Methadone maintenance treatment

Methadone is a proven and reliable treatment for opiate dependence, although provision in the UK is still patchy. **Bill Nelles** *discusses the origins of methadone treatment and the need for cooperation and advocacy in the provision of maintenance therapy.*

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IMAGINE A medical condition for which there is an effective and reliable treatment. This treatment does not cure the condition, but is very successful at reducing the harm that the disorder causes to the body. As an added benefit, it also saves society a great deal of money by reducing the costs that this condition causes to others.

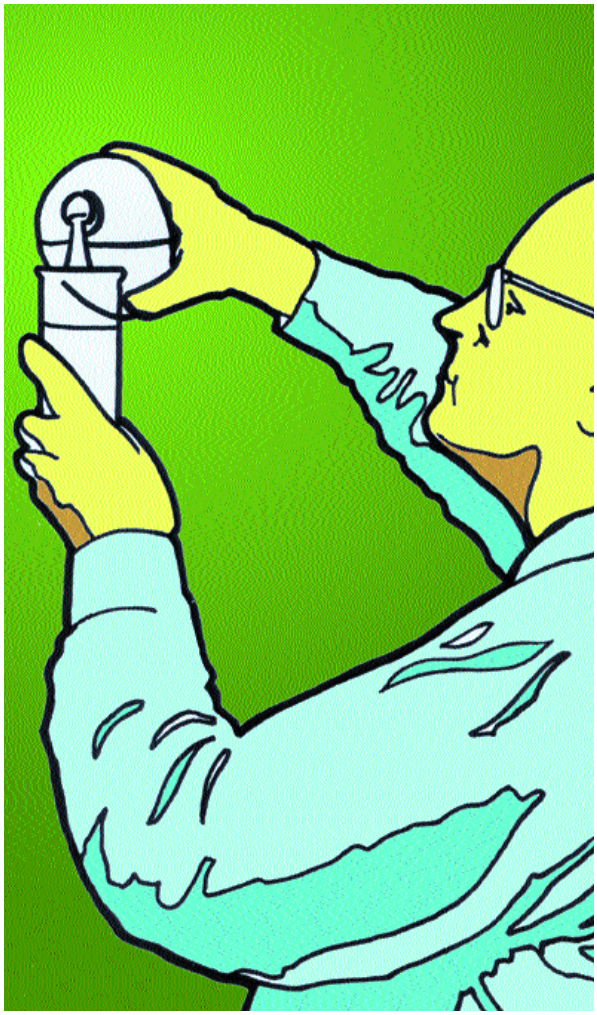
However, the treatment is controversial and can provoke tension between medical colleagues. Patients moving from one part of the country to another are often unable to obtain the treatment in their new locality, and many experience a return to their untreated condition with consequent damage to themselves, their family and their community.

I am writing about the use of methadone as a maintenance drug in the treatment of opiate dependency. It would be fair to describe methadone as a 'cinderella' of a drug. This is a great pity, as well-managed methadone treatment programmes demonstrate an extraordinary ability to lessen the long-term damage of active opiate addiction.[1]

Opiate dependence

Addiction to opiate drugs is a complex condition to manage. Although some people who become dependent are able to free themselves from their drug use with significant effort, many people find it extremely difficult or impossible to break the shackles of long-term dependent opiate use.

It is the current professional consensus that fast access services offering a wide range of interventions and tailored to the needs of the individual, produce the best treatment outcomes. An individual who wants to stop using drugs can get appropriate care; those for whom abstinence is not realistic or possible can receive treatment that aims for stabilisation and harm reduction.



Opiate dependence has always aroused strong and passionate views. For many years it was viewed as a problem of character and motivation, in fact, it is a chronic medical condition. Dependence may initially start with 'wilful' behaviour on the part of the patient concerned (i.e. the taking of drugs), but this is also true for many conditions that we treat without question.

