

# Criminology and Criminal Justice

<http://crj.sagepub.com>

---

## **Assessing UK drug policy from a crime control perspective**

Peter Reuter and Alex Stevens

*Criminology and Criminal Justice* 2008; 8; 461

DOI: 10.1177/1748895808096473

The online version of this article can be found at:  
<http://crj.sagepub.com/cgi/content/abstract/8/4/461>

---

Published by:



<http://www.sagepublications.com>

**Additional services and information for *Criminology and Criminal Justice* can be found at:**

**Email Alerts:** <http://crj.sagepub.com/cgi/alerts>

**Subscriptions:** <http://crj.sagepub.com/subscriptions>

**Reprints:** <http://www.sagepub.com/journalsReprints.nav>

**Permissions:** <http://www.sagepub.co.uk/journalsPermissions.nav>

**Citations** <http://crj.sagepub.com/cgi/content/refs/8/4/461>



# Assessing UK drug policy from a crime control perspective

PETER REUTER AND ALEX STEVENS

*University of Maryland, USA and University of Kent, UK*

## Abstract

---

Over the entire last quarter of the 20th century the British drug problem worsened, despite the implementation of a variety of approaches and commitment of substantial criminal justice and other resources. The link between chronic use of expensive drugs and property crime makes this experience important for understanding trends in crime and justice in Britain. The worsening of the problem can be seen in the growing number of new heroin users each year over almost the entire period 1975–2000, on top of which was layered, starting in the late 1990s, the first major outbreak of chronic cocaine use. This was not the common pattern in Western Europe over that time and by 2000 the UK had Western Europe's most serious drug problem.

One component of the response has been increasing enforcement against drug markets; in just the decade 1994–2005 the number of prison cell years handed out in annual sentences has tripled. Even with this expansion we estimate that the annual probability of incarceration for a class A drug dealer is only approximately 6 per cent. Since 2000 there has also been a massive increase in treatment resources linked to the criminal justice system. The number of treatment assessments in recent years has been as large as 58 per cent of the number of persons estimated to be problematic users of Class A drugs. The government believes that drug policy has contributed to the decline in crime in the UK since 2000. Using what is known about treatment outcomes, we argue that despite impressive evidence of effect on individual level offending, the effect of treatment expansion in reducing overall crime rates is likely to have been limited.

## Key Words

---

crime • drugs • enforcement • estimation • prevention • treatment

## **Introduction**

Illicit drugs have been a prominent issue in public policy in the United Kingdom at least since the 1970s, much discussed by politicians and the media. Prime Ministerial interventions even over matters as minor as the classification of marijuana are a staple of recent political debates. Over the entire last quarter of the 20th century the British drug problem worsened, despite the implementation of a variety of approaches and commitment of substantial criminal justice and other resources. Post-2000 there are consistent indicators that drug use has declined in the general population and that the prevalence of dependence on heroin and cocaine may have stabilized.

The link between chronic use of expensive drugs and property crime makes this experience important for understanding trends in crime and justice in Britain. This article, based on a larger study (Reuter and Stevens, 2007) supplemented by later analysis of the estimation of drug-related crime (Stevens, 2008), assesses the effectiveness of efforts to reduce drug markets and dependence and how these have affected crime in Britain. What is striking is that, despite a relatively pragmatic and evidence-oriented approach to drug policy in the past decade, there is little indication of substantial reductions in drug problems. Our final section argues that drug policy can play only a modest role in reducing drug use, though it can play a slightly more significant one in reducing drug-related crime.

## **The growth of the British drug problem**

### *Drug use*

Recent years have seen debates about whether drug use has become 'normalized' in the UK (Parker et al., 1998), with widespread use by young people, 'social accommodation' of 'sensible' users by young people who do not use drugs (Parker, 2005) and 'cultural accommodation' of drug use, including frequent drug references in advertising, television programmes and films (Blackman, 2004). Others have stressed the abstinence of many young people and continuing normative disapproval of drug users (Shiner and Newburn, 1999). This debate has recently moved towards synthesis (Measham and Shiner, 2008) and neither side has disputed that there have been very important increases in drug use in recent decades. The most widely used drug is cannabis. Despite recent concerns about the rapid expansion of the market for high-potency sinsemilla cannabis (known as skunk), often grown by commercial growers inside the UK, heroin and crack cocaine are considered to be more important than cannabis in influencing levels of crime (PMSU, 2003). So we focus here on trends in the use of these two drugs.

The available indicators of heroin and cocaine use are notoriously unreliable. Drug users may be reluctant to acknowledge use when interviewed

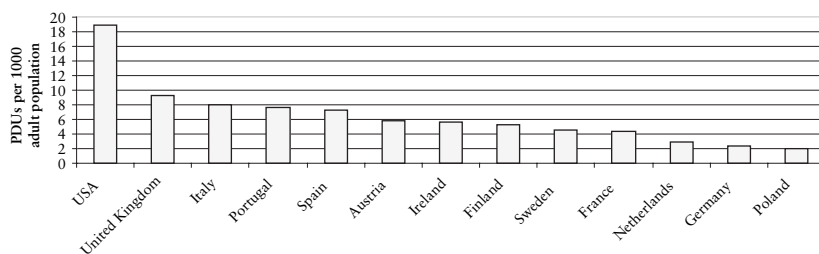


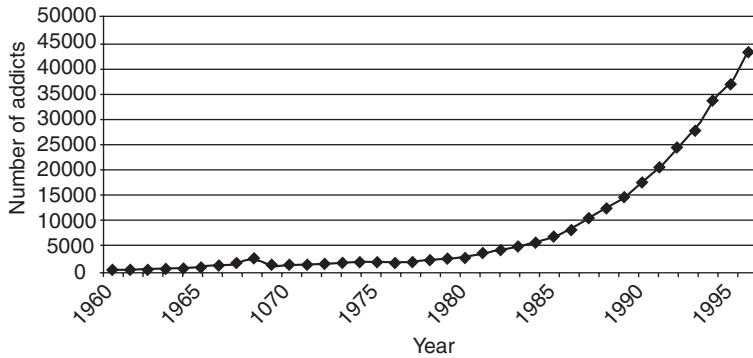
Figure 1 Prevalence of problem drug use in 13 countries

for household surveys. Such surveys do not contact homeless people and prisoners, who may have the highest rates of heroin and crack use. Treatment surveys measure the number of people in treatment, which is not directly related to the numbers of users. More reliable capture–recapture and multiple indicator methods have been used to estimate that there were 332,000 users of opiates or crack cocaine in England—a prevalence of 9.97 per thousand of the population aged 15–64—in 2005/6 (Hay et al., 2007). This indicates that the use of these drugs is more prevalent than has been estimated for other European countries, although lower than the estimated rate of drug dependence in the USA (EMCDDA, 2006); Office of National Drug Control Policy, 2001); see Figure 1. But these methods have only been used nationally since 2004, and so cannot tell us about historical trends.

