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# Methadone Maintenance Patients in a Residential Rehabilitation Program: The Eagleville Experience

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Methadone maintenance (MM) (provided through specialized bioigo treatment programs, OTPs) and therapeutic community (TC) treatments for addiction evolved independent, have as competing, addiction treatment modalities with widely varying philosophies and clinical protocol (White, 1998). Although both approaches have been positively evaluated in treatment outcome studies (De Leon, 2000, 2008; Kreek & Vocci, 2002), rarely have they been provided jointly through concurrent, sequential or integrated models of care. For example, a survey of 380 TCs revealed only 5.4% of traditional TCs currently providing MM as part of their service menu (Roman, 2005), and the historical antipathy between MM and TC proponents limited has collaborative ventures and referrals of patients between these modalities (Hettema & Sorensen, 2009; White, 1998).

The potential benefits of such collaboration are suggested by several findings. First, there are high rates of co-occurring dependencies on alcohol, cocaine and benzodiazepines among opioid dependent patients entering OTPs (Dobler-Mikola, Hattenscwiller, Melli, et al, 2005; Hubbard, Marsden, Rachal, et al, 1989;

Kreek, 1978; Raffa, Grebely, Tossonian, et al, 2007; Wedekind, Karg, Luedecke, et al, 2010). Co-occurring drug dependencies compromise MM patients' clinical engagement and recovery outcomes and increase risks for drug-related medical problems and mortality (Brands, Blacke, Marsh, et al, 2008; Ryder, Cullen, Barry, et al, 2009; Stenbacka, Beck, Leifman, et al, 2007). Efforts to create interventions to address co-occurring drug dependencies reveal promising pharmacological psychosocial/behavioral adjuncts that could be integrated into OTPs or provided by traditional residential and outpatients addiction treatment programs in tandem with MM treatment (Bickel, Marion & Lowinson, 1987; Bickel, Ruzzuto, Zielony, et al, 1988-89; Castells. Kosten, Cappella, et al, 2009; Gordis, 1991; Gossop. Stewart & Marsden, 2006; Kletter, 2003; Petry & Martin, 2002; Tzilos, Rhodes, Ledgerwood, et al, 2009; Villano, Rosenblum, Magura & Fong, 2002; Weinstock, Rash & Petry, 2010).

Second, methadone patients are at high risk of relapse following the cessation of MM (Joseph, Stancliff & Langrod, 2000; Magura & Rosenblum, 2001), and could potentially benefit from TC services as a source of support through the tapering and

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post-maintenance recovery stabilization period (Kaufman, 1979; Sorensen, Acampora & Deitch, 1984).

Third, the positive effects of TCs are offset by low attraction and retention rates compared to MM within an OTP (Simpson, 1981). Combining these modalities might attract a larger pool of opioid dependent persons in need of treatment and retain patients long enough to achieve the time-dependent benefits of each.

Forth, there are many TC patients with histories of chronically relapsing opioid dependence and multiple past admissions to TCs and other traditionally defined "drug free" programs. Nationally, 78% of persons admitted to addiction treatment with a primary drug choice of heroin have one or more prior episodes of treatment and 24.6% have 5 or more past treatment admissions (SAMHSA, 2004). Opioid dependent persons who are currently being repeatedly recycled through drug free programs could potentially benefit from the use methadone as a pharmacological adjunct in their efforts to achieve stable, long-term recovery (Greenberg, Hall & Sorensen, 2007).

Early experiments (1970s)collaboration between MM clinics and TCs included pilots at Tinley Park, Su Casa, Via Avanta, and Samaritan House (Kaufman, The potential for collaboration 1979). OTPs between and TCs has historically limited by two factors: 1) the less than widespread integration of psychosocial support services within mainstream OTPs, and 2) an anti-medication bias within traditional drug rehabilitation programs that often resulted in the denial of admission of MM patients seeking treatment of non-opiod drug dependencies (Greenberg, Hall & Sorenson, 2007; White & Torres, 2010).

Four studies experimenting with the treatment of co-morbid drug dependencies in OTP patients in non-OTP treatment settings suggest that such bifurcation of treatment philosophies and clinical protocol into OTPO and drug-free treatment silos is based on false assumptions and is clinically counter-productive.

Kipnis and colleagues (2001) studied 220 MM patients treated for alcohol dependence within New York State's publicly inpatient funded Addiction Treatment Centers (ATC) following extensive staff on the value of methadone training maintenance. Within this one-year pilot study, 80% of the MM patients successfully completed ATC treatment. As a result of this successful experience, MM patients are now routinely treated within the ATC network with methadone provided to these patients onsite at the ATC.

