Chapter 13
Young people, recreational drug use and harm reduction

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Abstract

This chapter begins by reviewing the prevalence of recreational drug use and related adverse health outcomes among young people in European countries. It then employs a typological approach to review and discuss the current range of responses that aim to reduce the harms associated with young people's recreational drug use in Europe. These responses include: individually focused and group-based interventions (school-based drugs education and prevention, mass media campaigns, motivational interviewing, and youth development programmes) and 'settings-based approaches', which make changes to recreational settings, such as nightclubs, or institutional settings, such as schools, to address the social and environmental background of young people's drug use.

Keywords: young people, drug use, prevalence, harm, intervention, Europe.

Introduction

This chapter focuses primarily on young people's use of illegal drugs (rather than alcohol and tobacco use). However, the potential for harm is likely to be greatest when young people use both drugs and alcohol, and many of the interventions reviewed in this chapter are considered to be appropriate for reducing the harms associated with both drug and alcohol use. The chapter will begin by reviewing the prevalence of drug use among young people in Europe and the related adverse health and other harms. The appropriateness and likely effectiveness of different types of interventions that aim to reduce the harms associated with young people's recreational drug are then discussed. Harm reduction has traditionally focused on adult 'problem' drug users, particularly injecting drug users (see, for example, Ball, 2007, and Kimber et al., 2010), and neglected not only the harms associated with young people's recreational drug use but also how to reduce these harms.

This chapter considers young people's recreational drug use to be drug use that occurs for pleasure, typically with friends, in either formal recreational settings, such as nightclubs, and/or informal settings, such as on the streets and in the home. This is thus a broader definition than the one applied in other EMCDDA publications, which often focus specifically on young people's drug use within a 'nightlife context' (e.g. EMCDDA, 2002). This chapter is primarily focused on young people aged 14–19, although some studies report on other age ranges (e.g. 14–24) and therefore at times it has been necessary to define 'young people' more broadly. Furthermore, data on prevalence and trends of drug use among young people often aim to provide an indication of overall levels of use and therefore do not always distinguish between recreational drug use and more problematic patterns of use.

Trends in young people's recreational drug use in Europe

The European School Survey Project on Alcohol and Other Drugs (ESPAD) and recent general population surveys have revealed lower prevalence of use of cannabis and other illicit drugs for European youth compared to youth in the United States (Hibell et al., 2004; Hibell et al., 2009; EMCDDA, 2009). However, these overall European-level data mask diversity within the EU in terms of young people's use of cannabis, 'club drugs', such as ecstasy and amphetamines, and cocaine.

Cannabis

The 2007 ESPAD data revealed that the highest lifetime prevalence of cannabis use among 15- to 16-year-old school students is in the Czech Republic (45 %), while Estonia, France, the Netherlands, Slovakia and the United Kingdom reported prevalence levels ranging from 26 % to 32 % (Hibell et al., 2009). Lifetime prevalence levels of cannabis use of between 13 % and 25 % are reported in 15 other countries. Less than 10 % of 15- to 16-year-old school students report cannabis use in Greece, Cyprus, Romania, Finland, Sweden and Norway.

Early onset of cannabis use has been associated with the development of more intensive and problematic forms of drug consumption later in life. In most of the 10 EU countries with relatively high prevalence of frequent use, between 5 % and 9 % of school students had initiated cannabis use at age 13 or younger. In addition, compared to the general population of students, cannabis users are more likely to use alcohol, tobacco and other illicit drugs (EMCDDA, 2009).
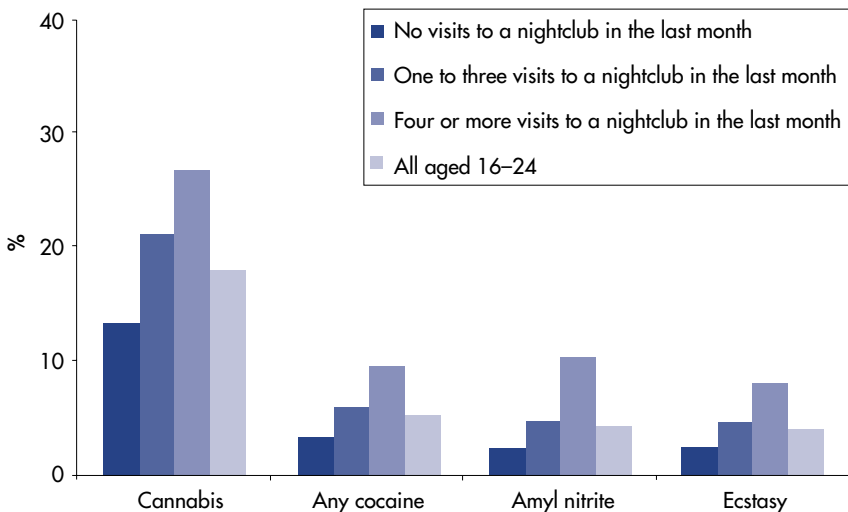
National survey data reported to the EMCDDA shows that in almost all EU countries cannabis use increased markedly during the 1990s, in particular among school students. By 2003, between 30–40 % of 15- to 34-year-olds reported 'lifetime use' of cannabis in seven countries, and more than 40 % of this age group reported ever having used cannabis in two other countries. However, data from the 2007 ESPAD surveys suggests that cannabis use is stabilising — and in some cases declining — among young people in Europe: of the 11 EU countries for which it is possible to analyse trends between 2002 and 2007, four countries showed overall decreases of 15 % or more in the proportion of 15- to 16-year-olds reporting cannabis use in the last year, and in four other countries the situation appears stable (Hibell et al., 2009; EMCDDA, 2009).