### Heroin

Heroin is the drug classically associated with ‘epidemics’ (Hunt, 1974). The notion of a drug epidemic captures the fact that drug use is a learned behaviour, transmitted from one person to another. In most Western countries there has been just one discrete heroin epidemic. That is true for example of the Netherlands and the United States, both of which experienced an epidemic of heroin use between the late 1960s and early 1970s; since then each has had only moderate endemic levels of initiation. Nordt and Stohler (2006) show this particularly clearly for Zurich, which underwent a major epidemic peaking in 1995. The United Kingdom is different. Indicators of the size of the heroin using population generally rise rapidly throughout the 25-year period 1975–2000. There are references in the literature (e.g. Parker and Egginton, 1998) to two epidemics, one in the 1980s and one in the 1990s, but there is not the sharpness of distinction in rates of change in different time periods that this suggests.

Figure 2 provides data on the number of ‘addicts notified to the Home Office’ for 1960–1996. If the series after 1976 is broken into five-year periods, in each of those periods the number roughly doubled. In 1976 the number of notifications was less than 2000; 20 years later it was more than 40,000. Few health indicators have shown such rapid deterioration over such a long period.



**Figure 2** Number of addicts notified to the Home Office, 1960–1996

After 1997, the series was ended, to be replaced by indicators from the Regional Drug Misuse Databases. For the period 1997–2004, there is no single indicator as authoritative as the notification series. There are however some other indicators, including drug-related deaths, that can, with caution, be combined to tell a consistent story; namely that the numbers of heroin users continued to rise until about 2000 and, less clearly, may have stabilized after that. Studies using sophisticated modelling techniques have generated similar conclusions. For example, De Angelis et al. (2004) find that though there is a moderate downturn in incidence between 1980 and 1985, prevalence of heroin addiction in the UK grew from 1968 to 2000, with especially large increases in the 1990s. Research from the north-west of England suggests that, during the 1990s, initiation into heroin use may have started to fall in areas which had seen big increases in the 1980s (Millar et al., 2006), even if it continued to increase in other areas.

This would be consistent with the idea that there have been a number of geographically specific epidemics in initiation into heroin use, which have tended to pass their peak in the 1990s and early 2000s. Ditton and Frischer (2001) provide analyses for Glasgow that show roughly a 10-year period (1985–1995) of high incidence. Pearson and Gilman (1994) refer to variations within northern England, where it struck west of the Pennines earlier than it did to the east. Rates of drug-related death continue to vary widely across areas (Ghodse et al., 2006). It is fair to say that the explanations offered so far for the long-term change in Britain are opportunistic and still not well integrated.

### *Cocaine*

Cocaine has always been a feature of the British drug scene. Concern over its abuse by chemists and then by soldiers led to increasing regulation of cocaine, alongside heroin, in, for example, the Dangerous Drugs Act of 1920. Use was probably very slight for the following 50- or 60-year period. In the 1960s and 1970s it became associated with leisure pursuits of the rich

and famous. Despite its use by heroin injectors in speedballs<sup>1</sup> and the prescription of cocaine to addicts, there was an air of exclusivity attached to its high price and champagne image. Two factors have changed this image in more recent years; the spread of powder cocaine out of fashionable metropolitan circles and the advent of crack.

Figure 3 indicates a large increase in cocaine use in the past decade. This increase has been attributed partly to the falling price of the drug. Another factor may be changes in the image of the drug and its pattern of diffusion among young people. From being an exclusive drug, used only by the wealthy and some dependent drug users, it has now become part of the menu of psychoactive substances young people use to enhance their leisure time. It may have come into fashion among these people as ecstasy reduced in perceived quality (Measham, 2004).

Initial concern over crack peaked in the late 1980s, following dramatic warnings that Britain was on the brink of a surge of crack use as South American drug traffickers sought to replicate their success in marketing the drug in American cities. However, Figure 3 suggests that crack use is still rare among the kinds of young people who respond to household surveys. Nevertheless, crack is often used by people who have problems with heroin. It has recently been estimated that there are approximately 198,000 users of crack in England, there is a large overlap with heroin users (Hay et al., 2007). It seems that crack, while not widespread, is used by a large proportion of the homeless and drug dependent populations in those urban centres where crack markets have been established (Wincup et al., 2003).

### *Drugs and crime*

The value of the UK markets in 2003/4 for cannabis, heroin, powder cocaine and crack have been estimated at £1.03, £1.21, £0.97 and £1.48 billion respectively, out of a total estimated value of the market for illicit drugs of £5.27 billion (Pudney et al., 2006). This compares with expenditures on alcohol of £38 billion in 2004 (Mintel, 2005). The reason for the focus of

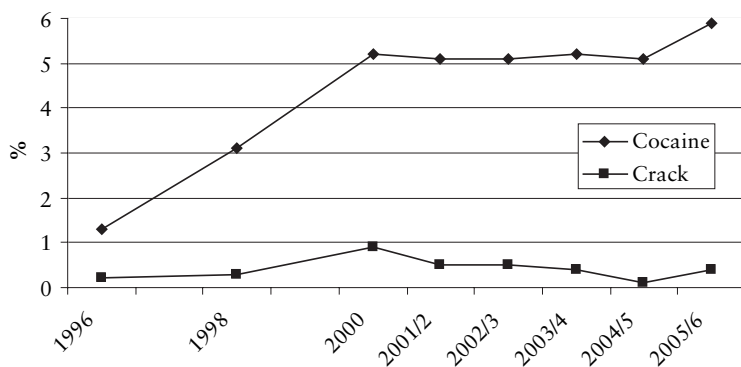


Figure 3 Last year use reported by 16–24 year olds (Murphy & Roe, 2007)

policy (and this article) on heroin and cocaine has been presented as the specific link from the use of these drugs to 'drug-related crime'. For example, it has been estimated that use of class A drugs<sup>2</sup> led to social and economic costs of £15.4 billion in England and Wales in 2003/4. Ninety per cent of these costs are said to arise from the cost of drug-related crime committed by 'problematic drug users' (Gordon et al., 2006), referred to elsewhere as 'high harm causing users' (PMSU, 2003), with heroin and crack referred to as 'high harm drugs' (PMSU, 2007). The issue of whether the crime related to these drugs is caused by their psycho-pharmacological effects or systemic crime related to the operation of illegal markets has not been directly addressed in government policy documents, which have tended to assume an economic-compulsive link (Goldstein, 1985) from drugs to the need to steal to feed an addiction.

While this article will not dispute the common criminological finding of a strong correlation between illicit drug use and other forms of offending (Seddon, 2000; Stevens et al., 2005), it will question the calculations of the link between drugs and crime that have been used in government policy. There are at least three problems with current estimates of this link. They are to do with issues of causality, and of estimating both the proportion and the cost of crimes related to drug use.

The recent consultation document for the new Welsh drug strategy stated, '[i]t has been estimated that drug motivated crime accounts for half of all crime' (Welsh Assembly Government, 2008: 9). This estimate of a half, which has also appeared in the Prime Minister's Strategy Unit report (2003), appears to be based on extrapolating from the proportions of arrestees who report recent drug use in studies such as the New-ADAM project (Bennett, 2000) and the Arrestee Survey (Boreham et al., 2006). It assumes that all the crimes of these people are caused by their drug use. But the causal pathway is much more complex than this (da Agra, 2002). While it is true that some drug users may commit crimes specifically to pay for their drugs, and that some studies (e.g. Farabee et al., 2001) have found that their offending tends to peak during periods of frequent drug use, it is also possible that others use drugs in order to celebrate success in criminal activities that would have happened in any case (Burr, 1987; Katz, 1988). The causal direction between drug use and crime has been questioned by studies showing that offending tends to precede drug use in the life course (Pudney, 2002) and that the most prolific criminals tend to offend at high rates before, during and after periods of drug dependence (Nurco et al., 1991). The simplistic drug-crime connection has also been challenged by findings from the New-ADAM study that socio-demographic variables—such as age, sex, employment status and school leaving age—may be more important than drug use in predicting some types of offending. This supports the search for the elusive 'third variable' that may help to explain the drug-crime link, for which a number of candidates—including poverty, inequality, genetic and psychological predispositions—have been suggested.

