

Chapter 7 – Delaying initiation and minimising the use of illicit drugs

7.1 Introduction

Drug dependence, even after successful treatment, can impact on the lives of individuals and their families. Reducing the number of people using drugs by delaying their initiation into drug use and preventing the transition from experimental or recreational drug use to problematic or dependent use has a role to play in drug prevention.

At present, strategies that aim to reduce the use of drugs fall broadly under two categories:

- reducing the number of people who are dependent on drugs, mainly by means of treatment and other forms of support
- undertaking activities to improve people's knowledge about the risks of using drugs, to influence their attitudes and behaviour and to encourage the development of skills to resist.

Treatment and other forms of support are discussed in **Chapters 8-10. Section 9.2** specifically examines evidence on strategies that aim to reduce use in those who are already using drugs. This chapter will explore the efficacy of interventions that aim to delay the onset of drug use. A focus on young people has been chosen because the volume of research among this population is much larger than for prevention in adults.¹ Adolescence is recognised as the period in life when drug use is most likely to begin.¹ While the majority of drug initiates do not progress to harmful use or dependence, for a minority this timeframe represents a crucial period when harmful drug-taking habits can be formed.¹ A large number of interventions are targeted at this population.

7.2 Interventions for preventing drug use

Prevention strategies are recognised as the main policy area aiming to reduce drug initiation and continued use. Traditionally, two main aims of prevention initiatives are recognised. These are:

- **primary prevention:** where the aim is to avert or delay the initial use of a drug
- **secondary prevention:** where the aim is to minimise hazards, or actual harms, among those who have already begun using drugs.

Secondary prevention measures, such as interventions based on harm-reduction strategies, are yet to receive much in the way of attention, in terms of interventions that aim to influence people's knowledge attitudes and behaviour. In relation to alcohol use, available evidence suggests that harm-reduction approaches show considerable promise in reducing alcohol-related harm.² Similar research for drug use is not available.

Most preventative drug interventions, known as universal interventions, are directed at unselected populations. A small minority of target groups are known, or believed, to be at a heightened risk of involvement with drug use; targeted interventions are known as:

- **selective interventions:** these strategies target subsets of the total population who are thought to be at an increased risk of using drugs. These approaches are intended for entire groups of people considered at risk, regardless of the degree of risk for any one individual in the group
- **indicated interventions:** rather than affecting groups, indicated interventions focus on identifying individuals who are exhibiting early signs of drug use. The emphasis is placed on identification, intervention, support and, in some cases, referral.

When considering the evidence base for prevention programmes, there are two limitations. Firstly, researchers have studied a fairly narrow band of strategies.¹ Commonly used strategies, such as supporting grassroots coalitions that organise against drug use, have rarely been evaluated.¹ Few conclusions can be drawn by policy makers on the efficacy of the vast majority of interventions for preventing drug use. Interventions that take place in school-based settings have received the greatest amount of attention, usually because of the ease of conducting research in these settings, compared to community-based or mass media interventions.¹ Secondly, while drug prevention strategies are used widely internationally, research into their efficacy has mainly taken place in the USA.

There is no clear evidence that drug education and prevention strategies have an effect on reducing total drug use in the UK.^{3,4} Even for programmes that are delivered effectively, these seem to have little impact on preventing future drug use.^{3,4} Drug prevention programmes may have some benefit in terms of delaying the initial onset of drug use. Drug use at an early age is associated with future drug use, particularly for harmful drugs such as heroin or cocaine, and is correlated with a range of other negative behaviours.^{1,5-7}

Midford reported in 2000 that the cost-effectiveness of drug education compares favourably with the cost-effectiveness of most law-enforcement approaches.⁸ In 1999, Caulkins et al used modelling to indicate that the US drug education programmes led to an average drop in cocaine use of 3.8g per person.⁹ The modelling went on to show that for every million dollars spent on drug education, consumption of cocaine would reduce by 26kg, which compared favourably with US law enforcement, but was not as

cost effective as drug treatment programmes.^{8,9} Available research indicates that soundly conceptualised and rigorously implemented programmes that are comprehensively provided are likely to produce a net social cost saving to society.⁸

7.2.1 Universal prevention strategies

Universal prevention strategies aim to prevent, delay or reduce drug use and drug-related harms at a general population level. These types of interventions can include programmes that address an entire school population through drug education lessons, parents through parenting programmes, or communities through community-wide prevention efforts.

