

Sociology and Substance Use

Government notes this independent review of the science, which includes scenarios of possible levels of future problem use. The scenarios range from a decrease in problem users to an increase. The data does not reflect recent Government data. The Government highlights that the latest surveys show that the proportion of 16-24 year olds reporting that they have ever taken any drug has fallen by 13% in comparison to 1998 and the proportion reporting that they have ever taken class A drugs has fallen by 24% in comparison to 1998. This data suggests a recent decrease in levels of use of certain illicit drugs.

It should be noted that this paper only looks in detail at the implications of worst case scenarios.

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While the Office of Science and Technology commissioned this review, the views are those of the authors, are independent of Government and do not constitute government policy.

Sociology and Substance Use

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Executive summary

This report looks at the contribution of sociological research on substance use and misuse within the UK and considers possible future developments in this area over the next 20 years. Research in the area of substance misuse began in the UK with Stimson and colleagues' classic study of heroin users (Stimson and Ogborne 1970; Stimson and Openheimer 1982). In the mid- to late 1980s sociological research in this area was shaped primarily by the focus on studying drug users' HIV-related risk behaviour. More recently, research in this area has tended to focus on criminal justice concerns, including identifying the extent of drug-related offending, the prevalence of drug use and effective ways of tackling drug abuse.

Prevalence

There are indications that, while the overall proportion of the population consuming alcohol has not changed markedly in the recent past, alcohol consumption has increased in the case of both young people and women. In the case of illegal drug use, there are indications that the prevalence of abuse has increased dramatically in the last 50 years. In 1955, for example, there were 46 new cases on the Home Office Addicts Index. By 1995 this figure had increased to 14,735. The National Drug Treatment Monitoring System in the UK identified 128,969 drug users in contact with services in England and Wales in 2004. Overall, it has been estimated that there may be around 350,000 problematic drug users in the UK.

With regard to the future, we have identified a number of scenarios covering possible increases in the prevalence of problem drug use. These range from a high-prevalence scenario of around 1 million problem drug users by 2025, to a medium-prevalence scenario of around 750,000 problem drug users, a low-prevalence scenario of around 500,000 problem drug users, and a reducing-prevalence scenario of around 300,000 problem drug users. On the basis of the longer-term trend of problem drug use of the last 40 years, it is certainly not beyond the bounds of credibility that the number of problem drug users could increase three-fold to the 1 million level by 2025.

The impacts of a possible three-fold increase in prevalence, if it occurred, could be considerable. For example, the number of drug-related deaths per year could increase from around 2,000 to around 6,000 per year. There could be around 400,000 drug users who are Hepatitis C positive and 10,000 who are HIV positive. There could be around 300,000 children with a drug-dependent mother in the

UK. The economic and social cost of drug abuse could increase to around £35 billion a year. There could be a substantial increase in drug-related crime to a level that would severely challenge the capacity of the police and other enforcement agencies to respond, and drug use and drug-related paraphernalia could become much more visible within public spaces.

Such an expansion in the level of problem drug use could result in a close interweaving between the legal and illegal economy to the point that it would be virtually impossible to distinguish between the two economies. In due course, interests associated with the illegal drugs trade could seek to secure growing local, and national, political influence. Public attitudes towards drugs and drug users could undergo substantial change, leading to the development of much harder or more tolerant attitudes towards those using illegal drugs. Similarly, drug policy could itself change dramatically, with much greater emphasis on prescribing heroin and cocaine, as well as other drugs of abuse, in order to reduce the extent of drug-related criminality.

Individual and cultural factors influencing drug use

There are indications from sociological research that some forms of drug use have become increasingly normalised within the UK. This is evident from studies of young people, as well as from the growing references to drugs within the advertising industry (e.g. Opium perfume). In terms of risk factors underpinning drug use and drug problems, those that have been identified include: parental drug use, family disruption, social deprivation, child sexual and physical abuse. It is possible that changes in the prevalence of substance use and misuse could lead to significant changes in these risk factors and to individuals using and getting into difficulty with substances who do not have the classic 'addict profile' of multiple social and family problems. Changes in youth transitions and, in particular, the lengthening of the period covered by youth and the delayed onset of adult responsibilities (associated in part with increases in the proportion of young people remaining in full-time education for longer) may have an important influence on changes in the pattern of legal and illegal drug use.

Treatment

Increasingly, service provision both for illegal drug users and those with alcohol problems are being delivered in the form of integrated packages of care that incorporate health, social and other forms of support, as well as drug misuse treatment. This is resulting in the expansion of 'wraparound' services encompassing housing,

education, training, and employment. These developments seem set to continue as a result of a number of factors. For example, increased polydrug use may mean that it will not be possible for services to treat clients as simply 'heroin users', 'stimulant users' or 'problem drinkers'. Similarly, if the prevalence of drug use – and the numbers of individuals from more affluent, educated and middle-class backgrounds – increases, service users will tend to have greater purchasing power and knowledge of the available treatment options. This will make them a more demanding client group that expects provision to be tailored more closely to their personal circumstances.

To date, the proportions of drug treatment clients over 35 has been low in the UK and elsewhere. It is possible that, in future years, society will find itself dealing with large numbers of middle-aged and even elderly 'difficult-to-treat' addicts. This burgeoning new treatment group could jeopardise the willingness of the medical profession to prescribe opiates and injectable drugs for fear that some individuals will need this expensive treatment for many years. Equally, such initiatives could come to be seen as negative treatments of despair – simply warehousing large numbers of individuals who have been failed by the existing system in order to protect the community from their drug-related offending, while keeping them out of a criminal justice system that is already struggling to cope.

Inevitably, new forms of drug misuse will generate new pharmacological interventions that will require both clinical and non-clinical testing and assessment. Although the optimal nature and extent of non-medical treatments continue to be disputed, psychosocial and behavioural interventions play an important role in tackling addictions and an ever-increasing number of such treatments are emerging. A key aim for sociological research must be to learn more about how best to exploit their potential.

Conclusions

It is possible that over the next 20 years the illegal drug problem in the UK will expand beyond the capacity of society to cope. Drug use could become a commonplace and visible occurrence on the streets; drug-related offending could be at such a level that the individual freedoms of drug users could be severely curtailed; drug-producer countries could cease to be accepted in the international community; there could be an irremediable linking of the legal and illegal drug economy; and there could be an attempt to secure increasing political influence on the part of those operating at the uppermost levels of the illegal drug economy. These are in a sense

the features of a worst-case scenario. Nobody knows whether illegal drug use will expand to the worst-case scenario of a three-fold increase in problem drug user numbers in the UK or whether it will reduce. However, what is clear is that illegal drug use has expanded phenomenally in the last 50 years and it would seem very unlikely that the current best estimate of around 350,000 problem drug users in the UK represents the ceiling in terms of the prevalence of this problem.

If we are to avoid the point where drug abuse reaches a level that is beyond the capacity of society to cope with it (and we have no way of knowing what that point may be) there will be a need to substantially increase funding in the areas of drug prevention, drug treatment and drug enforcement and to ensure that interventions in each of these areas are maximally effective.

Introduction

This report looks at the contribution of sociological research on substance use and misuse within the UK. It is possible to view drug use as an individual behaviour in which a given person consumes a given drug and experiences the effects of that substance on his or her system. Sociology, however, reminds us that drug-using behaviours are not simply a matter of what the individual person does. Rather, drug use exist within a cultural context: some drugs are legal and some are not, some people have anti-drug attitudes and some have pro-drug attitudes, some people enjoy drugs that have a euphoric effect and others prefer drugs that have a depressive effect. As well as being substances in their own right, drugs can also be associated with a certain kind of image, for example, some substances may seem 'cool' and 'attractive', others may have the reputation of being 'dirty' and 'dangerous'. These social factors can influence what drugs are used, how they are used, who uses them, and the impact of drug use on society. Understanding these dimensions is the role of sociologists and it is their contribution that we look at in this report.

Section 1 provides a short overview of sociological research in the area. Section 2 examines what is known about the prevalence of drug use and considers possible changes in its prevalence over the next 20 years. In Section 3, we look at individual and sociocultural factors associated with the onset and progression of illegal drug use. We consider how these factors may change over the next 20 years and with what impact. Section 4 focuses on treatment, considering the effectiveness of existing treatments and the scope for new treatments as the drug problem itself evolves. Finally, in Section 5, we draw our conclusions together and assess the nature and consequences of drug use in the future.

In any report on drug use and drug users, there are inevitably problems about whether one should use the term 'drug user' and 'drug abuser,' and 'substance misuse', or 'substance use'. The sensitivities of language in this connection are difficult enough when one is referring only to illegal drugs. They are compounded when one is also talking about legal substances. Mostly, it will be obvious whether we are discussing legal or illegal drugs, but where this distinction is unclear we will refer to substance use and misuse. It is also important to acknowledge that, while sociology as a discipline can be clearly defined as 'the systematic study of human society, especially present day societies' (New Dictionary of Cultural Literacy, 3rd edition, 2002), this does not mean that it is straightforward to identify the distinctive contribution of sociologists

to studying substance use and misuse. Over the past 20 years, it has become increasingly commonplace for sociologists to work in multidisciplinary teams, and it is therefore often very difficult to identify the contribution of any single discipline.

Section 1: Sociological research in the substance use/misuse field

Sociological research on substance use and misuse within the UK has gone through a number of overlapping phases during the last 30 years. The growth of illegal drug use in the 1960s had not led to the development of a major programme of substance use and misuse research, even by the 1970s. The picture was rather different in the United States, with a number of key researchers working on drug-use-related topics (Finestone, 1957; Sutter, 1966, 1969; Feldman, 1968; Preble and Casey, 1969). One of the most influential studies carried out in the US at this time was Howard Becker's classic *Outsiders* (1963). This ethnographic, and to an extent autobiographical, study outlined the ways in which neophyte cannabis users learn to interpret the experiences associated with their use of the drug and – in so doing – contribute a form of ethnocultural knowledge about the drug and its effects which in turn shapes future users' experiences.

Becker's account was resonant at that time with the upsurge of interest in the UK in qualitative sociological research. This interest influenced probably the first distinctively sociological study of drug use and drug users in the UK. Carried out by Stimson and colleagues (Stimson and Ogborne 1970, Stimson and Oppenheimer 1982), this pioneering work involved charting the experiences of individuals dependent on heroin. By following them over an extended period, Stimson was able to provide a detailed description of the impact of heroin use on individuals' lives. The study revealed that, while some users appeared able to incorporate heroin into their lives, others' involvement with the drug fundamentally damaged, and in some cases ended, their lives. This research raised important questions about heroin addiction, the services that users needed and the broader nature of drug policy in the UK.

At the time this research was undertaken, heroin use was largely confined to London. By the 1980s, research was charting a heroin epidemic that had spread to encompass a range of Northern and Scottish cities. Parker *et al.*, (1988) and Pearson (1987) reported on heroin use in Liverpool, while Ditton and Speirits (1982) outlined its spread in Glasgow. These and other studies showed the spread of heroin use among socially excluded working-class males, and to a lesser extent females, across the UK.

In the 1980s, research on substance use and misuse in the UK underwent a transformation brought about by the fear that injecting drug users were at risk of spreading HIV infection (Bloor *et al.*,

1992, Bloor 1995). Evidence of rapid and widespread transmission of HIV among injecting drug users attending a general practice surgery in Edinburgh underlined those fears and led to research on the prevalence of injecting drug use (Frischer *et al.*, 1993), the extent and social determinants of drug injectors' HIV-related risk behaviour (Grund *et al.*, 1991, McKeganey and Barnard, 1992) and the effectiveness of services designed to reduce drug injectors' HIV-related risk behaviour, including the impact of the newly developed needle and syringe exchange services (Stimson *et al.*, 1988a, 1988b).

By the mid-1990s, fears that tens of thousands of injecting drug users within the UK would become HIV positive, and spread infection to the wider population, had receded. Attention switched back to the epidemic of drug use that had swept through the UK. More recent research has encompassed a much broader range of topics, including developing methods to better estimate the number of people using drugs (Frischer *et al.*, 2001; Hay, 2001; Hickman *et al.*, 2004b,c); identifying the shifting patterns and forms of legal and illegal drug use among young people (Currie *et al.*, 2003); understanding young people's routes into drug use (McIntosh *et al.*, 2003a, 2003b, 2003c); understanding the place of legal and illegal drugs in youth culture (Parker *et al.*, 1998); understanding recovery from dependent drug use and assessing the success of treatment services (Neale, 1998); looking at the impact of drug use on families (Barnard and Barlow, 2002, Barnard 2003) and communities (McKeganey *et al.*, 2004b); and looking at the policing of drugs and drug users (May *et al.*, 2002). Much of the current and recent research effort in this area has been fuelled by concerns over drug- and alcohol-related offending and how this might be reduced.