Ecstasy and amphetamines

It is estimated that 7.5 million young Europeans aged 15 to 34 (5.6 %) have ever tried ecstasy, with around 2 million (1.6 %) using it during the last year (EMCDDA, 2009). Estimates of prevalence are generally even higher among the subgroup of 15- to 24-year-olds, for whom lifetime prevalence ranges between 0.4–18.7 % in European countries (estimates fall between 2.1 % and 6.8 % in most European countries). Among 15- to 16-year-old students lifetime prevalence of ecstasy use ranges between 1 % and 7 % in countries surveyed in 2007 (EMCDDA, 2009).

Studies of recreational settings that are associated with drug use, such as dance events or music festivals, provide further evidence regarding young people's ecstasy and amphetamine use. Estimates of young people's drug use in these settings are typically high. However, comparisons between surveys can only be made with the utmost caution, as the age and gender distribution of survey respondents as well as variations in the setting may lead to observed differences. Studies conducted in recreational settings in 2007 in five EU countries (Belgium, Czech Republic, Latvia, Lithuania, Austria) reveal lifetime prevalence estimates of 15–71 % for ecstasy use and 17–68 % for amphetamines (EMCDDA, 2009). Much of party-going young people's drug use occurs on weekends and during holiday periods (EMCDDA, 2006b).

Figure 13.1: Proportion of 16- to 24-year-olds reporting use of the most prevalent drugs in the last year by frequency of nightclub visits

Source: Hoare and Flatley, 2008.

A further indication of the extent to which the use of these drugs may be concentrated among the young, club-going population can found in the 2007/8 British Crime Survey (Hoare and Flatley, 2008). The study found that those 16- to 24-year-olds who reported visiting a nightclub four or more times in the last month were more than three times as likely to have used ecstasy in the last year than those not attending nightclubs (2 % vs. 8 %) (Figure 13.1). In a French study that was carried out in 2004 and 2005 among 1 496 young people at 'electronic' music venues, 32 % of respondents reported ecstasy use and 13 % reported amphetamine use in the past month (Reynaud-Maurupt et al., 2007). Among specific sub-populations that self-identified as 'alternative', prevalence estimates for ecstasy and amphetamines were as high as 54 % and 29 %, respectively (Reynaud-Maurupt, 2007).

Cocaine

Although cocaine is the second most commonly used illicit drug in Europe after cannabis (EMCDDA, 2007), estimates of the prevalence of cocaine use among school students are very low. Lifetime prevalence of cocaine use among 15- to 16-year-old students in the ESPAD survey is between 1 % and 2 % in half of the 28 reporting countries, and in the rest it ranges between 3 % and 5 % (Hibell et al., 2009; EMCDDA, 2009).

Table 13.1: **Prevalence of cocaine use in the young adult population — summary of the data**

Age group	Time frame of use		
	Lifetime	Last year	Last month
15–34 years			
Estimated number of users in Europe	7.5 million	3 million	1 million
European average	5.6 %	2.2 %	0.8 %
Range	0.1–12.0 %	0.1–5.5 %	0.0–2.1 %
Lowest-prevalence countries	Romania (0.1 %) Lithuania (0.7 %) Malta (0.9 %) Greece (1.0 %)	Romania (0.1 %) Greece (0.2 %) Poland (0.3 %) Hungary, Czech Republic (0.4 %)	Estonia, Romania (0.0 %) Czech Republic, Greece, Poland (0.1 %)
Highest-prevalence countries	United Kingdom (12.0 %) Spain (11.8 %) Denmark (9.5 %) Ireland (8.2 %)	Spain (5.5 %) United Kingdom (4.5 %) Denmark (3.4 %) Ireland, Italy (3.1 %)	United Kingdom (2.1 %) Spain (1.9 %) Italy (1.2 %) Ireland (1.0 %)
15–24 years			
Estimated number of users in Europe	3 million	1.5 million	0.6 million
European average	4.4 %	2.2 %	0.9 %
Range	0.1–9.9 %	0.1–5.6 %	0.0–2.5 %
Lowest-prevalence countries	Romania (0.1 %) Greece (0.6 %) Lithuania (0.7 %) Malta, Poland (1.1 %)	Romania (0.1 %) Greece (0.2 %) Poland (0.3 %) Czech Republic (0.4 %)	Estonia, Romania (0.0 %) Greece (0.1 %) Czech Republic, Poland, Portugal (0.2 %)
Highest-prevalence countries	United Kingdom (9.9 %) Spain (9.3 %) Denmark (9.2 %) Ireland (7.0 %)	Denmark (5.6 %) Spain (5.4 %) United Kingdom (5.0 %) Ireland (3.8 %)	United Kingdom (2.5 %) Spain (1.7 %) Italy (1.2 %) Ireland (1.1 %)

