ADDICTION TREATMENT

Forum

THE QUARTERLY NEWSLETTER FOR CLINICAL HEALTH CARE PROFESSIONALS ON ADDICTION TREATMENT

Vol. 12, #3 • SUMMER 2003

When properly prescribed and used methadone is safe and effective, yet the press is sounding alarms of danger.

IN THIS ISSUE

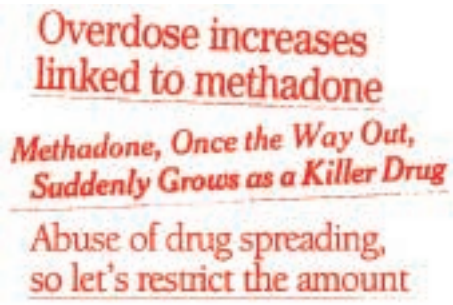
A.T. Forum is made possible by an educational grant from Mallinckrodt Inc., a manufacturer of methadone & naltrexone.

Clinical Perspective

Safety Matters: Perils & Pearls of Methadone

Methadone has been highly valued for helping millions of persons in recovery from opioid addiction. It also is a potent and inexpensive analgesic, suitable for treating even the most severe or chronic pain.

Yet, at a time when the medical literature is strongly advocating broader use of methadone as a safe and effective replacement for other opioid painkillers,[1,2] the popular press has been sounding alarms, with headlines warning of methadone's potential for misuse and harm (***examples below***).


Overdose increases linked to methadone

Methadone, Once the Way Out, Suddenly Grows as a Killer Drug

Abuse of drug spreading, so let's restrict the amount

A series of major news articles during 2002 and 2003 described methadone as being "widely abused and dangerous." This was inspired by reported rises in methadone-associated overdoses and deaths during the past few years.

Provocative stories appearing in the *New York Times* and other newspapers around the country posed a major dilemma: "How can methadone abuse be stopped without curbing its value?" – and, especially, without driving opioid-addicted persons back to drugs like heroin.[3]

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Beyond Methadone

What is the Physician's Role in MMT?

"I believe there is a responsibility for physicians to look at methadone maintenance treatment (MMT) services as but one component of ongoing comprehensive medical needs," says Lawrence S. Brown, Jr., MD, MPH, FASAM.

Brown started in the MMT field about 20 years ago and is Senior Vice President of ARTC (Addiction Research & Treatment Corporation) headquartered in Brooklyn, NY. He also is the current President of ASAM (American Society of Addiction Medicine).

ARTC is a non-profit organization cofounded in 1969 by Beny Primm, MD, who serves today as Executive Director. A staff of more than 300 professionals serve 3,000 patients at 7 MMT programs throughout the New York City area. There also are 2 drug-free programs and an affiliate organization, called Urban Resources Institute, which was started in 1983 to provide human services beyond substance abuse treatment, such as a domestic violence center and other services.

A.T. FORUM: *Dr. Brown, can physicians easily apply their medical training to MMT?*

BROWN: Physicians who come into addiction medicine often do so with a different mindset than what is needed. For example, when I first started in the field, I had been well-trained to treat the *complications of addiction* but wasn't as well versed in treating the *disease of addiction* itself.

For example, as a physician, I came to MMT thinking that the least amount of methadone I could prescribe the better. This was consistent with general medical

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Events to Note

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

October 2003

50th Annual Meeting, American Academy of Child and Adolescent Psychiatry
October 14-16, 2003
Miami Beach, Florida
Contact: (202) 966.7300; www.aacap.org

ICAA - International Council on Alcohol and Addictions
October 19-24, 2003
Toronto, Canada
Contact: www.icaa.ch

ASAM State of the Art in Addiction Medicine Conference
October 30 - November 1, 2003
Washington, DC
Contact: 301-656-3920; www.asam.org

November 2003

AMERSA 27th Annual Conference (Association for Medical Education & Research in Substance Abuse)
November 6-8, 2003
Baltimore, Maryland
Contact: 401-349-0000; Isabel@amersa.org

131st American Public Health Association Annual Convention
November 16-20, 2003
San Francisco, California
Contact: 202-777-2742; www.apha.org

37th Annual Convention Association for Advancement of Behavior Therapy
November 20-23, 2003
Boston, Massachusetts
Contact: 212-647-1890; www.aabt.org

December 2003

14th Annual Meeting, American Academy of Addiction Psychiatry (AAAP)
December 4-7, 2003
New Orleans, Louisiana
Contact: 913-262-6161; www.aaap.org

UPCOMING 2004...

