HEROIN IN BRITAIN

In this briefing, ISDD's information service pulls together what's known about heroin and its non-medical use in Britain, and highlights some of the issues involved in the UK's response to this use. *Heroin: ISDD drug notes 1* is also available from ISDD as a leaflet. The *Drug notes* series is intended to cover all the major drugs or drug groups misused in Britain. *Druglink* will feature these leaflets as they become available. See back page for further details.

Heroin is one of a group of drugs (the 'opiates') derived from the opium poppy with generally similar effects, notably the ability to reduce pain and anxiety. As well as being prescribed as pain-killers, opiates are used medically to treat coughs and diarrhoea. Opium is the dried 'milk' of the opium poppy. It contains morphine and codeine, both effective pain-killers, and from morphine it is not difficult to produce heroin which in pure form is a white fluffy powder with twice the potency of morphine.

In the nineteenth century opiates were a popular 'cure-all' and could be bought without prescription from grocers and other shops in the UK. Despite this free market, the level of abuse and health damage from opiates was relatively limited. However, opiates were a major cause of poisoning deaths and there were fears that the industrial working class might be using opiates as an intoxicant rather than a medicine. Doctors and pharmacists also wished for a monopoly on prescribing opiates for their own professional and economic interests, so in 1868 opiate sales were restricted to pharmacies. After the First World War, Britain implemented an international agreement and prohibited non-medical use of opium and opiates. Nevertheless, Britain has never denied that opiates, including heroin, could be prescribed to addicts who could not cope without the drug.

> "Yoo goo into druggist's shop o' market-day, into Cambridge, and you'll see the little boxes, doozens and doozens, a' ready on the counter; and never a venman's wife goo by, but what calls in for her pennord o' elevation, to last her out the week. Oh! ho! ho! Well, it keeps women-folk quiet, it do; and its mortal good agin ago' (ague) 'pains'."
> "But what is it?"
> "Opium, bor' alive, opium!"
> C Kingsley. *Alton Locke*. 1850.

This 'system', relying heavily on the doctor's discretion, worked well until the sixties when a group of younger addicts[1] emerged who recycled surplus heroin obtained from a few GPs. As a result, addiction spread and in 1968 all but a few specialist doctors were prohibited from prescribing heroin for addiction and hospital addiction treatment clinics were established. Not necessarily as a result, the mid-seventies saw the beginnings of a significant black market in imported illicitly manufactured heroin. Now nearly all the heroin misused in Britain comes illegally from abroad rather than from doctors.

A number of synthetic opiates (or opioids) are manufactured as pain-killers. These include pethidine (often used in childbirth), dipipanone (Diconal) and methadone (Physeptone), the drug often prescribed for opiate addiction. For simplicity the term opiates is used here to refer both to drugs derived from the opium poppy and to these synthetic substitutes. Drugs used in medicine may be sold under a number of trade names.

How opiates can be taken

To produce an effect opiates must be absorbed into the bloodstream. Most opiates, including heroin, are only poorly absorbed from the stomach after swallowing. Heroin is much more effective if it is sniffed, smoked or injected, so misusers will generally use these methods rather than 'waste' the drug by swallowing it. When sniffed, heroin is absorbed into the bloodstream in the nose. When smoked the heroin smoke is drawn into the lungs and very quickly enters the bloodstream. 'Chasing the dragon' is a way of smoking heroin by heating the powder and inhaling the fumes through a small tube. Heroin can be injected directly into the bloodstream through a vein; as with smoking the effects are practically immediate and also stronger, as none of the drug is 'lost' before entering the bloodstream.

Compared to other opiates, heroin is effective, acts quickly, is easy to dissolve in water for injection, and causes fewer side-effects like vomiting, facts which partly account for its relative popularity. Methadone is a synthetic opiate that (unlike most opiates) is effective when swallowed.

The law

Heroin and other opiates are controlled under the Misuse of Drugs Act, making it illegal to possess them or to supply them to other people without a prescription. The Act also bans unauthorised production, import or export. It is also an offence to allow premises to be used for producing or supplying these drugs.

The Misuse of Drugs Act divides drugs up into classes A, B and C. Maximum penalties are most severe for class A, least severe for class C.