De Leon and colleagues (1995) studied whether outcomes in OTPs could be enhanced by involving patients in a therapeutic community (TC) based day treatment regime. They compared the clinical outcomes of 115 MM patients who participated in the TC-based day treatment program (Passages) with 212 matched MM patients who received MM only. The patients in Passages exhibited greater reductions in drug use, needle use, criminal activity and psychopathology.

Sorensen and colleagues (2009) compared 24-month outcomes of 125 methadone patients admitted into therapeutic community (TC) treatment program with 106 opioid dependent patients who were not on medication admitted to the same program. They concluded that MM patients admitted to the TC had positive outcomes comparable to those patients not on medication as measured by dimensions of illicit opioid use, non-opioid drug use and injection- and sex-risk behaviors.

Chen and colleagues explored the utilization of special adjuncts added to a TC accommodate the treatment methadone patients (Chen. Masson. Sorensen & Greenberg, 2009). They found that 97% of MM patients participated in methadone support group and that 52% acupuncture services. used but that utilization of psychiatric services was actually lower for MM patients than other TC residents in spite of high rates of lifetime and current psychiatric illness. This latter finding may be related to evidence that patients with histories of opioid addiction and co-occurring psychiatric illness may receive special

benefits from the stabilizing properties of methadone (Musselman & Kell, 1995).

The inclusion of MM patients in modified TCs is part of a larger process of adapting traditional drug-free treatment to the needs of multiple clinical populations (White, Deitch, & De Leon. 2010). The Kipnis, De Leon, Sorensen and Chen studies and a body of related literature (Cheung & Ch'ien, 1999; Greenberg, Hall & Sorenson, 2007; Kaufman, 1979; Sorenson, Acampora & Deitch, 1984; Sorenson, Deitch & Acampora, 1984; Zweben, Aly, Martin, et al, 1999) all suggest potential benefits of collaboration across the historically dichotomized worlds of OTPs and TCs and the need to transcend polarized debates of harm reduction versus abstinence-based treatment (Kellogg, 2003; Larney, Corcoran, Wodak & Dolan, 2006; Marlatt, Blume & Parks, 2001). These studies also underscore that such collaborations from their beginning have treated a population experiencing great problem severity, complexity and chronicity (Kaufman, 1979).

The present study extends this literature by examining the front line experience of integrating MM patients into rehabilitation the residential units Eagleville Hospital, a once traditional drugfree TC. This study examines the historical attitudes toward methadone maintenance among Eagleville staff, the sources that prompted a change in MM patient exclusion policies, fears related to the expected negative outcomes of such integration and the actual positive outcomes experienced through the integration process. The paper closes with recommendations on process steps that can be used by traditionally drugfree programs to successfully integrate methadone patients.

#### Setting: Eagleville Hospital

Eagleville Hospital was first founded in 1909 for patients suffering from the "white plague" (tuberculosis). It functioned in that capacity until it was reconstituted in 1965 as a hospital specializing in the treatment of alcoholism. Three years later, Eagleville expanded its mission to include drug

addiction and became one of the first programs in the United States to provide integrated treatment of alcohol and drug addiction. Self-identifying itself as one of the early therapeutic communities, Eagleville Hospital programs grew in size and clinical sophistication over the intervening years to include specialized treatment of women and their children, halfway house and day treatment services, a day school program for adolescents, and treatment services for prisoners at Graterford Prison. Today, Eagleville Hospital's 318 bed campus provides medically supervised specialized detoxification, inpatient programs for men and women, a medical specialty unit, and dual diagnosis programs well as non-hospital programs. as (Eagleville also provides an Acute Geropsychiatric Service--20 beds). Alcohol and other Drug (AOD) treatment programs are provided in dedicated units within five patient care buildings, which house the following levels of care:

- Level 4A Medical Detoxification (22 beds)
- Level 4B Hospital Rehabilitation (26 beds)
- Level 3A Non-hospital Detoxification (14 beds)
- Level 3B/3C Short and Moderate Stay Rehabilitation (85 beds)
- Level 3B/3C Co-occurring Disorders Rehabilitation (123 beds)

Eagleville Hospital is licensed by the Department of Health, approved by the Division of Drug and Alcohol Licensing for all residential treatment services, licensed by the Department of Public Welfare for as an adult Residential Treatment Facility for co-occurring disorders, approved by regulatory authorities to treat methadone maintenance patients who need detoxification or rehabilitation, and is accredited by the Joint Commission on the Accreditation of Health Care Facilities.

