cost-benefit returns for substance abuse treatment ranging from 1-to-4 in federally funded programs to 1-to-23 in a Washington

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Events to Note

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

July 2006

47th Annual Institute on Addiction Studies
July 9-13, 2006
Toronto, Ontario Canada
Contact: www.addictionstudies.ca

National Conference on Women, Addiction and Recovery
July 12-14, 2006
Anaheim, California
Contact: ccrowley@jbs.biz;
http://conferences.jbs.biz/womensconference/

ASAM Comprehensive MRO Training
July 21-23, 2006
Phoenix, Arizona
Contact: 301-656-3920; www.ASAM.org

August 2006

American Psychological Association 114th Annual Convention
August 10-13, 2006
New Orleans, Louisiana
Contact: 202-336-5500

14th Annual New England School of Best Practices in Addiction Treatment
August 21-24, 2006
Waterville Valley, New Hampshire
Contact: 207-621-2549, www.neias.org

September 2006

23rd World Federation of Therapeutic Communities World Conference
September 1-5, 2006
New York City
Contact: www.wftc.org

11th International Conference on Family Violence
September 16-20, 2006
San Diego, California
Contact: 858-623-2777, ext. 406

7th National Conference on Addiction & Criminal Behavior
September 17-20, 2006
St. Louis, Missouri
Contact: www.gwcinc.com

October 2006

6th NIDA Conference: Blending Addiction Science & Practice
October 16-17, 2006
Seattle, Washington
Contact: www.sei2003.com/blendingseattle/

[To post your announcement in AT Forum *and/or our web site, fax the information to: 847-392-3937 or submit it via e-mail from www.atforum.com]*

Straight Talk... from the Editor

AATOD Atlanta Conference Focuses on CJS

"Treating People with Dignity: Working with Criminal Justice and Health Care Systems" was the theme of the American Association for the Treatment of Opioid Dependence (AATOD) National Conference in Atlanta, Georgia, April 22-26, 2006. Approximately 1,250 persons from the U.S. (primarily) and a number of foreign countries attended this event, which is held approximately every 18 months.

Terry L. Willis, MS, CEO of Georgia Therapy Associates, Inc., was Conference chair, supported by ***Mark Parrino***, MPA, AATOD president, his staff, and a large number of volunteer committee members and other workers. Those interested will find the complete Conference agenda posted at: http://www.aatod.org/2006_aatodnational.html.

As we usually do in *AT Forum*, following are highlights from several speaker presentations.

Parrino: AATOD Initiatives

In his opening plenary-session remarks, Parrino observed that AATOD is currently comprised of 22 state member chapters plus individual program members in more than 10 other states. Collectively, the organization represents more than 750 opioid treatment programs (OTPs) nationwide.

He went on to describe the Association's progress regarding 2 major initiatives. The first involves a 3-year effort, evaluating the impact of prescription-opioid abuse among persons coming into OTPs around the country. More than 70 treatment programs in 30 states have participated in this very large study, which has been directed by Andrew Rosenblum, PhD, of NDRI and Carleen Maxwell of the AATOD office in New York. A startling finding thus far has been that more than 40% of patients admitted to the participating OTPs have reported prescription opioid dependence as a reason for seeking methadone maintenance treatment (MMT).

Second, AATOD has made significant progress in its initiative to introduce medication-assisted treatment (MAT) through the criminal justice system to opioid-addicted individuals. This project, which has been supported by funding from the Robert Wood Johnson Foundation and Mallinckrodt, Inc., includes providing access to methadone and buprenorphine treatment in jails, building on the Rikers Island model in New York City. Increased access to MAT has been achieved in the Baltimore City Prison in Maryland, in New Mexico jails, and in Seattle, Washington. This is in addition to the development of such services in the Philadelphia Prison System, Rhode Island, and Orange County, Florida, Parrino stated.

"The point I want to make," he stressed, "is that we have been able to use our resources to provide access to care for greater numbers of people who were barred from gaining such treatment in years past. I encourage all of you in your respective cities and states to continue to work in educating representatives from the criminal justice system. I realize that it may seem daunting at first and you are likely to receive a less than enthusiastic welcome, but if you persevere favorable results are likely to follow."

Walters: ONDCP Perspective on Addiction as a Disease

In a keynote address, ***John P. Walters***, Director of the White House Office of National Drug Control Policy (ONDCP), affirmed that the federal government believes in what science shows regarding the efficacy of MMT in treating the *disease* of addiction. "We know how to make the problem of drug addiction smaller," he said, "and we need to do that more aggressively."

He noted that, overall, drug use has decreased 19% since 2001, and teen drug use has declined significantly regarding selected drug classes. However, certain substances of abuse continue to permeate parts of the country and spread the way communicable diseases do. Along with that, there has been an alarming rise in the diversion and abuse of prescription opioids.

