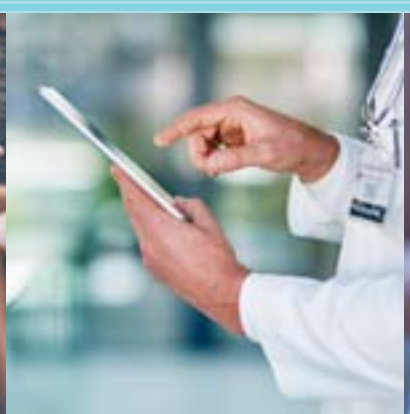
European Monitoring Centre
for Drugs and Drug Addiction

Health and social responses to drug problems

A EUROPEAN GUIDE



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Preface

It is my great pleasure to introduce this new EMCDDA publication *Health and social responses to drug problems: a European guide*. One of the major goals in the EMCDDA Strategy 2025 is to contribute to a healthier Europe, and I see this new report as an important component of the agency's activities in this area. By providing an overview of the current state of the art in this field and access to more detailed information and practical tools, the report, and accompanying web resources, offers support to both policymakers and practitioners working to reduce the health and social consequences of drug use.

In identifying the topics for inclusion in this guide, we have focused on what we see as particularly important issues in Europe. One example is the challenge of responding to new psychoactive substances. There are also more persistent problems, such as opioid-related deaths and the high rates of hepatitis C infection among people who inject drugs. In addition, with an eye to the future, we have highlighted some emerging issues, including the potential vulnerability of migrants and asylum seekers to drug problems, alongside opportunities for development, for example, exploiting e-health approaches within prevention, treatment and harm reduction interventions. This wide range of topics means that the guide will be of interest to diverse audiences with differing needs. For this reason, we have adopted an innovative format for this guide, designed to facilitate its use as a reference document and a gateway to additional materials online.

The guide brings together two important areas of the agency's work in relation to public health: reviews of evidence and best practice, in combination with information on the European picture from our monitoring systems. It also highlights what we see as the main implications for policy and practice that emerge from these. As is the case in all our work, we are indebted to a wide range of partners, individuals and organisations at both national and European levels, and from other regions, who have contributed to the development of this guide. I hope that these partnerships will continue to build, as we carry forward the work in this area and seek to further develop the evidence of what works and how to implement effective responses that will improve the health of European citizens affected by drug problems.

Alexis Goosdeel
Director, EMCDDA

Acknowledgements

This publication synthesises information from a wide range of sources, both existing and new. It has also benefited the input of a wide array of people, whose comments have helped shape this guide. However, it should be noted that responsibility for the content of the guide rests entirely with EMCDDA.

The production of this guide has only been possible because of the input of many EMCDDA staff members. In addition to the scientific staff working in the responses and other areas, who provided and reviewed content throughout, we acknowledge the production team for their help in developing the innovative format of the guide. We are also very grateful to Professor Wayne Hall for his assistance with reviewing and editing the guide throughout its development.

We would also like to thank the authors of the background papers that have been published as part of the accompanying package of resources: Beau Kilmer; Russell Webster; Annette Dale-Perera; Matthijs Blankers and Ajla Mujcic; Tibor Brunt; Sharon Arpa; Jørgen Bramness; Ciara Guiney; Sara Rafael Almeida, Joana Sousa Lourenço and Emanuele Ciriolo; Lauren Johnston, Dave Liddell, Katie Browne and Saket Priyadarshi; Paul Lemmens and Hans DuPont.

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And, as always, we are indebted to our national focal points and members of the Scientific Committee who contribute the information and provide the advice that underpins all our publications.

Introduction

This guide and the associated package of online materials provides a reference point for those planning or delivering health and social responses to drug problems in Europe. The most appropriate responses will depend on the specific drug problems, the contexts in which these occur and the types of intervention that are possible and socially acceptable. By providing key information on some of the most important drug issues for Europe and the responses available, this guide aims to assist those involved in tackling these challenges to develop new programmes and improve existing ones.

This publication will be revised every three years. It complements the annual European Drug Report and the triennial European Drug Markets Report. Together these three reports aim to provide a comprehensive European picture in order to assist policymakers and practitioners to develop and implement policies and interventions that will contribute to a healthier and more secure Europe.

The EU Drug Strategy 2013–20 has the objectives of reducing drug demand, dependence, drug-related health and social harms, and the supply of drugs. The role of the EMCDDA is to support the strategy by providing 'factual, objective, reliable and comparable information at European level concerning drugs and drug addiction and their consequences'; collecting information on emerging trends; and providing information on best practice in the EU Member States and facilitating exchange of such practice between them. To achieve this, the EMCDDA gathers information from a wide range of partners, in particular the Reitox network, which is made up of national focal points in the EU Member States, Norway and Turkey. This guide fulfils the EMCDDA's mandate with respect to the objectives of reducing drug demand and the health and social consequences of drug use. It does not cover drug markets and supply reduction, which are covered in the European Drug Markets Report.

Drug use, and its associated problems, is a complex and multifaceted phenomenon which changes over time. Therefore, the responses required to prevent and ameliorate the associated harms to individuals and societies are, of necessity, many and varied. Moreover, they will need to be adapted to changing patterns of both drug use and problems and to different national contexts. As a result, providing a comprehensive review of health and social responses to drug problems in Europe is not feasible, so instead this publication has been designed to provide an introduction to the topic, with more detailed coverage of some of the most salient drug issues from a European perspective. Importantly, it provides a gateway to online resources that offer more in-depth information and which will be regularly updated.

Definition: health and social responses to drug problems

Responses to drug problems are any actions or interventions that are undertaken to address the negative consequences associated with the illicit drugs phenomenon.

In considering health and social responses to drug problems, the focus is on those actions or interventions that address drug use and associated health and social harms, such as deaths, infectious diseases, dependency, mental health problems and social exclusion. Not included in the definition are actions taken to enforce drug laws or reduce the supply of drugs; these are covered in the European Drug Markets Report.

Health and social responses to drug use and related problems occur at various levels and can be approached from many angles. These include different:

- structural levels – European, national, regional, local, service level;
- perspectives – policy, planner, practitioner; and
- target groups – whole populations, sub groups, individuals.

At one end of the spectrum national policymakers and planners may be trying to find broad public health responses to a range of interlinked drug problems. Equally important, frontline practitioners may be concerned with identifying the most appropriate way to respond to the needs of individual clients. In reality, the needs of planners and those of practitioners may not be so different from each other, although the breadth and scale of the challenges they face may differ. Both will be required to undertake some form of assessment of the current situation, make decisions based on the range of possible interventions available and information on what works or is effective, and develop a plan for implementation and follow-up. While this guide is primarily geared towards those approaching drug problems from a public health planning perspective, both local and national, the mapping of approaches, links to evidence and tools will also be useful for frontline workers and responders.

How to use this guide

This guide has been designed as a reference document and is not intended to be read from beginning to end. Between the introductory and closing chapters, the building blocks of the guide are the individual sections within the three central chapters. There, to make the report easier to read and navigate, each section starts with a summary, and boxes are used to highlight key elements, such as definitions, the evidence base, topic overviews and policy implications. Each section includes a list of relevant resources. Each box type has a different icon to help readers quickly identify key information (see below).

Definitions, explanations, descriptions

Evidence, guidelines or good practice

Spotlight on … important cross-cutting issues or themes

Implications for policy and practice

Further resources

Chapter 1 describes the framework used in the report for thinking about the response process and the factors to take account of at each stage. This will be of particular interest to those planning health and social policy or interventions to address drug problems, but can equally apply to intervening at the individual level.

Chapters 2 to 4 view health and social responses to a range of drug problems in Europe from three different perspectives. There are, inevitably, overlaps between these different perspectives and the most important are highlighted within the relevant sections.

Chapter 2 provides examples of responses to problems associated with particular patterns of use, including cannabis problems, opioid dependence, drug-related deaths, infectious disease transmission and stimulant use. Emerging patterns of drug use, including the use of new psychoactive substances and the misuse of medicines, are also addressed, as is polydrug use.

Chapter 3 considers how to respond to the needs of particular target groups, such as the ageing cohort of opioid users that exists in many countries; women who use drugs; the new migrants and asylum seekers arriving in Europe; vulnerable young people; and families affected by drug use.

Chapter 4 considers examples of responses to drug problems in different settings: prisons, nightlife, festivals and other recreational settings, workplaces, educational establishments and local communities.

Chapter 5 focuses on improving implementation. It covers a range of topics, including the use of evidence (and working in areas where evidence is scarce); the role of quality standards; and the benefits of taking a systems approach that joins up services in order to enhance their effectiveness.

Links to further resources, including the electronic version of the guide, short policy and practice briefings and background papers can be found at http://www.emcdda.europa.eu/responses-guide. These will be regularly updated with new material.

1

CHAPTER 1
A framework for developing health and social responses to drug problems

SUMMARY

- Health and social responses to drug problems in Europe take place within the context of EU, national and local policies and legal frameworks, and these influence the selection and implementation of responses.
- Responses must adhere to a set of key principles, for example, respect for human rights, including the right to the highest attainable standard of physical and mental health.
- Developing and implementing responses to drug problems, whether at EU, national, local or individual level, involves three basic steps:
  - identifying the nature of the drug problems to be addressed;
  - selecting potentially effective interventions to tackle these problems; and
  - implementing, monitoring and evaluating the impact of these interventions.
- Many different factors need to be considered at each stage; some of the most important are highlighted in this chapter.

The harms associated with drug use depend on the type of drugs used and how they are used, who is using them and the settings where use takes place. The many different ways in which these factors can interact result in a wide array of possible drug use scenarios, which are associated with health effects of varying severity. The most common combinations of forms of drug use, users and settings vary between countries in Europe and, as a result, so do the nature and extent of their drug problems.

As well as varying between countries, drug use and the associated problems may change over time. This means that there can be no single blueprint for tackling drug problems, and that those tasked with responding to drug problems need to regularly review provision and adapt existing interventions or develop new ones to meet changing needs. It also indicates the need for a systematic approach, in which the evaluation of effectiveness is integrated into the development and implementation of responses to drug problems.

This chapter provides an introduction to the main issues to be considered in the development and implementation of health and social responses to drug problems. It also outlines the framework around which this guide is structured. The framework is designed to be useful to those involved in developing and implementing health and social interventions and to serve as a conceptual checklist when reviewing current policy or practice or developing new activities.

1.1 Overarching context and key principles

The overall EU approach to drugs is set out in the EU Drug Strategy 2013–20 and accompanying action plans. As stated in the EU Common Position on UNGASS 2016, presented at the United Nations General Assembly special session on the world's drugs problem, this is based on the understanding that '...drug policies should be built upon a sound public health approach, based on scientific evidence and supported by reliable and objective monitoring systems and evaluation, in compliance with human rights recognised as such by international legal instruments.' In line with the EU Strategy, it also highlights the need for '... an integrated, balanced and evidence-based approach ...' which addresses both demand reduction and supply reduction.

This guide focuses on health and social responses to drug problems, which mainly fit under the demand reduction element of drug policy. With respect to demand reduction, the EU Common Position further states that '...effective, targeted, multidisciplinary and evidence-based drug demand reduction policies should include prevention, early detection and intervention, risk and harm reduction, treatment, rehabilitation, social reintegration and recovery, and build upon continuity of service delivery.' It emphasises that in line with the objective of the drug control treaties to protect public health, those who are dependent on drugs should be seen as people in need of attention, care and treatment in order to improve their health, facilitate social reintegration and reduce stigma and marginalisation.

However, both the legal framework and law enforcement activities can have a large impact on health and social responses, acting as either a barrier to or a facilitator of these responses. For example, enforcement activity focused on people who use drugs may inhibit help-seeking. Thus, drug control activities may exacerbate harms associated with use and pose a barrier to efficient and effective operation of health and social services. On the other hand, employment legislation preventing discrimination against people with a history of drug problems may promote social reintegration and improve the effectiveness of treatment and rehabilitation. The legislative and policy approaches of EU Member States, which vary considerably, can have a big impact on the health and social responses adopted and resourced as well as on their effectiveness.

The common position on UNGASS, the EU drug strategy and other EU documents, such as the minimum quality standards for demand reduction, also highlight a number of key principles for health and social responses to drug problems. For the purpose of this guide, we have identified those which are central to responses in this area (see box). These principles should be fundamental to all health and social responses and will be discussed in different contexts within this guide.

Key principles for health and social responses to drug problems in Europe

Health and social responses should:

- be respectful of human rights, including:
  - the right to the enjoyment of the highest attainable standard of physical and mental health;
  - the right of the drug user to give informed consent to treatment;
- respect ethical principles, including informed consent, confidentiality and equity of access;
- promote service user and peer involvement in service design and delivery;
- take a public health approach;
- be based on an assessment of needs and tailored to the specific needs of the target population;
- respond to cultural and social characteristics, including gender issues and health inequalities; and
- be properly designed and based on evidence, duly monitored and evaluated.

1.2 An introduction to the framework

The process of responding to drug problems can be divided into three broad stages (Figure 1.1): the identification of the particular drug problems to be addressed; the selection of the response or interventions that are to be put in place; and the implementation of the interventions, in which monitoring and impact evaluation should be an integral part. This approach can be applied when developing responses any level — national, local or system level. Equally, these same basic processes apply whether one is developing a response to a particular problem for the first time or reviewing current provision. While not the primary focus here, the same broad steps — problem identification or needs assessment, response or intervention selection, and implementation and review — are also pertinent when working with individuals with drug problems.

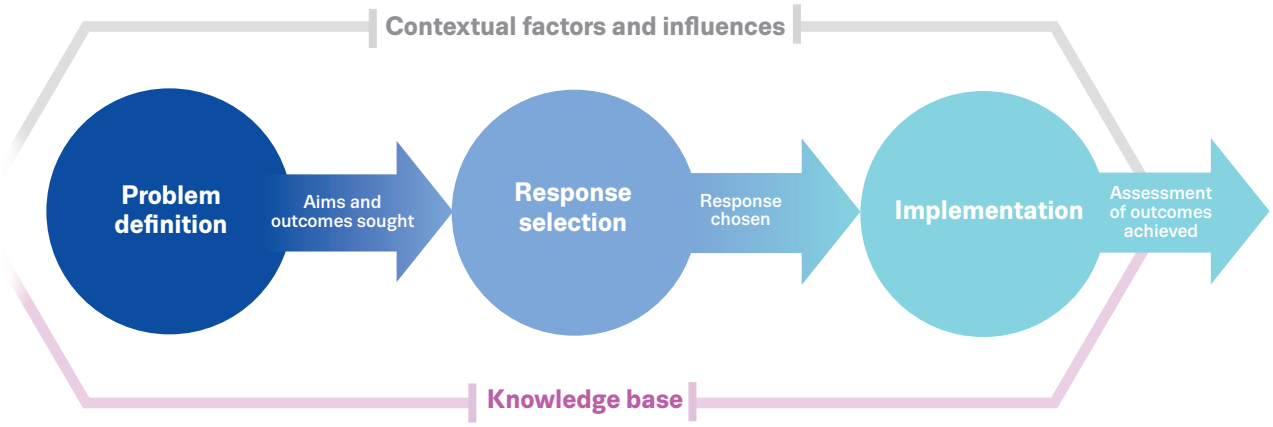
In all cases, the starting point should be obtaining an understanding of the extent and nature of the problems to be tackled, which may then be translated into objectives for change. This may come from reviewing the available data on the problem, ranging from national statistics to local research and needs assessments, and consulting with stakeholders. The selection of priorities and intervention objectives will stem from the problem definition and be informed by public and political attitudes and local and national priorities.

In the second phase, decisions are made as to what actions should be taken and plans made to implement them. Factors to be considered at this stage are the types of intervention likely to be effective, the target groups and the settings in which the measures will be implemented. Depending on the circumstances, this might involve selecting from a range of intervention options with evidence of effectiveness, or adopting and adapting interventions that have been shown to work elsewhere. If no suitable options exist, it may involve developing a new intervention. Where a programme or strategy is already in place, it may be necessary to review provision in light of the needs of particular groups or to fill gaps in coverage. These decisions will be influenced by considerations such as the scale and severity of the problem, the resources and competencies available, the outcomes expected and the values and preferences of the community.

Once responses have been chosen, the next phase is implementation. Whether an evidence-based intervention works in a particular case will depend on how it is implemented and the local context. Therefore an essential component in this phase is monitoring and evaluation of the implementation, including the costs and outcomes, to feed back into an ongoing review and planning process.

The remaining sections in this chapter describe the response planning framework and the factors that need to be taken into account in each phase in more detail.

FIGURE 1.1
The three broad stages of developing responses to drug problems

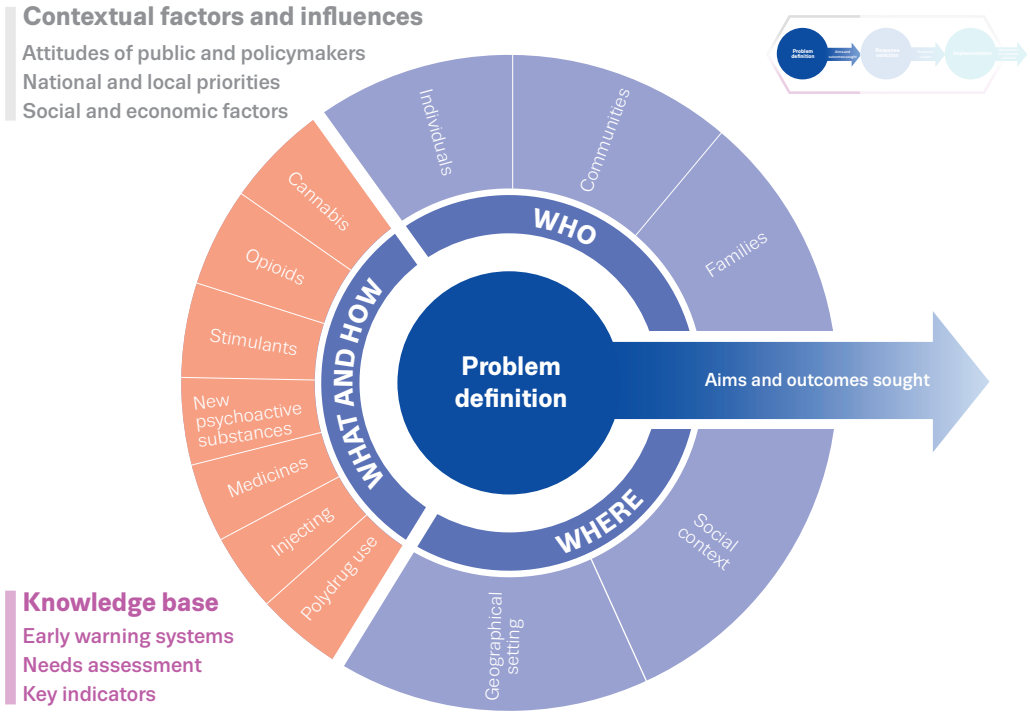


1.3 | Problem definition and needs assessment

Problem definition or needs assessment may be undertaken at different levels and by a variety of actors, including public authorities, planners, consultants or practitioners. Various approaches are possible and numerous tools are available to assist in the process, for example, the Prevention and Evaluation Resources Kit (PERK) and the routine epidemiological indicators maintained by the EMCDDA. At the individual level, health practitioners may use well established assessment tools such as the European Addiction Severity Index or the Drug Use Disorders Identification Test. The online Evaluation Instruments Bank contains a wide selection of such tools that may be useful at the individual and population levels.

Key questions that need to be addressed at the initial assessment stage are who is affected, what types of substances and patterns of use are involved, and where the problem is occurring. Responses need to be tailored to the particular drug problems being experienced, and these may differ between countries and over time. The wide array of factors that need to be considered at this stage in the process are discussed in this section and illustrated in Figure 1.2.

FIGURE 1.2
Factors to be considered in stage 1: problem definition



Role of drug type and patterns of use in drug-related harms

Psychoactive drugs act on the brain producing a variety of effects on perception, mood, thinking and behaviour. Initially these effects may be positive, for example, in relieving pain or mental distress, or producing pleasure, but may also lead to a range of harms. These may be associated with intoxication, since drugs may make users euphoric and impair thinking and physical co-ordination. If an intoxicated person drives a car, operates machinery or engages in physical activities, they may injure themselves or others, and on occasion, cause death. Depressed individuals who are intoxicated may act impulsively on suicidal thoughts. Intoxicated people may engage in violent acts in social settings that facilitate such behaviour, such as bars crowded with other intoxicated individuals. Chronic drug use, especially sustained daily use, can produce a dependence syndrome, in which users can find it difficult to cut down or stop using the drug and continue to use it despite it harming their health and well-being and that of family members and friends. If such drug use is sustained it can produce or exacerbate the symptoms of mental and physical disorders and lead to failures in the performance of important social roles, such as attending school, working or caring for children. In severe cases, sustained heavy daily drug use can undermine self-care and end in homelessness.

Drug problems may vary with type of drug, route of administration (e.g. orally, smoked or injected) and the frequency or pattern of use. These interact with other factors, such as the characteristics of the person using the drug (e.g. young people, women or men, socially integrated or disadvantaged people) and the social settings in which the drugs are used (e.g. the workplace, at home, in a nightclub or bar, on the streets), to either increase or reduce the problems that users experience. It is accordingly important to identify which of these factors are relevant when developing interventions to address drug problems.

Identifying the main problem drugs and patterns of use will indicate the probable major associated harms. Heroin and pharmaceutical opioids have a high dependence risk, especially if injected. They can lead to fatal overdoses and if users share contaminated injection equipment they can contract and spread blood-borne infections such as HIV and hepatitis B and C.

Stimulants, such as cocaine, MDMA and amphetamines, intoxicate. These are often used recreationally, but may be associated with more problematic patterns of use and modes of ingestion, such as injection or smoking. Intoxicated users may engage in risky sexual and other behaviour (e.g. driving a car) that puts their safety and that of others at risk. When stimulants are used over weeks or months in high doses, they may precipitate psychoses and serious cardiovascular events, such as heart attacks and strokes.

Cannabis has very low risk of fatal outcomes but its use can be associated with acute toxicity presentations at hospital. The risks of developing dependence on cannabis are lower than those of opioids or stimulants, or legal drugs like alcohol and tobacco. Nonetheless a substantial minority of cannabis users develop problem use and seek help to stop using cannabis.

Few regular drug users use only one substance. Most engage in polydrug use — the use of multiple drugs, in combination or at different times. For example, injecting heroin users often use other opioids, alcohol, tobacco, benzodiazepines, cannabis and stimulants. Cocaine users tend to use the drug alongside alcohol. Many daily cannabis users also smoke tobacco. These drug combinations can increase the risk of harm, for example, by increasing the likelihood of toxic drug effects, fatal overdoses or becoming dependent on multiple drugs, which can be more difficult to overcome than dependence on a single drug.

Variation in harms across individuals and communities

An important step in defining the problem is identifying the most important drivers (or factors that are the main causes) of harms and which individuals or communities are the most affected. For example, is there a problem due to increasing cannabis use among young people? And if so, is this concentrated among a particular age group, community or geographical area? Is this increase in cannabis use associated with school drop-out, rising youth unemployment, or increasing mental health problems? Answering these types of questions will clarify the issues to address, the outcomes to be sought and the criteria against which to measure the impact of the intervention.

An array of individual and societal factors can make some drug users more vulnerable to harm. This is also true with respect to the families and communities affected by drug problems. These factors interact in complex ways to reduce or increase risks and harms associated with drug use. In addition, these factors may interact with drug use in a circular fashion to create a vicious cycle. Some of the key factors that need to be considered and how they impact on harms are summarised in the box on page 19. More information is provided throughout the report.

Examples of factors to take into account when assessing drug problems

- **Age**

In general, the younger a person is when they first use a drug, the more likely they are to use regularly, develop dependence and experience drug-related harm later in life. Older long-term drug users may be particularly vulnerable to both acute and chronic health problems.

- **Gender**

Although drug use is less common among females than males, females who use drugs are more likely to develop problems and adverse health effects than their male counterparts. Drug use by women of reproductive age can impair fertility and, if drugs are used during pregnancy, affect the developing foetus.

- **Physical health**

People with some physical health problems (e.g. cardiovascular and respiratory diseases) who also use drugs are at increased risk of harm. Drug use may exacerbate these conditions and increase the risk of fatal overdose. Drug use may also reduce compliance with medical treatment leading to poorer outcomes.

- **Mental health**

Many people with a drug problem also have co-existing mental health problems. The relationship between drugs and mental health is complex: drugs may increase the risk of developing mental health problems in vulnerable people, may exacerbate existing mental health problems, and people with depression, anxiety disorders and schizophrenia are more likely to develop drug problems if they use drugs.

- **Biological influences**

An individual's neurobiological make-up affects how their bodies respond to drugs and their susceptibility to harm; a dose that is tolerated in one person may lead to a fatal outcome for another. Personal traits, such as impulsivity, also impact on risks of drug use and harms.

- **Socio-economic factors**

Socially disadvantaged or excluded people are more likely to use drugs and experience drug-related harm. Drug use problems can also exacerbate social disadvantage, for example, by reducing the chances that young people will complete their education or obtain well-paid jobs. Homeless drug users may engage in riskier drug use practices, such as sharing injecting equipment or using drugs in unsafe settings.

- **Family factors**

Family factors can increase or decrease vulnerability to drug problems. For example, having family members who use substances can increase the likelihood of using drugs, while having strong family support and parental monitoring may protect against drug problems and help to overcome them.

- **Ethnicity, religion and sexual orientation**

People from minority groups defined by ethnicity, religion or sexual orientation can be more likely or less likely to use drugs than the social majority. Rates of drug use may be higher if drugs are more readily available in their communities or prevention programmes are not appropriate to them. If they develop drug problems, stigma and poor access to health services may prevent help-seeking. However, some minority communities have lower rates of drug use because of strong social cohesion, close family ties and religious prohibitions on drug use.

The role of setting

The setting in which drugs are used must be taken into account, as it can affect the type and extent of harm that drug use can cause. Those who use drugs alone may be at higher risk of some harms. They will not have anyone to help if they experience a drug overdose. Using opioids alone, for example, increases the risk of a fatal overdose.

People who use drugs in public places often do so furtively and hurriedly. This can increase the risk of an overdose or of acquiring a blood-borne virus infection, if they shared injecting equipment. Poor hygiene often associated with such settings also increases the risk of a range of infections. This a particular issue for homeless people. Drug use in prisons is also clandestine and risky (see also sections 2.3, 2.4 and 4.1).

Injecting drugs outdoors in cold weather may leave users who overdose vulnerable to hypothermia. Alternatively using MDMA in a hot nightclub may put a user who is already predisposed to hyperthermia, at greater risk of experiencing this rare but serious adverse outcome.

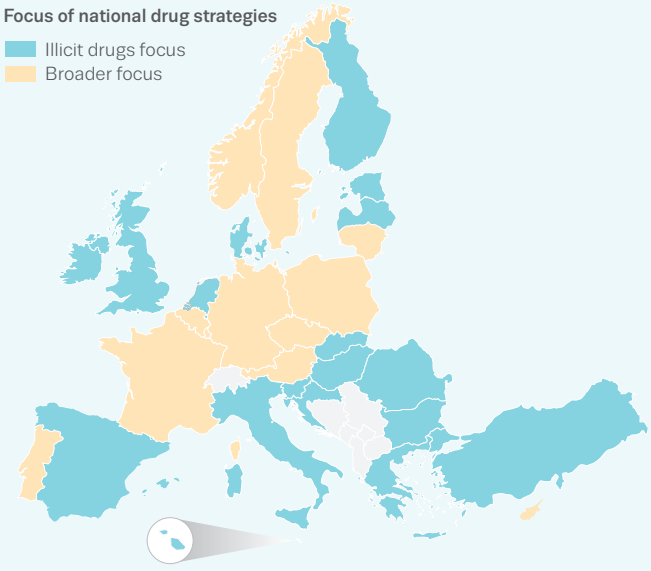
Identifying and prioritising the problems to be tackled

Needs assessment is likely to identify a range of potential problems to be addressed. In deciding which problems to tackle, a public health approach is useful. This approach firstly assesses the severity of the problems experienced by drug users and others, in terms of the nature of the problems and the number of people affected by them. It then looks

Spotlight on ... National drug strategies in Europe

National drug strategies are planning and co-ordination tools used by European countries to set out their responses to the various health, social and security challenges linked to drug problems. They usually include some general principles, objectives and priorities, while specifying actions and those responsible for implementation. These strategies support the balanced approach to drug policy put forward in the EU drug strategy (2013–20) and associated action plans, addressing both drug demand reduction and drug supply reduction.

Many of the factors that are linked to or exacerbate drug problems and drug dependence are broader social issues that are also associated with use of other potentially addictive substances or behaviours such as tobacco, alcohol, gambling, but also to other problems such as crime. These potential overlaps are recognised in what appears to be a trend in Europe towards drug strategy documents that give consideration to other addictive substances or are part of a wider addictions strategy.



As of 2016, 18 countries had a drug strategy focusing mainly on illicit drugs. In the other 12 countries, the policy focus is broader, giving consideration to other addictive substances and behaviours (see figure). These broader documents still mainly address illicit drugs, with variation in the other substances or behaviours considered; all of them address alcohol, nine consider tobacco, eight cover medicines, three include doping in sports (e.g. performance enhancing drugs) and seven look at addictive behaviours (e.g. gambling). There appears to be a trend towards broader drug strategies and the distinction between an illicit drugs focus and a broader strategy is not always clear cut. For example, within the United Kingdom, although the overall UK strategy focuses mainly on illicit drugs, the devolved administrations of Wales and Northern Ireland have broader strategy documents. In other cases a broader focus can be found in supporting documents to some elements of the strategy. This can be seen in Finland, where a specific prevention action plan addresses alcohol, tobacco, drugs and gambling.

See also the EMCDDA Paper, National drug strategies in Europe: trends and developments.

for interventions that will reduce the population impact of the drug problems that have been identified. This approach identifies priority areas for action, based on the evidence but influenced to some extent by political and public attitudes.

For example, in many European countries, drug overdose deaths are a major cause of mortality among men aged between 25 and 55 years and in some areas are increasing. Heroin or other opioids are implicated in the majority of these deaths. These premature deaths have a huge impact on families (who lose parents, children or siblings), on wider society, and place large demands on emergency health services. Reducing opioid-related deaths is therefore a high public health priority for drug policy in many jurisdictions.

Deaths and other adverse events associated with new psychoactive substances, although rare, often generate considerable media attention and public concern. Tackling the harms associated with the use of new psychoactive substances, which pose unknown risks to users, is therefore also a priority across Europe.

Another example is open drug scenes, where drug use and dealing take place in public spaces. These scenes, associated with public nuisance and possibly violence, often generate public concern, and may be a priority for intervention. Responses here need to consider both the needs of local communities and those of high-risk drug users.

1.4 | Developing appropriate health and social responses

Clarifying the objectives for the interventions

Having defined the drug problems that need to be tackled, the next step is to identify responses that are likely to be effective in dealing with them. Where possible, a combination of interventions should be used, as individual measures are rarely sufficient. Choosing the appropriate responses requires a clear understanding of the primary objectives for the interventions. For example, these objectives might be one or more of the following:

- to prevent young people from initiating drug use;
- to delay the age of initiation of drug use;
- to prevent experimental drug users from becoming regular users;
- to help people to stop using drugs;
- to reduce drug use and harm among people who are already using drugs;
- to reduce the drug-related harms experienced by communities; or
- to increase the social integration of people with drug problems.

Best practice portal

More detail on the evidence of what works for different drug problems, target groups and different settings, as well as guidelines and quality standards for delivery of different interventions, can be found in the Best practice portal on the EMCDDA website. Evidence updates are based on systematic reviews, reviews of reviews and synthesis of evidence included in guidelines (individual studies are usually not considered except in rare cases) and are developed in collaboration with members of the Cochrane and the Campbell collaborations and peer-reviewed by experts in the field. The Best practice portal also contains collections of European and international guidelines and standards and examples of practices.

The aims will depend upon an assessment of the nature and stage of development of the drug problem to be addressed, for example:

- Is a new drug beginning to cause problems although the number of users is still relatively small?
- Is an established drug like heroin with many high-risk drug users causing new problems?
- Is the concern about the resurgence of an illicit drug like MDMA?

In the case of a new psychoactive substance, the aim may be to discourage young people from experimentation and encourage those who have started to stop using or not to use regularly, while avoiding giving the impression that the use of such drugs is the norm. Research may be needed to identify problematic patterns of use of new drugs. Health educators may need to explore effective and targeted ways of informing drug users about the harms and riskiest patterns of drug use, such as peer based interventions, or messaging in selected social media that drug users trust.

In the case of an established drug, the aims may be to prevent initiation of drug use and to encourage users experiencing problems to engage with drug services.

Selecting the most appropriate response options

The next stage, based on the needs assessment and defined objectives, is to decide on an appropriate response. There are potentially three ways of addressing this: extending or improving an existing response; importing an approach or programme that has been used elsewhere; or developing a new intervention. In some cases, it may be most appropriate to slightly modify existing responses (e.g. extending opening hours of a service or adding a component to a training programme). In other circumstances, a new intervention will be required and a number of factors need to be considered to help select the most appropriate and effective response (Figure 1.3).

The first questions are what response options are available to address the problem and what evidence exists for their effectiveness (see Spotlight on understanding and

Spotlight on ... Understanding and using evidence

The types of evidence that may be used in developing and implementing responses include:

- basic science, knowledge of which is useful when designing new interventions;
- evaluations of interventions, such as randomised controlled trials and other experimental designs or observational studies;
- implementation studies, which may investigate factors associated with effective service provision; and
- synthesis of expert opinion, for example, as used in guideline development, where all groups of stakeholders, including both providers and recipients of the intervention, are involved.

The various types of evidence differ in their strengths and weaknesses and in the information they can provide. Drug-related problems are multifaceted and require not only medical, but also socio-economic and educational interventions. As a result it is often necessary to integrate evidence from a range of disciplines and types of study.

In reviewing what evidence is available to inform decision-making the first step is to define the research question, which in turn determines the most appropriate study design. For example, the effectiveness of treatment on individuals is best evaluated through randomised controlled trials. To determine the longer-term impact of an intervention that has already proven effective or for considering the impact of broader policies or population-based interventions, observational studies are likely to be more appropriate. These include interrupted time series or controlled before-and-after studies. It is also important to consider the quality and relevance of the available evidence. Are the findings from appropriate study designs; based on well-conducted studies that minimise biases; and reported correctly and related to the target groups of interest?

There are a number of ways of assessing the quality or strength of the available evidence. In general, the best evidence comes from systematic reviews that combine the results of multiple studies and assess their quality and the extent to which they show consistent findings. However, in emerging fields it can take some time for sufficient primary studies to be completed and systematic reviews undertaken, and services will often need to be developed in areas where the evidence base is weak or partial. When using evidence, it is also important to recognise that the strength of the evidence is not the only consideration; there can be effective interventions for which the evidence is currently weak, as well as strong evidence that suggests some interventions are ineffective or even can cause harm. Importantly, evidence statements are not broadly applicable, but linked to specific outcomes and, usually, specific populations, settings or both.

To provide evidence ratings for interventions, this guide uses a system based mainly on systematic reviews but which also recognises where other more limited evidence exists. These ratings take account of the quality of the reviews, the quality of the primary studies they include and the consistency of the findings. The categories used in this guide are:

High quality evidence — one or more up-to-date systematic reviews that include high-quality primary studies with consistent results. The evidence supports the use of the intervention within the context in which it was evaluated.

Moderate quality evidence — one or more up-to-date reviews that include a number of primary studies of at least moderate quality with generally consistent results. The evidence suggests these interventions are likely to be useful in the context in which they have been evaluated but further evaluations are recommended.

Lower quality evidence — where there are some high or moderate quality primary studies but no reviews available OR there are reviews giving inconsistent results. The evidence is currently limited, but what there is shows promise. This suggests these interventions may be worth considering, particularly in the context of extending services to address new or unmet needs, but should be evaluated.

The guide also features some good practice guidelines, which may incorporate areas of emerging practice or interventions that have not been subject to trials but are nevertheless accepted as valuable.

See the Background paper, Evidence review summary: drug demand reduction, treatment, and harm reduction.

using evidence, page 23). Ideally, interventions should be supported by the strongest available evidence, if possible meta-analyses and systematic reviews of large-scale randomised controlled trials and observational studies of treatment outcome that combine the results of multiple studies of large numbers of individuals. However, this is not always available, and at the other end of the spectrum, when evidence is very limited or not available, expert consensus may be the best option available until better evidence is obtained.

If no suitable responses are available then research may be required to develop an intervention, investigate its feasibility, and evaluate its acceptability to the target group. Later, when the programme has been implemented and experience gained in using it, research will be needed to evaluate it.

The main types of responses available and modes of delivery are described briefly in section 1.5. A combination of response measures will often be required to tackle the multiple aspects of complex problems.

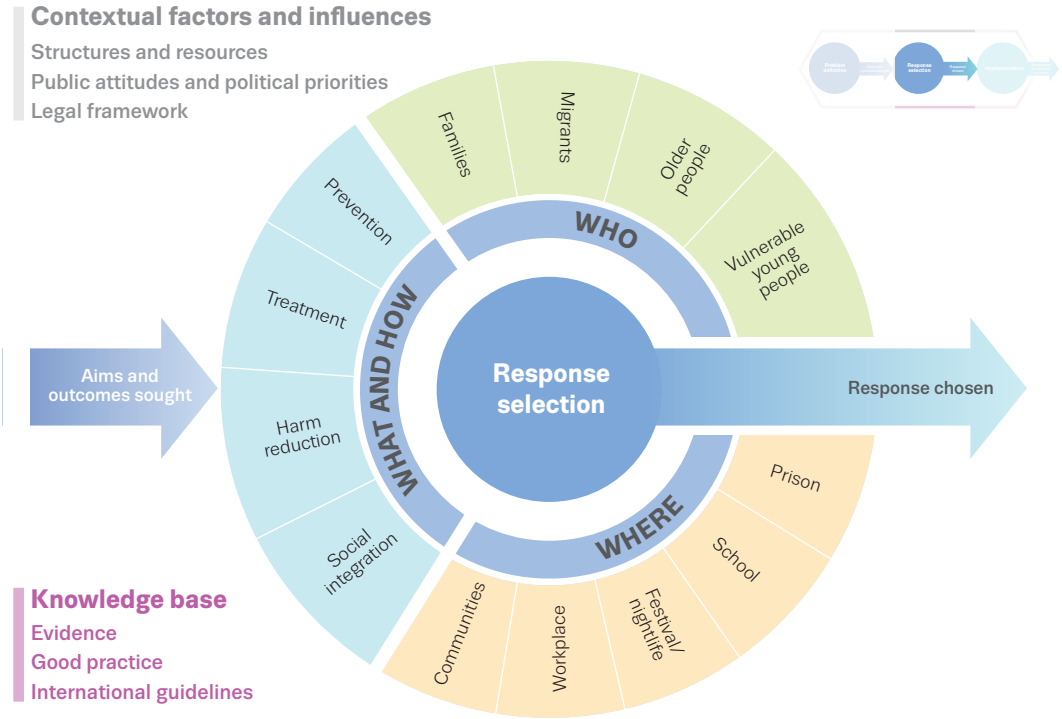
Another factor to be considered at this stage is the specific target groups for the intervention. For example, to whom will the programme be delivered:

- the whole population of potential users, for example, the adult population;
- subsets of the population who are at higher risk of initiating drug use or who may have particular needs, such as socially disadvantaged youth, homeless people, women, ethnic minority groups; or
- people who are already using drugs or have individual vulnerability?

A final consideration is the setting in which the programme will be delivered, such as schools, nightlife settings, workplaces, prisons or treatment facilities. These varied settings provide opportunities and impose constraints, which must be taken into account.

In addition to those listed above, other factors will need to be taken into account when making choices about the mix

FIGURE 1.3
Factors to be taken into account in stage 2: response or intervention selection



of interventions to implement. These include the available structures and resources for delivering the interventions. For example:

- Are there government, not-for-profit, civil society and charitable organisations that are already providing these types of services?
- Are services available at a sufficient scale or do they have the capacity to expand their services?
- What additional resources may be required to enable them expand capacity, for example, funds for new buildings, additional staff and staff training?

At times of limited resources or if there is a need for a rapid response to a crisis, there may need to be a trade-off between coverage of services (reaching the greatest number of people) and the intensity or level of provision (service quality) that can be provided.

The level of political priority given to the drug problem is an important factor in resource allocation. Is it sufficient to generate the resources needed to expand capacity? Or will existing service providers be expected to address the new problem within existing resources? How will decisions be made on prioritising the delivery of services to different clients and allocating resources between different services?

Public attitudes towards drug use may be major determinants of political priority, the amount of societal resources allocated to, and the approach taken in addressing drug problems. These attitudes will depend on the prevailing 'governing images' of drug use, whether drug use is primarily seen as a vice, a crime, a personal choice, an illness, or a disability.

A country's drug laws may impact on which responses are provided. In all EU countries, possession of controlled drugs is defined by law as an offence and in many, use of these drugs is a crime. In principle, those who use illicit drugs can be sentenced to prison, but many countries take a public health approach to health and social problems arising from drug use and divert drug users from the criminal justice system into treatment. In some countries this has led to increased funding for treatment and assistance to address the health and social problems experienced by drug users.

Understanding the social costs of drug problems

The costs to society associated with the illicit drug phenomenon are extensive and varied. They include negative consequences for individuals and their families, as well as impacts on neighbourhoods and society at large. These result in expenditure on health care services and within the criminal justice system. Further costs include the provision of social benefits, funding of prevention interventions, and education and research concerning drug use.

Understanding the cost of drug-related responses is important for planning and setting priorities. However, information on drug-related public expenditure in Europe, at both local and national level, remains sparse and heterogeneous. For the 23 countries that have produced estimates in the past 10 years, it appears that drug-related public expenditure is in the region of between 0.01 % and 0.5 % of gross domestic product (GDP). Demand reduction is estimated to make up between 23 % and 83 % of total drug-related public expenditure, with drug treatment and other health costs accounting for much of that. A recent report (Drug treatment expenditure: a methodological overview) on methods for estimating expenditure on drug treatment has highlighted both the developments in the field of treatment expenditure estimation and also the many remaining challenges to the production of robust and comparable estimates. It also provides a basis for developing work in this area in the future.

However, public spending on responses to the drug problem is only part of the costs borne by society in relation to illicit drugs. There are also the costs borne by individuals and other external costs to society, such as lost productivity due to premature deaths and illness linked to drug use as well as the economic impact on neighbourhoods affected by drug dealing or open drug scenes. In addition to such potentially measurable costs must be added the human harm, pain and suffering and other consequences, which are not readily measurable but still need to be borne in mind. Estimates of these wider societal costs of drug use may be useful for estimating the impact and cost-benefit of health and social responses and making the case for allocating more resources to these responses. In the European countries for which information is available, the social cost of illicit drugs is estimated to be between 0.1 % and 2 % of GDP.

See the topic page on drug-related public expenditure on the EMCDDA website and LEADER project guidance document at Alicerap.eu.

1.5 | Main types of responses available

A wide range of health and social responses are available for tackling drug problems. These may be used with different populations, at different stages in the drug problem and individually or in combination. When considered at the national or local level, all these measures may form part of a comprehensive drug demand reduction system and they need to be co-ordinated and integrated.

Prevention approaches

Approaches to drug prevention cover a wide spectrum, ranging from those that target society as a whole (environmental prevention) to interventions focusing on at-risk individuals (indicated prevention). The main challenges are in matching these different strategies to target groups and contexts and ensuring that they are evidence-based and have sufficient population coverage. Most prevention strategies focus on substance use in general, some also consider associated problems, such as violence and sexual risk behaviour; a limited number focus on specific substances, such as alcohol, tobacco or cannabis.

Environmental prevention strategies aim to change the cultural, social, physical and economic environments in which people make choices about drug use. They include measures such as alcohol pricing and bans on tobacco advertising and smoking, for which there is good evidence of effectiveness. Other strategies aim to provide protective school environments, for example, by promoting a positive and supportive learning climate and teaching citizenship norms and values.

Universal prevention addresses entire populations, usually in school and community settings, with the aim of giving young people the social competences to avoid or delay initiation of substance use.

Selective prevention intervenes with specific groups, families or communities who are more likely to develop drug use or dependence, often because they have fewer social ties and resources.

Indicated prevention targets individuals with behavioural or psychological problems that predict a higher risk of substance use problems later in life. In most European countries, indicated prevention primarily involves counselling young substance users.

Treatment

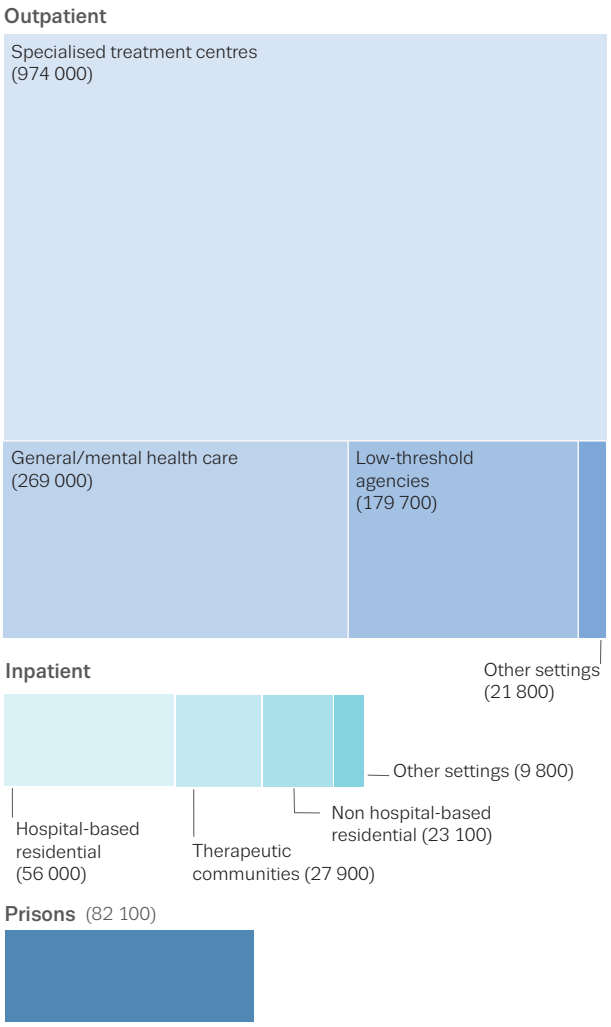
A range of interventions are used for the treatment of drug problems in Europe, including psychosocial interventions, opioid substitution and detoxification. The relative importance of the different treatment modalities in each country is influenced by several factors, including the organisation of the national health care system and the nature of the drug problems in each country. Drug treatment services may be provided in a variety of outpatient and inpatient settings: specialist treatment units; primary health care and mental health clinics; low-threshold agencies; hospital-based residential units and specialist residential centres; and units in prison (see Figure 1.4).

Most drug treatment in Europe is provided in outpatient settings and the two main modalities of outpatient treatment in Europe are opioid substitution treatment and psychosocial interventions.

Substitution treatment is the predominant intervention for opioid users in Europe. It is generally provided in specialist outpatient settings, though in some countries it is also available in inpatient settings and prisons. In addition, office-based general practitioners play an important role, often in shared-care arrangements with specialist addiction treatment centres, in about a third of all EU Member States.

Psychosocial interventions include counselling, motivational interviewing, cognitive behavioural therapy, case management, group and family therapy, and relapse prevention. These interventions support users to manage and overcome drug problems. They are the main form of treatment provided to users of stimulant drugs, such as cocaine and amphetamines. They are also provided to opioid users in combination with opioid substitution treatment. In many countries, responsibility for outpatient psychosocial treatment is shared between public institutions and non-governmental organisations. Commercial providers generally play a minor role in the provision of psychosocial interventions in Europe.

FIGURE 1.4
Numbers receiving drug treatment in Europe in 2015, by setting



A smaller proportion of drug treatment in Europe is provided in inpatient settings. Inpatient or residential treatment, whether hospital-based or non hospital-based, requires clients to live in the treatment facility for several weeks to several months, with a view to enabling clients to abstain from drug use. The provision of opioid maintenance treatment in inpatient settings is rare, but exists for selected client groups with high levels of morbidity. A prerequisite for entry may be detoxification, a short-term, medically supervised intervention aimed at the reduction and cessation of substance use, with support provided to alleviate withdrawal symptoms or other negative effects. Detoxification is usually provided as an inpatient intervention in hospitals, specialised treatment centres or residential facilities with medical or psychiatric wards.

In inpatient settings, clients receive individually structured psychosocial treatments and take part in activities to rehabilitate and reintegrate them into society. A therapeutic community approach is often used. Inpatient treatment may also be provided in psychiatric hospitals for those with comorbid mental health problems. Public institutions, the private sector and non-governmental organisations are all involved in the provision of inpatient care in Europe, with the main providers varying between countries.

Increasingly, a wide range of drug prevention and treatment interventions are provided online. Internet-based interventions have the potential to extend the reach and geographical coverage of treatment programmes to people experiencing drug use problems who may not otherwise access specialist drug services (see Spotlight on e-health, page 119, and the Background paper on e-health and m-health).

Social reintegration

Social exclusion is experienced by many high-risk drug users, especially chronic opioid users. Unemployment and low educational attainment are common, and many are homeless or living in unstable accommodation. Interventions addressing these issues focus on the social reintegration of drug users, including improving a person's ability to gain and maintain employment.

Approaches taken include vocational training programmes that aim to improve skills and qualities needed to find and secure employment. The transition from treatment to mainstream employment may be facilitated by social enterprises and cooperatives that offer work experience and supported employment. Programmes that engage with employers to encourage them to employ people who have had drug problems and provide in-work support are also valuable (see section 4.3 on responses in the workplace).

Addressing housing problems is also often essential for social reintegration. Housing support services may provide short- or long-term accommodation, as well as access to other services such as medical care, drug treatment, social activities, education and training. These include programmes such as 'Housing First', which provide accommodation as quickly as possible before tackling an individual's drug problem or providing other support.

Harm reduction

Harm reduction encompasses interventions, programmes and policies that seek to reduce the health, social and economic harms of drug use to individuals, communities and societies. A core principle of harm reduction is the

development of pragmatic responses to dealing with drug use through a hierarchy of intervention goals that place primary emphasis on reducing the health-related harms of continued drug use. It addresses the immediate health and social needs of problem drug users, especially the socially excluded, by offering opioid substitution treatment and needle and syringe programmes to prevent overdose deaths and reduce the spread of infectious diseases. Additional approaches include outreach work, health promotion and education.

In 2003, the Council of the Ministers of the European Union passed a recommendation on the prevention and reduction of health-related harm associated with drug dependence, in which Member States were urged to adopt a number of policies and interventions to tackle health-related harm associated with drug dependence. In 2007, the Commission of the European Communities confirmed the prevention and reduction of drug-related harm as a public health objective in all countries. National drug policies increasingly reflect the harm-reduction objectives defined in the EU drugs strategy, and there is broad agreement within Europe on the importance of reducing harms, in particular the spread of infectious diseases and overdose-related morbidity and mortality.

In the more recent past, new opportunities for improving the reach and effectiveness of harm reduction interventions have opened up, especially through developments in the field of information technology and mobile applications. New approaches include, for example, the use of e-health applications to deliver brief interventions and recovery support more widely, and the use of behavioural insights to develop more effective programmes (see also Spotlight on e-health interventions, page 119, and Spotlight on behavioural insights, page 169).

1.6 Implementing, monitoring and evaluating the selected responses

Successful implementation of any policy response depends on a range of factors that will need to be considered when planning or reviewing policies or programmes (see Figure 1.5).