Theorising drug use

As well as describing what drugs are used by what groups of people, sociologists have also sought, with varying success, to construct theories that account for why people use different substances. Whereas 'individualistic explanations' tend to assume that people who take drugs are suffering from some form of physiological or psychological illness or deficiency, sociologists have placed much greater influence on a range of social and cultural factors that explain patterns of drug-using behaviour in society. For example, emphasis has been given to the way individuals may be motivated to use illegal drugs as a result of their marginalisation from society, or because illegal drug use has become normalised within certain social groups, or as a result of the power of advertising.

One of the earliest theories of drug-using behaviours derived from the theoretical work of Robert Merton (1938). Merton argued that societies have valued goals (for example, wealth and status) and that individuals achieve these goals through socially structured channels (for example, good education and hard work). Where access to these objectives by legitimate means is denied, individuals may turn to illegitimate means to succeed. Alternatively, they may reject or 'retreat' from those things that are valued by society and the accepted ways of attaining them. For Merton (1938), drug use was a typical 'retreatist' behaviour. Building on Merton's work, Cloward and Ohlin (1960) later described drug users as 'double failures' – people who had failed in both conventional and illegitimate attempts to lead satisfactory lives and to get ahead in society.

The image of drug users as inadequate persisted until the mid-1960s. Thereafter, a number of largely American sociological studies (Finestone, 1957; Feldman, 1968; Fiddle, 1967; Preble and Casey, 1969; Sutter, 1972) challenged the belief that addiction was a 'pathology' and argued instead that drug users were normal self-determining individuals who had willingly chosen a lifestyle that just happened to be deviant. This lifestyle became known as the drug-using 'career'. The premise was that drug users actively adopted the 'street addict' identity and organised their behaviour, self-perception and sense of personal worth around that master status (Stephens, 1991).

The concept of drug use as a career relates closely to the labelling theory of sociologists such as Howard Becker (1963). According to labelling theory, the more people are labelled as deviants, the more likely it is that they will behave like deviants and think of themselves as deviants. Many labelled deviants eventually become career deviants and join with other similar individuals to form deviant subcultures. The individuals within these subcultures may then become isolated from non-deviants and thus increasingly trapped within a separate antisocial identity. Authors such as Jock Young (1971) have argued that the state, the law and the media perpetuate this process by promoting negative stereotypical images of drug users. These negative images further reinforce deviant behaviour and labelling, resulting in deviancy amplification.

Such theorising emphasises the role played by broader social processes and structural factors in drug taking, a connection that was developed in the 1980s when various commentators (Peck and Plant, 1986; Dorn and South, 1987; Pearson, 1987a, 1987b; Parker *et al.*, 1988) began to draw attention to the associations between opiate use and poor housing, unemployment, family breakdown and

poverty. This more structural theoretical approach maintains that the individuals most at risk of becoming drug dependent are those who are politically and economically marginalised and most disaffected from family, school, work and the standard forms of leisure (Downes and Rock, 1998). This argument has been developed by Friedman in his work on the sociopharmacology of drug use (Friedman, 2002). He argues that drug use must be located in a broad socioeconomic context since social structures and processes affect the likelihood that individuals will use various substances.

Feminist commentators, meanwhile, have highlighted the marginalisation of women within theoretical explanations of substance use and misuse (Rosenbaum, 1981; Ettore, 1992, 1994; Taylor, 1993; Pettitway, 1997). Authors such as Ettore (1992) Sterck (1999) and Maher (1997) have rejected limited accounts of women as passive and sick individuals and instead identified them as social actors who consciously used dependent substances as a means of taking something for themselves, seeking pleasure, or coping with an oppressive situation. In this way, women's drug use was theorised as a move towards agency and self-definition that involved autonomy and assertiveness. Additionally, the diverse and complex responses of individual women to drug-related issues were emphasised (Taylor, 1993).

The importance of agency and self-definition – along with diversity and difference – are also central aspects of postmodernist theory. According to postmodernism, there was a revolutionary restructuring of society during the twentieth century. As a result, individuals have become less constrained by the structures of inequality and are now able to exercise choice far more than previously (Jones, 1997). Self-denial and prudence have been replaced by self-fulfilment and choice through a culture of consumption (Featherstone, 1991; Bauman, 1992). As Parker *et al.* (1995) have argued, postmodern society has become characterised by the fracturing of moral authority, increasing globalisation, an emphasis on consumption rather than production and a reshaping of class and gender relationships. This, it is claimed, has resulted in the normalisation of drug use where drug taking has become a regular and ordinary feature of everyday life (Shiner and Newburn, 1999; South, 1999).

But, despite these insights, sociological research has not yet provided a single definitive explanation of drug taking.

Section 2: Developments in the prevalence of substance use and misuse

In this section, we look at current and past information on the nature and extent of drug and alcohol use within the UK and anticipate possible developments over the next 20 years, particularly in relation to problem drug use. Perhaps the first thing to say is that, overall, there is much less information available on the prevalence of either illegal drug use or alcohol use in the last 30 or so years than one might have expected. As a result, it is by no means easy or straightforward to portray either the past prevalence of these behaviours or their future development. Nevertheless, in this section we attempt to construct a number of possible scenarios covering future changes in prevalence and how these could impact on society in the next 20 years.

- Alcohol

There is a range of surveys of varying size reporting information on levels of alcohol consumption in the UK. Key among these is the General Household Survey, which obtains information from over 20,000 individuals across the UK. The 2002 survey (Office for National Statistics, 2004) shows that 74% of men and 59% of women had consumed alcohol in the preceding week. These overall percentages are very similar to those for 1998. But there have been significant changes in alcohol consumption on the part of women and young people. In the case of women, the proportion reporting drinking 6–8 units of alcohol on at least one day within the last week increased from 24% in 1998 to 28% in 2002. Similarly, the proportion of women drinking more than 35 units of alcohol in the last week increased from 7% in 1998 to 10% in 2002.

- Illegal drugs

There has never been a consistent mechanism for measuring the prevalence of illegal drug use in the UK. The first system for monitoring such use was the Home Office Addicts Index, which started in the 1930s and terminated in 1997. The Addicts Index principally collated information on heroin addicts coming forward for treatment. In 1955, there were 46 new cases registered on the index. By 1995 this figure had increased to 14,735. More recently the National Drug Treatment Monitoring System, which replaced the Addicts Index in 2001, has provided provisional figures for 2003/2004 showing a total of some 128,969 people in contact with drug treatment services in England and Wales (Department of Health 2004). While this increase in registrations undoubtedly

reflects the expansion in treatment services in the UK over that period, it also reflects the increase in illegal drug use from the 1960s through to the present day.

Current prevalence estimates

Prevalence estimates for the United Kingdom come from various studies carried out at the local (e.g. Brighton) or national (e.g. Scotland) level in different years. The most up-to-date estimates are for Scotland (Information and Statistics Division, 2004), where the estimate refers to 2003, followed by England for 2001 (Frischer *et al.*, 2004) and Northern Ireland for 2000/2001 (McElrath, 2002). The most recent prevalence estimate for Wales was derived in 1994 (Wood *et al.*, 2000) and is now thought to be obsolete. The prevalence estimates for Scotland and Northern Ireland were derived using the capture-recapture method, whereas the England estimate combined capture-recapture estimates for Brighton, Greater Manchester, Liverpool and parts of London within a multivariate indicator method analysis.

The prevalence estimates are summarised, along with the rate per population aged 15–64, in Table 1.

Table 1: Summary of most recent prevalence estimates

Country	Number	Population (15–64)	Rate per 1,000
England	287,670	32,292,156	8.91
Northern Ireland	828	1,095,309	0.76
Scotland	51,582	3,352,022	15.39

These estimates primarily refer to problem heroin users. If it is assumed that the prevalence rate for England (8.91 per thousand) applies to Wales, Table 2 is the result.

Table 2: Summary of most recent prevalence estimate, whole of UK

Country	Number	Population (15–64)	Rate per 1,000
England	287,670	32,292,156	8.91
Northern Ireland	828	1,095,309	0.76
Scotland	51,582	3,352,022	15.39
Wales	16,513	1,853,654	8.91
UK total	356,593	38,593,141	9.24

On this basis, and using the most up-to-date prevalence information largely derived from 2001 data, there will already be over 350,000 problem drug users in the UK.

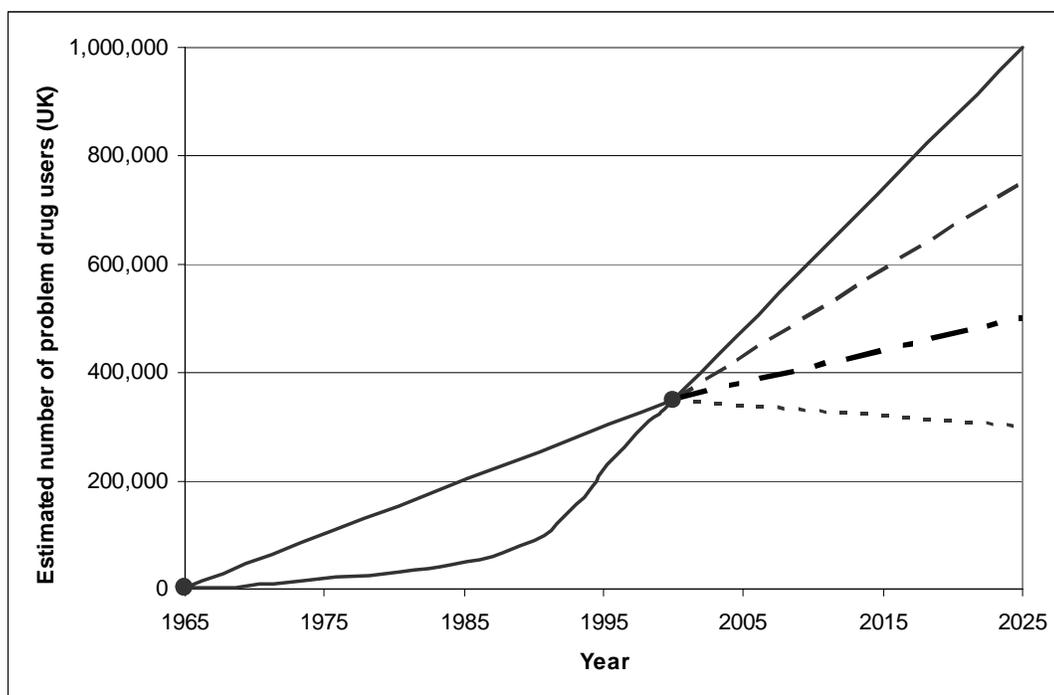
Past trends in problem drug use

Little is known about the past trends in problem drug use. The current best estimate of there being around 350,000 problem drug users in the UK is simply a point estimate referring to 2000. As we have indicated, however, the number of problem drug users in treatment in the 1960s, as documented by the Addicts Index, numbered in the hundreds and not the hundreds of thousands. The number of actual problem drug users (as distinct from the number in treatment) is likely also to have been in the hundreds at that time.

How then did the prevalence of problem drug users rise from a low level in the 1960s to what was found at the beginning of the twenty-first century? The simplest assumption would be that prevalence of problem drug use increased steadily over the 40-year period. However, research that has attempted to estimate the incidence and prevalence of problem drug use on the basis of data on drug-related deaths has suggested that there may have been a rapid increase in the prevalence of problem drug use in the 1990s (De Angelis *et al.*, 2004).

Figure 1 represents four possible scenarios relating to the future prevalence of problem drug use in the UK. The top line represents a possible increase in prevalence from around 350,000 to 1 million. The second line represents a possible increase in prevalence from around 350,000 to 750,000; the third line represents a possible increase in prevalence from 350,000 to around 500,000 and the fourth line represents a possible decrease in prevalence from 350,000 to 300,000 by 2025.

Figure 1: Possible trends in the prevalence of problem drug use in the United Kingdom



We explore below a number of factors that might influence these future prevalence scenarios. Before, doing so, it is worth considering the possible reasons why the prevalence of problem drug use might remain stable in the next 20 years.