A total complement of 85 beds is utilized for the delivery of "general" short and moderate stay non-hospital rehabilitation services (Level 3B/3C Non-hospital

Medically Monitored Rehabilitation). This program is designed to treat patients with high substance use disorders and low psychiatric needs. Physicians provide care to patients on an as needed basis. Nursing staff are available 24 hours a day, 7 days per week and share responsibility for milieu management with counselors and clinical assistants. All medications prescribed by the physician are administered by a nurse. Group therapists and recovery educators provide group and individual therapy, family sessions, addiction and mental health education, and 12 step recovery experiences. Psychiatric consultation is available. Therapists provide group and individual therapy. One unit has recently been converted for women only, allowing gender specific group therapy and education on topics of trauma and abuse. Included within the rehab complement is a separate, specialized program of 23 beds. The Eagleville Recovery Program is housed in the Gerstley Building and is designed for men referred by, or with current involvement in, the criminal justice system.

## **Early Attitudes toward Methadone Maintenance**

At the time Eagleville Hospital was redefining its mission as that of addiction treatment. considerable hostility existed between newly rising drug-free therapeutic communities and methadone maintenance programs, both of whom were competing for limited resources and struggling to gain professional credibility and cultural legitimacy (White, 1998). Eagleville staff attitudes toward MM were typical of this period and lingered through the era of increased education professionalization. In those early days we viewed medication. even psychiatric medication, as a "cop-out" and tried to convince people not to use it or to get off it.

Although attitudes toward methadone and other medications softened somewhat over the years, particularly for people who had failed multiple times in drug-free treatment, there was still a deep undercurrent of thought that MM 1) simply

substituted one drug addiction for another, 2) failed to address the characterological (cognitive, emotional, relational, spiritual) roots of addiction, 3) generated its own cognitive, emotional and behavioral impairments, and 4) was a form of government social control and not an aid to personal recovery. Based on these beliefs, Eagleville had maintained a policy of refusing to admit MM patients to its residential rehab units unless the patient agreed to be detoxified first. Eagleville Hospital did use methadone within its detox unit when the unit first opened in 1983, then shifted to alternative medications, before returning to the use of methadone as more persons entered with histories of using highpurity heroin. In those early years, we would only take a patient on methadone into detox if they were on 20 milligrams or less and then they would be tapered to 0 milligrams over five days.

#### The Context and Process of Change

Several influences set the stage for changes in Eagleville's attitudes and policies toward methadone. The most important of these included the:

- increased number of Eagleville staff with education and training in addictions who had been exposed to studies on the scientific effectiveness of MM
- growing emphasis in the field on integrating evidence-based practices into addiction treatment and the broader field's recognition of MM as an evidence-based practice
- development of a formal training program on evidence-based treatment initiated at Eagleville in collaboration with Drexel Behavioral Health
- re-examination of traditional philosophies/policies in light of the recoveryfocused systems transformation processes of the Philadelphia Department of Behavioral Health
- discovery of potential benefits of medication drawn from Eagleville Hospital units specializing in the treatment of co-

occurring substance use and psychiatric disorders

- lowering of daily census as a result of managed care and the subsequent admission of more clinically complex patients who would have been screened out in earlier years,
- advocacy and threatened law suits by the Pennsylvania Association for the Treatment of Opioid Dependence for denying MM patients full access to care, and
   recognition of a new generation of opioid addicts for whom combined MM and TC treatment might be particularly beneficial.

The first change in methadone policy at Eagleville Hospital began in 2000 with the first admissions of MM patients for detoxification related to benzodiazepine dependence. That initial experience led to considering admitting MM patients to the rehabilitation units in response to isolated referrals from MM programs began in 2002, but there remained considerable fear about the prospects of such inclusion. Serious discussions about admitting MM patients to the rehab units began in the fall of 2005 in response to increased calls from methadone clinics asking if Eagleville would consider treating co-occurring drug dependencies and psychiatric disorders of MM patients. Treating MM patients in a separate unit was considered first, mostly out of fear of the MM patient, but that idea was abandoned when a respected clinician and former Eagleville counselor shared his current positive experiences treating MM patients in a rehab setting. The former staff member challenged segregation of MM patients discriminatory and clinically unwise.