The evidence for the existence of biological determinants is unequivocal,[2] particularly in those who continue their drug use after initial exposure. Depending on the drug involved, considerable changes occur in the brain chemistry of drug users. For opiate users, the changes that take place in the endorphin system and at receptor level are particularly important. Unless these changes are understood and addressed, it is a great deal more difficult to intervene and successfully manage this condition.

Opiate dependence remains consistent in terms of physical symptoms and clinical course, and the relative success of different treatments is broadly similar, despite cultural variances. There is a strong tendency for those who have been dependent to relapse, and even the presence of severely negative social consequences does not appear to act as a deterrent to opiate use.

The development of treatment

From the earliest days of the Rolleston Committee,[3] which validated the British system of controlled prescribing during the 1920s, it has been recognised in the UK that it is better not to treat addicts as criminals, but as patients. It has long been demonstrated that some people can manage chronic opiate dependency through controlled access to the drugs themselves. The focus of such treatment is to teach the addict to manage their appetite for opiates, and ingest them in the least harmful manner.

At one time diamorphine was much more widely available for maintenance prescriptions in the UK; there are several reasons why it is now much less used. The main problem is the management of tolerance and the dose escalations required. There is also a problem of being perceived not to have changed the drug user's circumstances. Methadone, with its orally effective single dose, is more acceptable – although whether or not it is the best strategy for managing long-term opiate addicts is still contentious.

Methadone is one of the most widely researched medications in the world. Its long-term effects are well documented and there are literally hundreds of medical studies that attest to its ability to lessen the harm of active addiction to illicit heroin.

The original research for methadone treatment was undertaken in the late 1950s and early 1960s by Vince Dole, a physician in New York specialising in metabolic research, and Marie Nyswander, a psychiatrist and addiction specialist. Their 1965 paper entitled *A medical treatment for diacetyl morphine (heroin) addiction: a clinical trial of methadone hydrochloride*[4] gave hope to both professionals and addicts that there were alternatives to the punitive treatments offered at most facilities in the United States (US). At the time, relapse rates of more than 90% of patients were commonplace in US treatment facilities and it became clear that a more pragmatic approach was required. The concept of methadone maintenance was developed.

Dole was fascinated by the metabolic process that underpinned addiction to the morphine class of narcotics. He theorised that long-term use of narcotics brought about a metabolic change in the brain chemistry of some drug users. This physiological process explained, at least in part, the high rate of relapse following detoxification. Dole recognised that many of the addicts who relapsed once detoxified wanted to stop using heroin, but were unable to put this into practice. Without an understanding of the metabolic condition that develops in habitual opiate users, dependency is very hard to treat.

Methadone maintenance treatment (MMT)

Dole and Nyswander showed that methadone, by virtue of its long duration of action, was capable of normalising opiate receptor activity when given in sufficient dose once-daily. Most importantly, methadone relieved the intolerable hunger for narcotics experienced by so many intractable opiate addicts, thus enabling addicts to stabilise their condition and focus on activities other than seeking drugs.

One of the criticisms sometimes made of methadone treatment is that patients are not drug-free. Therefore, it is argued, no real change has taken place in the patient's situation. However, the purpose and value of methadone treatment is in the acute phase of opiate dependency, at the time when a person is not able to stop their use of opiates. Methadone can enable a dependent drug-user to stop, or greatly reduce, their use of illicit opioid drugs. It can also assist in reducing and sometimes eliminating injecting drug behaviour. Achieving this goal alone has considerable value in terms of harm reduction to the individual.

Attitudes to treatment

Despite this ability to assist addicts in making positive changes, methadone treatment can carry an enormous stigma and few patients want others to know that they receive it. Patients who are taking methadone are often reminded that they are not drug-free, despite the fact that many patients take no narcotics other than the methadone they are prescribed. They receive little validation from society for their efforts, although many of them have struggled hard to escape from the cycle of illicit heroin use, and now live productively.