6th International Conference on Pain & Chemical Dependency
February 5-7, 2004
New York, NY
Contact: Lorna Gannon 609-275-5030, lorna.gannon@Meditech-media.com; www.painandchemicaldependency.org

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

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A.T.F.

Straight Talk... from the Editor

What Went Wrong With Methadone?

A front-page headline in the *New York Times* last February portraying methadone as a "Killer Drug" certainly grabbed attention. Also see, "Safety Matters" beginning on page 1 in this edition of *AT Forum*.

However, if one looks closely at the many articles to date decrying methadone-associated deaths, it appears other opioid medications besides methadone are more widely prescribed and are associated with more fatalities. Yet, methadone grabs the headlines.

CSAT Takes Action

The news reports were of great concern to the Center for Substance Abuse Treatment (CSAT), since an implication was that methadone maintenance treatment (MMT) programs might be a source of harmful diverted methadone. And, CSAT is responsible for regulating those clinics.

Therefore, CSAT convened a meeting early last May to examine the problems. A multidisciplinary panel included more than 70 experts from various fields, including: epidemiology, forensic pathology, medical examiners/coroners, addiction treatment, pain medicine, and federal and state government agencies.

CSAT is assessing the meeting proceedings in order to better address this issue. Hopefully, a summary of findings will be publicly available.

Are MMTs Culpable?

Meanwhile, according to extensive research that we've examined, methadone's true role in most drug-induced deaths is debatable; complicated by inconsistencies in determining and reporting cause of death and the frequent presence of other drugs. Fatalities associated with methadone during MMT do occur, but are fairly rare in proportion to the hundreds of thousands of persons safely treated each day worldwide.

Furthermore, the tragic misuse of methadone diverted from MMT clinics also is comparatively uncommon. More problematic is the growing administration of methadone for pain management and its subsequent abuse.

At the AATOD Conference last April, Mark Parrino asserted that most of the methadone-associated fatalities in question have related to methadone prescribed by private physicians for pain. During that same Conference, Laura Nagel of the Drug Enforcement Agency similarly observed that methadone tablets commonly used for pain, rather than the liquid dispensed by most MMT programs, appear to be the most troublesome.

Still, MMT programs may not be entirely blameless. Some MMT staff may need to sharpen their skills in methadone prescribing and in monitoring take-home doses.

Also, clinic staff may be able to detect methadone diversion in their communities and report it to authorities. The abuse of methadone by a relative handful of persons can be a spoiler for everyone unless it is stopped.

Better education of healthcare workers in MMT and in pain management also may help stem this tide of tragic deaths. Question is: Who will do the educating?

Respond to Reader Survey

Concerns about methadone safety raise questions about the types of opioids abused by persons prior to entering MMT, which also may be complicated by chronic pain. ***Please respond to the following questions***:

1. What percentage of patients came into your MMT program with addiction to: heroin ____%; oxycodone ____%; hydrocodone ____%; other ____%, please specify: _____.

2. What percentage of your MMT patients are also being treated for chronic pain? _____%

3. Is pain management handled at your MMT clinic ❑, or by outside specialists ❑? (check one)

4. Please indicate city & state in which you are located: _____

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 below]; or, **C.** visit our web site to respond online. As always, your written comments are important for helping us discuss the results.

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Have You Visited www.atforum.com Lately?

According to preliminary results of our recent survey, 90% of all *AT Forum* readers on average have Internet access. Yet, almost half of survey respondents said they have never visited www.atforum.com.

Although all physicians responding to the survey said they have Internet access, they are the least likely to take advantage of the evidence-based scientific information at our web site. MMT clinic directors/managers and patients have the least access to the Internet at home or work. Considering the many reasons below, perhaps it would be worth an occasional trip to the local library to look into www.atforum.com.

For starters, here are 4 good reasons to visit our web site *frequently*:

- Each new quarterly *AT Forum* newsletter appears there first, even prior to mailing. This makes online access of each edition both timely and convenient. Plus, a PDF file download option provides a document with the same look and feel as the printed version.
- Monthly News Updates are posted *only* at the web site. Each month we scan dozens of publications, journals, and news sources to provide concise, state-of-the-art, information on what is happening in addiction research and treatment.
- There are answers to frequently asked questions (FAQs) on methadone and addiction. These are periodically updated and respond to the most crucial inquiries we receive from readers.
- An "Addiction Resources" section contains a wealth of materials of interest; all available for free downloading. These include research reports, government documents, educational programs, and much more.