The vast majority of universal prevention initiatives take place in an educational setting. This is because schools represent the most systematic and efficient way of reaching a substantial number of young people.

Types of school-based interventions

The history of drugs education in UK schools, outside the factual content taught in science lessons, has taken place under a number of conceptual models. Despite the widespread international use of drug prevention programmes in schools, there is limited high-quality evidence about the effect of school-based interventions on drug use.

In the 1970s, drug education and prevention interventions in schools were primarily aimed at reducing drug use through giving young people information about the risks associated with drugs.¹⁰ These interventions operated under the rationale that increased knowledge about the effects of drug use would impact on young people's attitudes to illicit drugs, with a consequent influence on behaviour, and therefore drug use.¹⁰ These programmes generally sought to instil fear of the consequences of experimentation with drugs. Evaluation of this intervention shows that this approach did not reduce young people's drug-taking behaviour.¹⁰ It is posited that the introduction of these interventions at a time when drug use, or at least cannabis use, was becoming more prevalent, led to difficulties for campaigns aiming to convince a population with extensive first-hand knowledge of drug use that it invariably led to serious harm.¹ A 2005 Cochrane review of school-based interventions to reduce illicit drug use found that approaches that simply convey didactic information about drugs and their effects have no impact on drug use.¹¹

The early 1980s saw the development of what are termed 'affective programmes'. The theory behind these interventions is that drug use is caused by lack of self-esteem, as opposed to a lack of knowledge about the adverse effects of drug use. Affective programmes aimed to prevent or reduce the scale of drug use, through enhanced personal and social development.¹⁰ While there is some evidence that these interventions improve drug knowledge, attitudes and self-efficacy, there is no evidence

that this type of programme impacts on drug use or behaviour.¹⁰ The 2005 Cochrane review of school-based interventions, noted that programmes that teach social and coping skills were shown to reduce drug use marginally.^{4,11} There was no evidence of a long-term impact from these interventions, and it was unclear what elements of skills-based approaches contribute to their effectiveness.^{4,11}

The late 1980s saw the growing use of social influence programmes. These were based on the hypothesis that drug use stems from direct or indirect social influences from peers and the media.¹⁰ These programmes aim to strengthen young people's resistance skills. There is little evidence of reduction in the use of illicit drugs as a result of these programmes.¹⁰

Most recent programmes have attempted to marry elements of all previous approaches into programmes designed to ensure that young people have the knowledge, skills and attitudes to make safe and sensible decisions about drug use. Research, including the 2005 Cochrane review,¹¹ has found that these high-quality school-based multifaceted programmes show a marked improvement in young people's knowledge and skills, which can have a small impact on illicit drug use, and drug behaviour, most notably in delaying the onset of use.^{7-9,12}

Whole-school approaches, involve addressing a school's values and ethos, as well as considering staff training and the involvement of pupils, staff, parents, carers, governors and the wider community. Programmes that change the environment of a classroom or school are thought to be more effective than those that try to change individual behaviour. Research from the USA in 2008, which included interventions on improving classroom behaviour management, demonstrated a 50 per cent reduction in lifetime drug use among young males (aged 14) but no effect on young females. Stronger effects were found in boys who were identified as aggressive and disruptive at a young age.¹³ This programme included no discussion of drugs, instead targeting changes in the school environment that promote consistency and reward positive behaviour. The long-term effects of this intervention appear to compare well with the best school-based programmes aimed specifically at drug prevention.¹ A possible explanation for this is the inter-relatedness of drug use and other aspects of young people's lives. Research has demonstrated that factors that predict development of a drug problem are also predictive of school failure, social isolation, aggression and other problems.¹ It should be noted that, of the 32 studies included in the above Cochrane review, none achieved the highest-quality rating for their research methods, and 28 of these were conducted in the USA.¹¹ This demonstrates the scarcity of high-quality reliable evidence, and presents difficulties in generalising any findings on the efficacy of school-based interventions from within the USA to the UK. It should be noted that, despite this limited evidence base, large amounts of pupil and staff time are invested in these types of intervention.