The government has provided grants to major healthcare systems around the country to do more screening for substance abuse on an everyday basis. Medical professionals need to learn more about identifying substance abuse and when to refer those persons for appropriate treatment.

Walters said the government has worked to expand drug treatment courts, helping to send substance dependent

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persons to treatment rather than incarceration. He reaffirmed that such courts do work and are effective.

In its acceptance of addiction as a disease, the federal government is reaching out to apply that knowledge in a variety of ways. For example, there has been expanded federal funding for the random drug testing of students in schools; a practice that has been admittedly controversial. "We have many childhood diseases that have been reduced dramatically through identification and testing," Walters observed. Since addiction is a disease like many others that can begin in childhood, it is important to test for early symptoms of it in the schools and arrange for appropriate treatment before it spreads.

It is essential to continuously educate the community on effective treatments for drug addiction. Walters acknowledged that members of the audience provide important services to their communities, which are facing opioid abuse, and he urged everyone to reach out to leaders at the community and state levels.

Samuels: Verdict on MAT is Favorable

Opening the second day's plenary, ***Paul Samuels***, Esq., President and Executive Director of the Legal Action Center, New York, emphasized that this is an exciting time for the addiction treatment field in that support from within the criminal justice system (CJS) is growing. Personnel at all levels, whether corrections officers or top decision makers, are seeing benefits of MAT.

In addition to the anecdotal reports of treatment successes, benefits have been demonstrated by sound science. "The verdict is in," Samuels attested, and evidence shows that MAT substantially reduces drug abuse, up to 80% of patients stop criminal activity, full-time employment increases by 24%, and there are very significant decreases in the spread of HIV and hepatitis, among other benefits.

We need to get the word out through advocacy, reaching members of the CJS who still are not aware that MAT is effective, he urged the audience. There are those who do not realize that addiction is a disease of the brain, and that it changes brain function and, therefore, it is not surprising that medications may be necessary to help treat those persons.

Many in the CJS may not understand the role of medications like methadone and buprenorphine; far from substituting one drug and one 'high' for another, they allow patients to function normally. In short, the things that we in the addiction treatment field know and accept as fact, people in the CJS may not know and understand or accept, Samuels continued. We need to make the treatment successes, of which we know there are many, much more visible.

The best way to reduce drug abuse and crime is to provide treatment behind bars and on the outside, and to provide an effective bridge between the two when public safety requires incarceration first. We need to establish partnerships between the CJS and the addiction treatment system, he concluded, and we need to replicate treatment programs that have been proven effective.

Horn: MMT in NYC Jails

In a fast-paced presentation, ***Martin Horn***, Commissioner, New York City Department of Corrections, asserted that the connection between addiction and crime needs to be recognized or public safety will be jeopardized. Furthermore, the problems of co-occurring addiction and mental illness are of great concern among prison and jail populations. Today, there are about 70,000 inmates in New York State prisons, with increasing numbers having such co-occurring disorders.

After a period of decline, heroin is returning as a drug of choice among prisoners coming into the jails, Horn observed. In 1995, he recalled, about 10% of inmates were getting 'high' on one drug or another, which was later reduced. However, he conceded that on any given day, 4% to 7% of New York City's 14,000 jail inmates get 'high' on illicit drugs while incarcerated.

The process of recovery must begin upon entry to the CJS; however, the average length of jail stay is only 38 days, with many staying less time. This does not allow much time to break the cycle of addiction, homelessness, and unemployment, and their association with repeated criminal activity. Continuity of care upon release from jail/prison is essential for increasing the odds of success, Horn noted. Once they are released, inmates must attend to continued sobriety or they will fail and return to prison; and, they must be able to find work and affordable housing.

MMT has been practiced in the New York City jail system since 1987. To qualify, an inmate must be diagnosed as opioid dependent upon intake, at least 18 years old, and charged with a misdemeanor (meaning they will be released to the community rather than remanded to prison for longer-term incarceration).

Current MMT patients entering jail are maintained at their present methadone dose, while new patients are allowed a maximum of 70 mg/day. All are discharged to community based MMT programs and about three-quarters of them do report to those programs for continuing treatment. Methadone also is used for detoxification in jail, and about 15,000 prisoners annually go through a 12-day medically supervised withdrawal protocol.

Horn concluded that implementing MMT in the CJS has to be done in a non-threatening atmosphere, taking into account all sides of the issues. The biases and negative personal experiences of CJS staff need to be recognized and overcome by educational efforts. Support from the very top is essential and participation of the various agencies involved needs to be well-coordinated.

McCaffrey: MMT Benefits Undisputable

During the closing plenary session, ***General Barry R. McCaffrey*** (ret.) – former head of ONDCP and currently a national security commentator and consultant – observed that roughly 1 million Americans use heroin. Within the CJS, he stated that 60% of arrestees test positive for drugs and 85% of prisoners have some form of substance abuse, although that might not be stated as the reason for their incarceration.