Of course, there also are many other reasons to visit, such as: an archive of past *AT Forum* issues, an updated events calendar, links to related web sites, and much more.

So, give www.atforum.com a try – today.

A.T.F.

Beyond Methadone
Continued from Page 1

training, which advocates prescribing the lowest possible doses of medications that might be effective. With methadone, and its surrounding stigma, that philosophy was emphasized even more.

This has changed somewhat among physicians who have been practicing in the field for awhile. However, I don't think it has changed much among doctors newly entering the field.

ATF: *How might that situation be improved?*

BROWN: I believe there are a number of necessary remedies. For one thing, there should be some minimum credentials required for medical practice in MMT; much the same as our counselors have credentialing. In most states, counselors have to be certified. The same should be true for physicians, beyond merely having a medical license.

ATF: *Aren't many physicians in MMT programs working there only part-time?*

BROWN: That's often the case; however, this also is common in general medicine. A physician may work part time in a hospital or clinic but also have a private practice elsewhere. For MMT programs, the positive side of that is it presents an opportunity to use 'physician extenders' like nurse practitioners and physician assistants. With their participation, along with even part-time physicians, MMT programs can function as a primary source of medical care for patients.

ATF: *Are there distinct advantages to offering primary care in MMT programs?*

BROWN: At ARTC, our patient population is economically disadvantaged – about 90% or more are Medicaid recipients, only half have high school diplomas, and three-quarters are unemployed – so, it is very difficult to expect patients to go to 3 or 4 different places for their medical care. Providing primary care on site offers the opportunity for 'one-stop shopping,' so to speak.

However, we can't force patients into that, since they are entitled to a free choice in where they receive care. Furthermore, in some states, patients on public assistance may be assigned to other healthcare providers for medical needs apart from addiction treatment. MMT programs would not be reimbursed for extra services if they did provide them.

Given studies that have demonstrated high healthcare costs for our patient population with unmet healthcare needs, it would make sense that managed-care organizations or public-assistance programs would want some patients with a substance use disorder to obtain their primary healthcare at one place where they are already receiving addiction treatment. However, an MMT program has to be adequately staffed to provide that level of care.

"There should be some minimum credentials required for medical practice in MMT."

ATF: *Have reports of deaths associated with methadone affected MMT programs?*

BROWN: We often hear about the numerator but not the denominator in these situations. That is, there is an emphasis in the news media on the tragic cases involving methadone without a full appreciation of the much broader population that is taking methadone safely every single day. Compared to all other licit and illicit drugs with potential for harm, methadone actually has quite a safe record.

We have a number of challenges ahead, such as defining exactly what is meant by a 'methadone-associated death.' We need to be aware of both subjective and objective indicators of potential problems in our patients for determining the best course of treatment. Unfortunately, some problems may arise due to physicians who are not adequately trained, and that's something that we need to look at.

ATF: *There have been some cases reported suggesting that methadone might have an affect on heart rhythm. Is that of concern?*

BROWN: If we have learned anything in medicine it is that many such findings may not be clinically relevant. If ECGs were required of all patients taking methadone it would only further enhance the stigma that many persons outside the MMT field already feel about methadone.

However, for certain MMT patients who are at high risk of heart problems, they should have an ECG as a matter of appropriate medical care and due diligence. However, this also would be the case with other drugs we routinely prescribe for those patients, not just methadone.

The basic principle is that the same heart-health screening procedures and diagnostic tests done for a general population of patients should equally apply to methadone-treated patients. Clearly, that

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Clinical Perspective
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Critical Concerns

A most critical concern is that the non-medical use and abuse of methadone, as well as other opioid medications, and the attendant harms will lead to further stigmatization and fear of such agents ("opiophobia"). As a result, doctors will be reluctant to prescribe (or *adequately* prescribe), and patients will be reluctant to take, methadone or other opioids due to the negative associations.[4]

According to press reports, the upsurge in methadone abuse and associated deaths appears linked to several factors:

1. There have been ongoing increases in abuse of heroin and opioid analgesics and, when these other drugs become unavailable, some persons are turning to methadone, primarily in *tablet* form.