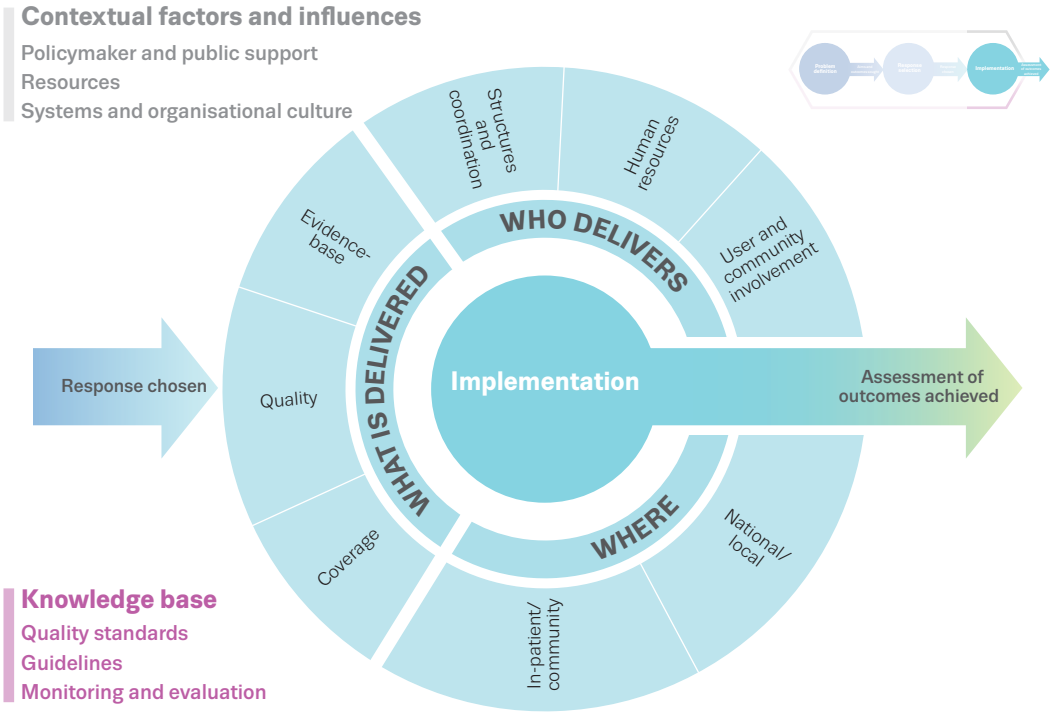
Factors affecting implementation

Firstly, policymaker and public support is essential. Policymakers and the public need to agree that there is a drug problem that requires a specific response. They may also need to be persuaded that a public health approach is more appropriate than a largely public order response. Advocacy that draws attention to the cost-benefits of action and inaction may be needed to ensure the allocation of the societal resources required for an effective public policy response.

Effective implementation of an intervention depends on having sufficient numbers of skilled staff to deliver it. This may require training additional staff to allow services to expand. It may also involve retraining staff more accustomed to dealing with other types of problem drug users (e.g. injecting opioid users rather than problem stimulant or cannabis users) or who need to work with new groups, such as younger drug users.

Interventions also require appropriate facilities and locations to house treatment, conduct outreach or other programmes. Community engagement may be essential if communities are to host treatment or outreach services. Concerns that will need to be addressed include fears that services will attract drug users and increase drug-related problems, or lead to users congregating around services and openly engaging in drug dealing and drug use.

FIGURE 1.5
Stage 3: Implementation



Management and co-ordination of services

Management systems are needed to co-ordinate the efforts of different agencies and services that are attempting to address drug problems. Co-ordination may require the establishment of advisory committees or reference groups with broad representation from key stakeholders. These can determine the direction of an overall strategy. They also ensure the involvement of all those affected by a policy, which facilitates wider acceptance of the policy approaches.

In addition, the interaction between drug problems and other health and social problems means that it is important to ensure proper co-ordination between drug services and other health services. For example, drug problems are often associated with mental health problems and it is therefore essential that drug and mental health services work together to ensure both problems are addressed effectively (see Spotlight on comorbid substance use and mental health problems, page 31). Unfortunately, this often does not occur.

Quality standards for service provision are another mechanism for assisting effective implementation. These are discussed in Chapter 5. The EU has published minimum quality standards in drug demand reduction that cover prevention, risk and harm reduction and treatment, social reintegration and rehabilitation.

Regular consultations with agencies involved in service delivery may be needed in order to identify and address implementation problems. Service user representatives can provide feedback on service performance and make suggestions on how to improve service design and delivery. It is critical to create an organisational culture in which there is collaboration rather than competition between agencies and services for resources and clients.

Monitoring and evaluation of service delivery

Monitoring, evaluation and feedback are essential for good service delivery. They enable staff to monitor the performance of their programmes, improve delivery, assess cost-efficiency and account to funders on the services that they deliver. It should also allow the identification of unintended negative consequences of interventions or other actions, for example, a change in practice leading to higher drop-out rates, or where actions taken to prevent diversion of prescription medicines reduce access for patients who require them, leading to ineffective treatment and associated pain and suffering and increased health care costs.

Monitoring the implementation and uptake of interventions requires sustainable data collection systems. If the data are to be useful, forms need to be routinely and well completed. Results should be fed back to staff to demonstrate the value of data collection. Examples of the types of questions that need to be asked in monitoring and evaluating interventions are:

- What types of intervention have been delivered (e.g. counselling, social support, opioid substitution treatment)?
- How many and what types of clients or target groups have they served?
- What are the outcomes in terms of preventing or reducing drug use and drug-related harm or improving quality of life of clients?
- How do the intervention costs compare to alternative programmes or services?

These data are valuable for both internal and external purposes, for example: evaluating and refining services and responses to clients; reporting to funding bodies; making the case for continued or additional funding for current services; or arguing for alternative more cost-effective interventions. Monitoring and assessment of ongoing service delivery are usually undertaken by the services themselves, while outcome and impact evaluation is ideally undertaken by external evaluators, who can be more objective. Monitoring and evaluation is discussed in more detail in section 5.3.

As there may be a delay before interventions have any detectable effects on drug-related harm, the challenge for policymakers may be to ensure that services continue to be funded when a perceived drug crisis has passed. Research findings on the impact of services, their cost-effectiveness and the population-level scale of drug problems can play a useful role in this process.

Spotlight on … Comorbid substance use and mental health problems

Mental health problems are very common in those with a substance use disorder, and these patients have more clinically and psychosocially severe problems than patients with substance use disorders without comorbid mental health problems.

The most frequent psychiatric comorbidities among individuals with substance use disorders are major depression, anxiety (mainly panic and post-traumatic stress disorders) and personality disorders (mainly antisocial and borderline). The presence of these comorbid mental health problems increases the difficulty of treating substance use disorders, increases the risk of chronicity, and leads to poorer prognoses for both the psychiatric and the substance use disorders.

There is broad agreement in the literature that the two types of disorders should be addressed using a multidisciplinary approach in which drug and mental health professionals work together towards common goals. However, there is a lack of consensus on the most appropriate treatment setting and the best pharmacological and psychosocial strategies to use.

The main barrier in treating comorbid substance use and psychiatric disorders is the separation of mental health and drug use treatment networks in most European countries. This often means that each treatment service lacks sufficient expertise to treat both types of disorders and this leads to different treatment approaches, regulations and financial resources.

Improving responses for people with comorbidity

A systematic approach is needed to detect and treat comorbid mental health problems in people with substance use disorders.

Substance use and psychiatric disorders should be assessed using validated instruments. Standard screening instruments for substance use disorders and for psychiatric disorders can be used routinely when limited staff time or lack of expertise prevents more extended assessments.

The therapeutic approaches to tackle dual diagnosis, whether pharmacological, psychological or both, have to address both disorders from the first point of contact to identify the best option for each individual.

There is a need for:

- An in-depth review of service organisation in European countries.
- A multinational study using a standardised methodology to facilitate cross-national comparisons.
- The introduction of specific items about psychiatric comorbidity in substance use disorder patients into reporting systems across Europe to allow routine monitoring.
- Treatment outcome studies to improve the evidence base for pharmacological and psychosocial treatments for people with comorbid substance use and psychiatric disorders.
- A comprehensive review and research on possible early interventions to identify high-risk cases (e.g. early adolescents) in order to develop prevention measures.

See the 2015 EMCDDA Insight, Comorbidity of substance use and mental disorders in Europe.

Further resources

EMCDDA

- Prevention and Evaluation Resources Kit (PERK).
- Evaluation Instruments Bank.
- Best practice portal.
- Drug-related public expenditure.
- Drug treatment expenditure: a methodological overview, EMCDDA Insights, 2017.
- National drug strategies in Europe: trends and developments, 2017.
- Evidence review summary: drug demand reduction, treatment, and harm reduction, Harry R. Sumnall, Geoff Bates and Lisa Jones, Background paper.

Other sources

- EU drug strategy (2013–2020).
- EU action plan on drugs 2017–2020.
- EU Common Position on UNGASS 2016.
- EU Minimum Quality Standards for demand reduction.
- LEADER project guidance.
- Report 'On the implementation of the Council Recommendation of 18 June 2003 on the prevention and reduction of health-related harm associated with drug dependence'.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

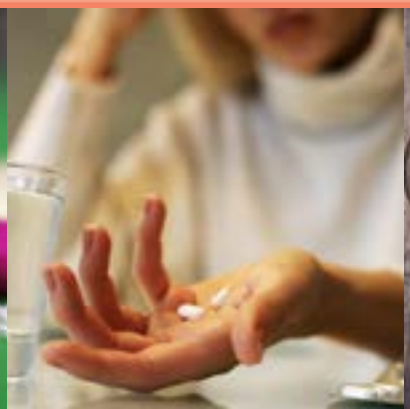
2

CHAPTER 2
Problems arising from particular types or patterns of drug use

This chapter considers problems from the perspective of particular patterns of drug use and the specific substances that are of concern in many EU countries. In each case an overview of the most important aspects of the problem is provided along with a review of the interventions that might be appropriate to respond to them. This is accompanied by a short summary of the evidence available on effectiveness, a review of the responses that are currently in use across Europe and consideration of some of the related implications for policy and practice. Links are also provided to more detailed information on the topics covered.

The drug problems covered in this chapter are:

- problems associated with cannabis use;
- opioid dependence;
- opioid-related deaths;
- viral hepatitis, HIV and other infections associated with injecting use;
- problems associated with stimulant use;
- new psychoactive substances;
- misuse of medicines;
- polydrug use.



2.1 Responding to problems associated with cannabis use

SUMMARY

Issues

Cannabis use can result in, or exacerbate, a range of physical and mental health, social and economic problems. Problems are more likely to develop if use begins at a young age and develops into regular and long-term use. The primary objectives for health and social responses to address cannabis use and associated problems should therefore include:

- preventing use, or delaying its onset from adolescence until young adulthood;
- preventing the escalation of cannabis use from occasional to regular use;
- reducing harmful modes of use; and
- providing interventions, including treatment, for people whose cannabis use has become problematic.

Response options

- *Prevention programmes*, such as multicomponent school interventions that develop social competences and refusal skills, healthy decision-making and coping, and correct normative misperceptions about drug use; family interventions; and structured computer-based interventions.
- *Brief interventions*, for example, motivational interviewing delivered in emergency departments or primary care settings.
- *Treatment*: research suggests that cognitive behavioural therapy, motivational interviewing and contingency management can reduce cannabis use and harm in the short term; multidimensional family therapy can help reduce use in high-severity young patients; and some web- and computer-based interventions can reduce cannabis use in the short term.
- *Harm reduction* interventions, for example, addressing the harms associated with smoking cannabis, especially when used together with tobacco.

European picture

- Universal prevention is widespread but not always evidence-based. Selective prevention approaches are used in some European countries, most commonly with young offenders or with youth in care institutions, but little is known about their effectiveness. Indicated prevention approaches and brief interventions do not appear to be widely used.
- Many EU countries offer treatment for people with cannabis problems within generic drug treatment programmes, and cannabis-specific treatment is available in half of the countries. Most treatment is provided in community or outpatient settings and increasingly online.

keywords: cannabis, prevention, e-health, young people, cannabis regulation, brief interventions

Understanding the problem and key objectives for responses

Cannabis is the most widely used illicit drug in Europe and globally. An estimated 17.1 million young Europeans (aged 15–34), or 13.9 % of this age group, used cannabis in the last year. This estimate includes 10 million aged 15–24 (17.7 % of this age group). The age of first use of cannabis is lower than for most other illicit drugs and cannabis use is highest among young adults.

Cannabis use is often experimental, commonly lasting for only a short period of time in early adulthood. However, a minority of users do develop more persistent and problematic patterns of cannabis use and these problems are strongly associated with regular, long-term and high-dose use. These problems can include:

- poor physical health (e.g. chronic respiratory symptoms);
- mental health problems (e.g. cannabis dependence and psychotic symptoms); and
- social and economic problems arising from poor school performance, failure to complete school, impaired work performance or involvement in the criminal justice system.

These outcomes are more likely if users begin regular use in adolescence, when young brains are still developing. The risks may increase with the use of higher potency cannabis products, especially those with high concentrations of the psychoactive component tetrahydrocannabinol (THC) and lower concentrations of another component, cannabidiol (CBD).

The negative consequences for young people of criminal records for use or possession offences have raised concerns in some countries that criminal penalties may be disproportionate to the harms caused by cannabis use itself. This is one of the factors driving experimentation with different regulatory models in this area (see Spotlight on the impact of new cannabis regulation models on responses, page 40).

In Europe, the most common method of using cannabis is by smoking it mixed with tobacco. This brings additional health risks and the associated nicotine dependence may also make treatment more difficult. It also points to the need for a more holistic consideration of policies and responses relating to cannabis and tobacco.

Concerns have also been growing about problems associated with highly potent synthetic cannabinoid receptor agonists, commonly referred to as synthetic cannabinoids. Despite acting on the same cannabinoid receptors in the brain, these substances are very different from cannabis and are discussed in this report in section 2.6 on new psychoactive substances and section 4.1 on prisons.

The primary objectives for health and social responses to address cannabis use and associated problems may include:

- preventing use, or delaying its onset from adolescence until young adulthood;
- preventing the escalation of cannabis use from occasional to regular use;
- reducing harmful modes of use; and
- providing treatment for people whose cannabis use has become problematic.

Policymakers might also want to consider how to reduce the involvement of young cannabis users in the criminal justice system.

Response options

Interventions to prevent, delay onset or escalation of cannabis use

Prevention programmes that are effective in relation to cannabis use generally take a developmental perspective and are not substance-specific. Prevention programmes for adolescents often aim to reduce or delay cannabis use along with the use of alcohol and cigarettes.

Well-designed school-based prevention programmes have been shown to reduce cannabis use. Such programmes are manualised (that is their implementation is standardised through the use of protocols and manuals for those delivering them) and generally have multiple aims: to develop social competences and refusal skills; to improve decision-making and coping; to raise awareness of social influences on drug use; to correct normative misperceptions that drug use is common among peers; and to provide information about the risks of using drugs. School-based programmes that focus solely on increasing students' knowledge of the risks of drug use have been found to be ineffective in preventing cannabis and other drug use. For examples of positively evaluated programmes see the Best practice portal (see also section 4.4).

There is moderate quality evidence that some manualised universal family interventions for parents and children may prevent cannabis use. Prevention programmes that are delivered across multiple settings and domains (e.g. in school and to the family, involving mentoring and media

Overview of the evidence on … interventions to prevent or delay cannabis use

Multicomponent interventions can reduce alcohol and cannabis use when delivered in schools using social influence approaches, correcting normative misperceptions and developing social competences and refusal skills. Programmes that only provide information about the risks of using drugs have not been found to be effective in preventing use.

Universal family interventions, such as Familias Unidas, Focus on Kids, Strengthening Families 10–14, may be effective in preventing cannabis use when delivered across multiple settings and domains.

Structured computer-based interventions may be effective in preventing cannabis use when delivered in schools or to family groups.

Motivational interviewing interventions targeting cannabis use may be effective when delivered in emergency departments or primary care settings.

It is unclear if school-based brief interventions can reduce substance use in young people although some information suggests they may possibly have some limited impact on cannabis use.

campaigns) appear to be the most effective. Evidence on the effectiveness of selective prevention targeted at the families of young people categorised as 'at-risk' is mixed and no conclusions can be drawn about the effectiveness of this approach.

Standalone mass media campaigns (including TV, radio, print and internet) that use social marketing principles and disseminate information about the risk of using drugs tend to be evaluated as ineffective in respect to behavioural change. It is therefore generally recommended that they should only be considered as part of a wider set of programmes that incorporate a broader range of approaches.

Brief interventions generally aim to intervene in the early stages of drug use to reduce the intensity of use or prevent escalation to problem use. They are most often used in responding to drugs that are commonly used by young people, such as cannabis. These interventions are time-limited and targeting and delivery methods vary considerably. Part of the attraction of this approach is that it may be used in different settings, for example, by general practitioners, counsellors, youth workers or police officers. They often incorporate elements of motivational interviewing. A recent EMCDDA review found that while there was some research supporting their effectiveness, this remains limited and this is an area where further studies are required. Some innovative work has been done in developing online brief interventions, and there is some also some limited (lower quality) evidence that structured interventions delivered via computers and the internet may help prevent cannabis use when delivered in schools, or to family groups.

Harm reduction for cannabis use

Harm reduction for cannabis use has received less attention than for other substances but is nevertheless important. Harm reduction interventions for cannabis users may focus on avoiding more problematic consumption patterns, limiting consumption, and raising awareness of the need for vigilance against possible negative impacts of use on other areas of life, for example, school performance or social relationships. A recent review of the literature by Fischer et al. (2017), undertaken to update Low Risk Cannabis Guidelines for Canada, provides relevant evidence-based recommendations that are drawn on below.

Addressing the specific harms associated with smoking cannabis, especially in combination with tobacco, is another important, but neglected topic. Interventions in this area would focus on encouraging alternative routes of administration, which do not involve smoking or use of tobacco, and limiting harm from inhalation.

Alternatives to smoking, such as vaporisers or edibles, are available although these methods are not risk-free. Use of edibles eliminates respiratory risks but the delayed onset of psychoactive effect may result in the use of larger than intended doses and acute adverse effects. There is little evidence on which to judge the potential relative benefits or harms of some of the established and new technologies in

this area. Nevertheless it is clear that from a public health point of view the co-use of tobacco with cannabis should be avoided.

Smoking practices, such as 'deep inhalation' and breath-holding, which are commonly used when smoking cannabis, increase the intake of toxic material into the lungs. Users should be encouraged to avoid these practices.

Higher THC-content products are associated with higher risks for acute and chronic problems. Users should be made aware of the value of knowing the nature and composition of the cannabis products that they use. There is some experimental evidence to suggest that CBD may moderate the psychoactive and potential adverse effects of THC, so the use of cannabis containing lower THC and higher CBD levels would be advisable. However, in an illicit market, information on the THC and CBD content is not generally available.

Research suggests that driving while intoxicated with cannabis increases the risks of having a motor vehicle accident, and these risks are likely to greater if alcohol or other psychoactive substances are also consumed. It would appear prudent that users should refrain from driving (or operating dangerous machinery) for at least 6 hours after using cannabis. Users also need to be aware of, and respect, locally applicable legal limits defining cannabis-impaired driving.

The use of cannabis should be particularly avoided by some population groups that appear to be at higher risk of experiencing cannabis-related harm. These include individuals with a personal or family history of psychosis or a substance use disorder, adolescents, and also pregnant women, to avoid adverse effects on the foetus.

Treatment for problematic cannabis use

Treatment for cannabis problems is based mainly on psychosocial approaches, family-based interventions for adolescents and cognitive behavioural interventions for adults. The available evidence provides support for a combination of cognitive behavioural therapy, motivational interviewing and contingency management. In addition, there is some moderate quality evidence that multidimensional family therapy may be effective for young cannabis users. Internet and digital-based interventions are increasingly used to reach cannabis users and show promising preliminary results in reducing consumption and facilitating face to face treatment (when needed). Better quality evidence is needed on the effectiveness of this approach.

A number of experimental studies are investigating the use of pharmacological interventions for cannabis-related problems. This includes the potential for using THC, and synthetic versions of it, in combination with other psychoactive medicines, including antidepressants, anxiolytics and mood stabilisers. To date, results have been inconsistent, and no effective pharmacological approach to treat cannabis dependence has been identified.

What is being done in Europe to respond to cannabis use and associated problems

Prevention

Manualised universal prevention programmes aimed at developing social competences and refusal skills and addressing social influences and correcting normative misperceptions about drug use are reported to be a central component in national prevention programmes in seven EU countries. Evidence-based family programmes have a

Overview of the evidence on … treating problematic cannabis use

Behavioural interventions (e.g. cognitive behavioural therapy, motivational interviewing and contingency management) can reduce use and improve psychosocial functioning in adults and adolescents in the short term.

Multidimensional family therapy helps reduce use and keep patients in treatment, especially in high-severity young patients.

Web- and computer-based interventions may be effective in reducing cannabis use, at least in the short term, and are a cost-effective way of reaching a large number of cannabis users.

Spotlight on … The impact of new cannabis regulation models on responses

Cannabis regulation in the European Union

A number of EU jurisdictions have reduced penalties for using or possessing small amounts of cannabis and, in some cases, for cultivation of a few plants for personal use. Most EU countries now use fines, cautions, and probation as penalties for possession of small quantities of cannabis. Most of these changes have been the result of changes in formal or informal enforcement policies towards possession rather than national legal changes.

The Netherlands has tolerated small retail sales of cannabis for about 40 years. More recently, Spain's cannabis social clubs have produced cannabis for non-profit supply to members. These clubs have proliferated and are appearing in other parts of Europe. Medicinal products derived from cannabis have been approved for use in many EU countries and, at the time of publication, cannabis use for medical purposes is allowed or tolerated in several Member States.

Cannabis legalisation in the Americas

In contrast to the European Union, a policy of legalising recreational cannabis use by adults has been introduced in some parts of the Americas:

- Citizens in eight US states voted to allow the commercial production and sale of cannabis to adults for recreational use (Colorado and Washington, 2012; Oregon and Alaska in 2014; and California, Massachusetts, Maine and Nevada in 2016). In addition, voters in Washington DC approved a measure to legalise home grows, possession, and gifting of cannabis, but not retail stores.
- In 2013, Uruguay was the first country to legalise cannabis for adult use.
- In 2017 the Canadian federal government introduced legislation to legalise commercial production and sale of cannabis for recreational use by adults.

Pros and cons of legalisation

Advocates of legalisation have argued that it will: limit adolescents' access to cannabis; improve the regulation of cannabis products; reduce cannabis users' exposure to more harmful drugs; eliminate criminal penalties for cannabis use; and generate tax revenue that can be used to prevent and treat cannabis use disorders.

Opponents of legalisation argue that the associated normalisation of cannabis use and eventual reduction in price will increase the number of cannabis users and heavy use among existing users, and thereby increase overall cannabis-related harm in the community. They also note that we know very little about the health consequences of the high-potency products typically sold in states that have legalised.

What are the possible impacts of cannabis legalisation?

It is too early to draw strong conclusions about the impact of cannabis legalisation, but the following potential positive and negative impacts should be monitored:

- Changes in the level or patterns of cannabis use.
- Presentations to emergency departments for accidental poisonings of children; cannabis intoxication in adults; and severe vomiting syndromes in heavy users.
- Treatment seeking for cannabis use among adults and adolescents, and referral sources.
- Motor vehicle accidents, in total and those involving cannabis and alcohol.
- Linked changes in the use and harms associated with other controlled and regulated psychoactive substances (including alcohol, tobacco, medicines and illicit drugs, such as opioids) to assess the overall public health impact.
- Costs associated with different approaches (including criminal justice costs, the impact on offending, and costs associated with regulating the marketplace).

See the 2017 EMCDDA report on cannabis legislation in Europe and the Background paper, New developments in cannabis regulation.

slightly wider availability. Other countries have prioritised other prevention approaches, for example, environmental prevention measures (see section 4.2 for more information about these) or community approaches (see section 4.5).

Selective prevention responses for vulnerable groups are common in the Nordic countries, Ireland, and parts of Spain and Italy. These address both individual behaviours and social contexts and, at the local level, often involve multiple services and stakeholders (e.g. social services, family, youth and police). The most common target groups are young offenders, pupils with academic and social problems and youth in care institutions. Little is known about the contents of these prevention strategies and evaluations of their effectiveness are limited. Expert opinion suggests that the most commonly used techniques are based on information provision. Provision of indicated prevention for at-risk individuals is limited in Europe, with only four countries reporting that these programmes are available to the majority of those in need of them (see also section 3.4 on responses for vulnerable young people).

Brief interventions

The relatively low cost of brief interventions and the fact that they can potentially be delivered in multiple settings by a variety of professionals after only brief training makes them intuitively appealing but also very varied in nature. Examples that have been implemented in several European countries include eSBIRT, which provides brief interventions in emergency departments; Preventure, a programme for schoolchildren assessed as having risky personality traits; and Fred, which targets young people at an early stage of criminal prosecution. However, it appears that brief interventions have not been widely implemented in Europe. Only three countries report full and extensive provision of these interventions in schools, and two report this level of provision in low-threshold services.

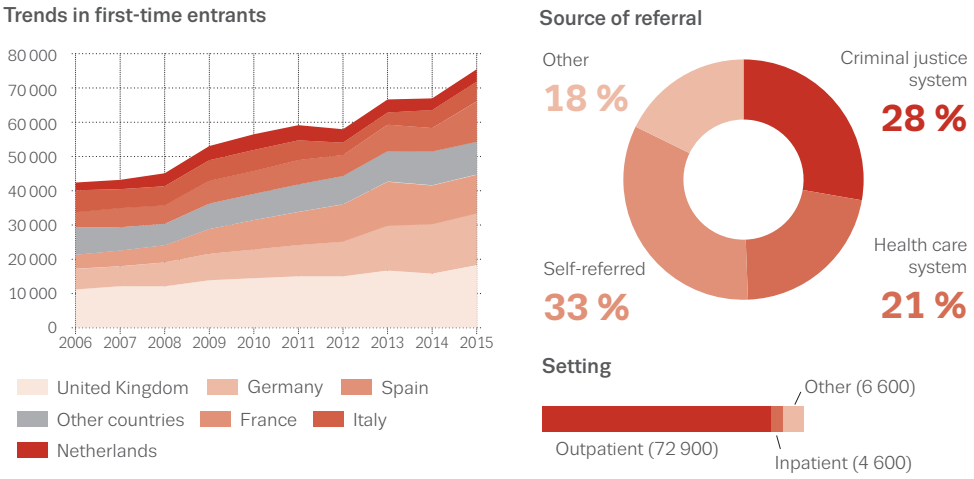
In France special centres have been established for young people who use cannabis or other psychoactive substances, and also for their relatives, who may be reluctant to access traditional treatment services. These Consultations Jeunes Consommateurs (CJC) are subordinate to specialist addiction treatment centres (CSAPA). Their mission is to intervene early, between prevention and care.

Treatment for cannabis problems

The number of first-time treatment entrants for cannabis problems in the European Union increased from 43 000 in 2006 to 76 000 in 2015 (Figure 2.1). Since 2009, cannabis has been the most frequently reported primary drug among new treatment clients. This rise may be due to a number of factors including changes in cannabis use in the general population, especially intensive use; changing risk perceptions; increasing availability of more potent cannabis products; and changes in treatment provision and referral. The criminal justice system has become an important source of referral for cannabis treatment; in 2015 over a quarter of cannabis users entering treatment for the first time in Europe were referred from the criminal justice system, and in some countries this proportion is considerably higher. The data are also influenced by

FIGURE 2.1

Cannabis users entering treatment in Europe: trends over time and source of referral in 2015



NB: Source of referral and settings are based on all treatment entrants with cannabis as primary drug based on most recent available data for all countries. Trends in first-time entrants are based on 23 countries. Due to changes in the flow of data at national level, data since 2014 for Italy is not comparable with earlier years.

differing national definitions and practices with respect to what constitutes treatment for cannabis-related disorders, which can range from a brief intervention session delivered online to admission to residential care.

In Europe, most cannabis treatment is provided in community or outpatient settings, but it is also worth noting that around one in five people entering inpatient drug treatment report primary cannabis-related problems. While many European countries offer treatment for people with cannabis problems within generic substance use treatment programmes, around half have cannabis-specific treatment options. The development of specific cannabis treatment programmes may be linked to specific local or national needs (e.g. existing services may be very opioid-focused and not attractive to some groups of cannabis users).

Availability and coverage of treatment options to cannabis users differ between countries and may not necessarily be related to the availability of specific programmes. In those countries that have developed cannabis-specific treatment, coverage of the affected population is rated as 'good', and experts report that the majority of individuals in need of treatment for cannabis use disorders have access to treatment. A few countries, however, have only limited coverage, sometimes despite high overall levels of need. Less is known about the accessibility of treatment for cannabis use disorders in countries that do not offer cannabis-specific interventions.

Responding to cannabis use and problems: implications for policy and practice

Basics

- Core responses in this area include general prevention approaches aimed at discouraging use or delaying onset, brief interventions for those with minor problems and formal treatment for those with more serious problems.

Opportunities

- More attention should be paid to harm reduction approaches to cannabis use, particularly with respect to the patterns of use and co-use with tobacco.
- Greater use of e-health approaches.
- The new regulatory models for cannabis that are emerging globally can provide valuable information on the pros and cons of different options for regulation and their likely impact on responses to cannabis problems.

Gaps

- There is still a need to develop a better understanding of the nature of cannabis-related disorders and what constitutes the most effective and appropriate treatment options for different clients.
- A better understanding is needed of the types of treatment being received by the increasing numbers of people entering treatment for cannabis use in Europe, in order to ensure that provision is appropriate and efficient.

Further resources

EMCDDA

- Best practice portal.
- Statistical bulletin.
- Cannabis legislation in Europe, 2017.
- European drug report: trends and developments 2017.
- Treatment of cannabis-related disorders in Europe, Insights, 2015.
- New developments in cannabis regulation, Beau Kilmer, Background paper.
- Implementation of drug-, alcohol- and tobacco-related brief interventions in the European Union Member States, Norway and Turkey, Technical report, 2017.

Other sources

- Fischer, B., Russell, C., Sabioni, P., van den Brink, W., Le Foll, B., Hall, W., Rehm, J. and Room, R. (2017), 'Lower-risk cannabis use guidelines: a comprehensive update of evidence and recommendations', *American Journal of Public Health*: published online before print June 23, 2017. DOI: 10.2105/AJPH.2017.303818
- Montanari, L., Guarita, B., Mounteney, J., Zipfel, N. and Simon, S. (2017), 'Cannabis use among people entering drug treatment in Europe: A growing phenomenon?', *European Addiction Research* 23, pp. 113–121.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

2.2 | Tackling opioid dependence

SUMMARY

Issues

Although the prevalence of opioid dependence among European adults is low and varies considerably between countries, it is associated with a disproportionate amount of drug-related harm that includes infectious diseases and other health problems, mortality, unemployment, crime, homelessness and social exclusion. Heroin use remains a major concern but in many European countries the use of synthetic opioids has also been growing and in a few countries now predominates.

Response options

- *Pharmacological interventions,* such as opioid substitution treatment (OST), usually with methadone of buprenorphine. Heroin-assisted treatment may be useful for people who have not responded to other forms of OST.
- *Behavioural and psychosocial interventions* to address psychological and social aspects of drug use include brief interventions, structured psychological therapies, motivational interventions, contingency management, and behavioural couples therapy. They are often used in conjunction with pharmacological interventions.
- *Residential rehabilitation* involves living in a treatment facility and following a structured, care-planned programme of medical, therapeutic and other activities. This approach is suitable for clients with medium or high levels of need.
- *Self-help and mutual aid groups* teach cognitive, behavioural and techniques of self-management without formal professional guidance.
- *Recovery/reintegration support services,* for example, employment and housing support.

Effective long-term treatment of opioid dependence often requires multiple treatment episodes and combinations of responses. Harm reduction interventions, mental health and other services, addressing co-occurring mental and physical health problems, will also be important.

European picture

- Opioid users are the largest group in specialised drug treatment in Europe. However, differences exist between countries. These differences reflect variations in prevalence but also in the orientation of the drug treatment systems.
- The most common treatment approach is opioid substitution treatment, usually provided in outpatient settings. Methadone (63 %) and buprenorphine (35 %) are the medicines most commonly used for OST in Europe. It is estimated that overall, around 50 % of people with opioid dependence receive some form of substitution treatment but coverage varies greatly between countries.
- All European countries provide some residential treatment but the level of provision varies greatly.

keywords: opioids, opioid substitution treatment, social reintegration, treatment

Understanding the problem and key objectives for responses

Injecting use of opioids, particularly heroin, has been the major drug problem in many European countries for the last 40 years. Heroin is the most commonly used illicit opioid in Europe and may be smoked, snorted or injected. The misuse of opioids other than heroin, such as methadone, buprenorphine and fentanyl, may be increasing. In three countries these were the most common opioids used by people entering treatment in 2015: fentanyl in Estonia and buprenorphine in the Czech Republic and Finland.

The prevalence of high-risk opioid use among adults (15–64) in Europe is estimated at 0.4 % of the EU population or about 1.3 million people. However, there is considerable variability in prevalence between countries, with estimates ranging from less than 1 to more than 8 cases per 1 000 population aged 15–64. It should also be noted that producing these estimates is methodologically challenging and they need to be interpreted with caution.

Although the prevalence of illicit opioid use is much lower than that of other drugs, the opioids account for a disproportionate amount of drug-related harm including:

- high rates of dependence, often associated with unemployment, criminal acts to obtain money to buy drugs, homelessness and social exclusion;
- large numbers of opioid-related deaths, particularly from overdoses;
- 'open drug scenes' and drug-related crime that blight some neighbourhoods; and
- the spread of HIV, viral hepatitis and other infections through sharing injecting equipment.

Primary opioid users make up a large proportion of people in drug treatment. Problematic opioid use is also associated with social exclusion and disadvantage, and overcoming addiction and reintegrating into communities often requires long-term treatment and multiple treatment episodes.

Overall the available data suggest that new recruitment into heroin use, and especially injecting use, is lower now than in the past. However, many long-term opioid users in Europe are polydrug users who are now in their 40s and 50s. Long histories of injecting drug use, poor health, bad living conditions and concurrent tobacco and alcohol use make these users susceptible to chronic health problems, such as cardiovascular, liver and respiratory diseases. The challenges in responding to the complex needs of this group are discussed in section 3.1.

Responses tackling opioid dependence aim to engage dependent users in treatment and provide other support to address their manifold psychosocial and chronic health problems and to reduce their social exclusion. The achievement of overcoming their dependence on opioids is usually a long-term rather than an immediate objective of treatment. Harm reduction services, such as needle and syringe programmes, also play an important role in engaging people with opioid dependence with services and treating opioid-related harms, such as overdose. They are discussed in more detail in sections 2.3 and 2.4.

Response options

A range of approaches are available for treating people with opioid dependence and supporting their reintegration into the community:

- *Pharmacological interventions,* such as long-term opioid substitution treatment (OST), the most common medications used being methadone or buprenorphine. These are generally combined with psychosocial interventions.
- *Behavioural and psychosocial* interventions to address psychological and social aspects of drug use include brief interventions, structured psychological therapies, motivational interventions, contingency management, and behavioural couples therapy.
- *Residential rehabilitation* involves living in treatment facilities and following a structured, care-planned programme of medical, therapeutic and other activities. This option is suitable for clients with medium or high levels of drug-related needs. Stays can be short or long depending on individual needs.
- *Self-help and mutual aid groups* teach cognitive, behavioural and techniques of self-management without formal professional guidance.
- *Recovery/reintegration support services*, for example, employment and housing support.

Evidence from controlled trials and observational studies indicates that drug treatment is effective in reducing the harms of opioid use and dependence. In addition to reducing reported injecting risk behaviours, treatment also reduces overdose risk, criminality and societal harms, including the adverse impacts on families and neighbourhoods (see the overview of the evidence box for a summary of the evidence for different treatment types). Opioid detoxification under heavy sedation is not recommended and can be harmful.

Compared to other areas, the evidence base for treating opioid problems is relatively robust. It is not complete, however, and important questions require further investigation. It is unclear, for example, whether detoxification under minimal sedation helps opioid users to complete treatment and avoid relapse, or if opioid-dependent adolescents respond better to detoxification or OST.

Effective long-term treatment for opioid dependence often requires multiple treatment episodes and combinations of responses. For example, opioid substitution treatment generally involves long-term pharmacological maintenance, typically in combination with psychosocial interventions and regular medical contacts to produce improvements across a range of health and social outcomes. Quality of treatment delivery is important: adequate doses of opioid substitution medicines are essential to prevent people taking heroin or other opioids on top of their prescription. Continuity of treatment is also vital, as the period immediately after leaving treatment, whether because of drop-out, discharge or transfer between services (e.g. on release from prison) is one of high risk of overdose (see sections 2.3 and 3.1). Similarly, to sustain good outcomes over the longer term, those in OST may benefit from a range of additional measures, such as relapse prevention and support for social reintegration, including training and employment and housing support.

Some sub-groups may have particular support needs: see section 3.1 on older problem drug users and section 3.2 on responding to the needs of women who use drugs.

Overview of the evidence on … treating opioid dependence

- Opioid substitution treatment keeps patients in treatment, reduces illicit opioid use, related risk behaviour and mortality, and improves mental health. Its impact may be enhanced by psychosocial support together.
- Methadone and buprenorphine are both recommended as medications for long-term pharmacological maintenance treatments.
- Methadone retains more people in the early weeks of treatment than buprenorphine.
- Heroin-assisted treatment has been found to be effective for chronic opioid users who have not responded to methadone treatment.
- Methadone or buprenorphine are effective treatment options for people who are dependent on pharmaceutical opioids.
- Opioid substitution treatment is strongly recommended over detoxification for opioid-dependent pregnant women. Psychosocial interventions alone do not improve opioid-related or obstetrical outcomes.
- When detoxification is indicated, tapered doses of methadone or buprenorphine should be used in combination with psychosocial interventions.
- Detoxification with alpha$_2$-adrenergic agonists (e.g. clonidine) is also effective but methadone has fewer adverse effects.
- Use of naltrexone for relapse prevention is generally not recommended, except in cases in which relapse would have serious and immediate consequences.
- Providing drug users with an incentive-based treatment approach (contingency management) and employment helps improve their social conditions.

What is being done in Europe to respond to opioid dependence

Overall picture

Opioid users are the largest group in specialised drug treatment, although this varies between countries. For example, while the vast majority of treatment entrants in Estonia were opioid users they make up less than 5 % in Hungary. In 2015, 191 000 clients entered specialised addiction treatment in Europe with opioids as their primary drug; 37 000 of these were first-time entrants, most of whom (79 %) were primary heroin users.

Most treatment for people with opioid dependence in Europe is provided on an outpatient basis, most commonly in specialist drug services. Low-threshold services, generic health care and mental health care, and general practitioners all play an important role in some countries. Inpatient care is less common but still remains important in terms of the numbers of those treated with psychiatric hospitals, therapeutic communities and specialised residential treatment centres all utilised for this purpose.

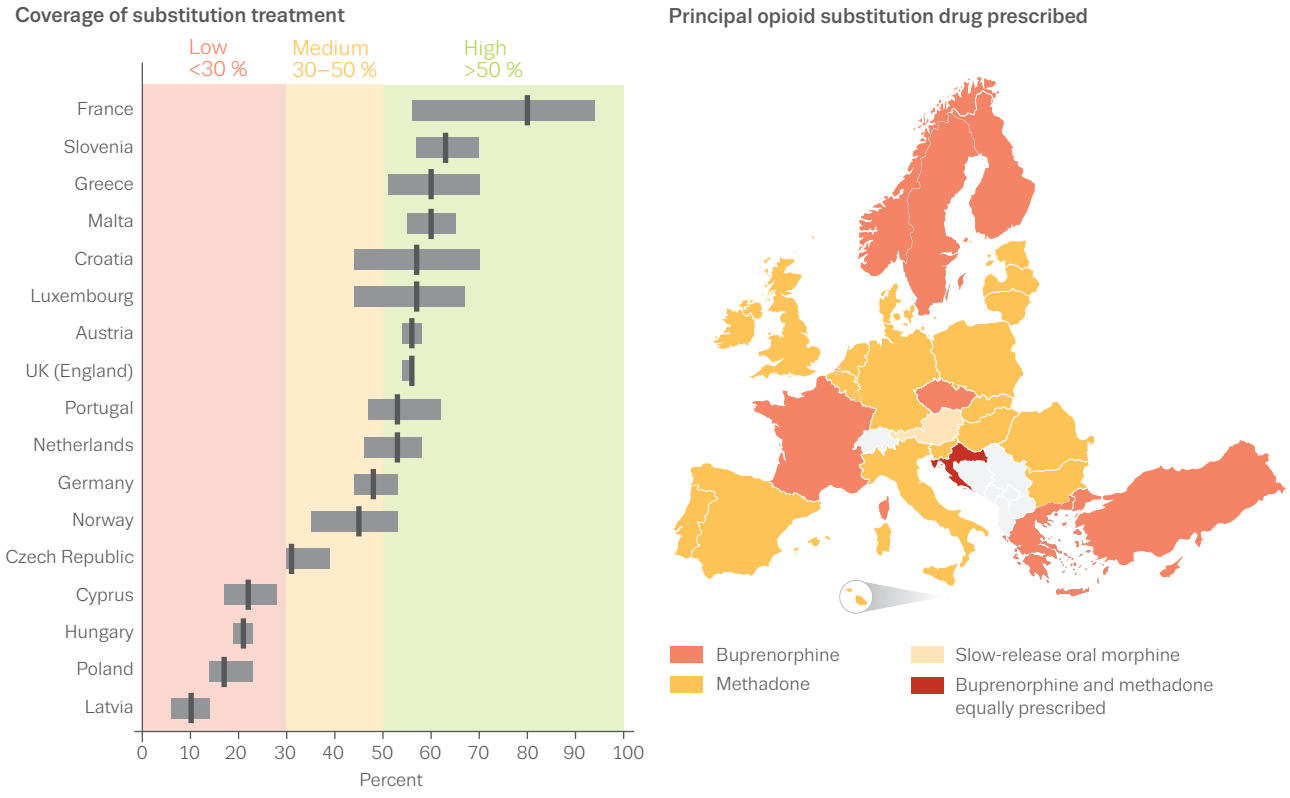
A wide range of services are provided to drug users in European treatment settings and these may vary by setting. This complexity, coupled with the generally long-term nature of treatment for opioid dependence, means that case management plays an important role in ensuring services meet the needs of each individual and they remain engaged in treatment. Linkage to other services, such as mental health and sexual health services, is also important but is often problematic — see Spotlight on comorbid substance use and mental disorders, page 31, and Spotlight on addressing sexual health issues associated with drug use, page 72.

Opioid substitution treatment in Europe

It is estimated that around 50 % of opioid-dependent persons in Europe receive some form of substitution treatment. National estimates vary from 10 % to 80 %, highlighting both the heterogeneous situation found in Europe in respect to treatment coverage and the fact that treatment provision remains insufficient in many parts of Europe (Figure 2.2).

FIGURE 2.2

Opioid substitution treatment in Europe: coverage and principal drug prescribed



NB: Coverage, percentage of estimated high-risk opioid users receiving the intervention; data displayed as point estimates and uncertainty intervals. Data refer to 2015 or most recent year available.

Research conducted in 12 European countries (ATOME, the Access To Opioid Medication in Europe research project) explored factors that may limit the adequate availability of opioid medicines, including those used for the treatment of opioid dependence. Legal and regulatory barriers, restrictive policies, limited knowledge and negative attitudes, narrow inclusion criteria and costs; were all found to represent potential obstacles to achieving adequate levels of treatment provision. Important barriers to improving access to care in some countries were restrictions that limited the number of medical practitioners who could prescribe OST medications, or the number pharmacies that were permitted to dispense these products.

In 2015 an estimated 630 000 opioid users received OST in the European Union, this figure has declined slightly overall (5 %) since 2010. Some countries have reported more significant reductions during this period, with OST treatment numbers falling by more than a quarter, in Hungary, the Netherlands, Portugal and Spain, for example.

Spotlight on … From harm reduction to recovery: the variety of treatment goals

What are the main goals of treatment?

Abstinence from drug use has been the traditional long-term goal of most forms of addiction treatment. The term 'recovery' in addiction has historically been used within the 'Twelve-step' movement. More recently, recovery has been conceived as a process of achieving voluntary control of substances and working towards positive outcomes in broad areas of life. The concept of recovery overlaps with that of social reintegration and requires many of the same interventions, such as training and employment support programmes and housing provision.

The advent of HIV/AIDS in the 1980s brought a service focus on harm reduction. Services often adopted a 'hierarchy of goals' in which stopping or reducing injecting and the use of heroin was the first step towards achieving the longer-term goals of abstinence and recovery. More recently there has been a renewed debate about the relative roles of abstinence and recovery goals alongside harm reduction.

Are these treatment goals mutually exclusive?

Opioid users are among the groups for whom achieving treatment goals can be most challenging, especially those in long-term OST, where high levels of morbidity and poor social integration are common. Recovery, if viewed in terms of full-time employment, good health and so on, may not be a realistic goal for this prematurely aged and ageing population (see section 3.1). Many have never been employed and are therefore very difficult to integrate into the labour market. Many have long-term health conditions, which need to be taken into account by services working to achieve the best quality of life for this marginalised and stigmatised group of drug users. Achieving improved outcomes for this group may need a re-examination of drug treatment goals and viewing them as complementary rather than competing. A harm reduction orientation may be most appropriate in the initial stages of OST treatment to reduce risk and promote engagement. After stabilisation in OST, the longer-term focus may shift to reintegration and recovery in order to enable users to achieve a better quality of life and a wider range of goals.

Those entering treatment have different backgrounds, problems and resources to draw on that are likely to change over time. Treatment goals and the support services provided therefore need to be individually-tailored and regularly reviewed.

Implications for service provision

An enhanced focus on recovery and reintegration implies a greater partnership with service users to redesign services to improve quality of life and meet their wider needs. These new treatment models also need to harness local services and community assets and address stigma and discrimination that can act as barriers to drug users integrating into their communities. Greater peer involvement may increase service users' social connectedness and well-being, inspire hope and enable users to work as volunteers in non-clinical posts to enhance service cost-effectiveness.

See the Background paper, Recovery, reintegration, abstinence, harm reduction: the role of different goals within drug treatment in the European context.

Treatment for opioid dependence: implications for policy and practice

Basics

- The core intervention is OST in combination with psychosocial treatment. This is an effective way to reduce illicit opioid use, transmission of infectious disease, drug overdose and crime.
- Different medicines are available for substitution treatment. Therapeutic choices need to be based on individual needs, involve a dialogue with patients and be regularly reviewed.
- Abstinence-oriented psychosocial treatment in residential settings can benefit some opioid-dependent people if they remain in treatment. However, this form of treatment is relatively costly and the relapse-rate is often high, with an increased risk of fatal overdose. Appropriate client selection and management are important as is support in the event of relapse.

Opportunities

- Optimise service delivery: The quality of treatment delivery is important, in particular, adequate doses of opioid substitution medicines are essential and continuity of treatment is vital. Increasing access to OST should remain a public health priority in those countries where it falls below recommended levels.
- Where good coverage has been achieved and many of those in OST treatment have now been in care for many years there may be a need to increase the attention given to social reintegration, including employment, and to review what constitutes appropriate individual therapeutic goals for different individuals and to promote recovery where appropriate.

Gaps

- Treatment services should be alert for the use of opioids other than heroin among treatment entrants and also polysubstance use, including alcohol and tobacco.
- Better information on unmet need for treatment is required in order to ensure appropriate levels of service availability.

At the same time, 14 countries have expanded treatment coverage. Over the same period many countries have observed an overall increase in the age of those receiving OST (see section 3.1).

Methadone and buprenorphine-based medicines are the most commonly prescribed OST drugs in Europe, accounting for about 63 % and 35 % of all OST treatments respectively. There is also limited use of other substances, such as slow-release morphine or diacetylmorphine (in heroin-assisted treatment), which are estimated to be prescribed to around 2 % of OST clients.

Heroin-assisted treatment is available in Denmark, Germany, the Netherlands and the United Kingdom. Luxembourg is in the process of introducing this form of treatment and it is also available to some users under compassionate use principles following a clinical trial in parts of Spain.

Residential treatment approaches

In most European countries, residential treatment programmes are an important element of treatment and rehabilitation for opioid drug users.

The term 'residential treatment' encompasses a range of treatment models where those with drug problems live together as a therapeutic unit, usually either in the community or in a hospital setting. Historically these approaches have tended to be abstinence-oriented, although there is now also a growing interest in integrating OST into this setting. Evidence-based clinical guidelines and service standards for quality assurance in residential treatment exist in most countries where this approach is commonly used. The therapeutic approaches used in residential treatment settings commonly include the use of 12-step or Minnesota models and cognitive behavioural interventions.

The level of residential treatment provision differs between countries. More than two-thirds of the 2 500 facilities in Europe are found in just six countries, with Italy accounting for the highest number of these (708). The treatment approaches used in residential settings also vary across Europe. In 15 countries the therapeutic community approach is used by most residential programmes.

Typically, people entering inpatient treatment are men in their early 30s. They are more socially disadvantaged than people entering outpatient treatment (lower education, unstable living conditions and unemployed). Just under half enter treatment for primary opioid problems (mainly heroin).

Further resources

EMCDDA

- Best practice portal.
- European drug report: trends and developments 2017.
- Pregnancy and opioid use: strategies for treatment, EMCDDA Papers, 2014.
- Residential treatment for drug use in Europe, EMCDDA Papers, 2014.
- Therapeutic communities for treating addictions in Europe: evidence, current practices and future challenges, Insights, 2014.
- Trends in heroin use in Europe: what do treatment demand data tell us? Perspectives on drugs, 2013.
- Social reintegration and employment: evidence and interventions for drug users in treatment, Insights, 2012.
- New heroin-assisted treatment, Insights, 2012.
- Recovery, reintegration, abstinence, harm reduction: the role of different goals within the drug treatment in the European context, Background paper, Annette Dale-Perera.

Other sources

- WHO Guidelines for the psychosocially assisted pharmacological treatment of opioid dependence, 2009.
- WHO Guidelines for identification and management of substance use and substance use disorders in pregnancy, 2014.
- ATOME project. Final report and recommendations to ministries of health, 2014.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

2.3 Reducing opioid-related deaths

SUMMARY

Issues

Mortality directly or indirectly related to use of opioids is a major cause of avoidable premature deaths among European adults. Overall drug-related mortality rates are 1–2 % per year among high-risk opioid users in Europe and drug overdoses account for over 7 000 deaths per annum. Other important causes of death among high-risk opioid users are infections, accidents, violence and suicide.

Key periods of increased risk follow periods of abstinence when tolerance is lost, particularly on leaving prison or abstinence-based treatment.

keywords: drug-related deaths, overdose, naloxone, drug consumption rooms, fentanils

Responses options

These mainly focus on preventing the occurrence of overdoses and on improving the survival of those who overdose.

- Enrolling and retaining problem opioid users in OST and ensuring continuity between treatment in prisons and the community and at other transition points.
- Promoting overdose awareness, particularly around key risk periods and other risk factors, such as concurrent alcohol or benzodiazepine use.
- Ensuring opioid antagonist (naloxone) availability and promoting appropriate use by professionals responding to or intervening in drug overdoses.
- Education and training of drug users, peers and family members to identify overdoses and intervene with take-home naloxone while waiting for the ambulance to arrive.
- Provision of drug consumption rooms to support safer injecting.

European picture

- Around half of opioid-dependent people in Europe are enrolled in OST, but coverage varies widely between countries.
- Overdose risk information provision is now available in 28 EMCDDA reporting countries.
- In 2016, there were 78 drug consumption rooms operating in 6 EU countries and Norway. There were also 12 operating in Switzerland.
- Take-home naloxone programmes existed in ten European countries in 2016.

