PRESCRIBING HEROIN: DOES IT WORK?

Thirteen years ago, this was the first published account of what remains the world's only randomised test of injectable heroin prescribing.

A study in 1972-76 randomly allocated heroin addicts seeking a heroin prescription into two groups, one prescribed injectable heroin, the other only oral methadone. Twelve months later many more of the heroin group were still in treatment but more were injecting and using heavily, though there was less crime. The methadone group tended to polarise into 'very good' or 'very bad' outcomes in terms of drug use and criminality.

Martin Mitcheson & Richard Hartnoll

At the time of the study, Martin Mitcheson was consultant psychiatrist in charge of University College Hospital drug dependency unit in London and Richard Hartnoll was an independent assessor on the study.

IN DETERMINING the treatment of any one individual there are a number of conflicts liable to arise. Most patients presenting to treatment clinics ask for a maintenance prescription. The staff may take one of a number of decisions.

They may accept that the addict will inevitably continue to take drugs and that for their sake and/or for society's – which would suffer if the drug trade and drug use became more criminalised – it is acceptable to provide a long-term maintenance supply. They may determine that in the long term they may be able to influence this person to stop taking drugs, but that in the short term the patient's commitment to drugtaking is such that a temporary prescription is acceptable. They may decide – although the patient is indeed currently taking drugs – that he or she is at a point of crisis and that a refusal to prescribe drugs may be followed by a period of abstinence, whereas a steady prescription would confirm the patient in their addiction.

Another area of conflict arises because most patients associate with each other in a loosely connected drug using subculture, and the treatment offered to any one patient is usually made known to others outside of the clinic. Thus precedents may be set, limiting the clinic's ability to respond individually to cases.

These conflicts together with the conflict between the clinic's responsibility to individual patients and to society in general, do not admit of any simple resolution. A controlled trial carried out at University College Hospital provides certain information as to the consequences for individual behaviour, and thus some of the consequences for society, when a group of patients are either offered maintenance treatment with injectable heroin (HM), or refused this but offered methadone to be taken by mouth as methadone mixture (OM). Allocation to treatment regimes was on a random basis.

Approximately one third of the patients presenting to the hospital between February 1972 and February 1975 were considered suitable for the trial, the basic criteria being that:

– the patient should be demanding maintenance with injectable heroin; and

– the clinic accepted that the person was indeed so addicted that it was reasonable to consider this treatment.

Random allocation to oral methadone or injectable heroin was satisfactory in terms of most intake variables except that there were tendencies for the heroin group at intake to be more often in full time employment and less likely to have committed acquisitive offences over the previous month. Records were maintained both by the clinic and by an independent research worker. All patients were followed up outside of the clinic by the independent research worker for a period of 12 months whether or not they maintained their contact with the clinic.

All but 4 per cent of the patients were followed up to 12 months, and some anecdotal information was available for the remainder. The main outcomes of the trial are summarised below.

Heroin: less abstinence but less crime

The heroin group were generally more likely to have continued regular use of heroin than the group who were refused heroin from the clinic. In the twelfth month of the follow-up, 10 per cent of those prescribed heroin but 32 per cent of those prescribed methadone were consuming on average less than 5mg of opiates daily. Also at this time, 90 per cent of the heroin group but just 57 per cent of the methadone group were injecting regularly.

During the final three-month period, 5 per cent of HM voluntarily abstained from injecting for at least 31 days compared to 30 per cent of OM; and a further 12 per cent of the heroin group abstained for between three and 30 days compared to 28 per cent offered methadone. All these differences were statistically significant. However, there was no difference between the two groups in terms of their consumption of non-opiate drugs such as barbiturates, tranquillisers

In retrospect

One of the authors reassesses the contemporary significance of their unique test of prescribing injectable heroin to heroin addicts.

When this research was reported to drug clinic workers in 1977, it was with a very clear health warning that it did *not* provide a clear answer to what treatment was best. We did, however, suggest it provided valuable information as to the consequences of choosing different policies – choices that were painful and must be based on ethical as much as clinical considerations. Sadly, the response of many was to use this as a directive to change policy rather than as a basis for rational discussion.

What is the relevance of this research now? I suggest by far the most important implication is the duty on those who advocate a particular treatment to specify the goals and ascertain to what extent these goals are achieved. It should be noted that at a time when HIV was not a risk (but hepatitis and septicaemia were) the prescription of injectable drugs did *not* result in an improvement in health. Indeed, those prescribed heroin were more likely to require inpatient hospital treatment for a complication of drugtaking than those refused such a prescription. It should also be noted that, by comparison with the independent assessors, the clinical staff recorded a progressively over-optimistic view of their patients' progress over the year, and that this was particularly marked for those prescribed injectable heroin.

