

Patient Outcomes After Initiation of Sabbath Closure of a Methadone Maintenance Clinic in Israel

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The study examined whether closing of a methadone maintenance clinic in Israel on the Sabbath was associated with adverse patient outcomes. One take-home dose of methadone was given to all patients for that day regardless of whether they had earned take-home privileges. No difference was found in dropout rates for the six-month periods before and after Saturday closure was initiated. Results of random, twice-weekly urinalyses for all patients did not indicate increased use of heroin. The findings suggest that closure of a methadone clinic at least one day a week does not jeopardize

patient outcome. Cutting hours of operation would reduce workload and enable clinics to function more economically. (*Psychiatric Services* 49:1483–1485, 1998)

There is a thin line between the real needs of patients in methadone treatment and the overprotectiveness and medical dictates to which they may be subjected. Patients who are addicted need to be supervised, as do patients with high blood pressure. But up to what point?

According to the self-medication model or coping hypothesis (1), addicted patients cannot really be trusted because of an inherent defect in their psychological coping. Based on this rationale, it has become widely accepted that people seeking treatment should be in an extremely well-structured environment where they would have as little opportunity to relapse as possible. In contrast, disease-oriented approaches consider addicted patients to have a chronic illness (2). The disease model does not lead

to an especially structured environment (3).

One feature of a strong environmental structure is that a treatment facility is accessible seven days a week. Some methadone maintenance clinics are open every day, primarily because of the conviction that patients will abuse a take-home dose of methadone either by selling it or by drinking it on the day they take it home rather than waiting until the next day. Such patients either would risk overdose or would need to buy heroin the following day. The study reported here examined whether this fear is warranted.

Take-home methadone is known to be a powerful therapeutic tool in methadone maintenance treatment (4,5), and take-home privileges are often used as a reward contingent on abstinence from street drugs. The study reported here examined patient outcome after a seven-day clinic in Israel decided to close on Saturday, the Sabbath. In Israel, no public transportation is available on Saturday, and

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getting to the clinic was difficult for some patients when Saturday attendance was required. However, staff members were concerned that the therapeutic value of take-home methadone might be reduced if all patients received a take-home dose one day a week regardless of their abstinence from street drugs. This naturalistic study assessed patient outcome in terms of treatment dropout and use of heroin.

Methods

The clinic is situated in the heart of the Tel-Aviv urban area and is affiliated with a major university medical center. Its policy is long-term methadone maintenance (2,3). The clinic population is similar to other samples of Israeli patients on methadone maintenance therapy (6). Eighty percent of the clinic's patients are males between the ages of 35 and 45 years. About two-thirds are of Sephardic origin. Thirty percent work full or part time, and the rest are unemployed. Most patients have a long history of addiction ($\text{mean} \pm \text{SD} = 14.2 \pm 7.6$ years). Most began to use heroin in their mid-twenties. Fifty percent have a history of criminal activity and have served prison sentences before starting treatment.

The clinic uses methadone pharmacotherapy in conjunction with appropriate medical and psychological treatment. Patients undergo an average of two random, observed urine tests each week. Urine samples are analyzed at an off-site laboratory using the EMIT method (7). Analyses detect methadone, opiates, benzodiazepines, amphetamines, cocaine, and cannabis.

The clinic instituted the Saturday closure in late February 1996. The study examined two six-month periods: September 1995 to February 1996 and March 1996 to August 1996. A total of 144 patients were treated during these two periods. The results of urinalyses for heroin and the retention rate for both six-month periods were compared. In addition, the results of urinalyses were compared for the month preceding and the month following the Saturday closure. A third comparison was made for all patients for whom we had at least two

months of urinalysis data in each six-month period.

Except for the introduction of the Saturday take-home dose for all patients, no changes were made in the clinic protocol during the two study periods. Clinic patients receive one take-home dose at three months if urinalysis indicates that they have maintained abstinence from street drugs. Patients who are abstinent for four months receive a second take-home dose, and so on—up to a maximum of six take-home doses. Thus patients who remain abstinent are eventually required to come to the clinic only once a week to drink one dose of methadone and to pick up their methadone for the other six days. However, if urinalysis results are positive for any substances other than methadone, all take-home privileges are suspended, and patients must re-earn take-home privileges according to the protocol.