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NEW SURVEY:
Mistreated Pain in MMT

As a followup to our article on the perils of pain in this edition, *please respond to the following survey questions:*

1. In your opinion, are MMT patients typically mistreated for their pain conditions? ❑ Yes; ❑ No; ❑ Don't Know.
2. How often has such mistreatment of pain in MMT patients occurred? ❑ Quite often; ❑ Occasionally; ❑ Rarely; or ❑ Never.
3. Where has such mistreatment occurred, if at all? (check all that apply) ❑ MMT clinic; ❑ Private doctor; ❑ Pain clinic; ❑ Emergency department; ❑ Hospital (inpatient).
4. Are you responding as ❑ an MMT patient, or ❑ MMT clinic staff member?

There are several ways to respond to* AT Forum *surveys:
A. provide your answers on the postage-free feedback card in this issue; **B.** write, fax, or e-mail [info above]; or, **C.** visit our website to respond online. As always, your written comments are important.

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A free, untreated heroin addict will do about $48,000 per year in damage to society, McCaffrey continued. If that person is incarcerated it only costs $26,000/year to keep him behind bars; although, once released, the person will most likely return to prior, costly mischief. Therefore, he asserted, addiction treatment during incarceration is smart social policy and saves a great deal of money in the long term.

Prevention, of course, is the obvious solution and it goes beyond the responsibility of law enforcement. What is needed are community coalitions to deal with substance abuse problems before they get out of control.

As he had done recently in other speeches, McCaffrey portrayed prescription-opioid abuse as the "new heroin," producing increasing admissions to addiction treatment programs. Strong law enforcement is needed to stem the diversion of prescription pain medications, he said, but we need to protect aggressive pain management practices; the distinctions between opioid analgesic addiction and dependency must be recognized.

Continuing, McCaffrey stressed that methadone is the most studied and most effective agent for medication assisted therapy. In MMT, substance abuse goes down 70%, criminality decreases 57%, and employment increases 24% – "it is one of the most leveraged health care policies imaginable," he stated.

However, comprehensive treatment is essential, which goes beyond the mere administration of methadone. Along with that, he observed, drug abuse treatment can be enhanced when it is tied in some way to coercion, and drug treatment courts have been extremely helpful in that regard.

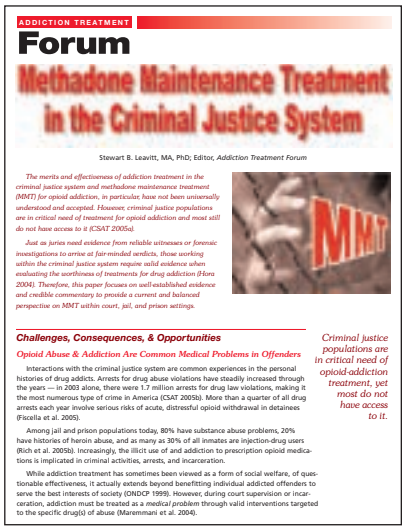
San Diego Next, in 2007

For the first time ever, this year's AATOD event featured a *Conference Syllabus* containing more than 400 pages of handouts and speakers' slides, printed with the compliments of Haworth Press and given to every fully-registered attendee. It was a welcomed supplement to an educational gathering that keeps getting better and better.

Next up: October 20-24, 2007 at the Sheraton San Diego Hotel and Marina. Be certain to mark those dates on your calendar.

"MMT in CJS" Research Report Released

At the AATOD Conference, *AT Forum* introduced a new research report, "Methadone Maintenance Treatment in the Criminal Justice System." This evidence-based document recognizes that interactions with the criminal justice system are common experiences in the personal histories of drug addicts. And, more than a quarter of all drug arrests each year involve serious risks of acute, distressful opioid withdrawal in detainees.


ADDICTION TREATMENT

Forum

Methadone Maintenance Treatment in the Criminal Justice System

Stewart B. Leavitt, MA, PhD; Editor, *Addiction Treatment Forum*

The merits and effectiveness of addiction treatment in the criminal justice system and methadone maintenance treatment (MMT) for opioid addiction, in particular, have not been universally understood and accepted. However, criminal justice populations are in critical need of treatment for opioid addiction and most still do not have access to it (CSAT 2005a).

Just as juries need evidence from reliable witnesses or forensic investigations to arrive at fair-minded verdicts, those working within the criminal justice system require valid evidence when evaluating the worthiness of treatments for drug addiction (Hora 2004). Therefore, this paper focuses on well-established evidence and credible commentary to provide a current and balanced perspective on MMT within court, jail, and prison settings.