'Trafficking' offences (producing or smuggling drugs, supply or intent to supply to other people) are more severely penalised than possession of drugs for personal use.

Heroin is in class A, where the maximum sentence for trafficking offences is life imprisonment plus fine; for possession, 7 years imprisonment plus fine.

Morphine, opium, methadone, dipipanone, and pethidine also appear in class A of the Act. Codeine and dihydrocodeine (DF118) are in class B. Dextropropoxyphene (Distalgesic, etc) is in class C. Some very dilute mixtures of codeine, morphine or opium (used as cough medicines or to treat diarrhoea) are exempt from most of the restrictions and can be bought over the counter from pharmacies. These include Actifed, Phensedyl. codeine linctus (all with codeine), Gee's Linctus, Collis Browne's mixture (opium) and kaolin and morphine mixture.

> Cigarette smoking is unquestionably more damaging to the human body than heroin.
> — Dr Vincent Dole in E Brecher. *Licit and illicit drugs*. Little Brown & Co, 1972.
>
> It was much easier to quit heroin than cigarettes.
> — Ex-addict, *New York Times*, 1971.

In practice relatively few offenders receive the maximum penalties allowed for in the Misuse of Drugs Act. In 1984, 40 per cent of those convicted of heroin offences were sentenced to immediate imprisonment, most of them for 2 years or less. Fines for heroin offences were usually between £20–£100.

Only specially licensed doctors can prescribe heroin or dipipanone for anything other than physical illness. This means most doctors cannot prescribe these drugs as a way of dealing with addiction. Apart from this, all opiates can be prescribed for their normal therapeutic uses. For instance, heroin is not uncommonly prescribed in Britain for the relief of severe pain in the terminally ill.

Users; how many and who?

Although licensed doctors can still prescribe heroin to addicts, most choose not to, so very little prescribed heroin reaches the illicit market. On the other hand, an illicit market in imported heroin has developed and in 1984 over 312 kilos of heroin were seized by British Customs. Since the late 1970s this smuggled heroin has become more and more easily available in Britain, and more people are using it and becoming dependent.

In 1983/4, illicit heroin was selling to users for about £60-80/gram, with sometimes wide regional variations. Relative to inflation, the price has halved since 1978. On average an addict might use ¼gm or more each day. More and cheaper heroin, coupled with the fact that heroin users and dealers no longer form subcultures separate from the wider society, mean that the drug is presently fairly easy to obtain.

Today, heroin on the illicit market in Britain originates largely from the Indian Sub-continent, though some still comes from SE Asia. At street level it is likely to have been diluted (or adulterated) with a

variety of powders of similar appearance, commonly lactose, glucose or mannitol (a laxative), but also chalk dust, caffeine, quinine, vitamin C and talcum powder. Recently heroin sold to users in Britain has been about 30-60% pure, the remaining 40-70% consisting of these various additives. Compared, say, with the USA, these purity levels are remarkably high.

Doctors must notify the Home Office of any opiate addicts they see in their practice[2]. During 1984 nearly 12,500 persons were notified. It is generally accepted that the number of people using opiates on a heavy and regular basis (approx. daily) is several times (perhaps five times) the number notified to the Home Office. Notified addicts generally inject and are very heavy users, but

Interviewer: Why did you try heroin again, if you got sick from it the first time?
Addict 1: Cause I liked, you know, like the high.
Interviewer: You said you got sick?
Addict 1: I got sick, but I got loaded. Got bombed . . . You get sick at the stomach, you know, but when you're loaded, you just don't care [You] just sit there nodding. [If you] feel sick, you just go, come back, and nod some more.
Addict 2: Well, I know one broad in particular. She begged me to give her . . . a shot, and she got deathly sick. And that was the last time she used it.
Interviewer: Did she say anything about it?
Addict 2: She said, if that's the way it is, she didn't want anything to do with it.

— W E McAuliffe. *A second look at first effects.* J. Drug Issues, 1975.

intermittent or 'recreational' use of heroin has developed amongst people in their late teens, the drug being sniffed or smoked rather than injected. Half the addicts first notified in 1984 were aged under 25.