Note: European prevalence estimates are based on weighted averages from the most recent national surveys conducted from 2001 to 2008 (mainly 2004–08), therefore they cannot be attached to a single year. The average prevalence for Europe was computed by a weighted average according to the population of the relevant age group in each country. In countries for which no information was available, the average EU prevalence was imputed. Population base is 133 million. The data summarised here are available under 'General population surveys' in the EMCDDA 2009 statistical bulletin.
Source: EMCDDA, 2009.

Of the 4 million Europeans who used cocaine in the past year, around 3 million were young people and young adults (EMCDDA, 2009). The prevalence of past-year cocaine use among 15- to 24-year-olds is estimated to be 2.2 %, which translates to about 1.5 million cocaine users. In contrast to the prevalence estimates for cannabis or ecstasy use, which are highest among the 15 to 24 age group, measures of more recent cocaine use (last year and last month) are similar among the 15 to 24 and 25 to 34 age groups (see Table 13.1). Of the 11 countries for which it is possible to analyse trends in cocaine use between 2002 and 2007, the proportion of 15- to 34-year-olds reporting cocaine use in the last year increased by 15 % or more in five countries (Ireland, Italy, Latvia, Portugal, United Kingdom), remained stable in four (Germany, Spain, Slovakia, Finland) and only decreased in two countries (Hungary, Poland).

Cocaine use is also strongly associated with alcohol use. For example, the British Crime Survey 2007–08 found that among 16- to 24-year-olds who made nine or more visits to a pub in the last month, 13.5 % reported using cocaine in the last year, compared to 1.7 % among those who had not visited a pub (Hoare and Flatley, 2008). Visiting nightclubs was also associated with higher cocaine use, as nearly 10 % of the 16- to 24-year-olds who visited a club on four or more occasions during the last month reported using cocaine in the last year, compared to 3.3 % among those who had not visited a club (Hoare and Flatley, 2008). Studies conducted in nightlife settings also report higher prevalence of cocaine use among club-goers than among the general population (EMCDDA, 2007).

It is worth noting that alcohol is almost always the first drug with strong psychoactive and mind-altering effects used by young people, and its widespread availability makes it the main drug connected to poly-drug use among young adults, particularly in recreational settings. Other psychoactive substances commonly referred to as 'legal highs' are increasingly sold as alternatives to controlled drugs. In 2009, a snapshot study of 115 online shops located in 17 European countries showed that a range of herbal smoking products and 'party pills' containing legal alternatives to controlled drugs were being sold (EMCDDA, 2009).

Health and other harms

It is now widely acknowledged that recreational drug use can be an important source of status and recreation for young people (Henderson et al., 2007); it can not only facilitate a shared sense of group belonging and security (Fletcher et al., 2009a), but also a sense of being different from other groups of young people (Shildrick, 2002). However, as recreational drug use has increased among different sections of the youth population, so has evidence of drug-related harm and concerns about the consequences of adolescent drug use. Although the vast majority of this increase in drug use among young people has been attributed to the use of 'soft' drugs (e.g. cannabis and ecstasy), these substances still have health risks, especially for frequent users who are most at risk of harm.

Cannabis can cause short- and long-term health problems, such as nausea, anxiety, memory deficits, depression and respiratory problems (Hall and Solowij, 1998; MacLeod et al., 2004;

Solowij and Battisti, 2008; Hall and Fischer, 2010). Although more research is needed on the long-term effects of adolescent cannabis use on mental health, cannabis use is also thought to increase the risk of mental health problems, particularly among frequent users (Hall, 2006; Moore et al., 2007) and those with a predisposition for psychosis (Henquet et al., 2005). Regular cannabis users can also become dependent (Melrose et al., 2007).