2. Methadone tablets have become more accessible as physicians prescribe them for pain relief.

3. The medication also has allegedly become more available to unauthorized users as methadone maintenance treatment (MMT) programs, following new federal regulations, have relaxed their policies regarding patients' take-home doses.

The news articles consistently note that abuse of methadone involves two categories of persons: A) those addicted to other opioids, and B) persons who have never taken methadone before. The articles usually do acknowledge that, in overdose or fatal cases, methadone is often taken in conjunction with other drugs and/or alcohol.

Historical Challenges

Methadone is a powerful synthetic opioid with a long history. First discovered in Germany, it was approved in the United States by the Food and Drug Administration in 1947 as an analgesic and, by 1950, it also was being used to treat the painful symptoms of withdrawal from opioids, usually heroin. It's use as a long-term maintenance treatment for opioid addiction (MMT) came much later.

Early indications for methadone in pain management included: migraine, dysmenorrhea, labor pain, trigeminal neuralgia, advanced cancer, tetanus, and others. Almost from the beginning, deaths associated with methadone were reported, especially in countries where it was most widely used.[5] There were, and still are, sporadic cases of accidental poisonings among the children or family members of methadone-treated patients, particularly when the medication was distributed for take-home use in packaging that masked its identity to the uninformed. Due to its perceived toxicity, methadone largely fell into disuse by the early 1960s.

The largest proportion of methadone-associated deaths, evident from even the earliest reports, occurs during start-up of methadone maintenance, the induction phase.

With its introduction as maintenance therapy for opioid addiction during the mid-1960s, methadone regained its place in medical practice. Worldwide consumption of methadone rose rapidly and exponentially, along with reports of methadone poisoning in many cities.[5]

In those countries tracking the trends, as access to MMT increased there were subsequent declines in heroin and other opioid-related deaths, despite the fact that overall drug abuse was on the rise in those areas. However, there often were attendant increases of methadone-associated deaths as more persons came into treatment.[6]. Such deaths declined in many countries as physicians became better educated on properly prescribing methadone and treatment was moved from private practices into regulated MMT clinics.

Mortality in MMT

Despite reported deaths during MMT, methadone has been demonstrated throughout many years of study as being safe when properly used. No serious adverse reactions or other organ damage have been associated with continued methadone therapy extending more than 20 years in some patients.[7,8]

It should be noted that many deaths among methadone-maintained patients were associated with illness resulting from unhealthy pretreatment lifestyles.[9] Deaths in those leaving MMT often were linked to drug-related violence or accidents (which had been diminished during participation in treatment).

An early study in New York City followed 17,500 MMT patients and found the all-cause death rate in these persons was similar to that in the general population; whereas, the mortality rate in untreated heroin addicts was more than 15 times higher.[10] Other studies reported the fatality rate among MMT patients was roughly 1%; whereas, the percentage increased to 10% in those who were discharged or voluntarily discontinued treatment.[11]

Research studies over the years have reinforced those early trends. They confirm the protective effects of methadone maintenance and demonstrate that the relative risk of death is at least 3 to 4 times *less* for persons continuing in MMT when compared with those who discontinue treatment.[12,13]

The largest proportion of methadone-associated deaths during MMT, evident from even the earliest reports, occurs during start-up of methadone maintenance, the induction phase. The risk of death during induction is nearly 7-times greater than the risk prior to entering MMT,[14] and nearly 98 times greater for new patients than for those who have been safely receiving methadone for more than 2 weeks.[15]

Importance of Opioid Tolerance

The proper prescription of initial methadone doses is critical. Deaths during induction are often associated with an *over*estimation of existing opioid tolerance in new patients and/or patients' continued drug abuse.[12]

Simply put, an opioid-tolerant person can withstand methadone doses that could be harmful or fatal to less tolerant individuals. An oral methadone dose as low as 20 mg can cause life-threatening respiratory depression in non-tolerant adults; whereas, only 10 mg can be fatal in a child.[5,13]

Tolerance to the euphoric effects of methadone develops more rapidly than tolerance to respiratory-depressing effects.[16] Thus, methadone abusers might take repeated and/or increasing doses to get "high" and it can stop their breathing.