The use of surveys of arrestees leads to exaggeration of the proportion of crimes that are committed by drug users. This is because they do not form a random sample of offenders. Some criminals are more likely to be caught by the police than others. Analyses of data from the Edinburgh Study on Youth Transitions and Crime (McAra and McVie, 2005) and the Offending Crime and Justice Survey (Stevens, 2008) have both shown that offenders who report drug use are about twice as likely to come into contact with the police, when other variables—including indicators of the frequency and type of offending—are taken into account. This over-representation of drug users in arrestee samples means estimates for the whole population of offences should not be extrapolated from the relatively small proportion that lead to arrest.

A similar problem affects current estimates of the cost of drug-related crime. These have been based on the rates of offending reported by the 1075 drug users who entered treatment in the National Treatment Outcome Research Study (NTORS Gossop et al., 1998). The estimates assume that all problematic drug users offend, over the course of a full year, at the same rate as this much smaller group reported for the three months prior to treatment. The problem with this approach, as has been shown in a later publication from NTORS (Gossop et al., 2006), is that offending peaks in the years and months preceding treatment entry. The 2006 NTORS article reported that the sampled heroin users had a mean duration of heroin use of nine years and that their levels of offending five years previous to treatment entry were less than half those found in the year immediately preceding treatment entry. Again, it is unsafe to extrapolate from the drug users who show up in treatment or the criminal justice system (who are likely to be the most troubled) to the wider population of people who use heroin, many of whom can get by without committing other crimes (Gossop et al., 1998; Warburton et al., 2005).

Notwithstanding these methodological problems in the estimation of drug-related crime, this concept has been the driving force behind British drug policy developments in recent years (Barton, 1999; Duke, 2006; Stevens, 2007). Health-related harms have been given less public attention. This is despite internationally high rates of drug-related death, which have been rising in Scotland (Ghodse et al., 2006), and increases in the proportion of injecting drug users who have been infected with HIV and Hepatitis C (HPA, Health Protection Scotland, National Public Health Service for Wales, CDSC Northern Ireland, and CRDHB, 2006). Despite rhetorical commitments to the rebalancing of drug policy spending towards treatment (Hellawell and Trace, 1998), and a massive expansion of the numbers in treatment (see below), the bulk of public expenditure continues to be devoted to criminal justice measures, as the next section will show. It is worth noting that this emphasis on enforcement in drug control expenditures also holds for the most explicitly harm reduction-oriented country, the Netherlands (Rigter, 2006), perhaps reflecting the high unit costs of criminal justice activities.



## Policy responses and their effects

Drug policy in the UK over the past decade has focused on four main areas: supply reduction, enforcement of drug laws, prevention of drug use, and treatment of problematic drug users. Spending on treatment has included investment in harm reduction measures, such as needle exchanges, and a large expansion of the number of people in opiate substitution treatment (mostly prescribed methadone). Each of the four areas will be briefly assessed here for their effects on crime.

### *Overseas supply reduction*

The extreme difficulty of stifling the flow of illicit drugs into the UK has been commented on by both the Prime Minister's Strategy Unit (2003) and senior customs officials. In 1999, Dame Valerie Strachan, then chairman of Customs and Excise, told a parliamentary committee that increasing drug seizures would not make a difference to the availability of drugs in the UK, as major drug importers see seizures as just 'a hazard of the job' (Select Committee on Public Accounts, 1999). In this, she was echoing the comments of one of the early architects of British drug control, Sir Malcolm Delevigne. He wrote in 1931 that '[t]he resourcefulness of those engaged in the illicit traffic is remarkable. When checked in one direction they find an outlet in another' (quoted in South, 1998: 90). This early discovery of the difficulty of supply reduction has not prevented British drug policy aiming to increase the amount of drugs seized (Hellawell and Trace, 1998). In the 2002 drug strategy update, government targets were amended to include reducing the availability of drugs and cutting the production of Afghani opium by 70% in five years on the way to complete elimination within 10 years. This last target lies in tatters, as estimated Afghani opium production has soared from 3400 metric tons in 2002 to 8200 metric tons in 2007 (UNODC, 2007). And increases in seizures, as predicted by both Delevigne and Strachan, have not reduced availability (as indicated by price). Reported street drug prices fell between 2000 and 2005—from £70 to £54 per gram of heroin, and from £65 to £49 per gram of cocaine (SOCA, 2006). More recently, heroin has been reported as selling at between £40 and £50 per gram. And a two-tier market for cocaine is reported to have developed, with relatively good quality cocaine sold at £50 and more heavily adulterated cocaine being sold for £30 per gram (SOCA, 2008). Price information should be supplemented by information on purity if it is to be used to indicate the retail availability of a drug. While there was a reduction in the average purity of seized cocaine from 69.6 per cent in 2003 to 64.8 per cent in 2005, the average purity of seized brown heroin has increased from 32.7 per cent to 46.5 per cent over the same period (Eaton et al., 2007). Given the imprecision of drug market measurements, the cocaine purity decline should be disregarded (as it falls within the margin of error of such measurements). The increase in heroin purity is consistent

with higher availability, a phenomenon found in many other countries since the end of the Taliban production ban in 2001 (Paoli et al., in press).

Though prices have declined, drug selling remains an attractive activity, as revealed in a recent study that involved interviews with incarcerated drug dealers (Matrix Consulting, 2007). This study shows the great variety of paths into drug dealing and the high rates of financial returns. Whether these returns more than compensate participants for the risks of arrest and incarceration cannot be determined with these data alone. The study suggests low levels of violence in drug markets themselves, consistent with other literature on the subject in the UK (Pearson and Hobbs, 2001) and in contrast to the US experience (e.g. Reuter et al., 1990).