Because methadone patients are considered by some not to be genuine patients, they remain vulnerable to sudden changes in their treatment…

There are problems with methadone treatment in the UK: it is supplied from a patchwork of clinics which lack a clear consensus on the nature of opiate addiction and the best way to treat it. As a result, opiate-dependent individuals often find it impossible to move from one part of the UK to another, or risk the possibility of being unable to access methadone treatment, no matter how successful they have been in their response to this treatment. They often face something of an obstacle course when seeking treatment and may encounter a treatment ideology which is resistant to the use of methadone.

Because methadone patients are considered by some not to be genuine patients, they remain vulnerable to sudden changes in their treatment, particularly if they are unable to attend their regular clinic for some reason. Methadone treatment is more likely to be stopped suddenly than any other long-term treatment and it is not surprising that patients, no matter how stable and socially productive, greatly fear this possibility.

There is no other field of medicine in which professionals would disregard a long-term treatment provided by a medical colleague and capriciously end it, but methadone patients know this happens every day. The peculiarly British practice of stopping sometimes high doses of methadone on entry to prison has led not only to reports of psychotic panic reactions, but also suicides amongst withdrawing patients held in custody.

In fact, the likelihood of a patient achieving stability with methadone can be enhanced by a number of factors. An open relationship between doctor and patient is essential and there is a compelling argument for general practitioners (GPs) to be involved at some stage in providing this treatment. Many patients have known their GP for years and as a result a degree of trust has developed. However, trust is of little value if the physiological issues are neglected. An adequate dose of methadone is a prerequisite for success in terms of abstinence from illicit street opiates.

Certainly, methadone treatment is sometimes provided in ways that do not optimise its potential to promote change; The Methadone Alliance is actively working with health care providers and government to help remedy this.

The 1999 Department of Health Guidelines[5] attempt to address some of these problems, in particular, the lack of consensus about MMT and the problem of inadequate training and support of doctors. These comprehensive guidelines represent a fresh approach and emphasise the value of methadone treatment as a part of package of support for individuals addicted to opiates. They contrast sharply with clinical guidelines issued over the past two decades, which advised against methadone maintenance in general and certainly if outside a specialist setting.

The Methadone Alliance

Drug use can certainly cloud the perceptions on an individual and make it difficult to appreciate the reasons why a clinical decision has been made. However, most users, particularly long-term opiate users, are rational and reasonable people. Clinics must start to recognise this and bring clients into a close partnership so that both sides, beleaguered as they sometimes feel, can find strength from each other in a shared purpose.

It is to provide such support that The Methadone Alliance was founded in the UK last year. Emulating the successful American methadone advocacy programmes, the Alliance is an organisation that brings together patients with extensive and positive experiences of methadone treatment, and some of the most experienced doctors and professionals working in the field of drug treatment.

The latest Department of Health Guidelines[5] give unequivocal support for the oral methadone maintenance as an ethical response to opiate addiction, particularly for those unresponsive to other approaches:

> *Methadone Maintenance treatment, incorporating psychosocial interventions, can enable patients to achieve stability, reduce their drug misuse and criminal activity, and improve health. For these reasons, such treatment should form an important part of drug treatment services.*
>
> *The use of methadone has a strong evidence base. Methadone is one of the most researched of the available treatment modalities.*[5]

The United States National Institute of Medicine recently concluded:

> *The effectiveness of methadone treatment of opiate addicts has been established in many studies conducted over three decades. Methadone-maintained patients show improvement in a number of outcomes... Consumption of all illicit drugs, especially heroin, declines. Crime is reduced, fewer individuals become HIV positive, and individual functioning is improved.*[6]

It is my view that methadone does have specific pharmacological properties that make it an effective treatment for the long-term management of opiate dependency. Its long duration of action avoids the peaks and troughs of the shorter acting opiate drugs, and it greatly reduces and often eliminates injecting behaviour when it is adequately prescribed in oral form. ■

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