Furthermore, even after opioid tolerance is achieved, tolerance of methadone's respiratory-depressant effect is incomplete. So, even long-term MMT patients can be at risk of opioid-induced respiratory depression if there is a sudden and large increase in serum level due to excessive methadone intake or interactions with other drugs.[16]

Diversion Problems

A long-standing problem has been the diversion or theft of legally prescribed methadone and its use by unauthorized persons,[17] which has occurred in a majority of fatalities.[18] Because of its long half-life and consequent potential for accumulation, some authors have claimed that

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the inappropriate use of methadone may be more dangerous than heroin.[13]

One alleged source of diverted methadone is take-home doses provided to MMT patients. The extent of take-home methadone given to patients is often a function of treatment program philosophies and existing regulations. U.S. federal regulations allow up to a month's supply of take-home doses after 2 years in MMT, and this may be in liquid, solid tablets, or dispersible tablets.[19]

Most recently, concerns have centered on the diversion or theft of methadone tablets prescribed for pain, which are abused for recreational purposes and often by persons with little or no opioid tolerance. Current investigations indicate that *tablets prescribed for analgesia are a vastly greater source* of methadone-associated deaths than any diversion from MMT clinics.[20]

Diversion and abuse of other substances, which are on the rise, greatly contribute to the problem. Long ago, Roizin and colleagues called attention to the "poison cocktail" resulting from multiple-substance abuse.[11] Alcohol, sedatives (e.g., benzodiazepines), and/or tranquilizers combined with powerful opioids, like methadone, can boost the respiratory depressant effects of each other to produce fatal toxicity even at moderate individual doses.[11,16]

Accountability & Responsibility

In summary, illicit diversion, overdoses, and deaths associated with methadone, have been the subject of front-page news. While sensational stories focus on the perilous spread and dangerous consequences of methadone misuse, they often have failed to provide pearls of information about how methadone provides life-saving relief from opioid addiction or soothing comfort to those in severe pain.

These articles tend to perpetuate long-standing myths and misconceptions about methadone. Consequently, such misinformation has the potential to discourage more widespread use of this medication, which has demonstrated efficacy and safety in millions of patients over the years. News media should be held accountable for more thorough investigation and accurate reporting of facts.

At the same time, both MMT clinic staff and patients must assume a share of responsibility for preventing methadone-associated deaths. Foremost, all clinic staff must understand how methadone works and how to safely prescribe it.

As a guide for MMT staff, *AT Forum* will be releasing in fall 2003 a special 8-page report, **"Methadone Dosing & Safety in the Treatment of Opioid Addiction."** This provides an evidence-based understanding of how methadone works and its effective application during induction, stabilization, and maintenance phases of treatment. It also will be available for downloading at *www.atforum.com*, under the "Addiction Resources" tab.

They are also responsible for helping to prevent abuse by educating patients, and by creating an atmosphere of trust and confidence that inspires honesty in patients. Fear, stigma, and misinformation about methadone abound, and clinic staff are in a position to overpower those prejudices so patients will be more confident in their treatment and cooperative.

On the other hand, patients must assume some responsibility for their own recoveries. If they are intent on continuing their substance abuse, while lying about it to clinic staff, it will place them in harm's way and foster a climate of distrust. If they want to be partners in their treatment – as would be the case with other medical therapies – they must be prepared to learn about methadone, follow rules, and make necessary lifestyle changes that are conducive to recovery.

Faced with uncooperative patients, clinic staff may chose a conservatively safe approach, which can unfortunately result in patients receiving insufficient methadone doses and no take-home privileges. Hopefully, these patients remain in MMT long enough to get on the road to recovery. Other pathways are often ill-fated, and dead addicts never recover.

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A.T.F.

Methadone Dose Survey 2003 - Continued
Regional & Clinic Operation Comparisons

Regional Dosing Trend 1993 - 2003

	1 WEST	2 MIDWEST	3 EAST	4 SOUTH
Average Typical Daily Dose (mg/d)				
2003	78.1	81.7	87.7*	90.7*
1998	71.3*	72.3*	69.2*	67.1*
1993	56.2*	52.3*	57.8*	58.1*
Highest Typical Daily Dose (mg/d)				
2003	153.4*	158.0	191.7*‡	156.3*
1998	114.5*	168.1*§	113.6*	115.2*
1993	84.6*	85.0*	96.1*#	85.7*

Significant differences, p < .05: * = within-region differences year-to-year; ‡ = higher than other regions in 2003; § = higher than other regions in 1998; # = higher than other regions in 1993.

