4.5 Achievable and avoidable rewards and punishments improve methadone outcomes

Findings Systematically rewarding abstinence or penalising drug use improves outcomes in methadone programmes, but there are considerable limitations to the applicability of this approach.

Known as 'contingency management', abstinence verified by urinalysis is typically rewarded by something the patient values such as take-home methadone, increased doses, money, vouchers for goods or services, relaxed attendance requirements, or housing and other services. Positive urine tests are responded to by withdrawing or not providing such benefits. Though clinics routinely apply similar sanctions, contingency management structures this by consistently linking pre-determined 'reinforcers' to the client's behaviour.

A meta-analysis combining results from 30 studies of contingency management in methadone programmes found that these make a modest but worthwhile contribution to improving drug use outcomes. Of the variables investigated in several studies, the greatest reductions in positive urine tests were associated with using take-home doses as a reinforcer, delivering reinforcers immediately after the relevant test result, and testing at least three times a week.

In context *Additional reading* 1 for a fuller account. Contingency management has proved itself in the US context as an adjunct to methadone maintenance and as a key element in cocaine treatment. However, regimes are inherently limited in the degree to which behaviour can be punished without affecting treatment entry and retention, in the rewards which can be afforded, and in those which can be used to improve 'bad' behaviour rather than to sustain good behaviour. For example, the risk of diversion limits take-home methadone and the need for regular urine testing limits relaxation of attendance requirements. Tussles over rewards and punishments and the focus on drug use could damage the client-counsellor relationship, itself an important therapeutic force. These and other factors mean that most patients for whom methadone alone is insufficient do not respond to contingency regimes, and that those who do respond tend to be the less problematic. Rewarding completion of individually tailored therapeutic activities has been found to lead to greater and more lasting improvements in abstinence than rewarding abstinence. Such regimes also sidestep the expense and unpleasantness of urinalysis and give a positive focus to therapy sessions.

Practice implications The spread of supervised consumption regimes in the UK creates the scope for US-style contingency management of take-home doses, one of the most powerful motivators. Deterring treatment entry is unlikely to be a major concern while long waiting lists continue.

Granting or withdrawing rewards in increments in response to small, achievable changes works best and can be applied to more patients than requiring major changes to qualify for major punishments and rewards. Delivering punishments which the drug user cannot quickly start to retrieve removes the incentive to recover from lapses and relapses. This has implications for offenders subject to drug treatment and testing or drug abstinence orders. Procedures which do not respond to lapses until these have cumulated to an unacceptable degree and then deliver the unretrievable penalty of a lengthy sentence cannot be considered good practice.

Expense and conflict are avoided by regimes which, instead of targeting urinalysis results, target recovery-promoting activities. The difficulty is identifying such activities. Evidence so far is that individually tailored activities outside the clinic are more promising than requiring attendance at therapy sessions.

Featured studies Griffith J.D., *et al.* "Contingency management in outpatient methadone treatment: a meta-analysis." *Drug and Alcohol Dependence*: 2000, 58, p. 55–66. Copies: apply DrugScope.

Additional reading 1 Higgins S.T., *et al, eds*. *Motivating behavior change among illicit-drug abusers*. American Psychological Association, 1999. Copies through bookshops 2 Budney A.J., *et al*. *A community reinforcement plus vouchers approach: treating cocaine addiction*. US National Institute on Drug Abuse, 1998. Copies: apply US National Clearinghouse for Alcohol and Drug Information, fax 00 1 301 468 6433, e-mail info@health.org.

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