### *Domestic enforcement*

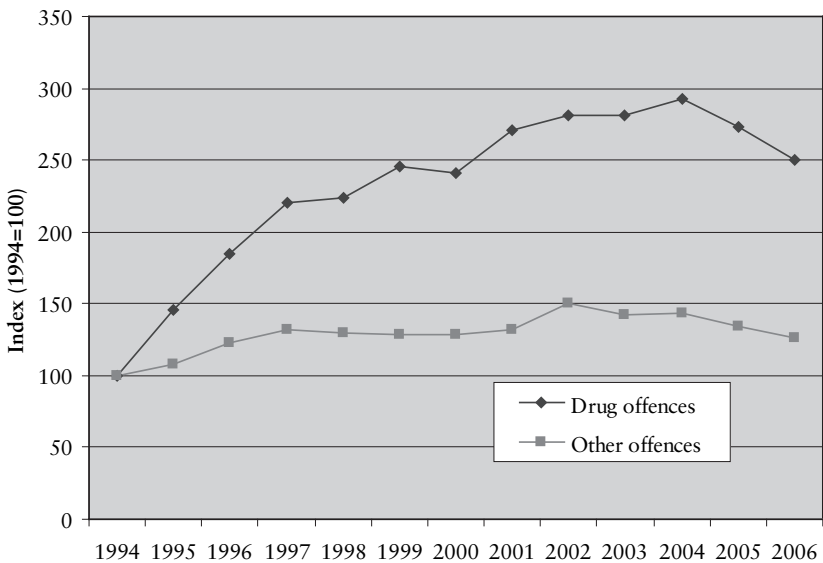
One way in which the government has tried to reduce drug related crime is through the disruption of drug markets and the arrest and punishment of drug users, dealers and traffickers. There is little evidence that targeting distributors and retailers of illicit drugs for arrest leads to reductions in drug use. The large US literature on drug markets includes only one good quality study of the effect of tougher enforcement on drug prices. Kuziemko and Levitt (2004) found that a tripling of incarceration for drug offences may have led to a 15 per cent increase in the retail price of cocaine, though the estimates lack precision. Hypothetically, this could have moved crime upwards by increasing the need to steal to fund drug habits and by increasing profit margins (and therefore the willingness to take violent risks) in drug markets. But it may also have moved crime downwards by discouraging use of cocaine and by incapacitation of drug offenders, who may have committed other crimes if not imprisoned. These hypotheses have not been tested. The effect of drug prices on crime rates has been little studied.

The available UK studies, while not generally of high methodological quality suggest that crackdowns tend to lead to changes rather than reductions in drug selling and using. These activities tend to be displaced to areas outside the crackdown area and move back in once the operation is over. Even where police efforts have led to numerous arrests of dealers and seizures of large quantities of drugs, it has been difficult to discern impacts in reducing drug use or other crimes. One example is Operation Crackdown, which was launched in London in November 2000, and has been claimed as one of the 'key achievements' of the government's drug strategy (Home Office, 2005). In the first 14 days, drugs with a street value of £1.5 million were seized and over 240 people arrested. However, interviews with drug users found that there were few changes in drug availability, price or use (Best et al., 2001). Another example is provided by the Derbyshire Drug Market Project. This arrested over 200 drug dealers and aimed to get users to enter treatment by creating a shortage of drugs and doing outreach work. However, the project did not create a shortage of drugs. There was no effect on overdoses or crime rates. The drug market was apparently temporarily

shut down in two towns, but users were able quickly to find alternative suppliers (Parker and Egginton, undated; Parker, 2004).

Imprisonment is not explicitly mentioned in drug policy documents, but it is an important and costly element of the governmental response to drug use. The prison population has increased rapidly in the past decade, so one would not be surprised to see an increase in imprisonment for drug offenders. But, as Figure 4 shows, the use of imprisonment has increased even more rapidly for drug offenders than other offenders. Despite reductions since 2004, the number of prison years given (if not necessarily served) in sentences for drug offences rose substantially in the 12 years from 1994. The number of people sent to prison for drug law offences has also increased in Scotland, by approximately 26 per cent between 1995/6 and 2004/5 (Scottish Executive, 2006). These increases have contributed significantly to the current prison overcrowding crisis.

This less visible element of drug policy contributes significantly to drug-related costs to the taxpayer. These costs are not regularly or publicly calculated. Following a Freedom of Information request by the campaigning group Transform, the government released a document written in 2001 for the comprehensive spending review. It calculated the annual cost of enforcing drug laws—including police, probation, prison and court costs—at approximately £2.19 billion, of which about £581 million was spent on imprisoning drug offenders (Anonymous, 2001). With the cost of a year's



**Figure 4** Trend in number of years of imprisonment handed out by courts, England & Wales, 1994–2006 (calculated from De Silva, 2005; RDS NOMS, 2007a, 2007b)

imprisonment recently calculated at £37,500 (Carter, 2007), the prison sentences given by courts for drug offences in 2006 imply a cost of nearly £400 million (assuming prisoners serve half their sentence<sup>3</sup>).

In assessing the effectiveness of tough enforcement, it is useful to make a rough estimate of the likelihood that a drug dealer spends time in prison. We start with the existing estimates of the number of problematic drug users in England and Wales, 332,000 (Hay et al., 2007). If we add an equal number of occasional users, that produces an estimate in 2006 of roughly 664,000 buyers of crack and heroin. There is no systematic data on how many users buy from a single seller. Moore (1977) in a classic study of heroin dealing in New York City guessed at 10 to one. This surely is a number that varies according to the circumstances of market participants. When enforcement is tough, so that sellers are at high risk of being arrested, users may have multiple sources at all times (Riley, 1997). The New-ADAM survey of arrestees who were users of crack or heroin suggested that they had a median of 10 people from whom they could buy their drugs (Bennett and Holloway, 2007). A study of drug markets in eight deprived areas noted a 'proliferation of small scale dealers' at the retail level (Lupton et al., 2002: 22). We use the 10 to one figure of Moore, implying that there are 66,400 dealers of heroin and crack. We think that Moore's ratio is probably high as there are many regular users of crack and heroin who are at least occasional sellers of the drugs. In the NTORS sample at intake, 29 per cent reported drug dealing, mostly infrequently (Gossop et al., 2000). When applied to available estimates of the size of the markets for crack and heroin (Pudney et al., 2006), the Moore ratio produces an estimate that dealers of heroin or crack have an average annual turnover of about £36,000. Since the number of persons incarcerated for production, supply or possession with intent to supply in 2004 was 4071 (the last year for which figures are available, Ministry of Justice, 2007a), that produces an annual imprisonment risk of barely 6 per cent (4071/66,400).

Clearly this is simply an indicative calculation with a great deal of uncertainty. But starting with the two figures of 332,000 problematic drug users and 4071 imprisonments for drug dealing, it appears that selling drugs remains a relatively low risk criminal activity, with serious implications for the effectiveness of law enforcement as a deterrent.

### *Prevention*

It has sometimes been argued that drug use and the related crime, whether caused by drug use or market issues, can be reduced by preventing drug use. While it is true that reductions in the level of demand for drugs may reduce the external costs of drug use, there is little evidence to suggest governments can have large effects in this area. The impact of even effective programmes tends to be small (Gottfredson et al., 2000) and they tend to share characteristics (including high intensity and programme integrity, encouraged by the presence of evaluators) that are difficult to spread widely (see Gottfredson and Gottfredson, 2002). Current evidence on drug prevention

efforts suggests how difficult it is to apply evidence on best practice to the reality of school life. For example, preliminary findings from a survey of Scottish schools were that teachers were using out-of-date and ineffective materials, with little training, and that pupils found drug education 'uninspiring and unrelated to their own experience' (ACMD, 2006).