By the spring of 2006, discussions among Eagleville's clinical leaders about admitting MM patients had shifted from its potential to increase patient census to a broader evaluation of Eagleville's clinical philosophy and programs. The question of admitting MM patients was integrated into a larger discussion of how Eagleville could more fully integrate principles of recovery management into its treatment approach. Prolonged and sometimes heated discussions ensued on the idea of multiple

pathways of long-term recovery, the role of medication within some of these pathways. and how Eagleville could best support the long-term recoveries of an increasingly diverse patient population. A paper disseminated on stigma and medicationrecovery distributed assisted by Philadelphia Department of Behavioral also influential in these Health was discussions (White & Torres, 2010).

A decision was made in May 2006 to admit MM patients to Eagleville and application was made for a license to treat MM patients in the rehab units. The application was approved and the first MM patient was admitted to a rehab unit in 2007. In 2007, the average number of MM patients in rehab at Eagleville on any day increased from three in May and July and by December That number has had risen to 10. progressively risen from an average of 13 through 2008, 17 in 2009 and 24 between January and June of 2010. Referral of MM patients for treatment of non-opioid drug dependencies come primarily from opioid treatment programs (OTPs, 78%), the criminal justice system (10%) and general or psychiatric hospitals (10%). Methadone patients are now fully integrated into the units. with methadone rehab dispensed onsite at Eagleville to these patients each morning and in again in the afternoon for those on split dosing, and patients referred back to their OTP of origin upon discharge. Other than medication dispensing, treatment of MM patients at Eagleville is indistinguishable from the treatment received by other Eagleville patients.

#### **Early Fears versus Actual Experience**

Five fears dominated early discussions regarding the potential inclusion of MM patients within the rehab units at Eagleville Hospital. While it is somewhat embarrassing to acknowledge these fears in light of subsequent experience, they reveal many of the stereotyped attitudes MM patients confront on a daily basis. The first staff fear was that other Eagleville patients would want to seek methadone treatment if

they were exposed to MM patients. This simply did not happen, not because such exposure created antipathy toward methadone as a medication but because patients were repelled by the rigorous demands of MM, the disruption of daily lifestyle imposed by involvement in MM and their perception that MM programs lacked a recovery oriented milieu. Other patients particularly discouraged were considering methadone when they heard MM patients speak of the demands of clinic visits, the travel limitations posed by MM and the negative attitudes toward methadone encountered in 12-Step groups, e.g., not being allowed to speak.

The second staff fear was that MM patients would destroy the therapeutic milieu by "being high" ("nodding out") on the units and in groups. This occurred rarely as patients stabilized on personally optimal doses of methadone were indistinguishable in appearance and functioning from patients on no medication. Even staff with the long pre-recovery addiction histories and the longest professional experience could not identify which patients were being maintained on methadone. In the rare cases where a MM patient self-reported sedating effects of methadone or where such effects were observed, these were able to be resolved either through an adjustment of methadone dose or by split dosing.

The third staff fear was that MM patients would not be fully accepted by other patients and by staff on the units. This fear contributed to the earlier noted consideration of a special unit for MM patients. A minimum level of staff and patient education prevented rejection of MM patients from happening. The number of young (under 30), professionally-trained staff at Eagleville made this transition far easier than it might have been in earlier years with a mostly older, ex-addict counseling staff. Once integrated into the units, MM patients wrestled with the same kinds of recovery issues as those patients not on medication, making their methadone use less and less of an issue as treatment proceeded.

The fourth major staff fear, a corollary of the third, was that other patients and staff

would try to convince MM patients to stop their methadone use. Again, staff/patient education on multiple pathways of long-term recovery and the legitimacy of medication-assisted recovery as one recovery pathway checked any such persuasion efforts. Only three patients have requested to taper from MM since MM patients began being admitted to the rehab units in 2007, and these were personal rather than staff-influenced decisions.

The fifth fear was that there would be problems integrating MM patients into local recovery mutual aid societies, given the emphasis of such linkage at Eagleville. This actually proved to be true and has required both preparing MM patients on how to handle the anti-methadone bias they encounter in local 12-Step meetings (e.g., suggesting that he/she address issues related to medication disclosure with his or her sponsor) as well as assertive attempts by staff to locate medication-friendly meetings.

In retrospect, the adjustments of MM patients to the TC environment had as more to do with issues other than medication. These issues included the greater problem severity complexity and (more medical/psychiatric problems; less recovery supports in their natural environment) of a population not successful within mainstream MM treatment and the transition from an outpatient treatment setting to a more structured demanding and residential treatment setting.