The true extent of future mental health problems due to adolescent ecstasy use is unclear, but young ecstasy users may be at risk of depression in later life and there is evidence that ecstasy use may also impair cognitive functions relevant to learning (Parrott et al., 1998; Schilt et al., 2007). Dehydration, a more immediate risk for ecstasy users, can cause loss of consciousness, coma and even death. Furthermore, evidence from cohort studies suggests that early initiation and frequent use of 'soft' drugs may be a potential pathway to more problematic drug use in later life (Yamaguchi and Kandel, 1984; Lynskey et al., 2003; Ferguson et al., 2006).

Cocaine use can result in dependence and/or serious mental and physical health problems, such as depression, paranoia, and heart and respiratory problems (Emmett and Nice, 2006). Hence, although only a small minority of young people use cocaine (NatCen and NFER, 2007; Hibell et al., 2009), their numbers are increasing in some countries in Europe, posing an increasing public health issue.

In addition to presenting direct health risks, adolescent drug use is also associated with accidental injury, self-harm, suicide (Charlton et al., 1993; Beautrais et al., 1999; Thomas et al., 2007) and other 'problem' behaviours, such as unprotected sex, youth offending and traffic risk behaviours (Jessor et al., 1991; Home Office, 2002; Jayakody et al., 2005; Calafat et al., 2009). For example, a recent report by the United Kingdom Independent Advisory Group on Sexual Health and HIV (2007) has suggested that there are strong links between drug use, 'binge' drinking and sexual health risk, with similar trends in these risk behaviours. Furthermore, although the links between crime and heroin or cocaine dependence are well known, there is increasing evidence of links between teenage cannabis use and youth offending (e.g. Boreham et al., 2006). This is not to say that there is necessarily a direct causal relationship between adolescent drug use and social problems, but there is clear evidence that they cluster together among certain groups of young people.

A typology of interventions

There have been surprisingly few attempts to synthesise the evidence relating to interventions in European countries addressing young people's recreational drug use. Here we adopt a typological approach to describe and discuss responses that aim to reduce the harms associated with young people's recreational drug use. These include: (1) individually focused and group-based interventions — school-based drugs education and prevention, mass media campaigns, motivational interviewing and youth development programmes — and (2) 'settings-based approaches' which make changes to recreational settings, such as nightclubs, or institutional settings, such as schools, to address the social and environmental background of young people's drug use.

This is not an exhaustive list of interventions in Europe that target young people's recreational drug use. For example, we do not discuss interventions that are directed primarily at young people's parents rather than young people themselves (see Petrie et al., 2007 for a review of the evidence relating to current parenting programmes). Social policies that may impact on macro-social — or 'structural' — factors, such as youth cultures, poverty or social exclusion, that are also associated with young people's drug use, are also not discussed, because they rarely aim to specifically reduce the harms associated with recreational drug use. The decriminalisation of drugs, drug classification policies, and policies and enforcement to reduce the supply of illicit drugs and illicit sales of prescription drugs are also beyond the scope of this chapter.

Individual and group-based approaches

School-based drugs education and prevention

In Europe, schools provide universal access to young people under 16 and are widely recognised as a key site for drugs education and prevention interventions that aim to prevent or delay drug use and reduce the frequency of drug use during adolescence (Evans-Whipp et al., 2004). However, evidence from randomised controlled trials (RCTs) of classroom-based drugs education interventions aiming to improve knowledge, develop skills and modify peer norms suggest that the effect of these interventions on young people's drug-use behaviour are limited: a recent systematic review found that they can have positive effects but concluded that these are small, inconsistent and generally not sustained (Faggiano et al., 2005). In other words, drugs education may promote students' 'health literacy' but is not sufficient on its own for changing young people's behaviour or reducing drug-related harms.

Faggiano and colleagues (2005) found that school-based drugs education programmes based on a 'comprehensive social influence approach' and those that are delivered by other students (rather than teachers) appear to have the most positive effects — programme characteristics that were also associated with more positive effects in systematic reviews of alcohol education and smoking prevention interventions in schools (Foxcroft et al., 2002; Thomas and Perera, 2006). However, in reviewing the evidence for drug education programmes in schools, Cahill (2007) has highlighted the difficulties of implementing complex interventions such as peer-led programmes in school settings and suggested that caution is also required with normative education to ensure that adolescents receive appropriate messages.

A key challenge in Europe and elsewhere is therefore to pilot and further evaluate evidence-based school-based drugs education and prevention interventions (Faggiano and Vigna-Taglianti, 2008; Ringwalt et al., 2008). 'Unplugged' is an example of a European school-based programme that employs a comprehensive social influence model. It aims to reduce young people's substance use via 12 interactive sessions addressing topics such as decision-making, 'creative thinking', effective communication, relationship skills, self-awareness, empathy, coping skills and the risks associated with specific drugs (Van Der Kreeft et al., 2009). A recent cluster RCT of the 'Unplugged' programme in 170 schools across seven

European countries suggested that curricula based on such a comprehensive social-influence model are not only feasible to implement in schools in Europe, they may also reduce regular cannabis use and delay progression to daily smoking and episodes of drunkenness (Faggiano et al., 2008).