Understanding the problem and key objectives for responses

Mortality directly or indirectly related to use of opioids is a major cause of avoidable premature deaths among European adults. There were over 7 500 overdose deaths in the European Union in 2015, with opioids implicated in approximately 80 % of cases. The overall mortality rate for overdose deaths in the European Union is approximately 20 deaths per million population, though national rates and trends vary considerably. This variation is due to a range of factors including differences in the numbers at risk of overdose deaths, and in the reporting and coding of overdose cases in national mortality databases.

All-cause mortality rates among cohorts of high-risk opioid users are in the range of 1–2 % per year, which is 5 to 10 times that found among peers of the same age and gender. The primary cause of this increased mortality is drug overdose, but important contributions are made by causes indirectly related to drug use, such as infections, accidents, violence and suicide. Poor physical health is common

Spotlight on … Fentanils

What are fentanils?

Fentanils are a family of highly potent opioids. A small number are used in human and veterinary medicine, in anaesthesia and for pain management. Recently an increasing number of uncontrolled fentanils have been reported to Europe's early warning system for new psychoactive substances. Fentanils have appeared on online markets and on the illicit market, sometimes sold as, or mixed with, heroin, other illicit drugs, and even counterfeit medicines. Due to their potential to cause serious harm, 15 fentanils have so far been controlled under the 1961 United Nations Single Convention on Narcotic Drugs. However, new fentanils, not controlled under the UN conventions, can be manufactured and traded relatively freely and openly by chemical and pharmaceutical companies, mainly based in China. These developments are part of a phenomenon that has seen the appearance of a wide range of new psychoactive substances on Europe's drug market over the past decade (see section 2.6).

Why are fentanils of concern?

The illicit use of fentanils is a growing concern in Europe because of their high risk of fatal overdose caused by severe respiratory depression. Long-term opioid users risk overdose due to lack of familiarity with the effects and appropriate dosage of these new substances. In users without tolerance to opioids even very small doses may be fatal. Estonia has experienced injecting use of these drugs for over a decade and reported high numbers of overdose deaths. Other EU countries have also reported fentanil-related deaths. Fentanils present risks, not only to those who use them (sometimes unknowingly), but also to people, such as postal workers, police and customs officers, families and friends of users, who may be accidentally exposed to them.

These substances are easy to conceal and transport because very small amounts produce many thousands of doses. This makes them both a very attractive commodity for organised crime and a challenge for drug control agencies. A new area of concern is the appearance of novel dosage forms, such as nasal sprays and e-liquids for vaping in electronic cigarettes, which make fentanils easier to use and possibly more socially acceptable.

How is Europe responding?

Early warning systems, including the EU Early Warning System based at the EMCDDA, play an important role in the identification and response to harms caused by new fentanils, by facilitating a rapid reaction to threats to public health related to these drugs (see EMCDDA website for risk assessments of fentanils, and box EU Early Warning System, page 78).

Responses to acute poisoning caused by fentanils should follow the guidelines for opioid poisoning generally, including the administration of naloxone for respiratory depression. However, recent experience suggests that larger and repeated doses of naloxone may be required to reverse poisoning in some cases. Training and guidance relating to the treatment of opioid poisoning, and associated with naloxone programmes, therefore needs to explicitly recognise appropriate responses to fentanil poisoning. This should include guidance with respect to the adequacy of stocks of naloxone to meet the needs associated with potential outbreaks of fentanil poisoning.

among high-risk opioid users and is reflected in high rates of chronic pulmonary and cardiovascular conditions (often tobacco-related) and liver problems from HCV infections and heavy alcohol use. These conditions account for an increased share of hospitalisations and deaths with age. There is now an increasingly ageing opioid-using population in many European countries, which may have an impact on both direct and indirect mortality rates. Since 2007, the number of reported overdose deaths has increased among older age groups and decreased among younger age groups (see section 3.1 on older people with drug problems).

The type of substance used, the route of administration and the health of the user all have an impact on the risk of overdose. Heroin and its metabolites are found in the majority of fatal overdoses in Europe, often in combination with other substances. There has been a recent increase in heroin-related deaths in Europe but other opioids (methadone, buprenorphine and to a lesser extent other prescription opioids and fentanils) are found in a substantial proportion of overdose deaths and predominate in a few countries. The role of illicitly produced synthetic opioids is probably under-reported because their presence is not routinely tested in many countries. Typically, multiple substances are implicated in overdose deaths; benzodiazepines and alcohol, often present alongside opioids.

A number of situational factors can increase the risk of drug overdose death including, in the case of opioid users, disruption of treatment provision or discontinuity of treatment and care. In certain situations, for example, following detoxification or discharge from drug-free treatment, the tolerance of drug users to opioids is greatly reduced and as a result they are at particularly high risk of overdosing if they resume use. For these same reasons, failure to ensure continuity of care through inadequate referral and follow-up on release from prison has also been identified as an important risk factor.

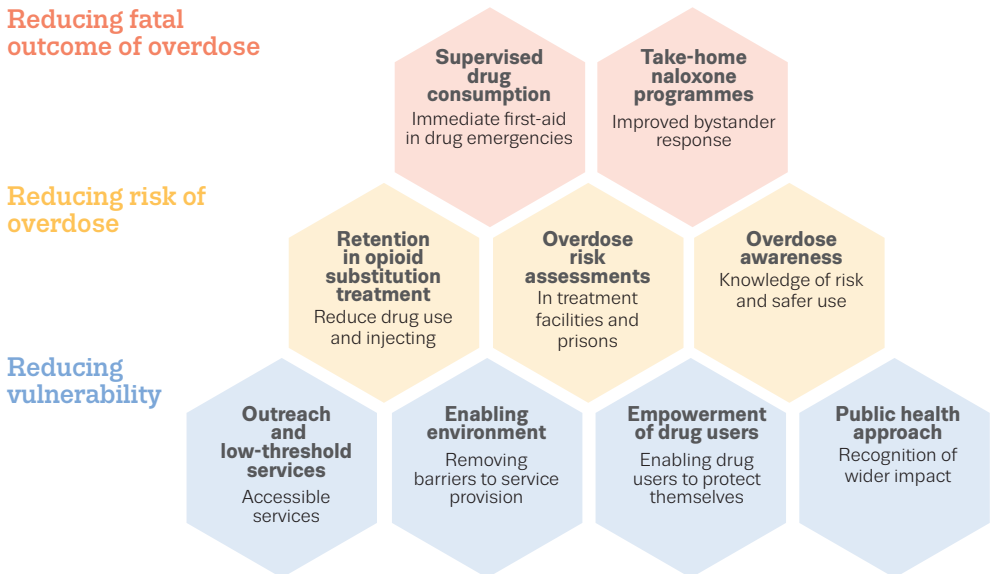
Response options

The main responses aimed at reducing opioid deaths are of two broad types: the first involves a set of interventions geared towards preventing overdoses occurring, while the second focuses on preventing death when overdoses do occur (Figure 2.3). In addition, broader harm reduction interventions can reduce vulnerability to overdose while wider public health interventions that reduce drug use and empower drug users to protect themselves may also provide an environment in which overdoses are less likely. This third group of broader interventions are not discussed here but are covered elsewhere in this guide.

Retention in treatment reduces overdose risk

The risk of overdose is reduced while opioid users remain in OST. A meta-analysis of observational studies shows that OST, using methadone and buprenorphine, reduces overdose and all causes of death in opioid-dependent people. The mortality rate of clients in methadone treatment

FIGURE 2.3
Interventions to reduce the risk of opioid-related deaths



is less than a third of that among opioid users not in treatment. Analyses of overdose deaths at different stages in OST suggest that preventive interventions need to be focused on the first 4 weeks of treatment (particularly for methadone) and in the first four weeks after treatment exit. These are two periods when the risk of overdose is especially elevated. People who frequently enter and leave treatment are particularly vulnerable to overdosing; so are drug users immediately after leaving prison (see section 4.1). To prevent prison post-release deaths, proactive and prepared referral to community OST or other appropriate treatment options ('throughcare' or 'continuity of care') is important. Treatment services also need to ensure that clients are aware of the risks of overdose when leaving treatment and how to reduce these.

Overdose awareness training and public health alerts

Effective communication with users can act as a catalyst for reducing harm, as many drug users underestimate, or are unaware of their overdose risks. Ideally, overdose prevention, education and counselling interventions should be routinely provided by trained professionals in health and primary care settings, including harm reduction services, such as needle and syringe programmes. Screening opioid users for overdose risk may reduce overall mortality, while overdose risk assessments can provide early identification of high-risk individuals.

The United States and Canada have seen a dramatic rise in opioid-related deaths in recent years, in part driven by the misuse of medicinal products and in part by the appearance of synthetic opioids (including fentanils) on the illicit drug market. Europe has not experienced these problems at the level seen in North America. Nevertheless, synthetic opioids, both diverted from legitimate uses and produced for sale on the illicit drug market, are a significant problem in some countries. The increasing number of new uncontrolled opioids being reported to the EU Early Warning System adds to concerns in this area (see section 2.6 and Spotlight on fentanils, page 52). Given the potential of these drugs to cause harm, it is important that Europe continues to be vigilant and is prepared to respond quickly and effectively to any increase in the threats observed in this area. This requires investment in surveillance capabilities, including better toxicological information on drug-related deaths. It also signals the need to identify the sources of the opioids involved in these deaths in order to identify appropriate responses (see also section 2.7). It also requires countries to have appropriate prevention, treatment and harm reduction capacities in place and be prepared if necessary to strengthen their responses to reduce opioid-related mortality.

Drug consumption rooms

Ideally, drug consumption rooms are professionally supervised health care facilities in which drug users can use drugs in safer and hygienic conditions under the supervision of trained staff. They aim to reduce the risks of unhygienic injecting (including serious infectious complications such as septicaemia and endocarditis), prevent overdoses and link drug users with treatment, health and social services (see Spotlight on drug consumption rooms, page 156).

Drug consumption rooms were originally developed as a public health response to the rapid spread of HIV/AIDS among injecting drug users in the 1980s and to problems posed by public drug use. These facilities are designed to attract hard-to-reach drug users, especially marginalised ones who inject drugs on the streets, under risky and unhygienic conditions. There are a number of ways in which they can reduce overdose deaths: by directly intervening in overdoses that occur on site; providing overdose prevention awareness raising and training, including training in the

Overview of the evidence on … reducing opioid-related deaths

Overdose deaths are reduced among opioid users while they are in opioid substitution treatment.

There is growing evidence that education and training interventions with take-home naloxone prevents deaths from opioid overdose.

Intranasal administration of naloxone is effective in treatment of opioid overdose.

Drug consumption rooms increase safer injecting, reduce blood-borne infections and overdoses and encourage people who inject drugs to engage with care services. These services are furthermore associated with positive effects on public order.

use of naloxone to service users. They can also promote engagement in OST treatment.

There is consistent evidence from observational studies that drug consumption rooms increase safer injecting among those who use them and reduce overdoses near the services. They also encourage people who inject drugs to engage with health care services. The extent to which drug consumption rooms reduce overdose mortality will depend on what proportion of the population of people who inject opioids is able to access them and what other overdose-related interventions are undertaken.

Naloxone to reverse overdose

Heroin and other opioids bind to receptors in the nervous system including areas of the brain implicated in the control of breathing. Their use can suppress breathing, leading to a loss of consciousness, organ failure and death. However, many overdose deaths could be prevented by the interventions of others, who witness them. Naloxone is an opioid antagonist that can reverse opioid overdoses. In 2014, the World Health Organization (WHO) recommended that naloxone should be made available to anyone likely to witness an opioid overdose. Ensuring it is available and used by first responders, such as the police, ambulance staff and in emergency rooms, is therefore essential. In addition, training of drug users and others who are likely to witness overdoses, such as family members and hostel workers, on how to recognise and respond to overdoses, combined with naloxone distribution can reduce opioid overdose deaths. People who receive overdose prevention training and learn how to administer naloxone safely and effectively to others can save the lives of those who overdose in their presence. Emerging evidence on the effectiveness of naloxone for intranasal administration is promising and may facilitate use by a wider range of people in the future.

FIGURE 2.4

Interventions in place in European countries that can reduce opioid-related deaths

NB: Year of data, 2016.

Recently released prisoners may particularly benefit from access to naloxone. An evaluation of a programme to distribute naloxone to prisoners on release in Scotland found that it was associated with significantly fewer opioid-related deaths within a month of prison release.

What is being done in Europe to prevent opioid-related deaths

As described in section 2.2, it is estimated that about half of those who are dependent on opioids in the European Union receive some form of opioid substitution treatment, although coverage varies widely.

Twenty-eight EMCDDA reporting countries report that they distribute overdose risk information. This is sometimes available in different languages for foreign-born drug users. There is increasing use of the internet and new channels of communication, such as e-health overdose risk assessment tools and overdose awareness videos that can be shown in the waiting rooms of drug treatment facilities.

Drug consumption rooms have been operating in Europe for 30 years: the first was established in Berne, Switzerland in 1986. In 2016, there were 78 facilities operating in 6 EU countries and Norway (Figure 2.4). This includes the first two drug consumption rooms to open in France as part of a 6-year trial, and the establishment of new facilities in Denmark and Norway. There were also 12 facilities operating in Switzerland, and a number of other countries are considering legislation to permit the establishment of drug consumption rooms. This indicates growing interest in this kind of provision.

In recent years in Europe, there has been increased distribution of 'take-home' naloxone to opioid users, partners, peers and families, along with training in recognising and responding to overdoses. Take-home naloxone programmes have also been made available to staff of services that regularly come into contact with drug users.

There are take-home naloxone programmes in ten European countries. After being scaled up in community settings

Reducing opioid-related deaths: implications for policy and practice

Basics

Core interventions in this area include:

- Sufficient provision of opioid substitution treatment, with adequate dosage, case management and additional support.
- Naloxone made available to and used by first responders, such as ambulance staff, paramedics and others who attend overdose incidents.
- Overdose awareness training to promote less risky use among people who use opioids (such as avoiding injection, mixing drugs and alcohol, not using alone, and fractioning the dose).

Opportunities

- Establish take-home naloxone programmes to make naloxone widely available to people at high risk of opioid overdose and to their peers, partners and family to enable them to intervene while waiting for the ambulance services to arrive.
- Improve throughcare between prison and community to prevent drug-related deaths in the first two weeks after prison release, when overdose risk is extraordinarily high.

Gaps

- Identify and review barriers to the establishment of drug consumption rooms in areas with high numbers of people injecting drugs in public places.
- Provide enhanced support to those who leave abstinence-based treatment, because their lost opioid tolerance increases the risk of fatal overdose.

since 2013, take-home naloxone provision in Estonia was extended to prisons in 2015. Similar prison release-based naloxone distribution programmes are also reported in several other countries.

Until 2017, take-home naloxone kits generally included syringes pre-filled with the medication, for injectable use. A formulation for intranasal use and a specific applicator tool has been developed and is becoming available in Europe to facilitate use of the drug by laypersons.

Further resources

EMCDDA

- Best practice portal.
- European drug report: trends and developments 2017.
- Preventing overdose deaths in Europe, Perspectives on drugs, 2017.
- Drug consumption rooms: an overview of provision and evidence, Perspectives on drugs, 2017.
- Preventing opioid overdose deaths with take-home naloxone, Insights, 2016.
- Preventing fatal overdoses: a systematic review of the effectiveness of take-home naloxone, EMCDDA Papers, 2015.

Other sources

- UNODC. Opioid overdose: preventing and reducing opioid overdose mortality, 2014.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

2.4 Reducing the spread of HIV, viral hepatitis and other infections associated with injecting drug use

SUMMARY

Issues

The sharing of injecting equipment increases the risk of the transmission and acquisition of blood-borne infections, such as HIV and hepatitis B and C viruses. Historically interventions targeting people who inject drugs — primarily OST, needle and syringe programmes and harm reduction measures to reduce risk behaviour — were mainly focused on reducing HIV transmission. The success of these measures can be seen in the low share of HIV transmission attributed to drug injecting (about 5 % of diagnoses for which the route of transmission is known), which has been stable for the past decade. Nevertheless, injecting drug use remains an important mode of HIV transmission in some countries and injecting-related HIV outbreaks still occur in Europe, especially where service coverage is low.

Hepatitis C is the most prevalent blood-borne virus infection among people who inject drugs. The development of highly effective treatments for hepatitis C has led to a shift in focus towards addressing the high rates of hepatitis C virus (HCV) infection found among people who inject drugs. Chronic HCV infection can result in deaths from severe liver disease, such as cirrhosis and liver cancer.

keywords: infectious diseases, health harms of drug use, drug consumption room, hepatitis, needle and syringe programmes

Response options

- Providing opioid substitution treatment and other effective drug dependence treatment to people who inject drugs.
- Needle and syringe programmes providing sterile injection equipment to injectors.
- Vaccination against hepatitis A and B, tetanus and influenza, and also pneumococcal vaccine for HIV-positive individuals.
- Routine testing for HIV, HCV (HBV for unvaccinated) and other infections including tuberculosis.
- This needs to be linked to referral and treatment provision for those found to be infected, including the new direct-acting antiviral treatments for HCV that are now available.
- Health promotion focused on safer injecting behaviour; sexual health, including condom use; and disease prevention, testing and treatment.
- Developing proactive, multi-component approaches that are adapted user needs and local conditions.

European picture

- Of the 30 countries monitored by EMCDDA, all except Turkey provide clean injecting equipment free of charge via specialised outlets. However, there are considerable differences in coverage, indicating a need to increase service provision in some countries.
- All EU countries provide OST but coverage in some remains low, including countries which report risk factors for HIV or hepatitis C infection among injecting drug users.
- An increasing number of European countries have adopted, or are preparing, hepatitis C strategies and alongside this new direct-acting antiviral treatments for HCV are being introduced in some countries with the aim of eliminating the infection.

Understanding the problem and key objectives for responses

In the 1980s and 1990s transmission attributed to injecting drug use was the main route of HIV infection in Europe. Since then, increased availability of harm reduction and treatment interventions, such as syringe provision, OST and combination antiretroviral therapy, and a decline in the prevalence of injecting drug use, have been accompanied by a dramatic fall in notified HIV infections attributed to drug injecting. Nevertheless, injecting drug use remains an important mode of HIV transmission in some EU countries, and sporadic outbreaks continue to occur in other countries. In addition, despite decreases over recent years, more than 1 in 10 new AIDS cases in the European Union are still attributed to injecting drug use. This may signal late diagnosis or bad case management, both of which are avoidable causes of harm to patients. Many of these cases were reported in Greece, Latvia and Romania, where HIV testing and treatment responses may require strengthening.

Infection with the hepatitis C virus (HCV) is highly prevalent among injecting drug users in Europe. Infection is often asymptomatic, and many of those infected are unaware of their infection status. The virus can cause both acute and chronic hepatitis, with an estimated 75–80 % of those infected going on to develop chronic infection. Chronic hepatitis C can lead to severe liver disease, such as cirrhosis and cancer, which may result in death. The prevalence of HCV antibodies (a marker of having been infected by the virus) among national samples of people who inject drugs is very variable, but in 2014/15, rates in most national samples were above 40 %.

Infection with the hepatitis B virus (HBV) is less common, as an effective vaccine is widely used in national immunisation programmes. However, people who use drugs may be missed by regular campaigns. Good data are lacking but of the seven countries with national estimates, between 2.2 % and 11 % of people who inject drugs were infected with hepatitis B. HBV may be transmitted through sharing injection equipment, sexual contact, or from mother to child (in pregnancy, and during and after birth).

Drug injection also carries a risk for other infectious diseases, such as wound botulism and anthrax. Marginalised groups, including people with serious drug problems, whether or not they inject, may also be at increased risk of contracting infectious diseases such as tuberculosis. Drug injecting may cause damage to veins and associated circulatory problems. For example, injecting of drugs that come in tablet form, such as buprenorphine, may a number of potentially serious health problems.

Although opioids are the predominant drugs injected in Europe, other drugs, such as amphetamines, mephedrone and anabolic steroids, are injected by sizeable numbers of people. The same risks of infection and other harms associated with injecting apply to them. Regardless of which drugs are injected, the major public health goal is the same — the reduction of transmission of infectious diseases acquired through sharing contaminated syringes, needles and other injecting equipment.

This may be achieved through a combination of two broad approaches. Firstly, seeking to reduce the number of unsafe injecting occasions that occur by providing effective drug treatment, and sufficient, readily accessible supplies of clean injection equipment, to eliminate the need for sharing used equipment. The second approach aims to reduce the number of people who are infected, by treating those who have the condition and by vaccinating uninfected people at risk of infection.

Response options

The concerns about the spread of HIV and AIDS in the 1980s and 1990s prompted the development of needle and syringe programmes and other harm reduction approaches. The main interventions available to prevent and control the spread of infections among people who inject drugs are highlighted in the box on good practice (page 60). Treatment for opioid dependence also plays an important role in preventing the spread of HIV and viral hepatitis and is discussed in section 2.2. People in OST inject less frequently and engage in less risky injecting behaviour. This section considers other interventions to prevent blood-borne and other infections.

Needle and syringe programmes

There is moderate quality epidemiological evidence that needle and syringe programmes may reduce HIV transmission among people who inject drugs. There is similar evidence, but not quite as strong, that needle and syringe programmes may also reduce HCV transmission. However, to have an impact on population rates of HIV and HCV transmission it is necessary for needle and syringe programmes to be provided at a sufficiently large scale and in combination with other responses, such as treatment. In addition to needle and syringe provision, there is also evidence that providing other types of equipment, for example, sterile cookers or filters, reduces injecting risk

Good practice for controlling infectious diseases among people who inject drugs

Key intervention components are:

- **Injection equipment**: Provision of, and legal access to, sterile needles, syringes and other equipment free of charge, as part of a multi-component approach that includes harm-reduction, counselling and treatment programmes.
- **Vaccination**: Immunisation against hepatitis A and B, tetanus and influenza as well as pneumococcal vaccination for HIV-positive individuals.
- **Drug dependence treatment:** Opioid substitution treatment and other effective forms of drug dependence treatment.
- **Testing**: Routine voluntary and confidential testing with informed consent for HIV, HCV (HBV for unvaccinated) and other infections including tuberculosis, linked to treatment referral.
- **Infectious disease treatment**: Antiviral treatment for those who are infected with HIV, HBV or HCV. Anti-tuberculosis treatment of active tuberculosis cases, prophylaxis for latent cases and treatment for other infectious diseases when clinically indicated.
- **Health promotion**: Health promotion focused on safer injecting behaviour; sexual health, including condom use; and disease prevention, testing and treatment.
- **Targeted delivery of services**: Services should be combined and delivered according to user needs and local conditions through outreach and fixed sites offering drug treatment, harm reduction, counselling and testing, and referrals to general primary health and specialist medical services.

The combination of these interventions enhances their effectiveness.

Adapted from: European Centre for Disease Prevention and Control and European Monitoring Centre for Drugs and Drug Addiction. *Prevention and control of infectious diseases among people who inject drugs.* Stockholm: ECDC; 2011.

behaviours. The provision of filters may be particularly important in countries where people inject substances that come in the form of tablets, such as buprenorphine, and can result in a range of health complications that can be difficult and expensive to treat.

Testing and treatment provision for HIV and viral hepatitis

Treatment of HIV and HCV infection is effective in people who inject drugs (moderate quality evidence). Stigma and marginalisation remain important barriers to testing and treatment for blood-borne virus infection among people who inject drugs and may delay diagnosis and treatment. For example, in 2015, 58 % of newly notified HIV infections related to injecting were diagnosed late, compared with 47 % for all routes of transmission. Early diagnosis and initiation of anti-retroviral therapy reduces morbidity and mortality, offering infected people a greater chance of a normal life expectancy and potentially reducing HIV transmission to others. The policy of 'test-and-treat' for HIV, when anti-retroviral therapy is started directly after a HIV diagnosis, is therefore important for addressing HIV infection among people who inject drugs.

In many countries, community-based, low-threshold drug services offer testing for infectious diseases. EU minimum quality standards for drug treatment promote voluntary testing for blood-borne diseases at community agencies and counselling about risk behaviours and assistance in managing illnesses. These services can increase rates of vaccination against hepatitis A and B.

Early detection of HCV infection and treatment with the new highly effective direct-acting antiviral drugs has considerable potential to prevent liver disease and deaths (Figure 2.5). A systematic review of the evidence suggests that many infections go undiagnosed and untreated among people who inject drugs. There also remains a need for more empirical data and evaluations of the impact of scaling up hepatitis C treatment among people who inject drugs in order to demonstrate how to maximise health gains in this area.

The enhancement of treatment uptake is important for people who inject drugs, and effective treatment options need to be available and easily accessible for this population group. The co-location of hepatitis C treatment and opioid substitution treatment is likely to facilitate user access. Improving treatment adherence among people who inject drugs can also be improved. Case management, support services and the provision of education and training to improve health- and HCV-literacy among people who inject drugs and service providers are likely to be of benefit here.

Scaling up hepatitis C treatment is essential in order to reduce the prevalence and transmission of HCV infection among people who inject drugs. European clinical guidelines recommend that all patients with chronic liver disease from HCV infection should be considered for therapy, regardless of disease stage. They also recommend that treatment be provided without delay to individuals at risk of transmitting the virus, such as people who inject drugs. Ideally, this should be tailored to individual needs and provided in a multidisciplinary setting.

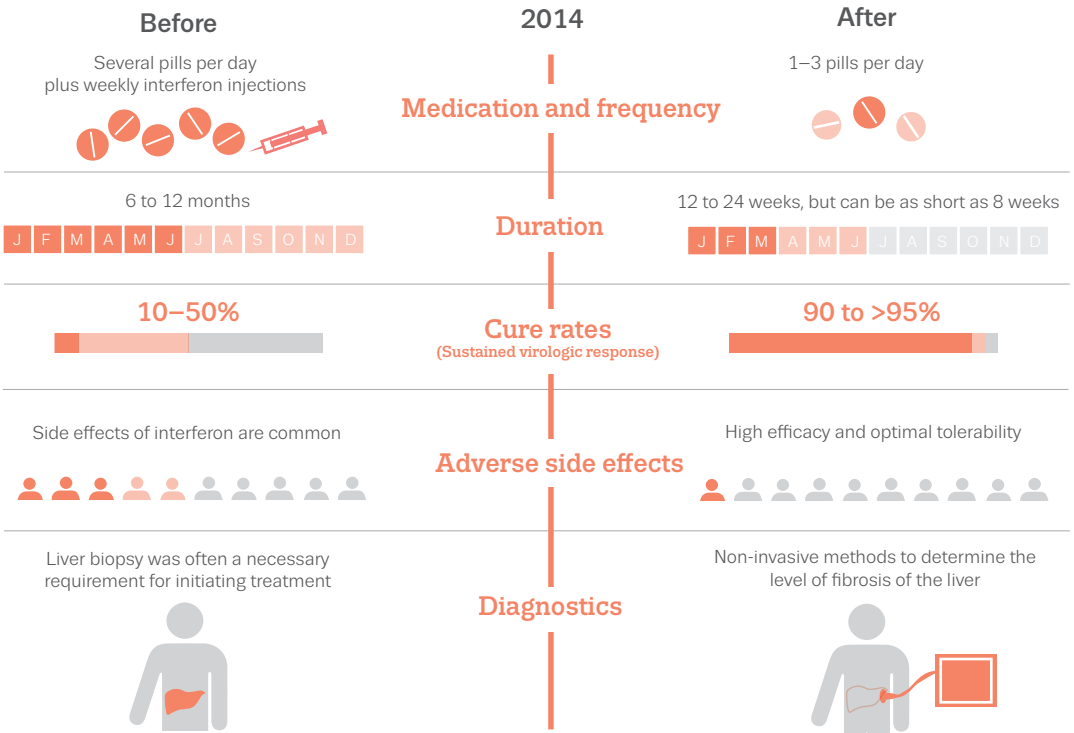
New all-oral combinations of direct-acting antiviral drugs can eliminate HCV infection in more than 90 % of cases in 8–12 weeks. These are becoming the first-line treatment for HCV infection because they are safe and effective. Hepatitis C can now be safely treated in people who inject drugs, and access and referral pathways need to be extended, including through offering the treatment in specialised drug services in community settings to increase uptake and availability.

Treatment for hepatitis B virus (HBV) infection, unlike hepatitis C treatment, is long-term and does not eliminate the virus. Universal vaccination of children for hepatitis B and vaccination campaigns targeting high-risk groups mean that hepatitis B should become increasingly rare in the future. However, as vaccine coverage of populations of injecting drug users can be poor, they need to be viewed as a group appropriate for additional screening and vaccination using the WHO-recommended Accelerated Schedule. Vaccination should be offered to those who inject drugs at all service contacts, whether at low-threshold harm reduction facilities, treatment services or in prisons (see section 4.1).

It is important that services are provided within a co-ordinated multi-component programme in order to maximise effectiveness. The programmes also need to be tailored to the needs of different groups of people, who may have different patterns of injecting drug use.

FIGURE 2.5

Hepatitis C treatment before and after the advent of direct-acting antiviral agents



Establishing links between drug and sexual health service providers may be particularly important for responding effectively to the spread of infections related to the injection of stimulants and other drugs by men who have sex with men. Prevention interventions for this group include testing and treatment of infections, health education and the distribution of prevention materials, including condoms and sterile injecting equipment. To prevent sexually acquired HIV infection, pre-exposure prophylaxis is an additional option for populations at highest risk.

Drug consumption rooms can also play a role in preventing the spread of infectious diseases associated with injecting drug use (see Spotlight on drug consumption rooms, page 156).

What is being done in Europe to prevent the spread of infectious diseases associated with injecting drug use

The provision of interventions to prevent the spread of infectious diseases associated with injecting drug use needs to be considered in the context of the prevalence of risk factors for transmission, such as injecting use and disease prevalence rates and trends. Figure 2.6 provides a summary of available information on some key risk factors and intervention coverage in the European Union, Norway and Turkey.

Opioid substitution treatment

Information on OST provision in the European Union is discussed in more detail in section 2.2 but is also summarised in Figure 2.6. This indicates that there are a number of EU countries with low coverage of OST, needle and syringe programmes, or both; some of which have a number of other potential risk factors for HIV or HCV infection among people who inject drugs.

Needle and syringe programmes

Of the 30 countries monitored by the EMCDDA, all except Turkey provide clean injecting equipment free of charge via specialised outlets. There are, however, considerable differences between countries in the geographical distribution of syringe outlets and in the proportion of injectors covered by needle and syringe programmes. In the 17 countries for which estimates of the number of injecting drug users are available, about half (9 countries) are rated as providing a low number of syringes, through specialised and publicly subsidised programmes, relative to the number of injecting drug users.

Spotlight on … Scaling up hepatitis C treatment to eliminate HCV infection

Cost is a major barrier to a widespread scale-up of new hepatitis C treatments. In 2015, for example, the price of the medication Sofosbuvir in 20 European countries varied between EUR 25 000 and EUR 91 000 for a 12-week course. This means that the cost of treating all adults infected with HCV in these countries would vary between EUR 0.91 million and EUR 31.7 million. These costs could be offset by large future savings from the decreased need for treatment for liver cirrhosis and liver cancers.

The availability of these improved treatments has prompted many European countries to adopt new viral hepatitis strategies, update treatment guidelines and improve HCV testing and treatment. The challenges that remain are low levels of HCV testing and unclear referral and treatment pathways.

Modelling suggests that the provision of hepatitis C treatment alongside high coverage of syringe provision and OST could reduce HCV transmission to negligible levels. To achieve this would require better case-finding and improved access to testing, as well as improved uptake and adherence to treatment. The ideal sites may be 'HCV treatment-in-the-community' services that are integrated with other services for people who inject drugs, including harm reduction and treatment programmes. Rapid testing techniques now make this feasible in a variety of contexts, including low-threshold services and outreach. Where possible, treatment delivery should take place at the same sites in order to improve uptake. These services should collect data on injecting, HCV transmission and HCV prevalence. Hepatitis C case-finding and treatment in prison is also a cost-effective way to reduce infection.

The needs and perspectives of those who inject drugs need to be taken into consideration in the scaling up of HCV treatment services. This will include research among these groups about how to facilitate their engagement, initiation and access to hepatitis C treatment. These studies and evaluation of the impact of scaled-up hepatitis C treatment on rates of reinfection are necessary to assist decision-making on the further roll-out of these treatments.

FIGURE 2.6

Summary indicators for potential elevated risk for HIV and HCV infections among injecting drug users

Low HIV notification rate (< 5 cases per million population) and no evidence of an increase.
No significant trend or statistically significant decrease of HIV prevalence.
National or subnational prevalence levels < 50 % or no significant trend or statistically significant decrease.
Prevalence of injecting drug use low (< 3 ‰).
High coverage (> 50 % of estimated population in opioid substitution treatment).
High coverage (> 200 syringes per estimated injector).

Medium notification rate (5–10 cases per million population) or consistent but non-significant rise in rate at national level.
Consistent but non-significant rise at national level.
National or subnational prevalence levels between 50 % and 60 % or consistent but non-significant rise at national level.
Prevalence of injecting drug use medium (3–6 ‰).
Medium coverage (30–50 % of estimated population in opioid substitution treatment).
Medium coverage (100–200 syringes per estimated injector).

High notification rate (>10 cases per million population) or statistically significant increase (95 % confidence level).
Statistically significant increase in HIV prevalence (95 % confidence level).
National or subnational prevalence levels > 60 % or statistically significant increase in HCV prevalence (95 % confidence level).
Prevalence of injecting drug use high (> 6 ‰).
Low coverage (< 30 % of estimated population in opioid substitution treatment).
Low coverage (< 100 syringes per estimated injector).

Information unknown/not reported/no recent population estimate.

NB: Free provision of sterile injecting equipment through needle and syringe programmes is not available in Turkey. OST for the United Kingdom coverage refers to England only.

Data from such programmes in 25 countries show that over 52 million syringes were distributed in 2014/15. However, this number is a considerable underestimate because data from Germany, Italy and the United Kingdom are not included. Using local data from these countries, it is estimated that more than 100 million syringes are distributed by national schemes annually in the European Union. This figure does not include injecting equipment purchased by people who inject drugs directly from pharmacies.

Testing and treatment

An increasing number of countries have adopted or are preparing specific hepatitis C strategies. Initiatives to tackle hepatitis C directed at testing, counselling and treating people who inject drugs have increased but still appear to be insufficient because HCV prevalence among this group is reported to be at medium or high levels or increasing in 18 of the 23 countries providing information. This is despite the evidence of the effectiveness of hepatitis C antiviral treatment for people who inject drugs. In part this may be explained by the high costs of the new medications, although barriers to detection and treatment for hepatitis C are also likely to play a part. Some of these barriers are being addressed. A new diagnostic tool (the Fibroscan) has been introduced, which should facilitate detection of liver disease, and new medications have reduced both treatment duration and negative side-effects, and therefore should facilitate compliance.

Reducing infections associated with injecting drug use: implications for policy and practice

Basics

- Core interventions in this area include needle exchange, OST provision, testing and treatment for infectious diseases, and health promotion activities.
- Many people who use drugs are unaware of their HCV infection. Testing should be offered as part of the baseline package at any contact with drug services.
- Vaccinating people who inject drugs against hepatitis A and B can substantially reduce these infections and their serious health effects.

Opportunities

- Implementation of an integrated strategy to provide prevention, outreach, screening and the new highly effective oral hepatitis C treatments in co-ordination with harm reduction (including needle and syringe programmes) and drug treatment programmes (including OST) in the community and prisons could reduce liver disease and cancers and potentially eliminate hepatitis C as a public health threat among people who inject drugs.
- Access to and uptake of testing and treatment of infectious diseases and sexually transmitted infections can be increased by developing on-site screening at services for drug users such as drug treatment centres, drug consumption rooms or needle and syringe programmes.

Gaps

- Currently, access to needle and syringe programmes and OST is below recommended levels in many EU countries and needs to be improved. Better data on HCV treatment uptake are also needed to allow assessment of the adequacy of service provision.
- HIV infection in people who inject drugs is often diagnosed late and there are still AIDS cases reported among this group. Enhanced HIV testing, immediate initiation of HIV treatment after diagnosis and improved retention in care are necessary.

Further resources

EMCDDA

- Best practice portal.
- European drug report: trends and developments 2017.
- Hepatitis C treatment for injecting drug users, Perspectives on drugs, 2015.
- Hepatitis C among drug users in Europe: epidemiology, treatment and prevention, Insights, 2016.
- Drug-related infectious diseases in Europe: update from the EMCDDA expert network, Rapid communication, 2017.
- Estimating trends in injecting drug use in Europe using national data on drug treatment admissions, Technical paper, 2015.
- Guidelines for testing HIV, viral hepatitis and other infections in injecting drug users, Manual, 2010.

ECDC and EMCDDA

- Prevention and control of infectious diseases among people who inject drugs, Joint publication, 2011.

Other sources

- UNODC, UNAIDS, WHO. Guidance relating to infectious diseases and injecting drug use (webpage).

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

2.5 Responding to problems related to stimulant use

SUMMARY

Issues

Overall cocaine is the most commonly used stimulant in Europe, though in some countries MDMA, amphetamine or methamphetamine may be the dominant stimulant.

Many of the harms from using stimulants are associated with intensive, high-dose or long-term consumption. Route of administration is an important mediating factor, with both stimulant injecting and the smoking of crack cocaine or methamphetamine particularly associated with more problematic patterns of use. However, acute problems can affect even experimental or occasional stimulant users.

Stimulants may be used functionally, for example, to stay awake when driving, working long hours, or when socialising in nightlife settings. This means that some of the responses appropriate to stimulant use are setting specific, or overlap with more generic public health measures. The settings in which they are used and the fact that stimulants are sometimes used in a sexual context also mean that drug-related responses may overlap with responses to sexual health issues, particularly in some groups.

keywords: stimulants, cocaine, amphetamines, harm reduction, treatment, sexual health

Response options

- Brief interventions, referral to treatment programmes or harm reduction services can be offered when users seek help at emergency departments for problems related to intoxication or high-dose use.
- Stimulant injectors need regular access to needle and syringe programmes because they may inject more often than opioid users during the course of a binge.
- Outreach programmes may be necessary to deliver harm reduction interventions to stimulant users who would not otherwise access services.
- Treatment using psychosocial interventions can be effective for problematic stimulant use. There are no pharmacological treatments with good evidence of effectiveness in treating problematic stimulant users, but some drugs used to treat depression have been shown to help retain amphetamine users in treatment.

European picture

- Cocaine is the main stimulant drug for which people seek treatment in Europe (63 000 people in 2015), with the majority of these cases in Spain, Italy and the United Kingdom. The number of new treatment entrants is stable. A further 7 400 entered treatment for primary crack cocaine problems, mostly in the United Kingdom.
- About 34 000 people entered treatment for problems with use of amphetamine in 2015, and 9 000 for methamphetamine, mostly in Czech Republic and Slovakia. There has been an increase in first-time treatment entrants for amphetamines since 2009.
- Very few people enter specialised drug treatment for MDMA use; harm reduction responses in festival and nightlife settings are more relevant to this group.

Understanding the problem and key objectives for responses

Cocaine is the most commonly used illicit stimulant in Europe. Among regular cocaine consumers, a broad distinction can be made between more socially integrated users, who snort powder cocaine (cocaine hydrochloride), and marginalised users, who are more likely to inject cocaine or smoke crack cocaine (cocaine base) and sometimes use opioids.

In many countries, use of the stimulant MDMA (often marketed as 'ecstasy') declined from a peak in the early to mid-2000s. In recent years, some monitoring sources have shown that both use and the average content of MDMA in tablets has increased. The high amounts of MDMA in some tablets have been linked with harms and deaths.

Amphetamine and methamphetamine, two closely related stimulants, are both consumed in Europe, although amphetamine is more commonly used than methamphetamine. Methamphetamine use has historically been restricted to the Czech Republic and, more recently, Slovakia, although increased use has also been noted in some other countries. In some data sources, it is not possible to distinguish these two substances, so the generic term amphetamines is used to cover both. Both drugs can be taken orally or nasally; injection is a common route of administration among high-risk users in some countries. Methamphetamine can be smoked but this is rare in Europe.

European countries vary in respect of the stimulants most often used. For example, in the United Kingdom cocaine is the illicit stimulant most often used in the past year in the general population, closely followed by MDMA. In Finland, by contrast, similar proportions report using amphetamine and MDMA in the past year and cocaine use is uncommon.

Many of the harms related to the use of stimulants are associated with intensive, high-dose or long-term consumption. Route of administration is also an important mediating factor with both stimulant injecting and the smoking of crack cocaine or methamphetamine particularly associated with more problematic patterns of use. Acute problems can affect even experimental stimulant users, but are likely to be less common when stimulant use is infrequent and low-dose. Although uncommon, some stimulant users engage in high-dose use over extended time periods, sometimes lasting several days. Stimulant 'binges' can result in a range of acute harms including psychosis, aggression and paranoia, and may also be associated with the development of dependence and other longer-term health and social problems. High-dose and long-term stimulant use may cause serious cardiovascular problems, such as strokes, cardiomyopathy and myocardial infarctions.

Problematic stimulant use can be associated with risks to sexual health. Some men who have sex with men engage in 'chemsex', which involves injecting methamphetamine and other substances to enhance sexual desire. Chemsex parties, while apparently uncommon, have been reported in a number of major European cities. They have become a concern in several European countries because of the potential spread of HIV and other sexually transmitted infections. Some studies have also reported high rates of sex for money or sex for drugs exchanges among women with crack cocaine problems. This illustrates a potentially more general issue relating to stimulant and other substance use among women and men engaged in sex work and the need to develop responses that can address both substance use and sexual health risk behaviours. In addition, the role of drugs in sexual exploitation, including drug-facilitated sexual assault, is an area of concern. Information on the extent and nature of these problems, however, is limited.

Stimulants may be used in combination with alcohol and other illicit drugs. Some of these combinations, for example, cocaine and alcohol, can result in increased health risks. Stimulant users may also use other drugs to manage negative after-effects of use and to help induce sleep. These drugs include alcohol, cannabis and benzodiazepines. For some more problematic users, opioids may be used for this purpose. This polysubstance use can expose stimulant users to additional risks. For this reason responses in this area will often need to consider interactions between the use of stimulants and other drugs (see section 2.8 on polydrug use).

Response options

Stimulant use often occurs in recreational settings such as nightlife venues or music festivals. Prevention and harm reduction programmes for users of MDMA and other stimulants in these settings are discussed in section 4.2.

People experiencing acute problems as a result of stimulant use may seek help from emergency medical services. The interventions offered will be dependent on the symptoms reported but often a brief medical or psychological intervention may be sufficient. It is important, however, that emergency services are aware that it may be necessary to provide referral to appropriate treatment, harm reduction or

sexual health services. The potential of stimulants to cause or aggravate cardiovascular problems also means that those responding to cardiovascular emergencies may need to consider the role drug use may have played in the event.

Harm reduction for problems arising from stimulant use

People who inject stimulants are likely to need greater access to needle and syringe programmes because they may inject more frequently than opioid users (see also section 2.4 on reducing the spread of infections associated with injecting drug use).

Responses for this group often include some form of outreach and the provision of sterile injection equipment, condoms, information on safer injecting, basic hygiene, vein and wound care, and antibacterial creams and ointments. These would appear to be appropriate responses but there is not yet a strong evidence base in this area. Whereas there is some limited evidence that outreach programmes can help stimulant injectors to reduce medical problems associated with injection, such as skin infections, there is a lack of robust data to show a measurable reduction in injecting or sexual risk behaviours resulting from these approaches. Given that stimulant-related problems appear to be growing this is an area for further research and service development.

There is limited evidence that multisession psychosocial and behavioural interventions may reduce sexual risk behaviours among people who use drugs. For people who use stimulants by smoking, the provision of clean crack kits to prevent sharing, information, education and communication material and outreach activities may be beneficial, but more research is needed into their effectiveness. An innovative intervention by low-threshold services for methamphetamine users in the Czech Republic has been to distribute empty gelatine capsules to encourage users to consume the drug orally and reduce injection-related risks of HIV and HCV infection. This intervention needs to be evaluated in order to explore its practicality and impact on behaviour.

Although uncommon in Europe, crystal methamphetamine smoking is a form of stimulant use that is particularly associated with problems, including respiratory damage and dental corrosion. Stimulant problems have the potential to evolve and develop rapidly. For example, methamphetamine smoking has been reported in Athens among opioid drug users since 2011. More recently methamphetamine injecting has begun to emerge, mainly in other urban areas outside the capital. The use of crystal methamphetamine is associated with a range of problems including aggressiveness, insomnia, skin inflammations and rashes, weight loss and deaths. In Greece, the capacity of low-threshold drug and mental health care services to respond to the needs of these users has been restricted by limited service availability in the urban areas outside Athens.

Given the link between stimulant use and risky sexual behaviour, sexual health services need to be alert to drug use among their clients. Drug services also need to assess the sexual health of their clients. These issues are discussed in more detail in the Spotlight on addressing sexual health issues associated with drug use (page 72).

Treatment for stimulant use problems

People who seek treatment for stimulant use problems primarily use either cocaine or amphetamine. Ecstasy users rarely seek treatment. People entering treatment for problems related to cocaine can be, in very simple terms, divided into three groups:

- powder cocaine users, who use cocaine intranasally (insufflation or snorting) on its own or in combination with cannabis and/or alcohol;
- crack cocaine users, who use crack cocaine often in combination with other drugs including heroin;
- polydrug users, who often use cocaine and heroin or other drugs and may inject.

To some extent these groups require different approaches. Primary powder cocaine users are usually more socially integrated than those smoking crack cocaine or using opioids. They are more likely to have stable housing and a regular income. People seeking treatment for problems associated with use of amphetamines are similarly heterogeneous in their social conditions and modes of use.

There are no pharmacological treatments with good evidence for their effectiveness in treating problematic stimulant users. Treatment approaches or interventions that have been shown to be useful are described in the evidence overview box below. Systematic reviews of clinical trials of medications for treating cocaine users have produced a mixed picture. Antipsychotic medications are the most successful in assisting users to cease use and overcoming cravings. Disulfiram, a drug used for alcohol addiction, is acceptable to users. None of these medications, however, has been found to be as effective in treating cocaine problems as OST is in treating opioid dependence. Trials of pharmacotherapies (e.g. buproprion, modafinil) for methamphetamine have found them to be no more effective than placebo.

Overview of the evidence on … treatment for problematic stimulant use

Psychosocial interventions can reduce cocaine use by influencing mental processes and the behaviours related to the addiction.

Disulfiram for alcohol addiction and antiparkinsonian medications may help cocaine users to reduce their use.

Psychosocial treatments (including contingency management) show positive short-term efficacy for crack abuse/dependence.

Some drugs used to treat depression (fluoxetine and imipramine) have been found to retain amphetamine users in treatment in the short and medium term.

For pregnant women, medications to assist detoxification from stimulants can be used but are only recommended for those experiencing withdrawal symptoms.

Psychosocial interventions can be effective for cocaine users. Contingency management may be effective when combined with medication. One systematic review showed that cognitive behavioural therapy interventions reduced treatment drop-out and use of cocaine. The effect was stronger when they were combined with contingency management. A recent Belgian study reported that after six months of contingency management and community reinforcement, abstinence rates among cocaine users were three times higher than in those who received standard treatment.

What is being done in Europe to respond to problems related to stimulant use

In Europe, cocaine treatment usually takes place in outpatient settings that primarily treat opioid users. Some people seeking treatment for stimulant use may be reluctant to use these services because they may not see them as meeting their needs and do not identify with the opioid clients who may predominate at some services. Modifying service delivery models to be more in line with client needs may make them more attractive. An Irish pilot project on cocaine treatment, for example, found that providing evening sessions in outpatient facilities increased attendance by people who use cocaine. Outreach work can also be conducted immediately before and after the weekend, when cocaine use generally is higher.

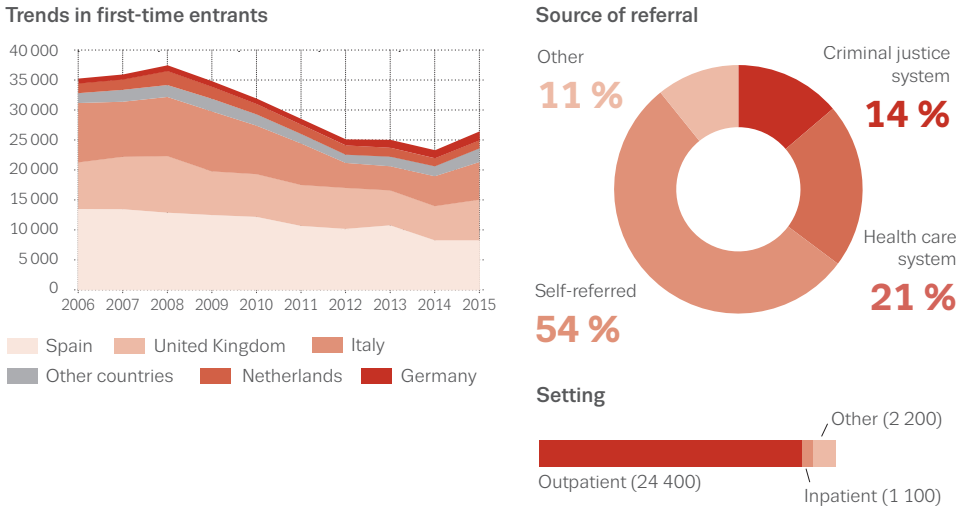
Spain, Italy and the United Kingdom accounted for three quarters (74 %) of all reported treatment entries related to cocaine in Europe in 2015. Overall, cocaine was the primary drug for around 63 000 clients entering specialised drug treatment, of whom around 28 000 were first-time clients. After a period of decline, the overall number of cocaine first-time treatment entrants has been stable since 2012 (Figure 2.7). In 2015, 7 400 clients entering treatment in Europe reported primary crack cocaine use. The United Kingdom accounted for almost two-thirds (4 800) and Spain, France and the Netherlands together (1 900) for most of the remainder.

Approximately 34 000 clients entering specialised drug treatment in Europe in 2015 reported amphetamines as their primary drug. Around 14 000 were first-time clients (Figure 2.8). Primary amphetamine users accounted for more than 15 % of first time treatment entrants in Bulgaria, Germany, Finland, Latvia and Poland. Treatment entrants with primary methamphetamine problems were concentrated in the Czech Republic and Slovakia, which together accounted for 90 % of the 9 000 methamphetamine clients entering specialised treatment in Europe. Overall, the number of first-time treatment entrants reporting amphetamine or methamphetamine as their primary drug increased between 2006 and 2015 in most countries. Trends in the proportion reporting injecting amphetamines need to be monitored because the decrease in injecting seen among users of other substances is not evident among amphetamine users.

Although use of methamphetamine among the general population is low, use of the drug by some groups within the population raise particular challenges and prompt different responses from service providers. Services currently involved in responding to these problems include mental

FIGURE 2.7

Cocaine users entering treatment in Europe: trends over time and source of referral in 2015



NB: Source of referral and settings are for all treatment entrants with cocaine as primary drug based on most recent available data for all countries. Trends in first-time entrants are based on 23 countries. Due to changes in the flow of data at national level, data since 2014 for Italy is not comparable with earlier years.

health, low-threshold, drug treatment, youth and sexual health services. For example, in the Czech Republic, where injection is the most common route of administration of methamphetamine, mental health care and residential treatment programmes using a therapeutic community model have been at the centre of the response. Services are also available that offer information and harm reduction advice to methamphetamine users.

In several northern European countries where methamphetamine use has emerged among existing stimulant users, the same type of treatment is offered to users of amphetamine and methamphetamine, generally psychosocial interventions. Methamphetamine is also reportedly used by recreational drug users, including clubbers, in several countries. Youth services have sometimes been involved in delivering responses to these users.