Although spreading, the available surveys do not suggest that opiate use is yet widespread in the general population, with commonly 1 per cent or less of young people admitting any heroin use at all. Nevertheless in some areas (eg, deprived inner-city areas or amongst some well-off groups) recreational heroin smoking or sniffing may be quite common. For those who continue their use, injecting may become the preferred method.

In times of difficulty it is not unusual for heroin users to resort to other opiates, to sedatives, or to drinking large quantities of opiate-based cough medicines available without prescription from pharmacies; some people restrict their opiate misuse to these preparations.

Effects of using heroin

Opiates are effective painkillers, but they also produce a number of other physical effects. Like sedatives they depress the activity of the nervous system, slowing down breathing and heart-rate and suppressing the cough reflex. Opiates also increase the size of certain blood vessels (giving a feeling of warmth) and depress bowel activity (resulting in a tendency to constipation).

Rather than blocking the sensation of pain, heroin and other opiates make pain more tolerable by reducing the sufferer's emotional reactions to it, so although still felt the pain seems to matter less. More generally opiates cushion the user from the psychological impact of not just pain, but also hunger, discomfort, fear and anxiety. This relief from suffering is also experienced by many people as a positive feeling of well-being, contentment and happiness – a sense of being 'wrapped up in cotton wool'.

Even at doses sufficient to produce these feelings, the user is still capable of functioning adequately – s/he can, if necessary, think, talk and act coherently. At higher doses sedation takes over and the user becomes drowsy. Excessive doses produce stupor and coma, and possible death from respiratory failure. Overdose death is unlikely unless there are aggravating factors – other depressant drugs used at the same time (eg, alcohol), loss of tolerance (see below) or a dose of unexpected strength. There can also be fatal reactions to impurities injected with the heroin. With the uncertain contents and strength of 'street heroin', dangerous reactions of this kind can never be entirely ruled out.

The initial experience of heroin is not always pleasant. Especially after injecting there can be nausea and vomiting alongside or instead of pleasurable feelings. These unpleasant reactions fade with repeated use.

When injected into a vein, all the heroin is usually injected directly into the bloodstream at one go. This can intensify the initial effects into an almost immediate, short-lived burst of extremely pleasurable feelings, often described as a 'rush'. Other ways of taking heroin give less intense feelings, though after smoking the effects are also practically immediate.

And the consequences?

Tolerance refers to the way the body usually adapts to the repeated presence of a drug, meaning that more must be taken to produce the same effects. Tolerance develops to opiates such that someone attempting to repeat their initial experiences must increase the dose and/or change their method of administration. Injection into a vein maximises the effects of a given amount of heroin and produces a much more intense, immediate experience. So as tolerance develops (and perhaps as money runs short), there may be a tendency to move from sniffing or smoking heroin to injecting.

If the user is unable to step up the dose to overcome tolerance (eg, due to shortage of money or supplies), a point will be reached at which this dose will fail to recreate the desired effects. Even *if* the user is able to continue increasing the dosage eventually the same will happen – the person will be using the drug just to feel normal and avoid withdrawal effects. Tolerance also develops to the respiratory-depressant effects of opiates. This means that gradually increasing the dose does not in itself increase the risk of death through overdose. However, fatal overdoses can happen when opiate users take their usual dose after a break during which tolerance has faded.

After as little as several weeks on high, frequent doses of heroin, sudden withdrawal results in differing degrees of discomfort some compare to a bad bout of influenza. The effects start 8-12 hours after the last 'fix' and include aches, tremor, sweating and chills, sneezing and yawning and muscular spasms. Withdrawal effects fade in 7-10 days, but feelings of weakness and loss of well-being can last for several months. Abrupt opiate withdrawal is rarely life-threatening and is considerably less dangerous than withdrawal from alcohol or barbiturates.

Fear of withdrawal effects can be a strong inducement to continue using heroin (physical dependence). But even after these effects have faded many addicts go back to heroin. For this reason it is generally accepted that physical dependence is not as significant as the strong psychological dependence that can develop to the effects of heroin *and* the lifestyle of being a regular heroin user.