- Drug production and cultivation

One scenario where prevalence could remain constant over the next 20 years would be if the global production of heroin and cocaine was already at its maximum level and there was little in the way of stored drugs that could serve an increased level of usage. While the data on drug production and storage is by no means robust, the 2004 World Drug Report from the United Nations Office of Drugs and Crime identifies a willingness on the part of producer farmers to plant more – not fewer – illegal crops. The report also makes the case that reductions in the overall acreage allocated to illegal crops in counties such as Columbia and Afghanistan have been compensated for by improvements in production techniques which in turn have led to increases in overall yield (United Nations Office of Drugs and Crime, 2004).

- Global conflict

It is far from clear what impact global conflicts have on overall drug production and distribution. It is possible that global conflicts in the

next 20 years might reduce levels of production within key areas with a corresponding depressive effect on drug user numbers. However, it is equally likely that such conflicts could see an increase in production and distribution. For example, the dismantling of the Taleban regime in Afghanistan resulted in an increase, at least in the short term, in heroin production. It is difficult to anticipate what further global conflicts might arise during the next 20 years or what impact they will have on drug production and consumption.

- Change in drug-using behaviours

It is possible that the next 20 years could bring a major cultural shift in the social acceptability of illegal drug use, resulting in, for example, a move away from drug injecting on the part of individuals who might otherwise have started to inject drugs. At present we know relatively little about the choices individuals make about what drugs to use, in what contexts, and at what levels. In Scotland, two national drug-misuse prevalence estimation studies carried out in 2000 and 2003 identified a reduction in the overall prevalence of problematic drug use from 55,800 to 51,582 (Hay *et al.*, 2005). These data remind us that the prevalence of problematic drug use can decrease even where it is not clear why such a reduction may have occurred.

- Vulnerable populations

Another possible scenario in which the number of problematic drug users could remain constant would be if the figure of around 350,000 represented the total vulnerable population. However, this seems unlikely. We know from recent prevalence estimation research that problematic drug use is more common in urban areas than in rural areas. This would suggest that, at minimum, there is room for expansion in the prevalence of problematic drug use in rural areas. We also know from recent prevalence estimation research that, while the overall prevalence of problematic drug use within the UK may be around 1%, it is much higher in many urban centres such as London, Glasgow and Manchester. This suggests that we have not reached the absolute ceiling in terms of the prevalence of problem drug use in the UK.

- Changes in policy

It is possible that the changes in government policy with regard to illegal drug use could have a significant influence on the overall number of problem drug users within the UK. It is difficult to speculate at this stage the various ways in which prevalence may be influenced by specific changes in policy.

Possible future increase in the prevalence of problem drug use

We explore three factors below which individually and in concert could influence future increases in the prevalence of problem drug use in the UK. These are: changes in the gender balance in those using illegal drugs, changes in the age structure of those using illegal drugs, and changes in the level of drug use in rural areas in the UK.

Changes in the gender balance of problem drug users

Most prevalence studies suggest that males make up approximately 70% of problem drug users. On that basis, the current estimate of around 356,593 problem drug users will be made up of 249,615 male problem drug users and 106,977 female problem drug users. Studies looking at less problematic forms of drug use, particularly drug use within school samples, suggest that the gender gap is narrowing (European Monitoring Centre for Drugs and Drug Addiction, 2005).

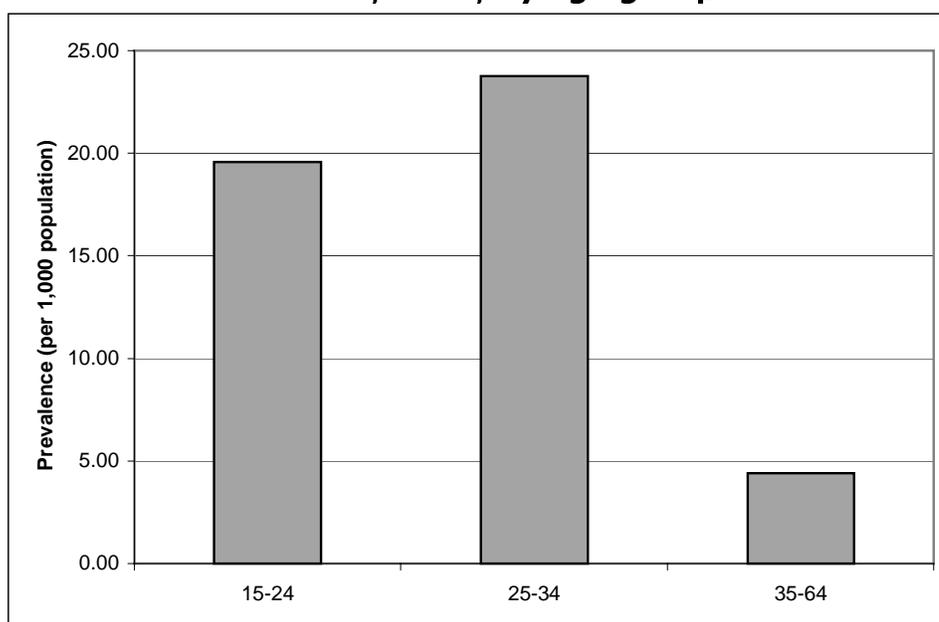
If the gender gap closed completely, and women problem drug users caught up completely with men (at the prevalence levels found in 2001), there would be approximately 2 x 249,615 problem drug users, i.e. approximately 500,000 problem drug users in the UK (13 per 1,000 of the population aged 15–64). If the current gender gap halved, there would be an additional 71,319 female problem drug users, taking the number of female problem drug users to 178,296 (i.e. half way between the existing 106,977 estimate for the number of female problem drug users and the estimated 249,615 male problem drug users). This would result in an estimated 427,911 problem drug users in the UK. Finally if the gender gap remained the same, the prevalence of problem drug use would remain at 350,000.

Changes in the age profile of problem drug users

Most problem drug users are typically in the aged 20–30. There are two obvious ways in which changes in the age structure of the drug-using population could influence the overall number of problem drug users. First, the average age at which people begin to use drugs could decrease and, second, there could be an increase in the number of drug users aged over 30. To examine the possible effect of widening the age range, we can compare different scenarios using data from Greater Manchester in 2001 (Millar *et al.*, 2004).

Figure 2 demonstrates the prevalence rates found in three age ranges, 15–24, 25–34 and 35–64 (recalculated from the 35–54 prevalence rate used in the original publication). With an overall prevalence rate of 11.92 per 1,000 population aged 15–64, the prevalence in Greater Manchester is higher than that estimated for the whole of England. The area does, however, include some local authority areas with lower prevalence e.g. 7.19 per 1,000 in Stockport, 7.68 per 1,000 in Bury and 7.91 per 1,000 in Trafford.

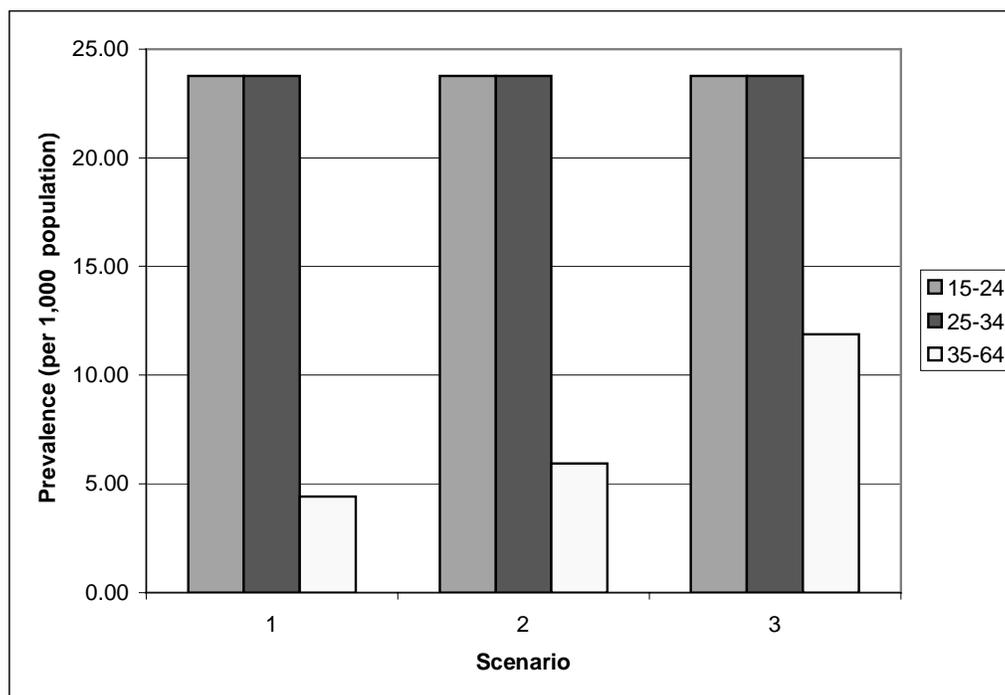
Figure 2: Prevalence of problem drug use in Greater Manchester, 2001, by age group



As a worst-case scenario, if the extent of problem drug use in the 15–24 age range rose to the level found in the 25–34 age range (as a result of a lowering of the average age at which people use drugs) and the prevalence in the 35–64 age range rose to half of that currently seen in the middle age group, this would increase the number of problem drug users to just under 500,000. This scenario is shown in Figure 3.

If the lower age range rose to match that currently found in the 25–34 age range, and the prevalence rate in the older age group rose slightly to one-quarter of that currently seen in the 25–34 age range, this would increase the prevalence of problem drug use in the UK to just under 400,000. Finally, if the prevalence of problem drug use in the 15–24 age range rose to match that currently found in the 25–34 age range (scenario 2 in Figure 3), the number of problem drug users in the UK would rise to 375,000 nationally.

Figure 3: Possible prevalence of problem drug use, by age group, under three scenarios



Increase in the prevalence of problem drug use in rural areas

In this section, we look at the possible impact on the overall prevalence of problem drug use in the UK of an increase in the prevalence of problem drug use in the rural areas. The possibility of a significant increase in the prevalence of problem drug use in rural areas was highlighted most recently in research carried out by Hay and colleagues in Scotland (Hay *et al.*, 2005). In particular, Hay and colleagues showed that while there had been a small decrease in the overall prevalence of problem drug use in Scotland in 2000–2003, prevalence in some of the rural areas had increased markedly over that period.

Previous research has estimated that the prevalence of problem drug use in Greater Manchester is around 11.92 per 1,000 aged 15–64). The equivalent figure for parts of London has been identified as 24.8 per 1,000 aged 15–64, while the figure for Liverpool is thought to be around 14.0 per 1,000 aged 15–64 (Millar *et al.*, 2004; Hickman *et al.*, 2004). The weighted average (weighted by population size) for these three areas is 18.45 per 1,000 aged 15–64.

If the prevalence of problem drug use for England and Wales as a whole rose to the 18.45 per 1,000 figure (based on the London, Liverpool and Manchester prevalence estimation work), the number of problem drug users in England and Wales would rise to around 630,000. Combining this estimate with the data from Scotland would give an overall figure of there being around 680,000 problem drug users in the UK by 2025. If the prevalence of problem drug use across England and Wales rose to the level already found in Scotland, this would result in there being approximately 580,000 problem drug users in the United Kingdom. But if the prevalence of problem drug use in rural England and Wales remained the same, the prevalence at the UK level would also remain at 350,000.

Overall changes in prevalence

It is possible that the prevalence of problem drug use in the UK by 2025 could fall below the current best estimate of 350,000 drug users. As we have already mentioned, the research by Hay and colleagues (2005) identified a small decrease in the prevalence of problem drug use in Scotland between 2000 and 2003. Similarly, the number of drug-related deaths in England and Wales also fell from 1,571 in 1999 to 1,388 in 2003 (National Statistics 2005). These figures are potentially significant because data on drug-related deaths is often taken as a proxy measure of the overall prevalence of problem drug use. On the basis of the drug-related death figures, there is the possibility that we may have witnessed a small reduction in the overall prevalence of problem drug use in the UK in recent years and that this may continue. However, sitting alongside such a possibility is the fact that the prevalence of problem drug use in the UK has increased markedly over the last 40 years. If these long-term trends continued it is entirely possible that we may witness the prevalence of problem drug use in the UK rising to between 500,000 and 1 million in the next 20 years.

While it is clearly not possible to predict the actual prevalence of problem drug use by 2025 it is important, from a sociological point of view, to explore the possible impact of a significant increase in problem drug use. In the remainder of this section, we consider the possible impact of the worst-case scenario of there being a three-fold increase in the number of problem drug users in the next 20 years. It is important to stress that the sorts of impacts we outline below could begin to be apparent in some parts of the UK in advance of a possible three-fold increase in problem drug user numbers.