#### **Clinical Outcomes**

To look at the profile and clinical outcomes of MM patients admitted to the rehab units at Eagleville Hospital, admissions between January 1, 2010 and June 30, 2010 were analyzed. A total of 88 MM patients were admitted during this time period. The MM patient cohort was gender balanced (52% male; 48% female); ranged in age from 19 to 58 with an average age of 33; and were predominately White (White, 91%; Black, 7% and Hispanic, 2%). Ten percent were admitted for detox only: 35% for rehab only; and 55% for both detox and

rehab (detox here referring to detoxification from drugs such as alcohol, cocaine, benzodiazepines and not from methadone). A particularly striking figure is that 55 (69.6%) of the MM patients were admitted or subsequently transferred to unit specializing in the treatment of co-occurring psychiatric disorders. It is unclear whether MM patients with co-occurring opioid and other substance use disorders have a higher rate of psychiatric illness or whether these patients are being referred to Eagleville Hospital because of its reputation for treatment such complex clinical profiles.

Key initial questions examined were whether MM patients could be attracted, engaged and integrated into the rehab units at Eagleville Hospital. Three key indicators are number of admissions, length of stay and discharge status. The Eagleville program has attracted MM patients, with such patients now constituting 10% of the total treatment population. There were significant differences between retention rates and length of stays for MM patients and patients not on medications. In comparing discharge status, the MM patients had a slightly higher discharge rate for breaking rules (7% compared to 2% for total hospital population) and leaving with consent (7% compared to 2% for total hospital population in both categories); comparable discharge rates for non-compliance (1% compared to .63%) and medical transfer (1% compared with 1.86%); a lower AMA/AWOL rate (7% compared to 12.6%); and a better positive completion rate (77% compared to 64%). Future efforts will focus on comparing the post-treatment recovery outcomes patients who use methadone to support their continued recovery and patients supporting their recoveries without methadone.

#### **Summary and Lessons Learned**

Based on the Eagleville experience and the other published efforts we have described to integrate MM patients within traditional residential and outpatient addiction treatment programs, there are a number of recommendations we would proffer regarding such integration.

- 1. Educate top organizational leadership on advantages and obstacles to integrated MM and psychosocial treatment and negotiate "buy-in" for sustained problem solving through the implementation process (Zweben, Aly, Martin, et al, 1999).
- 2. Provide methadone dispensing on site, where possible, to avoid the expense and disruption of regular travel to the OTP.
- 3. Address administrative issues and operational concerns related to licensing, methadone storage and security, dispensing procedures, billing procedures related to medication and communication protocol with physicians and OTPs.
- 4. Avoid mandating inclusion of MM patients unless a process is developed to assure that this experience is a positive one for the MM patients/families, other patients/families, and the clinical staff.
- 5. Address long-held biases against MM through a process of continued professional education about the proven scientific efficacy of MM as a medical treatment for opioid dependence (See Greenberg, Hall & Sorensen, 2007, for training formats, topics and tips). Such education/training should be infused with the following propositions:
- There are multiple pathways to longterm addiction recovery, and all are cause for celebration.
- Medication-assisted recovery is a legitimate pathway of recovery and is being increasingly recognized as such.
- Persons using medication to support their recoveries can benefit from the same psychosocial/behavioral treatment and peerbased recovery support available to those supporting their recoveries without benefit of medication.
- Persons using medication to support their recoveries may be of even greater need of professional and peer-based recovery support due to the ambivalence to outright hostility toward the use of medication to support addiction recovery they often

encounter from family, friends, co-workers, service professionals, peers in the recovery community and the public/media.

- Successful treatment outcome—recovery—is about functionality—clinical remission, global (physical, emotional, cognitive, relational, spiritual) health and citizenship; whether this is achieved with or without discontinuance of methadone or other medication is a matter of recovery style, not the line demarcating addiction and recovery initiation (White & Torres, 2010).
- 6. Establish formal collaborative agreements with referring MM programs to assure coordination of respective treatment plans and best stewardship of joint organizational resources, e.g., avoiding schedulina conflicts, duplicative services, contradictory messages, breaches of confidentiality in inter-organizational communications, etc. (Kipnis, et al, 2001); reciprocal staff visits, joint clinical staffing/supervision and joint planning of post-treatment continuing care are also potential strategies for enhanced service integration (Zweben, et al, 1999).
- 7. Where possible, provide methadone onsite during inpatient or residential treatment and re-evaluate optimal methadone dose as other drug use reduces and ceases; polydrug using MM patients are often undermedicated due to physician fears of untoward drug interactions (Kipnis, et al, 2001).
- 8. Assure that MM patients are adequately dose stabilized before they enter treatment in rehab units to avoid the clinically unproductive time a client is continuing to experience some withdrawal distress (under-medication) or signs of sedation/intoxication (over-medication).
- 9. Avoid creating a "class system within the patient population" via specialized tracks through which MM patients are marginalized and stigmatized within the treatment milieu; fully integrating MM patients into all treatment activities (Greenberg, et al, 2007; Kipnis, et al, 2001).