Partly because of the small effects of even the most successful drug prevention programmes, they are unlikely to have major effects on overall rates of drug use and related crime. The positive effects of many such programmes are short-lived and may not persist beyond a few months. If they do, there may be knock-on effects in preventing the spread of drug use through social networks, meaning that successful prevention with one individual may reduce drug use among his or her peers in future. Even taking such effects into account it has been estimated (with a great deal of acknowledged uncertainty) that, if the USA were to implement fully the most effective known programmes, this would lead to a reduction of between 2 per cent and 11 per cent in the future consumption of cocaine (Caulkins et al., 1999). More recently, Caulkins has commented on the difficulty in discerning the impact of drug prevention programmes. Even if they were to have significant effects in reducing levels of drug use, the effects on drug-related problems would be very difficult to measure. Short-term changes in drug initiation would not affect the problems related to the large group of existing users. And there is no counterfactual control group against which to measure the effects of national drug prevention initiatives (Caulkins and Zeiler, 2008). There is no reason to think that the impact of prevention would be greater in the UK. In the face of these uncertainties, continued investment in drug prevention seems more like an exercise in faith than the implementation of evidence. As Hawthorne (2001: 115) has argued, '[i]f drug education is primarily a symbolic political activity, adequate indicators might be successful implementation of programmes, and measures of popularity and funding', but if the goal is to reduce drug-related problems, then it should be demonstrated that these activities have a superior effect to comparable but alternative use of funds.

### *Treatment*

The treatment of addiction originated in the US penal system (Freed, 2005). It was appropriated by the medical profession in Britain following the 1926 Rolleston Committee, but even this was with Home Office supervision of their practices (South, 1998). In recent years, there has been increased focus on putting the treatment of drug dependence back into the context of the criminal justice system. Alongside the rapid expansion of drug treatment in general, there has been a plethora of criminal justice system initiatives, including: the Drug Treatment and Testing Order (DTTO), which became the Drug Rehabilitation Requirement; the Drug Abstinence Order; the Drug Abstinence Requirement; Restrictions on Bail; the Criminal Justice Interventions Programme, which became the Drug Intervention Programme; and the Tough Choices programme, which made use of the provisions of the Drugs Act 2005

on compulsory drug testing and treatment assessment. The number of people entering treatment under a court order in England and Wales increased from 1886 in 1995 to 11,286 in 2006 (Ministry of Justice, 2007b; RDS NOMS, 2005). This does not include people who may have entered treatment (e.g. by referral at arrest) through the criminal justice system but without a court order. By comparison, 90,038 people were sentenced to prison in 2006.

These measures have been based on the notion that drug treatment reduces offending. If enough criminal drug users can be brought into treatment, it is hoped crime rates will fall. The available evidence suggests that reductions in offending are indeed likely to occur following entry to drug treatment (Prendergast et al., 2002). Reductions in offending do not seem to be significantly different between types of treatment, although there are differential outcomes among treatment centres (Best, 2004; Howard and McCaughrin, 1996; McSweeney et al., 2007), and among drug users. While treatment can be effective for users of crack and cocaine, they are harder to engage and retain than users of heroin (Witton and Ashton, 2002).

There is convincing evidence of the effectiveness of treatment, but the returns to investment in drug treatment have been exaggerated through misinterpretation of the data from NTORS. The reductions in the offending reported by the NTORS sample have been used to produce a benefit: cost ratio for treatment of between 9.5 and 18 to one (Godfrey et al., 2004). However, this assumes that all the reductions in offending are caused by the treatment. In Prendergast et al. (2002) meta-analysis, it is notable that even the untreated comparison groups tended to show reductions in offending over the follow-up periods. This means that it is mistaken to attribute *all* the reduction in offending by the NTORS sample to their treatment.

A wider problem in the use of court-ordered drug treatment to reduce crime rates was discussed in a report by one of the 'policy entrepreneurs' for the DTTO. Following a Harkness Fellowship in the USA, Justin Russell (1994) advocated the importation of the US drug court model. In this report, he warned of the 'funnel of crime'. This refers to the high rate of attrition of offenders at each stage of the criminal justice system. The largest obstacle to getting offenders into treatment is that only a very small proportion is caught. Progressively fewer are charged, convicted and sentenced to treatment. Then there is high dropout between referral to treatment and actually arriving in treatment. Many who arrive do not stay for long. At the end of this funnel, the group of treated offenders is much smaller than the wider population, which is constantly replenished. So even significant effects at the thin end will not have large effects on the wider pool from which some offenders are poured into the funnel.

Of course, the criminal justice system is not the only route into drug treatment. And there has been a massive expansion in the numbers in treatment since 1998, from about 88,000 in that year to 195,000 in 2006/7 (NTA, 2007). This was produced by significantly expanding central government investment in drug treatment, which has now been capped at about £400 million per year. The Home Office estimated that a doubling in treatment

numbers would produce a reduction of about 7.5 per cent in the number of convicted offences (Home Office, 2004). However, this estimate was again based on extrapolation from NTORS data and so is open to challenge for the reasons stated above. In general, crime as reported to the British Crime Survey has fallen by 42 per cent since 1995. But this fall began before the rapid expansion of treatment and this survey does not include shoplifting, which is the crime with the strongest association to use of heroin (Bennett and Holloway, 2007). So it is very difficult to tell if the reductions in crime that the government has claimed for its investment in treatment have actually been produced. At the individual level, there is strong evidence for reductions in offending following treatment entry. However, the population of offenders is much larger (and generally younger) than the population of drug users in treatment. Even the Home Office's somewhat optimistic estimate of the effect of doubling treatment capacity would account for less than 20 per cent of the apparent reduction in crime.

## **Conclusion**

That last statement raises precisely the question that motivates this article. How much can drug policy reduce the crime problems of the United Kingdom? It might do so through two channels: reducing the number of regular users of crack and heroin (other drugs being relatively minor contributors to criminality in Britain) or lowering the criminal activities of those who are frequent users of crack and cocaine. We are quite pessimistic about the prospects of reducing drug use but believe that there are some possibilities of lowering associated crime.

It is striking that, despite the longstanding political prominence of the drugs problem in the UK, relatively coherent strategies (compared certainly to the USA) and substantial public investment, the UK is at the top of the European ladder for drug use and dependence. This did not happen as the consequence of one short epidemic burst but is the result of a steady worsening in the last quarter of the 20th century. It is encouraging that the problem does not seem to have worsened since about 2000, but that is the strongest positive statement one can make confidently at present.

The most fundamental point to understand about drug policy is that there is little evidence that it can influence the number of drug users or the share of users who are dependent. There is no research showing that any of the tougher enforcement, more prevention or increased treatment has substantially reduced the number of users or addicts in a nation. There are numerous other cultural and social factors that appear to be much more important.

What are the principal determinants of rates of drug use? Surely fashion or popular culture has to be given considerable weight. For example, in most nations throughout the Western world, from Australia to Finland, there was an upturn of about one-half in rates of cannabis use among 18-year-olds between approximately 1992 and 1998 (MacCoun and Reuter

2001), though from very different base rates in the various countries. Some of those nations had become tougher in their marijuana policies in that time (e.g. the US), most made no change and others became more tolerant (e.g. Australia); the policy stance seemed to have no effect. It is hard to identify which underlying cultural values drove these changes simultaneously, but their breadth and consistency make it very likely that increasingly globalized popular culture has a prominent role. After about 1998, the growth in most countries stopped as abruptly as it started; again there is no policy intervention that one can turn to for an explanation. Similarly the timing of epidemics of heroin use in different nations seems unrelated to government policy and appears to be driven instead by the confluence of broad demographic, social and economic changes.

