

# Executive summary

## Objectives

The objectives of this report are to:

- **encourage debate on the most effective approach to preventing and reducing the harms associated with illicit drug use and illicit drug-control policies, based on an independent and objective review of the evidence**
- **examine the role of the medical profession in preventing and reducing the harms associated with illicit drug use and policies for control of illicit drug use**
- **encourage debate and dialogue between the medical profession and policy makers, legislators, the police, service providers and academics who have knowledge and expertise in this area.**

The report starts by examining the scale of the problem, the harms associated with drug use – for both the individual and society – and influences on illicit drug use. The development of drug policy in Britain is then presented, followed by a chapter discussing the particular harms to the individual and society that are associated with the prohibitionist legal framework controlling drug use. This chapter also presents the options for an alternative legal framework. Interventions to reduce the harms associated with illicit drug use are then discussed, followed by three chapters that examine the doctor's role in the medical management of drug dependence and the ethical challenges of working within the criminal justice system.

Medical practitioners are ideally placed to encourage a refocusing of debate on policies for supporting and treating the physical and mental health needs of illicit drug users. The final chapter examines their role, both as individuals and as a profession, in relation to illicit drug use.

**Key points from each chapter are summarised next.**

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## **1. Introduction**

- Substance use describes a wide range of different patterns of use, from harmless recreational use to life-threatening dependence.
- There is evidence of a neurobiological underpinning to dependence, and an association between biological, psychological and social factors. These factors create a framework within which an individual's predisposing, precipitating, perpetuating and protective elements can be used to plan the most effective treatments.
- Drugs of dependence, such as alcohol and tobacco, are at least as harmful as some illicit drugs, and their use in the UK is subject to a regulatory framework that covers various aspects of production, supply and consumption.
- The Misuse of Drugs Act 1971 in the UK and the three international conventions on international drug policy, to which the UK is a party, classify illicit drugs according to their perceived level of harm, and regulate their control and supply. Possession, purchase or cultivation of illicit drugs is illegal and thus a criminal offence in the UK.
- The priority of the medical profession is to support and treat the physical and mental health needs of drug users and those affected by others' drug use.
- Medical professionals are ideally placed to encourage a refocusing of debate on issues relating to dependent drug use and to influence national and global drug policy.

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## **2. The scale of the problem: illicit drug use in the UK**

- There has been a long-term downward trend in illicit drug use in the UK, although use of cocaine has increased slightly. In 2009-2010, 5 per cent of 16 to 59 year olds in the UK population were current drug users (had used drugs in the last month).
- Men are more likely than women to report drug use and current use is highest in the under-25 age group.
- International evidence suggests 10 to 13 per cent of all people who use drugs worldwide are problem drug users. Problem drug use affects approximately 10 per cent of all UK drug users, with the highest levels in the 25 to 34 years age group.
- Cannabis is the most commonly used drug, followed by cocaine powder, ecstasy and amphetamines.
- After North America, Europe is the next largest cocaine market and the UK is the largest market in Europe.
- In Europe, UK teenagers are among the most likely to report recent and current cannabis use, and are above the European average reported level for lifetime use of other illicit drugs.

- There are few reliable data on novel psychoactive substances (gamma-butyrolactone (GBL), 1-benzylpiperazine (BZP), mephedrone, oripavine, anabolic steroids, Spice, etc), which have only been controlled under the Misuse of Drugs Act 1971 since 2009, but they appear to be used more by younger age groups and as an alternative to ecstasy.
- Around half the UK population surveyed considers drug use is a serious problem; and slightly more believe drug users should be treated as individuals needing medical treatment or other support.
- A majority of those interviewed in the British Social Attitudes survey in 2011 believed cannabis should remain illegal and is harmful; this has increased since 2009.
- A majority interviewed for the Scottish Social Attitudes survey thought illegal drug use should not be accepted as a normal part of some people's lives and the proportion has also increased from 2001 to 2009; this is particularly noticeable in the 18 to 24 years age group. Less than 10 per cent of pupils interviewed in England in 2010 thought use of any illicit drugs was acceptable.
- Over half the UK population interviewed in 2011 believed the Government's approach to illicit drug use is totally ineffective.