What would be the impact of the worst-case-scenario three-fold increase in the prevalence of problem drug use in the UK?

- Drug-related deaths

Figures for 2000 for England and Wales suggest there were 1,666 drug-related deaths (*Health Statistics Quarterly*, 2004). In the same year, there were 292 drug-related deaths in Scotland and 54 in Northern Ireland (Drug-Related Deaths in Scotland in 2003, General Register Office for Scotland; personal communication for the Northern Ireland figure), giving a total of 2,012. If the number of problematic drug users in the UK rose to 1 million, there could be approximately 6,000 deaths a year.

- Blood-borne infection

HIV has remained low at around 1% among injecting drug users in most parts of the UK. But the situation in relation to Hepatitis C is markedly different, with 35–40% of injecting drug users thought to have contracted the infection in the UK (Health Protection Agency, 2003). A three-fold increase in the prevalence of problematic drug use could mean somewhere in the region of 350,000–400,000 injecting drug users who are Hepatitis C positive and 10,000 who are HIV positive.

- Childcare

The *Hidden Harm* report (Advisory Council on the Misuse of Drugs, 2003) suggests that there were 88,200 children in England and Wales and 17,900 children in Scotland who had a mother who was a problem drug user in 2000. No information is provided for Northern Ireland. On this basis, there are approximately 100,000 children with a drug-using mother in the UK. If the prevalence of problem drug use were to treble to 1 million problem drug users, it could be expected that the number of children with a drug-dependent mother would at least treble to 300,000. This estimate does not include children of drug-using fathers whose mother is not using drugs.

- The economic and social costs of problem drug use

Christine Godfrey and colleagues (2002) from the University of York outlined an approach to calculating the economic and social costs of problem drug use in England and Wales in 2000. They estimated it at £10,402 per problem drug user, and the total social costs at £35,456 per user. If there are currently around 350,000 problem drug users in the UK, the total economic and social cost would be of the order of £12.8 billion per year. If there were 1 million problem

drug users in the UK, the total economic and social cost would rise to £35.4 billion, an increase of over £22 billion.

The largest part of that cost is the estimated social costs associated with victims of crime, accounting for £24 billion. There are also additional healthcare costs (just over £1 billion), and benefit payments (just over £2 billion). The Government's reactive spending on crime (as opposed to the social costs of victims of crime) would total £7 billion. These costs do not include the costs of treatment, currently estimated to be in the region of £500 million per year, which could also treble in the event of an increase in prevalence to the 1 million mark.

- Drugs and crime

Many key institutions are already struggling to cope with the impact of illegal drug use. Research in Scotland that involved interviewing and drug testing arrestees found that 80% of those arrested reported having used an illegal drug within the last 12 months (McKeganey *et al.*, 2002a). Holloway *et al.* (2004), reporting similar research in England and Wales, found that between 1999 and 2002 around 65% of tested arrestees were found to have used illegal drugs. The proportion of arrestees who tested positive for opiates and/or cocaine increased from 29% in 1999 to 35% in 2002. In this study, 85% of arrestees using heroin, cocaine or crack reported having committed one or more property crimes in the last 12 months (Holloway *et al.*, 2004). Increasingly, then, policing in many areas is about policing the impact of the UK's drug problem. In the event of a three-fold increase in the size of the problematic drug-using population, it is difficult to see how the enforcement agencies could avoid being overwhelmed by drug-related offending without a very substantial increase in their own resources.

- Public visibility of problematic drug use

At the present time, while problematic drug use may be fairly visible in some communities, public evidence of drug usage (discarded drug-injecting paraphernalia, individuals using drugs on the streets) is not that commonplace. If the UK did have 1 million problematic drug users, illegal drug use would become much more visible in public spaces, and many more families would have direct personal experience of a son, daughter, father or mother addicted to illegal drugs.

- Interweaving of the legal and illegal economies

In the event of a three-fold increase in the size of the problematic drug-using population, there would be increasing pressure to launder illegal drug money through the legal economy. Similarly, the success of efforts at seizing the assets of drug dealers is likely to mean that greater attention is devoted, on the part of those involved in the illegal drug economy, to conceal their assets in legitimate economic enterprises either in the UK or abroad. In time, it could become virtually impossible to distinguish between the legitimate and illegitimate economies and some local communities could become financially dependent on the illegal drug economy without knowing it.

- Economic and political influence

With increasing economic influence being located within the hands of a small group of high-level drug suppliers and drug dealers, it is possible that a number of the key individuals involved could seek to exercise local political influence in order to protect their own enterprises (both legal and illegal) and, in time, seek to gain influence at the national political level.

- Drug policy

In response to these developments, it is possible that one might see radical changes in drug policy. In the event of a three-fold increase in the prevalence of problematic drug use, and a corresponding increase in the level of drug-related crime, there could be considerable pressure on doctors to prescribe heroin and/or cocaine as an effective crime-reduction measure (Dijkgraaf *et al.*, 2005). Alternatively, one might see pressures developing to use the technology of satellite tracking to limit the movement of known drug users. Equally, one might see the development of communities from which known drug users are excluded – with the information on who to exclude being determined through a policy of much wider drug testing.

- Foreign policy

At the present time, both the UK and the US Governments provide substantial support to the Governments of Afghanistan and Columbia to reduce the level of heroin and cocaine production (for example, encouraging heroin- and cocaine-producing farmers to produce different crops). However, the Global Drug Report from the United Nations Office of Drugs and Crime (2004) states, on the basis of a 2003 survey of Afghan farmers, that only 4% of those surveyed reported an intention to decrease opium production, and 69% indicated an intention to increase it.

If the production of heroin and cocaine was sustaining something of the order of 1 million drug users in the UK, and an equivalent number in the US, it is possible that the negative impact of drug abuse in these countries would be so great as to lead to increasing calls in both countries for much greater military intervention within drug-producing countries. Alternatively, in the face of continuing drug production in certain countries, there will be some who advise not an increase in military intervention but an increase in aid and other non-military government support in order to encourage local farmers to move away from illegal drug-crop production.

- Changes in public attitudes

A trebling in the problematic drug-using population may lead either to greater tolerance of those who are using and dependent on illegal drugs, or to much greater tensions between those who are and those who are not dependent on them. Drug abuse could become a major fault line within our society.

Conclusion

In this section we fleshed out the possible impact of a three-fold increase in the prevalence of problematic drug use. As we indicated at the outset, there is no way of knowing whether we will witness an increase in prevalence of that order in the next 20 years, a plateauing in the number of drug user or a decrease in drug user numbers. On the basis of long-term trends, however, the scenario of a three-fold increase in problematic drug user numbers would not be beyond the bounds of credibility. This scenario gives rise to the question of whether society would always be able to cope with its illegal-drug-use problem irrespective of the size of that problem. At the present time, UK society does indeed cope, albeit at considerable cost, with what is thought to be an estimated 350,000 problematic drug users. It cannot be assumed that the same would be said if that figure doubled or trebled. Indeed, in the face of such an expansion, it is very likely that there would be communities within the UK whose very sustainability was called into question as a result of their local drug problem. The possibility of a further significant increase in the prevalence of problem drug use in the UK clearly underlines the importance of efforts aimed at reducing the number of problem drug users.

Section 3: Individual social and cultural factors influencing drug use

Public attitudes

The last 20 years have seen a major change in public attitudes towards cannabis. In the 1983 British Social Attitudes Survey (Stratford et al, 2003), 12% of respondents said that they thought cannabis should be legalised. By 2001, this figure had increased to 41%. The growing liberalisation of public attitudes towards cannabis, however, is not matched by a similar shift in attitude towards heroin and ecstasy. In the 2001 survey, 87% of respondents felt that heroin should remain illegal and 88% felt that ecstasy should remain illegal – similar proportions to 1993 (Stratford *et al.*, 2003).

Changes in public attitudes towards illegal drugs are likely to have been influenced by a wide range of social factors, including the representations of drugs and drug users in the media: and particularly through advertising.

Depictions of illicit drug use in film date back to the late nineteenth century (Blackman, 2004; Shapiro, 2003). There has also been a long history of widely publicised drug-dependent actors and actresses, drug overdoses and scandals. The same applies to the link between music and drugs (Blackman, 2004), from the early references to drug use in the Blues of the 1930s through to the present day, again involving drug-dependent musicians, tragic drug-related deaths and public scandals. It is harder to gauge whether this represents an increasing trend. Given the proliferation and diversification in most modern media, research needs to do more than show greater references to drugs in current film, television, music and literature.

One important area where it seems almost undeniable that there has been an explosion in drug references is advertising. Blackman (2004) has claimed that drugs are now 'part of the mainstream economy: they provide a reservoir of images and ideas which can be exploited by advertisers to sell products'. Blackman points to the wide range of products that drug imagery has been used to sell: hemp products; mobile phones; perfumes (Opium and Addiction) and, perhaps most brazenly, computer games. Other clear examples are the fashion industry ('heroin chic') and the drinks industry, which has employed 'spaced-out' imagery to sell alcoholic drinks and 'natural highs' to sell soft drinks.

Changes in youth transitions to adulthood

There have been major changes over the past 30 years in young people's transitions to adulthood (Coles 2001; Jones 2002). Until the 1970s, there were clear pathways and progressions for young people by which they achieved adult status. More recently, the loss of manual and semi-manual jobs in traditional industries and the huge rise in the proportion of women who work has led to much greater complexity and much greater uncertainty for young people's progression. These economic changes have been paralleled by many more young people staying on in education and a prolongation of the period when young people are economically dependent on their parents. In short, youth has been extended. This may explain some of the increases in drug-use prevalence referred to above (McCambridge and Strang, 2004).

Race

Household and school surveys of drug-use prevalence have repeatedly shown black and minority ethnic people to have lower rates of illegal drug and alcohol use than white people. However, an increasing proportion of second- and third-generation British Asians are using illegal drugs at least on a recreational basis.

Gender

Both men and women use drugs, but addiction research has focused largely on males. In the earliest ethnographic studies of heroin misuse conducted in the US (Finestone, 1957; Sutter, 1966, 1969, 1972; Feldman, 1968; and Preble and Casey, 1969), street addicts were portrayed as innovative, self-determining men who somehow managed to carve out an active role for themselves in an otherwise hostile world. This image was maintained in later research where male drug users were similarly described as busy, self-respecting individuals who actively confronted and purposely responded to external constraints and life opportunities (Agar, 1973; Waldorf, 1973; Hanson *et al.*, 1985; Johnson *et al.*, 1985; Biernacki, 1979; Rosenbaum, 1981; Bourgois, 1996).

By contrast, female drug users have often been omitted from – or at best peripheral to – studies of drug misuse (Ettorre, 1992, 1994; Henderson, 1988; Pettitway, 1997; Rosenbaum, 1981; Taylor, 1993). When they have appeared, they have overwhelmingly been portrayed as victims or as weak, self-destructive and insecure individuals who were sicker, more deviant and more psychologically

disturbed than their male peers (Colten, 1979; Ettore, 1989, 1992; Pettitway, 1997). Until recently, female drug use has tended to be discussed in relation to a narrow range of 'women's issues' such as the effects of addiction on childbirth, child rearing and parenting (Glynn *et al.*, 1983; Murphy and Rosenbaum, 1995), or the involvement of women drug users in prostitution (Freund *et al.*, 1989; Perkins and Bennett, 1985).

As both the number of drug-using women and the number of female drug-misuse researchers have increased, information relating to gender differences in drug-taking behaviour has been emerging. Recent research has shown that women report shorter progressions from first drug use to dependence than men (Anglin *et al.*, 1987; McCance-Katz *et al.*, 1999), are more likely to share used injecting equipment and to have a sexual partner who is also a drug user (Barnard, 1993; Becker and Duffy, 2002; Donoghoe *et al.*, 1992; Dwyer *et al.*, 1994; Gossop *et al.*, 1994; Powis *et al.*, 1996). In addition, disproportionate numbers of drug-dependent women have suffered posttraumatic experiences such as sexual abuse, incest, domestic violence, or the death of a child or a stillbirth (Becker and Duffy, 2002; El-Bassel *et al.*, 2000; Gilbert *et al.*, 2001; Horgan *et al.*, 1998). Likewise, female drug users experience particularly high levels of mental health problems, including low self-esteem, depression, anxiety and suicidal feelings (Becker and Duffy, 2002; Gilbert *et al.*, 2001).