The ASSIST (A Stop Smoking in Schools Trial) programme in the United Kingdom provides an example of an effective peer-led health promotion intervention that is feasible to deliver in schools: a cluster RCT of the ASSIST programme involving 59 schools in Wales found a significant reduction in smoking among the intervention group, including among the most 'high risk' groups of students (Campbell et al., 2008). The programme uses network analysis to identify influential students and train them as peer supporters to 'diffuse' positive health messages throughout the school. Researchers at the Centre for Drug Misuse Research in Glasgow have recently piloted a peer-led drugs prevention programme based on the ASSIST programme in two secondary schools in Scotland; this study suggested that it is feasible to deliver cannabis and smoking education (CASE) together using this approach (Professor Mick Bloor, personal communication). However, further research is needed to examine the effects of this intervention on students' drug use and drug-related harms.

Mass media campaigns

Mass media campaigns have become a popular tool among health promoters seeking to inform young people about the risks associated with recreational drug use and/or seeking to encourage current users to reduce their use and minimise the risk of harm. These interventions, such as the recent United Kingdom FRANK advertising campaigns on the mental health problems associated with recreational cannabis use (http://www.talktofrank. com/cannabis.aspx), aim to increase the information available to young people and reframe issues relating to young people's recreational drug use on public health terms. These mass media campaigns to raise awareness about the effects of drug use in the United Kingdom have also been integrated with a 'credible, non-judgemental and reliable' online and telephone drugs advice and information service for young people and their parents (Home Office et al., 2006).

However, mass media campaigns that aim to reduce the harms associated with young people's recreational drug have rarely been evaluated to examine their effects on young people's behaviour, attitudes or intention to use drugs — and where they have, the findings have not always been positive. A national survey to evaluate the United States Anti-Drug Media Campaign suggested that mass media campaigns have little or no effect on changing attitudes once young people have initiated drug use (Orwin et al., 2006), and may even have harmful effects as those young people who were exposed to the adverts were more likely to report cannabis use or an intention to use cannabis (Hornik et al., 2008). Similar negative outcomes were reported in another large-scale evaluation of the Scottish cocaine campaign 'Know the score': two-fifths (41 %) of respondents said that the campaign made them more likely to find out more about cocaine and 12 % felt that the campaign had made them more likely to experiment with cocaine (Phillips and Kinver, 2007). A meta-analysis of evaluations of mass media campaigns to reduce smoking, drinking or drug use by Derzon

and Lipsey (2002) found that campaigns featuring messages about resistance skills appeared to have the most harmful effects and were associated with significantly higher extent of substance use than observed in control communities.

Flay and colleagues (1980) have suggested that the key factors to change behaviour via mass media health promotion campaigns include: repetition of information over long time periods, via multiple sources and at different times (including 'prime' or high-exposure times). Mass media interventions also provide the opportunity to reach specific target groups within a short timeframe (HDA, 2004). However, population-level mass media campaigns require a significant financial investment (Hornik, 2002) and are competing in an increasingly crowded market with a range of other information available to young people (Randolph and Viswanath, 2004).

Brief interventions

Approaches based on early screening of young people's drug use and brief behaviour change interventions, such as motivational interviewing, have been rigorously evaluated in the United Kingdom and elsewhere (Tait and Hulse, 2003; Tevyaw and Monti, 2004). Developed by Miller and Rollnick, motivational interviewing has been defined as a 'client-centred, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence' (Miller and Rollnick, 2002). Evidence suggests that it is feasible to deliver brief one-to-one interventions such as motivational interviewing to young drug-users in a wide range of settings, such as youth centres, further education colleges, general practitioners' surgeries and 'emergency rooms' (Gray et al., 2005; Martin et al., 2005; McCambridge et al., 2008), and where brief interventions employ motivational interviewing principles they have been found to be effective in reducing young people's drug use (Tait and Hulse, 2003; McCambridge and Strang, 2004; Tevyaw and Monti, 2004; Grenard et al., 2006).

Reviewing the evidence from trials of brief motivational interviewing interventions, Tevyaw and Monti (2004) found consistent evidence that this approach can 'result in decreases in substance-related negative consequences and problems, decrements in substance use and increased treatment engagement', and these effects appear to be greatest among young people who report the heaviest patterns of drug use and the least motivation to change prior to intervention. Researchers have also found evidence that as little as a 'single session' of motivational interviewing can significantly reduce cannabis use among heavy users and among those young people considered to be at 'high risk' of progressing to more problematic drug use (McCambridge and Strang, 2004).