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### 3. The burden of illicit drug use

- The use of illicit drugs is associated with a range of physical, psychological and social harms. These are affected by the dosage of drug, the pattern of drug use and the mode of administration.
- Most drug-related deaths in the UK are related to the use of opioid drugs, followed by cocaine. The vast majority of these deaths are in men and many are associated with polydrug or polysubstance use. Ecstasy-related deaths are very rare and deaths from cannabis overdose do not occur.
- The risk of death from accidental drug overdose, and from suicide, is associated with poverty, homelessness, polydrug or polysubstance use, impaired physical health and depression.
- While dependence per se is not necessarily significantly harmful, the risk of harm is intrinsically raised as a result of chronic drug use. The following are associated with physical and psychological dependence: cannabis, cocaine, gamma-hydroxybutyrate (GHB), heroin, methamphetamine and other opioid drugs. Amphetamine and ecstasy are associated with psychological dependence only, and there is limited evidence for dependence with ketamine and phencyclidine (PCP). Dependence is rare with hallucinogens.
- Fetal development can be adversely impacted by maternal drug use.
- Adverse health impacts and drug-related deaths may also be associated with adulterants.

- Social harms of drug use include deprivation and family adversity/neglect; criminality associated with drug intoxication or with the need to obtain drugs; and drug-impaired performance at work or when driving. These can result from the illegality of the drugs, or from factors such as the psychopharmacological effects of the drug. They have associated costs for the individual related to loss of earnings, reduced educational attainment and damage to personal relationships. High levels of drug use in a community are linked to unsafe communities because of the associated social problems.
- Studies of the level of harm associated with use of different drugs in the UK scored heroin, crack cocaine and methamphetamine as most harmful to individuals; alcohol, heroin, crack cocaine and cannabis as most harmful to others; and alcohol as most harmful overall, followed by heroin, crack cocaine, methamphetamine and cocaine. The relative levels of harm for the different drugs correlate poorly with the legal classification of drugs.
- Economic and social costs of drug use are related to health and social care costs and criminality; 99 per cent of costs are linked to Class A drug use (cocaine, crack cocaine, ecstasy, heroin, methadone, lysergic acid diethylamide (LSD) and psilocybin (magic mushrooms)) and a large proportion is linked to crime, including crimes of illegality. The economic and social costs of Class A drug use in 2003-2004 in England and Wales were estimated to be £15.4 billion, which equates to £44,231 per year per problematic Class A drug user.

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#### 4. Influences on illicit drug use

- Drug use is widely held to be a multifaceted biopsychosocial phenomenon. No single biological, psychological or social factor is exclusively responsible for drug use.
- Family-based, adoption and twin studies have shown a substantial genetic component to drug use. Comorbid psychiatric illness and personality type have also been shown to be strongly linked to drug use.
- The rewarding potential of drugs, such as sensations of pleasure or relief from pain, may play a role in reinforcing the continued use of drugs. The use of drugs activates the mesolimbic dopamine system in the brain, strengthening neural connections, which influences the repetition of drug-related behaviours.
- A drug's potential to lead to tolerance and withdrawal may influence its continued use.
- The environmental or social factors commonly attributed to problematic drug use include family composition, behaviour and relationships, peer influence, social inequalities and being a member of a stigmatised group.

- Positive family relationships and communication may guard against future use of drugs. Living in a single-parent or step-family, substance use among family members, family conflict and poor parental supervision are all indicators for drug use in young people.
- Stigmatised groups are at increased risk of drug use; these include young people in care institutions, sex workers (particularly those who work outdoors), homeless populations and victims of traumatic experiences.
- Evidence shows price has an impact on drug use but the effect is not the same for all types of drugs.
- Evidence of the effect of portrayals of drug use in popular media on drug use are limited and difficult to interpret. There is some evidence that portrayals of drug use in film have an impact on drug use in the UK. Notable celebrities may have a role in either reducing or increasing drug use.

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## 5. Drug policy in the UK: from the 19th century to the present day

- Purchase of psychoactive drugs such as opium and laudanum was unregulated in the UK until 1868, when the Pharmacy Act was passed, restricting opium sales to pharmacists' shops, with a requirement on pharmacists to keep a record of purchasers.
- In 1916, an Army Council order, and the Defence of the Realm Act later the same year, made it an offence for anyone except a physician, pharmacist or vet to possess, sell or give cocaine, and the drug and its preparations could only be supplied on prescription.
- The first Dangerous Drugs Act passed in 1920, and a further Act in 1923, passed to conform to the 1912 International Opium Convention at The Hague to which Britain was a signatory, imposed stricter controls on doctors and pharmacists in relation to dangerous drugs, in a climate with a penal emphasis on policy.
- It was not clear from these Acts or the Convention whether prescribing drugs to addicts constituted legal medical work. The Rolleston Report in 1926 affirmed the right of doctors to prescribe controlled drugs to addicts in defined circumstances and set the scene for a balanced medical approach within a penal framework.
- The second Geneva Convention in 1925 brought cannabis under international control, and restrictions were implemented in the 1928 Dangerous Drugs Act.
- As a result of increasing use of heroin, the 1967 Dangerous Drugs Act restricted prescribing of heroin to doctors licensed by the Home Office, and set up new drug treatment centres within the NHS hospital system. A notification system for addiction was also introduced.