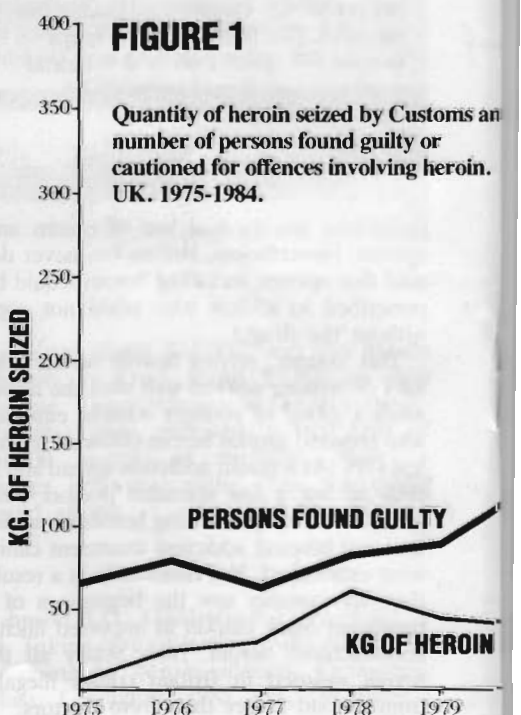
To be a regular heroin user is often to be drawn into a relatively tight community where relationships develop and then revolve around the daily, structured routine of buying, dealing, using and sharing heroin. As far as daily life is concerned, a purpose exists where possibly none did before, however negatively this purpose may be viewed by family and non-drug using friends. To stand any chance of remaining abstinent, the regular heroin user may have to reconstruct his/her life around non-drug activities and relationships, having first concluded that the reasons for continuing to use heroin are outweighed by the reasons for coming off.

Physical consequences

The physical effects of long-term heroin use are rarely serious in themselves. They include chronic constipation and menstrual irregularity. At higher doses chronic sedation can occur, but at moderate doses addicts can function normally. Women generally remain

FIGURE 1

Quantity of heroin seized by Customs and number of persons found guilty or cautioned for offences involving heroin. UK. 1975-1984.



fertile despite taking large doses of heroin, and pregnancy is possible. Diarrhoea during withdrawal may make the contraceptive pill ineffective.

However, the consequence of injecting opiates and of a drug-using lifestyle can be serious. Among regular injectors, there is commonly physical damage or infection associated with poor hygiene and the injection of adulterants. These include hepatitis, AIDS (through the sharing of needles), inflammation and obstruction of veins (which may lead to superficial veins being 'used up' as the user searches for healthy veins to inject), heart disease, lung disorder (as adulterants clog blood vessels in the lung).

Whether they inject or not, opiate addicts suffer from a high incidence of lung disease (especially pneumonia), caused by repeated drug-induced respiratory depression and decreased resistance to infection. Reduced appetite and apathy can contribute to disease caused by poor nutrition, self neglect and bad housing. Repeated heroin sniffing may cause nasal damage.

On the other hand, because opiates, in themselves, are relatively safe drugs, addicts in receipt of heroin or methadone on prescription and who maintain a stable, hygienic lifestyle can be indistinguishable from non-drug users and suffer no serious physical damage.

Opiate use during pregnancy results on average in smaller babies who may suffer severe withdrawal symptoms after birth. These can usually be managed with supportive therapy (which may or may not involve giving the baby drugs), until the withdrawal syndrome has run its course, but can be fatal in the absence of medical care. Opiate withdrawal during pregnancy can also result in foetal death, so the preferred option is usually to maintain the mother (and therefore the foetus) on low doses of opiates until birth. Appropriate pre-natal medical care can minimise risks to both mother and baby.

Issues in Britain's response to heroin

Stopping the supply

Heroin is a drug primarily smuggled into Britain from illegal production centres overseas. The upsurge in heroin use has focussed attention on the extent to which overseas nations can (or can be persuaded or helped) to clampdown on illicit opium cultivation and heroin production within their borders.

Recent British initiatives have concentrated on Pakistan, the country from which 80% of the heroin smuggled into Britain is said to originate. Several million pounds have been given to assist Pakistan in the eradication of opium poppy fields or to help encourage peasant farmers to replace opium with licit crops ('crop substitution').[3]

The government recognises that these efforts may only meet with limited success (opium tends to be grown in lawless, inaccessible frontier regions), and that even if they were successful, heroin production may simply shift elsewhere. Critics of this approach add that the licit global economic order perpetuates the disadvantaged position of Third World primary producer nations (opium growing nations included), encouraging the production of relatively lucrative illicit crops.