However, the existing evidence suggests that, although brief interventions based on motivational interviewing can encourage young people to moderate their drug use in the short term, this approach is unlikely to have long-term effects on its own (McCambridge and Strang, 2005) and may therefore need to form part of a more holistic approach to harm reduction. Further research is also needed to examine the essential elements of motivational interviewing interventions and their effects on developmental transitions during adolescence (McCambridge and Strang, 2004; McCambridge et al., 2008). Furthermore, motivational

interviewing is complex and requires practitioners to develop skills and experiences over time in order to deliver it proficiently. As such, it is likely to be difficult to replicate and evaluate existing intervention more widely across Europe at present while is there is limited capacity to deliver such interventions.

Youth development

Youth development programmes work with groups of teenagers and aim to promote their personal development, self-esteem, positive aspirations and good relationships with adults in order to reduce potentially harmful behaviours, such as drug use (Quinn, 1999). As well as enhancing young people's interests, skills and abilities, youth projects also have the potential to divert young people away from drug use through engaging them in more positive sources of recreation, and youth workers can provide credible health messages and signpost health services. There has been considerable interest from policymakers in youth development interventions as an alternative means of reducing young people's drug use. For example, in the United Kingdom youth work programmes targeted at socially disadvantaged and 'excluded' young people and other 'at-risk' groups have been supported by the Government, including new community-based youth development projects such as the Positive Futures initiative and the Young People's Development Programme (Department for Education and Skills, 2005).

Evaluations of youth development interventions targeted at vulnerable young people have shown mixed results: although some studies report that youth development interventions have had positive effects (Philliber et al., 2001; Michelsen et al., 2002), others suggest these interventions may be ineffective (Grossman and Sipe, 1992) or even harmful (Palinkas et al., 1996; Cho et al., 2005; Wiggins et al., 2009). It appears that involvement in such programmes may result in an increase in drug use where: young people are stigmatised (or 'labelled') via targeting, which further reduces their self-esteem and aspirations; and/or harmful social network effects arise through aggregating 'high risk' young people together, thus introducing young people to new drug-using peers (Bonell and Fletcher, 2008). For example, in a study examining an intervention for high-risk high school students (Cho et al., 2005), greater exposure to the programme predicted greater 'high-risk peer bonding' and more negative outcomes, including higher prevalence of cannabis and alcohol use (Sanchez et al., 2007).

Youth development approaches are therefore likely to be most appropriate and effective where they are delivered in universal settings to avoid the harmful 'labelling' and social network effects associated with targeting 'high risk' youth. In the United States, after-school and community-based youth development programmes promoting civic engagement and learning through the principle of 'serve and learn' — which involves voluntary service, reflection on this voluntary service though discussion groups, social development classes and learning support — have been found to be effective in reducing a wide range of risky behaviours including involvement with drugs and teenage pregnancy (Michelsen et al., 2002; Harden et al., 2009). Where youth workers aim to target 'high risk' groups of young people, 'detached', street-based services may be more appropriate in order to avoid the potentially harmful social network effects associated with aggregating these young people together in youth centres, although this

needs further evaluation (Fletcher and Bonell, 2008). Examples of street-based youth projects include the Conversas de Rua programme in Lisbon (http://www.conversasderua.org/) and the 'Off the Streets' community youth initiative in Derry, Northern Ireland.

Settings-based approaches

Settings-based approaches to health promotion have their roots in the World Health Organization's (WHO) Health for All initiative and the Ottawa Charter for Health Promotion (WHO, 1986). The Ottawa Charter argued that health is influenced by where people 'learn, work, play and love', integrated new thinking about health promotion, and heralded the start of this new approach (Young, 2005). Key principles regarded as necessary to achieve the status of a 'health promoting setting' are the creation of a healthy environment and the integration of health promotion into the routine activities of the setting (Baric, 1993). Since the late 1980s, health promotion interventions have been widely established, which make changes to recreational 'settings', such as nightclubs, or institutional 'settings', such as schools, to address the social and environmental determinants of harmful drug use.

Interventions in recreational settings

Studies of young people in Europe who attend dance music events consistently report much higher prevalence of drug use than found in surveys of the general population (EMCDDA, 2006a). A 'Hegemonic Recreational Nightlife Model' has been used to understand how recreational drug use and the settings where this takes place now govern many young people's weekend entertainment and social networks, and can give 'meaning' to their lives through intensive participation (Calafat et al., 2003). The recreation industry thus not only supplies services but also contributes to defining entertainment and creating the conditions in which recreational drug use takes place. In turn, there is a wide range of risk behaviours associated with recreational drug use in this context (e.g. violence, sexual risk, traffic risk), and these have been found to be influenced by factors such as a 'permissive atmosphere' (Homel and Clark, 1994; Graham et al., 2006), overcrowding (Macintyre and Homel, 1997), overt sexual activity (Homel et al., 2004; Graham et al., 2006) and transport habits (Calafat et al., 2009).