Many changes, including the risk of HIV transmission, have occurred in the drug scene between 1976 and 1990, but theorising pedagogues still abound.

Sadly, the capacity of project workers to evaluate their programmes with a rational assessment of their effects rather than to listen to unproven ideologies has changed very little.

Martin Mitcheson

Clinical Director, Avon Drug Problem Team

and amphetamines.

On the other hand, refusal to prescribe heroin tends to be associated with a higher conviction rate. During the year of the trial, 50 per cent of HM and 70 per cent of OM were convicted of a crime (approaching statistical significance).

Similarly, more of the heroin group were dependent on crime as a major source of income during the last month of the trial. This difference was statistically significant. However, if the initial slight tendency for the HM group to be more dependent on crime was taken into consideration, statistical significance was not maintained, though there was still a trend.

Denying heroin polarises outcomes

On various assessments of involvement with the drug subculture, time spent in the company of other drug users, etc, most of the heroin group maintained some contact with other drug users, but there was some reduction in the number categorised as having the most intensive contact.

On the other hand, denying heroin and offering oral methadone instead tended to polarise patients towards high or low categories: more maintained a high involvement, but a considerable proportion broke off all contact with other drug users. Similarly with the use of illegal drugs, most of those prescribed heroin continued with some illegal drug use, but the methadone group tended to polarise towards more intensive purchase in the illegal market, or to cease illegal drug use entirely.

The most statistically significant result was continued clinic attendance. At 12 months, 76 per cent of those offered heroin and 29 per cent of those refused it were attending the clinic regularly. This reflected the receipt of a prescription, with 74 per cent of HM and 29 per cent of OM in receipt of a prescription at the 12 month follow-up. There was no difference between the two groups in terms of employment, health, or death rate.

A question of priorities

Overall, prescribing heroin can be seen as maintaining the status quo, with most patients continuing to inject heroin regularly. Prescribing heroin is not associated with an improvement in social functioning or a reduction in consumption of illegal drugs, as is sometimes claimed. It may reduce the degree of involvement in criminal activity, especially in terms of arrests and conviction rates.

Refusal to prescribe heroin and offering oral methadone instead, constitutes a more confrontational response by the clinic and results in a higher abstinence rate. But this treatment is less acceptable to the client and the clinic fails to maintain regular contact with the group who continue to use illicit drugs, most of whom are fairly heavily dependent on criminal activity to support their drugtaking. Our findings suggest that that this group of persistent drug users come from particularly disadvantaged backgrounds in terms of social class, parental loss and incomplete education.

This research does not, therefore, provide a simple answer as to the success of the traditional British policy of offering maintenance with injectable drugs to heroin addicts. Rather, it highlights the conflict between different outcomes, none of which are ideal. Thus future decisions regarding treatment or control of addicts can ultimately only be resolved on the basis of ethical, social and political decisions.

These depend upon the relative importance given to the goal of abstinence and the achievement of a lifestyle free of involvement with the drug scene; the weight given to the client's request for a drug which, in the short term, will ameliorate his or her situation; the values which one places upon the consequences of someone continuing to support an illegal drug habit with the risk of chronic intermittent incarceration; and whether society can and will tolerate the continued (almost always minor in the United Kingdom) criminal activity of the persistent drug user.

It seems that refusal of heroin to confirmed addicts is more therapeutic, in terms of discouraging continued drug use, but leaves a group heavily involved in drugs outside of clinical control. This prospect might be considered undesirable to society, both because of the criminal activities of this group and because they form the basis of a potentially expanding illicit drug culture.

On the other hand, the implications of maintaining addicts with heroin include the prospect of a steadily accumulating clinic population of chronic heroin addicts who are rather less criminally involved and who buy illicit drugs in smaller quantities.

One ends up with a decision which requires clinical, ethical and political judgments, depending partly on the extent to which treatment should be concerned with the interests of individual patients or of society as a whole.

Theoretically it should be possible to determine which patient may benefit from either style of treatment, but individual patients certainly change in their capacity to respond, and once an injectable prescription has been initiated there is very considerable resistance to alteration. In addition, the drug subculture inevitably results in a rapid sharing of information regarding clinic policies, so the treatment offered to one patient is inevitably reflected in the expectations of others. ■

Sources

This article is based on the authors' presentation in December 1977 to the University of Cambridge Institute of Criminology Cropwood Round-Table Conference. It was published in *Problems of Drug Abuse in Britain* (D.J. West *ed*, Cambridge University, 1978). Academic publication of the study was in the *Archives of General Psychiatry*: 1980, *37*, p.877-884, when Richard Hartnoll was the first author.