- Introduction of other drugs to the illicit market, such as amphetamines and LSD, led to the Drugs (Prevention of Misuse) Act 1967, and recommendations that penalties for possession of cannabis should be reduced, with no custodial sentencing for casual use, were implemented.
- The 1961 United Nations Single Convention on Narcotic Drugs introduced four schedules of controlled drugs and was followed in the UK by the Misuse of Drugs Act 1971, with drugs categorised in classes according to perceived harm and therapeutic value. This Act also set up the Advisory Council on the Misuse of Drugs, to keep the drug situation under review and advise the Government.
- With increasing illicit drug use, Government strategies in the 1980s began to focus on the social and economic problems of drug users, in addition to their medical problems, and GPs became involved with the more general healthcare needs of drug users, leaving specialists to deal with more difficult drug users.
- The spread of HIV and AIDS generated 'harm-minimisation' policies in relation to drug use, by modification of using behaviours, from injecting to oral use where possible.
- The 1995 Drug Strategy moved away from this approach to one encouraging users to enter treatment, with the aim of moving users towards abstinence and achievement of a drug-free state and of reducing criminal behaviour.
- Later strategies (2002, 2004, 2008) continued to emphasise the need to move drug users into treatment and focused on the links between drugs and crime; they also aimed to move drug treatment away from the NHS into the community and voluntary sector.
- The 2008 strategy maintained a focus on drugs and crime but placed greater emphasis on the impact of problematic drug use on children and families of users.
- With the 2010 strategy, policy continues to move away from drug-crime links and towards a focus on wider social and economic factors that drive problematic drug use. The emphasis is on people in drug treatment achieving recovery, rather than aiming to simply engage and retain them in treatment.
- The international policy framework means that all possession or marketing of illicit drugs remains a criminal activity.

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## 6. Controlling illicit drug use

- For the last half century, prohibition and criminalisation has been the dominant policy for drug control, both nationally and internationally.
- It is very difficult to separate the impact of drug policy from the wider effects of social policy and environmental factors on drug-using behaviour.
- Levels of drug consumption do not necessarily follow predictable economic patterns in a linear way, where an increase in price leads to decreased use.

- It is difficult to predict supply and demand of illicit drugs, as all trade is illegal; decreased availability of one drug may result in users turning to other drugs that are more readily available.
- Illegally sourced drugs are of variable quality and purity, with clear adverse health implications for users.
- Criminalisation increases the health risks of illicit drugs by encouraging use in unsafe environments and through dangerous methods of administration. It also deters users from approaching health professionals for treatment.
- A prohibitionist approach creates a lucrative opportunity for criminality and leads to high levels of acquisitive crime among dependent users.
- The stigmatisation of vulnerable populations of drug users also has significant public health implications.
- The illicit drug trade has deleterious effects on development and security in many of the world's most fragile regions and states.
- The national budget required for law enforcement, the criminal justice system and dealing with the costs of drug-related crime is several times higher than the amount spent on drug-related health interventions.
- The existing legal framework directly impacts on the ability of medical professionals to gain access to and treat problematic drug users.
- Debate on liberalisation of drug policy is contentious, with strong feelings on both sides of the argument.
- There is widespread confusion about the use of terms such as 'decriminalisation' and an insufficient understanding that criminalisation can operate in tandem with other forms of regulation, supervision and intervention.
- Alternative legal frameworks include decriminalisation (eg sentencing reform), regulation (within a legislative framework), and free market legalisation.
- There is a shortage of robust evidence relating to the benefits of the present prohibitionist framework in terms of deterring use or reducing availability.
- The evidence suggests that the costs of enforcement are high and that prohibition has created a range of unintended health, social and economic costs.
- While some commentators argue that the benefits of the UK's current system are questionable, and that there is a pressing need to explore whether a new and/or modified legal and policy framework is required, other commentators have been more cautious. Among this latter group of commentators, the lack of research into the effects of criminalising illicit drug use and possession does not, in itself, lead to the position that new or amended regulations are required.