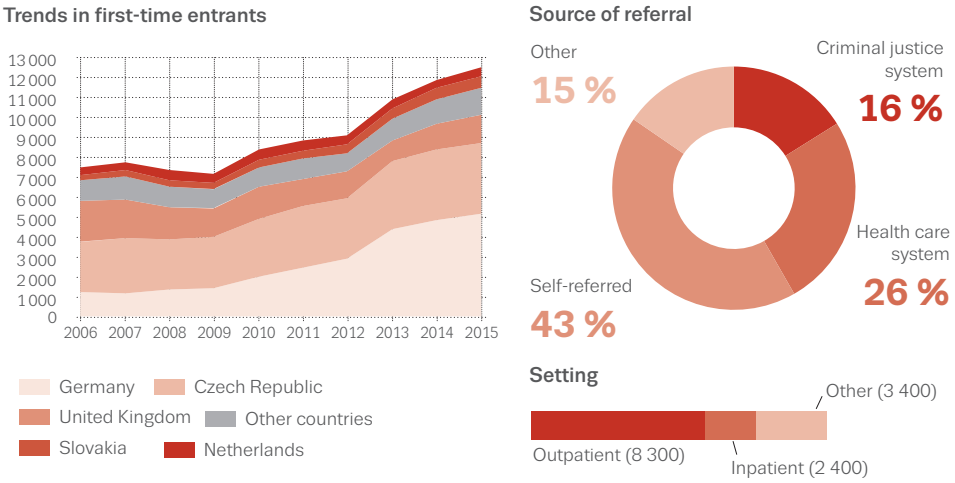
In addition, in response to use associated with 'chemsex', initiatives have been developed specifically for methamphetamine users. These include multidisciplinary services providing drug and sexual health services or improvements in links between services (see Spotlight on addressing sexual health issues associated with drug use, page 72).

Interventions that have been implemented in Europe to reduce the risks associated with methamphetamine injection include the provision of smoking equipment or safer-smoking kits through needle and syringe programmes. Health promotion initiatives tend to focus on general safety issues and self-care, including mental health, physical and sexual health.

MDMA use is rarely cited as a reason for seeking specialised drug treatment. In 2015, it was reported by less than 1 % (around 900 cases) of first-time treatment entrants in Europe.

FIGURE 2.8

Users of amphetamines entering treatment in Europe: trends over time and source of referral in 2015



NB: Source of referral and settings are for all treatment entrants with amphetamines as primary drug based on most recent available data for all countries. Trends in first-time entrants are based on 23 countries.

Responses for stimulant users: implications for policy and practice

Basics

- Problems associated with stimulant use vary depending on patterns of use, the groups who are using and the setting in which they are used. Responses therefore need to be tailored to the local patterns of use and problems experienced.
- Core responses for stimulant problems currently include psychosocial treatment or brief interventions and harm reduction for people who inject drugs.

Opportunities

- Improving links between sexual health and drug treatment services could improve efficiency and effectiveness of both.

Gaps

- Harm reduction interventions for stimulant users need development and evaluation.
- Research into effective pharmacological treatments for stimulant dependence should be prioritised at EU level.

Spotlight on … Addressing sexual health issues associated with drug use

What is the nature of the problem?

There is a substantial prevalence of drug use, particularly stimulant use, among the clientele of sexual health services and sexual health problems are common among persons treated for drug problems. Links between sexual health and drug problems can arise in a number of ways:

- Drug use can intoxicate and disinhibit and lead to unintended sexual activities — consensual or not — that result in negative consequences, such as regret, mental distress, sexually transmitted infections or unwanted pregnancy.
- Some people with drug problems may engage in sex work to fund drug use, increasing their risks of sexually transmitted infections and assault.
- Drugs may be used before or during sex to enhance sexual performance and pleasure ('chemsex') increasing risks of sexually transmitted infections, sexual assault and the development of drug dependence. Reports of this pattern of behaviour among some groups of men who have sex with men have raised concerns in some countries.
- Drugs may be used to cope with the emotional distress arising from a sexual health problem, such as an HIV diagnosis.

In Europe, treatment services for drug and sexual health problems are usually funded separately, have different eligibility criteria and are rarely co-located. This makes it challenging to provide 'joined up' care for people with both types of problems. Each type of service focuses on providing only one type of care, missing an opportunity to address both sets of problems.

What responses are required?

Research has not yet identified a good model for services, although new ones are emerging. In the absence of an evidence base, there is a need to start collecting better data on the extent of the problem in sexual health and drug treatment services in order to:

- identify people with problems related to drug use, including dependence, and sexual health;
- understand their risk behaviours and treatment needs;
- understand where linking or integrating sexual health and drug treatment services may be beneficial, for example, in services for men who have sex with men that have been developed in some countries.

The two types of services also need to share expertise and develop treatment pathways by:

- training sexual health staff to assess drug use and offer brief interventions where indicated;
- training drug treatment staff to assess sexual health and offer brief interventions for sexual problems related to drug use; and
- encouraging services to work together more closely, for example, through joint training events or staff exchanges.

See the Background paper, Joining up sexual health and drug services to better meet clients' needs.

Further resources

EMCDDA

- Best practice portal.
- Statistical bulletin.
- European drug report: trends and developments 2017.
- Emergency health consequences of cocaine use in Europe, Perspectives on drugs, 2014.
- Treatment for cocaine dependence: reviewing current evidence, Perspectives on drugs, 2014.
- Emergency health consequences of cocaine use in Europe. A review of the monitoring of drug-related acute emergencies in 30 European countries, Technical report, 2014.
- Health and social responses for methamphetamine users in Europe, Perspectives on drugs, 2014.
- Exploring methamphetamine trends in Europe, EMCDDA Papers, 2014.
- Joining up sexual health and drug services to better meet clients' needs, Owen Bowden-Jones, Background paper.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

2.6 Responding to new psychoactive substances

SUMMARY

Issues

New psychoactive substances are drugs that are not controlled under the United Nations drug control conventions but which may pose similar threats to health. These drugs include synthetic cannabinoids, opioids, stimulants and hallucinogens. Usually they are marketed as 'legal' replacements for the illicit drug market; while some are also used by small groups who wish to explore them for novel experiences and effects.

The large number of new substances, their diversity and the speed at which they appear is challenging both for monitoring and developing effective and timely responses.

keywords: new psychoactive substances, synthetic drugs, early warning system, hospital emergencies

Response options

- Early-warning and risk assessment supported by data on the chemical identification of new substances from forensic and toxicology laboratory networks.
- Risk communication with authorities, professionals and users related to particularly harmful new substances.
- Inclusion of new substances into effective generic prevention programmes, with specific education and harm reduction messages targeted towards those already using drugs, or at risk of using new substances.
- Training and awareness-raising activities for professionals in prevention, treatment and harm reduction services in order to enhance their competencies in identifying and responding to use of new substances.
- Development of clinical guidelines for the management of acute toxicity caused by new substances.
- Multidisciplinary approaches and the linking up of different services are needed to engage vulnerable groups who may not come into contact with traditional services.

Many of the health and social responses to new substances are adaptations of programmes for 'established' drugs. Responses have tended to target particular groups where problems have been observed. These vary be country but include: recreational stimulant users, psychonauts, men who have sex with men, people avoiding drug tests, and high-risk drug users. There has also been a focus in many countries on strengthening legal responses and restricting the availability of these substances.

European picture

- EU legislation provides a 3-step approach of early warning, risk assessment and control measures that allows Europe to rapidly identify and react to public health threats caused by new substances. The EMCDDA plays a central role in this system by operating the EU Early Warning System and undertaking risk assessments to support national and EU-level responses.
- Multidisciplinary harm reduction approaches are being developed and trialled in which vulnerable groups who may not come into contact with drug services are being engaged, for example, in sexual health settings.
- Clinical guidelines for the treatment of acute intoxications associated with new psychoactive substances are being developed and published. Specific guidance on responding to the use of these substances in prisons and custodial settings is also being developed in some countries.
- Harm reduction information platforms, often coupled with drug checking, are operating in several countries and online.
- Specialist treatment for problems caused by new substances is not well developed in most countries.

Understanding the problem and key objectives for responses

New psychoactive substances are a broad range of drugs that are not controlled under the United Nations drug control conventions but which may pose similar threats to health. These drugs include synthetic cannabinoids, opioids, stimulants and hallucinogens as well as a range of other substances. In the past few years, a number of these substances (such as GHB, GBL, and more recently mephedrone as well as some fentanils and synthetic cannabinoids) have been controlled under the United Nations conventions. Such substances are included in this section because they present similar challenges in developing responses.

Over the last ten years there has been a large increase in the availability of new psychoactive substances in Europe. Many of these substances are intended to circumvent drug laws and are sold as 'legal' replacements for cannabis, heroin, cocaine, amphetamines, MDMA and benzodiazepines. To increase their availability and attractiveness, they have been marketed as 'legal highs', 'research chemicals' and 'food supplements'. New substances are also sold on illicit drug markets under their own street names or passed off as illicit drugs.

As the range of new substances and products has grown, so have the user groups. Initially, most users were people who explored them for novel experiences and effects (often called 'psychonauts'), and groups such as electronic dance music fans and nightclubbers. Users now include broader groups of recreational users, people who self-medicate, people looking to improve how they look or their performance at work, vulnerable groups such as prisoners and the homeless, and high-risk drug users (such as people who inject opioids). These developments are linked to the growing interactions between the markets in new substances and illicit drugs in the past few years.

New substances have been linked to a range of harms. These include a large increase in non-fatal and fatal poisoning and the spread of drug-related infectious diseases and bacterial infections. In some cases, these have manifested in outbreaks which place substantial demands on health care systems. Currently, synthetic opioids, such as fentanils, and synthetic cannabinoids, pose particular challenges to public health.

The appearance of a large number of highly potent new opioids — particularly derivatives of fentanyl — poses new challenges. These drugs are sometimes sold as heroin or other illicit drugs, or counterfeit medicines. The risk of severe and fatal poisoning may be increased, both among high-risk opioid users and other user groups who have not built up a tolerance to opioids. The high potency of these substances may also pose a serious risk though the accidental exposure to family and friends of users and to first responders, forensic personnel, postal services and personnel in custodial settings (see Spotlight on fentanils, page 52).

Synthetic cannabinoids are often highly potent substances that were initially sold as 'legal alternatives' to cannabis. They are increasingly being used by marginalised groups, such as homeless people, or those who wish to avoid drug testing. In prisons, the use and distribution of synthetic cannabinoids has been associated with debt, bullying and intimidation and acute harms causing hospitalisations and deaths (see Spotlight on synthetic cannabinoids, page 81, and section 4.1).

Concerns have been raised in a number of European countries about the use of drugs such as mephedrone, GHB/GBL and methamphetamine by men who have sex with men to enhance, sustain, disinhibit or facilitate sexual pleasure. This practice, sometimes referred to as 'chemsex' is associated with high-risk drug and sexual behaviour (e.g. injecting, unprotected sex, sex with multiple sexual partners), potentially resulting in hospitalisation, overdose, sexually transmitted infections, and infection with HIV and HCV.

Use of synthetic cathinone stimulants has also been noted in some groups of heroin injectors. This can increase the frequency of injection and may be associated with tissue damage and severe bacterial infections.

Response options

It is essential to know which new psychoactive substances are being sold and used in order to respond appropriately. Early warning systems and related monitoring systems can play a central role in early identification and response to emerging harms caused by new substances (see box on the EU Early Warning System). These systems need to be based on data on the chemical identification of new substances from forensic and toxicology laboratory networks related to law enforcement seizures and poisonings) and draw on information from a wide range of sources including law enforcement, poisons centres, hospital emergency departments, and medico-legal death investigations. More novel data sources, such as wastewater analysis, analysis of drug residues from used syringes and drugs collected from amnesty bins, may have potential. Drug checking

services may also potentially support early warning systems and provide a conduit for information, advice and brief interventions to users of new psychoactive substances (see Spotlight on drug checking, page 139).

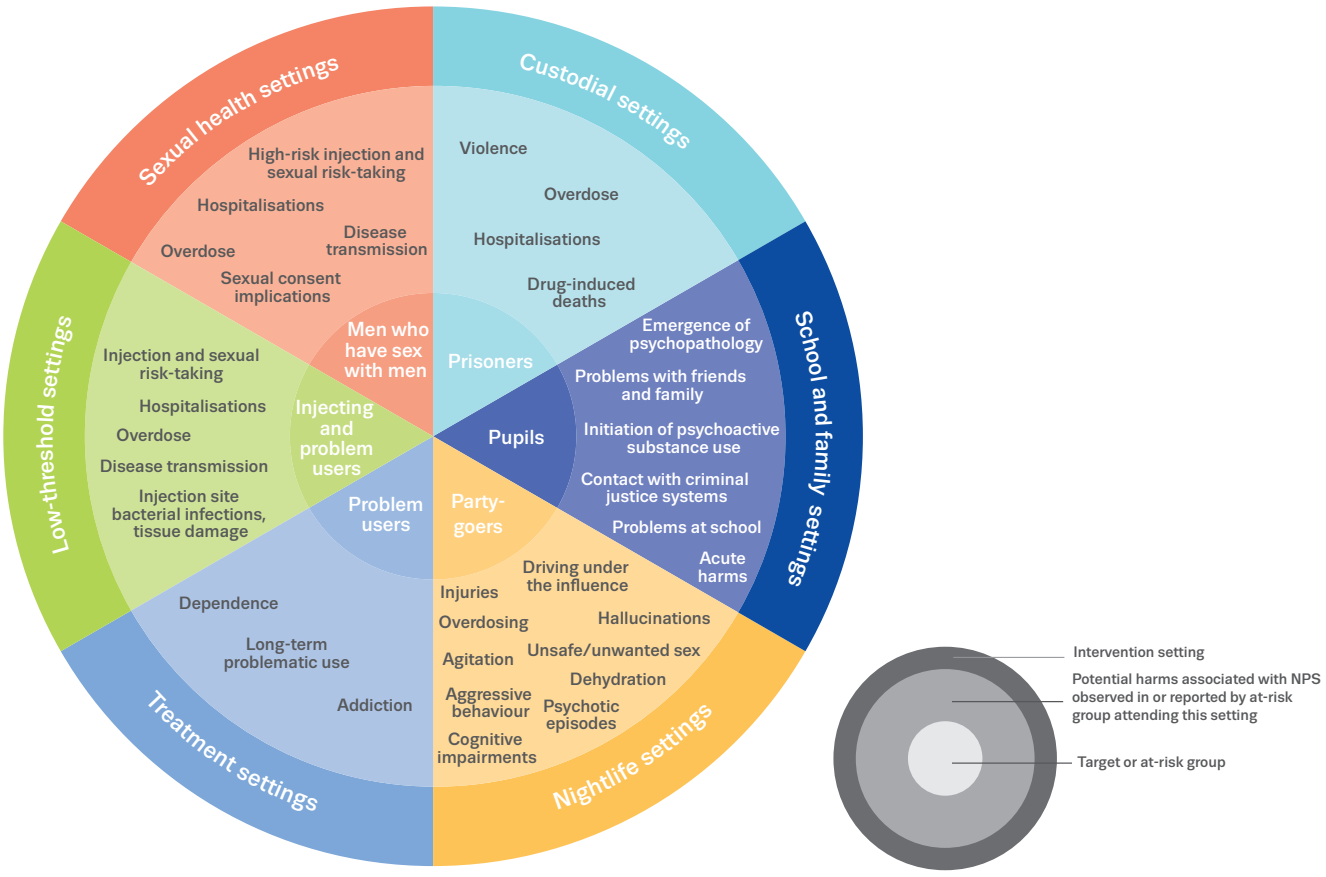
However, there are a number of challenges in measuring and monitoring the use and harms from new psychoactive substances. These include the large number and range of different types of substances available, the speed in which they appear on the market, a lack of capacity to detect and report on acute harms (and link these to a particular substance), and limited information on their pharmacology and toxicology.

Assessment of the prevalence and consequences of the use of new psychoactive substances is complicated because users are often misinformed or unaware of what substances they have consumed. New psychoactive substances may be sold in the form of mixtures, or as branded products whose constituent elements change over time, or instead of controlled drugs or mixed with them. This also poses challenges for responses to these substances. Young people, often in recreational settings such as parties and festivals, if unaware of what new psychoactive substances they are using and of their effects or erroneously believing them to be 'legal' and possibly 'safer' than controlled drugs, may be less able to use harm reduction measures and cope with negative consequences. As a result, our understanding of patterns of new psychoactive substance use remains poor and most information comes from populations and settings where problems have occurred. Nonetheless, this is sufficient to identify a range of settings in which interventions targeting problems associated with new psychoactive substance use may be required (Figure 2.9).

Responses to new substances often involve adapting evidence-based responses to reducing harms for established drugs. Adjustments may need to take account of specific drug effects, socio-cultural characteristics of risk groups (e.g. party-goers, men who have sex with men) or particular risk behaviours (e.g. increased access to syringes

FIGURE 2.9

Intervention settings and the potential new psychoactive substance-related harms and risk behaviours that may be reported by or observed among at-risk groups



for high injecting frequency). Alongside early warning systems, responses may include innovative regulatory controls, specialised treatment, educational responses (e.g. dissemination of educational material), harm reduction measures (e.g. provision of sterile injecting equipment) and medical treatment of overdoses (e.g. symptomatic management of acute emergencies and the administration of antidotes). As health care professionals may feel unskilled when first confronted by problems caused by new substances, basic knowledge sharing, competence building and highlighting how to transfer existing competencies to new substances may also be important.

Prevention interventions which stress skills and coping strategies are effective, independently of the substance. School-based prevention activities related to new substances should only be delivered as part of generic prevention programmes for which there is evidence of effectiveness. Components incorporating discussion of new substances might focus on providing accurate descriptive and injunctive norms. For example, based on local data, this may include messages such as, 'very few people use new substances' and 'young people like you say they don't want to take risks with unknown new psychoactive substances'). More specific education and harm reduction related to new substances is most appropriate for target groups and individuals who are either already using drugs, or at increased risk of doing so.

A particular challenge is delivering interventions to hard-to-reach populations of new psychoactive substance users who are experiencing significant harms. This includes high-risk drug users (including opioid injectors), men who have sex with men, homeless people and prison inmates. Multidisciplinary responses and collaborations between health providers in different settings (e.g. sexual health clinics, custodial settings and drug treatment centres) are needed to reduce these harms (see, for example, Spotlight on addressing sexual health issues associated with drug use, page 72).

Emerging good practice for responding to new psychoactive substances

- Early warning capacity to identify, assess and communicate on the risks of particularly harmful substances is important for responding to the acute harms associated with new psychoactive substances.
- Develop support and training to empower professionals in existing services to recognise how their skills and competences can be applied to responding to problems associated with new psychoactive substances.
- Development of practice guidelines for addressing problems related to new substances is generally based on responses to other drugs, for example, drug education, professional training, and low-threshold services such as needle and syringe programmes. These responses must be adapted to the harms and needs of different groups of users of new substances.
- Build cultural competence (an understanding of how cultural issues influence patterns of drug use and associated harms) within services to enhance service engagement and uptake.
- Education, including harm reduction, specific to new substances is most appropriate for target groups and individuals who are either already using drugs, or at increased risk of doing so.
- School-based prevention activities related to new substances are best delivered as part of generic prevention programmes for which there is evidence of effectiveness.
- Multidisciplinary approaches and the linking up of different services are needed to engage vulnerable groups who may not come into contact with traditional services (e.g. men who have sex with men who practise 'chemsex' and homeless people).
- The development of responses to new substances needs to be evaluated in order to identify effective interventions to meet the diverse challenges they pose.

Cultural competence (an understanding of how cultural issues influence patterns of drug use and associated harms) is required to ensure service engagement and uptake. This means that services need to be accessible and welcoming to all groups of potential clients. Staff in services seeking to attract people experiencing problems with new psychoactive substances may also need to undergo training to develop the cultural competencies necessary to work with diverse groups of users of new substances, many of whom may not have presented to drug services primarily focused on 'traditional' illicit drugs.

What is being done in Europe to respond to problems associated with use of new psychoactive substances

In Europe, Council Decision 2005/387/JHA provides a 3-step legal framework of early warning, risk assessment and control measures that allows the European Union to rapidly identify and react to public health threats caused by new substances. The EMCDDA is responsible for the first two steps in this system, namely operating an early warning system together with Europol (the EU police agency) and conducting risk assessments (see boxes on EU Early Warning System and risk assessment). The European Commission, European Parliament and Council of the European Union are responsible for control measures.

In European countries, initial responses to the emergence of new psychoactive substances have been predominantly regulatory in nature, using legislative tools to reduce their supply. Health and social responses to the challenges posed by new drugs have been slow to emerge, but are now gathering momentum in Europe. These include a wide range of efforts mirroring the full spectrum of responses to established illicit substances, such as drug education and training activities, user-led consumer protection interventions on the internet, and needle and syringe programmes in low-threshold services.

EU Early Warning System

The early warning step of the Council Decision 2005/387/JHA is known as the European Union Early Warning System on New Psychoactive Substances. The EMCDDA and Europol are responsible for operating the Early Warning System, which is comprised of a multidisciplinary network of 30 national early warning systems of EU Member States, Norway and Turkey, Europol and its law enforcement networks, the European Medicines Agency (EMA), the European Commission and other partners.

The national systems gather information on the chemical identification of new substances from forensic and toxicology laboratory networks. These laboratories analyse samples from seizures made by law enforcement agencies and from poisoning and death investigations. They can also include drug samples collected from users, for example, in nightclubs and music festivals, or test purchased from vendors. These data may be supplemented by information from law enforcement agencies, health care systems, medicine agencies, key informants (such as users, owners and staff of clubs, and organisers of festivals), and open source information (such as media reports and user discussion forums on the internet). This allows the collection, assessment and rapid reporting of event-based information on the appearance of, and harms caused by, new substances found at national level to the EMCDDA.

The EMCDDA collates and analyses this data, as well as data from its other monitoring systems, in order to rapidly detect the appearance of new substances and associated harms. This is then used to produce an analysis which includes technical information and risk communications, including public health alerts. This includes information on chemistry and analysis, manufacture, pharmacology, toxicology, epidemiology, trafficking and distribution of new substances. If the information collected on a new substance reported requires a formal response, then the EMCDDA and Europol undertake a special investigation into the substance leading to the preparation of a report which is presented to the European institutions. Known as a Joint Report, the analysis provided in the report is used by EU decision-makers to determine if a formal risk assessment is required. This marks the final stage of early warning.

EU risk assessment on new psychoactive substances

The second step of Council Decision 2005/387/JHA provides for an assessment of the risks associated with new substances. The risk assessment component supports decision-making on new psychoactive substances at EU level, adding value to national actions in this area.

A risk assessment takes into account all factors which according to the 1961 or 1971 United Nations drug conventions would warrant placing a substance under international control. The EMCDDA has published risk-assessment operating guidelines to provide a sound methodological and procedural basis for carrying out a risk assessment, including providing a conceptual framework for consideration of risk.

The risk assessment process reviews the possible health and social risks of the substance and the implications of placing it under control. The concept of risk includes both the element of probability that some harm may occur (usually defined as 'risk') and the degree of seriousness of such a harm (usually defined as 'hazard'). An assessment of the risk–benefit ratio of a new psychoactive substance is also needed. Various factors, including the question of whether the substance has legitimate uses, such as potential therapeutic benefits, industrial use or other economic value, may be taken into account.

The assessment uses the data reported by the network and identified by the EMCDDA through its other monitoring systems. Risk assessments are based on a broad range of available evidence, including recent unpublished data, the quality of which needs to be appraised. At the risk assessment stage, the prevalence of use of a new substance will usually be low and the majority of the available information comes from forensic and toxicology laboratories, law enforcement agencies and anecdotal reports. Especially important are reports relating to non-fatal and fatal poisonings involving the substance under assessment. As data on the effects of new substances is often extremely limited, part of the assessment involves an analysis of the possible nature and risks of the substance with reference to similar known substances, both controlled drugs and other substances.

At the end of the risk assessment process a report on the substance is drawn up which contains an analysis of the information available, which includes chemistry and pharmacology, dependence producing potential and abuse liability, the health and social risks as well as the involvement of organised crime, and its production and distribution. Since 1997, the EMCDDA has conducted 22 risk assessments on new psychoactive substances. Half of these have been conducted in the past three years, reflecting the growth in the market in recent years.

For more information see Action on new drugs and Publications on the EMCDDA website.

More attention is now being paid to developing targeted education and prevention activities and to training and awareness-raising activities for professionals. Services working in nightlife and recreational settings have tended to integrate their response to new psychoactive substances within established approaches. The internet is also increasingly used to provide information and counselling, including 'online-outreach' interventions to reach new target groups. Examples include drug user-led initiatives, such as forums and blogs, which provide consumer protection information and advice. The impact and accuracy of these services is not known and there is the potential for them to spread misleading information as well as valuable advice. In a few cases, these interventions have been linked with drug testing and pill-checking services, with results and harm reduction messages disseminated online. There is a need for research in the area of risk communication and evaluation of different models of providing information on new psychoactive substances to users.

There is a limited demand in Europe for specialist drug treatment for problems caused by the use of new substances. This may be related to a number of factors, such as poor identification of use, low prevalence of use, and low levels of problematic use. Poor identification of use may reflect under-reporting of use or misreporting of substances — because users do not know what they are consuming — lack of suitable screening and monitoring instruments and low professional awareness of new

substances. Nevertheless, service developments are now seen in some countries.

The emergence of new substances has manifested itself in different ways in individual countries, and national responses reflect these differences. In Hungary and Romania, where injecting synthetic cathinones has been reported, needle and syringe exchange services play an important role. In the United Kingdom, where significant use of mephedrone has been reported, specialist 'club-drug clinics' are engaging with this client group.

Clinical guidelines for responding to acute and chronic health harms are being developed in some European countries, for example, the Neptune Guidelines in the United Kingdom.

Responding to new psychoactive substances: implications for policy and practice

Basics

Core interventions in this area include:

- Early warning systems to monitor new substances on the market and the harms they cause. These need to be supported by the chemical identification of new substances by forensic and toxicology laboratory networks.
- The provision of training material on new substances for health professionals and the creation of knowledge exchange platforms for clinicians, health care and social workers at local and national level.
- Interventions addressing the use of new substances based upon responses to established drug groups, but adapted appropriately to account for the nature and patterns of use of the new substances, the different user groups and contexts of use.

Opportunities

- National health authorities should be encouraged to develop new psychoactive substance guidelines, including on overdose management, or translate and adapt existing ones, such as the UK-based NEPTUNE guidelines, to national needs.
- Analytical and toxicological testing and risk assessment capacities need to be enhanced and results disseminated in a timely and usable way to both risk groups and relevant professionals.
- Services need to be developed to address the specific issues of use of new psychoactive substances among some particular groups such as homeless people, prisoners and people who inject drugs.

Gaps

- The effectiveness of the adapted interventions now being used for responding to new substances should be evaluated.
- The impact of different ways of communicating the risks associated with new psychoactive substances is not well understood. Therefore there is a need to develop and strengthen the evidence base with respect to risk communication.
- To improve the targeting and development of appropriate responses, better epidemiological data on the extent, motivations for use and patterns of use and how they change over time is needed as well as fundamental research (pharmacology and toxicology).

Spotlight on ... Synthetic cannabinoids

What are they?

Synthetic cannabinoids (or synthetic cannabinoid receptor agonists) is the name given to a diverse range of substances that act on the same brain receptors as tetrahydrocannabinol (THC), the main psychoactive ingredient in cannabis. Since 2008, more than 170 synthetic cannabinoids have been detected in Europe in hundreds of different products, frequently sold as 'legal' replacements for cannabis although their effects are often very different.

Typically, synthetic cannabinoids are sold as 'herbal smoking mixtures'. Synthetic cannabinoids have also been sold as powders and tablets, products that look like cannabis resin and e-liquids for use in electronic cigarettes.

Why is their use of concern?

Many of the synthetic cannabinoids sold on the drug market are more potent than THC. This may explain why the harmful effects of synthetic cannabinoids, such as severe and fatal poisoning, may be more common than for cannabis. The large doses users may be exposed to are likely to be another important factor.

Smoking mixtures are made by spraying synthetic cannabinoids onto plant material. This crude process can result in mixtures that contain large amounts of highly potent cannabinoid, as well as 'hot pockets' within them in which the cannabinoid is highly concentrated. These make it difficult for users to control their dose and they can inadvertently administer a toxic dose. Smoking mixtures have caused a number of mass poisonings in the United States. While outbreaks have been rare in Europe, during 2015 more than 200 people were hospitalised over a few days in Poland after smoking a product called 'Mocarz'. Because these products rarely state the ingredients, most users will be unaware that they are using a synthetic cannabinoid.

The prevalence of use in the general population appears low but may be higher in socially marginalised populations, such as homeless people and prisoners. Synthetic cannabinoids are attractive to these groups because they produce strong intoxication at a relatively low price and, in the case of prisons, are not detected in most routine urine testing (see section 4.1).

Responding to synthetic cannabinoid problems

Early warning systems play an essential role in identifying and responding to harms caused by synthetic cannabinoids. The potential for outbreaks of intoxications and other harms posed by these substances highlights the importance of maintaining and strengthening the identification and monitoring of deaths associated with their use.

Drug services need to focus on the individual, their symptoms, and the setting of use rather than on identifying the specific substance. It is important to recognise that the needs of synthetic cannabinoid users may significantly differ from those of cannabis users.

Prisons may require special approaches to synthetic cannabinoids, which pose both threats to health and security. Data collection on the extent of the problem and developing guidance and training for staff in their management is important. Prison staff need to be prepared to manage the adverse health effects, which in extreme cases may require transfer to hospital, but can also be long-lasting and require ongoing management. Education, harm reduction advice and treatment for prisoners who have developed dependence on synthetic cannabinoids should also be provided.

See Synthetic cannabinoids in Europe, EMCDDA Perspectives on drugs.

Further resources

EMCDDA

- Best practice portal.
- European drug report: trends and developments 2017.
- EMCDDA EWS reports and updates and the Risk assessment reports.
- Health responses to new psychoactive substances, Perspectives on drugs, 2016.
- Health responses to new psychoactive substances, Rapid communication, 2016.
- Injection of synthetic cathinones, Perspectives on drugs, 2015.
- New psychoactive substances in Europe: Innovative legal responses, 2015.
- Drug-checking as a harm reduction tool for recreational drug users: opportunities and challenges, Tibor Brunt, Background paper.
- New psychoactive substances in Europe: legislation and prosecution — current challenges and solutions, 2016.

Other sources

- UNODC. Global SMART programme.
- Neptune group. Neptune clinical guidance, 2015.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

2.7 | Addressing the misuse of medicines

SUMMARY

Issues

Misuse of medicines refers to the use of a psychoactive medicine for self-medication, recreational or enhancement purposes, with or without a medical prescription and outside accepted medical guidelines. It may occur in the context of polydrug use.

Concerns have been growing in many European countries about increasing misuse of medicines, particularly in the light of large increases in deaths from prescription opioid analgesics in the United States. However, there are considerable differences between Europe and the United States with respect to prescribing practices.

The groups of medications that have been associated with misuse include:

- Sedatives and hypnotics including barbiturates, benzodiazepines and benzodiazepine-like drugs such as the z-hypnotics.
- Opioids, including pain relief medications and OST (opioid substitution treatment) medications.
- Stimulants prescribed to treat attention deficit and hyperactivity disorder (ADHD).

These medicines may be obtained by regular prescribing, doctor shopping or visits to multiple pharmacies, diversion of supplies onto the illicit market and internet purchases. One important driver of misuse of medicines is poor prescription practice — this can be over-prescription or, particularly in the case of OST medication, under-prescription, which can result in people seeking to self-medicate. Clinical good practice in the prescription of OST medications reduces diversion and the harms associated with misuse of these medications.

Response options

- Monitoring to establish the extent and nature of the problem is essential in developing appropriate responses. In addition to key epidemiological indicators and pharmacovigilance schemes, other potential data sources include hospital emergency cases of drug-related toxicity, sales statistics and prescription databases, and monitoring on-line forums where these drugs are discussed.
- Prevention approaches include practitioner training and the establishment of quality standards and protocols to improve prescribing practice; controls on availability, such as limiting sales and packaging restrictions and disposal schemes for waste or surplus medicines; using special forms for certain drugs; and not allowing telephone or internet prescribing.
- Drug treatment providers need to be ready to treat people with problems associated with misuse of medicines. This includes recognising the potential for clients presenting for treatment for illicit substances to also be misusing medicines and addressing this as necessary. In addition, since people with primary problems associated with misuse of medicines may be reluctant to seek help from traditional drug treatment services, alternative treatment in primary care may be necessary.

European picture

- Information is limited on current treatment practices in Europe in managing misuse of medicines.
- Work to better understand the extent and nature of the problem and monitor developments is underway and includes monitoring of acute events through sentinel sites (Euro-DEN Plus) and developing wastewater analysis.
- There have been several EU-funded projects, such as CODEMISUSED looking at Codeine Use, Misuse and Dependence, and Access To Opioid Medication in Europe (ATOME) in this field, and there is ongoing collaboration between the EMCDDA and European Medicines Agency.

keywords: misuse of medicines, drug diversion, benzodiazapines, monitoring

Understanding the problem and key objectives for responses

The EMCDDA defines misuse of medicines as the use of a psychoactive medicine with or without a prescription from an appropriate practitioner, clearly outside of accepted medical practice or guidelines, for either self-medication, recreational or enhancement purposes, including in the context of polydrug use.

Misuse of prescription medicines is an increasing concern in Europe, although it appears to be much less common in Europe than it is in the United States. Information from the European Drug Emergencies Network (Euro-DEN Plus), which monitors drug-related presentations in 15 (sentinel) hospitals in 9 European countries, showed that in 2015 almost a quarter of presentations (24 %) involved misuse of prescription or over the counter medicines (most commonly opioids and benzodiazepines). The sampling used for this exercise means that this figure needs to be interpreted with caution. Nevertheless, it suggests that misused medications may be a problem meriting further monitoring in order to understand the extent and patterns of misuse of medicines in Europe.

The majority of these medicines are prescribed according to standard practice and guidelines, often for a limited period to relieve pain, insomnia or deal with surgical or other trauma.

Problems may arise in the use of these medications, such as when people continue to use them after the original problem has passed, use too much or increase their doses beyond therapeutic doses as tolerance develops. In addition, people who have never been prescribed these medicines may also use them for a range of purposes. The misuse of medicines in combination with other drugs can lead to interactions that can increase harms and may result in death.

The following are some common patterns of medicine misuse:

- Some people with anxiety disorders and other psychiatric disorders or pain may misuse medicines to self-medicate these symptoms. Use that is not in line with recommendations may occur among a relatively small proportion of those prescribed these drugs who have developed tolerance or dependence.
- Some people who misuse medicines have no medical reasons for using the drugs and use them for recreational or enhancement purposes, for example, to obtain a high, improve their physique or to facilitate concentration for long periods.
- Many users of heroin or central stimulants also use prescription opioids. Benzodiazepines or z-drugs may also be used to increase the high, postpone opioid withdrawal or to end a stimulant binge. This form of polydrug use can also be a form of self-medication in heroin and stimulants users.

Commonly prescribed medicines that may be misused

Sedatives and hypnotics induce sleep, relieve anxiety and produce euphoria. They include barbiturates, benzodiazepines and non-benzodiazepine hypnotics such as the 'z-drugs' (zaleplon, zopiclone, eszopiclone and zolpidem). Benzodiazepines and z-drugs are popular among people who inject drugs. They may also be used by stimulant users to 'come down' from binges and by heroin users to prolong intoxication and prevent withdrawal. They contribute significantly to overdose deaths in people who use illicit opioids (see box on common drug combinations, page 93).

Opioids include natural, synthetic and semi-synthetic substances that act on opioid receptors to produce pain relief and euphoria. Taken in high doses they can cause respiratory depression and death. They include a range of **pain relief** medications, which may be available on prescription only or without prescription (sometimes called 'over the counter'). Some of these, such as methadone or buprenorphine, are used as **opioid substitute** medications.

Central stimulants — increased prescribing of these medicines to treat attention deficit and hyperactivity disorder (ADHD) has increased their availability and abuse. Central stimulants may be used as 'cognitive enhancers' to stay awake and work for prolonged periods or in the belief that they may improve school performance.

Other drugs include a large and varied group of medicines that do not fall into the above categories. A group currently causing concern with respect to misuse in some European countries are pregabalin and gabapentin, which are prescribed for the control of seizures and treatment of neuropathic pain. A range of other medicines, besides stimulants, may be misused for image and performance enhancement, such as, anabolic steroids, peptide hormones, slimming pills and sildefanil (commonly known by the brand name Viagra).

People who misuse medicines obtain them in a range of different ways, which are becoming increasingly diverse. In the past, availability was almost entirely a result of the diversion of prescription medicines, defined as the unsanctioned supply of regulated pharmaceuticals from legal sources either to the illicit drug market or to a user for whom the drugs were not intended. Diversion can occur at all points in the medicine supply chain: from the original manufacturing site, at the wholesale distributor, in the physician's office or the retail pharmacy or from the patient.

Diversion methods include:

- robberies and thefts from manufacturers, distributors, and pharmacies and institutional drug supplies;
- the 'doctor shopping' phenomenon, whereby individuals consult more than one doctor to obtain multiple prescriptions, or visit multiple pharmacies to circumvent restrictions on purchase quantities;
- theft (including stealing insurance cards to obtain multiple prescriptions), forgery or alteration of prescriptions by patients; and
- the illegal sale and recycling of prescriptions by physicians and pharmacists.

In addition, insecure storage and disposal of medicines in homes and institutions may provide opportunities for diversion.

In recent years a number of technological advances have reduced the opportunities for some forms of diversion. For example, the introduction of electronic record keeping and centralised prescription databases reduces the opportunity for doctor shopping. On the other hand, the advent of online pharmacies has provided another point of access. In addition, it appears that some medicines are being manufactured specifically for sale for non-medical use on the illicit market. Overlaps can exist between the phenomena of medicines misuse and the use of new psychoactive substances as in the case of fentanils (see Spotlight on fentanils, page 52).

Response options

Monitoring

Gaining an understanding of the extent and nature of the misuse of medicines, including prevalence, motivations for use and sources of supply as well as monitoring change over time is essential for developing appropriate responses. However, the diversity of medicines, their sources of supply and the different groups who use them, and variation between countries in prescribing practice and legal frameworks make this a challenging task. This variety also makes it important to clearly define what constitutes misuse, particularly for cross-national comparisons. The extent of the problem needs to be assessed using a variety of data sources. Case reports and time series can detect signals of misuse that require systematic investigations of the extent of the problem. Currently the information on the sources of medicines that are being misused or being seized is very limited.

Population surveys are costly and have decreasing response rates but still provide valuable insights into use. Some information on misuse of medicines is also captured by the EMCDDA's key epidemiological indicators. For example, the numbers of people seeking treatment for dependence on medicines and the number of drug overdose deaths in which medicines were implicated. The EU Early Warning System and drug seizures data can also help identify medicines that are appearing on the illicit market.

Signals of misuse of medicines may also come from national or international databases on adverse drug effects, such as the Eudravigilance database maintained by the European Medicines Agency and WHO's Uppsala Monitoring Centre Adverse Effects Database. These compile data on substances associated with adverse events reported by hospital emergency departments and other sources. They include information on problems associated with medicines taken for 'recreational purpose' alone or with other psychoactive substances. Other sources of information include services working with substance users and data from driving under the influence cases, autopsies and prisons.

Pharmacy sales statistics represents a cheap and efficient way to follow medicine use and trends. Sales data should be monitored by area to obtain information on levels and trends in use. Prescription databases are generally a more costly option and are less easily interpreted. These data arise from health insurance claims and national prescription databases or pharmacy records. They can be analysed to provide information on the extent of doctor shopping and forged prescriptions. Another indicator of potential misuse is when a large proportion of the drug is used by a small proportion of consumers.

Prescription opioids, benzodiazepines and other medicines are often found on the illicit drugs market. They may be obtained by deception, diverted by people who have them prescribed, and stolen from patients, pharmacies or factories. Seizures by the police tap the illegal market and provide an indication of its size.

Monitoring the internet can also help pick up misuse of medicines. Data can be collected from websites in information requests about specific medicines or online reports of misuse. Wastewater (sewage) analysis is a novel approach to drug epidemiology that may give information on the total use of these drugs within a community. Weekly temporal variations in use may indicate how much is used recreationally.

Prevention and treatment of misuse of medicines

Any medicines control system must ensure the availability of medicines for people who need them for medical reasons while minimising the scope for their abuse. The WHO guidelines on access to controlled medicines seek to ensure that drug control measures do not restrict access to medicines for those who need them. Lack of such access is a problem in a number of countries globally, including some in Europe.

The increasing availability of medicines over the internet poses challenges to regulation and will require the development of new responses. Many of these, as is often the case for actions against diversion at the production and distribution stages of supply, will involve law enforcement rather than health and social responses. Key for success here will be a clearer understanding of the sources of the medicines appearing on different markets.

One important driver of misuse of medicines is poor prescription practice. This includes over-prescription but also, particularly in the case of OST medication, under-prescription which leads people to self-medicate. Clinical good practice in the prescription of OST medications has been shown to reduce the diversion and harms associated with misuse of these medications. The use of substitution drugs for the treatment of opioid dependence represents a key evidence-based response to heroin problems in Europe. It is important that good coverage and high quality provision is available to people with opioid dependence problems. This is not always the case.

The diversion of these medicines from their intended use in drug treatment to non-medical use and sale on illicit drug markets can be a problem. An overview of available studies suggests that the use of diverted substances has been associated with three consequences: fatal and non-fatal overdose; an increased incidence of opioid dependence (particularly in jurisdictions where heroin is scarce); and compromising public acceptance of OST.

Nevertheless, although the diversion of OST medications has been described as a growing problem in recent years, there has been little systematic monitoring or data on the extent and nature of the problem. There is therefore a lack of empirical data to inform regulatory decisions and to develop prevention and risk management plans. Nevertheless, a number of interventions have been developed and are currently used in Europe to minimise the diversion of OST medications (Figure 2.10). These include:

- the use of misuse-deterrent formulations, for example, suboxone or the dilution of methadone to discourage injection;
- the development of clinical prescribing guidelines on the supervision of doses for people who are not stable in treatment;
- educating physicians on safe opioid prescribing, including comprehensive initial assessment and regular monitoring of patients, and providing information to patients on safe use, including appropriate storage and disposal;
- electronic medicine dispensers to promote safe opioid prescribing and reduce medical errors;
- control measures such as patient toxicology tests, pill counts and unannounced monitoring;
- regulation at a system level via registers of pharmacy transactions with disciplinary measures to address inappropriate prescribing.

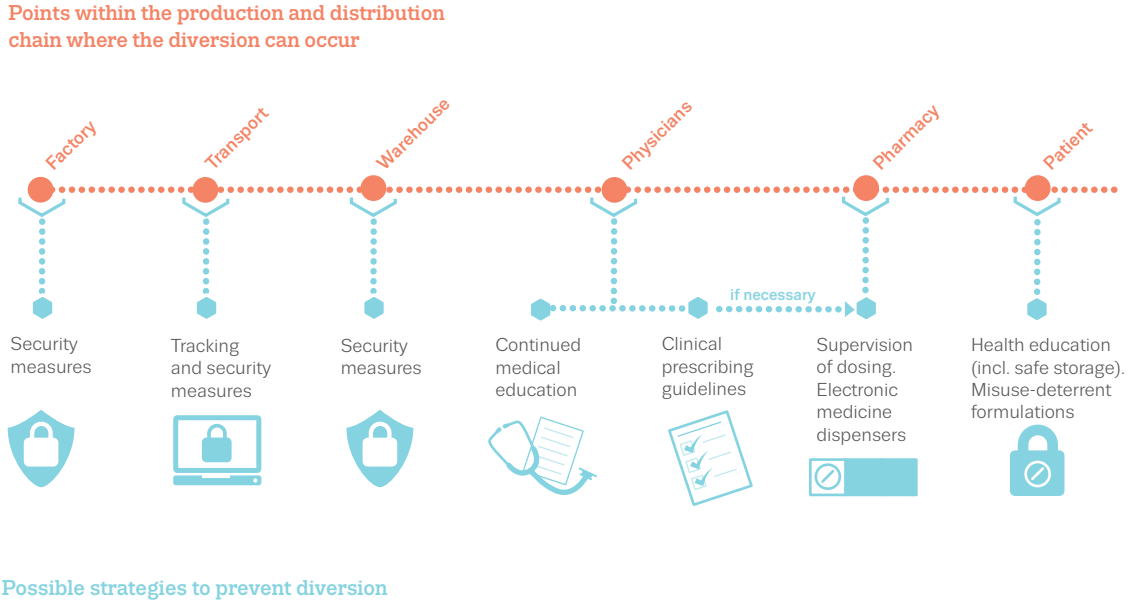
Overview of the evidence concerning … treatment for misuse of medicines

Cognitive behavioural therapy helps to reduce benzodiazepines use when added to tapering dosages in the short term.

Tailored letters sent by family doctors to patients, a standardised interview with GPs plus tapered doses, and relaxation techniques each showed promising results in individual small studies addressing benzodiazepine misuse. These approaches merit further investigation.

It is not clear if motivational interviewing can help to reduce benzodiazepine use.

FIGURE 2.10
Examples of strategies to prevent the diversion of opioid substitution treatment medication



The treatment of misuse of medicines is similar to that for other drug use disorders and needs to be tailored to individual needs. People experiencing problems associated with misuse of medicines may come from a wide range of social groups. Treatment in primary care settings may be more appropriate for some groups who would not readily access drug services. Primary care treatment providers may be less informed about misuse of medicines and many people with problems related to prescription medicines do not see themselves as having a drug problem or do not disclose it to their doctor. Polydrug users may not acknowledge their misuse of medicines so drug treatment providers need to assess these patients for misuse of medicines and provide treatment as needed.

A strong therapeutic relationship between the patient and physician can play an important role in preventing misuse of medicines. In dealing with drug-seeking patients, doctors need to be aware of the reasons patients provide for additional prescriptions, such as lost medicines and prescriptions and, if frequently repeated, investigate further. They should be cautious in prescribing to unknown patients while not withholding medication to patients in need. Primary health care workers need to be trained to deal with these dilemmas.

Primary health care workers need to know the basics of minimal interventions. A simple and effective strategy is to send a letter of concern to patients. Further support may be needed if this fails ('stepped care'), which could include providing pharmacology education, information about the underlying disease and alternatives to pharmacological treatments, and referral to support groups or group therapy.

What is being done in Europe to respond to the misuse of medicines

A number of international organisations and agencies have responsibilities in the area of medicines control including the European Medicines Agency, the World Health Organisation, UNODC and the INCB. The EMCDDA collects information from national legislation that covers prescribing, the substances authorised, prescription regulations, any criteria for enrolment in OST medications and any sanctions for infractions. Substitution registers in each EU Member State help to avoid double prescriptions that can arise when several doctors prescribe in parallel. Use of wastewater analysis for monitoring purposes is also being explored.

Other psychoactive medicines, such as tramadol, benzodiazepines and unauthorised medicines sold as new psychoactive substances or vice versa, are monitored through the EU Early Warning System. It also monitors established (controlled) drugs adulterated with unusual or harmful cutting agents and substances sold as others ('new opioids' sold as benzodiazepines, for example).

The European Drug Emergencies Network (Euro-DEN Plus) monitors drug-related emergency presentations in 29 sentinel centres across Europe to provide unique insight into acute health harms related to drug use and also to medicine misuse.

A number of European research projects are relevant to this area. The completed EU-funded project ATOME (Access To Opioid Medication in Europe) has already been mentioned in section 2.2 above. Another example is CODEMISUSED, a 4-year EU-funded project looking at Codeine Use, Misuse and Dependence, which commenced in 2013. The CODEMISUSED collaboration has collected data on prescribed and over the counter codeine use, misuse and dependence in partner countries. Data were collected by the collaboration from a range of stakeholder groups (codeine patients, prescribers, pharmacists, addiction treatment specialists, drug users, pharmacy customers and addiction treatment patients). Its results will be useful to inform the design of a wide range of response measures, such as patient information, professional training and education, risk detection, surveillance and monitoring, and treatment provision.

Information is limited on current treatment practices in Europe in managing misuse of medicines. Collecting this information is complicated by the fact that much of the treatment is carried out by family doctors or general practitioners rather than drug treatment services and will not be reported to drug treatment monitoring systems.

Misuse of medicines: implications for policy and practice

Basics

Core objectives in this area include:

- Ensuring that regulatory regimes for medicines with abuse potential provide sufficient availability for medical use, while limiting opportunities for misuse.
- Ensuring that health care professionals are trained in correct prescribing guidelines and practice, identifying and treating problematic use, and how to address signs of misuse.

Opportunities

- Develop and provide alternative treatment options to deal with misuse of medicines for patients who are reluctant to seek help in traditional drug dependence treatment settings.
- Promote awareness among patients and the general population of the problem of misuse of medicines in order to destigmatise it and encourage help-seeking.

Gaps

- Investigate and monitor the extent and nature of misuse of medicines locally and nationally, in order to facilitate the development of appropriate interventions, using a wide range of sources: surveys, treatment demand, sales statistics, police seizures, internet trends and wastewater analysis. This should include the relative importance of different sources of medicines on the illicit market as well as understanding how many and which people misuse medicines and for what reasons.

Spotlight on … Misuse of benzodiazepines

Benzodiazepines are a widely prescribed group of medicines used to treat anxiety and insomnia and to manage alcohol withdrawal. Benzodiazepines are often misused by high-risk opioid users in whom use is associated with increased morbidity and mortality.

Much benzodiazepine prescribing to high-risk drug users is for legitimate therapeutic purposes. Nevertheless, there are concerns about the health consequences of using benzodiazepines for longer than a few weeks, their use by polydrug users, and use that is not in accordance with prescribing guidelines. The misuse of benzodiazepines increases the risk of heroin overdose and is associated with higher risks of HIV infection, psychopathology (anxiety and depression), poorer treatment outcomes and poorer social functioning.

Opioid users may misuse benzodiazepines to self-medicate, for example, to treat anxiety or insomnia, to alleviate opioid withdrawal symptoms or the adverse effects of alcohol or cocaine. Benzodiazepines may also be used to prolong the intensity and duration of the effect of opioids, especially when injected. Patients in opioid substitution treatment (OST) using methadone, for example, may misuse benzodiazepines to increase the effects of their opioid medication when under-dosing allows withdrawal symptoms to re-emerge.

Users obtain benzodiazepines from diversion of prescriptions (such as 'doctor shopping'), the illicit market or the internet. A growing number of benzodiazepines that are not approved medicines within the European Union, such as flubromazolam or flubromazepam, have been sold at street level and online.

The combined use of opioids and benzodiazepines is a significant issue among high-risk opioid users in prisons and among those receiving treatment. In 2014 data from 18 countries, of the 102 000 treatment entrants citing opioids as the primary problem drug, 10 000 (11 %) reported benzodiazepines as a secondary problem drug. This may be an underestimate because the use of secondary drugs is often under-reported.

Benzodiazepines are commonly identified in post-mortem examinations of drug-related death cases. Current EMCDDA drug-induced deaths data show that benzodiazepines were implicated (i.e. they were thought to have played a role in the death), often in combination with opioids, in 28 % of the overdose deaths in Scotland, 48 % in France, 30–32.5 % in Portugal and 35 % in Ireland.

What is being done to respond to the issue?

Prescribing and clinical practice guidelines have a critical role to play in the management of benzodiazepine use among high-risk opioid drug users. The EMCDDA's Best practice inventory currently contains six sets of guidelines that address these issues, as part of general or specific guidelines for managing opioid use.

See The misuse of benzodiazepines among high-risk opioid users in Europe, EMCDDA Perspectives on drugs.

Further resources

EMCDDA

- Best practice portal.
- European drug report: trends and developments 2017.
- The misuse of benzodiazepines among high-risk opioid users in Europe, Perspectives on drugs, 2015.
- Strategies to prevent diversion of opioid substitution treatment medications, Perspectives on drugs, 2016.
- EMCDDA activities in the area of hospital emergency data.
- Misuse of medicines in Europe: risks and prevention, Jørgen G. Bramness, Background paper.

