Drug and Alcohol Dependence 100 (2009) 100–106

Contents lists available at ScienceDirect

Drug and Alcohol Dependence

journal homepage: www.elsevier.com/locate/drugalcdep

Methadone patients in the therapeutic community: A test of equivalency

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ARTICLE INFO

Article history:
Received 26 April 2008
Received in revised form
17 September 2008
Accepted 18 September 2008
Available online 14 November 2008

Keywords:
Therapeutic community
Opioid dependence
Methadone
Residential treatment

ABSTRACT

Background: Residential therapeutic communities (TCs) have demonstrated effectiveness, yet for the most part they adhere to a drug-free ideology that is incompatible with the use of methadone. This study used equivalency testing to explore the consequences of admitting opioid-dependent clients currently on methadone maintenance treatment (MMT) into a TC.
Methods: The study compared 24-month outcomes between 125 MMT patients and 106 opioid-dependent drug-free clients with similar psychiatric history, criminal justice pressure and expected length of stay who were all enrolled in a TC. Statistical equivalence was expected between groups on retention in the TC and illicit opioid use. Secondary hypotheses posited statistical equivalence in the use of stimulants, benzodiazepines, and alcohol, as well as in HIV risk behaviors.
Results: Mean number of days in treatment was statistically equivalent for the two groups (166.5 for the MMT group and 180.2 for the comparison group). At each assessment, the proportion of the MMT group testing positive for illicit opioids was indistinguishable from the proportion in the comparison group. The equivalence found for illicit opioid use was also found for stimulant and alcohol use. The groups were statistically equivalent for benzodiazepine use at all assessments except at 24 months where 7% of the MMT group and none in the comparison group tested positive. Regarding injection- and sex-risk behaviors the groups were equivalent at all observation points.
Conclusions: Methadone patients fared as well as other opioid users in TC treatment. These findings provide additional evidence that TCs can be successfully modified to accommodate MMT patients.

1. Introduction

Research has demonstrated that therapeutic communities (TCs) have beneficial effects in decreasing drug use (Simpson and Curry, 1997), and decreasing sexual HIV risk behaviors (Cooperman et al., 2005). An extensive literature on TC treatments for opioid dependence has found that retention in a treatment program is the main marker of a variety of successful outcomes (Carroll and McGinley, 2000; De Leon and Schwartz, 1984; McCaul et al., 2001; Simpson and Curry, 1997). In general the longer a resident remains in treatment, the more likely positive outcomes will occur. Several studies have indentified factors that predict longer retention, including less severe psychiatric illness (Condelli and De Leon, 1993; Eland-Goossensen et al., 1998), involvement with and pressure from the criminal justice system (Eland-Goossensen et al., 1998; Harrison et al., 2007; Sacks et al., 2004), and client expectations about a longer length of treatment (Condelli and De Leon, 1993; Kressel et al., 2000).

In the last decade TCs have modified their approaches to accommodate a variety of special populations, including prisoners (Sacks et al., 2004), women and their children, adolescents (De Leon, 1997), people with HIV/AIDS (Sargent et al., 1999), homeless persons (De Leon et al., 2000; Skinner, 2005) and those with co-occurring mental illness requiring psychiatric medication (Sacks et al., 1997). A small number of TCs have also made modifications to allow clients on methadone maintenance treatment (MMT) into the TC. The primary application of TC methods to MMT patients was led by George De Leon (De Leon et al., 1995). The "Passages" project was a day treatment program based on TC methods that were adapted for patients in methadone clinics. The most comprehensive evaluation of Passages indicated that its clients improved significantly more than comparison subjects on measures of cocaine and heroin use, and those who remained in Passages for at least 6 months exhibited further positive outcomes.

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doi:10.1016/j.drugalcdep.2008.09.009

The use of medically prescribed drugs for substance abuse has been inconsistent with the TC perspective, however (De Leon, 2000). In the TC view, medications that alter emotional or mental states could reinforce the substance abuse and impede recovery. For example, TC staff may view methadone as a threat to the individual and the system as a whole. MMT clients tend to be marginalized and perceived as using a crutch to progress through the treatment process (Greenberg et al., 2007). These beliefs may undermine treatment success among methadone patients, and influence treatment policies. Due to philosophical differences between TCs and methadone programs, TCs often do not admit to treatment patients who are receiving methadone, and very few actually provide MMT services. For example, the National Survey of Substance Abuse Treatment Services (Office of Applied Studies, 2007) found that for residential treatment settings (including halfway houses and TCs) only 3.6% had opioid treatment programs. Similarly, a recent national survey of 380 TCs indicated that less than 10% use methadone (Institute for Behavioral Research, 2005).

Yet methadone is one of the most widely used and extensively evaluated treatments for opioid dependence. Research indicates that opioid-dependent clients treated with methadone tend to fare better than those who are not treated with methadone (Gossop et al., 2000; National Institutes of Health-Center for Disease Control, 1997; Farrell et al., 1994). In addition, the National Consensus Panel on Effective Medical Treatment of Opioid Addiction (1998) calls attention to the need for opioid-dependent persons to have access to MMT and recommends expanding the availability of MMT.