- 10. Designate a lead person to serve as patient educator, staff trainer, advocate, and liaison on methadone-related issues (Greenberg, et al, 2007).
- 11. Evaluate the risk/benefit of creating a special support track (e.g., weekly support group) for MM patients; this was not done at Eagleville out of fear of isolating and labeling MM patients, but others have described the value of such a group (Zweben, et al, 1999).
- 12. Maintain liaison with local recovery mutual aid societies to enhance inclusion of MM patients and to link MM patients to medication-assisted recovery support groups, e.g., Methadone Anonymous (Gilman, Galanter & Dermatis, 2001; McGonagle, 1994; See White, 2011 for working with NA).

Most of the literature on MM patients in TCs has focused on the referral of MM patients to TCs. Far less is known about the referral of TC patients to MM. Models of joint collaboration are needed through which patients may move easily across these systems of care over time as well as participate in them concurrently.

There is a growing body of scientific studies and clinical experience confirming the successful integration of MM patients into inpatient and residential addiction treatment programs for treatment of co-occurring, non-opioid substance dependencies and/or treatment of co-occurring psychiatric illness. The experience of Eagleville hospital with such an integration process turned out to be an unexpectedly positive one.

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#### References

Bickel, W.K., Marion, I & Lowinson, J.H. (1987). The treatment of alcoholic methadone patients: a review. *Journal of Substance Abuse Treatment*, 4(1), 15-19.

Brands, B., Blake, J., Marsh, D.C., Sproule, B., Jeyapainm R. & Li, S. (2008). The impact of benzodiazepine use on methadone maintenance treatment outcomes, *Journal of Addictive Diseases*, 27(3), 37-48.

Bickel, W.K., Marion, I & Lowinson, J.H. (1987). The treatment of alcoholic methadone patients: a review. *Journal of Substance Abuse Treatment*, 4(1), 15-19.

Bickel, Ruzzuto, Zielony, R.D., Klobas, J., Pangiosonlis, P, Mermit, R. & Knight, W.F. (1988-89). Combined behavioral and pharmacologic treatment of alcoholic methadone patients, *Journal of Substance Abuse*, 2, 161-71.

Castells, X., Kosten, T.R., Capella, D., Vidal, X, Colom, J. & Casas, M. (2009). Efficacy of opiate maintenance therapy and adjunctive interventions for opioid dependence with comorbid cocaine use disorders: A systematic review and meta-analysis of controlled clinical trials. *American Journal of Drug and Alcohol Abuse*, 35(5), 339-49.

Chen, T., Masson, C.L., Sorensen, J.L. & Greenberg, B. (2009). Residential treatment modifications: Adjunctive services to accommodate clients on methadone. American Journal of Drug and Alcohol Abuse, 35(2), 91-94.

Cheung, Y.W. & Ch'ien, J.M. (1999). Previous participation in outpatient methadone program and residential treatment outcome: A research note from Hong Kong. *Substance Use and Misuse*, 34, 103-118.

De Leon, G. (2008). Therapeutic communities. In M. Galanter, & H.D. Kleber (Eds.), *The American psychiatric publishing textbook of substance abuse* (4th Edition, pp. 485-501). Washington, DC: American Psychiatric Publishing, Inc.

De Leon, G. (2000). The therapeutic community: Theory, model, and method. New York: Springer Publishing Company.

De Leon, G., Stains, G.L., Perlis, T.E., Sacks, S., McKendrick, K., Hilton, R., & Brady, R. (1995). Therapeutic community methods in methadone maintenance (Passages): An open clinical trial. *Drug and Alcohol Dependence*, 37, 45-57.

Dobler-Mikola, A., Hattenscwiller, J., Melli, D., Beck, T., Boni, E. & Modeston, J. (2005). Patterns of heroin, cocaine, and alcohol abuse during long-term methadone maintenance treatment. *Journal of Substance Abuse Treatment*, 29(4), 259-65.