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## 7. Delaying initiation and minimising the use of illicit drugs

- Current prevention strategies aim to reduce drug use by influencing attitudes and behaviour, in order to prevent or delay the initiation of drug use.
- Primary prevention aims to avert or delay initial use, while secondary prevention aims to minimise the harms in those already using drugs. Secondary prevention interventions, such as harm-prevention strategies, are yet to receive much in the way of attention.
- There is no clear evidence that drug education and prevention strategies have an effect on reducing total drug use in the UK. Drug treatment programmes are more cost effective.
- All schools in the UK are required to have a drug education programme. These programmes improve young people's knowledge about drug use, and have a small impact, notably in delaying the onset of use.
- There is evidence that most pupils recall the content of their drug-education lessons and report that it helps them to make decisions about what to do if offered drugs. Those who had taken drugs said lessons helped them understand why people take drugs and that not as many people as they thought take drugs.
- Programmes that also address classroom behaviour management have been shown to reduce lifetime drug use in boys but not girls in the USA.
- Drug testing in schools does not appear to affect the use of illicit drugs; random testing in schools may have a negative effect.
- There is insufficient research on interventions outside the school setting to prevent drug use to provide evidence on their effectiveness.
- The use of mass media can improve knowledge but is not effective at reducing illicit drug use; social marketing may be a useful way of increasing the efficacy of mass media campaigns.
- Selective prevention strategies target at-risk groups and often address multiple and complex risk factors. There is conflicting evidence about their efficacy in reducing drug use among vulnerable groups, and there is a risk that they further stigmatise already marginalised individuals. The age range 11 to 13 years has been identified as a crucial period for effective intervention.
- Groups that are most susceptible to drug harm should be identified. Taking action on preventing the underlying causes of drug harm rather than preventing drug harm directly may be more effective.

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## 8. Medical management of drug dependence: the doctor's role in managing heroin addiction

- Medical management of drug dependence is more difficult and challenging than for other chronic disorders. Many users who present for treatment are socially marginalised, lead chaotic lifestyles and have little to motivate them towards recovery.
- Stigma and staff attitudes may also complicate management.
- Traditional methods for treating opioid addiction were based on two approaches – encouraging abstinence and a change of attitude on the part of the user.
- Although some individuals do recover spontaneously from opioid dependence, it is usually a chronic relapsing–remitting condition.
- The principle of opioid substitution therapy (OST) is to prescribe and administer a pharmaceutical opioid as a substitute for heroin. This attenuates the symptoms of withdrawal from heroin and allows the user to gain control over other aspects of their life, thereby creating the necessary preconditions to cease drug seeking and use.
- Opioid substitution therapy provides a structured routine through daily attendance for administration in a safe non-punitive and non-judgemental treatment space, which may benefit users in restructuring a chaotic lifestyle.
- The basis of effective OST is suppression of opioid withdrawal.
- High-dose methadone is more effective than a low dose, because it progressively increases the patient's tolerance to opioids, making heroin less reinforcing and cessation of use more likely.
- For some users, the respite from withdrawal offered by methadone is insufficient to allow them to move away from heroin use; treatment with diamorphine is more reinforcing and successful in these individuals.
- Long-term studies suggest OST may reduce use of opioid drugs (in a relapsing–remitting manner), but seldom results in long-term abstinence from all drugs. Continued alcohol misuse and cannabis use are common.
- Opioid substitution has been shown to reduce deaths from opioid overdose and the risk of blood-borne viruses.
- Evidence on the effects of OST on mental health and quality of life is limited and equivocal.
- The National Treatment Outcome Research Study (NTORS) demonstrated that for every pound spent on treatment in the UK, a reduction of £3 in public costs was observed. Economic benefits were largely accounted for by reduced costs of crime.
- Opioid substitution has been shown to reduce rates of acquisitive crime and there is some evidence that it contributes to social reintegration.

- There has been little research on the effectiveness of supervised administration of OST, but limited evidence suggests it is more effective at reducing heroin use than non-supervised treatment.
- Randomised trials have shown no benefit overall of additional psychological interventions in terms of retention, non-prescribed opioid use, psychiatric symptoms, compliance or depression. There is substantial evidence that good-quality staff interactions are of benefit for recovery.
- Opioid substitution is associated with a risk of diversion of methadone to other individuals, as well as an increased risk of death during the first two weeks of treatment and in the month after leaving treatment. Overall, the risk of death is reduced by entering OST.
- Subtherapeutic dosing is a serious limitation on the effectiveness of OST.