The current study explored the effectiveness of admitting opioid-dependent clients currently on MMT into TC treatment. If more TCs are to treat MMT patients, it is vital to document whether MMT patients do as well as opioid users who are not enrolled in MMT, which TCs are accustomed to treating. To examine this question we used equivalence testing (Rogers et al., 1993) to contrast a group of MMT patients to a comparison group of similar non-MMT opioid users. Equivalence testing is a statistical technique often used to show that a new medication is indistinguishable from an approved medication that is the standard of care. In this study, TC treatment for drug-free opioid users represents the usual mode of care. The aim of the study was to learn whether MMT patients would benefit as well from enrollment in a TC. In the context of a TC setting we tested whether outcomes for MMT patients would be indistinguishable from those of opioid-dependent patients not enrolled in MMT. Specifically, using a comparison group of opioid-dependent clients with similar psychiatric history, criminal justice pressure and expected length of stay in the TC, we tested the hypotheses that: (1) Retention in the TC would be statistically equivalent between patients receiving or not receiving MMT, and (2) use of illegal opioids would be statistically equivalent in the MMT and comparison groups at assessments up to 24 months from baseline. Secondary hypotheses posited statistical equivalence between the two groups in the use of stimulants, benzodiazepines, and alcohol, as well as in HIV risk behaviors and criminal behaviors. Although medical issues, employment, family issues, alcohol use, and many other factors are also important outcomes, primary hypotheses focused on retention and illegal use of opioids to preserve experiment-wise power.

2. Method

2.1. Study design

We used a two-group longitudinal follow-up design to compare outcomes for TC residents admitted while receiving MMT ($n = 125$) to those of TC residents who were not receiving MMT upon admission ($n = 106$). Participants were not randomized to conditions, but the groups were balanced on variables shown to predict TC retention in prior studies: criminal justice pressure, history of psychiatric hospitalization or suicidal attempt, and expected length of stay. Participants were followed for 24 months after admission to the TC. The primary outcomes included retention in the TC and opioid use.

2.2. Setting and research participants

Participants were opioid users admitted to the residential TC treatment program of Walden House, Inc. in San Francisco, CA. They were recruited at admission to the TC from three Walden House adult programs that provided variable planned length of residential treatment, ranging from 45 days to 12 months. All programs provided continuity of treatment, and when residents completed one program they were often transferred to the next level of care in the Walden House system. Thus, while these three sites were the points of initial treatment for research participants, TC treatment was also provided at other sites during the study, for example as participants completed residential treatment and transferred to group living "satellites", and later to independent living as "outpatients." TC clients were allowed to continue in MMT while enrolled in the treatment program.

The program has a long history of embracing patients with diverse and challenging needs and has been providing residential treatment options for persons on methadone for over two decades. The TC has made a number of modifications to accommodate the presence of residents receiving methadone (see Greenberg et al., 2007). For example, the program designates a "methadone counselor," a TC staff member who plays a vital role in the process of facilitating the residential treatment program in modifying its services to accept and treat MMT patients. The methadone counselor offers "methadone sensitivity" training sessions to staff periodically (such as during TC staff training days) and to patients (providing education and confronting stigma about methadone maintenance). The methadone counselor conducts a weekly "methadone therapy group" for residents who are receiving methadone. For patients who choose to attempt withdrawal from methadone, residents have greater access to alternative therapies and medical services. Staff education programs in the TC setting have the potential to increase acceptance of non-abstinence treatment goals and use of pharmacotherapies such as methadone. For example, Andrews et al. (2005) found that TC staff that participated in methadone sensitivity training had greater methadone knowledge and a lower abstinence orientation than those who had not attended the training.

In this study the participants in the MMT group were all patients in San Francisco area MMT programs at the time they applied for admission to the TC. During residential stay in the TC the patients were escorted to the relevant MMT program to receive treatment, and if they received take-home doses those were stored in a secure medication dispensary at the TC. During the course of the study the San Francisco Department of Public Health began a mobile methadone van program. A common problem for mobile methadone programs has been finding a site that is acceptable to the community (see Besteman and Brady, 1994). As part of the commencement of the van program, the mobile clinic was located for part of the day in the staff parking lot of the Walden House Outpatient program (a few miles from the TC residential programs), and in return for use of the parking lot and a counseling office, the TC residents on methadone were able to transfer to the van program. Once the methadone van was established the participants in treatment had the option of receiving methadone treatment there, and most chose that option.

2.3. Inclusion and exclusion criteria

Participants were included in the study if they were residents at Walden House TC treatment centers who qualified for MMT (current use plus confirmation of at least 1-year documented history of opioid dependence), admitted to the TC no more than three working days before the research screening interview, willing to allow access to agency records, and willing to participate in follow-up interviews. In addition, participants in the MMT group either had to be enrolled in long-term 180-day methadone detoxification or MMT. Participants were excluded from the study if they were unable to provide informed consent or not qualified for MMT, or if the study was unable to complete a research baseline interview within 7 days of their admission to the TC.

2.4. Enrollment procedures

2.4.1. Recruitment

Screening procedures were adapted from methods developed for a prior study of day treatment conducted at Walden House (Guydish et al., 1998). The project director (SA) trained clinical staff in the program's intake department to identify participants meeting study criteria, and research staff determined eligibility. The University of California, San Francisco Committee on Human Research approved all procedures, and a Federal Certificate of Confidentiality was obtained to provide an extra level of protection against disclosure.

2.4.2. Balancing the groups on factors that predict retention

Balancing procedures were designed to assure that the MMT and comparison group participants did not substantially differ on three factors demonstrated to predict retention in TCs: Criminal justice pressure, history of psychiatric hospitalization or suicidal attempt, and expected length of stay. All three variables were dichotomous. Although each factor is conceptually a continuum, it was measured