It is also suggested that political objectives sometimes encourage less than wholehearted opposition to heroin producing or trafficking groups. One recent example of this dilemma has arisen in Soviet-controlled Afghanistan, where the 'rebels' have stepped up their heroin production. To call upon the Soviet government to eradicate this development would amount to asking them to extend their control over the Western-supported Afghan opposition groups.

Other enforcement measures have attempted to make cost-effective use of resources (and minimise inconvenience to the public) by strengthening the drugs intelligence gathering/investigating capacity of Customs and police, rather than massively extending spot-searches at ports of entry or on the street.

Increased penalties

Recently the maximum penalty for trafficking in class A drugs (the category in the Misuse of Drugs Act which includes heroin) has been increased to life imprisonment. The government intends to introduce legislation permitting courts to freeze the assets of suspected drug traffickers and (on conviction) effectively confiscate assets or income that the defence is unable to show were not the proceeds of drug trafficking. These measures, though not aimed exclusively at heroin, have certainly been prompted by the increase in heroin smuggling and use.

Overprescribing doctors now supply only a small part of the opiates available on the illicit market. Nevertheless further measures to restrict prescribing have been taken (the restricting of dipipanone prescribing for addiction to licensed doctors) or proposed (the extension of similar restrictions to all opiates, a proposal recently rejected by the government).

Further controls are justified partly by the increasing involvement of private doctors in addiction treatment, by the physical damage caused by addicts injecting ground-up tablets obtained from doctors, and by fears that success in preventing illicit importation of heroin might be counteracted by increased pressure on doctors to supply opiates on prescription. But further controls over family doctors' prescribing to addicts have also been criticised as unnecessary infringements of clinical freedom and a likely deterrent to the involvement of GPs in addiction treatment.