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## 9. Medical management of drug dependence: reducing secondary health harms

- Consistent evidence shows that doctors in primary and secondary care and in mental health settings frequently do not address alcohol and drug use.
- Caution should be exercised in prescribing drugs with potential for dependence, particularly for patients who are at high risk for dependence or diversion.
- Management of medical emergencies related to acute symptoms of withdrawal should be followed by longer-term medical management and support to reduce dependence.
- It is also important to address strategies for relapse prevention after detoxification.
- The use of naloxone for relapse prevention after opioid detoxification is of limited value.
- Psychosocial interventions that help users to identify high-risk situations and use coping strategies have been shown to be helpful in managing cannabis dependence.
- In US studies, contingency management in the form of voucher-based reinforcement has been found to significantly improve outcomes for all substance use disorders apart from alcohol. Couples-based therapy and support groups are also of value.
- Brief therapist interventions and motivational interviewing have been shown to reduce drug use among young people. Opportunistic interventions in patients attending for HIV testing has also been shown to increase the likelihood of abstinence and reduce arrest rates.
- Illicit drug use in pregnancy needs particular care with medical management, to avoid harm to both the mother and her baby.

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## 10. Medical management of drug dependence in the context of criminal justice: illicit drug use, courts and prison

- Many illicit drug users first present to medical practitioners via the criminal justice system.
- Treatment of illicit drug users creates particular ethical challenges for medical professionals, especially in relation to coercion and informed consent within the criminal justice system. It is essential to recognise that these individuals have the same rights to accept or refuse treatment as the rest of the population.
- There is a high prevalence of drug use among prisoners in the UK, and high rates of first initiation of drug use.
- The Drug Interventions Programme (DIP), introduced by the Home Office in 2003, aims to develop and integrate measures for directing adult offenders who are illicit drug users into drug treatment and thereby reduce offender behaviour. Most DIP referrals into treatment are achieved via drug testing in police custody suites. This raises ethical issues about coercion to treatment.
- Methadone treatment in prisons has been shown to significantly reduce heroin use among those treated; retention in treatment is associated with reduced mortality, reincarceration and hepatitis C infection. It is hoped that a research study currently in progress in the UK will provide evidence about the most effective treatment for detoxification in prisons. Naltrexone may have a role in this treatment.
- Safety considerations are paramount in opioid detoxification treatment, especially in those soon to be released.
- Opioid substitution therapy has been shown to have an important role in reducing transmission of HIV in the prison setting.
- Needle-exchange programmes are important for harm reduction and are recommended for all illicit drug users in prison in guidance from the World Health Organization (WHO), the United Nations Office on Drugs and Crime (UNODC) and the Joint United Nations Programme on HIV/AIDS (UNAIDS). Nowhere in the UK offers such programmes in the prison setting.
- Vaccination for hepatitis B in the prison setting is important but not yet offered in every prison in England and Wales.
- The National Offender Management Service (NOMS) aims to offer all prisoners who want to commit to leading a drug-free life access to accommodation designated as 'drug free'.
- There is a high risk of drug-related deaths in prison and shortly after release. Medical management must take this into account in planning treatment.
- It is important to ensure patients are linked with community drug services immediately on release from prison.
- The use of naloxone may reduce mortality from drug overdose.

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## 11. The role of healthcare professionals

- Medical training should provide graduates with basic knowledge about the social and personal factors increasing the risks of illicit drug use, the adverse health consequences of the illicit use of drugs, and the role of doctors in identifying drug-related harm and initiating intervention.
- Doctors should maintain an awareness of the non-medical facets of drug use, and exercise caution in prescribing drugs with the potential for non-medical use.
- Doctors should take a drug use history when indicated, undertake brief opportunistic interventions to reduce drug-related harm, and refer to specialist services as appropriate.
- Guidance on clinical management of drug use and dependence is provided by 'The orange guidelines', available to all clinicians.
- Doctors can play an essential role in refocusing debate and influencing global drug policy, so that it is based on public health principles, and results in better health outcomes for all illicit drug users.
- Doctors with knowledge and experience of helping patients affected by illicit drug use are ideally placed to engage in debate to promote a rational approach to drug policy that is evidence based and health oriented.