Gilman, S.M., Galanter, M., & Dermatis, H. (2001). Methadone Anonymous: A 12-step program for methadone maintained heroin addicts. *Substance Abuse*, 22(4), 247-256. Gordis, E. (1991). Methadone maintenance and patients in alcoholism treatment. In: Pickens, R.W., Luekefeld, C.G & Schuster, C.K. (Eds.). *Improving drug abuse treatment. NIDA Research Monograph # 106.* Rocville, MD: National Institute on Drug Abuse, p. 365-372.

Gossop, M., Stewart, D. & Marsden, J. (2006). Effectiveness of drug and alcohol counselling during methadone treatment: Content, frequency, and duration of counseling and association with substance use outcomes. *Addiction*, 10(3), 401-12.

Greenberg, B., Hall, D.H. & Sorensen, J.I. (2007). Methadone maintenance therapy in residential therapeutic community settings: Challenges and promise. *Journal of Psychoactive Drugs*, 39, 203-210.

Hettema, J.E. & Sorenson, J.L. (2009). Access to care for methadone patients in the

United States. *International Journal of Mental Health and Addiction*, 7(3), 468-474.

Hubbard, R.L., Marsden, M.E., Rachal, J.V., Harwood, H.J., Cavanaugh, E.R. & Ginzburg, H.M. (1989). *Drug abuse treatment: A national study of effectiveness*. Chapel Hill, NC: University of North Carolina Press.

Joseph, H., Stancliff, S., & Langrod, J. (2000). Methadone maintenance treatment (MMT): A review of historical and clinical issues. *Mount Sinai Journal of Medicine*, 67, 347-364.

Kaufman, E. (1979). The therapeutic community and methadone: A way of achieving abstinence. *International Journal of the Addictions*, 14, 83-97.

Kellogg, S.H. (2003). On "gradualism" and the building of the harm reduction—abstinence continuum. *Journal of Substance Abuse Treatment*, 25, 241-247.

Kipnis, S.S., Herron, A., Perez, J., & Joseph, H. (2001). Integrating the methadone patent in the traditional addiction inpatient rehabilitation program,--problems and solutions. *The Mount Sinai Journal of Medicine*, 68(1), 28-32.

Kletter, E. (2003). Counseling as an intervention for cocaine-abusing methadone maintenance patients. *Journal of Psychoactive Drugs*, 35(2), 271-7.

Kreek, M.J. (1978). Medical complications in methadone patients. *Annals of the New York Academy of Science*, 311, 110-114.

Kreek, M. J., & Vocci, F. (2002). History and current status of opioid maintenance treatments. *Journal of Substance Abuse Treatment*, 23(2), 93-105.

Larney, S., Corcoran, K., Wodak, A. & Dolan, K. (2006). Integration of harm reduction into abstinence-based therapeutic communities: A case study of We Help Ourselves,

Australia. Geneva: World Health Organization.

Lewis, D.C. (1999). Access to narcotic addiction treatment and medical care: Prospects for the expansion of methadone maintenance treatment. *Journal of Addictive Diseases*, 18(2), 5-21.

Lowinson, J.H., Berle, B., & Langrod, J. (1976). Detoxification of long-term methadone patients: Problems and prospects. *The International Journal of the Ad*dictions, 11(6), 1009-1018.

Magura, S., & Rosenblum, A. (2001). Leaving methadone treatment: Lessons learned, lessons forgotten, lessons ignored. *Mount Sinai Journal of Medicine*, 68, 62-74.

Marlatt, G.A., Blume, A.W. & Parks, G.A. (2001). Integrating harm reduction therapy and traditional substance abuse treatment. *Journal of Psychoactive Drugs*, 33(1), 13-21.

McGonagle, D. (1994). Methadone Anonymous: A 12-step program. Reducing the stigma of methadone use. *Journal of Psychosocial Nursing*, 32(10), 5-12.

Musselman, D.L., Kell, M.J. (1995).Prevalence and improvement psychopathology in opioid dependent patients participating in methadone maintenance. Addictive Journal of Diseases, 14, 67-82.

Petry, N.M. & Martin, B. (2002). Low-cost contingency management for treating cocaine- and opioid-abusing methadone patients. *Journal of Consulting and Clinical Psychology*, 70(2), 398-405.