The current situation in the UK

The most recent guidance on drugs education in schools, published by the DfES in 2004,¹⁴ states that all schools should have a drug education programme that should cover all drugs, and specifically cannabis, volatile substances and Class A drugs, and, to be effective, be supported by a whole-school approach.

This guidance also states that all schools should have a drug policy that sets out the school's role in relation to all drug matters, which includes the content and organisation of any drug education programme. This was reiterated in joint guidance published in 2012 by the Department for Education (DfE) and The Association of Chief Police Officers (ACPO).¹⁵

In the overwhelming majority of schools, drug education forms part of personal, social and health education (PSHE) programmes.¹⁶ In terms of providing drugs education through PSHE lessons, in recent years the PSHE curriculum has expanded to include new modules (see **Box 7**). With no additional time provided for PSHE, this has had an immediate and negative impact on the time allocated to the provision of drugs education in some schools.¹⁶ This is of concern, given the range of drug-promoting influences that exist (as identified in **Chapter 4**).

Box 7 – Combating the psychological attractiveness and social acceptance of drugs

As identified in **Chapter 4**, heavy exposure to substance use in popular media may influence drug use. Universal interventions aimed at reducing the use of drugs may need to be rethought by policy makers. This is because currently accepted health education usually takes place under the wider umbrella of PSHE in schools. These lessons take place for finite number of hours a year, with information on health behaviours such as drug use often competing with other modules. Over the same time period, the average person is likely to be exposed to a larger number of hours of drug-promoting references in film, television, popular music, video games and the internet. This large disparity between the exposure to drugs in popular media, and interventions to reduce the use of illicit drug use, may result in the efficacy of interventions to reduce the use of drugs being diluted by the widespread exposure to drug imagery. **Appendix 7** explores current and possible policy options to counter the psychological attractiveness and social acceptance of drug use within popular media.

The quality of provision of drug education in UK schools differs across age ranges. The most recent assessment of drugs education in the UK, conducted by Ofsted in 2005, found that the quality of teaching is good in around 80 per cent of lessons at key stages one and two (primary school)¹⁶ and in around 65 and 75 per cent of lessons at key stages three and four, respectively (secondary school).¹⁶ The review also noted that the evidence base for school-based drug programmes is poor, particularly with reference to primary school education.^{16,17}

While the majority of young people of school age have never used an illicit drug, a proportion may experiment with illicit drug use, some of whom may then go on to become problem drug users.¹⁸ In 2010, 9 per cent of pupils aged 11 years reported having ever taken drugs, with the prevalence increasing to 40 per cent among 15 year olds.¹⁸ Further information on the prevalence and patterns of drug use can be found in **Chapter 2**.

From a UK perspective, there is a paucity of evidence for the efficacy of school-based drug prevention programmes. The Home Office's *Blueprint drugs education* programme,¹⁹ which ran from 2003 to 2007, was the largest drugs education programme that has ever been run in Britain. The programme provided drug education lessons to school children aged 11 and 12 years, across 23 different schools in England. It aimed to equip pupils with the knowledge and experiences necessary to make informed choices about drug use.¹⁹ The efficacy of the programme is not known, as the study design meant it was not possible to draw any conclusions from this research.

Despite a lack of evidence that UK school-based prevention programmes affect drug use, perception studies suggest that the messages taught in these programmes are reaching pupils, although the extent to which these are affecting behaviour, and therefore drug use, is less strong. The 2011 NHS Information Centre survey of smoking, drinking and drug use among secondary school pupils, surveyed 6,519 pupils aged 11 to 15 years across 219 schools in England.²⁰ It found that in relation to school-based prevention programmes, most pupils recalled lessons about drugs (60%), and felt they helped them think about the risks of taking drugs (96%).²⁰ Pupils also believed that lessons helped them realise that taking drugs was against the law (88%), think about what they would do if they were offered drugs (77%) and find out where they could get advice or information about drugs (71%).²⁰ Fewer pupils reported that the lessons helped them understand that not as many young people take drugs as they previously believed (38%).²⁰