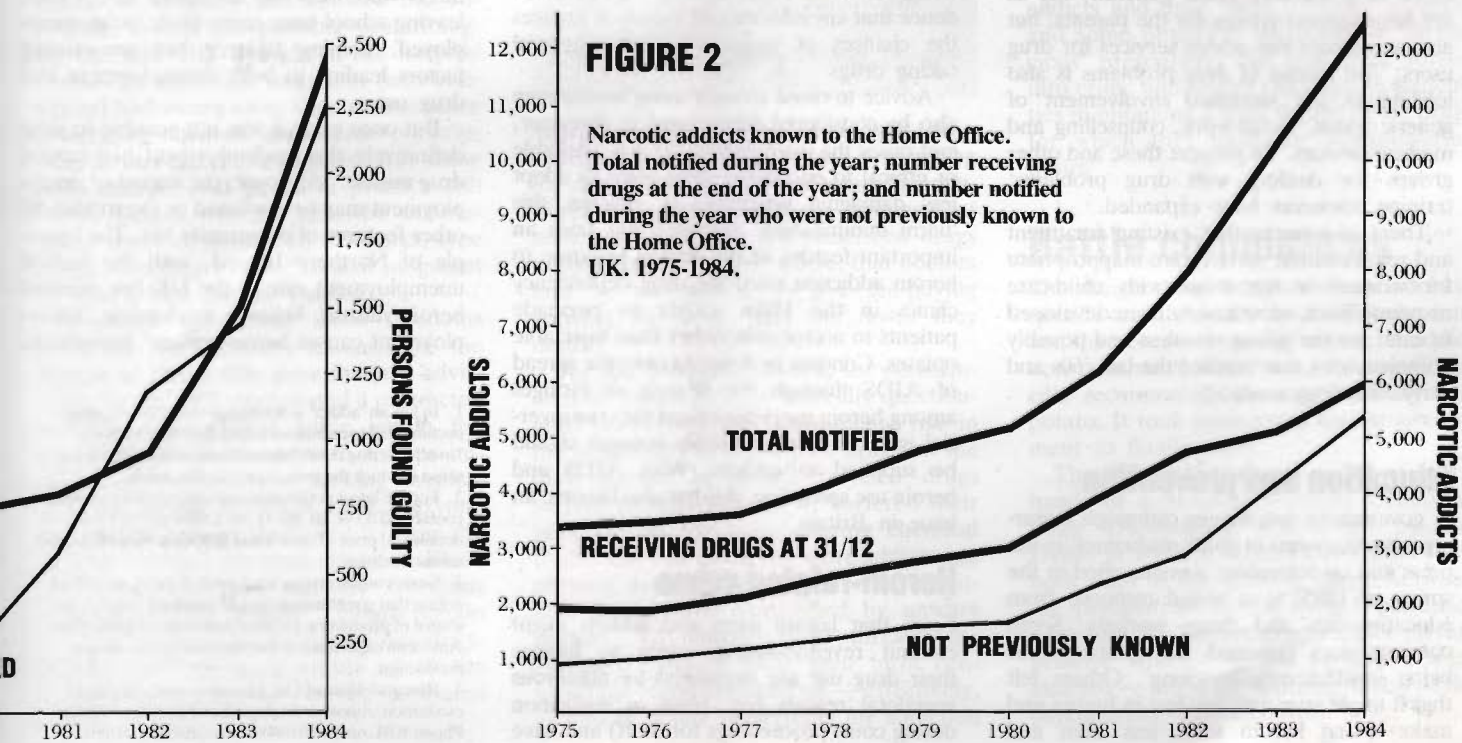


FIGURE 2

Narcotic addicts known to the Home Office. Total notified during the year; number receiving drugs at the end of the year; and number notified during the year who were not previously known to the Home Office. UK. 1975-1984.

Health and welfare responses

The NHS hospital drug dependency clinics established in the late '60s have continued to provide largely outpatient treatment to opiate addicts. This may involve counselling, psychological therapy and social work assistance, but the most contentious area has been the extent to which opiate drugs should be prescribed to remove the addict's need to resort to illicit supplies. This 'maintenance therapy', though still practised, has generally been abandoned in favour of 'fixed-term' prescription regimes usually lasting no more than six months.

Few doctors will prescribe opiates in injectable form to addicts. Most prefer methadone mixture, a non-injectable formulation taken as a drink. Doctors outside the clinics can still prescribe methadone (or any opiate other than heroin or dipipanone) for addiction, but are generally unwilling to take on addict patients. Nevertheless pressure on the relatively few clinics is such that general practitioners have come to rival the hospitals as a treatment resource. This development is also attributed partly to more restrictive prescribing policies in the clinics. It may also be a reflection of the fact that opiate addiction has spread to younger and less deviant groups who tend to remain settled in their local communities.

It is likely that about four-fifths of opiate dependents are not in treatment at any given time. These and other heroin users may receive help from voluntary sector day centres, advice, counselling and social work services specialising in drug problems. Such centres may take the major role in supporting and rehabilitating their clients, or may refer them to clinics or to one of the residential rehabilitation houses, where drug dependents who have ceased drug use stay for up to 18 months to reconstruct their personal and social life.

With the increasing spread of drug problems (particularly heroin-related problems) amongst young people, volunteer services based on parental concern have become more of a feature. These generally act as self-help support groups for the parents, but also sometimes run advice services for drug users. The spread of drug problems is also leading to the increased involvement of generic youth, social work, counselling and medical services. To prepare these and other groups for dealing with drug problems, training resources have expanded.

There is concern that existing treatment and rehabilitation services are inappropriate for women or for those with child-care responsibilities, most having been developed to cater for the young, rootless and possibly homeless men that typified the late '60s and early '70s drug scene.

Education and prevention

A government anti-heroin campaign featuring advertisements in youth magazines, in the press and on television, was launched in the spring of 1985, to a mixed response from educationalists and drugs workers. Some commentators criticised the campaign for being insufficiently 'shocking'. Others felt that it might stimulate interest in heroin and make taking heroin seem less alien and unthinkable ('normalise' heroin use). There were also fears that the adverts' portrayal of inevitable dependence and physical deterioration after taking heroin might provide unfortunate 'role models' for those youngsters it failed to deter from trying the drug.