Changes in risk factors in the development of illegal drug use

- Parental drug use

A large body of research has shown that substance-dependent people tend to have had substance dependent parents (e.g. Lloyd, 1998; Rhodes *et al.*, 2003; Johnson and Leff, 1999). However, the relative importance of genetic predisposition and the family environment is not so clear. Interestingly, recent research on twins suggests that the genetic and environmental factors that influence risk for use and problematic use are 'largely or entirely nonspecific in their effect' and that the 'environmental experiences unique to the person largely determine whether predisposed individuals will use or misuse one class of psychoactive substances rather than another' (Kendler *et al.*, 2003).

- Family disruption and family relationships

While some studies have found an association between divorce or separation and drug use, including more problematic use (Rhodes *et*

al., 2003), a growing body of research seems to indicate that once family relationships are taken into account, family structure ceases to be influential (Friedman *et al.*, 2000; Spooner, 1999). It may be family relationship difficulties, rather than separation, that cause poor outcomes for children (Rogers and Prior, 1998). Similarly a number of studies have attempted to identify the type of parent-child relationships that are associated with problem use.

Generalising from this growing literature, it would appear that lack of attachment and warmth, overprotection, rejection and possibly poor parental monitoring are associated with problem use (Spooner, 1999; Oxford *et al.*, 2000; Lee and Bell, 2003; Glavak *et al.*, 2003; Anderson and Eisemann, 2003).

These findings suggest that poorer parent-child relationships would be accompanied by greater vulnerability to substance dependence, along with a whole host of other problems. There have been major changes in parenting in recent times in the UK, including recent growth in non-parental care due to changing trends in the employment of women. Men are more involved in parenting (especially in cases where the mother is working) and children appear to be increasingly protected (e.g. Ransom and Rutledge, 2005). Whether these changes have led – and will lead in the future – to changes in parental attachment or the other factors referred to above is an open question. However, policies that encourage parental attachment and warmth and discourage overprotection may prove important to prevent future problematic use.

- Child sexual and physical abuse

Since Lloyd's review in 1998, which concluded that there was 'a strong relationship between child sexual abuse and drug abuse', there has been a burgeoning in the literature in this subject area. Virtually all of these studies have focused on drug users in treatment (Westermeyer *et al.*, 2001; Berry and Sellman, 2001; Ballon *et al.*, 2001; Liebschutz *et al.*, 2002; Medrano *et al.*, 1999). Excluding one study with exceptionally high rates, self-reported sexual abuse rates vary between 50% and 64% for females and between 10% and 24% among males. Rates for physical abuse varied between 40% and 55% among females and between 23% and 26% among males. Given the much greater level of social awareness of these issues in recent times, it may be that rates will stabilise or decline.

- School

Previous research has shown that poor performance at school, truancy, exclusion and attendance at pupil referral units (or

'continuation schools' in the US) are associated with problematic drug use. This conclusion has been verified by more recent work (Rhodes *et al.*, 2003; Goulden and Sondhi, 2001). Many of these school-based factors cannot be seen in isolation from earlier family factors and the considerable body of evidence showing an association between conduct disorder and drug use.

The permanent exclusion rate in England has been decreasing in recent years. After 1997/8 it declined by 24% to 9,290 in 2002/3 (Department for Education and Skills, 2004). Any substantial decrease in the truancy rate is likely to help prevent the escalation of drug use among those attending school who might otherwise be on the street during the day with time to kill.

- Social deprivation

Sociological research on the UK heroin epidemic of the 1980s recognised that these new drug problems were developing in the poorest areas of cities (Pearson, 1987; Parker *et al.*, 1988). Since then, a number of studies have shown deprivation to be linked to problem drug use (see Rhodes *et al.*, 2003).

The connection between deprivation and problematic drug use is likely to be complex, but will probably involve parenting. Bringing up a child in deprived circumstances is more stressful and difficult than in well-off circumstances (Utting, 1995). There is also the issue of access to drugs. Longitudinal research on young people in the US has shown that exposure to cocaine is more widespread in more deprived neighbourhoods (Crum *et al.*, 1996). Class A drug markets are likely to develop in areas where crime and disaffection with police are high (Lupton *et al.*, 2002). Thus exposure to drugs like heroin is likely to be more common in socially excluded communities (Webster *et al.*, forthcoming).

The proportion of children brought up in 'poverty' is declining (Sutherland *et al.*, 2003). While this may have an eventual impact on problematic drug use, it is difficult to avoid the conclusion that without a dramatic rise in the fortunes of some of the more deprived areas of the country, there is likely to be a continuing escalation in the use of such drugs as heroin and cocaine.

Section 4: Treatment

There is now a wide range of readily accessible drug services within the UK, including in-patient drug detoxification and residential rehabilitation, methadone and other substitution programmes and

non-clinical interventions such as counselling and group work. In addition, new types of treatment such as vaccines, ultra-rapid detoxifications, memory extinction and transcranial magnetic stimulation are emerging. In this chapter, we examine research on the impact of drug treatment services and consider how treatment may need to evolve if it is to address changes in the pattern and profile of drug use.

In medical research, it is commonly assumed that the gold standard in measuring what works is the randomised control trial (RCT). The drug-misuse treatment field has had its fair share of clinical experiments. However, there are difficulties in conducting highly controlled evaluations with groups of addicts. It is almost impossible to ensure that any given individual only receives one specific treatment and there are ethical issues in withholding support from someone simply to maintain a rigorous evaluation methodology. Additionally, drug treatment programmes can be very diverse and comprise non-medical as well as medical components, making systematic comparisons difficult.

Alongside RCTs, the effectiveness of drug treatment services has been assessed using longitudinal outcome studies. They have consistently provided research evidence that the major treatment modalities (methadone prescribing, residential services, and drug-free out-patient support) are effective in reducing illicit drug use, reducing the incidence of crime-related behaviour, and supporting improvement in physical health, mental health, and social functioning (Fletcher and Battjes, 1999).

In the criminal justice field, longitudinal studies of prison drug treatment programmes have also shown positive outcomes in terms of relapse and recidivism rates (Field, 1992; Inciardi *et al.*, 1997; Knight *et al.*, 1997; Martin and Player, 2000; Martin *et al.*, 2003; Pelissier *et al.*, 1998; Shewan *et al.*, 1994; Wexler *et al.*, 1990). Despite this, there is worrying evidence that the availability of drug treatment provision in prisons is insufficient to meet need, and drug users' perceptions of the help they receive while in jail is poor (Neale and Saville, 2004). Furthermore, the long-term success of relatively new criminal justice interventions – such as Drug Courts, Arrest Referral schemes and the Drug Treatment and Testing Order (DTTO) – has yet to be proven. An evaluation of DTTOs concluded that there was a low completion rate which probably reflected the challenges faced by local services in keeping chaotic drug users on an intensive and highly structured programme (Audit Commission, 2002).

Current sociological drug-misuse research highlights the importance of 'process' factors (as opposed to simple 'outputs' and 'outcomes') in drug service evaluation (Neale and Saville, 2004). Key process factors relate to how services are delivered and the attitudes of service providers. According to one qualitative study, positive service attributes include offering a broad range of services, having staff with specialist drugs knowledge, being accessible, having a good attitude towards drug users, encouraging open and honest working relationships, being willing to listen and being supportive and understanding (Neale, 1998).

Qualitative studies have also examined the barriers drug users can face when attempting to access help. An Australian study of women who self-managed change in their alcohol and other drug dependence found that the principal barriers to accessing treatment included social stigma and labelling, lack of awareness of the range of treatment options, concerns about childcare, the perceived economic and time costs of residential treatment, the confrontational models used by some treatment services, and stereotypical views of clients (Copeland, 1997).

A recent Home Office report on women drug users and drug service provision argued that female drug users have specific experiences and needs that are not always recognised or met by service providers (Becker and Duffy, 2002). These relate to pregnancy and childcare, sex-working, sexual and physical abuse and mental health needs. A Home Office study by Sangster *et al.*, (2002) found that drug services in the UK have also failed to develop in ways that would make them more accessible to black and ethnic-minority people. This research argued that there is a place for specialist drug services, but mainstream providers must also develop accessible and appropriate support that recognises the diversity of needs across ethnic groups.

In terms of alcohol treatment, the new alcohol harm-reduction strategy for England (Prime Minister's Strategy Unit, 2004) identifies a range of appropriate interventions. It concludes that no particular treatment is more effective than any other in responding to alcohol problems, but different types of treatment are appropriate for different types of individual. Accordingly, more co-ordinated arrangements for commissioning and monitoring standards and for tailoring treatment to differing individual needs and motivations are required.

Increasingly, service provision for both illegal drug use and alcohol problems is being delivered in the form of integrated packages of care that incorporate general health, social and other forms of

support, as well as drug misuse treatment (National Treatment Agency, 2002). This is resulting in an expansion of 'wraparound' housing, education, training and employment services. Although such developments have yet to be thoroughly evaluated, the complexity and extent of problems accompanying addiction is likely to mean that enabling service users to achieve relatively simple goals, such as moving into paid employment or retaining secure accommodation, will prove very difficult (Kemp and Neale, 2005). The success or failure of integrated models of care and add-on services may therefore need to be judged by small incremental steps rather than by large-scale change.

As support services become more individualised and involve a wider range of care providers, qualitative research – particularly that incorporating service users' views – will have an increasing role to play in service evaluation. Moreover, the importance of user-centeredness can be expected to intensify for two further reasons. More polydrug use means that it will not be possible to treat drug service clients as simply 'heroin users,' 'stimulant users' or 'problem drinkers'. And if the prevalence of drug use – and the numbers of individuals from more affluent, better-educated and middle-class backgrounds – increases, service users will tend to have greater purchasing power and knowledge of the available treatment options. This will make them a more demanding client group that expects provision to be tailored closely to their personal circumstances.

Looking to the future in drug treatment research

In the future, sociologists must build on existing research evidence to increase understanding of how services might better help vulnerable and marginalised subgroups of drug users, the families and carers of drug users, and the communities in which drug users live. Equally, it will be necessary to investigate and evaluate a broader range of drug treatments than has been the case hitherto.

International research suggests that the provision of safe injecting rooms (SIRs) reduces drug users' mortality and other health risks. However, theoretical and simulation evidence has indicated that SIRs can also diminish incentives to refrain from drug use by reducing the risk of drug-related death (Clarke, 2001). Though SIRs are not currently available in the UK, this may change during the next 20 years as the UK Government comes to face the prospect of problematic drug use becoming much more visible in public spaces.

Recently, the UK Government has given guarded endorsement to the use of prescribed injectable opioid drugs to a minority of

(mainly older) heroin misusers who have failed to respond to other treatment (Drug Strategy Directorate, 2002; National Treatment Agency, 2003). Where such treatments are occurring, there is a clear need for them to be carefully monitored and evaluated.

To date, the proportions of drug treatment clients over 35 years have been low in the UK and elsewhere. It is possible that in future, society will find itself dealing with large numbers of middle-aged and even elderly 'difficult-to-treat' addicts. This burgeoning new treatment group could jeopardise any nascent willingness in the medical profession to prescribe opiates and injectable drugs for fear that some individuals will need this expensive treatment for many years. Equally, such initiatives could come to be seen as negative treatments of despair – simply warehousing large numbers of individuals, who have been failed by the existing system, in order to protect the community from their ill-doings while keeping them out of a criminal justice system that is bursting at its seams.

Both of these possibilities highlight the importance of future research into the prevalence and treatment needs of older drug users. However, at the opposite end of the age spectrum, society must deal with ever-younger drug users. It is here that the boundary between treatment and prevention is most blurred. Although the effectiveness of drug prevention programmes has been widely contested, research indicates that drug education – if delivered in the proper context and in the appropriate way – can reduce drug misuse or at least delay the onset of experimentation (DrugScope, 2004). Building on this evidence, the Department for Education and Skills (2004) now provides detailed guidance on what schools should be doing in this area and efforts are being made to equip young people with core life skills that will protect them against drug taking.

Inevitably, new forms of drug misuse will generate new pharmacological interventions that will each require both clinical and non-clinical testing and assessment. Currently, good substitution therapies for many drugs (such as synthetic drugs, crack cocaine and cannabis) are not available. In years to come, this treatment gap will probably disappear as pharmaceutical technologies advance. Even if suitable treatment drugs are not developed, vaccinations against specific forms of drug taking will almost certainly appear. Vaccines to help nicotine users (NicVax) and cocaine users (TA-CD) break their addictions are already being developed.