Boys were more likely than girls to say they had learnt messages from lessons about drugs.²⁰ Younger pupils were more likely in general to indicate they had learnt lessons from drug education programmes.²⁰ A more complex pattern was reported in

relation to pupils' previous experiences with drug use. Those who had never taken drugs were more likely to say that lessons had helped them to avoid drugs, and to think about what to do if they were offered drugs.²⁰ This contrasts with pupils who had taken drugs, who were more likely to say they had been helped to understand why people took drugs, and to see that not as many people as they thought took drugs.²⁰

Drug testing

Drug testing in schools has been suggested as an alternative school-based policy intervention to reduce the use of illicit drugs. This policy has not been extensively evaluated in the UK. Drug testing in schools, whether random or on suspicion, is more common in the USA, albeit in a minority of schools.

In the UK, the DfES guidance on drug testing in schools states that the implementation of drug testing should be considered carefully.¹⁴ It recommends that schools should formulate their own appropriate drugs policies and practices in consultation with staff, parents, governors, local drug services and the police. The guidance also advises that drug testing should be placed within the wider context of educating children about the risks, effects and consequences of drug use. Since the publication of this guidance in 2004, the uptake of drug testing in schools has been limited. It is recommended by the ACPO that drug testing should not be used in cases where there is no evidence of drug use.¹⁵

Drug testing in schools does not appear to affect the use of illicit drugs. Research has demonstrated that drug use does not differ between schools with and without drug testing.²¹ A 2005 review of school-based prevention programmes found no convincing evidence to support random drug testing in schools.²² It was also speculated that such programmes could have negative effects, which include reduced trust between pupils and staff.²²

Non-school settings

Non-school settings for universal interventions that aim to reduce drug use can include youth clubs, primary care centres, colleges, and work with families and in the community. In 2006, the Cochrane Collaboration published a systematic review of interventions for the prevention of drug use delivered to young people in non-school settings.²³ The interventions included:

- multicomponent community studies
- family intervention studies
- education and skills training.

The lack of research in this area meant the authors were unable to carry out a meta-analysis and pool results across similar interventions. It was suggested that further high-quality research was needed before any conclusions could be made on the efficacy of non-school-based prevention strategies.²³

Some evidence of efficacy was found in individual studies but this was not constant across the different study modalities. Significant effects on reducing drug use were detected for individual family interventions.²³ There was insufficient evidence that any of the multicomponent family community studies for reducing illicit drug use that had been considered had any advantage over the school-based programmes. Education and skills training were found to have little effect on reducing drug use.²³ Overall, the findings suggest that community-based programmes offer little for reducing the use of drugs, although family interventions may have some impact.

Mass media and social marketing approaches

Mass media campaigns are commonly used as part of universal strategies to reduce drug use. They often involve the use of television, radio and other advertising media.

In the UK, the *Talk to FRANK* initiative (now called *Frank. Friendly confidential drugs advice*) is the most recent example of a mass media prevention initiative. This was established by the Department of Health and the Home Office in 2003 and included an online information source. It is advertised and promoted through television, radio and the internet.²⁴ As part of the 2010 drug strategy,²⁵ the UK Government affirmed its commitment to continue enhancing this service.

In 2002, WHO undertook a thorough analysis of mass media approaches for the prevention of psychoactive substance use. An analysis of 13 review papers concluded that the use of mass media alone improved awareness of drug harms in some cases, but overall was not effective in reducing illicit drug use.²⁶ This was particularly true in countries where the presence of countervailing influences, such as drug club cultures, drug imagery within music, drug-using role models and exposure to images of drug use was high.²⁶ These influences are common to the UK. Large-scale research, which evaluated the efficacy of the US National Youth Antidrug Campaign between 1999 and 2003 showed exposure to campaign materials had no effect on youth drug use.²⁷ The widespread use of mass media approaches to reduce drug use may need to be rethought by policy makers.