A small-scale evaluation of the campaign's impact queried how far any such campaign could succeed in areas of marked deprivation where heroin use is widespread and familiar, and expressed concern that in other areas it might help to reduce the audience's 'instinctive' repulsion for heroin and for injecting. A subsequent 'before and after' quantitative evaluation found that the campaign had probably 'firmed up' young people's existing anti-heroin attitudes and led to a greater awareness of health risks of heroin use. There was no evidence of decreased heroin use.[4]

Less controversially, the upsurge in heroin use has stimulated educational initiatives including videos and teaching packs for use with young people in schools, youth training and other youth-work settings. One favoured objective is to give youngsters the social skills to refuse drug offers from their peers, an approach which recognises that friends of the same age are the usual source of drugs for young people.

> Boils and abscesses plague the skin; gnawing pains rack the body. Nerves snap; vicious twitching develops. Imaginary and fantastic fears blight the mind and sometimes complete insanity results. Often times, too, death comes — much too early in life . . . Such is the torment of being a drug addict; such is the plague of being one of the walking dead.
> — US Supreme Court, 1962.

At the same time as modern education packages are being developed, more traditional materials based on 'shock-tactics' have been revived or produced, and are also widely favoured despite criticism from health educationalists. There is no compelling evidence that any educational approach reduces the chances of young people in general taking drugs.

Advice to those already using heroin may also be considered educational in character, and raises the issue of how far it is advisable or ethical to encourage drug users to adopt less damaging practices. In practice this 'harm minimisation' approach has been an important feature of the British response to heroin addiction since the drug dependency clinics in the 1970s sought to persuade patients to accept oral rather than injectable opiates. Concern in America over the spread of AIDS through the sharing of syringes among heroin users has raised the controversial issue of whether sterile syringes should be supplied to addicts. With AIDS and heroin use spreading, this has also become an issue in Britain.

Heroin-related crime

Fears that heroin users and addicts might commit revenue-raising crime to finance their drug use are supported by numerous anecdotal reports (eg, pleas in mitigation during court proceedings for theft) and have gained credibility from research in the deprived areas of Glasgow, where the majority of users interviewed stole to support their habit.

However, it is impossible to say whether these crimes might not have been committed in any event, if only to finance the purchase of alcohol, tobacco or other consumer goods. Studies abroad have found that drug use may lead to crime, that the reverse may be the case (as the proceeds of crime are spent on drugs), or that both crime and drug use may be caused by a third factor.

It should be remembered that only a proportion of heroin users need (as opposed to choose) to turn to non-drug crime — occasional users and those with sufficient resources can support themselves by legal means, whilst more regular but less affluent users may be able to manage from the proceeds of small-scale dealing in drugs.

To sum up, whilst it is undoubtedly true that many individuals are led into crime by their involvement with heroin, it is unclear how far the overall level of non-drug crime has been affected by the spread of heroin.

Unemployment

Recent political debate over where the 'blame' lies for increased heroin use in Britain has concentrated on the extent to which unemployment and poverty may be a factor, young people turning to heroin to cope with boredom and the lack of prospects or alternative pursuits.

What is clear is that nationally heroin use and unemployment appear to have increased more or less in parallel and that studies of young heroin users find a higher than expected rate of unemployment. Recent British studies have strongly suggested that behind this correlation lies a causal link, with unemployment and deprivation helping to cause misuse of whatever drugs are available on the illicit market.

One study found that from an apparently 'normal' sample of teenage school children, those who went on to misuse drugs after leaving school were more likely to be unemployed, helping to rule out pre-existing factors leading to both unemployment and drug use.

But once again it was not possible to state definitively that unemployment had caused drug misuse. Moreover, the impact of unemployment may be mediated or overridden by other features of community life. The example of Northern Ireland, with the highest unemployment rate in the UK but minimal heroin misuse, belies a mechanistic 'unemployment causes heroin misuse' hypothesis.

1. In law an 'addict' is defined as someone who has become so dependent on a drug that they have an "overpowering desire" to continue its use. This is the sense in which the term is used in this article.
2. For the latest notification and enforcement statistics contact ISDD or ask the Home Office (01-213 3388) for details and price of their latest statistical bulletin on the misuse of drugs.
3. Some commentators have posited the more radical notion that governments should purchase crops at the source of production for later destruction although the American experience is that this merely encourages production.
4. Research Bureau Ltd. *Heroin misuse campaign evaluation: report of findings.* London: RBL, 1986. Phone RBL on 01-480 9600 for availability details.