Although the optimal nature and extent of non-medical treatments continue to be disputed (Wodak, 2001), psychosocial and

behavioural interventions play an important role in tackling addictions and an ever-increasing number of such treatments are emerging. A key aim for sociological research must be to learn more about how best to exploit their potential.

The importance of mutual aid in recovery processes is clearly reflected in the popularity of Alcoholics Anonymous (AA) and Narcotics Anonymous (NA). But mutual-aid practices are increasingly varied. For example, there are trends toward the political organisation of addicts, the professionalisation of mutual-aid movements and the globalisation of recovery mutual aid via the Internet. Nowadays, mutual-aid groups differ markedly (White, 2004) and more information about their functions and capabilities is needed.

Finally, it is important to highlight the role that local communities might play in tackling drug problems in the future. Involving communities in developing locally based initiatives through the imaginative use of existing and planned network partnerships is a cornerstone of the UK drug strategy (Home Office, 1998). Despite this, sociological research has sounded a note of caution by criticising romantic and idealised notions of 'community'. Communities exist within communities and attempts to present a unified front can obscure the many differences between people (Cockburn, 1977; Cowley *et al.*, 1977; McClenaghan, 2000; Peterson, 1994). While community-based responses to drug problems are to be welcomed, the success of such initiatives may depend upon first re-establishing a sense of safety within local neighbourhoods and, secondly, increasing understanding and trust between local people who use drugs and those who do not (McKeganey *et al.*, 2004b).

Section 5: Conclusions

In this review we have covered a wide range of areas to do with the sociology and the social impact of drug use and abuse. We have looked at issues to do with how sociologists have understood drug use; past and possible future changes in the prevalence of legal and illegal drug use; factors associated with individuals' drug use; and the impact of treatment services in meeting the needs of people who get into difficulty as a result of their drug use.

In terms of looking to the next 20 years, one of the key issues we have considered is the possible increase in overall prevalence of problem drug use. While it is not possible to say with any certainty what the level of illegal drug use will be in 2025, we can speculate, on the basis of past increases in prevalence, that the next 20 years may witness a three-fold increase in prevalence. Such an increase would not be beyond the realm of possibility and could come about as a result of such factors as the level of drug use among females equalling that among males, a reduction in the age of onset of illegal drug use, a lengthening of drug-using careers, and an increase in the level of drug use in rural areas. These are all developments we are starting to see the early signs of at the present time (Hay *et al.*, 2005, McKeganey *et al.*, 2004a, European Monitoring Centre for Drugs and Drug Addiction, 2005).

The result of such a development could be that within the next 20 years the prevalence of problematic drug use in the UK could increase from around the 350,000 to 1 million. Again, while it is not possible to be precise as to the impact of such an increase, there clearly would be significant effects on health services, on the police, on domestic drug policy and on foreign policy.

It is possible that any significant expansion in the use of heroin, cocaine and any new drugs yet to be developed might occur among new social groups whose 'risk profile' is very different from those who are currently using these drugs. These individuals may be less likely to resort to crime to fund their drug use and, when they do develop problems associated with their drug use, they may be more responsive to treatment than current problematic drug users. It is possible that the prevalence of problem drug use in the UK could remain at its current level, although we think this is an unlikely outcome.

The impact of any significant increase in the prevalence of problem drug use is itself likely to be influenced by the nature of any policy developments in this area. If heroin and cocaine became legal, for

example, one would not necessarily expect to see anything like the connection between problematic drug use and crime which is commonplace today. However, the legalisation of these drugs could see a much greater expansion in their use to the point where the level of their consumption is on a par with current levels of alcohol and tobacco use.

In the next 20 years there may also be marked changes in the nature of drug treatment services, with less focus on addiction and more focus on intoxication (Caulkins *et al.*, 2003). There may be a need for drug treatment services to be much more responsive to the greater consumer power and knowledge of a large group of users who do not have the traditional risk profile which includes abuse and social exclusion. Equally, there will be a need to identify exactly what 'treatment' means for individuals who are not yet addicted but who may be on the road to addiction. Other demographic changes are also likely to influence the nature of drug treatment, including the decreasing age of onset of illegal drug use as well as individuals who have remained drug dependent into their 60s and 70s.

The field of prevention might also undergo dramatic change. Drug prevention technology today is somewhat underdeveloped. It is possible that the introduction of cheap, non-invasive, drug-testing kits might fundamentally change the terrain of drug prevention, allowing services to focus directly on those who are using specific substances at a point well before they get into difficulty with those substances. Similarly, it may be that widespread drug testing itself reduces the overall prevalence of drug use. We might see widespread erosion of the rights of individuals as a result of their drug use (McKeganey, 2004).

If there was anything like a three-fold increase in the level of drug-related offending, there would be a very strong push to limit the freedom of known drug users, both those who have become addicted to certain drugs and mere users of specific substances. We already accept the principle of requiring drug users to undergo treatment as part of their processing by the criminal justice system. It may be that any significant expansion in drug-related offending would call forth initiatives to limit drug users' movements, possibly using the technology of satellite tracking.

In the face of these sorts of developments, there is likely to be a need to increase the support for those working in the drug treatment, drug prevention and drug enforcement fields. There will be a growing need to support professional practice in each of these areas to ensure that professional practice is based on clear evidence

of 'what works'. This will necessitate much greater investment in research to establish the effectiveness of different approaches to tackling society's drug problem.

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References

Advisory Council on the Misuse of Drugs (1998). *Drug Use and the Environment*. London: HMSO.

Advisory Council on the Misuse of Drugs (2003) *Hidden Harm: Responding to the Needs of the Children of Problem Drug Users*. London: HMSO.

Agar, M. (1973) *Ripping and Running. A Formal Ethnography of Urban Heroin Addicts*. New York and London: Seminar Press.

Anderson, P. and Eisemann, M. (2003). Parental Rearing and Individual Vulnerability to Drug Addiction: A Controlled Study in a Swedish Sample. *Nordic Journal of Psychiatry* 57(2): 147–156.

Anglin, D.M., Hser, Y.-I. and McGlothlin, W.H. (1987) Sex Differences in Addict Careers: Becoming Addicted. *American Journal of Drug and Alcohol Abuse* 13: 59–71.

Audit Commission (2002) *Changing Habits: The Commissioning and Management of Drug Treatment Services for Adults*. London: Audit Commission.

Ballon, B.C., Courbasson, C. and Smith, P.D. (2001). Physical and Sexual Abuse Issues among Youths with Substance Use Problems. *Canadian Journal of Psychiatry* 46: 617–621.

Barnard, M. (1993) Needle Sharing in Context: Patterns of Sharing among Men and Women Injectors and HIV Risks. *Addiction* 88: 805–812.

Barnard, M. (2003) Between a Rock and a Hard Place: The Role of Relatives in Protecting Children from the Effects of Parental Drug Problems. *Child and Family Social Work* 8: 291–299.

Barnard, M. and Barlow, J. (2002) Discovering Parental Drug Dependence: Silence and Disclosure. *Children and Society* 17: 45–56.

Bauman, Z. (1992) *Intimations of Modernity*. London: Routledge.

Becker, H. (1963) *Outsiders: Studies in the Sociology of Deviance*. New York: Free Press.

- Becker, J. and Duffy, C. (2002) *Women Drug Users and Drugs Service Provision: Service Level Responses to Engagement and Retention*. London: Home Office.
- Berry, R. and Sellman, J.D. (2001). Childhood Adversity in Alcohol- and Drug-Dependent Women Presenting to Out-Patient Treatment. *Drug and Alcohol Review* 20: 361–367.
- Biernacki, P. (1979) Junkie Work, 'Hustlers' and Social Status Among Heroin Addicts. *Journal of Drug Issues* 9: 535–551.
- Blackman, S. (2004). *Chilling Out: The Cultural Politics of Substances Consumption, Youth and Drug Policy*. Maidenhead, Berkshire: Open University Press.
- Bloor, M. (1995) *The Sociology of HIV Transmission*. London: Sage Publications.
- Bloor, M., McKeganey, N., Findlay, A. and Barnard, M. (1992) The Inappropriateness of Psychosocial Models of Risk Behaviour to Understanding HIV-Related Risk Behaviour among Glasgow Male Prostitutes. *AIDS Care* 4: 131–137.
- Bourgois, P. (1996) *In Search of Respect Selling Crack in El Barrio*. Cambridge: Cambridge University Press.
- Carroll, J. (1993) Attitudes of Professionals to Drug Abusers. *British Journal of Nursing* 2: 705–11.
- Caulkins, J., Reuter, P., Iguchi, M. and Chiesa, J. (2003) *Drug Use and Drug Policy Futures Insights from a Colloquium*. Rand Corporation. Philadelphia.
- Clarke, H. (2001) Some Economics of Safe Injecting Rooms. *Australian Economic Review* 34: 53–63.
- Cloward, R. and Ohlin, L. (1960) *Delinquency and Opportunity*. Chicago: Free Press.
- Cockburn, C. (1977) *Local State: Management of Cities and People*. London: Pluto Press.
- Coles, B. (2001). *Joined-Up Youth Research, Policy and Practice: A New Agenda for Change*. Leicester: Youth Work Press.
- Colten, M.E. (1979) A Description and Comparative Analysis of Self-Perceptions and Attitudes of Heroin-Addicted Women. In: US

Department of Health, Education and Welfare. *Addicted Women: Family Dynamics, Self-Perceptions, and Support Systems*. 7–36. Rockville, Md: National Institute on Drug Abuse.

Copeland, J. (1997) A Qualitative Study of Barriers to Formal Treatment among Women who Self-Managed Change in Addictive Behaviours. *Journal of Substance Abuse Treatment* 14: 183–90.

Cowley, J., Kay, A., Mayo, M. and Thompson, M. (1977) *Community or Class Struggle*. London: Stage 1.

Crum, R.M., Lillie-Banton, M. and Anthony, J.C. (1996). Neighbourhood Environment and Opportunity to Use Cocaine and Other Drugs in Late Childhood and Early Adolescence. *Drug and Alcohol Dependence* 43: 155–161.

Currie, C., Fairgrieve, J., Akhtar, P. and Currie, D. (2003) Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) National Report: Smoking, Drinking and Drug Use Among 13- and 15-Year-Olds in Scotland in 2002. Edinburgh: TSO.

De Angelis, D., Hickman, M. and Yang, S. (2004) Estimating Long-Term Trends in the Incidence and Prevalence of Opiate Use/Injecting Drug Use and the Number of Former Users: Back-Calculation Methods and Opiate Overdose Deaths. *American Journal of Epidemiology* 160: 994–1004.

Department for Education and Skills (2004) *Drugs: Guidance for Schools*. London: Department for Education and Skills.

Department for Education and Skills (2004). *Permanent Exclusions from Schools and Exclusion Appeals in England*. London: Department for Education and Skills.

Department of Health (2004) Provisional Statistics from the National Drug Treatment Monitoring System in England and Wales 2001/2002 and 2002/2003

Dijkgraaf M.G.W., van der Zanden, B.P., de Borgie, C.A.J.M., Blanken, P., van Ree, J.M. and van den Brink, W. (2005) Cost Utility Analysis of Co-Prescribed Heroin Compared with Methadone Maintenance Treatment in Heroin Addicts in Two Randomised Trials. *British Medical Journal* 330: 1297.

Ditton, J. and Speirits, K. (1982) *The Rapid Increase of Heroin Addiction in Glasgow during 1981*. Glasgow: Department of Sociology, University of Glasgow.

Donoghoe, M., Dorn, N., James, C., Jones, S., Ribbens, J. and South, N. (1987) How Families and Communities Respond to Heroin. In: Dorn, N. and South, N. (eds) *A Land Fit for Heroin? Drug Policies, Prevention and Practice*. Basingstoke and London: Macmillan Education Ltd.

Dorn, N. and South, N. (eds) (1987) *A Land Fit for Heroin? Drug Policies, Prevention and Practice*. Basingstoke and London: Macmillan Education Ltd.

Downes, D. and Rock, P. (1998) *Understanding Deviance: A Guide to the Sociology of Crime and Rule Breaking*, 3rd edn. Oxford: Oxford University Press.

Drug Strategy Directorate (2002) *Updated Drug Strategy 2002*. London: Home Office.

DrugScope (2004) Does drug education stop drug use? http://www.drugscope.org.uk/druginfo/drugsearch/faq_template.asp?file=%5Cwip%5C11%5C1%5C2%5Ceducation.html (accessed 18 August 2004).