The last issue of *Addiction Treatment Forum* (*ATF* Vol. 12, No. 2; Spring 2003) reported on readers' responses to questions asked during fall 2002 and winter 2003 about dosing practices at their MMT clinics, including: ***Average*** typical daily dose? ***Highest*** typical daily methadone dose? This was a followup to *ATF* surveys conducted in 1993 and 1998.

To recap, ***average*** typical methadone doses increased by about 51% – from a mean 56.6 mg/day to 85.2 mg/day – between 1993 and 2003. ***Highest*** typical doses increased by 90%, from a mean 89.1 mg/d to 169.4 mg/d, during the ten-year period.

It should be noted that these increases were consistent with a linear upward trend in methadone dosing that began with a survey in 1988.[1] During the 15-year period – 1988 to 2003 – *average* doses increased nearly 90%, while *highest* doses increased about 114%.

All three *ATF* surveys also examined dosing trends by United States regions and clinic operations; that is, whether the clinic operated on a for-profit or non-profit/public basis. Those results are reported here.

East Region Leads the Way

The ***table*** data shows that all four regions had increases in mean ***average*** doses from year to year; however, the increases from 1998 to 2003 in the West and Midwest were not statistically significant. And, although region-to-region dose levels in each year were equivalent statistically, it appears that the East (which some might characterize as the Northeast) and South regions were leading the others in 2003, and these regions also showed significant increases in *average* doses between 1998 and 2003.

An earlier report by D'Aunno and colleagues [2] also found that East-region MMT clinics were more likely to provide patients higher *average* methadone doses than clinics in other regions. They concluded, "…treatment units in the [East] have more effective treatment practices than their counterparts in the Midwest, West, and South."

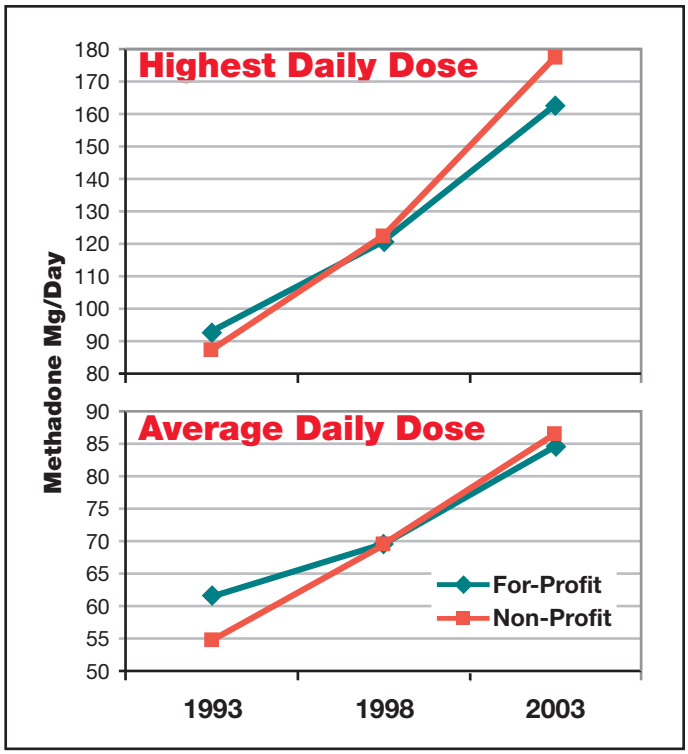
Looking at mean ***highest*** dose, the East region significantly led the others in 2003 (as it had in 1993). There was actually a downward shift in the Midwest in 2003, but the very large *highest* dose in this region for 1998 may have been an aberration.

It is interesting to observe that *average* doses in the East and South in the 2003 *ATF* survey are greater than the *highest* doses were 10 years ago in the West and Midwest. This clearly demonstrates the remarkable shift toward more adequate dosing levels during a relatively short time.

Clinic Operations Comparable

The ***graphs*** (below) depict statistically significant year-to-year increases for both *average* and *highest* daily methadone doses in ***for-profit*** and ***non-profit/public*** MMT programs.

A popular myth has been that for-profit clinics prescribe higher doses of methadone to generate more income. Mean *average*



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doses in for-profit clinics were significantly greater in 1993; however, the trend appears to be reversing in 2003, with non-profit programs possibly becoming most liberal in dosing practices. Statistically, however, *average* and *highest* doses among the two classifications of clinics are equivalent in 2003.