Other sources

- WHO. Access to analgesics and to other controlled medications.
- INCB. Availability of Internationally controlled drugs: ensuring adequate access for medical and scientific purposes. Indispensable, adequately available and not unduly restricted, 2015.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

2.8 | Responding to polydrug use

SUMMARY

Issues

The term 'polydrug use' is used to describe the use of more than one drug or type of drug by an individual either at the same time or sequentially. It encompasses use of both illicit drugs and legal substances, such as alcohol and medicines.

Among polydrug users, a broad distinction can be made between socially marginalised users of heroin and a range of other substances — such as cocaine, benzodiazepines and alcohol — and socially integrated people using combinations such as cocaine and alcohol or cannabis and alcohol problematically.

The use of multiple drugs potentially increases risks and worsens dependence. The most severe consequences of polydrug use include fatal and non-fatal overdoses, hepatotoxicity and compromised treatment outcomes.

Response options

Prevention and harm reduction measures for reducing alcohol and drug use in festival and nightlife settings and the misuse of medicines may be helpful in reducing polydrug use.

Assessment processes that can identify problematic polydrug use in treatment clients are important, as it is common among this group. Treatment for other forms of drug dependence can also reduce polydrug use in severe and long-term problem drug users.

European picture

- Information is limited on current treatment practices in Europe in managing polydrug use.
- While it is assumed that polydrug use is hard to treat, large outcome studies in Europe show that treatment significantly reduces multiple drug use among highly problematic users.

keywords: alcohol, polydrug use

Understanding the problem and key objectives for responses

The term 'polydrug use' is used as a catch-all term to describe the use of more than one drug or type of drug by an individual. This can involve use of multiple substances either at the same time or sequentially within a specified time period. It encompasses use of both illicit drugs and legal substances, such as alcohol, new psychoactive substances and medicines. The range of behaviours encompassed by this term is so wide that almost all consumers of psychoactive substances can be regarded as engaging in some form of polydrug use. For this reason, in responding to polydrug use problems, it is necessary to focus on specific populations, drug interactions or risk behaviours.

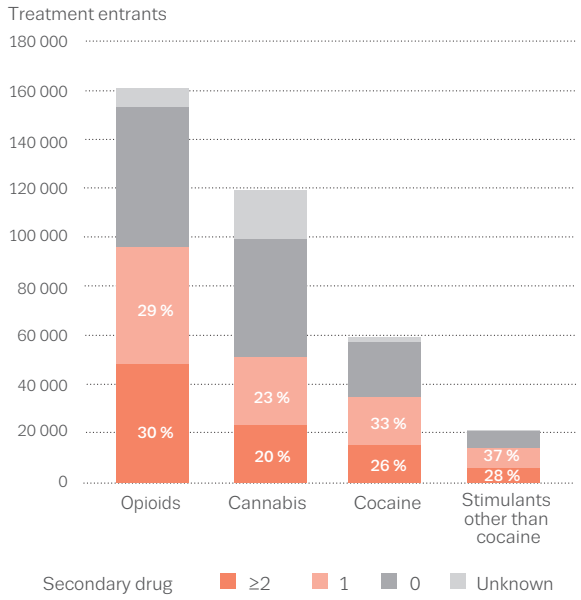
Interactions between different drugs, consumed close together in time, can increase drug toxicity. The effects of some psychoactive substances can increase risky use of other substances. For example, alcohol intoxication can impair judgements about the amount of opioids consumed or the risk of reduced tolerance after leaving treatment or prison. Similarly, the combined use of cocaine and alcohol can increase toxicological risks. The co-use of several substances can also increase the risk of accidents or injuries. Polydrug intoxications including alcohol represent a significant proportion of drug-related hospital emergency presentations.

Polydrug use is very common among people with drug problems who seek treatment (see Figure 2.11). In Europe over half of the people entering drug treatment report consuming several substances in a problematic way — though this may be an underestimate as secondary drugs are not always recorded. Drug interactions that can have important consequences for treatment and health outcomes are often seen in drug treatment populations and may sometimes go unacknowledged. For example, many of those being treated for a primary illicit drug problem will also have problems with alcohol use. Tobacco smoking is also commonplace. Failing to recognise and address these problems is a potential missed opportunity for health gain.

Polydrug use can undermine successful treatment approaches if it is not addressed. For example, concurrent stimulant use can result in a worse outcome for those undergoing OST treatment. Much of the information available on polydrug use is based on treatment entry data. Leaving aside the national differences, overall the most common combinations of drugs recorded among treatment clients in Europe are opioids, as the primary drug leading to

FIGURE 2.11

Polydrug use among clients entering treatment, by primary drug



NB: Secondary drugs are those drugs used in addition to the primary drug (the one causing the most problems to the client), and are substances that cause problems for the client or change the nature of the problem as assessed by the client and the therapist. Most recent data for 28 EU countries (2014 or 2015).

treatment, consumed with cannabis and powder cocaine; cocaine, as primary drug, consumed with cannabis and alcohol; cannabis, as the primary drug, consumed with alcohol and powder cocaine; and stimulants, as the primary drug, consumed with alcohol and cannabis. Recognising these types of polydrug use is important because the use of multiple drugs can aggravate an already difficult condition and be associated with increased risk-taking. The most severe consequences of these forms of polydrug use include fatal and non-fatal overdoses, hepatotoxicity — especially in combination with hepatitis C infection — and compromised treatment outcomes.

Response options in Europe

Some **prevention** approaches used to address misuse of medicines have been found to reduce polydrug use involving the misuse of medicines. In addition, as most effective prevention approaches are non-substance specific they should help reduce polydrug use. In particular, environmental and other prevention approaches, discussed in section 4.2 on festivals and nightlife settings, may address some of the risks associated with the use of alcohol with other drugs in this recreational context.

Common drug combinations: effects and consequences

The risks of drug combinations are influenced by characteristics of the user, such as their tolerance, health status or genetic or phenotypic factors. Impaired liver function may lead to higher drug concentrations in the blood, increasing toxic effects. The quantity and purity of the drugs used and the route of administration have an impact on the effects of drug combinations. Intravenous drug use will lead to higher concentrations in the blood.

The following are some of the better-documented effects of common drug combinations:

Alcohol: Alcohol is found in most polydrug use combinations. It may lead to misjudgements about the amount of other substances used and change the pharmacokinetics of other substances. Long-term, heavy use of alcohol can damage the liver and impair the metabolism of other substances, making it dangerous to consume amounts that would otherwise be tolerated. In nightlife and other recreational settings, alcohol use with MDMA, other stimulants and new psychoactive substances is common.

Cannabis and tobacco: Smoking cannabis and tobacco together is the most common form of polydrug use in Europe. Users combine the two to facilitate combustion. Tobacco use in cannabis joints is often ignored when assessing cannabis dependence, although its high abuse liability in humans is well documented.

Cocaine and alcohol: Alcohol can increase levels of cocaine in the blood by about 30 % and produces a psychoactive cocaine metabolite (cocaethylene) that has a longer duration of action. The combination increases heart rate and blood pressure and can cause cardiovascular problems. Cocaine use may increase alcohol consumption by reducing the perceived effects of alcohol intoxication. Violent behaviour and suicidal ideation have been associated with the co-use of these two substances.

Opioids and cocaine: Opioids depress the central nervous system whereas cocaine stimulates it. The negative cardiovascular effects of cocaine are amplified when used with opioids. Cocaine and opioids used together may increase risk of overdose and associated respiratory depression. Cocaine can mask the sedative effects of opioids, increasing the risk of a later overdose.

Opioids and benzodiazepines, with or without alcohol: Opioids, benzodiazepines and alcohol are all central nervous system depressants and so when used together can increase the risk of fatal and non-fatal opioid overdoses. Older drug users may also have impaired metabolism of benzodiazepines, increasing the risk of respiratory depression when used with methadone.

Treatment services often focus on one particular problem substance even though large national treatment outcome studies in Australia, Italy and the United Kingdom indicate that polydrug use is common in treatment clients. These studies also show that drug treatment substantially reduces the proportion of clients who use multiple substances (moderate quality of evidence). Although the lack of randomisation of clients to treatment limits the attribution of these changes to treatment, the results suggest that treatment can reduce polydrug use in severe and long-term problem drug users. These findings are supported by systematic reviews of a small number of randomised controlled studies that have demonstrated that pharmacological and psychosocial interventions, such as contingency management, can reduce polydrug use (moderate quality of evidence).

Harm reduction services for problematic drug users usually address the harms and risk behaviours for injecting rather than focusing on a specific substance. Harm reduction interventions operate within a broader prevention strategy that combines other types of services such as outreach work and OST, which improves the health of polydrug users.

There is limited information on current treatment practices in the EU Member States for polydrug use. Generally, the treatment literature focus on the management of problems related to opioids or stimulants. There is little information on the management of problems arising from multiple substance use. While it is generally assumed that polydrug use is hard to treat, large treatment outcome studies in Europe show that treatment significantly reduces multiple drug use among highly problematic users.

European countries provide a wide range of harm-reduction services that include safer-use training, needle and syringe programmes, infectious diseases testing and counselling, hepatitis B vaccination and treatment of viral hepatitis and HIV infection. These can apply also to polydrug users. Client health care assessments provide appropriate information, advice and basic health care.

Responding to polysubstance use: implications for policy and practice

Basics

- Polydrug use increases the risk of a wide range of drug-related harms. Among the most severe consequences, the concomitant use of several depressant drugs such as opioids, benzodiazepines and alcohol increases the risk of fatal and non-fatal overdose.
- The management of polydrug use remains a complex and challenging task. Treatment is often less successful for individuals who use multiple substances.
- Psychosocial interventions can contribute to reducing polydrug use among treatment clients, especially stimulant use among clients in opioid substitution treatment

Opportunities

- The reduction of polydrug use should be a priority within harm reduction interventions.
- Given the impact of polydrug use on overdose risk, information on general dangers and specific risky combinations needs to be provided for opioid users and included in counselling interventions for this group.

Gaps

- There is a need to develop a clearer picture of the extent and nature of polydrug use among different drug user groups to support the development of appropriate responses.

Further resources

EMCDDA

- Polydrug use: patterns and responses, Selected issue, 2009.
- Treatment demand indicator (TDI) standard protocol 3.0: Guidelines for reporting data on people entering drug treatment in European countries, 2012.
- European drug report: trends and developments 2017.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

3

CHAPTER 3
Responding to the needs of particular groups

Some sub-groups of the population have particular drug problems, needs or vulnerabilities that require specific interventions. In this section drug problems and how to respond effectively are reviewed through the lenses of particular groups of people who are likely to be particularly affected. This provides a different perspective on some of the issues raised in Chapter 2, where a drug-specific perspective was developed. It also better reflects the logic of service development, where a range of different drug issues may be relevant to the needs of a particular target group.

The following sections consider both the needs profile and how it is possible to respond better to the needs of the following groups:

- the growing group of older people with problematic opioid use;
- women with drug problems;
- newly arrived migrants, refugees and asylum seekers;
- vulnerable young people; and
- families of people with drug problems.

In each case, a description of the type of drug problems faced by these groups is provided, based on the available epidemiological and clinical evidence. Examples are given of social and health responses that have been developed to address these needs in various EU countries.

In the case of many of these subpopulations of drug users, there is limited information on the effectiveness of preventive, treatment and harm reduction interventions. The information provided in these sections is accordingly based on what appears to be the consensus of expert opinion about current best practice. This often assumes that evidence-based interventions in the broader drug-using population may also be effective in these subpopulations. Important caveats here are that whereas this is a reasonable approach to take for service development and makes best use of the available knowledge base, responses will always need to be configured appropriately for the different contexts in which they are implemented. Monitoring and evaluation are even more important in areas where the evidence base is poor (see Chapter 5).

3.1 Older people with problematic opioid use

SUMMARY

Issues

People over the age of 40 make up an increasing share of those with an opioid problem in Europe. This is reflected in the increasing age of those in drug treatment and those dying of opioid overdoses.

In this group of older opioid users, the physical ageing process may be accelerated by the cumulative effects of polydrug use, overdose and infections over many years. Older people with opioid problems have higher rates of degenerative disorders, circulatory and respiratory problems, pneumonia, breathlessness, diabetes, hepatitis and liver cirrhosis than their peers and younger people who use drugs. They may also be more susceptible to infection, overdose and suicide.

In addition, their social networks may be reduced because of premature death and stigma, which can further increase social exclusion and isolation from families. The stigma and shame of still using drugs may also act as a barrier to help-seeking.

Response needs

- Drug treatment services tailored to the needs of older people need to provide multidisciplinary care to address their medical and psychological needs as well as their social isolation.
- Improved access to, and uptake of, hepatitis C antiviral therapies.
- Specialised nursing homes for long-term residential care of ageing drug users.
- Awareness-raising and training of health and social care staff dealing with elderly people about how to respond to the needs of older people with drug problems to ensure appropriate care and avoid stigmatisation.
- Appropriate physical health care, including dental health services
- Advocacy support to increase self-esteem, acceptance and positive feelings about the future, with peer-led approaches likely to be particularly appropriate.

Implications for future developments in Europe

- Planning of services to meet the future health and social care needs of this growing cohort of older drug users in Europe is needed.
- This may require having age-specialised care services that host social activities and events, and provide regular peer and volunteer support.
- An integrated, multidisciplinary approach is needed with interagency partnerships and referral between specialised and mainstream health and social services to address the needs of older opioid users.

keywords: older drug users, high-risk drug use

Health and social issues and key objectives for responding to older people with drug problems in Europe

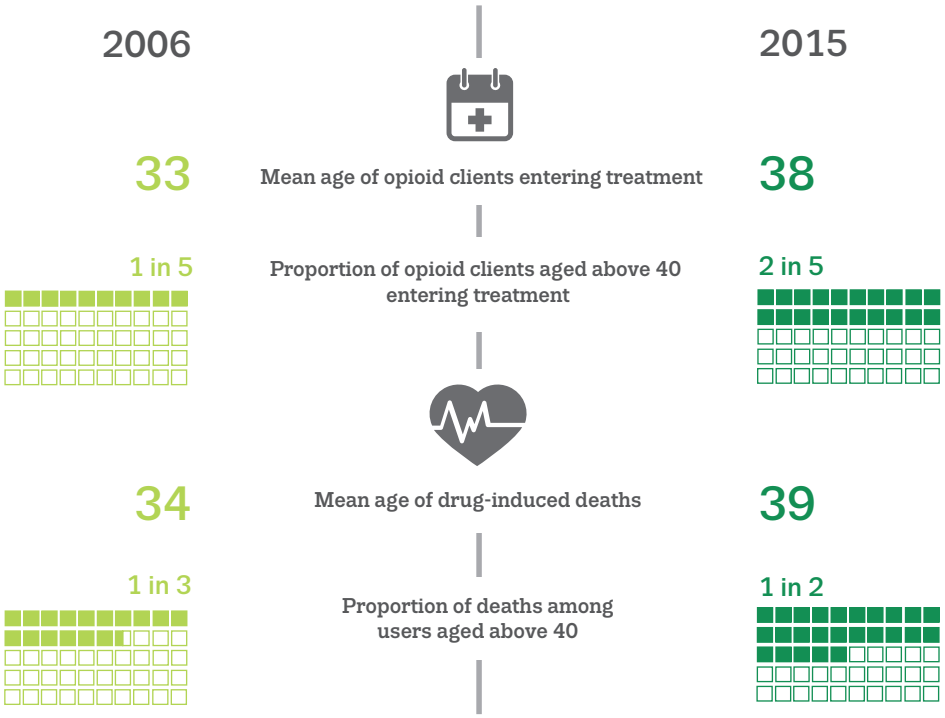
This section considers the needs of older people with a drug problem, defined here as people aged 40 or over, whose recurrent opioid use is causing or placing them at high risk of harm. This group makes up an increasing proportion of opioid users in Europe, as illustrated by two trends in EMCDDA treatment and drug-related death data (Figure 3.1). Between 2006 and 2015, the number of new opioid users entering treatment in the European Union decreased by 45 %, compared with a 9 % decline for all drugs. The mean age of clients entering treatment for opioid problems increased from 33 to 38 years, and the proportion over 40 increased from 1 in 5 in 2006 to almost 2 in 5 in 2015. In addition, the average age of drug-related deaths (which are mainly related to opioids) increased by 5 years between 2006 and 2015. Among these deaths, the proportion aged above 40 years increased from around 1 in 3 in 2006 to nearly 1 in 2 in 2015.

Although the focus of the section is on older people with problems associated with opioid use, there are also groups of older people who use other substances in a problematic way, for example, alcohol or medicines. While these have not been specifically addressed here, some of the responses discussed may also be relevant to these groups.

A wide range of health conditions can reduce the quality of life of those who have long histories of drug use. A large proportion of older people with problematic drug use in Europe initiated heroin use during the 1980s and 1990s. Many of those with long injecting careers have contracted HIV and hepatitis C virus (HCV) infection and their long history of problematic drug use may also have accelerated their ageing. Typically this group has higher rates of physical and mental health problems than their non-drug-using peers and younger people who use drugs. An earlier onset of degenerative disorders, circulatory and respiratory problems, pneumonia, breathlessness, diabetes, hepatitis and liver cirrhosis is also possible. They can also be more at risk of drug-related infections, overdose and suicide. Dental problems may also be a serious concern.

Most of this group of older opioid users have received or still receive methadone or buprenorphine treatment. Little is known about the interaction and efficacy of opioid medication and treatments of physical disorders and impaired liver function.

FIGURE 3.1
The ageing cohort of high-risk drug users



NB: Mean age of drug-induced deaths refers to all EU countries, excluding Greece. Proportion of deaths among users aged above 40 refers to all EU countries, excluding Greece and Portugal.

Rates of blood-borne viral infections are generally high among older people who have had long opioid injecting careers. For example, a 2015 French survey, undertaken in low-threshold centres (ENa-CAARUD), found that the self-reported prevalence of HIV was 12 times higher (7.4 % versus 0.6 %) and of HCV 4 times higher (35.6 % versus 8.9 %) among older drug users (40 or over) than among younger drug users (30 or under). Older opioid users who contracted HCV early in their lives are at a greater risk of developing liver disease and cancer if they are not treated.

In addition to physical and psychological problems, older people with drug problems are more likely to be isolated. Stigma and ageism (discrimination on the grounds of age) add to the social exclusion and isolation from families and friends that are common in this group. They are vulnerable to depression and loneliness because their social networks shrink as other older drug users die or recover from addiction and move on. The stigma and shame they experience from continuing to use drugs as they advance into older age can prevent help-seeking, engaging with recovery communities or seeking health care.

A significant proportion of older people with drug problems live alone, are in housing need and are unemployed and economically inactive. In a study of older people with problems related to opioid use, carried out in eight EU countries, 86 % who entered treatment for heroin use were unemployed or economically inactive. Lack of employment reduces social networks, skills and knowledge and entrenches marginalisation and isolation.

Providing adequate pain relief to older people who use opioids can be difficult for generic health care providers because these patients may have increased tolerance to opioid analgesics. In the absence of guidance on effective pain management for this group, providers may under-medicate them. Health care providers also need to be aware that a number of drugs that may be prescribed to people with problem opioid use, including alongside opioid substitution treatment, present an increased risk of overdose, due to their depressant effects on the central nervous system. These include gabapentinoid drugs, prescribed for neuropathic pain, and benzodiazepines.

Scaling up of harm reduction services in many European countries has kept problem heroin users alive into their later years. Their complex health and social needs require specific policy responses.

Responses required for older people with opioid problems

Treatment and care for older people with opioid use problems is limited in Europe because most services were established to meet the needs of a younger cohort of drug users. Older drug users are seen as less motivated, despite often doing better in treatment than younger drug users.

Multidisciplinary and innovative approaches are needed to address the medical (including dental), psychological and social needs of older people with drug problems. Their social isolation and loneliness needs to be tackled by enhancing coping strategies, improving social networks and encouraging activities that enhance well-being. A pilot study in the United Kingdom showed that older drug users could be recruited into a gym-based exercise scheme, but multiple social challenges reduced their ability to participate. Men's shed programmes in Australia, Canada, Ireland and the United Kingdom have encouraged older men to develop a sense of identity, self-esteem and value by learning new skills, developing social networks and engaging with communities.

There is a need to improve access to, and uptake of, hepatitis C antiviral therapies in this population. Their elevated risk of overdose deaths makes them an important target for take-home naloxone distribution and other overdose prevention strategies (see section 2.3).

Specialised nursing homes for older people with drug problems who are not able to care for themselves exist in Denmark, Germany and the Netherlands. These may serve as models for long-term residential programmes that offer care and support to chronic, ageing drug users. Alternatively work is needed to integrate those with drug problems into geriatric inpatient units and community old age settings. Currently these are ill-equipped to offer the comprehensive assessment, treatment and care that older people with drug problems may need.

The Geriatric Addiction Program was developed in the United States to meet the needs of older adults with substance misuse problems. The majority of clients were referred for alcohol problems, but 15 % had comorbid drug problems. The community-based programme provides in-home substance use intervention, assessment and linkage to services for older adults.

There is widespread lack of awareness and skills in the geriatric care workforce in dealing with older people who use drugs. Training is needed to help this workforce deal with the increasing numbers of these patients. Drink Wise

Age Well is a national education and awareness-raising programme in the United Kingdom that provides training for professionals in recognising and responding to alcohol use in the over-50s. Similar programmes are needed for older drug users. Pain clinic staff may require specialist training in managing pain in those who are opioid-dependent based around clear treatment protocols. Investment in developing a skilled workforce will be vital to improve the recognition of, and service provision, for older people with opioid problems.

To tackle the ageism and stigma experienced by these older drug users, advocacy support could be provided by older people within substance use services. Peer support can increase self-esteem, increase feelings of being accepted and understood, and increase positive feelings about the future. Those in a peer/volunteer role are also likely to benefit from this kind of engagement.

Safe and suitable housing is a prerequisite for dealing with social, health and physical challenges. The accommodation needs of older drug users will often require particular attention in those moving away from their drug-using networks. Those continuing to use drugs may require accommodation in which tenure is not threatened by drug use. Housing-first models, which provide accommodation as quickly as possible before tackling an individual's drug problem or providing other support, may be useful for homeless older drug users.

Future developments in Europe

Careful planning is needed to meet the future needs of the ageing cohort of opioid users seen in many countries in Europe. This may require having age-specific groups in services, hosting social activities and events, and providing regular peer and volunteer support to address their social isolation. Physically accessing services may be challenging for older people with opioid problems, who may require assistance with transport. Home visits may be needed for those with mobility problems or living in rural areas, satellite services operating out of community centres for

Older people with opioid problems: implications for policy and practice

Basics

- Key issues for service providers are managing comorbidity, chronic health conditions, overdose deaths, early ageing, loneliness and isolation. These needs can be met by modifying or restructuring services and developing specialist services that address both health and social care needs.
- Clear communication channels and referral pathways need to be in place between drug services and mainstream health and social care services.

Opportunities

- Investment in workforce development for staff involved in generic elderly care, in order to improve their understanding of the needs of older people with drug problems, could improve the management of physical and mental health problems in this group.
- Developing protocols for managing pain in people who are opioid-dependent for use in pain and palliative care clinics would assist the provision of high quality care in these settings.

Gaps

- Screening tools and outcome measures need to be developed that are appropriate for older people with long-standing substance misuse and associated health and social problems.
- There is a need to identify promising interventions and models of care to address the health and social problems experienced by the growing cohort of older people with opioid problems and to evaluate them to identify and share best practice.

older people and expanded outreach work. An integrated, multidisciplinary approach is needed to address the needs of older people with drug problems within the communities in which they live.

Screening tools and treatment outcome measures for older people with substance use problems are lacking. The Bristol Drugs Project '50 Plus Crowd' in the United Kingdom aims to improve health and well-being among older people rather than achieve 'recovery orientated' outcomes. An employment outcome, for example, may not be relevant for retirees or those with no history of sustained employment. The practical steps in achieving recovery may differ for older and younger drug users. Services might consider supervised methadone consumption in the homes of older opioid users or allow more take-home doses.

The Addiction Worker Training Programme of the Scottish Drugs Forum trains individuals with problematic drug and alcohol use to work in social care. The majority in the programme are older than 35. Similar programmes may provide some older drug users with secure paid or voluntary work. Employers may require training to understand the health and social issues faced by this population.

A joined-up treatment approach for older people with drug problems, with interagency partnerships and established referral pathways between specialised and mainstream health and social services, will be particularly important. Training for staff in mainstream services will be essential for successful implementation of these models of care.

Given that long-term opioid users aged over 40 are likely to make up the majority of the drug treatment population in Europe in the near future, these measures need to be put in place. In addition, the evidence base for effective interventions for this group needs to be developed.

Further resources

EMCDDA

- Ageing and addiction: challenges for treatment systems, Poster, 2015.
- Treatment and care for older drug users, Selected issues, 2010.
- Responding to the needs of ageing drug users, Lauren Johnston, Dave Liddell, Katie Browne and Saket Priyadarshi, Background paper.

Other sources

- Scottish Drug Forum. Older people with drug problems in Scotland: addressing the needs of an ageing population.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

3.2 | Women with drug problems

SUMMARY

Issues

Women make up approximately a quarter of all people with serious drug problems and around one-fifth of all entrants to drug treatment in Europe. They are particularly likely to:

- experience stigma and economic disadvantage, and to have less social support;
- come from families with substance use problems and have a substance-using partner;
- have children who may play a central role in their drug use and recovery; and
- have experienced sexual and physical assault and abuse and have co-occurring mental disorders.

A number of sub-groups of women with drug problems have special needs. These sub-groups, which often overlap, include pregnant and parenting women; women involved in sex work, who may often experience violence and stigma; women from ethnic minorities, who may have been trafficked; and women in prison.

Response needs

- Specific services for women. These services may be offered in female-only or mixed-gender programmes. They need to be welcoming, non-judgmental, supportive and physically and emotionally safe, in order to address stigma and trauma. They should promote healthy connections to children, family members and significant others.
- Collaboration between drug treatment and mental health services in order to address co-occurring substance use and mental health needs.
- Services for pregnant and parenting women, which need to deal with drug use, obstetric and gynaecological care, infectious diseases, mental health, and personal welfare, as well as providing childcare and family support.
- Measures to overcome the barriers to care for women involved in the sex trade, such as evening opening, mobile outreach services and open access support.
- Sensitivity towards ethnic and cultural aspects and the possibility of interpreter services when working with women from ethnic minorities.

Implications for future developments in Europe

- The need for and the benefit of specific interventions for women who have problems with different drugs, including prescription drugs and polydrug use, should be investigated.
- Evaluations, including cost-effectiveness studies, of interventions for women in diverse settings across Europe are needed.
- Large knowledge gaps about women's drug use exist for a number of reasons: studies do not always include women; those that do may not disaggregate by gender, or address gender issues; most research on drug-using women of child-bearing age only deals with opioid users; research on cannabis, new psychoactive substances, misuse of medicines and polydrug use among women is limited.

keywords: women, pregnancy, children

Main health and social problems faced by women with drug problems

In the Europe Union an estimated 35 million women and 54 million men aged 15 to 64 have tried an illicit drug at some time in their life. Generally the gender difference in overall drug use is smaller among young people and the gap appears to be decreasing among younger age groups in many countries of Europe. However, for more intensive and problematic forms of drug use, the difference between the genders is larger.

Women make up approximately a quarter of all people with serious illicit drug problems and around 20 % of all entrants to specialist drug treatment in Europe. In some studies women have been found to be more likely to access treatment because of needs arising from pregnancy or parenting or the general tendency for women to more readily seek care. Other studies have found women less likely to seek specialised services than men because of stigma. Women may attribute their problems to physical or mental health issues and seek care in the physical or mental health sectors. The extent and nature of the treatment gap within different regions and sub-groups in Europe requires further study.

Women differ from men with drug problems in their social characteristics, consequences of substance use and in the development and progression to dependence. Women present unique concerns that are sex and gender-based, but many drug services are male-oriented.

These specific problems are:

- **Stigma**: Women who use drugs experience more stigma than men because they are perceived as contravening their roles as mothers and caregivers. Stigma can exacerbate guilt and shame, while discriminatory and unsupportive services may deter help-seeking.
- **Socio-economic burdens**: These are heavier for women who use drugs because they have lower employment and income levels. The cost of drug treatment may be a barrier when services are not provided by the state and there is no insurance coverage. Transport costs may impede access to treatment.
- **Social support**: Women who use drugs may have less social support than men because they are more likely to come from families with substance use problems and have a substance-using partner. For example, among English drug treatment-entrants, three-quarters of women had drug-using partners as against two-fifths of men.
- **Children**: Relationships with children are very important and may play a central role in women's drug use and recovery. Female treatment entrants are more likely than males to live with their children.
- **Drug-using partners**: Having a partner who uses drugs can play a significant role in women's drug use initiation, continuation and relapse. It also affects their exposure to blood-borne viral infections and violence. Substance-using men may be unsupportive of treatment and women may fear loss of the relationship if they become drug-free.

In addition, compared with men, women who use drugs are more likely to have experienced sexual and physical assault and abuse as children or as adults and to be exposed to intimate partner violence.

Post-traumatic stress disorders and other mental health problems, such as anxiety and depression, are more common among women drug users. As a consequence, the exclusion of persons with dual diagnoses from services may impact more on women than men.

Women who inject drugs have specific vulnerabilities to blood-borne viral infections. They have a higher HIV prevalence than men because they are likely to share injecting equipment with more people. They are also more likely to trade sex for drugs or money and have difficulties negotiating condom use with sexual partners.

A number of sub-groups of women have particular needs and may need specific responses that address these (see box).

Responses for women with drug problems

A gender-responsive approach is required to meet the needs of women who use drugs. This incorporates a consideration of women's needs in all aspects of service design and delivery: structure and organisation, location, staffing (including access to female practitioners in all services), development, approach and content. These programmes may be female-only or a mixed-gender programme that incorporates specific services for women. This section focuses on the specific needs of particular groups of women, but it is important to recognise that women with drug problems may be in more than one of these groups and that their circumstances will change over time (Figure 3.2).

Because of the high levels of stigma and trauma experienced by drug-using women, services need to be

Examples of sub-groups of women with particular needs

Pregnant and parenting women: Drug use in pregnancy can adversely affect the unborn child and the new-born. Each year in Europe approximately 30 000 pregnant women use opioids and a similar number have other drug problems. Pregnancy and motherhood can be both a strong motivator for, and a barrier to, recovery. Guidelines now exist for the clinical management and use of substitution medications during pregnancy and the perinatal period for opioid-using women. In addition to stigma, shame and guilt, drug-using women may fear having their children taken away. Women have a pivotal role in facilitating health or social care for family members but may be fearful of contacting services themselves. They may also be unable to obtain the support they need because of family responsibilities and a lack of childcare.

Women involved in sex work: Sex work is often intertwined with drug use; for example, it is estimated that in the range of 20 % to 50 % of women who inject drugs, in some countries, are involved in sex work. Many women who trade sex for drugs have limited power to practice safe sex or safe injecting practices and are likely to experience violence and imprisonment. They also experience more stigma.

Women from ethnic minorities: These women may encounter additional barriers in accessing treatment services, such as language difficulties or treatments that conflict with religious beliefs. Their immigration status may affect their service eligibility and they may experience racism and discrimination. Some ethnic minority women may be migrants who have been trafficked and experienced trauma from war and violence in their homelands. Ethnic, cultural and religious diversity needs to be taken into account when working with these women.

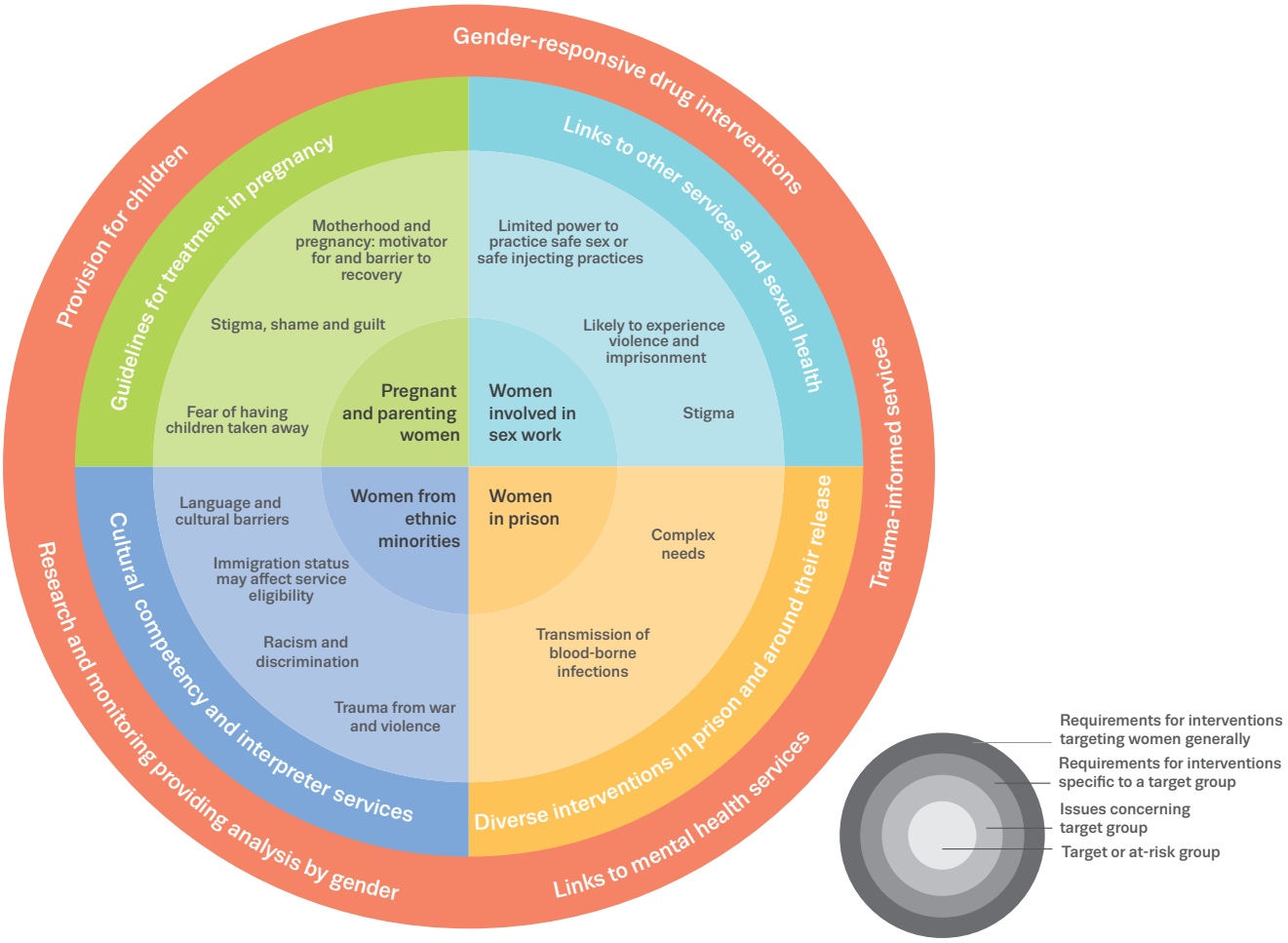
Women in prison: Many women in prison have a history of drug use (a review found 30 % to 60 %, although mainly in US studies). Women offenders with substance use problems experience more severe problems than women seeking treatment in the community. There is a lack of services in prisons to meet their psychological, social and health care needs. Prisons are high-risk environments for transmission of blood-borne infections, but access to clean syringes is often opposed. This may have a greater impact on women than men because in Europe, female prisoners are more likely to inject drugs. These women require diverse interventions in prison and after their release.

welcoming, non-judgmental and supportive. They need to be physically and emotionally safe for women and to take a trauma-informed approach. They need to be holistic and comprehensive in order to address the multiple issues that women face.

Trauma-informed treatment approaches are recommended for women who have experienced trauma and intimate partner violence. For women at continuing risk of violence, a multi-agency, multi-sector approach is essential, with collaborations between health and social services and the justice sector. An example of this type of approach is a women-only, abstinence-based residential rehabilitation service in the United Kingdom in which women participate in a range of group therapies based on a manualised, trauma-informed treatment programme. The women are offered individual counselling, eye movement desensitisation and reprocessing to reduce the distress of trauma, and family support. Residents can also benefit from a structured programme comprising education skills, training and recreational activities, and peer support groups (Narcotics Anonymous and Alcoholics Anonymous). After successful treatment women move into their own accommodation or into one of the organisation's resettlement houses and receive ongoing support if required.

Services for pregnant and parenting women who use drugs need to be non-discriminatory and comprehensive. Punitive policies, such as compulsory treatment, deter women from seeking treatment. Anonymity can encourage women to seek care by removing fear of reprisals. Interventions for pregnant women also need to deal with their drug use; obstetric and gynaecological care; infectious diseases; mental health; and personal and social welfare. In some countries specialist family centres and health visitor services exist to support pregnant drug users and parents of young children. Providing services to pregnant and parenting women can benefit both mother and child, improving parenting skills and having a positive impact on child development, as highlighted in the UNODC's *International standards on drug use prevention*.

FIGURE 3.2
Service needs and responses for some sub-groups of women with drug problems



Opioid-dependent pregnant women need opioid substitution treatment and psychosocial assistance. Many pregnant women who use opioids want to stop once they discover they are pregnant, but withdrawal is not advised during pregnancy because it is increases adverse outcomes for the neonate, including miscarriage. Methadone and buprenorphine may be used. Buprenorphine is associated with superior neonatal outcomes, but women already using methadone should not switch unless they are not responding well to methadone.

Multidisciplinary care programmes are provided in various countries. Some offer interventions to women who use drugs and their children from early pregnancy into childhood. Women may be provided with psychosocial support, interventions to empower them and build skills that strengthen the family, and follow-up with case managers. Services need to deal with practical concerns and provide childcare. Residential services should provide child-friendly accommodation, enabling mothers to stay with their children.

Given the centrality of relationships to women, services should promote healthy connections to children, family members and significant others. Family involvement and connections to the community can enhance drug treatment effectiveness.

For women with **co-occurring substance use and mental health problems**, it is important that both problems are addressed. This requires a multidisciplinary approach, involving professionals from the drug treatment and mental health sector collaborating and working towards agreed upon, common goals. Unfortunately, this does not always happen and, since women have higher rates of many mental disorders compared with men, women who use drugs may be particularly disadvantaged by this (see Spotlight on comorbid substance use and mental health problems, page 31).

The high rates of drug use, past abuse and mental health problems often found among **women in prison** means that gender-responsive, trauma-informed, integrated

Guidelines for the treatment of pregnant women who use drugs

Screening and brief interventions

Health care providers should:

- ask all pregnant women about their use of drugs and alcohol (past and present) as early as possible in the pregnancy and at every antenatal visit; and
- offer a brief intervention to all pregnant women using drugs or alcohol.

Psychosocial interventions

Health care providers managing pregnant or postpartum women with alcohol or other substance use disorders should offer comprehensive assessment, and individualised care.

Detoxification or quitting programmes

Health care providers should, at the earliest opportunity, advise pregnant women dependent on alcohol or drugs to cease their alcohol or drug use and offer, or refer to, detoxification services under medical supervision where necessary and applicable.

Pregnant women dependent on opioids should be encouraged to use opioid maintenance treatment rather than to attempt opioid detoxification.

Pregnant women with benzodiazepine dependence should undergo a gradual dose reduction, using long-acting benzodiazepines.

In withdrawal management for pregnant women with stimulant dependence, psychopharmacological medications may be useful to assist with symptoms of psychiatric disorders but are not routinely required.

Pharmacological treatment (maintenance and relapse prevention)

Pharmacotherapy is not recommended for routine treatment of dependence on amphetamine-type stimulants, cannabis, cocaine, or volatile agents in pregnant patients.

Pregnant patients with opioid dependence should be advised to continue or commence opioid maintenance therapy with either methadone or buprenorphine.

Adapted from WHO Guidelines for the identification and management of substance use and substance use disorders in pregnancy.

interventions need to be provided in order to address substance use, trauma, mental health, physical and reproductive health, and infectious disease risk. Needle and syringe programmes should be considered, such as those at Hindelbank women's prison in Switzerland, where syringes can be exchanged via slot machines. Drug substitution treatment and psychosocial interventions should be available for women with opioid dependence.

In order to prepare women for release from prison, interventions need to be considered in the following areas: housing and financial issues, vocational and life skills, social support and family relationships, and referral to drug treatment in the community. One example of this sort of provision is the Quartier Intermédiaire Sortantes, a pre-release unit near Paris for female prisoners with drug-related problems.

The barriers to care for **women involved in sex work** can be addressed by evening opening hours, mobile outreach services, child care and open access support. A non-judgmental, empathetic approach, peer support and women-only provision is recommended. Interventions from needle exchange to treatment and support with employment and housing should be provided.

Ethnic and cultural aspects need to be considered when working with **women from ethnic minorities**. Outreach

workers who can act as cultural mediators may be required to encourage these women to attend and engage in treatment. Interpreter services or services in the women's native language may be required and cultural aspects considered in matching women to treatment.

Future developments in Europe

Services able to address the different needs of women with drug problems are likely to be increasingly required as the difference in demand for drug services narrows between men and women. More interventions may be needed for women who have problems with cannabis, prescription drugs and polydrug use. Interventions may also need to cater for older women. Internet-based drug treatment may provide an array of women-centred activities, alone or as an adjunct to other interventions. These may appeal to women not well served by specialised drug services. It is important that policies and practices are gender-mainstreamed (i.e. they ensure that gender perspectives and the goal of gender equality are central) and that women who use drugs participate in the planning, formation and development of programmes.

Funding is a challenge in many European countries in times of budgetary restraint. Programmes for women may be neglected because women are a minority of service users. Cost-effectiveness studies of interventions for women in diverse settings across Europe are needed to secure long-term funding.

There are still large knowledge gaps about women's drug use. Studies do not always include women and may not disaggregate data by gender or address gender issues. Most research on drug use among women of child-bearing age only deals with opioid users. More research is needed on cannabis and polydrug use among women.

The complex, overlapping issues faced by many women who use drugs requires co-ordinated and integrated services. Across Europe drug use and mental health networks are often separated. Collaboration relies on the

Spotlight on … Services for pregnant and parenting women

Services for pregnant and parenting women who use drugs need to deal with a wide range of issues besides drug use. These include obstetric and gynaecological care, infectious diseases, mental health, and personal and social welfare. The services also need to address parenting issues, including women's concerns that their children may be taken away, and provide childcare or child-friendly accommodation.

In Hungary the Józan Babák Klub cares for pregnant women or mothers with a child under 2 years using a three-step approach. In the first step, women contact the Józan Babák Klub self-help group to get information about the service. In the second step, medical, legal, social and psychological services can be used on an anonymous basis. A pregnant or parenting woman who engages in eight sessions of counselling receives EUR 11 per session. In the third step, the organisation arranges contact with health care, social or legal services and prenatal services for pregnant women. During the second and third steps, a member of the Józan Babák Klub self-help group will accompany women to services.

The Kangaroo project is a programme for parents within a residential setting in Belgium. It aims to enhance parents' links with their children. Women are supported in their parenting role. During the day, children attend nursery, kindergarten or school, while mothers attend a therapeutic programme. The project provides information to parents, facilitates parent–child activities and thematic groups, offers individual consultation and accompanies parents to appointments.

In the United Kingdom, the Family Drug and Alcohol Court service provides an alternative to proceedings when parental substance misuse plays a major role. It offers intensive support to parents to cease drug use, keep families together and improve child and parent outcomes. After assessment, services are provided by a multidisciplinary team which includes a nurse, substance misuse worker, social workers, psychiatrists, a family therapist and service manager. Issues dealt with include substance use, physical and mental health, parenting, relationships with children and other family members, domestic violence and housing.

goodwill of stakeholders and cooperation at the individual level. Collaborations needed to be embedded in policies.

Staff need to be non-judgmental, non-discriminatory and supportive; they also must encourage women who use drugs to engage with services and intervene effectively with them. This requires awareness of the unique needs of women and skills in areas other than substance use.

Service providers in settings that intersect with drug use need to embrace the same attitudes and be knowledgeable about drug use. Staff competency should be built through education, training, skills development and adequate supervision. Community agencies (e.g. child welfare system and health care providers) also require training to enhance awareness, identify women who use drugs and provide interventions, or refer, as necessary.

Services for women with drug problems: implications for policy and practice

Basics

- Provide gender-responsive and trauma-informed services to meet the needs of particular groups of women and ensure they are accessible to all in need.
- Provide co-ordinated and integrated services to address issues beyond drug use. This may require embedding collaboration with other services, such as mental health and children's services, into policies and strategies.
- Staff in specialised drug and other health and social services, who come into contact with women who use drugs, need to have appropriate attitudes, knowledge and skills to allow them to provide high quality care.

Opportunities

- Include gender breakdowns in routine statistics in order to enhance understanding of drug use trends, sociodemographic factors and issues faced by women within a given region and develop appropriate responses.
- Increase the participation of women who use drugs in the planning, formation and development of policies and programmes.
- Implementation of the guidelines for provision of services for the treatment of pregnant women who use drugs has the potential to improve outcomes for both mother and child.

Gaps

- Reduce knowledge gaps by research that addresses gender issues and considers gender in all aspects of service design in order to identify the types of intervention that are most appropriate for different groups of women.
- Include the misuse of prescription drugs in policies and responses.

Further resources

EMCDDA

- Best practice portal.
- Pregnancy and opioid use: strategies for treatment, EMCDDA Papers, 2014.
- Women and gender issues in drug use, EMCDDA topic page.
- Women who use drugs: Issues, needs, responses, challenges and implications for policy and practice, Sharon Arpa, Background paper.

Other sources

- WHO. Guidelines for the identification and management of substance use and substance use disorders in pregnancy, 2014.
- UNODC. Guidelines on drug prevention and treatment for girls and women, 2016.
- UNODC. International standards on drug use prevention, 2015.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

3.3 Migrants, refugees and asylum seekers

SUMMARY

Issues

Europe has a long history of migration and the diversity of its ethnicities and religions creates complex links between ethnicity and drug use. More recently, following a high level of conflicts in the Middle East and Africa, more than 1.4 million people applied for asylum in the European Union in the last half of 2015 and the first half of 2016. Over half of the asylum seekers to the European Union in 2015 (53 %) were young adults (18–34 years), the age group most likely to use substances in Europe. Some lessons may be drawn from past research on migrants to Europe but must be viewed with caution because of cultural differences and reasons for migration.

Many migrants have lower rates of substance use than their host communities, but some may be more vulnerable to substance misuse for reasons such as trauma, unemployment and poverty, loss of family and social support, and the move to a normatively lenient setting. Drugs may be used to cope with trauma, boredom, uncertainty and frustration around immigration status. Vulnerability may be aggravated by poor knowledge about and access to treatment services.

keywords: migrants, refugees, asylum seekers

Response needs

- Cultural competency within existing services and assistance to overcome language barriers will be important in identifying and meeting needs of new migrants. Some studies report lower rates of health care utilisation, particularly for mental health problems. The longer the time taken to get residency the greater the use of mental health and addiction services, but unmet need still remains. Language problems and cultural factors may be major reasons for under-utilisation.
- Preventive interventions for minority ethnic populations are not available in all EU countries. With respect to asylum seekers, general awareness-raising concerning the potential vulnerabilities and marginalisation of migrant groups is more common. Some interventions have used peer educators to provide information on drug use and its risks and drug and alcohol services.
- There is a lack of policies to address migrant health, cultural barriers, language problems and addiction, and a lack of staff competence to work with migrants.

Areas for future development in Europe

- Undertaking needs assessments and establishing monitoring systems will be essential for identifying and addressing emerging problems and filling the current data gap in this area.
- Sharing of good practice and programmes within and between countries may help to extend service provision to meet the needs of these vulnerable groups of individuals.
- Future research should investigate the role that cultural continuities between the country of origin and the host country play in drug and alcohol use after migration.

Extent and nature of the potential health problems faced by asylum seekers

Europe has a long history of migration and its population includes a diversity of ethnicities and religions. This variety and the differing experiences of migrants over different generations means that links between ethnicity and drug use are very complex and diverse and defy a neat summary.

However, following violent conflicts in several Middle-Eastern countries and parts of Africa, migration into Europe is now at exceptionally high levels. More than 1.4 million people applied for asylum in the European Union in the last half of 2015 and the first half of 2016. The number of asylum applications has never been as high as it is now, and this raises concerns about the potential impact across a range of policy areas, including the field of drug problems. Past research on migrants has limited application to current asylum seekers because of differences in cultural values and practices and reasons for migration. Nevertheless, there may be lessons to be drawn from past experience that can help those tasked with responding to the needs of this group of migrants.

Over half (53 %) of the asylum seekers to the European Union in 2015 were young adults and about one-third were children. This produces a *healthy migrant paradox*: most asylum seekers are in relatively good physical and mental condition in terms of chronic health conditions but suffer more infectious diseases, such as tuberculosis, hepatitis A, and more injuries than people in the host country. There are large variations between migrant groups of different ethnic background which make generalisations problematic. There is a lack of information on the recent influx of migrants because most of the available data on health status and health care access was collected before 2014.

Several factors may make new migrants more vulnerable to substance use problems, but others may be protective (see Table 3.1). Risk factors include traumatic experiences, unemployment and poverty, loss of family and social support, and living in a normatively lenient setting. Coping with trauma, boredom and frustration, and drinking as a social experience were important motivations for drinking in African migrants to Australia.

Some studies have found high levels of cultural or ethnic identity to be associated with heavier drug use. So is having spent a longer time in hostile conditions in the host country after migrating. Children of parents who were less well acculturated or integrated have higher risks of juvenile drug use and abuse. The vulnerability of some ethnic minorities to developing illicit drug use problems may be aggravated by poor knowledge about and access to treatment services. The longer the time taken to obtain a residency permit, the greater the use of mental health and addiction services, but these services are often still under-used.

On the other hand, some studies find that, in general, people from ethnic minority groups drink less alcohol than the host population, and refugees are less likely to develop alcohol and drug problems than other groups in the population, including non-refugee immigrants. These differences may be related to cultural, religious and ethnic identity. Strong feelings of ethnic identity, sustained religious values and strongly maintained family ties may initially discourage alcohol drinking, but involvement with alcohol may increase with social integration.

Forced migrants may be at risk for substance use disorders because of traumatic experiences, comorbid mental health disorders, acculturation challenges and social and economic inequality. Drug and alcohol use patterns in the country of origin may be more significant than past trauma in explaining alcohol and drug use patterns. These practices may not be sustainable in Europe because of changing living circumstances, availability of the substance and changes in everyday life. The most important factors seem to be dullness of daily life and uncertainty about refugee status. Boredom and unemployment, together

Definitions

The term **migrant** can be understood as 'any person who lives temporarily or permanently in a country where he or she was not born, and has acquired some significant social ties to this country' (UNESCO).

The focus here is mainly on **asylum seekers**. Asylum is a legal status given by a state to a person who is unable to live safely in his or her home country because of a fear of persecution for reasons of race, religion, nationality, membership of a social group, or political opinion. A **refugee** is an asylum seeker who has received a permit to live in a country.

TABLE 3.1

Principal risk and protective factors for substance use problems relevant to the current migration situation

Risk factors	Protective factors
Being single	Some strong religious affiliations, e.g. being a devout Muslim
Coming from a culture in which substance use is normalised (e.g. opium, khat)	Living in strong family unit
Boredom, unemployment	Integration in new society language, employment or other activities
Traumatic experiences	Good physical and mental condition
Poverty	
Poor knowledge about treatment services	
Living in run-down neighbourhoods and socially deprived areas	

with undiagnosed depression, make the asylum seeker more likely to continue drug use patterns from their home countries, possibly more intensively. One example is khat use among Somalis who moved to Europe. Problems related to khat appear to have increased after migration because they were often unemployed or not permitted to work and were able to spend long periods using khat. A similar intensification of traditional opium use has been reported among Iranian migrants who moved to Europe.