A wide range of interventions now aim to change the physical context and/or the social and cultural norms of recreational settings to address the conditions and influences associated with the most 'habitual' contexts for young people's recreational drug use, such as nightlife settings and music festivals, and the potential harms arising from use in such contexts. For example, several organisations in Europe have launched safer nightlife guidelines. 'Safer dancing' guidelines, developed in the United Kingdom, have now become an important tool in this field. Other examples are the Safe Nightlife initiative in Holstebro, Denmark, and the London Drug Policy Forum's 'Dance Till Dawn Safely' initiative.

Safe-clubbing guidelines aim to reduce opportunities for drug-related problems to occur in these settings and include promoting the accessibility of free water, the immediate availability of first aid and outreach prevention work with young clubbers. Reports on the availability of such measures, in nightclubs with sufficiently large target populations for the intervention to

be implemented, were collated by the EMCDDA in 2008 (EMCDDA, 2009). These reports highlighted the limited availability of simple measures to prevent or reduce health risks and drug use in European nightlife settings. For example, it was found that outreach prevention work was provided in the majority of dance clubs in only two out of 20 European countries (Slovenia and Lithuania), while free water was still not routinely available in nine of the 20 countries. Furthermore, while 12 countries now report having developed guidelines for nightlife venues, only the Netherlands, Slovenia, Sweden and the United Kingdom report that they are monitored and implemented.

The most widely implemented intervention in recreational settings is the responsible beverage service (RBS) guidelines to support staff and managers in harm reduction strategies. A recent systematic review, however, concluded that there is no reliable evidence that these interventions are effective in preventing injuries or other harms (Ker and Chinnock, 2008; see also Herring et al., 2010). Community-based approaches to responsible service may produce the largest and most significant effects. For example, Stockholm Prevents Alcohol and Drug Problems (STAD) is a community-based prevention programme that started in 1996 in Stockholm to promote community mobilisation, the training of bar staff in RBS and stricter enforcement of existing alcohol licensing and drug laws: an evaluation found a decrease in alcohol-related problems, increased refusal to serve minors and a 29 % reduction in assaults (Wallin and Andréasson, 2005). However, large-scale community-based interventions are likely to be expensive and need political commitment. Other factors may also limit compliance to responsible service, such as low pay, high staff turnover and a stressful working environment, and the efficacy of such interventions is therefore likely be greater when enforced as a statutory intervention (Ker and Chinnok, 2008; Wallin and Andréasson, 2005).

Promising interventions that need further evaluation are glassware bans in recreational settings (Forsyth, 2008) and the creation of collaborating guidelines between licensed premises and accident and emergency services (Wood et al., 2008). Some nightclubs in Europe have now incorporated a first aid service inside the premises, but we are not aware of any evaluations of their effectiveness. Further research and effective collaboration between health promoters, nightlife settings and the alcohol industry are likely to be crucial in reducing the harms associated with young people's recreational drug use. However, building relationships across these sectors is not straightforward. 'Codes of practice' with the potential of enforcement may be the most appropriate means to facilitate engagement across the sectors (Graham, 2000). At present, there seems to be a reluctance to enforce greater accountability through law enforcement. The Tackling Alcohol Related Street Crime (TASC) intervention in Cardiff provides an example of a broad and multifaceted intervention implemented largely by the police that produced reductions in violence at the relevant premises, although further research is needed to examine the feasibility of introducing police-led approaches in nightlife settings more generally (Maguire et al., 2003).

Finally, on-site pill testing in recreational settings has been a controversial issue for several years and appears to be steadily less common in Europe. The main arguments against pill testing are the limited capacity of on-site tests to accurately detect harmful substances and that, by permitting on-site pill testing, contradictory messages are being sent out about the risks related to both use and possession of controlled substances (EMCDDA, 2006b).

Whole-school interventions

Following the emergence of 'settings-based approaches' to health promotion, traditional classroom-based drugs education programmes have gradually been accompanied by additional strategies in schools that address more 'upstream' environmental, social and cultural determinants of young people's drug use, such as student disengagement and truancy. The origin of this new 'settings' approach to health promotion in schools is attributed to a WHO conference in 1989 which led to the publication of *The Healthy School* (Young and Williams, 1989). Following this report, 'whole-school' approaches have received continued support from international networks, such as the WHO, the European Network of Health Promoting Schools (ENHPS) and the International School Health Network (ISHN) (WHO, 1998; McCall et al., 2005).