In comparing trends between 1988 and 1995, D'Aunno et al. [2] reported that private for-profit MMT units actually had lower average doses than public methadone programs. However, by 2000, D'Aunno's team found there were no differences between for-profit and public ownership operations,[3] which is consistent with the *ATF* 1998 and 2003 surveys.

Dosing Outside The U.S.

Mean Dose, mg/day	1998	2003
Average Typical Dose	68.0	73.9
Highest Typical Dose	122.1	260.0

Outside U.S. Pattern Different from United States

In 1998 and 2003, *ATF* survey data from respondents outside the United States (OUS) were recorded (see ***table***). The *average* dose from OUS in 1998 was equivalent to U.S. data for that year, but the OUS increase in 2003 was not statistically significant and was well below the U.S. mean *average* dose level in 2003 (85.2 mg/d).

Conversely, the *highest* dose (260 mg/d) from OUS in 2003 was significantly greater than in the U.S. Also, this represented a sharp, statistically significant, increase from 1998 in OUS *highest* dose level (122.1 mg/d).

The number of respondents from OUS was relatively small, with wide variation in the reported values, so the data analyses lacked power. Furthermore, differences across various countries could not be analyzed and might be important.

Significant Improvements

In terms of *highest* and *average* methadone doses on a regional and clinic operation basis, *ATF* surveys demonstrated significant increases between 1993 and 2003. It now appears that whether an MMT clinic operates on a for-profit or non-profit/public basis is not a defining factor. Regionally, the East, and to a lesser extent the South, appear to be leaders in achieving more adequate methadone dosing levels. Overall, the field has come a long way in providing more liberal, therapeutically adequate, methadone doses.

As noted in previous articles, *ATF* surveys are helpful for sensing the direction and scope of trends, but they are not scientifically rigorous and the sampling of MMT programs is not random. Many additional variables would be worthy of exploration as they relate to dosing trends, such as: clinic size and staffing, patient retention in treatment and illicit drug abstinence. Hopefully, other research organizations will undertake more extensive surveys, possibly international in scope, in the future.

1. D'Aunno T, Vaughn TE. Variations in methadone treatment practices: Results from a national study. JAMA. 1992;267(2):253-258.
2. D'Aunno T, Folz-Murphy N, Lin X. Changes in methadone treatment practices: results from a panel study, 1988-1995. Am J Drug Alcohol Abuse. 1999;25(4): 681-699.
3. D'Aunno T, Pollack HA. Changes in methadone treatment practices: results from a national panel study, 1988-2000. JAMA. 2002;288(7):850-856.

Survey-Respondents' Comments on Methadone Dosing

Following are representative comments from clinic staff:

"Our philosophy is that the proper dose is what the patient needs regardless of amount. Sometimes, state regulatory authorities put tremendous pressure on clinics to hold down doses; or, it seems, they want to get involved in dose adjustment decisions." – Georgia

"There was high patient turnover until we started dosing above 100 mg/d, and we have now also seen a large decrease in recidivism." – Washington

"Doses should be higher, but this is discouraged in the clinic where I work. Most counselors would prefer patients were not even on methadone. What's wrong with the clinics is the people they have working in them." – Georgia

"New patients are not allowed to go over 80 mg/d. Those already above 80 mg/d can stay at that level." – Virginia

"I believe the 100 mg/d dose ceiling is causing some patients to buy the extra methadone they need on the streets." – Alabama

The following are from patients:

"My clinic's first priority is the patient, and I'm thankful for that. I've been on 175 mg/d of methadone for 3 years and clean of heroin." – Michigan

"I am very fortunate that the clinic doctor understands MMT and has worked with me in getting my dose to 620 mg/d. Unfortunately, most clinics will not dose anyone over 120 mg, and they wonder why they don't have the outcomes they would like." – Oregon

"I've been on 90 mg/d for a couple of years, but have started feeling 'not right' and it scares me. However, I don't think they'll give me an increase." – Alabama

"At the clinic I attend, low dosing is encouraged and 'high' doses are looked upon as 'bad' or 'harder to detox off of.' Many staff are uneducated when it comes to how methadone works and optimal dosing." – Washington

"I'm on 110 mg that I get from the clinic; then I buy 110 mg each day off the street, because after 20 years of taking methadone the 110 mg alone is not enough." – Midwest

"It's hard to get a daily dose over 120 mg. The state has to be notified and approve of anything higher." – Tennessee