Raffa, J.D., Grebely, J., Tossonian, H., Wong, T., Viljoen, M., Khara, M., Mead, A., McLean, M., Duncan, F., Petkau, A.J., DeVlaming, S. & Conway, B. (2007). The impact of ongoing illitic drug use on methadone adherence in illicit drug users receiving treatment for HIV in a directly observed therapy program, *Drug and Alcohol Dependence*, 89(2-3), 306-09.

Roman, P. (2005). National Treatment Center Study Summary Report No 9: A National Sample of Therapeutic Communities, p. 16. Accessed November 1, 2010 at http://www.uga.edu/ntcs/reports/NTCS%20 summary%20reports/NTCS%20Report%20 No.%209.pdf

Ryder, N., Cullen, W., Barry, J., Bury, G., Keenan, E. & Smyth, B.P. (2009).Prevalence of problem alcohol use among attending primary patients care for methadone treatment. **BMC** Family Practice, 10, 42.

Simpson, D.D. (1981). Treatment for drug abuse: Follow-up outcomes and length of time spent. *Archives of General Psychiatry*, 38, 875-879.

Sorensen, J.L., Andrews, S., Delucchi, K.L., Greenberg, B., Guydish, J., Masson, C.L., & Shopshire, M. (2009). Methadone patients in the therapeutic community: A test of equivalency. *Drug and Alcohol Dependence*, 100(1–2), 100–106.

Sorenson, J.L., Acampora, A. & Deitch, D.A. (1984). From maintenance to abstinence in a therapeutic community: Preliminary results. *Journal of Psychoactive Drugs*, 16, 73-77.

Sorenson, J.L, Deitch, D.A. & Acampora, A. (1984). Treatment collaboration of methadone maintenance programs and therapeutic communities. *American Journal of Drug and Alcohol Abuse*, 10(3), 347-59.

Steinbacka, M., Beck, O., Leifman, O., Romlesjo, A. & Helander, A. (2007) Problem drinking in relation to treatment outcome among opiate addicts in methadone maintenance treatment. *Drug and Alcohol Review*, 1, 55-63.

Substance Abuse and Mental Health Services Administration, Office of Applies Studies (2004) Treatment Episode Data Set (TEDS). Table 3 Admission by primary substance of abuse, according to frequency of use, route of administration, age of first use, and number of prior treatment episodes.

http://www.oas.samhsa.gov/TEDS/2k4TED S/TEDSHi2k4Tbl3.htm

Tzilos, G.K., Rhodes, G.L., Ledgerwood, D.W. & Greenwald, M.K. (1009). Predicting cocaine group treatment outcome in cocaine-abusing methadone patients. *Experimental Clinical Psychopharmacology*, 17(5), 320-5.

Villano, C.L., Rosenblum, A., Magura, S. & Fong, C. (2002). Improving treatment engagement and outcomes for cocaineusing methadone patients. *American Journal of Drug and Alcohol Abuse*, 28(2), 213-30.

Wedkind, D., Jacobs, S., Karg, I, Luedecke, C., Schneider, U., Cimander, K., Baumann, P., Reuter, R., Poser, W., Havermann-Reinecke, U. (2010). Psychioatric comorbidity and additional abuse of drugs in maintenance treatment with L- and D,L-methadone. *World Journal of Biological Psychiatry*, 11(2 pt 2), 390-9.

Weinstock, J., Rash, C.J. & Petry, N.M. (2010). Contingency management for cocaine use in methadone maintenance patients: When does abstinence happen? *Psychology of Addictive Behaviors*, 24(2), 282-91.

White, W. (2011). *Narcotics Anonymous and the pharmacotherapeutic treatment of opioid addiction*. To be posted at www.williamwhitepapers.com

White, W. (1998). Slaying the Dragon: The History of Addiction Treatment and Recovery in America. Bloomington, IL: Chestnut Health Systems.

White, W., Deitch, D. & De Leon, G. (2010). David Deitch, PhD, and George De Leon, PhD, on recovery management and the future of the therapeutic community. *Counselor*, 11(5), 38-49.

White, W. & Torres, L. (2010). Recovery-oriented methadone maintenance. Chicago, IL: Great Lakes Addiction Technology Transfer Center, Philadelphia Department of Behavioral Health and Mental Retardation Services and Northeast Addiction Technology Transfer Center.

Zweben, J.E., Aly, T., Martin, J., Wengrofsky, S., Bacci, J. & Meddaugh, R. (1999). Making residential treatment available to methadone patients. *Journal of Substance Abuse Treatment*, 17(3), 249-56.

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