Using cross-sectional survey data from 10 European countries, Canada and Australia, Nutbeam and colleagues (1993) found a consistent relationship between 'alienation' at secondary school and 'abusive behaviours', such as smoking, drinking and drug use, and warned that 'schools can damage your health'. Further analysis of this data suggested that students' perceptions of being treated fairly, school safety and teacher support were related to substance use (Samdal et al., 1998). Three recent systematic reviews of experimental studies of 'whole-school health promotion interventions', which make changes to schools' physical environment, governance and management, policies, and/or educational and pastoral practices, have found that these approaches appear to be 'promising' for reducing a wide range of 'risky' health behaviours among young people (Lister-Sharpe et al., 1999; Mukoma and Flisher, 2004; Fletcher et al., 2008). The review by Fletcher and colleagues found that changes to the school social environment that increase student participation, improve teacher–student relationships, promote a positive school ethos and reduce disengagement are associated with reduced drug use. The Gatehouse Project in Australia is one of the best-known examples (http://www.rch.org.au/gatehouseproject/).

Although various pathways may plausibly underlie school effects on drug use and drug-related harms, three potential pathways via which school effects on drug use may occur have been identified: peer-group sorting and drug use as a source of identity and bonding among students who are disconnected from the main institutional markers of status; students' desire to 'fit in' at schools perceived to be unsafe, and drug use facilitating this; and/or drug use as a strategy to manage anxieties about schoolwork and escape unhappiness at schools lacking effective social support systems (Fletcher et al., 2009b). This evidence further supports 'whole-school' interventions to reduce drug use through: recognising students' varied achievements and promoting a sense of belonging; reducing bullying and aggression; and providing additional social support for students.

Discussion

There is considerable data on the prevalence of recreational drug use among young people in European countries, and the related adverse health and other harms. However, much of this evidence regarding overall prevalence of young people's drug use is gained through

school-based surveys and we cannot assume that patterns of drug use among young people who have low school attendance and young people who have been excluded from school will therefore be accurately captured in these surveys; there are also practical problems with collecting reliable self-report data about students' use of drugs in school-based surveys (McCambridge and Strang, 2006). Street-based surveys of young people, such as the Vancouver Youth Drug Reporting System (VCH, 2007), could therefore complement existing monitoring systems in Europe. Nonetheless, current European surveys that monitor prevalence and trends are well established and allow cross-national comparisons to be made regarding young people's drug use.

In response to public and political concerns about the harmful consequences of young people's drug use, a wide range of interventions have been implemented throughout Europe and elsewhere. There is no 'magic bullet', and harm reduction strategies in this context will need to encompass both universal and targeted strategies that seek to prevent or delay drug use, reduce the frequency of drug use during adolescence, and make changes to risk environments. Mass media campaigns may be politically important but appear to be largely ineffective (and occasionally counter-productive). If they are to continue to play a role in informing young people about the risks associated with recreational drug use, health promoters should design mass media campaigns in conjunction with young people and — although it is difficult to attribute changes in behaviour to mass media interventions — these campaigns should be subjected to pilot trials prior to 'roll-out'. Future mass media campaigns should also pay close attention to providing easy access to information via the Internet and telephone advice lines.

Based on the current evidence, school-based programmes show greater promise for preventing young people initiating drug use at a young age than mass media interventions. Comprehensive social influence models and peer-led programmes based on the 'diffusion of innovations' approach are the most promising approaches for drugs education and prevention in schools, and thus should be piloted and evaluated more widely in Europe. Interventions that promote a positive school ethos and reduce student disaffection and truancy are likely to be an effective complement to these drugs education and prevention interventions in schools. These school-level 'settings' interventions focusing on the more 'upstream' determinants of risk should also now be piloted and evaluated in Europe to examine their potential for harm reduction.

Motivational interviewing shows considerable promise in a wide range of settings, including among those young people with the heaviest patterns of drug use. However, motivational interviewing is resource-intensive and where there is insufficient investment this will impact on its potential for harm reduction. New training programmes in motivational interviewing should therefore be considered a priority in European countries, initially to build capacity for greater intervention in recreational contexts and among professionals working with high-risk young people.

Youth development approaches appear to be most appropriate and effective in addition to, rather than as an alternative to, school, such as after-school and school-holiday programmes promoting self-esteem, positive aspirations, supportive relationships and learning through the principle of 'serve and learn', which is based on volunteering in the local community. In

addition, because of its focus on working with existing peer groups (and thus its ability to avoid the potentially harmful effects associated with centre-based youth projects), as well as its greater reach and flexibility, detached, street-based youth work may be the most appropriate and effective approach for targeting those young people deemed at 'high risk' of harm. These approaches should be the subject of further evaluation in Europe with high-risk groups.

Perhaps of greatest concern at present is the lack of agreement and guidance about what to do in recreational settings in Europe to reduce drug-related harm. There are few statutory policies governing the most 'habitual' contexts for young people's recreational drug use, such as nightlife settings and music festivals, or rigorous evaluations of interventions in such settings in Europe. Guidelines promoting the accessibility of free water, immediate availability of first aid and outreach services have been implemented with promising effects in some (but by no means all) European countries. These should be enforced through changing them into laws where possible and be accompanied by additional efforts to encourage responsible alcohol service and reduce other risky behaviours.

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