Results

Pairwise *t* test comparisons between periods indicated no significant changes in the proportion of patients receiving take-home doses (other than the Saturday dose) after the closure was instituted. Of the 131 patients attending the clinic in the first six-month period, 39 (30 percent) had take-home privileges ($\text{mean} \pm \text{SD} = 3.58 \pm 1.90$ doses), compared with 37 of 133 patients (28 percent) in the second six-month period ($\text{mean} \pm \text{SD} = 4.24 \pm 1.66$ doses). Of the 116 patients attending during the month before the Saturday closure, 28 (24 percent) had take-home privileges ($\text{mean} \pm \text{SD} = 4.14 \pm 1.65$ doses), compared with 35 of 122 patients (29 percent) the month after closure ($\text{mean} \pm \text{SD} = 4.13 \pm 1.66$).

The mean number of urinalyses per patient per month was similar for both periods— 6.71 ± 1.85 for the period before Saturday closure and 6.51 ± 1.86 for the period after.

The retention rates for the two periods were examined using a survival analysis, with time in treatment as the dependent covariate. Of the 131 patients attending the clinic in the six months before the Saturday take-home dose was introduced, 14 left treatment, for a dropout rate of 10.7

percent. Of the 133 patients attending in the six months after, seven left treatment, for a dropout rate of 5.3 percent. Although the rate was roughly halved during the second period, the difference was not statistically significant.

A series of statistical analyses compared positive tests for heroin in the two periods. A total of 84 patients attended the clinic for the entire 12 months of the study period. Of these, 19 percent tested positive for heroin in the first six-month period and 21 percent in the second—not a significant difference. However, when the analysis focused more narrowly on the month before and the month after the Saturday closure, a trend could be seen. Of the 114 patients who attended the clinic for both of these months, 26 percent tested positive for heroin in the first month and 31 percent in the second month ($p = .06$). A similar analysis focused on patients with at least two consecutive months of data in each six-month period ($N = 109$). Fifty-one percent tested positive for heroin in the first period, and 46 percent in the second, which was not a significant difference.

For all comparisons of urinalysis results, Pearson correlations were done comparing paired differences of each *t* test with time in treatment up to the onset of the study to assess the potential biasing impact of unequal time in treatment. Correlations were all lower than .14 and were not significant. All the sample sizes were large enough to avoid type II error at a power level of .80 for medium effect sizes at significance levels of .01 and .05 (8).

Discussion and conclusions

Heroin-addicted patients are often difficult to treat, and many treatment providers regard any changes in the treatment protocol as threatening to the basic supportive and protective environment they feel is necessary for these patients. Giving the responsibility for self-administration of methadone—even for one day a week—to patients who may not be ready to assume this responsibility was a concern of many staff members at our clinic. They feared that patients would resume or increase their use of drugs.

However, this study has shown that

these fears were not realized. Changing the protocol of take-home privileges— that sine qua non of the therapeutic armamentarium in methadone maintenance programs— did not reduce the efficacy of treatment. We believe that this finding can be attributed to two factors— maintenance of our patients at the appropriate methadone dosage (9) and the “holding” function of the clinic. Apparently these two factors were powerful enough to keep patients relatively responsible for their own welfare.

The findings raise questions related to the treatment approach used in methadone maintenance programs. Are therapists sometimes overprotective in such settings? Are patients not given enough personal responsibility in a system that anxiously controls them? Does the treatment approach based on the self-medication model of addiction (10) create an atmosphere in which patients are too carefully protected from themselves? These issues are beyond the scope of

this study, but they warrant further research.

Methadone maintenance programs are often understaffed and poorly financed, and staff are often overworked. The findings suggest that clinics can permit themselves to close at least one day a week with no significant change in patient outcomes. Not having to attend the clinic for one day a week would make patients' lives easier. In addition, a six-day schedule would reduce some of the workload and enable clinics to function more economically. ♦

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