Dwyer, R., Richardson, D., Ross, M.W., Wodak, A., Miller, M.E. and Gold, J. (1994) A Comparison of HIV Risk Between Women and Men who Inject Drugs. *AIDS Education and Prevention* 6: 379–89.

El-Bassel, N., Gilbert, L., Schilling, R. and Wada, T (2000) Drug Abuse and Partner Violence among Women in Methadone Treatment. *Journal of Family Violence* 15(3): 209–228.

Ettorre, E. (1989) Women, Substance Abuse and Self-Help. In: MacGregor, S. (ed.) *Drugs and British Society: Responses to a Social Problem in the Eighties*. London and New York: Routledge.

Ettorre, E. (1992) *Women and Substance Use*. New Brunswick, New Jersey: Rutgers University Press.

Ettorre, E. (1994) What Can She Depend On? Substance Use and Women's Health. In: Wilkinson, S. and Kitzinger, C. (eds) *Women and Health: Feminist Perspectives*. London: Taylor and Francis.

European Monitoring Centre for Drugs and Drug Addiction (2005) *Differences in Patterns of Drug Use between Men and Women*. European Monitoring Centre for Drugs and Drug Addiction Lisbon

Featherstone, M. (1991) *Consumer Culture and Postmodernism*. London: Sage.

Feldman, H. (1968) Ideological Supports to Becoming and Remaining a Heroin Addict. *Journal of Health and Social Behavior* 9: 131–139.

Fiddle, S. (1967) *Portrait From a Shooting Gallery*. New York: Harper and Row.

Field, G. (1992) Oregon Prison Drug Treatment Programmes. In: Leukfield, C. and Tims, F. (eds), *Drug Abuse Treatment in Prison and Jails*. Washington, DC: National Institute of Drug Abuse.

Finestone, H. (1957) Cats, Kicks and Color. In: Becker, H. (ed.) *The Other Side*. New York: The Free Press.

Fletcher, B.W. and Battjes, R.J. (1999) Introduction to the special issue: treatment process in DATOS. *Drug and Alcohol Dependence* 57: 81–87.

Freund, M., Leonard, T.L. and Lee, N. (1989) Sexual Behavior of Resident Street Prostitutes with Their Clients in Camden, New Jersey. *Journal of Sex Research* 26: 460–478.

Friedman, A.S., Terra, A. and Glassman, K. (2000). Family Structure versus Family Relationships for Predicting Substance Use/Abuse and Illegal Behaviour. *Journal of Child and Adolescent Substance Abuse* 10(1): 1–16.

Friedman, S.R. (2002) Sociopharmacology of Drug Use: Initial Thoughts. *International Journal of Drug Policy* 13: 341–347.

Frischer, M., Leyland, A., Cormack, R. *et al.* (1993) Estimating Population Prevalence of Injection Drug Use and HIV Infection among Injection Drug Users in Glasgow. *American Journal of Epidemiology* 138(3): 170–181.

Frischer, M., Hickman, M., Kraus, L., Mariani, F., Wiessing, L. (2001) A Comparison of the Different Methods for Estimating the Prevalence of Problematic Drug Misuse in Great Britain. *Addiction* 96: 1465–1476.

Frischer, M., Heatlie, H. and Hickman, M. (2004). *Estimating the Prevalence of Problematic and Injecting Drug Use for Drug Action Team Areas in England: A Feasibility Study Using the Multiple Indicator Method*. Home Office Online Report 34/04. <http://www.homeoffice.gov.uk/rds/pdfs04/rdsolr3404.pdf>

- Gemmell, I., Millar, T. and Hay, G. (2004) Capture–Recapture Estimates of Problem Drug Use and the Use of Simulation-Based Confidence Intervals in a Stratified Sample. *J Epidemiology and Community Health* 58: 758–765.
- Gilbert, L., El-Bassel, N., Rajah, V., Foleno, A. and Frye, V. (2001) Linking Drug-Related Activities With Experiences of Partner Violence: A Focus Group Study of Women in Methadone Treatment. *Violence and Victims* 16(5): 517–536.
- Glavak, R., Kuterovac-Jogodic, G. and Sakoman, S. (2003). Perceived Parental Acceptance-Rejection, Family-Related Factors and Socio-Economic Status of Families of Adolescent Heroin Addicts. *Croatian Medical Journal* 44(2): 199–206.
- Glynn, T.J., Wallenstein Pearson, H. and Sayers, M. (1983) *Women and Drugs*. Rockville, Md.: National Institute on Drug Abuse.
- Godfrey, C., Eaton, G., McDougall, C. and Culyer, A. (2002) *The Economic and Social Costs of Class A Drug Use in England and Wales, 2000*. London: Home Office Research Study 249.
- Gossop, M., Griffiths, P. and Strang, J. (1994) Sex-differences in Patterns of Drug Taking Behavior: A Study at a London Community Drug Team. *British Journal Of Psychiatry* 164: 101–104.
- Goulden, C. and Sondhi, A. (2001). *At the Margins: Drug Use by Vulnerable Young People in the 1998/99 Youth Lifestyles Survey*. London: Home Office Research Study 228.
- Greenwood, J. (1992) Unpopular patients: GPs' Attitudes to Drug Users. *Druglink* July/August: 8–10.
- Grund, J.P.C., Kaplan, C.D. and Adriaans, N.F.P. (1991) Needle Sharing in the Netherlands: An Ethnographic Analysis. *American Journal of Public Health* 81: 1602–1607.
- Hanson, B., Beschner, G., Walters, J.M. and Bovelie, E. (eds) (1985) *Life with Heroin: Voices from the Inner City* Lexington, Mass.: Lexington Books.
- Hawke, M.J. (2000). The Prevalence of Sexual Abuse and its Impact on the Onset of Drug Use among Adolescents in Therapeutic Community Drug Treatment. *Journal of Child and Adolescent Substance Abuse* 9(3): 35–49.

- Hay, G. (2000) Capture–Recapture Estimates of Drug Misuse in Urban and Non-Urban Settings in the North-East of Scotland. *Addiction* 95: 1795–1803.
- Hay, G., McKeganey, N. and Hutchison, S. (2001) *Estimating the National and Local Prevalence of Problematic Drug Use in Scotland* Edinburgh: Scottish Executive.
- Hay, G., Gannon, M., McKeganey, M., Hutchinson, S. and Goldberg, D. (2005) *Estimating the National and Local Prevalence of Problem Drug Misuse in Scotland* Edinburgh: ISD Scotland.
- Health Protection Agency (2003) *Shooting Up Infections among Injecting Drug Users in the United Kingdom 2002. An Update 2003*. London: Health Protection Agency.
- Health Statistics Quarterly* (2004) Spring 21: 59.
- Henderson, S. (1988) Living with the Virus: Perspectives from HIV-Positive Women in London. In: Dorn, N., Henderson, S. and South, N. (eds) *AIDS: Women, Drugs and Social Care*. London: Falmer.
- Hickman, M., Griffin, M., Mott, J., Corkery, J., Madden, P., Sondhi, A. and Stimson, G. (2004a) Continuing the Epidemiological Function of the Addicts Index: Evidence from Matching the Home Office Addicts Index with the National Drug Treatment Monitoring System. *Drugs: Education, Prevention and Policy* 11(2): 91–100.
- Hickman, M., Higgins, V., Bellis, M., Tilling, K., Walker, A., Henry, J. (2004b) Injecting Drug Use in Brighton Liverpool and London: Best Estimates of Prevalence and Coverage of Public Health Indicators. *Journal of Epidemiology and Community Health* 58: 766–777.
- Hickman, M., Higgins, V., Hope, V. and Bellis, M. (2004c) *Estimating Prevalence of Problem Drug Use: Multiple Methods in Brighton, Liverpool and London*. Home Office Online Report 36/04. <http://www.homeoffice.gov.uk/rds/pdfs04/rdsolr3604.pdf>
- Holloway, K., Bennett, T. and Lower, C. (2004) *Trends in Drug Use and Offending: The Results of the New-ADAM Programme 1999–2004* London: Home Office Findings 219.
- Home Office (1998) *Tackling Drugs to Build a Better Britain: The Government's Ten-Year Strategy for Tackling Drugs Misuse Cm 3945*. London: The Stationery Office.

Horgan, A., Cassidy, C. E. and Corrigan, A. (1998) Childhood Sexual Abuse Histories in Women with Drug and Alcohol Misuse Disorders. *Irish Journal of Psychological Medicine* 15(3): 91–95.

Inciardi, J.A., Martin, S.S., Butzin C.A., Hooper, R.M., and Harrison, L. (1997) An Effective Model of Prison-Based Treatment for Drug-Involved Offenders. *Journal of Drug Issues* 27: 261–278.

Irish Times Health Supplement (2004) A Healing Approach to Drug Rehabilitation. 27 July: 3.

Information and Statistics Division (2004) *Drug Misuse Statistics Scotland, 2004*. Edinburgh: ISD.
<http://www.drugmisuse.isdscotland.org/publications/04dmss/04dmss.htm>

Johnson, B.D., Goldstein, P.J., Preble, E., Schmeidler, J., Lipton, D.S., Spunt, B. and Miller, T. (1985) *Taking Care of Business: The Economics of Crime by Heroin Abusers*. Lexington, Mass.: Lexington.

Johnson, J.L., and Leff, M. (1999). Children of Substance Abusers: Overview of Research Findings. *Pediatrics* 1085–1099.

Jones, G. (1997) Youth homelessness and the 'underclass'. In: Macdonald, R. (ed.) *Youth, the 'Underclass' and Social Exclusion*. London and New York: Routledge.

Jones, G. (2002). *The Youth Divide. Diverging Paths to Adulthood*. York: Joseph Rowntree Foundation.

Kemp, P. and Neale, J. (2005) Employability and Problem Drug Users. *Critical Social Policy* (in press).

Kendler, K.S., Jacobson, K.C., Prescott, C.A. and Neale, M.C. (2003). Specificity of Genetic and Environmental Risk Factors for Use and Abuse/Dependence of Cannabis, Cocaine, Hallucinogens, Sedatives, Stimulants and Opiates in Male Twins. *American Journal of Psychiatry* 160(4): 687–695.

Knight, K., Simpson, D.D., Chatham, L.R. and Camacho, L.M. (1997) An Assessment of Prison-Based Drug Treatment: Texas In-Prison Therapeutic Community Program. *Journal of Offender Rehabilitation* 24: 75–100.

Lee, J. and Bell, N.J. (2003). Individual Differences in Attachment-Autonomy Configurations: Linkages with Substance Use and Youth Competencies. *Journal of Adolescence* 26: 347–361.

Liebschutz, J., Savetshy, J.B., Saitz, R., Horton, N.J., Lloyd-Travaglini, C. and Samet, J.H. (2002). The Relationship between Sexual and Physical Abuse and Substance Abuse Consequences. *Journal of Substance Abuse Treatment* 22: 121–128.

Lloyd, C. (1998). Risk Factors for Problem Drug Use: Identifying Vulnerable Groups. *Drugs: Education, Prevention and Policy* 5(3): 217–232.

Lupton, R., Wilson, A., May, T., Warburton, H. and Turnbull, P.J. (2002) *A Rock and a Hard Place: Drug Markets in Deprived Neighbourhoods*. Home Office Research Study 240. London: Home Office.

Maher, L. (1997) *Sexed Work Gender Race and Resistance in a Brooklyn Drug Market*. Oxford: Oxford University Press.

Martin, C. and Player, E. (2000) *Drug Treatment in Prison: An Evaluation of the RAPt Treatment Programme*. Winchester: Waterside Press.

Martin, C., Player, E., and Liriano, S. (2003) Results of Evaluations of the RAPt Drug Treatment Programme. In: Ramsay, M. (ed.) *Prisoners' Drug Use and Treatment: Seven Research Studies*. Home Office Research Series. London: Home Office.

May, T., Warburton, H., Turnbull, P.J. and Hough, M. (2002). *Times They are A-Changing: Policing of Cannabis*. York: Joseph Rowntree Foundation.

McCambridge, J. and Strang, J. (2004). Patterns of Drug Use in a Sample of 200 Young Drug Users in London. *Drugs: Education, Prevention and Policy* 11(2): 101–112.

McCance-Katz, E.F., Carroll, K.M. and Rounsaville, B. (1999) Gender Differences in Treatment-Seeking Cocaine Abusers: Implications for Treatment and Prognosis. *American Journal On Addictions* 8: 300–311.