Responses and interventions to address the needs of new migrants

A recent study by the European Agency for Fundamental Rights (FRA) found no data collection on the number of individuals with signs of drug dependence among victims of torture or severely traumatised individuals in any of the 14 Member States covered by their research. However, they did find reports from some services of increasing numbers of migrants or asylum seekers among the people with drug problems they were seeing. Screening and needs assessment procedures for migrants and asylum seekers need to include potential substance use problems, and staff in any services, such as housing and drop-in facilities, need to be alert for potential problems. In addition to the range of standard assessment tools available, UNHCR and WHO have developed assessment tools for use with displaced populations and in emergency situations.

Data on health care utilisation by migrants in the European Union are also limited. Few countries collect data on outpatient care, which is important for mental health. Newly arriving or 'undocumented' asylum seekers are usually only entitled to health care in emergencies, but there is variation between countries in how this operates. In addition, asylum seekers may be unaware of their rights, and fears about the potential impact on their asylum claim may be a barrier to help-seeking.

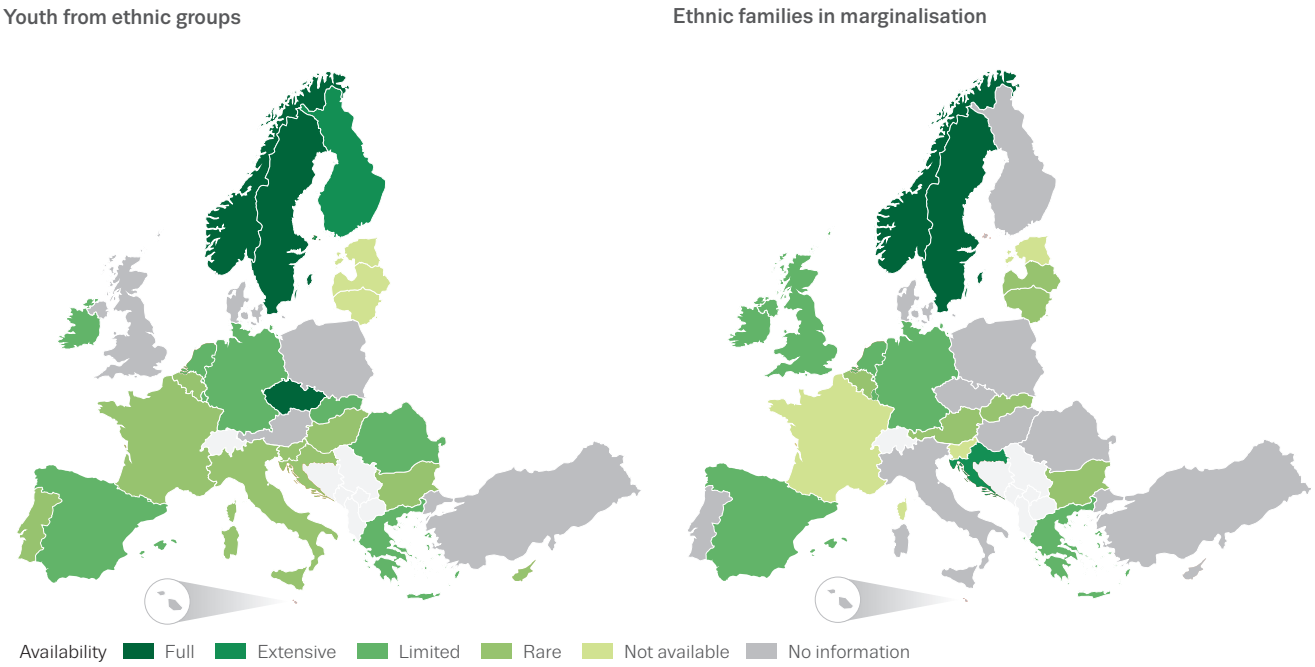
After acquiring refugee status, migrants in most EU countries are entitled to the same access to health care as residents. Nevertheless, studies report lower rates of health care utilisation, particularly for mental health problems. Cultural beliefs and language issues that hamper communication may be important reasons for under-utilisation. Higher levels of acculturation and lower levels of cultural traditionalism are associated with increased use of mental health care. A recent Dutch report concluded that objective and subjective health of asylum seekers is poorer than that of the residential population and this gap increases with age.

Drug policies in EU countries rarely target migrants' use of substances. Exceptions include the Dutch government's ban on khat in 2013 and a similar ban in the United Kingdom in 2014. An evaluation of the Dutch ban in 2015 concluded that khat use had declined but problematic use had increased. The ban produced a tenfold increase in price, a decline in quality and more alcohol use. Before and after the ban, the most prevalent problems were family disruption and sleeping problems. After the ban, heavy khat users reported more financial problems.

The EU drugs action plans that accompany the EU drug strategy 2013–2020 have highlighted the need for demand reduction activities addressing the situations and needs of ethnic minorities, migrants and asylum seekers. This has resulted in the development of preventive interventions in a number of countries. However, data on the availability of such selective prevention interventions for minority groups are patchy. From what information is available, coverage varies between countries and appears particularly limited for marginalised ethnic families (Figure 3.3). The main rationale for interventions has been to increase

FIGURE 3.3

Availability of selective prevention interventions for ethnic minority groups in the European Union, 2015/16



NB: The information provided here is based on the opinion of an expert (or panel of experts) in each country. Key for ratings of availability: Full, 'exists in nearly all relevant locations'; Extensive: 'exists in a majority of relevant locations (but not in nearly all of them)'; Limited, 'exists in more than a few relevant locations (but not in a majority of them)'; Rare, 'exists in just a few relevant locations'; Not available, 'does not exist'.

awareness of vulnerabilities and reduce social exclusion and marginalisation of migrant groups. Interventions have used peer educators to provide information on drug use and its risks and about drug and alcohol treatment services. Most often these programmes aim to prevent substance use by young people. However, they tend to encounter a number of obstacles: a lack of policies addressing migrant health; cultural barriers; language problems and conceptual understandings of addiction; and lack of staff competence to work with migrants.

Some new initiatives specifically for refugees and asylum seekers are beginning to be reported. For example, in Belgium a new small psychosocial team (LaMbda) was created in 2015 in order to help asylum seekers with an addiction problem to access treatment. The idea is to facilitate the link between the reception centres for asylum-seekers and the low-threshold specialised treatment sector. In Cyprus, new migrants have been highlighted as a high-risk group for treatment services. The UNODC in partnership with the University of Manchester is piloting a multi-level trauma-informed parenting and caregiver support programme for displaced populations aiming to strengthen the capacity of parents to protect their children in the difficult circumstances they encounter. The support provided ranges from information leaflets, through parent seminars and a manualised family skills training programme based on the Strengthening Families programme to a more specific programme for trauma-exposed families. It is currently being tested in several countries in the Middle East and in refugee camps in Turkey and with refugees transiting Serbia.

Future developments in Europe

To fill the current gap in knowledge about the extent and nature of substance use problems among new migrants in Europe, it will be essential to develop appropriate assessment tools, undertake needs assessments and establish monitoring systems. These actions will need to be coupled with the development of appropriate interventions to address any emerging problems and, where necessary, the expansion of services, such as mental health care, to meet the needs of refugees who have been traumatised or negatively affected in other ways.

New programmes will need to be evaluated to ensure they are effective. The sharing of good practice and programmes within and between countries may help to extend service provision to meet the needs of these vulnerable groups of individuals.

Research is also needed to investigate the role that cultural continuities between the country of origin and the host country play in drug and alcohol use after migration. This will allow the development of prevention and support programmes that maximise resilience among these people, many of whom will have suffered extensive trauma, hardship and dislocation and may continue to experience social exclusion and disadvantage following migration.

Migrants, refugees and asylum seekers: implications for policy and practice

Basics

- Migrant groups, such as the current wave of asylum seekers, may be at risk of developing drug problems. There is a need to increase awareness of vulnerabilities and reduce social exclusion of these people.
- Services need to be alert to potential health issues, including drug problems, among asylum seekers and be prepared to address potential cultural barriers and language difficulties.
- Monitoring of the health needs, including substance misuse issues, of new migrants is needed.

Opportunities

- Services to address the needs of migrant groups are being developed in a number of countries and these should be identified and promising practice shared.

Gaps

- Where specific needs are identified new services for prevention and treatment of problems need to be developed. These need to be evaluated so that the current limited evidence base is expanded.

Further resources

EMCDDA

- Drug prevention interventions targeting minority ethnic populations: issues raised by 33 case studies, Thematic paper, 2013.
- Responding to the needs of new migrants, refugees, and asylum seekers, Paul Lemmens and Hans Dupont, Background paper.

Other sources

- European Union Agency for Fundamental Rights. Current migration situation in the EU: Torture, trauma and its possible impact on drug use, 2017.
- UNHCR and WHO. Rapid assessment of alcohol and other substance use in conflict-affected and displaced populations: a field guide, 2008.
- UNHCR and WHO. mhGAP Humanitarian Intervention Guide (mhGAP-HIG): Clinical management of mental, neurological and substance use conditions in humanitarian emergencies, 2015.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

3.4 Vulnerable young people

SUMMARY

Issues

Many young people experiment with drugs but only a minority become dependent on drugs in young adulthood. Those who are most vulnerable to drug dependence are socially disadvantaged young people and those having family members and peers who use drugs. Individual factors, such as poor impulse control, also increase vulnerability, as does the use of substances at an early age.

Vulnerable young people who develop drug dependence are more likely to report anxiety and depressive disorders; psychotic symptoms and disorders; suicidal ideation and suicide attempts; blood-borne infections; and failure to complete their schooling and secure employment. It is not always clear to what extent these problems increase the risk of drug problems, or having a drug problem causes these problems.

keywords: young people, prevention, treatment

Response options

- Selective and indicated prevention interventions can be used to intervene early to prevent vulnerable young people initiating use and progressing to regular and problematic drug use.
- Brief screening questionnaires to detect illicit drug use problems in adolescents in primary care settings may be useful.
- E-health approaches to screening and brief interventions are promising ways to reach vulnerable young people who are familiar with mobile phones and the internet and are reluctant to seek help from health services.
- Treatment services for young people who have developed severe drug problems, which need to use appropriate treatment approaches, for example, multidimensional family therapy.
- Needle and syringe programmes are needed for young people who inject drugs who are at high risk of acquiring blood-borne infections in the early years of their injection use. Hepatitis B vaccination should be routinely provided to young people who inject drugs.
- Prisons, outreach programmes, needle and syringe programmes and health clinics may be good settings in which to intervene with young people at risk of injection-related harms.

European picture

- Austria, Denmark, Germany, Portugal and Spain have implemented selective prevention interventions for pupils in vocational schools.
- Ireland has taken a broader approach by working to improve literacy and numeracy among disadvantaged students.
- Community-level interventions targeting high-risk groups of young people in Italy and northern Europe, combine outreach, youth work, and formal cooperation between local authorities and non-governmental organisations.

Main health and social issues and key objectives for responses for vulnerable young people in Europe

Many young people experiment with illicit drugs or use them occasionally, but a minority become regular users and may become dependent on drugs in adolescence or young adulthood. Drug dependence is more likely to develop in young people who have used substances at an earlier age, whose family members and siblings are substance users, who come from socially disadvantaged backgrounds, and whose peers engage in drug use and antisocial behaviour. Some individual factors are also associated with increased risk of the development of more problematic drug use, such as behavioural problems (e.g. impulse control problems, attention deficit (hyperactivity) disorder, oppositional defiant disorder).

In Europe young people who are highly vulnerable to drug problems often have multiple risk factors, such as having left school early, being in care institutions, having mental health problems, or being in contact with the criminal justice system.

Vulnerable young people who develop drug dependence are more likely to experience other problems, such as:

- anxiety and depressive disorders;
- psychotic symptoms and psychotic disorders;
- suicidal ideation and suicide attempts;
- blood-borne infections from sharing contaminated injecting equipment;
- failure to complete their schooling and secure employment; and
- fatal and non-fatal drug overdose.

With the exceptions of blood-borne infections and drug overdoses, it is not always clear what the relationship is between drug problems and these outcomes. It may be that having these problems increases the chances of developing drug problems. It may be that having a drug problem can cause or worsen these problems. And it may be both: having these problems may increase the chance of developing drug problems, which make these problems worse.

The most obvious way to prevent drug-related problems in vulnerable young people would appear to be to prevent them from ever starting to use drugs. This may be one of the aims of family-based interventions early in the life course. However, this may be difficult to achieve for older highly vulnerable young people who are living in social environments that encourage early drug use and have access to drugs at an early age. The aim of most preventive interventions in these cases is to intervene early to prevent young people from progressing to regular and problematic drug use. There is also a case for harm reduction interventions that aim to reduce drug-related harm in young people engaging in high-risk drug use, such as injecting drug use.

Responses and interventions to address the needs of vulnerable young people

Selective and indicated prevention

Some universal prevention programmes that also benefit vulnerable groups are discussed in section 4.4 on responses in schools and colleges, while many of the responses in Chapter 2, particularly those addressing cannabis use problems in section 2.1, will be largely used by vulnerable young people since they are at highest risk of cannabis use problems. Here the focus is mainly on selective and indicated prevention programmes.

Family-based prevention programmes typically train parents to support their children to achieve age-specific developmental outcomes (including impulse control, social competence and gratification delay) that are associated with reduced risk of substance use and other behavioural problems. Family-based selective prevention programmes address marginalised and vulnerable families, including those affected by parental substance use problems.

Relatively little is known about the contents of many of the family-based interventions delivered in Europe. One exception is the Strengthening Families Programme, which provides training in parenting skills, and has now been implemented in 13 European countries. This internationally recommended programme also seeks to remove obstacles to participation for vulnerable parents, by providing transport and childcare.

Indicated interventions for young people who are using drugs or who have personal vulnerability factors as described above aim to reduce their drug use, risky patterns of drug use and harms that may arise from use. Brief screening questionnaires can detect illicit drug use problems in adolescents in primary care settings, but there is insufficient evidence to decide whether brief interventions reduce drug use and related harm in young people in these settings.

A Canadian indicated prevention programme (Preventure) that targets adolescent sensation-seeking drinkers in schools has been positively evaluated, and adapted for use in the Czech Republic, the Netherlands and the United Kingdom. Evidence-based indicated programmes for younger children in schools exist in Spain (Empecemos) and Germany (Trampolin) (see EDDRA on the EMCDDA website).

In general, go-approaches (approaching the target group at home or on the street) are likely to be more successful in engaging with vulnerable young people than come-approaches (where young people are expected to present at services).

E-health approaches to screening and brief interventions, using both computers and mobile phone platforms, are a promising way to reach vulnerable young people. These approaches may be especially attractive to young people, who will generally have access to mobile phones and the internet and are familiar and very comfortable with using these technologies. E-interventions potentially provide a way to increase the reach of early interventions in a high-risk group of young people who may be reluctant to seek help from conventional health services (see Spotlight on e-health interventions, page 119).

Harm reduction interventions

Young people who inject drugs are at high risk of acquiring blood-borne infections in the early years of injecting. Needle and syringe programmes reduce injection-related risk behaviours and HIV transmission in young adults, but there has been limited research on their impact in young people. Hepatitis B vaccination is efficacious and safe, and should be routinely provided to young people who inject drugs. Prisons, outreach programmes, needle and syringe programmes and health clinics may be good settings in which to identify and intervene with young people at risk of injection-related harms. However, in some cases services are not permitted to work with under-18s.

Treatment

Family can play an important role in addressing substance use problems among young people. Multidimensional family therapy — a process that includes the young person, their family and their environment — is a holistic approach that can deliver promising results during therapy and these can last after the treatment ends. A systematic review of five main studies carried out in the United States and the European Union indicated the potential for positive results, but it is important to ensure implementation fidelity and family adherence, which can be difficult. Furthermore, the relatively high cost of such treatment must be considered before recommending its general use.

Treatment for young people is often for cannabis use problems, and these services have been discussed in section 2.1. However, vulnerable young people with problems related to the use of other drugs may have trouble accessing treatment or, where there are dedicated services for under-18s, may have difficulties in the transition to adult

Overview of the evidence on … responses for vulnerable young people

A number of personality traits that increase vulnerability can be detected and mitigated early in life, for example, by programmes that improve self- and impulse-control.

Screening and brief intervention is a promising approach to indicated prevention that remains to be evaluated. The e-delivery of screening and brief interventions using both computer and mobile phone approaches also appears potentially valuable, but needs further research to assess its effectiveness.

Evidence-based approaches for vulnerable youth consist of providing support for educational success in general (especially for males), personal and social competence training, and training families in better managing and monitoring their offspring. Mentoring programmes can be helpful for vulnerable youth.

Evidence-based approaches for young children ('child protection') include home visiting programmes for vulnerable and socially excluded families.

Needle and syringe programmes, vaccination against HBV and opioid substitution treatment are effective in older people who inject drugs and are likely to be effective for under-18s, but this is yet to be demonstrated.

Spotlight on … E-health interventions

What are e-health and m-health?

E-health involves the use of digital technologies to improve health in a variety of ways including:

- providing drug-related information with harm reduction advice (e.g. safer use) with or without personalised feedback from professionals and linked with specialised drug services if needed;
- treating patients with substance use disorders via e-health interventions;
- educating treatment professionals using e-learning modules on therapeutic techniques; and
- using digital diaries to monitor substance use in persons being treated for substance use disorders.

M-health is a type of e-health involving the delivery of e-health interventions using mobile phones and similar devices. Delivering screening and brief interventions via e-health and m-health applications is a promising innovation for substance use problems in vulnerable young people in Europe.

How are these applications being developed in Europe?

An EU-funded project established the Click for Support network, which has developed guidelines for the development of e-health interventions. The number of applications is growing. Examples include:

- Quit the Shit (QTS) is a German online cannabis withdrawal programme developed for adolescents aged 15–17 years, who want to reduce or quit their cannabis use. An interactive diary helps users monitor their drug use and a counselling team provides them with tips and personalised feedback to support users in achieving their personal goals;
- The Dutch substance misuse treatment centre, Jellinek, has developed a 'blended' programme called MijnJellinek (MyJellinek) for people who meet the criteria for a substance use disorder diagnosis, which combines an e-health intervention with face-to-face contact with a therapist.
- The Overdose Risk Information Tool (ORION) is an e-health decision support tool for individuals who are at high risk of experiencing a drug overdose. Through a number of questions this tool calculates an overdose risk estimate of 0 (lowest) to 100 (highest) and presents this risk estimate in a visually attractive way, with the aim of facilitating the discussion on overdose risk management between substance users and their doctors.

Future developments for Europe

Research into the effectiveness of these interventions is needed, especially among hard-to-reach target populations, such as high-risk youth.

An important step is to ensure that e-tools remain online after being developed for research projects. Their running costs are often a fraction of the research and development costs, so it would be very cost-effective to make these tools available after projects are completed.

Advances in technology have also opened up possibilities for continuous, real-time data collection and feedback from smartphones, social media, sensors and self-report. Quality management and data security are important issues. End users could be harmed if data confidentiality is not protected. European-level policy and good practices on data security need to be incorporated into e-health interventions for substance users.

See the Background paper, E-health and m-health: using new technologies to respond to drug problems.

services. There is a need to identify models of good practice and expand the evidence base around treatment provision for children and adolescents with drug problems.

What is being done in Europe with respect to interventions for vulnerable young people

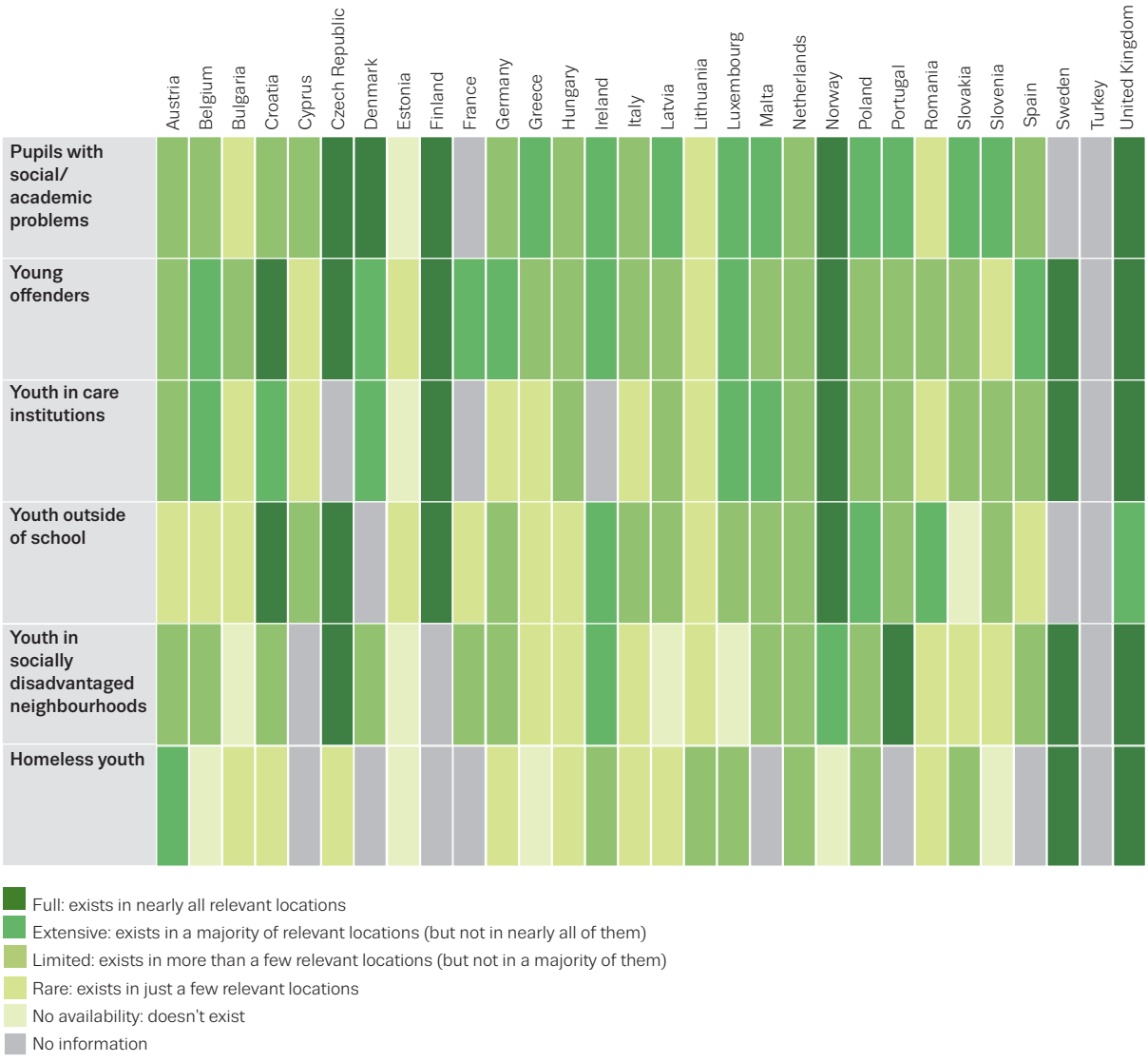
Austria, Denmark, Germany, Portugal and Spain have implemented selective prevention interventions for pupils in vocational schools, a group of young people identified as at increased risk of developing drug problems. Ireland has taken a broader approach with at-risk youth, by working to improve literacy and numeracy among disadvantaged students.

Selective prevention responses for vulnerable groups are implemented in European countries through interventions that address both individual behaviours and social contexts. At the local level, such approaches can involve multiple services and stakeholders (e.g. social, family, youth and police) and are common in the Nordic countries and Ireland, as well as parts of Italy and Spain.

The approaches with the highest availability are reported to be those targeting families with substance misuse problems, the provision of interventions for pupils with social and academic problems and interventions for young offenders (Figures 3.4 and 3.5). Little is known about the actual contents of these prevention strategies and evaluation is limited. Expert opinion data, however,

FIGURE 3.4

Availability of selective prevention interventions for different groups of vulnerable young people in Europe, 2015/16



NB: The information provided here is based on the opinion of an expert (or panel of experts) in each country.

FIGURE 3.5

Availability of family-based selective prevention interventions for vulnerable young people in Europe, 2015/16

NB: The information provided here is based on the opinion of an expert (or panel of experts) in each country.

indicates that the most commonly used selective prevention techniques are based on information provision. One programme of note targeting young offenders is FreD, a set of manual-based interventions, which has been implemented in 15 EU Member States. Evaluations of this programme have shown a fall in repeat-offending rates.

Although prevention interventions for vulnerable families exist in the majority of countries, expert ratings from 2013 indicate that their coverage is often limited. Family-based interventions for families where there are substance misuse problems in the family are available in most European countries, but interventions specifically targeting marginalised ethnic minority families, or those with mental health problems or criminal justice problems in the family are less common.

Responding to the needs of vulnerable young people: implications for policy and practice

Basics

- The main vulnerable groups of young people in Europe are young offenders, youth out of school or at risk for dropping out, youth with academic and social problems, homeless youth, youth in care institutions, youth from marginalised ethnic groups and vulnerable families.
- Evidence-based selective and indicated prevention approaches targeting substance use among vulnerable young people should be provided rather than only awareness-raising and informational approaches. Go-approaches (approaching the target group at home or on the street) are more appropriate than come-approaches (where people are expected to show up to services).
- Treatment and harm reduction services need to be provided for the small group of young people with severe problems.

Opportunities

- Indicated programmes that target behavioural and temperamental vulnerabilities of neurobiological origin are rare in Europe but have high effect sizes in studies in North America. Expanding provision in Europe has the potential to make a significant impact.

Gaps

- There is a need to expand the evidence base on the effectiveness of treatment and harm reduction services for under-18s with severe drug problems and to identify and share models of good practice.
- An improved understanding of the availability and levels of provision of drug treatment services for young people with drug problems is needed to identify where increased provision is required.

Further resources

EMCDDA

- Preventing later substance use disorders in at-risk children and adolescents: a review of the theory and evidence base of indicated prevention, Thematic paper, 2010.
- Multidimensional family therapy for adolescent drug users: a systematic review, EMCDDA Paper, 2014.
- Prevention of addictive behaviours, Insights, 2015.
- Treatment of cannabis-related disorders in Europe. Insights, 2015.
- Drugs and vulnerable groups of young people, Selected issues, 2008.
- Examples of evaluated practices: EDDRA.
- E-health and m-health: using new technologies to respond to drug problems, Background paper, Matthijs Blankers and Ajla Mujcic.

Other sources

- INCB. International standards on drug use prevention.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

3.5 Adult family members of people with drug problems

SUMMARY

Issues

There are different ways in which families of people who use drugs may be affected and may affect the drug use of their family member. Some are positive and some are negative. This section focuses on the problems experienced by adult family members of people who have drug problems and the potential role of families in supporting treatment engagement.

Families of people who use drugs can experience a wide range of harms: worry and psychological distress leading to physical and mental ill-health; harm from domestic violence; exposure to threats and violence associated with the drug debts and the involvement of the drug-using family member in the illicit market; the financial burden of directly and indirectly supporting a drug user; impact on employment from stress or caring responsibilities; strain on family relationships; and loss of social life and isolation.

Family members can make a positive contribution by supporting the family member who uses drugs and encouraging them to engage with treatment.

Response options

- Dedicated family support services providing help and support to family members in their own right.
- Support for kinship carers (family members who take on parental responsibilities for the children of a drug-using relative).
- Provision of appropriate health care by medical practitioners in primary care, including evidence-based interventions, such as the five-step programme.
- Proper assessment of family relationships at the point when a drug user enters a treatment programme and the provision of support to family members in order to enhance their contribution to successful outcomes.
- Where appropriate, more intensive and specialist interventions, such as intensive family-based therapy, behavioural couples therapy, multidimensional family therapy and social network approaches.
- Bereavement support.

European picture

- There is no comparable information on the availability of programmes to support adult family members of people with drug problems in Europe or on the provision of family-based therapies.
- Peer-led family support and advocacy organisations are reported in a number of countries.

keywords: families, carers

Main health and social issues for adult family members of people who use drugs in Europe

There are a number of ways in which families of people who use drugs may be affected, or may affect the drug use of their family member. Very close friends may be similarly affected and provide support and in such cases will need the same responses as family members. Some of these are positive some are negative. The main ones are:

- Adult family members of someone who uses drugs problematically may suffer a range of health, economic and social harms.
- Family circumstances, such as socioeconomic circumstances, parental, siblings' or a partner's substance use may increase the risk of a family member developing drug problems or exacerbate problems when they occur.
- Family support may encourage and maintain a person's engagement with treatment.
- Children of people who have drug problems are vulnerable to a range of harms.

In this section, the focus is on the first of these and the potential role of families in providing support to treatment engagement. This is for practical reasons and not to suggest that the other aspects are less important. The impact of family circumstances on young people's vulnerability to drug problems has been considered in section 3.4, on vulnerable young people. The issues in providing services for parenting women with drug problems in section 3.2 also touched on the very complex and difficult area of reducing harm to children of people with drug problems.

The harms that adult family members of someone with drug problems may experience include:

- worry and psychological distress leading to physical and mental ill-health;
- harm from domestic violence;
- exposure to threats and violence associated with the drug debts and the involvement of the drug-using family member in the illicit market;
- the financial burden of providing direct and indirect financial support to a drug user, which may include providing kinship care to the children of an affected family member;
- the potential impact on employment arising from stress or additional caring responsibilities;
- the strain on family relationships and the loss of social life and increased isolation they experience as a result of the stigma associated with having a family member who is a drug user.

The precise impact that a family member's drug use has will vary between individuals and is dependent on their own circumstances and their relationship to the person using drugs. For example, parents of problem drug users may be required to bring up their grandchildren on a temporary or permanent basis. Siblings of problem drug users will be affected by their chaotic behaviour. They may also feel neglected by their parents, whose attention is focused on their drug-using sibling. The spouses of people with drug problems may have to take sole responsibility for all aspects of family life and, in addition to worrying about their drug-using spouse, may feel guilt and concern about the impact on their children. Sometimes, families may feel it necessary to disengage with the drug user, which can also pose problems and have a big psychological impact. Whether or not families remain engaged, the damage to relationships is likely to be profound.

In addition to support with day-to-day living, families can also be an important source of motivation and financial help to get a relative into a drug treatment programme. Research shows that there may also be benefits in involving families in that treatment. In some cases families provide the support and encouragement that enable people to undertake detoxification and recovery outside of the formal treatment sector.

Responses available

The types of services and interventions needed to support families include the following:

- Dedicated family support services providing help and support to family members in their own right; for example, peer support groups, specialist support groups and services. These can be very valuable in reducing social isolation.
- Support for kinship carers, such as grandparents looking after the children of their drug-using child.
- Medical practitioners working in primary care need to recognise and address the health needs of individuals affected by a family member's drug use. There are some programmes for addressing the support needs of adult family members and helping in the development of coping strategies in various settings, such as the five-step programme, for which an evidence base is emerging.
- Proper assessment of family relationships at the point when a drug user enters a treatment programme and then, as appropriate, providing support and recognising the contribution of family members within treatment programmes for drug users. This could typically include the provision of information and education about drug misuse, the identification of sources of stress, handling relapses

and the promotion of coping skills. Treatment services need to respect patient confidentiality, but protocols can be developed that allow family support where appropriate.

- For some people there will be a need for more intensive and specialised support, provided through such interventions as intensive family-based therapy, behavioural couples therapy, multidimensional family therapy, community reinforcement and family training (CRAFT) and social network approaches.
- Bereavement support.

What is being done in Europe to support families affected by drug problems

There is no comparable information on the availability of programmes to support adult family members of people with drug problems in Europe.

In Ireland, the National Family Support Network, a peer-led organisation, provides support to peer support networks across the country and advocates for policy and practice improvements. The problem of drug debt and intimidation is recognised in the Irish National Drug Strategy and a Drug Related Intimidation Programme established by the police in collaboration with the National Family Support Network.

Similar peer-led national family support and advocacy organisations are available in some other European countries, such as Adfam and Scottish Families Affected by Alcohol and Drugs, in the United Kingdom. Bereavement support is often an important component of the work of these organisations, and they may also be involved in campaigning for or promoting naloxone distribution programmes.

Families of people with drug problems: implications for policy and practice

Basics

- Adult family members of people who use drugs may experience a wide range of harms and need support services to help them address these. These include primary health care to address the anxiety and stress they experience, peer support, bereavement care and support for kin carers.
- The needs and potential contribution of family members to the effectiveness of drug treatment should be recognised within drug policy and practice guidelines.

Opportunities

- Involvement of adult family members of people with drug problems in policy and practice development as well as in the provision of peer support has the potential to improve provision of service generally, as well as specifically for family members.

Gaps

- Information on the extent and nature of provision of interventions for this group is currently limited, and research and monitoring in this area needs to be improved.

Further resources

EMCDDA

- Pregnancy, childcare and the family: key issues for Europe's response to drugs, Selected issue, 2012.

Other sources

- UK Drug Policy Commission. The forgotten carers: support for adult family members affected by a relative's drug problems, 2012.
- UK Drug Policy Commission. Adult family members and carers of dependent drug users: prevalence, social cost, resource savings and treatment responses, 2009.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

4

CHAPTER 4
Responding in particular settings

Another important factor that can influence drug use and the problems that may be associated with use is the setting in which use occurs. The setting will also affect the responses that are most appropriate and it is this perspective that is taken in this chapter.

The settings considered are:

- prisons and the criminal justice system;
- nightlife, festival and other recreational settings;
- workplaces;
- schools and colleges; and
- local communities.

Each of these very different settings has unique characteristics that make them important for responses to drug problems. The amount of information available about these settings is variable as, in most of these areas, the EMCDDA has no established data collections.

In many cases, there is limited information on the effectiveness of preventive, treatment and harm reduction interventions in these specific settings. The advice provided in these cases is often based on a consensus of expert opinion about current best practice and, at times, on the assumption that evidence-based interventions that work in other settings may also be effective when transferred to the settings considered here. However, such assumptions need to be tested, and the importance of improving evaluation and monitoring to augment the evidence base in support of activities in these settings is a recurring theme.

4.1 Prisons and the criminal justice system

SUMMARY

Issues

People who commit criminal offences and enter the criminal justice system have higher rates of drug use and injecting than the general population. People with drug problems in the criminal justice system are often repeat offenders, and make up a significant proportion of prisoners. Adherence to the international drug conventions does not necessitate incarceration as a response to the use of controlled substances. Nevertheless, a significant number of offenders with drug problems are incarcerated for use or possession offences. Many others are imprisoned for other drug law offences or crimes, such as theft committed to obtain money for drugs. The complex health care needs of these individuals need to be assessed on prison entry.

As the average duration of a prison sentence for this group is a few months, they are a dynamic population with regular contacts with the community; this has implications for public health. Drug use occurs in prisons and also presents a public health and safety risk to prisoners and prison officers. The use of synthetic cannabinoids is an emerging issue of concern in some countries.

keywords: prison, alternatives to punishment, treatment, harm reduction

Response options

Alternatives to punishment: Encouraging drug-dependent offenders to engage with treatment can be an appropriate alternative to imprisonment. There is reasonable evidence for the effectiveness of some, but not all, of these approaches in reducing drug use and recidivism. More and better evaluations of the different models of interventions are needed.

Responses in prisons: Two important principles for health interventions in prison are equivalence of care to that provided in the community and continuity of care between the community and prison on admission and after release. This implies that all appropriate prevention, harm reduction and treatment services need to be provided within prisons and also particular attention paid to service provision around admission and release.

European picture

- Opioid substitution treatment in prisons is reported by 28 of the 30 countries monitored by the EMCDDA (28 EU Member States, Norway and Turkey).
- Detoxification, individual and group counselling, and therapeutic communities or special inpatient wards are available in prisons in most countries.
- Infectious diseases testing is available in prisons in most countries, but hepatitis C treatment is rare. Hepatitis B vaccination is reported in 16 countries.
- Needle and syringe programmes in prisons are reported in four countries.
- Many European countries have partnerships between prison health services and providers in the community to ensure continuity of care on prison entry and release.
- Preparation for prison release, including social reintegration, is done in most countries. Programmes to prevent drug overdose among opioid injectors are reported in five countries which provide training and naloxone on release from prison.

Drug use and its consequences in prisons and the criminal justice system

People who commit criminal offences and enter the criminal justice system and prisons report higher lifetime rates of drug use and more harmful patterns of use (including injecting) than the general population. This makes prisons and the criminal justice system an important setting for drug-related interventions.

Drug use can be linked to offending in a number of ways: use or possession are offences against the drug laws; crimes, including drug supply, may be committed in order to obtain drugs or fund their purchase; offences may be committed under the influence of drugs; and there are also crimes that are linked to the drug trade, such as violence between different groups of dealers. People who use drugs most often commit offences in the first three of these groups. The majority of recorded drug law offences in most EU countries are for cannabis use or possession, while people who have problematic patterns of use tend to enter the criminal justice system for acquisitive crimes, such as robbery, theft and burglary, committed to fund their drug use. This latter group are often repeat offenders and can make up a significant proportion of the prison population.

The international drug conventions recognise that people with drug dependence problems need health and social support and allow for alternatives to punishment to help them address their drug use problems. Nevertheless, many problem drug users are incarcerated. Drug-using prisoners can have complex health care needs that have implications for responses at intake, during incarceration and on release. As the average duration of a prison sentence for this group is a few months, they are a dynamic population with regular contacts with the community; this has public health implications. Drug use that occurs in prisons presents a public health and safety risk to prisoners and prison officers. Therefore the assessment of drug use and drug-related problems should be an important part of health screening at prison entry.

The economic cost to governments of incarcerating offenders whose crimes are drug-related is high. Estimating these costs is difficult because many are hidden within overall prison expenditure. It has been roughly estimated that between 2006 and 2010, in the 22 countries for which data were available, expenditure on drug law offenders in prisons varied between 0.06 % and 0.9 % of total public expenditure. This will be an underestimate of the overall cost of incarceration for all drug-related offending because drug law offences are only one type of drug crime, and it does not include the costs of crimes committed under the influence of drugs, crimes committed to obtain drugs or pay for drugs, and violent crimes committed in the course of drug supply, distribution and use.

A particular issue of concern in some countries is the increasing use of synthetic cannabinoids in prisons. This may be due to the fact that these substances are not generally detectable by random drug tests that are used in prisons in some jurisdictions, or that they are cheaper than other drugs and easier to smuggle into prison (see Spotlight on synthetic cannabinoids, page 81).

Responses to drug problems in prisons and the criminal justice system

Alternatives to punishment

There are many different types of alternatives to punishment, which may be applied at different stages of the criminal justice process from arrest to sentencing. A recent European Commission-funded study conducted by RAND Europe found 13 different types of alternatives to punishment (or, as they describe them, alternatives to coercive sanctions) available in all 28 EU Member States. These ranged from a simple caution, warning or no action to a range of options that generally involved some element of drug treatment.

These were:

- caution/warning/no action;
- diversionary measure;
- drug addiction dissuasion committees;
- suspension of investigation/prosecution with a treatment element;
- suspension of court proceedings with a treatment element;
- suspension of sentence with a treatment element;
- drug court;
- drug treatment;
- probation with a treatment element;
- community work with a treatment element;
- restriction of liberty with a treatment element;
- intermittent custody/release with a treatment element;
- parole/early release with a treatment element.

Alternatives to punishment are recognised as having the potential to reduce drug-related harms by diverting offenders with drug problems into programmes that may help them tackle the drug problems that often underpin their offending.

It also enables them to avoid the very damaging effects of a criminal conviction and, possibly, imprisonment and the associated costs to the state. The evidence base for these programmes is limited, however, as few have been evaluated. Where there have been evaluations, these have mostly been undertaken outside Europe with generally weak designs.

To develop an understanding of which of the various types of alternatives to punishment implemented in Europe are most effective and for which groups of offenders, information is needed on the primary objectives of these programmes, the extent of their use and the outcomes achieved. Only with these data, will it be possible to compare the potential costs and benefits of alternatives to prison relative to other sanctions.

Responses in prisons

In general, where evidence is available, it is supportive of the use in prisons of interventions that are effective in tackling drug problems in the community. Indeed they may be particularly important because prisons are a high-risk environment.

Two important principles for health interventions in prison are equivalence of provision to that in the community and continuity of care before and after prison release. Human rights principles should also be respected: there should be humane treatment, access to care, patient consent and confidentiality, and humanitarian assistance for the most vulnerable individuals.

The principle of equivalence of care obliges prison health services to provide prisoners with care of a quality equivalent to that provided for the general public in the same country, including harm reduction interventions, such as needle and syringe programmes and drug treatment. Barriers, whether legal or structural, should be overcome to guarantee high quality treatment and care for prisoners.

Continuity of care between services in the community and prison applies both on entry to prison and on release. It should also apply to drug treatment, including opioid substitution treatment and all types of health care. Many European countries have partnerships between prison health services and providers in the community to facilitate health education and treatment interventions in prison and ensure continuity of care on prison entry and release.

To meet these basic requirements, prison reception routines need to include systems to identify individuals with high

Overview of the evidence for … interventions in prisons and the criminal justice system

Opioid substitution treatment is protective against death in prison for opioid-dependent prisoners.

Substitution treatment is also important in prison in reducing injecting risk behaviours.

To prevent overdose death in the period directly following prison release, it is important that there is continuity of treatment in the community.

Drug court programmes (in the United States, where the vast majority of studies have been conducted) can help people achieve financial independence and find employment or enrol in education and reduce recidivism.

There is some evidence that quasi-coercive treatment involving programmes diverting people with drug problems from the criminal justice system can be as effective as voluntary treatment.

Psychosocial treatments reduce the re-incarceration rates in female drug-using offenders.

For opioid-dependent offenders the use of naltrexone seems to help to reduce their re-incarceration rates.

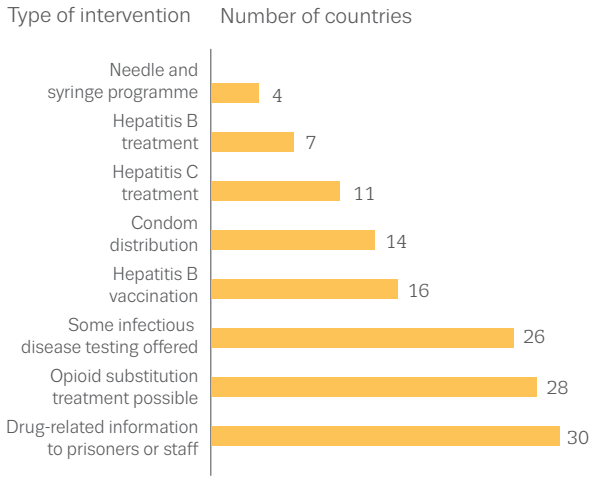
Education and training interventions with take-home naloxone provision help to decrease overdose-related deaths after release from prison.

treatment needs immediately on arrival. In addition, proper needs assessments and review must be undertaken to ensure that treatments are matched to individual needs. Where detoxification is appropriate this should be properly managed. Acute detoxification management may include symptomatic treatment of withdrawal symptoms, and it may benefit from the use of clinical tools to monitor symptoms.

Providing universal voluntary testing programmes for a range of infections (blood-borne viruses, sexually transmitted infections and tuberculosis) on entry to prison, and rapid treatment where necessary, can reduce the spread of infectious diseases within the prison setting and, in the longer term, to the wider community (see section 2.4). Training prison health care staff about communicable diseases and the promotion of testing may increase active case finding and the implementation of these programmes.

FIGURE 4.1

Availability of harm reduction interventions in prisons in Europe, 2015/16



NB: countries are the 28 EU Member States, Norway and Turkey.

What is being done in Europe to respond to drug problems in prisons and criminal justice system

Alternatives to punishment are available in every EU Member State, and all include at least one drug treatment option. Most of these are available at the point of sentencing, rather than at an early stage of the criminal justice process. The extent to which they are used is very variable. Often, eligibility restrictions exclude many of those who might benefit. This suggests the need to review and, where necessary, adjust rules that are overly restrictive. Another barrier to the use of alternatives to punishment is the perception of their ineffectiveness or low public acceptability among the judiciary. Here investing in studies that may make the evidence base stronger would appear merited.

Interagency partnerships between prison health services and providers in the community exist in many countries in order to ensure delivery of health education and treatment in prison and continuity of care upon prison entry and release. Some opioid substitution treatment is provided in prisons in 28 of the 30 countries monitored by the EMCDDA, although coverage is not complete. Detoxification, individual and group counselling, and therapeutic communities or special inpatient wards are also available in most countries (Figure 4.1).

Infectious diseases testing (HIV, HBV, HCV and tuberculosis) is available in prisons in most countries, but this may be limited to, for example, HIV and tuberculosis testing on entry, with testing for hepatitis limited to symptomatic individuals. Treatment for HCV infection is available in only 11 countries, and the new more effective treatments may not be being used. Hepatitis B vaccination programmes are reported in 16 countries. The provision of clean injecting equipment is less common, with only four countries reporting syringe programmes in this setting, and only three countries report figures on actual syringe distribution. Approaches, target group, and modalities of harm reduction measures in prison vary by country.

Preparation for prison release, including social reintegration, is carried out in most countries. Programmes to reduce the high risk of drug overdose death among opioid injectors in the period after leaving prison are reported in several countries. These include training and information on overdose risk reduction and, in some cases, the provision of naloxone upon prison release.

In response to the problem of infections in prisons, the EMCDDA is collaborating with ECDC to produce evidence-based public health guidance for prevention and control of communicable diseases in prison settings. As part of this work, systematic reviews of the evidence base regarding tuberculosis and active case finding have been published or are in press. Other topics to be included in the future are vaccination and the prevention of blood-borne infections.

Responses in prisons and the criminal justice system: implications for policy and practice

Basics

- The principles of equivalence of care and continuity of care require the provision of the same range of evidence-based interventions for people with drug problems in prison as in the community, provided by staff properly qualified for treating addiction (whether prison staff or outside professionals), and mechanisms to ensure continuity of treatment; this is especially important for those incarcerated for short periods.
- Preparation for release should include activities to support social reintegration and training on overdose prevention — the provision of take-home naloxone should be considered.
- Alternatives to punishment are recognised in the international conventions as a potentially valuable option for offenders with drug problems.

Opportunities

- Prison settings may provide an opportunity to have a significant impact on morbidity, mortality and public health. Firstly, by engaging people with opioid problems in treatment, their illicit opioid use and risk behaviours in prison and overdose risks on release may be reduced. Secondly, by offering testing for infectious diseases to everybody on entry to prison and following up with treatment as needed.
- Increasing the use of alternatives to punishment through review of the regulations that govern their application and addressing public and professional attitudes to their use may have the potential for improving long-term outcomes and reducing criminal justice expenditure.

Gaps

- UN/WHO guidance recommends the provision of harm reduction measures (needle and syringe programmes, condom distribution, safe tattoos) in prison, but this is currently rare — scaling up these programmes could make an important contribution to health improvement.
- Studies are needed to improve the evidence base around alternatives to punishment, with particular attention being paid to the groups that can most benefit from these, and the stages in the criminal justice process at which they are best applied.

Further resources

EMCDDA

- Best practice portal.
- European drug report: trends and developments 2017.
- Prisons and drugs: prevalence, responses and alternatives to imprisonment, Thematic page.
- Prisons and drugs in Europe: the problem and responses, Selected issue, 2012.
- Estimating public expenditure on drug law offenders in prison in Europe, EMCDDA paper, 2014.
- Alternatives to punishment for drug-using offenders, EMCDDA Papers, 2015.
- Health and social responses to drug problems in prisons, Ciara Guiney, Background paper.

Other sources

- World Health Organization. Prisons and Health, 2014.
- ECDC. Systematic review on the diagnosis, treatment, care and prevention of tuberculosis in prison settings, 2017.
- European Commission. Study on alternatives to coercive sanctions as response to drug law offences and drug-related crimes, 2016.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

4.2 Nightlife, festival and other recreational settings

SUMMARY

Issues

Drug and alcohol use in nightlife settings, such as bars, nightclubs and other recreational venues, is linked to health and social problems, including acute health harms, aggressive behaviour and violence, and driving under the influence of alcohol and drugs. There are also longer-term health effects and addiction. Adverse social consequences may include drug dealing and public nuisance. Because many of these harms are associated with excessive use on a particular occasion, many responses aim to reduce the amounts of alcohol and drugs that are used.

Response options

Most of the evidence on responses in recreational settings relates to alcohol. Few interventions targeting drug use in recreational settings have been robustly evaluated.

Prevention or harm reduction information material can be provided to young people in recreational settings. Peer educators disseminating this type of information may be seen as more credible. These activities can be supported by websites and apps providing more detailed information on drugs, alcohol and related harms, and tips on avoiding them. However, the evidence for behavioural change effects from these interventions is scarce.

Environmental strategies have a better evidence base. This approach includes measures that target factors that promote excessive consumption (e.g. discounted drinks, loud music and poor serving practices) or that create safer spaces and venues (e.g. by reducing crowding, providing chill-out rooms and free water, serving food, enforcing rules on behaviour and access).

Drug-checking services (sometimes called pill testing) enable individual drug users to have their synthetic drugs chemically analysed, providing information on the content of the samples as well as advice, and, in some cases, counselling or brief interventions. The effectiveness of this approach in changing behaviour is not clear, but it may provide a valuable opportunity for engaging drug users and for drug monitoring purposes.

European picture

Various environmental and regulatory approaches are used across Europe to address substance-related problems in nightlife and other recreational settings. These include zero tolerance rules, regulatory measures against venues that have visible problems, the training of door and security staff, health and safety measures, and training in recognising and responding to drug- and alcohol-related emergencies. Structured evidence-based environmental prevention approaches are now being used in more countries, as are local regulatory coalitions between the police, the nightlife industry and services (prevention and harm reduction). Two European projects, the Nightlife empowerment and well-being implementation project (NEWIP) and the Club Health Project, are developing good practice standards for people working in this area.

The number of drug-checking services available across Europe is growing. These use a variety of different models, including off-site testing centres and on-site testing at festivals and in nightclubs. The impacts of different models of drug checking need to be investigated.

keywords: nightlife settings, recreational settings, festivals, young people, drug checking

Drug issues in nightlife settings

Bars, nightclubs and other recreational venues provide young Europeans with opportunities to socialise and dance. Large music festivals during the summer months attract thousands of visitors, among whom the use of drugs is much more common than in the general population.

In addition to illicit drug use, excessive alcohol use is also common in these recreational settings. A study carried out in nine European cities estimated that over three quarters of visitors to nightlife venues had been drunk at least once in the last four weeks. School surveys show that most 15- to 16-year-old students who had used MDMA/ecstasy during the last month had also consumed five or more alcoholic drinks at least once, underlining the strong association between alcohol and drug use among young people.

Drug and alcohol use in nightlife settings are linked to a number of health and social problems. These include acute health risks and other problems, such as acute intoxication, unconsciousness and unintentional injury, aggressive behaviour and violence, unsafe and unwanted sex, and driving under the influence of alcohol and drugs. Adverse consequences of longer-term use of alcohol and drugs can include liver and brain damage and addiction. The adverse social consequences may include drug dealing and public nuisance.

Most of these harms are associated with binge use, that is, excessive use on a particular occasion. As a result, many responses aim to reduce the amount of drugs or alcohol used. There are also concerns that drug use in these settings is increasingly viewed as the norm in many countries and the risks associated with drug use underestimated. Another cause for concern is the increasing availability of a wider range of substances, for many of which the content and psychoactive effects are unknown.

Responses to drug issues in nightlife settings

Most of the evidence for responses in recreational settings relates to alcohol use and harms. The body of evidence on the effectiveness of interventions that target drug use in these settings is growing. However, few interventions have yet been subjected to robust evaluation. Despite these limitations, some lessons from the evidence on responses to alcohol use and harms are likely to be useful when considering drug-related problems.