MMT

Challenges, Consequences, & Opportunities

Opioid Abuse & Addiction Are Common Medical Problems in Offenders

Criminal justice populations are in critical need of opioid-addiction treatment, yet most do not have access to it.

Interactions with the criminal justice system are common experiences in the personal histories of drug addicts. Arrests for drug abuse violations have steadily increased through the years — in 2003 alone, there were 1.7 million arrests for drug law violations, making it the most numerous type of crime in America (CSAT 2005b). More than a quarter of all drug arrests each year involve serious risks of acute, distressful opioid withdrawal in detainees (Fiscella et al. 2005).

Among jail and prison populations today, 80% have substance abuse problems, 20% have histories of heroin abuse, and as many as 30% of all inmates are injection-drug users (Rich et al. 2005b). Increasingly, the illicit use of and addiction to prescription opioid medications is implicated in criminal activities, arrests, and incarceration.

While addiction treatment has sometimes been viewed as a form of social welfare, of questionable effectiveness, it actually extends beyond benefitting individual addicted offenders to serve the best interests of society (ONDCP 1999). However, during court supervision or incarceration, addiction must be treated as a *medical problem* through valid interventions targeted to the specific drug(s) of abuse (Maremmani et al. 2004).

Yet, the merits and effectiveness of addiction treatment in the criminal justice system and methadone maintenance treatment (MMT) for opioid addiction, in particular, have not been universally understood and accepted. Consequently, although criminal justice populations are in critical need of treatment for opioid addiction, most still do not have access to it.

Just as juries need evidence from reliable witnesses or forensic investigations to arrive at fair-minded verdicts, those working within the criminal justice system require valid evidence when evaluating the worthiness of treatments for drug addiction. Therefore, this paper focuses on well-established evidence and credible commentary to provide a current and balanced perspective on MMT within court, jail, and prison settings.

The full report is available for free download at the ATForum.com website, under the "Rx Methadone" tab.

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state clinic. In the CalTOP study, an analysis by type of treatment showed that outpatient programs had an 11-to-1 cost-benefit ratio, while the residential treatment benefit achieved a 6-to-1 ratio. Only 3 methadone-maintenance treatment (MMT) programs were included in the assessment, so there were insufficient data for an accurate portrayal specifically of MMT benefits.

The CalTOP authors conclude that even without considering health and quality-of-life benefits to patients, spending taxpayer dollars on addiction treatment is a wise investment. However, they caution that the results may not apply to all programs in all states. And, there is a need to further examine how the intensity and length of treatment affects monetary return on investment.

The California Department of Drug and Alcohol Programs, the Center for Substance Abuses Treatment, and the Robert Wood Johnson Foundation provided funding for the study.

See: Ettner SL, Huang D, Evans E, et al. Benefit-cost in the California Treatment Outcome Project: Does substance abuse treatment "pay for itself"? Health Servs Research. 2006;41(1):192-213.

Ongoing MMT May Provide Large Lifetime Benefits

Investigations such as the CalTOP Study noted above are limited by focusing on single treatment episodes, rather than considering cost-benefit gains or deficits over patients' lifetimes. More typically, the chronic nature of addiction results in multiple treatment episodes, interspersed with costly problems associated with potential criminal activity and interaction with the criminal justice system, unemployment, and health crises.

To overcome those limitations, and focus particularly on heroin addiction and methadone maintenance treatment (MMT), Zarkin and colleagues (2005) created a sophisticated simulation model for looking at opioid abuse as a chronic, potentially recurring problem during the lifetime of an individual. They examined several scenarios involving no treatment versus access to MMT, multiple treatment episodes, and the impact of treatment on criminal behavior, employment, and healthcare use.

The researchers derived extensive data for their computerized simulation from evidence-based literature in the field and readily accessible information databases. In this way, they were able to generate plausible outcomes for 1 million male and female individuals from age 18 to 60, anticipating

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MMT changes a patient's entire life course and benefits gained far exceed costs; for every $1 invested in providing treatment there can be a $38 gain to society.

their patterns of heroin abuse, entry into MMT, and lifetime treatment history. They also could project the costs of probable unemployment, healthcare use, criminal behavior, arrests, and incarcerations.

Using a "static model" scenario – that is, considering only a single treatment episode, which would be minimally effective – they determined a cost-benefit ratio of $1-to-$5 favoring MMT. Although, MMT was soundly beneficial, the measured period of benefits were short-term (usually 1 year post-treatment), which is the approach of most studies in the field (such as CalTOP and CalDATA).

However, in their "dynamic lifetime model," which looked at ongoing or multiple MMT episodes compared with not receiving treatment at all over a lifetime, there was a $1-to-$38 cost-benefit ratio. As the authors explain, "The magnitude of the lifetime cost-benefit ratio, which is more than seven times that of the static model, illustrates that treatment has a multiplicative effect that yields a greater than proportional increase in lifetime benefits."