McClenaghan, P. (2000) Social Capital: Exploring the Theoretical Foundations of Community Development Education. *British Educational Research Journal* 26(5): 565–582.

McElrath, K. (2002) Prevalence of Problem Heroin Use in Northern Ireland. Belfast: Queens University.

McIntosh, J., Gannon, M., McKeganey, N. and MacDonald, F. (2003a) Exposure to Drugs among Pre-Teenage Schoolchildren. *Addiction* 98: 1615–1623.

McIntosh, J. MacDonald, F. and McKeganey, N. (2003b) Dealing with the Offer of Drugs: The Experiences of a Sample of Pre-Teenage Schoolchildren. *Addiction* 98(7): 977–986.

McIntosh, J. MacDonald, F. and McKeganey, N. (2003c) The Initial Use of Drugs in a Sample of Pre-Teenage Schoolchildren: The Role of Choice, Pressure and Influence. *Drugs: Education, Prevention and Policy* 10(2): 147–158.

McKeganey, N. (2004) *Random Drug Testing of Schoolchildren: A Short in the Arm or a Shot in the Foot For Drug Prevention?* York: Joseph Rowntree Foundation.

McKeganey, N. and Barnard, M. (1992) *AIDS, Drugs and Sexual Risk: Lives in the Balance*. Buckingham: Open University Press.

McKeganey, N., Barnard, M. and McIntosh, J. (2002b) Paying the Price for their Parents' Addiction: Meeting the Needs of the Children of Drug-Using Parents. *Drugs: Education, Prevention and Policy* 9: 233–246.

McKeganey, N., Connelly, C., Knepil, J., Norrie, J. and Reid, L. (2002a) *Interviewing and Drug Testing of Arrestees: A Pilot of the Arrestee Drug Abuse Monitoring Methodology*. Edinburgh: Scottish Executive Central Research Unit.

McKeganey, N., McIntosh, J., MacDonald, F., Gannon, M., Gilvarry, E., McArdle, P. and McCarthy, S. (2004a) Preteen Children and Illegal Drugs. *Drugs: Education, Prevention and Policy* 11(4): 315–327.

McKeganey, N., Neale, J., Parkin, S. and Mills, C. (2004b) Communities and Drugs: Beyond the Rhetoric of Community Action. *Probation Journal* 51(4): 343–361.

Medrano, M.A., Zule, W.A., Hatch, J. and Desmond, D.P. (1999). Prevalence of Childhood Trauma in a Community Sample of Substance- Abusing Women. *American Journal of Alcohol Abuse*, 25 (3), pp.449-462.

Merton, R.K. (1938) Social Structure and Anomie. *American Sociological Review* 3: 672–682.

Miller, P. and Plant, M. (1996) Drinking Smoking and Illicit Drug Use among 15- and 16-Year-Olds in the United Kingdom. *British Medical Journal* 313: 394–397.

Millar, M., Gemmel, I., Hay, G. and Donmall, M. (2004) *The Dynamics of Drug Misuse: Assessing Changes in Prevalence*. Home Office Online Report 35/04.
<http://www.homeoffice.gov.uk/rds/pdfs04/rdsolr3504.pdf>

Murphy, S. and Rosenbaum, M. (1995) The Rhetoric of Reproduction: Pregnancy and Drug Use. *Contemporary Drug Problems* 23: 581–585.

National Audit Office (2004) *The Drug Treatment and Testing Order: Early Lessons*. London: Home Office.

National Statistics (2005) *Health Statistics Quarterly* Palgrave

National Statistics Online (2004) Drinking to Excess Rising among Women <http://www.statistics.gov.uk/cci/nugget.asp?id=922> (accessed 3 September 2004).

National Treatment Agency (2002) *Models of Care for Treatment of Adult Drug Misusers*. London: National Treatment Agency.

National Treatment Agency (2003) *Injectable Heroin (and Injectable Methadone): Potential Roles in Drug Treatment*. London: National Treatment Agency.

Neale, J. (1998) Drug Users' Views of Drug Service Providers. *Health and Social Care in the Community* 6: 308–317.

Neale, J. and Saville, E. (2004) Comparing the Effectiveness of Community and Prison-Based Drug Treatments. *Drugs: Education, Prevention and Policy* 11: 213–228.

Office for National Statistics (2004) *Living in Britain Results from the 2002 General Household Survey*. London: Office for National Statistics.

Oxford, M.L., Harachi, T.W., Catalano, R.F. and Abbott, R.D. (2000). Preadolescent Predictors of Substance Initiation: A Test of Both the Direct and Mediated Effect of Family Social Control Factors on

Deviant Peer Associations and Substance Initiation. *American Journal of Drug and Alcohol Abuse* 27(4): 599–616.

Parker, H., Bakx, K. and Newcombe, R. (1988) *Living with Heroin. The Impact of a Drugs 'Epidemic' on an English Community*. Milton Keynes and Philadelphia: Open University Press.

Parker, H., Measham, F. and Aldridge, J. (1995) *Drug Futures: Changing Patterns of Drug Use Among English Youth*. Research Monograph 7. London: Institute for the Study of Drug Dependence.

Parker, H., Aldridge, J. and Measham, F. (1998). *Illegal Leisure: The Normalisation of Adolescent Drug Use*. London: Routledge.

Pearson, G. (1987a) *The New Heroin Users*. Oxford: Basil Blackwell.

Pearson, G. (1987b) Social Deprivation, Unemployment and Patterns of Heroin Use. In: Dorn, N. and South, N. (eds) *A Land Fit for Heroin? Drug Policies, Prevention and Practice*. Basingstoke and London: Macmillan Education Ltd.

Peck, D.F. and Plant, M.A. (1986) Unemployment and Illegal Drug Use: Concordant Evidence from a Perspective Study and National Trends. *British Medical Journal* 293: 929–932.

Pelissier, B.M.M., Gaes, G., Rhodes, W., Camp, S., O'Neil, J., Wallace, S. and Saylor, W. (1998) *TRIAD Drug Treatment Evaluation Project Six-Month Interim Report*. Washington, DC: Federal Bureau of Prisons Office of Research and Evaluation.

Perkins, R. and Bennett, G. (1985) *Being a Prostitute*. Boston: Allen and Unwin.

Peterson, A.R. (1994) Community-Development in Health Promotion: Empowerment or Regulation? *Australian Journal of Public Health* 18(2): 213–217.

Pettway, L.E. (1997) *Workin' It: Women Living Through Drugs and Crime*. Philadelphia: Temple University Press.

Powis, B., Griffiths, P., Gossop, M. and Strang, J. (1996) The Differences between Male and Female Drug Users: Community Samples of Heroin and Cocaine Users Compared. *Substance Use and Misuse* 31: 529–543.

Preble, E. and Casey, J. (1969) Taking Care of Business: the Heroin User's Life on the Streets. *International Journal of Addiction* 1: 1–24.

Prime Minister's Strategy Unity (2004) *Alcohol Harm Reduction Strategy for England*. London: Cabinet Office.

Ransom, S. and Rutledge, H. (2005). *Including Families in the Learning Community: Family centres and the expansion of learning*. York: Joseph Rowntree Foundation.

Rhodes, T., Lilly, R., Fernandez, C., Giorgino, E., Kemmesis, U.E., Ossebaard, H.C., Lalam, N., Faasen, I. and Spannow, K.E. (2003) Risk Factors Associated with Drug Use: The Importance of 'Risk Environment'. *Drugs: Education, Prevention and Policy* 10(4): 303–329.

Rogers, B. and Prior, J. (1998). *Divorce and Separation. The Outcomes for Children*. York: Joseph Rowntree Foundation.

Rosenbaum, M. (1981) *Women on Heroin*. New Brunswick, New Jersey: Rutgers University Press.

Sangster, D., Shiner, M., Patel, K. and Sheikh, N. (2002) *Delivering Drug Services to Black and Ethnic-Minority Communities*. London: Home Office.

Shapiro, H. (2003). *Shooting Stars: Drugs, Hollywood and the Movies*. London: Serpent's Tail.

Sheridan, J. and Barber, N. (1996) Drug Misusers' Experiences and Opinions of Community Pharmacists and Community Pharmacy Services. *Pharmaceutical Journal* 257: 325–327.

Shewan, D., Macpherson, S., Reid, M.M. and Davies, J.B. (1994) *Evaluation of the Saughton Drug Treatment Reduction Programme: Main Report*. Occasional Paper No.12. Edinburgh: Scottish Prison Service.

Shiner, M. and Newburn, T. (1999) Taking Tea with Noel: the Place and the Meaning of Drug Use in Everyday Life. In: South, N. (ed.) *Drugs: Cultures, Controls and Everyday Life*. London: Sage Publications.

South, N. (1999) Debating Drugs and Everyday Life: Normalisation, Prohibition and 'Otherness'. In: South, N. (ed.) *Drugs: Cultures, Controls and Everyday Life*. London: Sage Publications.

- Spooner, C. (1999). Causes and Correlates of Adolescent Drug Abuse and Implications for Treatment. *Drug and Alcohol Review* 18: 453–457.
- Stephens, R.C. (1991) *The Street Addict Role: A Theory of Heroin Addiction*. Albany: State University of New York Press.
- Sterck, C. (1999) *Fast Lives: Women Who Use Crack Cocaine*. Temple University Press, Florida.
- Stimson, G., Alldrit, L., Donoghoe, M., Lart, R. (1988a) *Injecting Equipment Exchange Schemes Final Report*. London: Goldsmiths College.
- Stimson, G., Alldritt, L., Dolan, K. and Donoghoe, M. (1988b) Syringe Exchange Schemes for Drug Users in England and Scotland. *British Medical Journal* 296: 1717–1719.
- Stimson, G. and Oppenheimer, E. (1982) *Heroin Addiction, Treating and Control*. London: Tavistock.
- Stimson, G.V. and Ogborne, A.C. (1970) Survey of Addicts Prescribed Heroin at London Clinics. *Lancet* 30: 116–136.
- Stratford, N., Gould, A., Hinds, K. and McKeganey, N. (2003) *The Measurement of Changing Public Attitudes Towards Illegal Drugs in Britain*. London: Economic and Social Research Council.
- Sutherland, H., Sefton, T. and Piachaud, D. (2003). *Poverty in Britain: The Impact of Government Policy since 1997*. York: Joseph Rowntree Foundation.
- Sutter, A. (1966) The World of the Righteous Dope Fiend. *Issues in Criminology* 2(2): 177–222.
- Sutter, A.G. (1969) Worlds of Drug Use on the Street Scene. In: Cressey, D.R. and Ward, D.A. (eds) *Delinquency, Crime and Social Process*. New York: Harper and Row.
- Sutter, A.G. (1972) Playing a Cold Game: Phases of a Ghetto Career. *Urban Life and Culture* 1: 77–91.
- Taylor, A. (1993) *Women Drug-Users: An Ethnography of a Female Injecting Community*. Oxford: Clarendon Press.

United Nations Office on Drugs and Crime (2004) *World Drugs Report Volume 1 Analysis*, Vienna..

Utting, D. (1995). *Family and Parenthood: Supporting Families, Preventing Breakdown*. York: Joseph Rowntree Foundation.

Waldorf, D. (1973) *Careers in Dope*. New Jersey: Prentice Hall.

Webster, C., Simpson, D., MacDonald, R., Abbas, A., Cieslik, M., Shildrick, T. and Simpson, M. (forthcoming) *A Critical Case Study of Young Adulthood and Social Exclusion*. London: Policy Press.

Westermeyer, J., Wahmanholm, K. and Thuras, P. (2001) Effects of Childhood Physical Abuse on Course and Severity of Substance Abuse. *American Journal on Addictions* 10: 101–110.

Wexler, H.F., Falkin, G.P. and Lipton, D.S. (1990) Outcome Evaluation of a Prison Therapeutic Community for Substance Abuse Treatment. *Criminal Justice and Behaviour* 17: 71–92.

White, W.L. (2004) Addiction Recovery Mutual Aid Groups: An Enduring International Phenomenon. *Addiction* 99: 532–538.

Wodak, A. (2001) Drug Treatment for Opioid Dependence. *Australian Prescriber* 24: 4–6.

Wood, F., Bloor, M. and Palmer, S. (2000) Indirect Prevalence Estimates of a National Drug-Using Population: The Use of Contact-Recontact methods in Wales. *Health Risk and Society* 2: 47–58.

Young, J. (1971) *The Drugtakers: The Social Meaning of Drug Use* London: MacGibbon and Kee.