ECONOMICS

A programme of methadone maintenance plus moderate counselling services was cost effective

Kraft MK, Rothbard AB, Hadley TR, et al. *Are supplementary services provided during methadone maintenance really cost-effective?* *Am J Psychiatry* 1997 Sep;154:1214-9.

Objective

To determine the cost effectiveness of 3 support levels in a methadone maintenance programme.

Design

Cost effectiveness analysis using data from a 24 week randomised controlled trial and 6 month follow up.

Setting

Methadone maintenance clinic of a Veterans Affairs hospital in Philadelphia, Pennsylvania, USA.

Patients

100 patients who were admitted to a methadone maintenance clinic (mean age 43 y, 85% men, mean duration of heroin use 16 y). All patients completed a 6 month follow up period at the end of the 24 week trial.

Intervention

All patients received methadone, 60 to 90 mg/day, and were allocated to 3 support levels: minimum (methadone plus 1 counselling session/mo) (n=31); counselling plus methadone (methadone, 3 counselling sessions/wk, and behavioural interventions) (n=36); or enhanced (methadone; 7 counselling session/wk; and extended on site medical, psychiatric, employment, and family therapy services) (n=33). During the 6 month follow up period, all patients continued to receive the counselling plus methadone level of treatment.

Main cost and outcome measures

Medical needs, welfare dependency, days of illegal activity, illegal income, psychological problems, drug use, and increased employment.

The cost effectiveness ratio was constructed using salary and benefits figures of the professional staff, average contact time per treatment episode, number and type of service contacts per client, and client outcome measures. Costs were in US dollars.

Main results

At 24 weeks, patients who received enhanced methadone services had better outcomes than patients in the other 2 groups on all measures. At 12 months, however, patients who were originally allocated to the enhanced methadone services group had superior outcome only for level of abstinence from heroin (p=0.02). The cost analysis showed that the counselling plus methadone programme was the most cost effective treatment for abstinence from heroin and cocaine. The annual cost per abstinent client was \$16 485 for minimum services, \$9804 for counselling plus methadone services, and \$11 818 for enhanced services.

Conclusion

A 24 week programme of methadone maintenance plus triweekly counselling sessions and behavioural sessions was more cost effective than lower or higher support programmes of the same duration.

Source of funding: Department of Veterans Affairs.

For article reprint: Dr M K Kraft, Robert Wood Johnson Foundation, College Road East, P O Box 2316, NJ 08453-2316, USA. Fax +1 609 514 5451.

Abstract and commentary also published in *Evidence-Based Medicine* 1998 May-Jun.

Commentary

The study by Kraft *et al* is important because few of its kind have been published despite the service relevance of the issue. Considerable consensus exists about the benefits of methadone maintenance and there is reasonable scientific evidence to support a dosage range from 60-90 mg. Limited work, however, has been done on the need for frequent dosing, on the effect of psychosocial interventions, or on the setting in which methadone treatment is delivered.

The original study by McLellan¹ is often quoted and provides justification for counselling and other interventions, but this work has not been repeated elsewhere. The role of regulations and of service providers, in insisting on the need for counselling and other psychosocial interventions in a context where demand

for treatment far outstrips supply, has been criticised.

This debate has been too polarised. The real challenge is how to deliver good quality treatment, maintain high standards, and effectively treat the large population of addicts. The authors assessed the costs of delivering 3 levels of services and chose abstinence from heroin as their main outcome measure in a population of long term, middle aged heroin addicts in a Veterans Administration programme. The applicability of this cohort in such a setting may be limited when compared with other settings. Probably the most important finding, and one that is worthy of further exploration, is that of the diminishing returns to be gained from enhancing treatment intervention. Moderate counselling was shown to be the

most cost effective at 12 months, whereas enhanced treatment cost more to achieve minimal gains.

This study highlights the need for criteria for the cost effective delivery of methadone treatment. Given the complex multidimensional nature of outcome, including such costing factors as other health care, criminal justice, and other social costs, future studies will need to consider a range of outcomes when assessing overall cost effectiveness.

Michael Farrell, MRCP, MRCPsych
Rachel Churchill, MSc
John Strang, MD, FRCPsych
*Institute of Psychiatry
London, UK*

¹ McLellan AT, Arndt IO, Metzger DS, *et al*. The effects of psychosocial services in substance abuse treatment. *JAMA* 1993;269:1953-9.