What about the criminality of drug users? We have already noted that there is a great deal of evidence that, on average, treatment can help dependent drug users cut down both on the quantities of drugs they use and the volume of crime they commit, even if many treated users continue some illegal drug use and offending. However a characteristic of treatment in the UK and other nations is that it comes late in a drug user's career and is characterized initially by relatively high levels of drop-out and relapse. The various efforts to tie criminal justice to the treatment system in the past decade are still maturing and the 2008 drug strategy has called for more individually tailored drug treatment to be delivered by mainstream (not drug specific) services (HM Government, 2008). Working out ways to make the treatment system more attractive to younger users, engage more users of crack and keep entrants for longer must be a priority if drug policy is to succeed in what the government has seen as its principal aim, which is to reduce the costs of drug use both to users and society.

Of the drug policy instruments available to governments to control drug-related crime, treatment is the option best supported by the available evidence. Controlling drug supply at source, in transit and at retail level has not produced significant reductions in the drug market and associated criminality. Neither have efforts at preventing drug use produced discernable impacts on levels of use or offending. The costs of imprisonment of drug offenders have increased significantly, but the associated benefits are much less clear. Even treatment has limited impact on overall crime rates. Reducing crime has been the main driver of British drug policy over the past 10 years, and some would say that this has been to the detriment of other potential focuses of drug policy, such as preventing drug-related deaths and viral infections, or reducing the social exclusion of drug users. This article suggests that the limited impact of policies explicitly focused on drug use should encourage governments to take a wider view of influences on drug use and offending and to seek other means, outside of drug policy (which could include prevention at primary and secondary level, such as general improvements in family support, early education and youth work provision (Margo and Stevens, 2008)), as well as increasing the scale and quality of drug treatment.



## Acknowledgements

We are happy to acknowledge financial support from the UK Drug Policy Commission. The opinions expressed here are solely the responsibility of the authors and not of the Commission.

## Notes

- 1 Injected mixtures of heroin and cocaine.
- 2 The costs related to ecstasy were estimated at less than 2 per cent of the total in an earlier study using the same methods, leaving the vast majority of costs to be attributed to users of heroin and cocaine (Godfrey, et al. 2002).
- 3 This assumption may be conservative if parole boards are less sympathetic to drug offenders and because foreign drug importers who will be deported cannot be given parole, as they cannot be supervised in the community.

## References

- ACMD (2006) *Pathways to Problems: Hazardous use of Tobacco, Alcohol and Other Drugs by Young People in the UK and its Implications for Policy*. London: Advisory Council on the Misuse of Drugs.
- Anonymous (2001) *SR 2000: Stocktake of Anti-drug Interventions and Cost-effectiveness*. London: Home Office.
- Barton, A. (1999) 'Breaking the Crime/Drugs Cycle: The Birth of a New Approach?' *Howard Journal of Criminal Justice* 38(2): 144–57.
- Bennett, T. (2000) 'Drugs and Crime: The Results of the Second Developmental Stage of the NEW-ADAM Programme', Home Office Research Study 205. London: Home Office Research and Statistics Directorate.
- Bennett, T. and K. Holloway (2007) *Drug–Crime Connections*. Cambridge: Cambridge University Press.
- Best, D. (2004) *Delivering better treatment: What works and Why?* NTA National Conference. London.
- Best, D., J. Strang, T. Beswick and M. Gossop (2001) 'Assessment of a Concentrated, High-Profile Police Operation: No Discernible Impact on Drug Availability, Price or Purity', *Br J Criminol* 41(4): 738–45.
- Blackman, S. (2004) *Chilling Out: The Cultural Politics of Substance Consumption, Youth and Drug Policy*. Maidenhead: Open University Press.
- Boreham, R., E. Fuller, A. Hills and S. Pudney (2006) *The Arrestee Survey Annual Report: October 2003–September 2004. England and Wales*. Home Office Statistical Bulletin 04/06. London: Home Office.
- Burr, A. (1987) 'Chasing the Dragon: Heroin Misuse, Dependency and Crime in the Context of South London Culture', *The British Journal of Criminology* 27(4): 333–57.
- Carter, L. (2007) *Securing the Future. Proposals for the Efficient and Sustainable use of Custody in England and Wales*. London: Ministry of Justice.

- Caulkins, J.P., S.S. Everingham, C.P. Rydell, J. Chiesa and S. Bushway (1999) *An Ounce of Prevention, a Pound of Uncertainty: The Cost-Effectiveness of School-Based Drug Prevention Program*. Santa Monica, CA: RAND Corporation.
- Caulkins, J.P. and I. Zeiler (2008) Understanding inertia: inherent limitations on evaluating 'upstream' drug control interventions, Second Annual Conference of the International Society for the Study of Drug Policy. Lisbon.
- da Agra, C. (2002) 'The Complex Structures, Processes and Meanings of the Drug/Crime Relationship', in S. Brochu, C. da Agra and M.M. Cousineau (eds) *Drugs and Crime Deviant Pathways*, pp. 88–103. Aldershot: Ashgate.
- De Angelis, D., M. Hickman and S. Yang (2004) 'Estimating Long-term Trends in the Incidence and Prevalence of Opiate Use/Injecting Drug use and Number of Former Users: Backcalculation Methods and Opiate Overdose Deaths', *American Journal of Epidemiology* 160: 994–1004.
- De Silva, N. (2005). 'Sentencing Statistics 2004', *Home Office Statistical Bulletin 15/05*. London: Home Office.
- Ditton, J. and M. Frischer (2001) 'Computerised Projection of Future Heroin Epidemics: A Necessity for the 21st Century?', *Journal of Substance Use and Abuse* 36(1/2): 151–66.
- Duke, K. (2006) 'Out of Crime and into Treatment?: The Criminalization of Contemporary Drug Policy Since "Tackling Drugs Together"'. *Drugs: Education, Prevention and Policy* 13(5), 409–415.
- Eaton, G., C. Davies, L. English, A. Lodwick, M.A. Bellis and J. McVeigh, (2007) *United Kingdom Drug Situation: Annual Report to the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) 2007*. London: Department of Health.
- EMCDDA (2006) *Annual report 2006: The State of the Drugs Problem in Europe*. Luxembourg: Office for Official Publications of the European Communities.
- Farabee, D., V. Joshi and M.D. Anglin (2001) 'Addiction Careers and Criminal Specialization', *Crime and Delinquency* 47(2): 196–220.
- Freed, C.R. (2005) 'Treating the American Inebriate in the 19th and early 20th Century: Medicalizing Deviance, Criminalizing Inebriety', Critical Criminology Common Sessions Programme. New York.
- Ghodsse, H., J. Corkery, A. Oyefeso, F. Schifano, T. Tonia and J. Annan (2006) *Drug-related Deaths in the UK*. London: International Centre for Drug Policy.
- Godfrey, C., G. Eaton, C. McDougall and A. Culyer (2002) 'The Economic and Social Costs of Class A Drug use in England and Wales, 2000', *Home Office Research Study 249*. London: Home Office.
- Godfrey, C., D. Stewart and M. Gossop (2004) 'Economic analysis of costs and consequences of the treatment of drug misuse: 2-year outcome data from the National Treatment Outcome Research Study (NTORS)', *Addiction* 99(6): 697–707.
- Goldstein, P. (1985) 'The Drugs–Violence Nexus: A Tripartite Framework', *Journal of Drug Issues* 15: 493–506.
- Gordon, L., L. Tinsley, C. Godfrey and S. Parrott (2006) 'The Economic and Social Costs of Class A drug use in England and Wales, 2003/04', in N. Singleton, R. Murray and L. Tinsley (eds) *Measuring Different Aspects of Problem Drug Use: Methodological Developments*. London: Home Office.