In other words, ongoing MMT changes a patient's entire life course by decreasing his/her likelihood of continuing to abuse drugs, which in turn improves future employment prospects, stems the inclination to commit crime, and reduces needs for expensive healthcare services. From this perspective the benefits gained far exceed the costs; for every $1 invested in providing treatment there was a $38 gain to society.

Computerized simulations such as this have obvious limitations in that they tend to simplify real-life situations that are otherwise very complex and not always predictable. However, no other way has been found to estimate the total lifetime impact that MMT can have on people's lives, and clinical surveys reported to date capture but a relatively brief period of patients' histories. As this study demonstrates, there is a possibility that ongoing MMT may offer long-term benefits to individuals and society that are far greater than anyone has previously imagined.

Source: Zarkin GA, Dulap LJ, Hicks KA, Mamo D. Benefits and costs of methadone treatment: results from a lifetime simulation model. Health Economics. 2005;14:1133-1150.

Determining the Most Effective Methadone Dose in MMT

Based on past research, methadone dosages of at least 60 mg/day are often recommended for MMT; however, for most patients this might be inadequate. In a one-year prospective trial enrolling 222 U.S. veterans initiating MMT, Trafton and colleagues (2006) examined the range of methadone dosages that helped patients achieve opioid abstinence.

Approximately three-quarters (168) achieved at least one month of illicit-opioid abstinence. The range of effective methadone dosages in patients achieving abstinence ranged widely up to 191 mg/day. Approximately 16% of the abstinent patients required more than 100 mg/day.

Overall, patients at clinics providing 60 mg/day or higher doses were more likely to achieve abstinence. Among patients who achieved abstinence, the need for higher methadone doses also were correlated with posttraumatic stress disorder (PTSD), depression, a greater number of previous detoxifications from heroin, attending a clinic where counselors discourage dose reductions, and staying in treatment for an adequately longer period of time.

This study confirms that effective methadone doses (as defined by illicit opioid abstinence for at least a month) vary widely. Even high doses that work for one patient may be too low for another patient; however, a substantial portion of patients may be able to achieve abstinence at lower doses.

The results also suggest that there are some factors that seem to bring about tolerance of methadone's effects and might predict whether a patient is more likely to need a higher dose, such as a diagnosis of posttraumatic stress disorder or depression. Most surprisingly, the results suggest that repeated attempts to stop using methadone may actually increase the need for a higher methadone dose over the long term.

The authors observe that only those patients with low tolerance to methadone can benefit from lower doses and will achieve abstinence early in treatment. For most patients, they recommend, "Encouraging rapid dose titration early in treatment and discouraging attempts at dosage reduction or cessation should improve the percentage of patients who achieve abstinence."

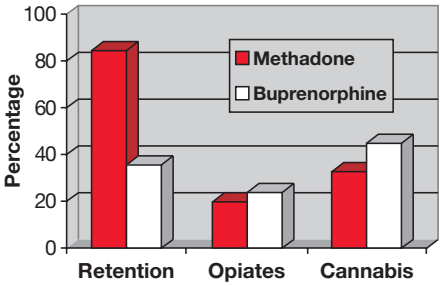
From: Trafton JA, Minkel J, Humphreys K. Determining effective methadone doses for individual opioid-dependent patients. PloS Medicine. 2006;3(3). Available online at: http://medicine.plosjournals.org/perlserv/?request=get-document&doi=10.1371/journal.pmed.0030080. Access checked May 2006.

Methadone Compared With Buprenorphine for Opioid Dependence

Methadone maintenance treatment for opioid addiction was approved in Norway in 1998, and buprenorphine maintenance in 2000. In one of the relatively few head-to-head comparisons of methadone versus buprenorphine for the treatment of opioid addiction, Kristensen, et al. (2005) conducted a small 6-month trial in 50 patients, aged 27-44 years, who were opioid-dependent for more than 10 years.

Patients were equally randomized, 25 per group, to receive either variable dose methadone (80-to-160 mg/day, average 106 mg/d) or buprenorphine (16 mg/day, sublingually). Based on prior research, the authors anticipated that this fixed dose of buprenorphine should be approximately equivalent to 106 mg of methadone, the average dose in the methadone group.

By the end of the trial (180 days), patient retention was significantly greater in the methadone group (85% vs. 36%, see ***Graph***). Drug-positive urine test rates also significantly favored methadone compared with buprenorphine: opiates = 20% vs 24%; cannabis = 33% vs 45%. The methadone group also had greater improvements in mental health scores and lower self-reported risk behaviors (e.g., syringe use) during the treatment period.



Many buprenorphine patients continued to use syringes, so the authors cautioned about providing doses for use at home. They speculated that combination buprenorphine and naloxone formulations might help reduce this problem.