Using social marketing to enhance mass media approaches may be a useful way of increasing the efficacy of mass media campaigns.²⁸ Social marketing programmes are designed to bring about social change using concepts from commercial advertising and marketing. Social marketing differs from commercial marketing, in that it tries to sell 'ideas' to consumers, as opposed to products. Social marketing seeks to influence social behaviours and benefit the target audience.

Using social marketing to deliver health messages presents a developing area in reducing the uptake of drugs. An evaluation of social marketing to reduce alcohol and cannabis use found a significant effect in terms of lifetime cannabis use.²⁸

Cannabis initiation was shown to be between 10 and 72 per cent less likely two years after exposure to the social marketing. This research has yet to be robustly replicated.

7.2.2 Selective and indicated prevention strategies

Aside from broader questions surrounding the impact of universal prevention strategies on drug use, universal strategies can also be inefficient, as they may address those who are not at risk of using illicit drugs, while not concentrating on those at highest risk. Selective and indicated prevention strategies overcome this by targeting specific groups at heightened risk of using drugs. Research has demonstrated that these groups commonly include the homeless, those looked after by local authorities or in foster care, sex workers, truants and those excluded from school, young offenders, children from substance-using families, and young people with conduct or depressive disorders (see **Section 4.4.4**).²⁹ There are benefits of these approaches but since selective and indicated prevention programmes are specifically targeted at those at risk of drug use, identifying these individuals also risks stigmatising or labelling those involved in these strategies.^{30,31} This in itself is a risk factor for subsequent drug use.^{30,31}

Despite the large amount of information concerning risk and protective factors for drug use, relatively little is known about what works to reduce the use and uptake of illicit drugs among high-risk groups. There is a limited amount of high-quality research in this area, but the evidence that is available suggests these interventions have some effect at reducing drug use among vulnerable groups. A 2005 review of US research of the effectiveness of drug use prevention programmes found that selective prevention programmes appear to be effective in reducing short-term drug use among vulnerable young people, although this was not found across all the studies reviewed.³² A number of school-based programmes that provided life skills training to at-risk groups demonstrated positive effects on drug use, whereas similar studies did not.³² Results from studies of the effectiveness of counselling services for at-risk groups were mixed, with some showing positive results, some showing negative results, and some showing no change at all.³² Multicomponent studies also produced similarly mixed reports.³²

While interventions targeted at vulnerable groups appear to have some effect on reducing drug use, it is not clear what type of intervention works best, and what format these interventions should take. It should be noted that all research from the above review is from the USA, raising issues of comparability to the UK.³² There is a need for outcome evaluations of targeted drug prevention programmes that take place in the UK.

The age at which interventions take place among vulnerable young people appears to have a significant impact on illicit drug use. The 2005 review discussed above identified the age range 11 to 13 years as a crucial period for interventions.³² This is a time when young people at high risk start to experiment with drugs.³² This appears to be an

earlier age of onset than for the general population.^{33,34} In the UK, this period traditionally marks the time of transition to secondary school, and it may be that interventions should be targeted at this age range among vulnerable groups within the school setting. For vulnerable children at high risk, interventions in non-school settings may need to be explored, as these children may have higher levels of school truancy. Targeting preventative interventions to those at heightened risk of problematic drug use relies on accurate identification of those groups that are susceptible to drug use. It is essential that all necessary agencies are provided with the appropriate resources to identify at-risk groups.

7.3 Evaluation of prevention strategies: conclusions

Prevention strategies have a relatively small impact on reducing drug use, other than delaying the initiation of use. There is little international evidence, and only a small amount of UK evidence, to suggest that such strategies have any impact on future drug use. Government policy currently focuses on providing universal and selective prevention programmes. While these interventions may have some benefit, this is limited and there is a lack of robust evidence to support their use. The question remains whether alternative policy options should be explored, which could potentially have greater benefit.

Prevention strategies that focus on positive social and behavioural development appear to be effective. Programmes that only provide drug-relevant information, or try to boost self-esteem, are less likely to be effective at reducing demand. Taking action on preventing the underlying causes of drug use may be as effective as, or more effective than, preventing drug use directly.

Summary

- 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.

