5.10 Injectable methadone maintenance suitable for more severely affected heroin addicts

Findings The first study to randomise opiate addicts to injectable versus oral methadone maintenance found that addicts with relatively severe problems gained most from injectables.

The study involved 39 opiate injectors seeking maintenance treatment at a London drug clinic. Apart from weekends, drugs were taken under supervision at the clinic; a room was set aside for injecting. Interviews with 33 showed that six months later crime and illegal drug use were much lower than at intake and physical and psychological health had improved. Most outcomes were slightly better on injectables, but only significantly so for satisfaction with treatment. However, the more problematic patients were, the more they reduced their use of heroin while receiving injectable methadone, a significantly effect among those with poor psychological or physical health. A similar effect was not seen on oral methadone. The requirement to return empty ampoules from weekend take-home doses (to prevent diversion) caused no problems.

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The injectables regime cost nearly five times as much. Oral methadone was four times as cost effective per heroin abstinent patient and six times for each patient no longer injecting illicit drugs.

In context The study was intended to test the feasibility of supervising injecting at a drug clinic and to identify which patients would benefit most. It was not a test of injectable methadone as normally used or as recommended in official guidelines; generally injectables are reserved for addicts not attracted by or who do not respond well to oral regimes. Other British reports of injectables prescribed to such patients have found greater reductions in heroin use. The featured study's design limited the potential for injectables to demonstrate an advantage with this minority. Self selection and the study's selection criteria would have tended to eliminate long-term frequent injectors and addicts who would have been satisfied only with injectables. Once in the study, patients were allocated at random. The test of whether more problematic and addicted clients benefited most divided the sample into halves, yet few clinicians believe half their patients need injectables. That despite these limitations injectables were found particularly suitable for more severely affected clients is all the more significant.

After the study the clinic changed to fortnightly supervision. This would reduce costs to three times the oral regime. Per patient abstinent from heroin, injectables would cost 2.4 times as much as oral methadone; per crime-free day, less than twice as much. Such ratios based on the full sample suggest that for more problematic patients injectable methadone could prove as cost-effective as oral.

Practice implications On-site supervision of methadone injecting is feasible and acceptable to patients. Whilst it may be desirable at first, daily supervision is costly and unnecessary for stabilised patients who conform to safety and anti-diversion rules. Less frequent supervision could be used to rectify risky injecting. Cost and the established benefits of oral methadone normally dictate that injectables are reserved for patients with the greatest health and drug problems who have not and/or will not respond well to oral regimes. Used in this way for a minority, injectable prescribing will gain the greatest benefits without unduly absorbing resources which could have funded three times as many oral methadone slots.

The main drawback is perpetuation of injecting and its associated health risks. However, these risks are greater if the alternative is injection of illegal heroin two or three times a day without medical care. Less acute mood swings and fewer injections make injectable methadone preferable to heroin for patients who can forgo heroin's psychoactive impact. In this sense, injectable methadone is intermediate between oral drugs and 'drug-of-choice' prescribing of heroin.

Featured studies Strang J., *et al*. "Randomized trial of supervised injectable versus oral methadone maintenance: report of feasibility and 6-month outcome." *Addiction*: 2000, 95(11), p. 1631–1645. Copies: apply DrugScope.

Additional reading Sarfraz A., *et al*. "Injectable methadone prescribing in the United Kingdom – current practice and future policy guidelines." *Substance Use & Misuse*: 1999, 34(12), p. 1709–1721. Copies: apply DrugScope.

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Thanks to Andrew Preston of Exchange Health Information for his comments.