- Gossop, M., J. Marsden, D. Stewart, P. Lehmann, C. Edwards, A. Wilson and G. Segar (1998) 'Substance use, Health and Social Problems of Service users at 54 Drug Treatment Agencies', *British Journal of Psychiatry* 173: 166–71.
- Gossop, M., J. Marsden, and D. Stewart (2000) 'Drug Selling Among Drug Misusers Before Intake to Treatment and at 1-year Follow-up: Results from the National Treatment Outcome Research Study (NTORS)', *Drug and Alcohol Review* 19(2): 143–51.
- Gossop, M., K. Trakada, D. Stewart and J. Witton (2006) 'Levels of Conviction Following Drug Treatment: Linking Data from the National Treatment Outcome Research Study and the Offenders Index', Findings 275. London: Home Office.
- Gottfredson, D.C. and G.D. Gottfredson (2002) 'Quality of School-Based Prevention Programs: Results from a National Survey', *Journal of Research in Crime and Delinquency* 39(1): 3–35.
- Gottfredson, G.D., D.C. Gottfredson and E.R. Czeh (2000) *National Study of Delinquency Prevention In Schools*. Maryland: Gottfredson Associates Inc.
- Hawthorne, G. (2001) 'Drug Education: Myth and Reality', *Drug and Alcohol Review* 20: 111–19.
- Hay, G., M. Gannon, J. MacDougall, T. Millar, C. Eastwood and N. McKeganey (2007) 'National and Regional Estimates of the Prevalence of Opiate use and/or Crack Cocaine use 2005/06: a Summary of Key Findings', *Home Office Online Report 21/07*. London: Home Office.
- Hellawell, K. and M. Trace (1998) *Tackling Drugs to Build a Better Britain: The Government's Ten-Year Strategy for Tackling Drugs Misuse*. London: Her Majesty's Stationery Office.
- HM Government (2008) *Drugs: Protecting Families and Communities. The 2008 Drug Strategy*. London: Home Office.
- Home Office (2004) 'Modelling Crime Reduction for the Home Office's Strategic Plan', *Home Office Online Report 38/04*. London: Home Office.
- Home Office (2005) 'Tackling Drugs', *Changing Lives: Turning Strategy into Reality*. London: Home Office.
- Howard, D.L. and W.C. McCaughrin (1996) 'The Treatment Effectiveness of Outpatient Substance Misuse Organizations between Court-mandated and Voluntary clients', *Substance Use and Misuse* 31(7): 895–926.
- HPA, Health Protection Scotland, National Public Health Service for Wales, CDSC Northern Ireland, and CRDHB (2006) 'Shooting Up; Infections among Injecting Drug users in the United Kingdom 2005', *An Update—October 2006*. London: Health Protection Agency.
- Hunt, L.G. (1974) 'Recent Spread of Heroin Use in the United States', *American Journal of Public Health Affairs* 74: 16–23.
- Katz, J. (1988) *Seductions of Crime. Moral and Sensual Attractions in Doing Evil*. New York: Basic Books.
- Kuziemko, I. and S. Levitt (2004) 'An Empirical Analysis of Imprisoning Drug Offenders,' *Journal of Public Economics* 88(9/10): 2043–66.
- Lupton, R., A. Wilson, T. May, H. Warburton and P.J. Turnbull (2002) 'A Rock and a Hard Place: Drug Markets in Deprived Neighbourhoods', *Home Office Research Study 240*. London: Home Office.

- MacCoun, R. J. and P. Reuter (2001) *Drug War Heresies: Learning from Other Vices, Times, and Places*. Cambridge: Cambridge University Press.
- Margo, J. and A. Stevens (2008) *Make me a Criminal: Preventing Youth Crime*. London: IPPR.
- McAra, L. and S. McVie (2005) 'The Usual Suspects? Street-life, Young People and the Police', *Criminal Justice* 5(1): 5–36.
- McSweeney, T., A. Stevens, N. Hunt and P. Turnbull (2007) 'Twisting Arms or a Helping Hand? Assessing the Impact of "Coerced" and Comparable "Voluntary" Drug Treatment Options', *British Journal of Criminology* 47(3): 470–90.
- Measham, F. (2004) 'The Decline of Ecstasy, the Rise of Binge Drinking and the Persistence of Pleasure', *Probation Journal* 51(4): 309–26.
- Measham, F. and M. Shiner (2008) *The Baby, the Bathwater and the Legacy of Normalisation: The role of classical and contemporary criminological theory in understanding young people's drug use*. Second Annual Conference of the International Society for the Study of Drug Policy. Lisbon.
- Millar, T., I. Gemmell, G. Hay, R.F. Heller and M. Donmall (2006) 'How well do Trends in Incidence of Heroin use Reflect Hypothesised Trends in Prevalence of Problem drug use in the North West of England?', *Addiction Research and Theory* 14(5): 537–49.
- Ministry of Justice (2007a) *Criminal Statistics 2006. England and Wales*. London: Ministry of Justice.
- Ministry of Justice (2007b) *Offender Management Caseload Statistics 2006*. London: Ministry of Justice.
- Mintel (2005) *Drinking Habits—UK—March 2005*. London: Mintel International Group Ltd.
- Murphy, R. and S. Roe (2007) 'Drug Misuse Declared: Findings from the 2006/07 British Crime Survey', *Home Office Statistical Bulletin* 18/07. London: Home Office.
- Nordt, C. and R. Stohler (2006) 'Incidence of Heroin Use in Zurich, Switzerland; a Treatment Case Register Analysis', *The Lancet* 367: 1830–4.
- NTA (2007) *Statistics for Drug Treatment Activity in England 2006/07: National Drug Treatment Monitoring System*. London: National Treatment Agency for Substance Misuse.
- Nurco, D.N., T.E. Hanlon, M.B. Balter and T.W. Kinlock (1991) 'A Classification of Narcotic Addicts Based on Type, Amount and Severity of Crime', *Journal of Drug Issues* 21: 429–48.
- Office of National Drug Control Policy (2001) *What America's Users Spend on Illegal Drugs 1988–2000*. Washington D.C.: Executive Office of the President.
- Paoli, L., Greenfield, V., and P. Reuter (in press) *Heroin: Can the world supply be cut?* New York: Oxford University Press.
- Parker, H., J. Aldridge and F. Measham (1998) *Illegal Leisure. The Normalization of Adolescent Recreational Drug Use*. London: Routledge.
- Parker, H. (2005) 'Normalization as a Barometer: Recreational Drug Use and the Consumption of Leisure by Younger Britons', *Addiction Research and Theory* 13(3): 205–15.
- Parker, H. and R. Eggington (undated) 'Managing Local Heroin–Crack Problems: Hard Lessons About Policing Drug Markets and Treating Problem