Good practice in responding to drug problems in nightlife settings

The available research evidence and expert opinion suggest that a balanced approach is needed to tackle the drug- and alcohol-related health and social problems associated with recreational nightlife. There is less consensus on individual measures, although all of the following items merit consideration as part of a comprehensive response in this area:

- co-ordinated multicomponent interventions involving community stakeholders, generic health and emergency services, regulatory bodies, and policing and law enforcement;
- environmental strategies, such as providing chill-out rooms or free drinking water;
- training staff in these venues;
- rapid emergency response measures;
- early warning systems and monitoring of substances being consumed, including drug-checking services;
- provision of prevention and harm reduction materials — although on their own they are unlikely to be effective.

Overall, the evidence for the effectiveness of interventions to reduce alcohol-related harm is stronger than that for drug-related harm.

The Healthy Nightlife Toolbox is available at hntinfo.eu. It is made up of three databases: evaluated interventions, literature on these interventions, and other literature within the field of nightlife alcohol and drug prevention. The main types of interventions available are described briefly below.

Education/information for nightlife users

Young people who are involved in nightlife activities can be provided with prevention or harm reduction information material, such as brochures and pamphlets on intoxication and related harm. Peer educators may be helpful in disseminating credible information on harms and harm reduction to young people in these settings. These prevention activities can be supported by websites and apps that provide more detailed information on drugs, alcohol and related harms, and tips on how to avoid them. The promotion of harm reduction strategies addressing some key harms, such as drink and drugged driving (designated driver schemes, for example), may also be adopted. However, research evidence suggests that information provision alone is not an effective way to reduce drug- and alcohol-related problems, and risk communication approaches still require further research and development.

There is a consensus that it is important to provide good information on different substances, their associated risks and ways to minimise harms. However, risk communication strategies need to ensure that the information provided allows people to make choices that minimise adverse consequences, while avoiding using terminology that might make dangerous drugs appear more attractive. There is a risk that some people may deliberately seek out substances that have been identified as high-dose or high-potency. Understanding how to communicate risk in a way that has the desired impact on behaviour and avoids unintended negative consequences is an important research need.

Drug checking

Within the European Union, drug checking is a controversial harm reduction intervention for illicit drugs (see Spotlight on drug checking, page 139). While checking may provide users with some information on the substances they use, critics fear that consumers may be falsely reassured that tested drugs are safe to use. Commenting on this issue is complicated by the different analytical approaches that are used for testing and the technical difficulties in providing rapid, accurate chemical analysis of the substances and mixtures sold on the illicit drug market. A variety of drug-checking schemes exist in Europe, among the most longstanding of which is the Drug Information and Monitoring System (DIMS) in the Netherlands. This service provides users with information on the content of the drug and delivers a prevention message, which is based on scientific information on the chemical contents of the drug sample. DIMS also publishes qualitative information on changes in the content of drug samples in the Netherlands. On-site drug-checking services are emerging in several EU countries at festivals and in clubs and may provide an opportunity for brief interventions with people who do not usually engage with services or see their drug use as problematic.

It is not yet clear to what extent consumers change their drug use when informed about the contents of their pills. Nevertheless, drug checking does provide an opportunity for reaching people who do not usually engage with services or see their drug use as problematic. It also provides useful information for drug monitoring purposes. Alerts are sometimes issued, for example, when a very high potency 'brand' of MDMA pill is detected, although more work needs to be done to understand the behavioural impact of this approach. Given the developments in the European drug market and growing interest in these approaches, evaluation of the impact of different models of drug checking should be regarded as a priority.

Environmental strategies

Alcohol- and drug-related problems may also be exacerbated by the physical and social environment of entertainment venues. A permissive environment, characterised by, for example, tolerance of intoxicated behaviour, discounted drinks, poor cleanliness, crowding, loud music and poor serving practices, may promote higher levels of alcohol intoxication, and this may also apply to drug use. Environmental strategies for which there is some evidence of positive impact include creating safer spaces and venues by reducing crowding; providing cool-down or chill-out rooms; serving food; enforcing clear house rules on behaviour; and preventing access to minors. Ensuring that drinking water is available free of charge at venues where drugs such as MDMA are used is one way to prevent dehydration.

Training of staff and availability of first aid services

Training for bar servers, door supervisors and other staff in recreational venues combines information and skills building. The areas covered can include alcohol legislation, the psychoactive effects of alcohol and drug use, the links between alcohol and violence, first aid, how to refuse service to intoxicated customers, manage conflict and respond to drug dealing on the premises. Evidence for the effectiveness of staff training in preventing alcohol- and drug-related harm is inconclusive, in part because of the high rates of staff turnover in these venues.

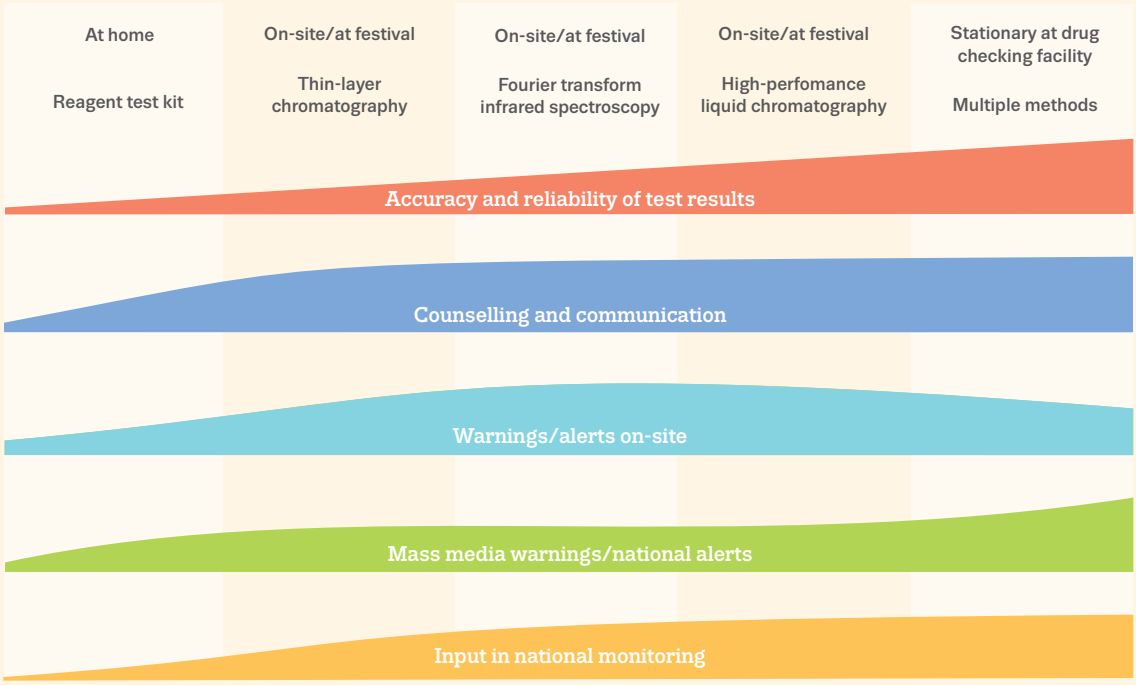
Spotlight on ... Drug checking

What is drug checking or pill testing?

Drug-checking services enable individual drug users to have their synthetic drugs chemically analysed, providing information on the content of the samples as well as advice, and, in some cases, counselling or brief interventions. Service aims vary, ranging from information collection to harm reduction by informing and warning users about the drugs on the market. The analytical techniques used also vary: from sophisticated technology that is able to provide information on strength and content of substances to self-testing kits that simply show the presence or absence of a particular drug (see figure). The sites at which testing occurs include fixed laboratories, to which individuals and organisations can submit drugs for testing (with results days later), and mobile laboratories at festivals or in clubs, which provide almost immediate results.

An important aspect of drug-checking services is how the results are communicated to individuals and whether this is accompanied by harm reduction advice or brief interventions.

An illustration of the range of models of drug checking available and their relative strengths



What is known about the effectiveness of drug checking?

Drug-checking services are controversial. They have certainly provided a valuable contribution to early warning systems in the European Union. However, evidence of their impact on drug use or risk behaviours remains limited. Advocates argue that there are case examples in which information from drug-checking services has had a positive public health impact and that drug checking can potentially reduce harm by engaging with young recreational drug users not seen by existing services; identifying drugs that contain unwanted or unknown chemicals allowing an early public health response; and helping avoid overdose by providing information on potency. On the other hand, critics suggest that drug checking may give a false feeling of safety because the reliability of some of the testing approaches used is questionable; may give the impression that drug taking is normal and acceptable behaviour, potentially undermining prevention efforts; and that drug users will go ahead and use their drugs regardless of results.

Continued on next page.

Spotlight ... On drug checking *(continued)*

Any assessment of these arguments is hampered by the lack of robust studies and the difficulties in generalising given the very different approaches and models used. Nevertheless, given the growing importance of synthetic drugs in the European market, including high potency synthetic opioids, any response that may reduce risks merits careful consideration and evaluation.

Drug checking in Europe: challenges for the future

The impact of different models of drug-checking services should be evaluated in order to identify the best models for different purposes (e.g. early warning versus harm reduction). The behavioural impact of drug checking is particularly in need of research. This research needs to pay particular attention to risk communication, and a behavioural insights approach may be useful.

Legal questions around the handling of controlled substances must be addressed, as many countries do not accept drug checking as a reason for a legal exemption to drug control laws, whatever the purpose. This issue also extends to users of drug-checking services, staff and proprietors of recreational settings where there is on-site testing. Close collaboration with the police is always recommended.

Changes in drug use and markets pose challenges for drug checking and associated responses:

- Accurate drug checking requires advanced and sophisticated laboratory equipment, although simpler and cheaper techniques are being developed. In addition, testing new psychoactive substances requires knowledge of their chemistry and spectral databases. Co-ordination between drug checking, academic and forensic services could maximise the value obtained from investment in these services.
- Even when substances can be identified, the risks of using them may still be unknown. Polydrug use further complicates the provision of advice linked to drug checking because interactions between drugs are much less predictable than the risks of using one drug alone.

See the Background paper, Drug-checking as a harm reduction tool for recreational drug users: opportunities and challenges and NEWIP guidelines.

Medical first aid services can result in prompter identification of and response to drug emergencies, potentially saving lives and decreasing transfer time to hospital emergency departments. European guidelines exist for responding to acute emergencies in nightlife settings.

Co-ordinated multi-component approaches

Partnerships between stakeholders can facilitate the implementation of effective nightlife interventions. Such partnerships, between local municipalities, venue owners or managers, the police and health authorities, aim to mobilise communities by raising awareness of harms and creating support among stakeholders and the public for preventive measures. The number of evaluated community interventions is slowly growing. Multi-component interventions can have an impact on levels of violence, problem drinking and street accidents. Where this is the case, leadership, continuity of interventions and funding are critical for success.

Legislative measures

Problems such as underage drinking, violence within or outside nightlife venues and drink driving are best addressed by multicomponent community interventions that include prevention services, regulators, the nightlife industry, as well as policing and enforcement of appropriate regulatory measures. This can include police visits to high-risk nightlife venues, age verification checks on entry to venues, and the use of sanctions (e.g. revocation of operating licences) to enforce licensing legislation. These measures have been shown to be effective in reducing alcohol-related problems, but their positive effects rapidly diminish if they are not carried out regularly and linked to real deterrents, such as loss of licence for failure to comply. They may also result in the displacement of activities to other locations or settings.

What is being done in Europe to respond to drug issues in nightlife settings

Some European projects have developed guidelines and standards for prevention and harm reduction activities for interventions in nightlife settings. These voluntary standards and guidelines include:

- Good practice standards on Safer Nightlife labels and charters, drug checking and peer education from the Nightlife empowerment and well-being implementation project (NEWIP).
- A 'Set of standards to improve the health and safety of recreational nightlife venues' that have been published by the Club Health project. This project, involving 20 associated and 15 collaborating partners from 15 EU Member States and Norway, had the aim of reducing diseases (especially addictions and sexually transmitted infections), accidents, injuries and violence among youth in nightlife settings.

More structured, evidence-based environmental prevention approaches, such as the STAD-project (Stockholm Prevents Alcohol and Drug Problems), are now being rolled out to more countries. Some local regulatory coalitions between the police, the nightlife industry and services (prevention and harm reduction) have been found to have an impact on violence, sexual assaults and hospital admissions in the United Kingdom and the Netherlands.

Although there is some evidence to support the use of a number of regulatory measures, they appear to be less frequently applied. These include no 'flat fee' or happy hours, minimum drink prices, refusal of service to intoxicated persons, mandatory staff training, no access for minors, limiting the density of nightlife venues and opening hours, and an 'apple juice law' — whereby in all drinking establishments the cheapest drink has to be non-alcoholic.

The multidisciplinary Euro-DEN network, in collaboration with the EMCDDA, has adapted existing UK guidelines to the wider European context. The guidelines cover the identification of individuals with acute drug toxicity who require clinical assessment in emergency departments and for whom the emergency services should be called. This enables early assessment and management by emergency

Responding in nightlife, festival and other recreational settings: implications for policy and practice

Basics

- Provision of environmental prevention and harm reduction interventions, supported by the guidelines and standards drawn up in the NEWIP and Club Health projects, should be implemented as appropriate.
- There should be provision of emergency health care to deal with adverse events in recreational settings and linked to emergency departments. The European guidelines may be useful here and need to be built on.
- Community-based initiatives that deliver a range of co-ordinated interventions through a multi-agency partnership are more effective than single interventions. They often combine community mobilisation, staff training and enforcement and appear to be effective in reducing violence, problem drinking and street accidents.

Opportunities

- Increase the sharing of good practice and guidelines for prevention and harm reduction interventions in these settings and promote evaluation of their effectiveness.
- Drug-checking services have the potential to be useful both for reducing harmful use of drugs and for monitoring what drugs are on the market. However, research is needed into the effectiveness of different models of provision and their appropriateness in different scenarios.

Gaps

- The evidence on the effects of information provision for clubbers/peer education (often harm reduction) is limited. It has the potential to be counterproductive so more research is needed on the most effective ways to present information on risks, safe dosing etc.

services and, if necessary, the emergency department, of those at highest risk of significant morbidity or death from acute drug toxicity.

At the time of publication 16 drug-checking services, using a range of different models, have been established in 11 European countries. Some provide national coverage but others, particularly those operating on-site in festivals and clubs, are restricted to a particular area or venue. There appears to be growing interest in this sort of provision.

Further resources

EMCDDA

- Responding to drug use and related problems in recreational settings, Thematic paper, 2012.
- Best practice portal.
- Healthy Nightlife Toolbox.

Other sources

- Nightlife Empowerment & Well-Being Implementation Project (NEWIP) standards available at http://newip.safernightlife.org/standards
- Peer education interventions in nightlife settings.
- Drug checking services.
- Safer nightlife labels and charters.
- Serious games in nightlife settings.
- IREFREA Manual: Set of standards to improve the health and safety of recreational nightlife venues.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

4.3 | Workplaces

SUMMARY

Issues

A significant proportion of workers in Europe are likely to have problems associated with alcohol or drug use; for example, it is estimated that between 5 % and 20 % of the working population in Europe have serious problems related to their use of alcohol. In addition to the general public health and social implications, substance use problems are highly relevant in industries where safety issues exist or where individual performance failings can have a significant impact. This includes, but is not limited to, the construction, farming, transport, power, ICT and financial services sectors.

Alcohol use and drug use are important issues in workplaces because:

- they can increase accidents and injuries, absenteeism, and, inappropriate behaviour;
- they can impose an economic burden on employers, governments and society;
- employers have a duty under health and safety laws to protect, as far as reasonable, the health, safety and welfare of employees and others affected by their activities;
- workplaces also provide an opportunity for health education about alcohol and drugs and opportunities to identify individuals who have problems with alcohol and drug use or have family members with drug or alcohol problems.

The workplace also has a potential role in supporting the social reintegration of people with a history of serious drug problems.

Response options

- Workplace policies on the consumption of alcohol and drugs in the workplace.
- Prevention through information, education and training programmes addressing alcohol and drugs issues, preferably as part of wider health promotion programmes.
- Workplace screening and testing to identify substance use problems, which may arise informally through discussions around performance issues or as a result of formal assessments, which may include testing in safety-critical industries.
- Interventions to address problems that have been identified, including assistance, treatment and rehabilitation programmes.
- Providing employment opportunities for people with a history of serious drug problems.

European picture

Most European countries have some kind of general legislation or agreements to prohibit or regulate the consumption of alcohol and drugs in the workplace. However, the type of legislation in force and nature of occupational safety and health legislation varies considerably depending on the national culture and the awareness of and priority given to the issue.

There is no up-to-date, comprehensive information on the extent and nature of different types of interventions in workplaces in Europe. There is also very little European evidence regarding effectiveness of different interventions.

Looking to the future, the use of performance-enhancing drugs, such as modafinil for cognitive enhancement, may become a growing issue in the workplace.

keywords: prevention, workplace

Substance misuse issues in the workplace

Alcohol and drugs represent a serious problem for a substantial share of the working population. National estimates in Europe indicate that between 5 % and 20 % of workers are either addicted or at risk of becoming addicted to alcohol. The problem of alcohol or drug consumption by workers (inside and outside workplaces) is especially relevant in some economic sectors, such as construction, farming and transport.

The reasons for the use of alcohol or drugs at work can be differentiated into work-related and social or personal. Work-related reasons include tough physical or uncomfortable working conditions (for example, a cold environment), low satisfaction at work, irregular working hours, self-perception of low social support from work colleagues and superiors, little decision latitude and other factors related to stress at work. This might make certain types of jobs more likely to be linked to substance use. For example, long-distance truck drivers, who need to maintain concentration for long monotonous periods of driving, may be tempted to use stimulant drugs. Doctors and other health professionals may be vulnerable to addiction problems due to easy access to medicines combined with stress at work. Other groups of workers in high pressure, competitive or bullying work cultures, including city traders, academics and lawyers, may use a range of performance-enhancing drugs for a variety of reasons, such as to improve productivity or to overcome jetlag.

Non-job-related reasons include social factors, such as a 'high' social tolerance to alcohol and drug consumption, cultural patterns that make workers more 'prone' to this consumption, 'easy' accessibility to these substances (in the alcohol and entertainment industries, for example) and personal factors (such as specific personality types or a family background of alcohol misuse).

Alcohol use and drug use can increase problems in the workplace, such as accidents and injuries, absenteeism and inappropriate behaviour. Intoxication by alcohol or illicit drugs can affect work performance by impairing decision-making and reaction times, reducing productivity, leading to production of inferior goods and services, and errors and work-place accidents.

There are a number of ethical and often legal obligations relevant to responding to workplace substance misuse problems. Medical professionals brought in to a workplace to help employees or advise management have to clarify their role and respect patient confidentiality. It is generally accepted that managers and supervisors should be trained to recognise the signs of problems with alcohol and illicit drug use. They also need to know how to respond if they suspect an employee has a problem or if they are approached by an employee who declares a problem.

In supporting people with a past or current alcohol or drug problem back into work, health professionals must avoid the application of arbitrary abstinence periods, except where they are legally mandated, such as for driving. Health professionals can be very influential in addressing employers' concerns about risks and challenging stigma and negative stereotypes.

Responses to drug problems in the workplace

Workplaces provide opportunities for health education about alcohol and drugs. They also provide opportunities to identify individuals who have problems with alcohol and illicit drug use. Medical professionals who support workplaces are well placed to offer health advice to workers. They can also train managers and supervisors to recognise and deal with alcohol and illicit drug use in the workplace.

The International Labour Organization has produced a code of practice on the management of alcohol- and drug-related issues in the workplace. In Europe, Eurofound (the European Foundation for the Improvement of Living and Working Conditions) and the European Agency for Safety and Health and Work are EU agencies involved in this area. The Pompidou group of the Council of Europe has an activity stream on prevention of drug use in the workplace. A common theme is the importance of having a preventive approach that views drug problems from a health perspective rather than as a disciplinary issue.

At the national level, approaches to drug-related problems in the workplace will be influenced by the administrative, legislative and cultural context in each country. Regulations, legislation and policies in the domains of employment law, health and safety, may all be relevant to drug issues in the workplace. To support their policies, countries may produce their own guidance for employers, for example, *Drug misuse at work: a guide for employers* published by the UK Health and Safety Executive.

The following responses may be used to address drug use and problems in the workplace:

- Workplace policies: these may place restrictions on the consumption of alcohol and legal and illegal drugs in the workplace, and thereby establish norms and restrict availability.
- Prevention through information, education and training programmes, such as 'Top on job'. This programme is targeted to young workers before addiction problems

occur and uses a peer-education approach. Having alcohol and drugs issues incorporated into wider health promotion programmes may make them more attractive to employees.

- Formal screening for drug problems will generally occur in three situations: (1) pre-employment testing of job applicants; (2) incident-driven or for-cause testing of employees (e.g. post-accident, fitness for duty); and (3) in-employment testing without specific cause, often selected at random from a pool of targeted sensitive positions. In Europe, formal screening is generally conducted only where necessary to promote workplace safety.
- Identification of problems — workplace screening and testing. In the workplace, identifications of drug problems will generally arise either through self-assessment by the individual concerned or as a result of identification by the employer, either informally through discussions around performance issues or as a result of formal assessments, which may include testing in safety-critical industries. These approaches often comprise screening, assessment, counselling and referrals to more specialist care and aim to provide opportunities for managers to forestall discipline or dismissal of employees with substance use problems, contingent upon their ability to constructively address these issues that negatively affect job performance.
- Interventions to address problems, including assistance, treatment and rehabilitation programmes. The type and level of support provided will depend on a range of factors, including the size of the organisation. Actions that should be considered as a minimum are as follows: identifying specialist services in the area and providing information on these or referral if appropriate; identifying community support agencies, such as Narcotics Anonymous, that may be helpful to the individual concerned; suggesting the individual seeks support from his or her personal physician.

The workplace also has a potential role in supporting the social reintegration of people with a history of serious drug problems. The stigma associated with problematic drug use can pose a major barrier to employment, which is a cornerstone of reintegration. However, some employers have worked with drug services to develop programmes, such as supported employment schemes, that facilitate the employment of people with a history of problematic drug use and find these produce benefits for their organisation as well as the individual concerned.

What is being done in Europe to respond to drug problems in the workplace

A report produced by Eurofound (European Foundation for the Improvement of Living and Working Conditions) indicated that most European countries have some kind of general legislation or agreements intended to prohibit or regulate the consumption of alcohol and drugs in the workplace. However, the type of legislation in force and nature of the limitations established under occupational safety and health legislation varies considerably depending on the national culture and the awareness of and priority given to the issue. For example, in some countries there may be a specific regulation on alcohol, whereas in others it is at the employer's discretion.

There is no up-to-date, comprehensive mapping of the practices and interventions relating to substance-related issues in the workplace in Europe. The evidence of effectiveness of the different programmes and interventions that are in use is also limited, and what there is mainly comes from the United States. A comprehensive assessment of most current provision is therefore not possible.

However, there may be data sources available that can provide some information. For example, EU-OSHA conducts the European Survey of Enterprises on New and Emerging Risks (ESENER), which focuses on a number of issues: general safety and health risks in the workplace; psychosocial risks, such as stress, bullying and harassment; drivers of and barriers to occupational safety and health management; and worker participation in safety and health practices. The survey was carried out in 2009 and 2014, and the data from these surveys is available online. It included a question on whether their establishment takes any '...measures for health promotion among employees? ... Raising awareness on the prevention of addiction, e.g. to smoking, alcohol or drugs'. In 2014, about a third of respondents across Europe said that their enterprise did so, ranging from 19 % to 59 % in different countries (Figure 4.2).

Key principles for the management of drug-related issues in the workplace identified by the UN International Labour Organization

- Drug policies and programmes should promote the prevention, reduction and management of alcohol- and drug-related problems in the workplace.
- Drug-related problems should be considered as health problems, and dealt with like any other health problem at work and covered by the health care systems (public or private) as appropriate.
- Employers and workers and their representatives should jointly assess the effects of alcohol and drug use in the workplace, and cooperate in developing a written policy for the enterprise.
- Employers should cooperate with workers and their representatives to do what is reasonably practicable to identify job situations that contribute to drug-related problems, and take appropriate preventive or remedial action.
- The same restrictions or prohibitions with respect to alcohol should apply to both management personnel and workers to ensure a clear and unambiguous policy.
- Information, education and training programmes about alcohol and drugs should be undertaken in order to promote safety and health in the workplace as part of broad-based health programmes.
- Employers should establish a system to ensure the confidentiality of all information communicated to them concerning alcohol- and drug-related problems.
- Testing of bodily samples for alcohol and drugs in the context of employment involves moral, ethical and legal issues of fundamental importance that require a determination of what is fair and appropriate testing.
- Holding a job is an important factor in facilitating recovery from alcohol- and drug-related problems. Therefore the workplace has a special role to play in assisting individuals with these problems.
- Workers who seek treatment and rehabilitation for alcohol- or drug-related problems should not be discriminated against by the employer and should enjoy normal job security and the same opportunities for transfer and advancement as their colleagues.
- The employer has authority to discipline workers for employment-related misconduct associated with alcohol and drugs, but counselling, treatment and rehabilitation should be preferred to disciplinary action. Should a worker fail to cooperate fully with the treatment programme, the employer may take disciplinary action as appropriate.
- The employer should adopt the principle of non-discrimination in employment based on previous or current use of alcohol or drugs, in accordance with national law and regulations.

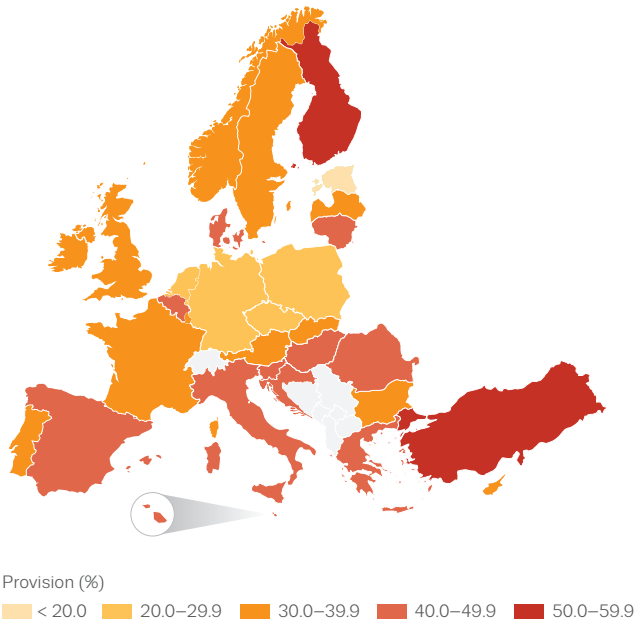
Adapted from: *Management of alcohol- and drug-related issues in the workplace.* An ILO code of practice. Geneva, International Labour Office, 1996.

Providing a comprehensive overview is difficult, given the wide range of different programmes involved and the need to avoid over-burdening employers. Focusing on the interface between drug treatment services and employees and describing and evaluating access to treatment for employees who have substance-related issues or are on programmes to support people in treatment for drug problems into employment might have the biggest impact.

Looking to the future, the use of drugs for performance enhancement may become a growing issue in the workplace. This includes the use of prescription stimulants, such as modafinil, as an aid to concentration or because they are believed to provide cognitive enhancement. It appears that the use of performance-enhancing drugs is becoming more widespread and, as mentioned above, some groups of employees have a greater likelihood of using them for work-related reasons. Therefore it might be expected that, in an increasingly competitive society, use in the workplace could grow. It will be important to monitor the use of performance-enhancing drugs in the future, and more work is needed on the effects of use of these drugs in the workplace.

FIGURE 4.2

Provision of health promotion interventions for employees: share (%) of workplaces reporting measures to raise awareness on the prevention of addiction



Source: EU-OSHA: European survey of enterprises on new and emerging risks, 2014.

Responses in workplaces: implications for policy and practice

Basics

- It recommended that employers have an alcohol and drug use policy as a component of their health and welfare policies rather than as a disciplinary matter.
- The key principles for the management of drug-related issues in the workplace identified by the UN International Labour Organization, and highlighted above, should also be promoted.

Opportunities

- Gaining employment is an important component of reintegration, therefore it is important that people with a past or current alcohol or drug problem are supported back into work. Working with employers to overcome barriers to employing people with a history of drug problems offers benefits to employers, to those trying to overcome their drug problems and to society as a whole.

Gaps

- There is a need for an overview or mapping of existing data sources, current responses and interventions addressing drugs in the workplace as well as evaluation of existing interventions in Europe.
- Research is needed into the extent and nature of the use of performance-enhancing drugs in the workplace and on the effects of their use in that setting.

Further resources

EMCDDA

- Social reintegration and employment: evidence and interventions for drug users in treatment EMCDDA Insights, 2013.

Other sources

- OSHA. A review on the future of work: performance-enhancing drugs, Discussion paper, 2015.
- OSHA. European survey of enterprises on new and emerging risks, 2014.
- Eurofound. Use of alcohol and drugs at the workplace, 2012.
- *Management of alcohol- and drug-related issues in the workplace.* An ILO code of practice. Geneva, International Labour Office, 1996.
- Shahandeh, B. and Caborn, J. (2003), *Ethical issues in workplace drug testing in Europe* Geneva: ILO.
- Pompidou Group. Prevention of drug use in the workplace.
- UK Health and Safety Executive. Drug misuse at work: A guide for employers.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

4.4 | Schools and colleges

SUMMARY

Issues

Adolescence and young adulthood are periods of risk-taking and experimentation that often includes substance use. Schools and colleges are important settings in which to reach young people, although some vulnerable groups may not be well-represented within them.

In schools the focus is mainly on preventing or delaying the initiation of substance use and on the development of skills to support healthy decision-making.

Poor school attenders, frequent truants or young people with behavioural problems, such as poor impulse control, are at increased risk of developing problematic forms of substance use. This makes schools an important setting for early identification of at-risk individuals.

The greater independence of young people attending colleges and the tendency to increased alcohol and drug use in this age group make colleges an important setting for harm reduction and for referral of those developing problems to specialist services.

keywords: young people, prevention, students

Response options

Drug use among school populations is generally low and can be part of a wider pattern of behavioural problems and risk-taking. Interventions therefore need to address the wider determinants of risky and impulsive behaviour rather than the drug use in isolation.

Most prevention interventions in schools aim at having an impact on the whole student body and staff. Those that are supported by current evidence include:

- evidence-based universal prevention programmes that focus on developing social competences and refusal skills, healthy decision-making skills, and correcting normative misperceptions about drug use;
- school policies around substance use; and
- interventions aimed at developing a protective and nurturing educational environment that is conducive to learning and establishes clear rules about substance use.

Other approaches that may be beneficial include events or interventions involving parents and the use of peer-to-peer approaches.

European picture

Of the interventions for which there is good evidence of effectiveness, smoking bans in schools are reported in all countries providing information, while 21 countries reported that school policies around substance use are in place in the majority of schools. Programmes aimed at developing personal and social skills are less widely implemented, with only 11 countries reporting them in the majority of schools. This is lower than the level of provision of information only programmes, which have not been found to be effective, but are reported in the majority of schools in 16 countries.

Some evidence exists in support of other types of programmes. Among these, peer-to-peer programmes seem to be relatively uncommon, but creative extracurricular activities and events for parents are more widely available. Drug testing of pupils is not recommended and is rarely used; it was only reported as being conducted in a few schools in 10 countries.

Drug use issues for schools and colleges

Adolescence and young adulthood are periods in life associated with risk-taking and experimentation with new experiences, including substance use. Schools and colleges are important settings for reaching the general population of young people. They may also provide opportunities for identifying and intervening with at-risk individuals, such as young people with vulnerable personality traits (such as poor impulse control), poor school attenders and frequent truants, who are at increased risk of developing problematic forms of substance use. Interventions for vulnerable young people are discussed in section 3.4.

In schools the main focus will be on preventing or delaying the initiation of substance use and on the development of personal and social skills to support healthy socialisation and decision-making more generally. In colleges harm reduction will also be an important component as young people transition to greater independence and may engage in frequent partying and believe increased alcohol use to be the norm.

Response options

Drug use in school populations is generally low and can be part of a wider pattern of behavioural problems and risk-taking. Action to reduce it therefore needs to address the determinants of these general behaviours rather than the drug use in isolation. Similarly, education systems are more likely to support prevention programmes, policies and interventions if, in addition to reducing substance use, they reduce violence and bullying, improve learning, academic achievements and create a better school climate.

Substance use prevention is often carried out in schools because schools provide unique access to young people during a critical development phase. Prevention interventions typically aim at having an impact on the whole student body and staff. They may include evidence-based universal prevention programmes that focus on developing social competences and refusal skill, healthy decision-making skills and correcting normative misperceptions about drug use. Examples are Unplugged, a programme that focuses on the development of life skills and the correction of normative beliefs, which has been positively evaluated in several European countries, and Rebound, which was developed in Germany and has also been tested in the United Kingdom. Having in place school policies around substance use is important to support such programmes. Interventions aimed at developing a positive school climate that is conducive to learning and establishes clear rules about substance use can have a positive impact. Evidence-based programmes are available that do not explicitly address substance use, but focus on general behaviour, and have been shown to have positive effects on impulse control and the learning and classroom climate, with potential longer-term impacts on substance use and mental health. These may be particularly appropriate in primary schools. Examples are the Good Behaviour Game and Nina e Nino.

Other approaches, for which the evidence is more mixed, include events or activities involving parents, providing creative extracurricular activities for pupils and the use of peer to peer approaches in school-based programmes.

In colleges, where heavy alcohol use and drug use may be viewed as normal or an important part of the student experience, the prevention focus tends to be on challenging these norms. These approaches are used quite extensively in the United States, and evaluations have shown some impact on harmful drinking behaviours although these tend to be small. Social norms interventions are based on the premise that incorrect perceptions of high rates of peer substance use are linked to increased personal use. A cross-national research project (SNIPE, Social norms intervention for the prevention of polydrug use) investigated if this was the case in seven European countries. It found that such misperceptions of use existed in regard to use of a range of drugs (cannabis, cocaine, ecstasy, amphetamines, hallucinogens, synthetic cannabinoids and inhalants) as well as nonmedical prescription stimulants use (i.e. Ritalin used because it is perceived to enhance academic performance). Norms-based programmes are now being developed and trialled in Europe.

Although rare, drug testing in schools is practiced in some European countries. The assumption that drug testing acts as a deterrent to substance use is not supported by the evidence. Testing can be either random or targeted. Random testing can be viewed as a universal intervention, since it aims to create a climate of deterrence on the whole student body. Targeted drug testing involves testing only individuals whose behaviour raises reasonable suspicion for drug use. The evidence that random drug testing changes behaviour is weak, even in the United States, where it is more extensively used. There is some evidence that it may increase illicit drug use or risks associated with substance use. Hence it is not currently recommended.

Overview of the evidence on ... interventions in schools and colleges

Effective school-based prevention programmes can delay initiation of use. These are manual-based and develop social competences and refusal skills, healthy decision-making and coping, and correct normative misperceptions about drug use. Ideally they should be provided within the context of a school drug policy.

Substance use-related problems may be reduced by providing a protective and nurturing educational environment that is conducive to learning and establishes clear rules about substance use.

There are evidence-based programmes for primary schools, which — without explicitly addressing substances — have effects on impulse-control and, therefore, potentially on later substance use and mental health problems. They have immediate effects on learning and classroom climate.

Interventions that only provide information about the risks of drug use have **not** been found to be effective in preventing drug use.

The invasiveness of the procedure and limitations to the information derived from drug testing all affect its utility.

If drug testing is to be used, further studies should be undertaken to guide best practices with adolescents. In particular it will be important to identify which procedures used to follow up on the results of testing are most effective in helping students who test positive. The research literature indicates that such infractions are better handled by further assessments and providing or referring the students to counselling, treatment or other health care and psychosocial services rather than punishing or expelling the students.

What is being done in Europe to respond to drug use in schools and colleges

The range of school-based interventions to prevent substance use that are implemented in European countries varies both in terms of the supporting evidence and in level of provision (Figure 4.3). Expert assessments of level of provision in each country of 13 types of intervention indicate that, of the measures with good evidence of effectiveness, smoking bans in schools are fully implemented in all 29 countries providing an answer. School policies around substance use are implemented at full or extensive level in 21 countries. Programmes aimed at developing personal and social skills are less widely available — only 11 countries reported full or extensive provision. In contrast, a considerable number of countries report full or extensive provision of interventions for which the evidence is unclear. Sixteen countries report this level of provision for information-only programmes and 9 report it for visits of law enforcement officers. It should be noted that the exact nature of what is provided within each category of intervention can vary widely between countries.

With respect to other types of programmes for which there is some evidence, peer to peer programmes seem to be relatively uncommon. Creative extracurricular activities and events for parents are more common, with 18 and 12 countries respectively reporting full or extensive provision and 8 in each case reporting limited provision.

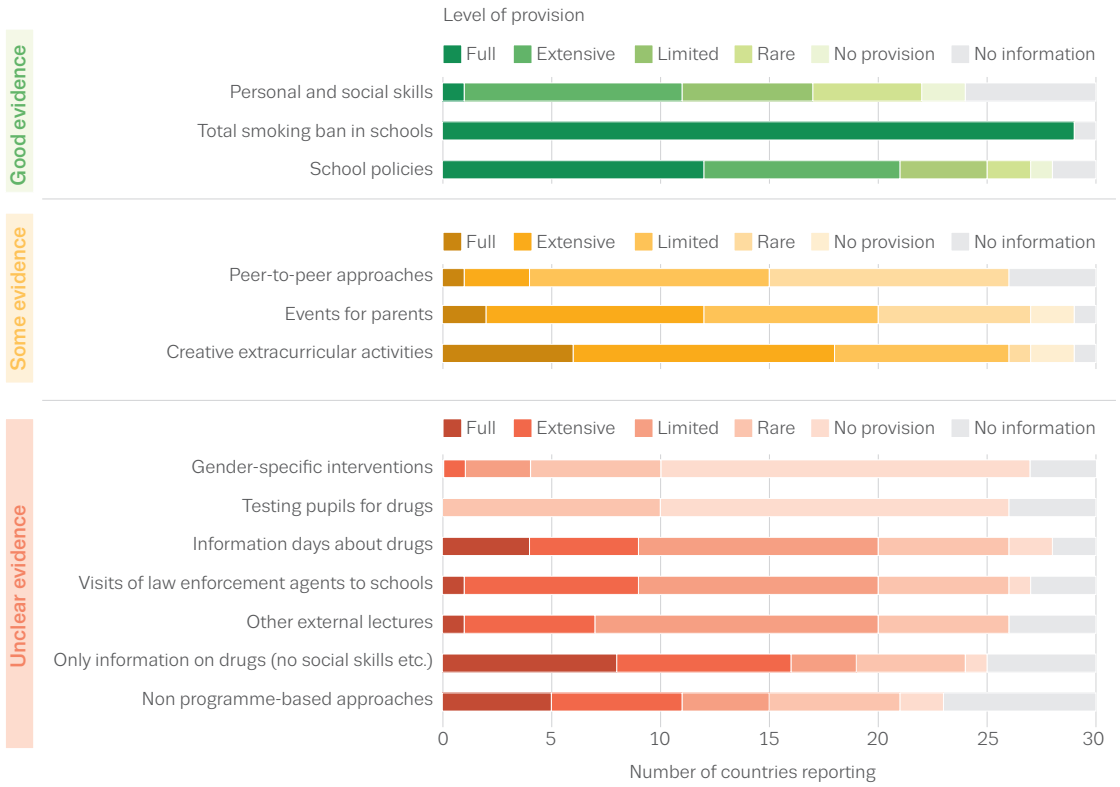
Drug testing of pupils, which is not recommended, is reported as rare by 10 countries, 16 said there was no provision, while the remaining four countries did not provide information.

Early-detection and intervention approaches are used in some schools, often based on the provision of counselling to young substance users. A Canadian programme (Preventure) that targets young sensation-seeking drinkers has been positively evaluated and adapted for use in the Czech Republic, the Netherlands and the United Kingdom. Interventions for specific vulnerable groups are discussed in more detail in section 3.4.

Norm-based approaches are being developed for use in colleges in Europe, including a web-based intervention being trialled in Germany (INSIST). However, there is no information on the extent of provision of drug-related interventions in colleges currently.

FIGURE 4.3

School-based interventions to prevent substance use in Europe: provision and evidence of effectiveness



NB: countries are the 28 EU Member States, Norway and Turkey. Availability: Full, provided in nearly all schools; extensive, provided in the majority but not nearly all schools; limited, provided in more than a few but not the majority of schools; rare, provided in only in a few schools.

Responses in schools and colleges: implications for policy and practice

Basics

- Schools are important access points to the adolescent population and their parents. They also have a role in identifying at-risk individuals for targeted interventions.
- Education systems should ensure schools provide evidence-based prevention programmes and have appropriate drug policies in place. These should aim not only to reduce substance use, but also to reduce violence, improve learning, produce better academic achievements and create a better school climate, outcomes that are of intrinsic interest to the education sector.
- Ineffective prevention programmes are often popular, but there is a growing number of programmes that have been shown to work and these should be used instead.

Opportunities

- Establishing systems that encourage or require schools and colleges to use programmes supported by evidence instead of ineffective programmes and providing the necessary support for this would be a more efficient use of resources.

Gaps

- The evidence for effective programmes in colleges is very limited, but this is a period of high risk of drug use and appropriate programmes are needed for this setting.

Further resources

EMCDDA

- Best practice portal.
- Xchange registry.
- Prevention of addictive behaviours. Insights, 2015
- Prevention profiles.

Other sources

- UNESCO, UNODC and WHO (2017), Education sector responses to the use of alcohol, tobacco and drugs. Paris: United Nations Educational, Scientific and Cultural Organization.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

4.5 | Local communities

SUMMARY

Issues

In this section community is used to mean a group of individuals sharing a common geographical and administrative setting.

Local communities are important to drug responses in providing a way of promoting bottom-up civic engagement and action. In Europe, municipalities and local governments are often the main drivers of strategy development and delivery.

Communities may be involved in drug responses in different ways:

- as a setting for interventions (as opposed to in schools or services, for example);
- responses may specifically target drug-related harms that communities experience; and
- through community involvement in interventions addressing drug problems.

keywords: local communities, drug consumption rooms

Response options

- The development of community plans to co-ordinate activities according to local needs;
- community-based outreach provides services for individuals and groups who are not effectively reached by fixed-site services or traditional health promotion channels;
- diversionary activities for young people in the community seek to reduce vulnerable young people's involvement in drug use and gangs by providing positive activities that build self-esteem and life skills;
- programmes to address drug-related harms experienced by the community, for example, clean-up schemes picking up needles and other drug paraphernalia and drug consumption rooms; and
- community intervention approaches, such as community coalitions and Communities that Care programmes.

The way in which communities are defined varies between countries in Europe, as do approaches to community engagement.

European picture

Prevention approaches that target high-risk neighbourhoods have been implemented in some countries, utilising new methods, including the redesigning of urban spaces. Provision for these types of interventions is reported to be highest in the north and west of Europe. Approaches that have good evidence of effectiveness (normative and environmental) are implemented in just over a quarter of countries.

The Communities that Care (CTC) programme is being used in Germany, the Netherlands, Croatia and the United Kingdom. In addition Belgium is conducting a study on the use of CTC for crime prevention.

Systematic collection of information on community interventions is limited. The variety of different types of interventions, their implementation at a local level, and the fact that they often overlap with broader public health and crime prevention activities makes monitoring these interventions difficult.

Sharing of best practice may occur through networks, which may also have a broader focus, or be specific to a type of intervention. Mapping these networks and obtaining a clearer understanding of the different approaches being taken within Europe to the different types on intervention within communities can be a useful starting point for developing best practice sharing and monitoring of provision.

Drug use issues for communities

The meaning of 'community' varies between European countries. In some cases communities may be defined by geographical boundaries, either informally as in the case of neighbourhoods or more formally by municipal or local government boundaries. In other cases they might be defined by ethnic, linguistic or cultural commonalities.

However defined, communities experience a range of harms associated with drug use, for example, problems associated with open drug scenes in their neighbourhood. They can also be important in addressing drug problems by promoting bottom-up civic engagement and action. Municipalities and local governments are often the main drivers and stakeholders of strategy development and delivery of interventions.

In this section community is understood to mean a group of individuals sharing a common geographical and administrative setting. Interventions within a community do not necessarily address all of the community concerned, but may involve several key actors (for example, family groups or associations, health services, schools and sport facilities).

Involvement of communities in drug responses can be manifest in different ways:

- communities as a setting for interventions, for example, through outreach services;
- responses to the drug-related harms that communities experience, such as drug-related disorder and crime; and
- community involvement in support of responses to drug problems — these may address community-level harms but can also address harms to individuals.

Response options

Communities as a setting for interventions

Community-based outreach services can be a flexible and effective component of local harm reduction and prevention strategies. In general these aim to improve health by reducing risks and harms for individuals and groups who are not effectively reached by fixed-site services or through traditional health education channels. Outreach workers generally make contact and establish rapport with target populations and gain acceptance as trusted and knowledgeable sources of information and advice. These services vary greatly and may be led by social workers or trained peers. The target groups can range from young people, in street or party settings to high-risk drug users and sex workers. Peer-driven interventions need to be particularly well-supported by good management practices. Issues of confidentiality, defining and respecting boundaries and protecting the health and safety of staff members are important considerations for services working in this area. This is helped by establishing clear guidelines covering objectives, services offered, responsibilities and the need to recognise and respect personal, professional and legal boundaries.

Positive youth development interventions or diversionary activities for young people in the community, such as those provided by Positive Futures organisations in the United Kingdom or the annual 'adventure weeks' provided in Luxembourg, provide a range of activities (such as rock climbing, sports, music or creative activities and volunteering) that build skills, new friendships and self-esteem. They aim to enhance protective factors and reduce risk factors and provide alternatives to substance use, crime and gang involvement for vulnerable young people.

Responses to harms experienced by communities

The Drug Related Intimidation Reporting Programme in Ireland is an example of initiatives to address community harms. The programme is a collaboration between the police service and the National Family Support Network, and it supports people in the community suffering intimidation due to drug debts. In other countries telephone lines with associated media campaigns may allow anonymous reporting of drug dealing in neighbourhoods.

Drug consumption rooms, sometimes known as supervised injecting facilities, can also have benefits for communities as well as for people who inject drugs (see also Spotlight on drug consumption rooms, page 156). There is evidence that they are effective at reducing harms to the local community, for example, from drug litter and public nuisance, as well as reducing the risks of overdose and infection among individuals who inject drugs. However, there is often community resistance to the establishment of these services so community engagement is important if they are to be successful.

Other harm reduction services can also provide direct benefits to communities in addition to their primary goals, for example, needle exchanges may reduce drug litter. Some may also engage in proactive programmes, such as organising action days to clean up parks or areas where drug litter is posing a problem in local neighbourhoods.

Spotlight on ... Drug consumption rooms

What are drug consumption rooms?

Drug consumption rooms, sometimes known as supervised injecting facilities, are places in which drug users can use illicit drugs under the supervision of medically trained staff. They exist in several European countries and are usually located in areas where there is an open drug scene and injecting in public places is common. Their primary goal is to reduce morbidity and mortality by providing a safer environment for drug use and training clients in safer forms of drug use.

What problems do they address?

Drug consumption rooms were originally developed as a public health response to the rapid spread of HIV/AIDS among injecting drug users in the 1980s. Their aims were to reduce the risks of unhygienic injecting, prevent fatal overdoses and link drug users with treatment, health and social services. Their establishment was often opposed because of community fears that they would encourage drug use, delay treatment and aggravate open drug scenes. However, there is increasing awareness of their potential to reduce harms to communities associated with public drug injecting, such as drug litter.

What is known about their effectiveness?

There is growing moderate quality evidence that drug consumption rooms are able to attract hard-to-reach drug users, especially marginalised ones who inject drugs on the streets, under risky and unhygienic conditions. There is also moderate quality evidence that drug consumption rooms increase safer injecting and may reduce the transmission of blood-borne infections and the occurrence of overdoses near services. There is similar evidence that they reduce the public visibility of illicit drug use and drug litter, thereby improving public amenity around urban drug markets.

Drug consumption rooms in Europe

There have been drug consumption rooms operating in Europe since 1986, when the first one was established in Berne, Switzerland. As of 2016, 90 of these facilities were operating in six EU countries, Norway and Switzerland. In 2016, two opened in France, new facilities were established in Denmark and Norway, and other countries are in the process of passing legislation to permit drug consumption rooms to operate.

Looking to the future

Drug consumption rooms were originally established to reduce the harms associated with public injecting of opioids, but in some cases they are also used by people injecting other substances. As rates of injecting in some countries decrease, consideration has been given to using drug consumption rooms to reduce harms associated with other routes of administration (e.g. smoking) or other substances (e.g. cocaine and methamphetamine). This implies some changes in the aims of this response, and research and evaluation will be necessary to assess the effectiveness of this approach with non-injecting populations. More generally as the number of drug consumption rooms expands, it is important that they are evaluated to improve the evidence on the extent to which they reduce individual harms and harms to the community.

See Drug consumption rooms: an overview of provision and evidence.

Community engagement

Community coalitions co-ordinate activities and resources to prevent adolescent substance use and delinquent behaviour. They can bring together diverse community stakeholders to address a common goal and mobilise communities to participate in prevention and health promotion initiatives.

The Communities That Care (CTC) approach is based on the premise that the prevalence of adolescent health and behaviour problems in a community can be reduced by identifying strong risk factors and weak protective factors among young people within that community. This then allows the selection of tested and effective prevention and early intervention programmes to address these specific risk and protective factors.

Although studies on the effectiveness of this approach have been conducted mainly in the United States, experience of implementation in Europe is now emerging. Preliminary evaluations point to a need to adapt the organisation of the programme. For example, professional coalitions seem to be more appropriate than volunteer-dominated coalitions in Europe, as school systems are more usually organised at the national or state level, with less local community involvement compared with the United States. Evaluation research needs to consider the adaptation process and programme fidelity. The impact of different implementation contexts needs to be assessed systematically across multiple sites and countries in order to improve the quality of future implementations.

Community drug plans are an important mechanism for translating national strategies into appropriate responses to meet local needs. The level at which these are developed will vary between countries, depending on administrative structures and responsibilities. Involving people who use drugs and local communities in consultation processes ensures that plans are better informed by the local situation. It also can help reduce stigma towards drug users and promote understanding between different community members.

What is being done in Europe to respond to drug problems in communities

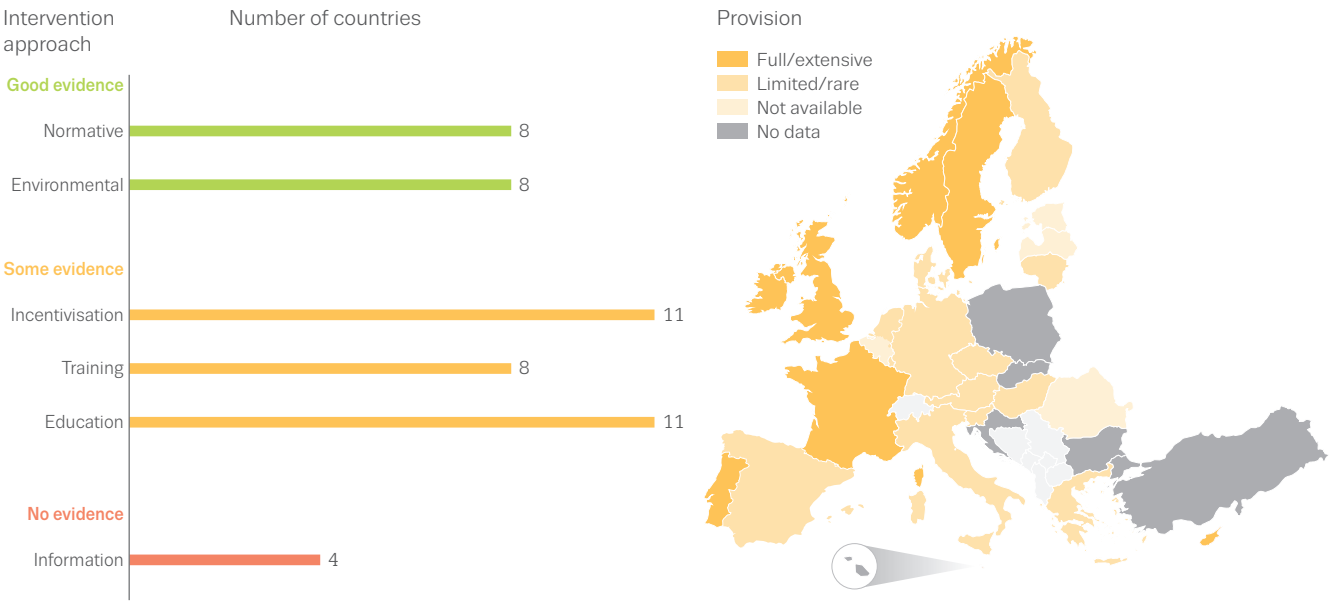
Prevention approaches that target high-risk neighbourhoods have been implemented in some countries, utilising new methods, including the redesigning of urban spaces. Provision for these types of interventions is reported to be highest in the north and west of Europe (see Figure 4.4). Approaches that have good evidence of effectiveness (normative and environmental) are implemented in just over a quarter of countries.