"Clinic staff say we can't have take-home doses if we need more than 80 mg methadone per day. They tell us it's state law, and that no matter how long we've been in treatment we can only have up to 6 days of take-homes." – Louisiana

"We can't have take-home doses if we go above 100 mg/d, and that just doesn't hold me very well." – Georgia

"After years of struggling with the clinic doctor, I was finally able to get my dose to 200 mg. Now we have a new doctor who doesn't believe in doses above 110 mg per day!" – Alabama

"I was at 80 mg for most of my 20 years on methadone. I had problems, but now that I'm on 140 mg daily my dose is finally adequate." – Texas

"My clinic makes you feel as if you're wrong by requesting a dose increase and implies you are simply trying to 'get high.' I know very well how to get high and it's not with an extra few milligrams of methadone." – Maryland

is the program's responsibility and the physician's role.

ATF: Will the recent approval of using buprenorphine in MMT clinics have an impact?

BROWN: Buprenorphine does have a place in our small offering of approved medications for opioid addiction. We are planning to offer it at ARTC and have trained additional physicians in its use.

Some MMT clinicians are concerned that this may draw away their best patients; however, the greater potential is the provision of buprenorphine by private practice physicians. I believe there will always be patients who simply will not go to clinics but they will go to private doctors' offices and they have the financial resources to do so.

ATF: Overall, what are key areas in which MMT physicians might improve?

BROWN (see *box*): **First**, physicians should become more involved in all aspects of treatment beyond methadone dosing. Besides appropriate methadone prescribing and due diligence to sustain high standards of care, program physicians should serve as constructive members of the interdisciplinary team.

Areas For Improvement

- **Become more involved in interdisciplinary activities.**
- **Maintain competency in the field.**
- **Do a better job of advocacy.**

It is unfortunate that in addiction treatment, as well as in general medical services, physicians see patients briefly and often refer them elsewhere. Further collaboration with those other disciplines could be improved.

Second, there is a need for physicians to maintain their competence in the addiction field, and this may not be occurring consistently. Addiction medicine is a dynamic and changing science, and requiring that medical directors be certified in that specialty could improve overall patient care.

Third, physicians could do a better job of advocacy. By that, I mean they should advocate for reimbursement for services that their patients need, relating to addiction as well as the complications of addiction.

For example, until fairly recently, it was recommended that treatment for hepatitis C should be withheld until a patient was stabilized for at least 6 months in addiction treatment. And, liver transplants were denied to methadone maintained patients who needed them. These were classic cases of stigmatization requiring advocacy on behalf of patient care.

ATF: As the President of ASAM, how do you believe the Association helps improve the areas that you've identified as important?

"Physicians will not practice in addiction medicine unless there is parity with other medical specialties."

BROWN: With 3,000 members, ASAM is the largest specialty organization focusing on addictive disorders. The Society has been closely involved in expanding access to addiction treatment while also improving the quality of care.

The greatest challenges confronting ASAM are the same as those facing patients, such as lack of access to care or lack of quality care. Physicians will not seek to practice in addiction medicine unless there is parity with other medical specialties in terms of compensation for services provided, how often those services can be provided, and where they must be provided.

Absence of parity also sends a message as to how society values the treatment of addiction and, to date, addiction medicine remains far from the top. So, ASAM has been engaged in educating decision-makers, at both the state and federal levels, regarding the need for parity.

ASAM also is a provider of education in addiction medicine, and offers a certification program. Such efforts help fulfill the crux of ASAM's mission, which is to advance access to quality care.

A.T.F.

ADDICTION TREATMENT
Forum
is published quarterly by:
Clinco Communications, Inc.
P.O. Box 685
Mundelein, IL 60060
Phone/Fax: 847-392-3937

Editor: Stewart B. Leavitt, Ph.D.
Publisher: Sue Emerson

Addiction Treatment Forum is made possible by an educational grant from Mallinckrodt Inc., a manufacturer of methadone and naltrexone. All facts and opinions are those of the sources cited. The publishers are not responsible for reporting errors, omissions or comments of those interviewed.

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1. What percentage of patients came into your MMT program with addiction to: heroin _____%; oxycodone _____%; hydrocodone _____%; other _____%, please specify: _____.
2. What percentage of your MMT patients are also being treated for chronic pain? _____%
3. Is pain management handled at your MMT clinic ❑, or by outside specialists ❑? (check one)
4. Please indicate city & state in which you are located: _____.

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