- Users', *Final report from the Derbyshire Drug Market Project*. Manchester: SPARC, Manchester University.
- Pearson, G. and M. Gilman (1994) 'Local and Regional Variations in Drug Misuse: The British Heroin Epidemic of the 1980s', in M. Gossop and J. Strang (eds) *Responding to Drug Misuse: The British System*. Oxford: Oxford University Press.
- Pearson, G. and D. Hobbs (2001) 'Middle Market Drug Distribution', *Home Office Research Study no. 227*. London: Home Office.
- PMSU (2003) *SU Drugs Report. Phase 1 report: Understanding the issues*. London: Prime Minister's Strategy Unit.
- PMSU (2007) *Building on Progress: Security, Crime and Justice*. London: Prime Minister's Strategy Unit, Cabinet Office.
- Prendergast, M.L., D. Podus, E. Chang and D. Urada (2002) 'The Effectiveness of Drug Abuse Treatment: A Meta-analysis of Comparison Group Studies', *Drug and Alcohol Dependence* 67(1): 53–72.
- Pudney, S. (2002) *The road to ruin? Sequences of Initiation into Drug Use and Offending by Young People in Britain*. London: Home Office.
- Pudney, S., C. Badillo, M. Bryan, J. Burton, G. Conti and M. Iacovou (2006) 'Estimating the Size of the UK Illicit Drug Market', in N. Singleton, R. Murray and L. Tinsley (eds.) *Measuring different Aspects of Problem Drug use: Methodological Developments*. London: Home Office.
- Rigter, H. (2006) 'What drug policies cost. Drug policy expenditures in the Netherlands, 2003', *Addiction* 101, 323–329.
- RDS NOMS (2005) 'Offender Management Caseload Statistics 2004', *Home Office Statistical Bulletin 17/05. England and Wales*. London: Home Office.
- RDS NOMS (2007a) 'Sentencing Statistics 2005', *Home Office Statistical Bulletin 03/07*. London: Home Office.
- RDS NOMS (2007b) 'Sentencing Statistics 2006', *Statistical Bulletin*. London: Ministry of Justice.
- Riley, K. J. (1997). *Crack, powder cocaine, and heroin: Drug purchase and use patterns in six U. S. cities*. Washington, DC: National Institute of Justice and Office of National Drug Control Policy.
- Reuter, P., R. MacCoun and P. Murphy (1990) *Money from Crime: The Economics of Retail Drug Dealing in Washington, D.C.* Santa Monica CA: the RAND Corporation.
- Reuter, P., and A. Stevens (2007). *An Analysis of UK Drug Policy*. London: UK Drug Policy Commission.
- Russell, J. (1994) 'Substance Abuse and Crime (Some Lessons from America)', *Harkness Fellowship Report*. New York: Commonwealth Fund of New York.
- Scottish Executive (2006) 'Criminal Proceedings in Scottish Courts. 2004/05 Statistical Bulletin', *Criminal Justice Series*. Edinburgh: Scottish Executive.
- Seddon, T. (2000) 'Explaining the Drug–Crime Link: Theoretical, Policy and Research Issues', *Journal of Social Policy* 29(1): 95–107.
- Select Committee on Public Accounts (1999) *Minutes of Evidence: Examination of Witnesses (Questions 20–39)*. Wednesday 25 November 1999. London: The Stationery Office.

- Shiner, M. and T. Newburn (1999) 'Taking Tea with Noel: The Place and Meaning of Drug use in Everyday Life', in N. South (ed.) *Drugs: Cultures, Controls and Everyday Life*, pp. 139–59. London: SAGE Publications.
- SOCA (2006) *The United Kingdom: Threat Assessment of Serious Organised Crime*. London: Serious Organised Crime Agency.
- SOCA (2008) *The United Kingdom Threat Assessment: Serious Organised Crime 2008/9*. London: Serious Organised Crime Agency.
- South, N. (1998) 'Tackling Drug Control in Britain: From Sir Malcolm Delevigne to the New Drugs Strategy', in R. Coomber (ed.) *The Control of Drugs and Drug Users: Reason or Reaction?*, pp. 87–106. London: CRC Press.
- Stevens, A., D. Berto, W. Heckmann, V. Kersch, K. Oeuvray, M. van Ooyen, E. Steffan and A. Uchtenhagen (2005) 'Quasi-Compulsory Treatment Of Drug Dependent Offenders: An International Literature Review', *Substance Use & Misuse* 40: 269–83.
- Stevens, A. (2007) 'When Two Dark Figures Collide: Evidence and Discourse on Drug-related Crime', *Critical Social Policy* 27(1): 77–99.
- Stevens, A. (2008) 'Weighing up Crime: The Estimation of Criminal Drug-related Harm', *Contemporary Drug Problems*.
- UNODC (2007) *Afghanistan Opium Survey 2007*. Vienna: United Nations Office on Drugs and Crime.
- Warburton, H., P.J. Turnbull and M. Hough (2005) *Occasional and Controlled Heroin use: Not a problem?*. York: Joseph Rowntree Foundation.
- Welsh Assembly Government (2008) *Working Together to Reduce Harm—The Substance Misuse Strategy for Wales 2008–2018*. Cardiff: Welsh Assembly Government.
- Wincup, E., G. Buckland and R. Bayliss (2003) 'Youth Homelessness and Substance use: Report to the Drugs and Alcohol Research Unit', *Findings* 191. London: Home Office.
- Witton, J. and M. Ashton (2002) *Treating cocaine/crack dependence. Research into practice briefing 1a*. London: National Treatment Agency for Substance Misuse.

---

PETER REUTER is Professor in the School of Public Policy and in the Department of Criminology at the University of Maryland. He is Director of the Program on the Economics of Crime and Justice Policy at the University and also Senior Economist at RAND. He founded and directed RAND's Drug Policy Research Center from 1989-1993. His early research focused on the organization of illegal markets and resulted in the publication of *Disorganized Crime: The Economics of the Visible Hand* (MIT Press, 1983), which won the Leslie Wilkins award as most outstanding book of the year in criminology and criminal justice. Since 1985 most of his research has dealt with alternative approaches to controlling drug problems, both in the United States and Western Europe. His other books are (with Robert MacCoun) *Drug War Heresies: Learning from Other Places, Times and Vices* (Cambridge University Press, 2001) and (with Edwin Truman) *Chasing Dirty Money: The Fight Against Money Laundering* (Institute for International Economics, 2004). From 1999 to 2004 he was editor of the *Journal of Policy Analysis and Management*. In 2007 he was elected the first president of the International Society for the Study of Drug Policy.

---

ALEX STEVENS holds a PhD in Social Policy from the University of Kent and works there for the European Institute of Social Services. He directs the Connections project, which promotes research and dissemination on the prevention of drug use and related infection in the criminal justice system and is funded by the European Commission's Public Health Programme. He led the QCT Europe study, a six country research project on alternatives to imprisonment for drug dependent offenders. He was co-author, with Peter Reuter, of the *Analysis of UK Drug Policy*, published in April 2007 by the UK Drug Policy Commission. He is also Secretary of the International Society for the Study of Drug Policy and is a consultant to the Beckley Foundation's drug policy programme. He has recently edited a book on international developments in drug treatment, published by Pavilion Publishing under the title *Crossing Frontiers*.

---