Patients in both the methadone and buprenorphine groups reported improved recovery as a result of treatment. However, the researchers concluded that, for older, long-term opioid-dependant persons with significant comorbidity and unsuccessful medication-free treatment, higher-dose methadone maintenance is still the treatment of choice. In cases where methadone is poorly tolerated or unavailable, buprenorphine therapy may be a reasonable alternative.

See: Kristensen O, Espegren O, Asland R, et al. A randomized clinical trial of methadone vs. buprenorphine to opioid dependants. Tidsskr Nor Laegeforen [English translation]. 2005;125(2):148-151.

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Misconceptions & Mistreatment

As reported previously in *AT Forum*, pain is a prevalent problem in MMT patients; up to 80% in some clinical surveys noted pain in a typical week, and more than half experienced long-lasting, chronic pain conditions. The prevalence rates may vary in particular MMT clinic populations; although, there is no doubt that pain in these patients is a significant problem affecting quality of life and outcomes of addiction treatment.

Methadone Provides Pain Relief?

A recent and thorough review by Alford et al. (2006) addressing pain management in MMT patients presented 4 common misconceptions that often result in mistreatment. The first is that during MMT methadone provides pain relief (analgesia).

Although methadone is, indeed, a potent and effective opioid analgesic, during long-term MMT in which the patient typically receives once-daily dosing there are no substantial pain-relief benefits. Methadone is dosed entirely differently for analgesic purposes and its duration of pain-relieving action is only 4 to 8 hours. Furthermore, stabilized MMT patients become tolerant of any pain-relieving effects; that is, as the patient becomes accustomed to the medication it loses potency as a pain reliever.

Therefore, any pain relief afforded by methadone would be short-lived at best and insufficient in the MMT patient with significant pain. Also, the tolerance of opioid analgesic effects, which extends to any opioid-class medication, helps explain why MMT patients usually require higher, more frequent doses of short-acting opioids to achieve adequate pain control.

Along with this, experiments have suggested that patients maintained on opioids can develop a heightened sensitivity to pain, which counteracts any pain-relieving benefits that might otherwise be afforded by methadone. This is discussed later below.

Methadone Plus Opioid Analgesics is Dangerous?

Alford et al. (2006) state that physician's concerns that opioid pain relievers in combination with methadone-maintenance will harmfully depress breathing or brain activity is "a theoretical risk, which has never been clinically demonstrated."

For one thing, persons maintained on opioids become tolerant of the respiratory and nervous system depressant effects. It also has been suggested that the stressful physiological responses to pain serve to counteract those effects.

[The lack of evidence to support concerns about severe drug toxicity with analgesic-opioid therapy in MMT patients would not appear to rule out the potential for harmful opioid overdose if the analgesic is not appropriately prescribed and administered. Also, the combination of multiple long-acting opioids – e.g., methadone plus sustained-release morphine – is not advised, since their effects might accumulate and increase unpredictably over time (Kral 2006).]

Opioid Analgesia May Produce Addiction Relapse?

There is no evidence that exposure to opioid analgesics for the relief of pain increases relapse rates in MMT patients, according to Alford et al. (2006). Small studies involving MMT patients reported no differences in relapse rates between those receiving opioid analgesia for pain and those without pain.

In contrast, principles of relapse prevention would suggest that the duress of unrelieved pain would be more likely to trigger drug relapse than adequate pain relief afforded by any means. Clinical surveys of MMT patients have found that unrelieved pain can play a significant role in initiating or continuing substance abuse (Karasz et al. 2004).

There is no evidence that exposure to opioid analgesics for the relief of pain increases relapse rates in MMT patients

Pain Complaints Are a Form of Drug-Seeking?

All physicians are concerned about being manipulated by patients who are seeking prescribed analgesics for non-medical purposes, and this might be of special concern in addiction treatment settings. However, the experience of pain is subjective, making clinically objective assessments of its presence and severity difficult.

Still, Alford et al. (2006) suggest that careful clinical examinations for objective evidence of pain can be important for determining legitimate requests for analgesics. Reports of acute pain, supported by objective clinical findings or plausible causes, may be more readily considered legitimate than complaints of chronic pain that is only vaguely described. Which is not to say that poorly defined reports of ongoing pain should be dismissed as merely drug seeking.

Many of the behaviors in MMT patients, and others, often deemed to be drug-seeking might be explained by the mistreatment of pain or a fear of such by the patient. In this regard, Alford et al. (2006) mention several terms of interest, derived from the literature:

- ***Pseudoaddiction*** – inadequate pain relief motivates the patient to seek alternate formulations, amounts, and sources of opioid analgesics, which results in seemingly aberrant or addictive behaviors.
- ***Therapeutic dependence*** – sometimes patients exhibit what is considered drug-seeking because they fear the reemergence of pain and/or withdrawal symptoms from lack of adequate medication; their ongoing quest for more analgesics is in the hopes of insuring a tolerable level of comfort.
- ***Pseudo-opioid resistance*** – other patients, with adequate pain control, may continue to report pain or exaggerate its presence, as if their opioid analgesics are not working, to prevent reductions in their currently effective doses of medication.

