# Methadone maintenance was more effective for treatment retention for opioid dependence than psychosocially enriched detoxification

Sees KL, Delucchi KL, Masson C, et al. **Methadone maintenance vs 180-day psychosocially enriched detoxification for treatment of opioid dependence. A randomized controlled trial.** JAMA. 2000 Mar 8;283:1303-10.

### QUESTION

In adults with opioid dependence, do standard methadone maintenance (MM) and methadone-assisted detoxification plus intensive psychosocial services lead to similar outcomes?

### DESIGN

Randomized {allocation concealed*}†, unblinded,* controlled trial with 12-month follow-up.

### SETTING

A Veterans Affairs medical center in San Francisco, California, United States.

### PATIENTS

179 nonveteran adults who were ≥ 18 years of age (mean age 39 y, 59% men); had a diagnosis of opioid dependence according to the *Diagnostic and Statistical Manual of Mental Disorders, Revised Third Edition*; and tested positive for opioid use and negative for methadone use. Exclusion criteria were contraindications to methadone treatment, psychiatric medical conditions that interfered with treatment, pregnancy, lactation, concurrent substance-abuse treatment, no signs of opioid withdrawal on 3 occasions, methadone treatment in the previous week, participation in a follow-up phase of a previous methadone detoxification research protocol, or inability to participate for 12 months. Follow-up was 76% at 6 months and 75% at 12 months.

### INTERVENTION

Adults were allocated to MM ($n$ = 91) for 14 months or to 120 days of methadone-assisted maintenance and 60 days of methadone-assisted detoxification with intensive psychosocial services and 8 months of aftercare (M180) ($n$ = 88). The initial methadone dose was 30 mg/d, which was increased to 80 mg/d within the first 3 treatment weeks. The maximum dose was 100 mg/d, which was reached by day 44.

### MAIN OUTCOME MEASURES

The main outcome was treatment retention. The following outcomes were also assessed but had < 80% follow-up: opioid and cocaine use (assessed by self-report and urine screening test); HIV risk behaviors (Risk of AIDS Behavior scale score); and function in employment, drug use, alcohol use, legal, family, and psychiatric problem areas (Addiction Severity Index).

### MAIN RESULTS

Analysis was by intention to treat. Patients in the MM group remained in treatment longer than did patients in the M180 group (median 439 d, 95% CI 413 to 441 vs 174 d, CI 161 to 181; $P$ < 0.001). More patients were discharged from treatment for noncompliance in the M180 group than in the MM group (Table).

### CONCLUSION

In adults with opioid dependence, treatment retention was greater for methadone maintenance than for methadone-assisted detoxification plus intensive psychosocial services.

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*For correspondence: Dr. S.M. Hall, Department of Psychiatry, University of California, San Francisco, 401 Parnassus Avenue, Box 0984-TRC, San Francisco, CA 94143-0984, USA. FAX 415-476-7677.*

*See Glossary.

†Information provided by author.

**Methadone maintenance (MM) vs methadone-assisted detoxification and psychosocial services (M180) for opioid dependence‡**

| Outcome at 1 y | MM | M180 | RBI (95% CI) | NNT (CI) |
|---|---|---|---|---|
| Treatment retention | 74% | 55% | 35% (8 to 71) | 6 (4 to 20) |

‡Abbreviations defined in Glossary; RBI, NNT, and CI calculated from data in article.

## COMMENTARY

In this study by Sees and colleagues, MM is compared with a detoxification package involving an identical methadone dose followed by detoxification and aftercare (M180). MM resulted in better treatment retention than did M180 and lowered HIV risk and legal status scores, which is no doubt a reflection of increased illicit drug use in M180. Treatment retention in the M180 group was adversely affected by receipt of an intensive psychosocial intervention and rapid opiate detoxification in a context where most patients did not want to detoxify.

M180 had about 10% to 15% more discharges than did MM during the first 4 months (even though the medication used during this period was identical in both groups), presumably because of the more stringent attendance requirements (1.25 vs 3 to 4 hours per wk). The detoxification phase in M180 was 60 days and involved a weekly 10-mg methadone reduction from an average starting dose of 85-mg methadone, which is likely to have generated prolonged mild-to-moderate opiate withdrawal symptoms. Only 50% of patients in this group reported wanting to stop illicit opiate use in addition to their methadone, and no doubt even fewer would have wanted complete opioid detoxification.

Failure to attend therapy sessions resulted in discharge, but continued use of heroin or other illicit drugs did not. Indeed, 60% to 70% of participants continued to use illicit opiates (even when on maximal methadone treatment in both groups), which increased to about 90% after methadone termination in the M180 group. 50% to 70% of patients also continued to use cocaine during the study. These high rates suggest that the psychosocial intervention was insufficiently targeted at this clinically important goal.

For clinicians, this study shows the importance of targeting illicit drug use with a psychosocial intervention, the dangers of compulsory intensive psychosocial treatments, and the necessity that those who undergo therapeutic detoxification must really want to do so and are prepared to tolerate the level of suffering required.

*Fergus Law, MBChB*
*University of Bristol*
*Bristol, England, UK*

  