MMT patients' fears of inadequate analgesia or other mistreatment by healthcare practitioners are often based on the stigma and prejudices against methadone and persons with addiction that they have experienced in the past. Patient anxiety related to such concerns can be profound, resulting in demanding or aggressive behaviors that are misunderstood by healthcare practitioners and detract from the provision of adequate pain relief.

It is important to consider that chronic pain in MMT patients has been linked to psychological problems, social isolation, and polysubstance abuse. In many cases, patients complain that healthcare providers express a lack of concern, do not listen to them and, consequently, do not effectively treat their pain. Researchers suggest that pain management approaches in these patients should emphasize emotional support, taking into account the psychosocial effects of pain (Ilgen et al. 2006; Also see *AT Forum*, Summer 2005;14[3] for references).

Concerns About Perioperative MMT

MMT patients often are worried about pain management during hospitalization for surgical procedures. According to anecdotal reports, maintenance methadone doses have been tapered or withdrawn before or after surgery (perioperative), resulting in considerable distress and discomfort.

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Clinical Concepts continued from page 6

In brief, there is no rationale for tapering an opioid-dependent patient off opioids in the perioperative setting. All practice guidelines regarding pain management require that maintenance opioids be continued in the opioid-dependent patient who is about to undergo surgery. Along with that, a full range of pain-control measures should be instituted as aggressively as needed to relieve any perioperative pain (McCarter 2006).

Before or upon hospital admission, it is important that hospital staff verify the patient's methadone dose with the respective MMT clinic. It is equally crucial that the hospital communicate with the MMT program at the time of discharge to make clinic staff aware of any controlled substances that were given to the patient and would be detectable during routine drug testing.

Pain Management Summary

The review by Alford et al. (2006) provides specific recommendations for pain management in patients on methadone or buprenorphine maintenance for addiction, and interested practitioners should consult that article. By way of summary, several general principles outlined in that article and previously in *AT Forum* are listed in the ***Table***.

Do MMT Patients Feel More Pain?

More than 40 years ago, researchers suggested that opioid-addicted persons may abuse opioids to treat "an abnormally low tolerance for painful stimuli" (Martin and Inglis 1965). Hence, the presence of addiction and pain may be intimately related; acute pain decreases the pleasurable qualities of opioids, while opioid addiction worsens the experience of pain (Alford et al. 2006). In many cases, addiction and pain interact with each other to complicate treatment of both conditions.

Furthermore, long-term daily opioid administration for any purpose appears to increase sensitivity to pain, which counteracts the analgesic effects of opioids (Pud et al. 2006). This heightened pain sensitivity – called *hyperalgesia* – may also explain why persons in opioid treatment programs, taking daily maintenance doses of long-acting opioids like methadone or buprenorphine, are afforded less pain relief by doses of other opioids that typically relieve pain in the general population of patients (Athanasos et al. 2006; Angst et al. 2006).

This is a paradoxical effect; the same agents that provide pain relief set in motion processes that oppose their analgesic effects (Fine 2004). One suggested theory for opioid-induced hyperalgesia is that the body counters the persistent presence of a pain-dampening opioid agent by boosting or amplifying pain-perception mechanisms. This results in an exaggerated reaction, whereby the patient may become overly sensitive to painful stimuli, as compared with the reactions of 'normal' subjects (Alford et al. 2006; Angst and Clark 2006).

In a recent systematic review of the scientific literature, Angst and Clark (2006) noted that MMT patients develop different kinds of pain sensitivity. For example, in some experiments, many subjects were highly sensitive to cold, but not as sensitive to electric shocks or mechanical pressure (Athanasos et al. 2006).

However, it is uncertain whether methadone directly causes hyperalgesia, and which comes first – heightened sensitivity to pain, or opioid addiction and subsequent methadone maintenance. Angst and Clark (2006) note, "The few human studies suggesting a cause-and-effect relationship only demonstrate an aggravation of preexisting hyperalgesia by opioids."

Still, these authors propose that serious consideration be given to the possibility that long-term opioid therapy – whether with methadone, buprenorphine, or other opioids – may predispose patients to experiencing greater levels of pain. This may ultimately limit the analgesic effectiveness of opioids and emphasizes the value of employing additional methods of pain control. At the least, this might recommend the potential usefulness of switching from one type of opioid analgesic to another when pain seems to get worse rather than better (Angst and Clark 2006).

These recent discussions in the literature reinforce 2 aspects of pain in MMT: 1. Methadone maintenance itself does not facilitate pain relief in those patients with pain conditions; 2. The complaints of MMT patients about increasing pain are probably more real than imagined. Clinic staff and other healthcare providers need to aware of these issues to deliver adequate pain management for those patients in need.

Managing Pain During MMT

- MMT patients need appropriate analgesia, including opioid medications, just like any other persons with acute or chronic pain.
- However, MMT patients may need short-acting opioid analgesics more frequently and in larger doses.
- Mixed agonist and antagonist opioids must be avoided since they can cause acute withdrawal.
- Most, but not all, research indicates that MMT patients with pain require higher daily methadone doses.
- An adequate methadone-maintenance dose should be continued when initiating pain therapy; prior detoxification from or reductions in methadone is counterproductive and can negatively affect the health of the patient.
- Blockade and cross-tolerance effects of adequate methadone-maintenance dosing protect MMT patients from euphoric effects, drug craving, and/or respiratory depression associated with large doses of short-acting analgesics.
- Concerns regarding respiratory depression or reduced brain (central nervous system) activity and addiction relapse due to opioid analgesia are generally unfounded.
- However, patients' fears of relapse into prior substance abuse should be acknowledged and appropriate supervision, follow-up, and relapse-prevention support provided.

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AT Forum Survey: Disaster Plan Update - 2005

Following the hurricane disasters that struck the U.S. Gulf Coast in 2005, *AT Forum* addressed the issues of disaster preparedness in the Fall edition (Vol. 12, No. 4). A similar discussion had been presented in this publication after the tragic events of September 11, 2001 (Winter 2002;11[1]).

Disappointing Results

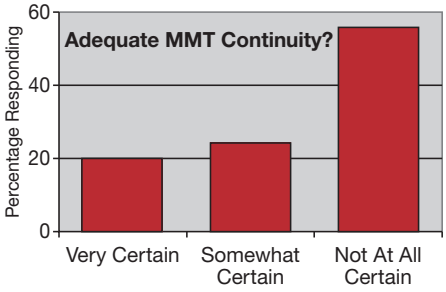
In 2005, for a second time, readers were surveyed regarding disaster preparedness. There were 138 responses to this survey, compared with 130 in 2002 – so there was little improvement in response rates, which were modest for an *AT Forum* survey to begin with. There was a nearly equal mix of patients and clinic staff responding to both surveys.

To begin, the 2005 survey asked, "Has your MMT clinic reviewed and updated its disaster/emergency plans in the past year?"

A combined 70% said either "no" (25%) or "not sure" (45%). Of interest, in the prior 2002 survey an identical 70% answered "no" or "don't know" to a question asking if their clinics had revised disaster preparedness plans in the wake of 9/11/01 events.

The most recent survey went on to ask, "How familiar are you with your MMT clinic's disaster/emergency plans and procedures?" Only a third (33%) said they were 'very familiar" with those; the majority responded "not at all" (55%) and the remainder were only "somewhat familiar."

In view of the many persons left stranded for an extended period without access to MMT following the hurricanes, a third question asked, "How certain are you that you (or your patients) would receive adequate continuity of MMT in the event of a disaster/emergency?"



As the ***graph*** illustrates, only 1 in 5 respondents (20%) were "very certain"; whereas, a 56% majority were 'not at all certain" and 24% were only "somewhat certain" that uninterrupted care would be available for MMT patients.

Taken together, the survey results are rather disappointing, as many clinics seem reluctant to adequately address issues of disaster preparedness in a proactive manner. It should be noted that *AT Forum* surveys are voluntary and may not represent a true sampling of MMT clinics around the country; however, other *AT Forum* survey results usually have been consistent with those of more scientific studies on the issues in question.

Readers Express Concern

"I'm terrified at the thought of missing my medication. If there was a disaster here I'd have to go to the drug dealers."

"I'm surprised at myself for not being aware of our clinic's plans."

"Our clinic staff are only vaguely familiar with disaster plans and the patients have no knowledge of them at all."

"My organization serviced many MMT patients displaced by hurricanes Katrina and Rita. I was surprised by the lack of preparedness by New Orleans clinics, as well as here in Texas."

One reader offered a caution of what may become the next crisis: "What is really getting us revising our emergency plans currently is the possible outbreak of avian influenza [bird flu] in humans, which could cause major disruptions."

SAMHSA Summit Held

In late May 2005, the Substance Abuse and Mental Health Services Administration (SAMHSA) held a 3-day summit in New Orleans to help U.S. states and territories assess progress made on disaster plans and address existing barriers and needs in the planning process. It was expected that 54 states and territories would be represented by teams of mental health, substance abuse, and related professionals. However, it is unknown whether a public report on the summit will be published.

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