The Communities that Care programme is one example of a neighbourhood-focused prevention approach. Currently examples of use of this model exist in Croatia, Germany, the Netherlands and the United Kingdom. In addition, Belgium is conducting a study on the use of this approach for crime prevention.

However, systematic collection of information on community interventions is limited. The variety of different types of interventions described above and the fact that they are, by their nature, often driven and implemented at a local level makes monitoring these interventions difficult. In addition, many of the community activities may take place or overlap

FIGURE 4.4

Interventions in high-risk neighbourhoods: evidence of effectiveness and provision in European countries, 2015



NB: Level of provision information provided here is based on the opinion of an expert (or panel of experts) in each country. Availability: Full/extensive, provided in nearly all or a majority of relevant locations; Limited/rare, provided in a few or more but less than a majority of relevant locations; Not available, no provision in the country.

with broader public health and crime prevention activities. Sharing of best practice may occur through networks, which may also have a broader focus, or be specific to a type of intervention, or cover different geographical areas. Some examples are Communities that Care EU, the International Network of Drug Consumption Rooms, and Club Health. Mapping these networks and obtaining a clearer understanding of the different approaches being taken within Europe to the different types of intervention within communities can be a useful starting point for developing best practice sharing and monitoring of provision.

Responding within communities: implications for policy and practice

Basics

Drug interventions in the community include:

- Drug policies and interventions addressing nuisance and harms experienced by communities.
- Community engagement in service provision, such as multi-component drug prevention programmes.
- Outreach services for people not engaged with services.

Opportunities

- Community engagement can reduce stigma towards drug users and hence facilitate the provision of services.
- In some areas the provision of drug consumption rooms or other measures might be considered to reduce nuisance from open drug scenes.

Gaps

- Information on the extent and nature of services to tackle the harms experienced by communities and their impact is limited.
- There is very little evidence for effectiveness of community interventions, therefore research in this area will be important.

Further resources

EMCDDA

- Communities That Care (CTC): a comprehensive prevention approach for communities, EMCDDA paper, 2017.
- Drug consumption rooms: an overview of provision and evidence, Perspectives on drugs, 2017

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

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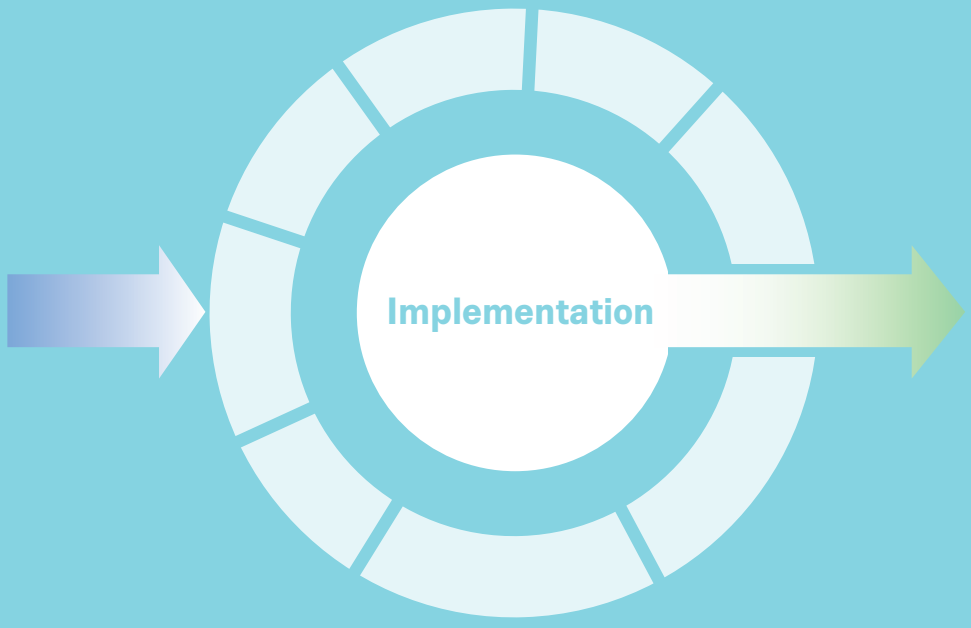


CHAPTER 5
Supporting successful implementation

SUMMARY

Regardless of the evidence that exists to support the use of any response option, it is unlikely to be effective if it is implemented poorly. This chapter highlights a number of activities that may help to support successful implementation in three broad domains.

Evidence into practice

These activities focus on ensuring the quality of the services delivered and the use of evidence-based interventions, including:

- the transfer of programmes to different cultural contexts;
- the use of quality standards and guidelines; and
- sharing best practice.

Systems and partnerships

Activities in this domain promote effective delivery by considering the people and organisations involved. This includes:

- training and staff development;
- service-user and community involvement;
- promoting links between services and multiagency working; and
- taking a systems approach to programme delivery.

Monitoring and evaluation

Monitoring and evaluation are necessary to underpin effective implementation. These activities promote learning from experience, as well as supporting system-level planning and knowledge transfer. The topics covered include:

- the different roles of monitoring and evaluation;
- monitoring of health and social responses in Europe;
- current practice in Europe and priorities for development; and
- evaluation to understand the full impact of drug-related responses.

This chapter focuses on the implementation of responses, as this is a key, but often neglected area. Regardless of the evidence that exists to support the use of any response option, it is unlikely to be effective if it is implemented poorly. The successful implementation of any intervention can be complex and will be dependent on interactions between a wide array of factors. As it is not possible in this guide to review in detail all issues relevant to delivering responses to drug problems, the approach adopted is to provide an overview of three key activity areas that need to be considered to support the delivery of evidence-based interventions. These are:

Evidence into practice: Activities here aim to ensure quality while configuring programmes to local needs. This includes activities that focus on what is delivered, and which support the use of evidence-based interventions; translation of programmes to different cultural contexts; the use of quality standards and guidelines; and sharing best practice.

Developing effective systems and partnerships: Activities in this domain promote effective delivery by considering the people and organisations involved. This includes training and staff development, user and community involvement; promoting links between services and multiagency working; and taking a systems approach to programme delivery.

Monitoring and evaluation: These activities are a necessary underpinning to effective implementation of responses to drug problems. They promote learning from experience as well as supporting system level planning and knowledge transfer.

5.1 | Evidence into practice

To support the implementation process, systems are needed to assist the integration of scientific evidence with relevant policy and practice. Increasingly in recent years, a consensus has emerged that this is best achieved through proactive and ongoing dialogue and partnerships ('knowledge exchange') between researchers, policymakers and practitioners.

As in other fields, research findings can be poorly translated into drug policy and practice. This can mean that there is a gap between the evidence on what are effective interventions and the programmes that are actually delivered. There are many possible reasons for this. For example, it could simply be because the selection of programmes has not been based on an evidence review. However, new evidence also may emerge that challenges historical delivery models, or new problems may develop that require new approaches. This means that ongoing needs assessment and research and monitoring are needed if services are to remain fit for purpose (see section 5.3). It is also important to remember that programmes that have been shown to be effective in one setting or country will not necessarily be directly transferable into a different context or culture. Often, to ensure successful implementation, a process of translation and testing is necessary that will require both time and resources.

A number of tools are being developed to support implementation as well as the use of evidence in decision-making in a range of contexts. The Consolidated Framework for Implementation Research, for example, provides a comprehensive conceptual framework for thinking about and studying the implementation process. It is based around five major domains: intervention characteristics, outer setting, inner setting, characteristics of the individuals involved, and the process of implementation. Within these domains, constructs are identified that reflect the evidence on factors most likely to influence implementation of interventions. The importance of these depends on the stage of implementation, from initial adoption and implementation to sustaining an established programme or intervention.

Another example, DECIDE (Developing and Evaluating Communication strategies to support Informed Decisions and practice based on Evidence), was a project funded by the European Union, which categorised the dimensions that are important for decision-making in health-related interventions. It developed tools to help people make decisions about health care provision, such as clinical guidelines, decisions on intervention coverage, and public health decisions, through consideration of the evidence available and the local context. The issues to be considered include, for example, the setting where the intervention is to be delivered and the target population, the potential for undesirable effects, local values and implementation considerations, and the strength of the available evidence. Ideally a panel of experts and representatives from carers, patients and families weighs all these factors together through a structured and transparent process in order to make a decision on which programmes are appropriate for the local context and to specify how they should be implemented (see Figure 5.1).

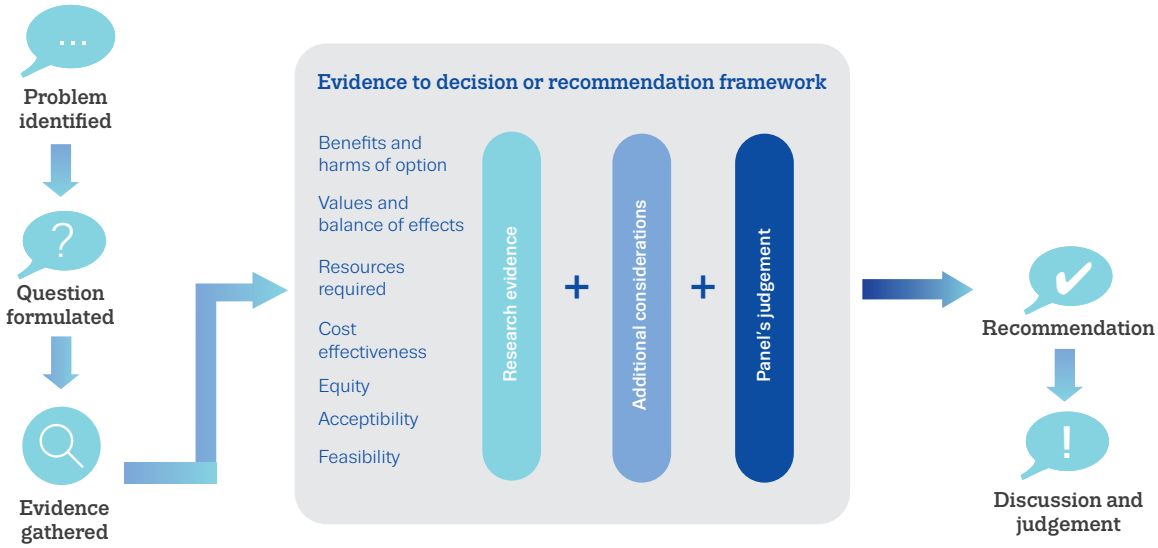
The development of research-based guidelines and quality standards (see below) is an essential part of the process of getting evidence into practice. Another important element is developing a culture that supports and encourages the sharing of best practice. The EMCDDA is involved in a number of such activities which can be accessed through the Best practice portal.

Transfer of programmes and interventions

Considerable research now exists on implementation science and technology transfer in the health and social care fields. This provides valuable insights into how interventions can be adapted to work in other contexts, along with practical hints on how to make them appropriate to new target populations.

Central to successful programme transfer from one culture to another is establishing how many adaptive changes can be made to the programme's core idea without it losing its effectiveness. This is important because the complexity of an intervention can hinder its successful transfer. For example, some programmes developed in North America require the use of elaborate manuals, training systems, technical support, supervision and the cooperation of community and other stakeholders in ways that may specifically reflect the prevailing organisation and delivery of health and social

FIGURE 5.1
Using the DECIDE framework for evidence-based decision-making



NB: This graphic is based on an image originally produced by Dr Sarah Rosenbaum, Norwegian Institute of Public Health, Oslo, Norway. More information on the DECIDE project is available at http://www.decide-collaboration.eu.

care in the North American context. Such interventions will often need to be adapted by adjusting wording, images and examples to reflect norms, values and practices within European settings. Adaptation to context requires knowledge of organisational, and sometimes also political and service delivery infrastructures. It is best achieved by actively involving key stakeholders in the planning and adaptation process. Focus groups and other qualitative research methods involving the target populations and other stakeholders have been found to be useful tools for adapting programmes to local needs and context. Examples of some evidence-based prevention programmes that have been transferred into different European settings and the lessons learned in the process can be found in the Xchange registry on the EMCDDA website.

Quality standards and guidelines

Once an intervention has been implemented successfully, the focus should move to maintaining quality. The use of quality standards and guidelines can play an important role in this area and can provide a benchmark against which to monitor services or assist in the setting of these.

Quality standards are principles and rules set by recognised national or international bodies about what to do and what to aim for. Typically the standards proposed in the health field provide clear and aspirational, yet measurable, statements related to content, processes, or structural aspects of quality assurance, such as environment and staffing composition.

Guidelines are used to encourage the use of evidence-based interventions by providing practice recommendations that are based on appraisal, synthesis and grading of the available evidence. Evidence-based guidelines are generally produced by multidisciplinary groups of experts who systematically assess the quality of the evidence and agree on practical recommendations and timely updates. Tools such as the Appraisal of Guidelines, Research and Evaluation (AGREE) have also been developed to assess the methodological quality of guideline development. Guidelines typically outline a plan of expected activity (which may be mandatory in some countries). They provide a guide to recommended practice, and may operate alongside quality standards, providing a benchmark against which to evaluate the quality of the services being delivered. It is important that those developing and using guidelines consider their relevance to potentially diverse target audiences and populations.

A number of standards and guidelines have been highlighted in the relevant sections of this guide. In 2015, the ministers of the Member States in the Council of the European Union endorsed council conclusions that set out 16 minimum quality standards in drug demand reduction in the European Union (see Spotlight on European minimum quality standards for demand reduction, page 164), and countries have been encouraged to integrate them into their drug policies and programmes. The European quality standards are a set of aspirational statements for prevention, treatment, harm reduction and social reintegration. These standards link intervention quality to concrete measures that include appropriate staff

training and provision of evidence-based interventions. They highlight the need for the participation of all the stakeholders, including civil society, in the implementation and evaluation of interventions. In addition they include key principles for demand reduction interventions, such as adhering to ethical principles and respecting human rights, which have been highlighted in Chapter 1 of this guide. The importance of adapting evidence-based standards to local conditions and systems is also stressed.

Quality standards exist in most European countries and can be used in different ways. In some countries, the standards are linked to service delivery and used to evaluate its provision. They are also being used as a requirement for participation in competitions for service contracts and as instruments for service-level self-assessment. The EMCDDA Best practice portal hosts an inventory of European and international standards and guidelines. In addition, the European Drug Prevention Quality Standards (EDPQS) project has produced a toolkit containing materials for people who need to provide training on the use and implementation of quality standards in drug prevention.

Online e-health support tools may also have a role in ensuring adherence to good practice, for example, by supporting prescribing according to protocols, enhancing case management, or promoting access to evidence and best practice (see Spotlight on e-health, page 119).

Sharing best practice

The sharing of best practice may occur through a wide range of channels and mechanisms. For example, programme evaluations may be published in scientific journals and practice-related articles in the national trade press. Increasingly, online portals and tools are being developed to provide widely accessible overviews and syntheses of best practice. Also available online are clinical decision support tools that provide access to relevant evidence in clinical situations. While many approaches require the user to search and find what is of interest on their own initiative, some interventions, such as Drug and Alcohol Findings in the United Kingdom, also take a proactive or push approach and send out regular emails with evidence summaries and policy and practice implications. Training initiatives, both online and face to face, also offer a fruitful way of sharing expertise and experience.

The Best practice portal on the EMCDDA website provides an example of the online tools for accessing information on evidence-based approaches to tackling drug problems. In addition to providing synopses of current evidence with links to the supporting studies and the inventory of standards and guidelines mentioned above, it now includes two wider European initiatives in the prevention field: the Healthy Nightlife Toolkit and the Xchange registry of evidence-based prevention programmes that have been used in Europe.

Sharing best practices requires the existence of a learning culture in which processes and outcomes are monitored and compared with expected outcomes. Lessons learnt are then shared and discussed and changes made where appropriate. Ongoing training is also likely to be important to this process.

Spotlight on … European minimum quality standards for demand reduction

The EU minimum quality standards in drug demand reduction, cover prevention, risk and harm reduction, treatment and rehabilitation and aim to support a focus on quality in drug demand reduction interventions in the European Union.

I. Prevention

a. Prevention (environmental, universal, selective and indicated) interventions are targeted at the general population, at populations at risk of developing a substance use problem or at populations/individuals with an identified problem. They can be aimed at preventing, delaying or reducing drug use, its escalation and/or its negative consequences in the general population and/or subpopulations; and are based on an assessment of and tailored to the needs of the target population;

b. Those developing prevention interventions have competencies and expertise on prevention principles, theories and practice, and are trained and/or specialised professionals who have the support of public institutions (education, health and social services) or work for accredited or recognised institutions or NGOs;

c. Those implementing prevention interventions have access to and rely on available evidence-based programmes and/or quality criteria available at local, national and international levels;

d. Prevention interventions form part of a coherent long-term prevention plan, are appropriately monitored on an ongoing basis allowing for necessary adjustments, are evaluated and the results disseminated so as to learn from new experiences.

II. Risk and harm reduction

a. Risk and harm reduction measures, including but not limited to measures relating to infectious diseases and drug-related deaths, are realistic in their goals, are widely accessible, and are tailored to the needs of the target populations;

b. Appropriate interventions, information and referral are offered according to the characteristics and needs of the service users, irrespective of their treatment status;

c. Interventions are available to all in need, including in higher risk situations and settings;

d. Interventions are based on available scientific evidence and experience and provided by qualified and/or trained staff (including volunteers), who engage in continuing professional development.

III. Treatment, social integration and rehabilitation

a. Appropriate evidence-based treatment is tailored to the characteristics and needs of service users and is respectful of the individual's dignity, responsibility and preparedness to change;

b. Access to treatment is available to all in need upon request, and not restricted by personal or social characteristics and circumstances or the lack of financial resources of service users. Treatment is provided in a reasonable time and in the context of continuity of care;

c. In treatment and social integration interventions, goals are set on a step-by-step basis and periodically reviewed, and possible relapses are appropriately managed;

d. Treatment and social integration interventions and services are based on informed consent, are patient-oriented, and support patients' empowerment;

e. Treatment is provided by qualified specialists and trained staff who engage in continuing professional development;

f. Treatment interventions and services are integrated within a continuum of care to include, where appropriate, social support services (education, housing, vocational training, welfare) aimed at the social integration of the person;

g. Treatment services provide voluntary testing for blood-borne infectious diseases, counselling against risky behaviours and assistance to manage illness;

h. Treatment services are monitored and activities and outcomes are subject to regular internal and/or external evaluation.

Source: Council of the European Union (2015), *Council conclusions on the implementation of the EU Action Plan on Drugs 2013–2016 regarding minimum quality standards in drug demand reduction in the European Union.*

5.2 | Developing effective systems and partnerships

Training and staff development

Staff skills and competencies are essential for the delivery of interventions and are a key part of effective systems. Both initial and ongoing staff training will be central to developing and maintaining these. Training needs to encompass basic skills and knowledge, as well as training in specific interventions. Training aimed at developing competencies in interpreting evidence will help people to keep up to date with emerging evidence and programmes. The Universal Prevention Curriculum in Europe project (UPC-ADAPT), the aim of which is to adapt the Universal Prevention Curriculum to the European context, is one example (see box).

Training for intervention providers is available in many European countries. It ranges from specialist university programmes that exist in Germany and in the Czech Republic for example, to specific courses offered as part of health or social welfare university curricula in many countries. Often some type of vocational training is offered for those working in prevention and harm reduction services.

Service user involvement/community engagement

The involvement of both those with drug problems, the target for the intervention, and the communities affected by the problem or hosting the intervention, is essential for the effective and efficient operation of services. In addition, involving service users can be a pragmatic and ethical way to ensure the quality and acceptability of services. Some support may be necessary to empower drug users to contribute in order to ensure that their involvement is both meaningful and successful.

Active involvement of drug users in shaping drug services in Europe has a long history with, for example, some early pioneering work early occurring in the Netherlands in the 1970s. More recently, an increasing number of initiatives have been undertaken to facilitate the involvement of drug user organisations at national and European level. User involvement varies in form and can pursue a range of different aims. Activities may include service user surveys on accessibility and quality of services, seeking users' advice on staff recruitment, conducting focus groups to develop new service areas and the inclusion of user organisations in health advocacy and policymaking (see Spotlight on user-led interventions, page 167).

The Universal Prevention Curriculum

The importance of staff competencies and training in delivering evidence-based prevention is highlighted in the 2015 Council Conclusions that set out minimum quality standards in drug demand reduction. The Universal Prevention Curriculum (UPC) was designed to meet the demand for an evidence-based curriculum for substance use prevention professionals worldwide. The training aims to enhance the knowledge and skills of prevention professionals and enable them to develop and implement evidence-based substance use prevention interventions and policies. Use of a standardised curriculum will help to ensure that regionally- and nationally-based prevention professionals obtain consistent science-based information and skills training.

The Universal Prevention Curriculum in Europe project (UPC-ADAPT), which is financed by the European Commission, is being pilot-implemented in nine EU Member States (Belgium, Croatia, Czech Republic, Estonia, Germany, Italy, Poland, Slovenia and Spain) and will distil the original UPC curriculum into a shorter intense and interactive training module, and an extended academic module, and will also include online training. The aim is to create a standardised EU Prevention Curriculum, based on quality standards for staff training developed in the nine countries. The curriculum is built upon the International Standards on Drug Use Prevention, which was developed by the United Nations Office on Drugs and Crime, and the European Drug Prevention Quality Standards. Primary emphasis is on evidence-based interventions and policies and on implementation quality and sustainability.

Spotlight on ... User-led interventions

What are they?

User-led organisations carry out activities that are predominantly designed and delivered by, in this context, current or former drug users. The focus here is on one end of a spectrum of organisations with different levels of involvement of people with a history of drug problems. However, it can sometimes be difficult to distinguish between user-led organisations and other organisations that were founded by service users but which now have mainly paid staff, albeit with former drug users as a substantial proportion of the workforce.

What's happening in Europe

Many European countries have seen a growth in the number and impact of user-led organisations. Most user-led activities can be divided into five broad, sometimes overlapping, categories:

1. Mutual aid (typically fellowships where current and ex-users support each other). For example, Narcotics Anonymous, SMART recovery and L'Isola di Arran.

2. Recovery enterprises. Recovery-focused networks may provide supportive accommodation, recovery cafes and social activities, social enterprises and employment schemes, and peer support.

3. Harm reduction (current or former users provide information and advice on how to use drugs safely). The work they do normally takes place in one of four ways: through providing training sessions; attending clubs or festivals to provide information and support; providing information and advice online; and drug checking to inform consumers of the content of the drugs they have obtained.

4. Advocacy (arguing for the rights or fair treatment of drug users), such as INPUD (the International Network of People who Use Drugs) and EuroNPUD, the European network, and more local groups such as Act Up Paris and the Swedish Drug User Union. Similar unions exist in Denmark, France and Portugal.

5. Research (conducting peer research projects). The use of peer researchers is recognised as being valuable for a number of reasons, including giving better access to hard-to-reach groups, improving research design and analysis by incorporating drug user perspectives, and helping people with drug problems develop skills and gain employment.

Key challenges for further development

- Stigmatising attitudes towards drug use and drug users is a major barrier to effective user-led organisations. Including these groups in official forums, working parties and so on can help to overcome this.
- Long-term engagement between statutory bodies, other agencies and user-led organisations is necessary to ensure that treatment and harm reduction services meet the needs of drug users.
- User-led groups need to be properly resourced if they are to develop and represent a large number of drug users with different views while remaining independent enough to critique service provision.

See the Background paper, User-led interventions: an expanding resource? and Drug policy advocacy organisations in Europe.

Historically, drug user organisations have probably been most visible in the areas of peer support, delivering education on infectious disease prevention and other harm reduction activities, and awareness-raising and advocacy on behalf of drug users. More recently, in some countries, user-led organisations have been involved in developing social enterprise initiatives. These generally provide employment and training to people who use drugs, during or after treatment, in order to assist their recovery and reintegration into society, and also provide ongoing support for those who have completed treatment.

The involvement of local communities is often important for successful service implementation. If communities are not engaged they may act as a barrier to service provision, for example, by campaigning against the establishment of treatment services in their area. On the other hand, their support can open up opportunities for social reintegration of people with a history of drug problems. Some aspects of community engagement are discussed in section 4.5.

Another area of community engagement is civil society involvement in drug policy. A study of information available online conducted for the EMCDDA in 2013 identified 218 drug policy advocacy organisations in Europe. About 70 % of these organisations were active in some way at a national level, with the rest split almost equally between the local or regional level, and European or international level. Their primary objectives were predominantly practice development, with 26 % advocating use reduction and 39 % harm reduction. The organisations aimed to influence the attitudes and opinions of the public and policymakers on drug service provision, drug controls, or both and thereby improve the well-being of the individuals, groups or societies affected by drug use.

Linking services: multiagency working

Many drug users present to services with a complex mix of drug, mental, physical and sexual health problems. Services, however, often specialise in dealing with one type of issue. As a result, individuals can find themselves having to engage with multiple agencies, none of whom have a holistic view of their problems, and the care provided may lack co-ordination and cohesion. Alternatively, those with multiple problems may be passed between services, with no agency taking responsibility for their care, as they consider that the individual's primary problem is outside their area of responsibility. For example, vulnerable young people with drug problems may find themselves referred between childcare and social services, youth offending and youth mental health agencies. Similarly those with coexisting mental health and drug problems may sometimes not be regarded as meeting the admission criteria for either specialist drug treatment or specialist mental health care. Effective cooperation between services is therefore essential to meeting the complex health and social needs of many of those with drug problems. This can be facilitated by using joint assessment tools, establishing referral protocols and running joint training sessions. Effective mechanisms for linkage with drug services are needed in a wide range of service settings, in particular, housing providers and social services, childcare services, prisons, mental health, primary care and sexual health services.

As an example, there is growing awareness of the importance of sexual health services for those using drugs, as interactions may exist in risk behaviours and related problems. However, current treatment services for drug and sexual health problems operate separately, making it challenging to provide 'joined up' care for people who experience both types of problems (see Spotlight on addressing sexual health issues associated with drug use, page 72).

Another area with similar issues is drug use and mental health services (see Spotlight on comorbid substance use and mental disorders, page 31). Rates of mental health problems are very high among people with drug problems, but it is well-established that they often find it hard to access the services that they need.

It may be appropriate to establish special multidisciplinary services in situations where there are groups of individuals with particular needs, a high prevalence of problems and who may be reluctant to engage with general services. Examples of this might be services for men who have sex with men involved in drug use and 'chemsex', or services for women involved in prostitution, or for homeless people living on the streets.

Taking a systems approach

Rather than focusing solely on the delivery of individual interventions, taking a whole-system perspective can support cooperative approaches and multiagency working, and provide a number of benefits for researchers, practitioners, and policymakers. It can help ensure that synergies are maximised, resources are used efficiently and programmes delivered effectively. It also draws attention to the many different components in an effective response, prompts reflection on how they interact, and encourages planning and resource management for the system as a whole. Shifting the focus from individual programmes or

Spotlight on ... Applying behavioural insights to drug policy and practice

Behavioural biases, such as short-sightedness or overconfidence (for example, thinking that 'I will be able to stop when I want to') are known to affect a person's choices. This may lead them to act in ways that they might have been expected to avoid. Policymakers need to take account of these factors in the design of policies or interventions.

What are behavioural insights?

Behavioural insights use the information that comes from research into how people actually behave, rather than how they might be expected to behave if they always acted completely rationally, to design more effective interventions.

Contributions from various disciplines, such as behavioural economics, social and cognitive psychology, neuroscience and sociology, are integrated to provide a better understanding of actual human behaviour and, consequently, socio-economic phenomena. The insights gained are then used to help develop more effective policies and interventions, which are based on sound experimental methods.

Behavioural insights can contribute to improving drug policy by offering new tools to influence behaviour, by improving predictions about the effects of existing policies, and by generating new policy perspectives.

How can they be applied?

Behavioural biases vary between individuals and groups and between different behaviours. One of the key lessons from behavioural sciences is that one-size-fits-all solutions do not work. In other words, behavioural interventions should be as targeted and as tailored as possible: they should be designed specifically for the target group and for the particular behaviour that is to be encouraged or discouraged.

Behavioural insights have been used in a variety of successful interventions. Examples include the use of tailored, individual and real-time feedback on the use, motives and harms of cannabis consumption in an online screening programme. This led to reduced cannabis use in the short term. The use of commitment devices, such as encouraging individuals to make a plan, has been found to help with quitting smoking. Contingency management (a technique that systematically uses the setting of clear consequences that act to discourage drug use and strengthen abstinence) is effective in reducing cocaine use and in keeping opioid-dependent patients in treatment.

Whatever the focus, there are three key stages in the process of using a behavioural insights approach in the design of interventions in the field of drug addiction and other related areas:

a) Identification of the target groups, behavioural elements (i.e. pre-existing motives and a set of barriers to overcome), and target behaviours for the intervention.

b) Consideration of the behavioural biases (e.g. present bias, overconfidence, framing effects) that may be present and the specific behavioural levers (e.g. use of defaults, feedback mechanisms and reminders) that could be used to design contexts more favourable to healthier choices.

c) Planning the evaluation of the impact of any intervention chosen.

See the Background paper, Applying behavioural insights to drug policy and practice: opportunities and challenges.

interventions and the evidence to support them, to the wider system prompts a broader review of supporting factors and actors. It may also encourage consideration of a wider range of policy options and stakeholders.

The following components are important considerations in both drug prevention and treatment systems:

- the target populations: their characteristics and needs have an impact on what is appropriate and what can be delivered;
- interventions: the programmes, services and policies that are adopted;
- moderators: those aspects of social, political and cultural life that influence the functioning, implementation and effects of the activities, such as social inequalities, social norms; legislative frameworks;
- organisation: where decision-making happens, how cooperation between policy sectors occurs, and how activities are funded;
- workforce: the professional background and training of those delivering the programmes; and
- research and quality control: the development of new interventions and ensuring the quality of existing activities.

5.3 Monitoring and evaluation

The role of monitoring and evaluation

Information, research, monitoring and evaluation is one of the cross-cutting themes of the EU drug strategy. This is clearly a broad and complex area, and it is not possible for this guide to elaborate these topics in any detail. Here the intention is to provide a general overview of why these topics are important in the context of drug responses, point the reader to EU-level resources that exist in this area, and highlight some specific system-level issues in respect to monitoring response activities in the drugs field.

It is important to note that, although the activities may often overlap or be linked, and the terms monitoring, evaluation and research are sometimes used interchangeably, important differences exist between these areas at a conceptual level. In very basic terms, research implies a set of activities structured in such a way that evidence is collected and evaluated using scientific methods to address a specific question. Monitoring refers to the collection of information over time and reviewing it regularly, for example, to describe the situation at any moment or identify important changes. Evaluation may rely on information obtained from monitoring, or it may be conducted as formal research. However, the objective of evaluation is to make a judgement as to how a policy, programme or intervention has performed against predetermined criteria for success.

Monitoring health and social responses to drug problems in Europe: an overview

Monitoring and evaluation are key tasks in the programme implementation stage. Understanding a programme's activities, monitoring progress and client characteristics, and ensuring that services are meeting performance targets can all be regarded as core aspects of good governance. How these monitoring and review activities are conducted, however, will be specific to individual services and settings. When designing data collection systems, it is important to use established tools and measures, wherever possible, as this allows programme monitoring to better contribute to a more general understanding of activities at the systems level.

At the national and European levels, data collection on health and social responses in the drugs area is needed for a number of reasons. These include building a more accurate and holistic picture of the drugs situation; identifying emerging trends at an early stage; identifying and sharing objective information on best practices in order to inform the planning and delivery of interventions; and providing decision-makers with the evidence needed for the design of national and regional drugs strategies and their evaluation. In the EU context, the EMCDDA's Reitox national focal points play a critical role as information providers. They also contribute to epidemiological monitoring and threat assessment exercises, such as the EU Early Warning System on new psychoactive substances. Information on the Reitox network of national drug focal points can be found on the EMCDDA website.

Epidemiological information is important as it informs policy discussions on what responses are needed, ensures these responses remain commensurate to needs, and facilitates the evaluation of different policy options in this area. Monitoring efforts need to reflect the major goals of European and national responses to drugs, such as reducing the prevalence, incidence or severity of the health and social consequences of problem drug use in the population. Core areas for epidemiological activities include, but are not limited to, monitoring drug use prevalence; the transmission of blood-borne viruses, overdose deaths and morbidity related to drug use; and the number of people entering specialised treatment for drug problems.

In addition to epidemiological data, the European drug monitoring system also collects information on the type, nature and availability of responses that EU Member States implement to address drug problems. While this information is clearly important for methodological, practical and cost reasons, it can be challenging to collect. For example, interventions like drug prevention may be integrated into the work of a range of different agencies and form part of a broader set of measures targeting other problematic behaviours. The costs and practical difficulties of accurately auditing these separately, and over time, mean that robust numerical data that can be used in an aggregate form is often absent. Moreover, delivering drug services increasingly forms part of the work of agencies with larger social and

health care remits, and monitoring and reporting may take place within this context. This means that it can be difficult or prohibitively costly to collect or access information on interventions in the drugs field. The organisation and delivery of health and social care also varies considerably across Europe, and this presents another challenge to introducing standardised monitoring initiatives. Overall, these difficulties mean that outside some very narrow areas in which numerical data sets exist and can be routinely collected, qualitative and expert opinion data together with ad-hoc in-depth reviews, provide the basis for comparative analysis of drug responses at the European level.

The data presented in this guide does demonstrate that responses to drug problems can be described in general terms. In addition, areas in which responses appear to be lacking or differ can be identified and changes over time can be tracked. It is also evident, however, that in some areas important data is absent and it is often difficult to identify robust measures of the quality or availability of services. More positively, information technology developments are providing new opportunities for monitoring that are likely to impact on what it is possible to collect in the future. Taken together this highlights the fact that both identifying the key information needs for development of current, and future, drug responses, and developing associated indicators suitable for routine monitoring, should be regarded as a priority. This requires a pragmatic, two-pronged approach that identifies and focuses on those areas that are currently both most useful and most achievable, alongside an ongoing search for and development of new sources of information to fill critical gaps or to inform service development in emerging problem areas.

At a systems level, monitoring should identify and quantify what services exist, what they do, and how much of this is delivered to whom. Regardless of the response area or level of implementation, the steps necessary to enable monitoring to achieve these objectives are similar.

A necessary starting point is the development of a framework for monitoring a specific area, informed by both a theoretical perspective of what the core components of intervention should be and knowledge of what services exist. The purpose of this framework is to identify a distinct set of activities that can be grouped together to constitute a response category for monitoring purposes. From this, a minimum set of measures, or questions, is identified. Once this has been done and information is routinely collected, this can be used to address important questions such as: 'is the level of provision sufficient?', 'are there gaps in provision?', and 'is what is being delivered in line with what is known about effective practice in the area in question?'

State of play and monitoring priorities for some important response areas

The EMCDDA collects a range of epidemiological indicators for all EU countries, Norway and Turkey as well as some information relating to important response areas (see Table 5.1). The European Drug Report provides an annual overview of these data, and country-level data are available in 30 Country Drug Reports and the Statistical Bulletin, which is updated annually. When supplemented by other types of information, for example, costs of interventions, these data can support different types of evaluation, including impact assessment or a consideration of cost-effectiveness. More detail on the current state of play with respect to data collections in core response areas and priorities for development are discussed in this section.

TABLE 5.1

Information relevant to health and social responses to drug problems collected by the EMCDDA

Prevalence of drug use in the general population	Adults
	Schoolchildren
Prevalence of problem drug use	Opioids
	Injecting
	Other drugs
Treatment demand	Treatment setting
	First or subsequent treatment
	Main and secondary drugs
	Route of administration and frequency of use
	Socio-demographic characteristics of clients
Drug use among prisoners	Before prison
	Inside prison
Overdose deaths	Toxicology (type of drugs involved)
	Sociodemographic characteristics
Infectious diseases	Notifications for HIV, AIDS, HCV and HBV
	Prevalence of for HIV, HCV and HBV
Health and social responses	Opioid substitution treatment: ▪ client numbers ▪ programme information
	Needle and syringe programmes: ▪ numbers of syringes provided, clients, contacts ▪ sites and geographic coverage
	Prevention: expert opinion of coverage of different types of interventions

NB: data can be accessed in the Statistical Bulletin and analyses are published in the European Drug Report and Country Drug Reports.

Prevention

Prevention is usually theoretically grouped into activities falling into three main domains: universal, selective and indicated prevention. This classification reflects the target population for the intervention and level of risk that group is assessed as having rather than the overall objective or content of the intervention delivered. More recently, increasing attention has been given to environmental prevention approaches. As drug prevention is often delivered as part of a broader strategy addressing substance misuse, and sometimes other problematic behaviours, monitoring provision can be particularly difficult. Currently, at EU level, only descriptive information is available on the extent and nature of service provision, and a need exists to improve reporting to allow a more robust comparative analysis. In some countries the situation is somewhat better, but overall the ability to monitor activities at the system level remains poor. This is an area in which evidence for effectiveness is growing, but this information is not always evident in the delivery of responses. Monitoring efforts are increasingly focusing on developing measures that can identify the use of evidence-based approaches or aspects of programme quality, such as the use of manuals or guidelines. This reflects the fact that identifying and encouraging the adoption of good practice can be viewed as a priority in this area.

Reduction of drug-related harm

Measures to reduce drug-related deaths and other harms, and actions to mitigate public nuisance are an integral part of many national drug strategies and a clear policy priority in a majority of European countries. Data collection in this area at the European level aims to improve information on the level of implementation of evidence-based harm reduction measures by monitoring national strategies and responses, analysing available information and documenting evidence-based projects in order to support the transfer of expertise across Europe. Current approaches are informed by epidemiological data on problem drug use, injecting drug use and prevalence and trends for infectious disease transmission. In addition to the monitoring of chronic harms, data is increasingly becoming available, both at the national level and through European initiatives (e.g. the Euro-DEN project), that sheds light on acute drug-related harms as identified through admissions to emergency departments for drug-related problems. Currently, at EU level, the main quantitative data sets available to monitor interventions for reducing drug-related harms are for needle and syringe provision through specialised programmes (from a limited number of countries) and opioid substitution provision. Increasingly, data are also now becoming available on provision of drug consumption facilities and naloxone programmes. As with prevention monitoring, at EU level some expert opinion and descriptive information is available on the extent and nature of harm reduction-related service provision, but this needs improvement to allow comparative analysis.

Drug treatment

Ensuring the availability of, and access to, targeted and diversified treatment and improving the quality of treatment are core to reducing drug demand. The EMCDDA collects information through several treatment monitoring tools which aim to:

- collect data about the policies and organisational framework of drug treatment, as well as availability, accessibility and diversification of treatment;
- collect data that documents the quality assurance measures that countries have taken to achieve and maintain a high quality of treatment service provision;
- collect quantitative data on the number of people reached by drug treatment in EU Member States, including the characteristics of those entering specialised drug treatment (e.g. drug type, sociodemographic characteristics) and the number of clients receiving opioid substitution treatment.

Some European countries have registries of drug-related treatment that provide data that can be used to assess drug strategies and set new objectives. This is the case for the United Kingdom, where the National Drug Treatment Monitoring System collects data on all the adults entering treatment, including reasons for leaving and outcomes of treatment. In other European countries, long-term observational studies have provided important insights into the outcomes of treatment. In Ireland, the ROSIE study also looked into substance use during treatment; a German study considered various treatment outcomes in specialised centres and primary care, while a Danish study considered also abstinence from drugs. Some of these have included consideration of mortality incidence and causes, and in addition there have been a number of cohort studies of mortality among specific cohorts at high risk for different reasons, for example, injecting drug users and prisoners.

In addition, in some countries there are data collections that incorporate systematic assessment of the quality of health care against predefined criteria. These systems focus on reporting on outcomes that are considered indicators of treatment quality. Examples are: in Italy, the national programme for the evaluation of health outcomes (Piano nazionale Esiti); in France, the health care quality and safety indicators of Haute Autorité de Santé; in Germany, the Institute for quality and efficiency in health care (IQWIG); and in Sweden, Socialstyrelsen. These systems are part of

the national monitoring and evaluation mechanisms and should contribute towards service improvement and the identification of research gaps.

Prisons

As part of a programme to improve the quality and comparability of information concerning interventions implemented in prisons in European countries, the EMCDDA has published a methodological framework for monitoring drug use and related responses in these settings. This aims to improve information on drugs in prison and increase country comparability of information in this area. The framework includes two monitoring components (epidemiology and interventions). Currently the EMCDDA collates data on the prevalence of drug use and drug use patterns among prisoners, on prevalence of infectious disease in prison settings and qualitative information on the situation and developments in the area of drugs and prison at the national level. An overview of the agency's work in this area is available on the EMCDDA website.

Evaluation: understanding the impact of drug-related responses

Evaluation involves making a judgement on the impact of an activity. Monitoring data is usually a fundamental component of such assessments, although it may be supplemented by specific information-gathering processes.

The data collected for the evaluation of the impact of responses to drug problems, in addition to reflecting the specific objectives of particular interventions, may usefully include indicators of other, broader, policy objectives. For example, the evaluation of the impact of needle and syringe programmes could incorporate the potential benefits to the community of reductions in drug litter. Similarly, economic evaluations of some types of drug treatment (e.g. opioid substitution treatment) have suggested that one of its major economic benefits is linked to the reduction of criminal activity among treatment participants and the associated reduction in policing and criminal justice system costs. Understanding the full impact of interventions can inform policy choices and help to ensure that they represent the best use of public resources.

It may be challenging to demonstrate that responses have a public health impact. This requires data systems and analysis that permit the detection of reductions at the population level in the magnitude of the adverse effects of drug problems. And it requires evidence that enables improvements in these problems to be plausibly attributed to the interventions. It is therefore essential that policymakers include funding for monitoring systems that can generate the information that is needed for decision-making within their drug strategies and action plans.

Evaluation should assess as objectively as possible the effects of a policy or programme, the ways in which it operates and the extent to which it achieves its objectives. In the ideal case, evaluation is carried out using scientifically rigorous methods by evaluators who are independent of the services under scrutiny, to ensure conclusions can be viewed as unbiased.

Evaluation is increasingly recognised, at the systems level, as being central to ensuring the public health impact of responses to drug problems. The neutrality offered by a dispassionate framework for considering the relative benefits of different approaches can be helpful in an area in which different stakeholders may have very different but equally entrenched views. In addition, owing to a constant process of diversification and innovation, drug demand reduction programmes and services now encompass a large variety of approaches and methods. It has therefore become more difficult to assess the relative value of these various approaches and programmes. The choice of, for example, a particular prevention intervention often depends more on considerations such as ready accessibility, cost, familiarity or the charisma of the proposer, than on a systematic assessment of the advantages and disadvantages of competing programmes.

Furthermore, the increased provision of prevention, treatment and harm reduction interventions, in terms of both quantity and diversity, has brought with it competition between services for clients. The need to justify the expenditure of public funds on treatment services calls for rational criteria and adequate data on their efficacy and cost-effectiveness. Evaluation of services therefore is increasingly regarded as an essential element to the development of an evidence-based drugs policy.

Lastly, drug problems continue to evolve and new service models need to be developed and evaluated to ensure that responses remain fit for purpose. These changes are occurring against the more general backdrop of ageing populations becoming an increasing economic burden on health budgets worldwide. This concern has already begun to press health and treatment services for cheaper and more flexible solutions, and is evident across the health care sector as a whole. Potentially the increasing pressure

on and limited resources for health services could lead to cuts in funding available for evaluation. Conversely, to maximise the value of scarce resources, it will be increasingly important to know how well treatment works and which treatments work best for which clients.

A number of tools are available to assist with the evaluation of demand reduction interventions, including EMCDDA guidelines on evaluation. These tools should help to shift policy and practice towards more widespread and systematic evaluation of prevention and treatment services.

Supporting successful implementation: implications for policy and practice

Evidence into practice

- Implementing the European minimum quality standards for demand reduction and the development of national quality standards and guidelines can contribute to increasing the quality of health and social responses to drug problems in Europe.
- Websites providing easy access to the evidence of what works and registries of best practice, such as the EMCDDA's Best practice portal, can help promote uptake of evidence-based programmes. Online e-health support tools may also have a role in ensuring good practice is adhered to, for example, by supporting prescribing according to protocols, enhancing case management, or promoting access to evidence and best practice.

Developing effective systems and partnerships

- People who use drugs are key partners in responses to drug problems. User-led social enterprise initiatives that provide employment and training in order to assist social reintegration and recovery and provide ongoing support for those who have completed treatment may be a valuable addition to treatment and social reintegration service provision.
- Many people with drug problems have complex needs and must engage with multiple services. Multiagency working and the establishment of strong links, the development of referral pathways and protocols are important for an effective and efficient response to their multiple needs.
- Taking a whole-system perspective to service provision in an area, rather than focusing on individual interventions, draws attention to the different components required for programme delivery and how they interact. This facilitates efficient use of resources and better support to multiagency working, as well as potentially encouraging consideration of a wider range of policy options and stakeholders.

Monitoring and evaluation

- Monitoring the drug situation and the responses to the problems identified is central to effective and efficient drug policy and practice delivery. The EMCDDA and other bodies collect a broad range of epidemiological data, but the information collected on response provision is patchy and should be a priority for improvement. Important tasks in this area include the identification of the key information needs for the development of current and future drug responses, and the development of indicators for routine monitoring.
- Evaluation of interventions and policies is also important in order to identify what can work, under what circumstances and whether there are any unintended consequences. Currently the evidence base for responses to drug problems is weak in many areas and continued support is needed both for evaluations and for initiatives that synthesise and make available the results. Expanding monitoring systems to include consideration of the outcomes of responses (for example, treatment outcomes) would be useful.

Further resources

EMCDDA

- Statistical bulletin.
- European drug report: trends and developments 2017.
- Country drug reports.
- Best practice portal — Xchange registry.
- Drug policy advocacy organisations in Europe, EMCDDA papers, 2013.
- Evaluating drug policy: a 7 step guide, Manuals, 2017.
- Evaluation: a key tool for improving drug prevention, Monograph, 2000.
- Evaluating the treatment of drug abuse in the European Union, Monograph, 1998.
- Guidelines for the evaluation of treatment in the field of problem drug use, Insights, 2007.
- Neil Hunt, Eliot Albert and Virginia Montañés Sánchez, User involvement and user organising in harm reduction, *Harm reduction: evidence, impacts and challenges*, Chapter 12, 2010.
- User-led interventions: an expanding resource?, Russell Webster, Background paper.

Other sources

- Universal Prevention Curriculum in Europe project (UPC-ADAPT).
- The European Drug Prevention Quality Standards (EDPQS) training on quality standards toolkit.
- Consolidated Framework for Implementation Research.
- UNDOC Gap toolkit.

Links to further resources can be found at http://www.emcdda.europa.eu/responses-guide.

Moving on: responding effectively to drug problems in Europe

The starting point

This European responses guide has been designed to give readers an overview of the complex landscape of responses to drug problems across Europe. Both opportunities for improving services and gaps requiring particular attention have been identified in this guide. Their relative importance, however, will vary according to national contexts, reflecting the heterogeneity we see in drug problems across Europe. Nevertheless, there are some general conclusions that can be made from a European perspective about the main current public health challenges in the drugs area. The guide emphasises the multifaceted nature of drug issues and the correspondingly varied response options that are necessary to address differing needs and objectives. It allows the reader to consider the logic for selecting different approaches and take a conceptual walk through the different stages of designing, targeting and implementing responses to drug problems. Throughout, the importance of clear problem definition and understanding the implications of working with different target groups and in different intervention settings is emphasised. Acknowledging that new problems will occur that are likely to require us to adapt and develop new responses, this guide has been designed around the central premise of the need to think logically and structurally about developing drug policy and services, based on an ongoing assessment of what is needed, and informed by an understanding of what is known about what works. Moreover, this sort of structural thinking improves the ability to identify and respond to new problems.

To a large extent Europe's responses to drug problems have been defined by the heroin injecting epidemic that most countries experienced in 1990s. Successful service models were developed and have dramatically impacted on this problem. In many respects we have learnt what is required to respond to the needs of those with opioid problems or who inject drugs; it is interesting to note that many of the activities now regarded as core responses in this area were first considered as controversial or even counter-intuitive. In some countries, however, the level of provision still remains less than optimal, and there is a risk that health gains in this area could be compromised. A worry here is that, in times of financial austerity, it is possible that the fact that we have seen some success in this area is interpreted as suggesting that continued investment is no longer required. In fact, failing to continue to adequately support responses shown to be both effective and cost-effective, such as opioid substitution treatment, would be unwise from a public health perspective.

Harnessing the potential of new technologies

Looking to the future, it is important to recognise the impact that new technologies, globalisation and international political, social and demographic developments have on Europe's drug problem. This can be seen in the emergence of new psychoactive substances and in the way in which the internet, social networking applications, new

payment technologies and encryption software are beginning to change the way drugs can be bought and sold. These changes affect not only drug markets, with an associated impact on consumption patterns, but also have implications for appropriate health and social responses in the future. This is an area in which European countries have often been prepared to experiment and quick to innovate. To remain relevant, those involved in responding to drug problems will need to continue to develop and, for example, harness the potential of new technologies to support the better delivery of prevention, treatment and harm reduction initiatives. E-health applications have the potential to extend the reach of some services, for example, to rural areas or to vulnerable young people who may be reluctant to engage with formal services. However, they can also assist the implementation of evidence-based interventions by helping practitioners access the evidence, assisting the delivery of appropriate interventions, improving case management, and delivering training. Equally, it will be important to keep a focus on developments in neuroscience and, in particular, in new pharmacotherapies. These may provide new tools in the clinical toolkit, but identifying the best way to implement them alongside other established clinical approaches will be important if they are to be used effectively.

The importance of using and building the evidence base

The rationale that responses should be based on evidence of effectiveness is a central tenet of European drug policies, although some critics might argue that this is not always observed in practice. Nevertheless, evidence-based responses appear to be steadily gaining ground in Europe, and within the current financial climate there appears to be greater interest than ever in ensuring that scarce health resources are well spent. Understanding the evidence that exists to support any specific intervention is clearly important, as is understanding the ways in which evidence can be used to inform the development of responses. Looking forward, as the evidence base grows, and as interventions become ever more joined-up, a more sophisticated understanding of the nature and role of evidence is likely to be required. Competencies in this area are growing, as illustrated by developments in areas such as knowledge transfer and implementation science.

The perspective used here has been to recognise that being *evidence-based* is not a binary, intrinsic characteristic that any set of activities either has or has not. Rather it is an assessment of the current state of the knowledge base across a continuum of uncertainty, and in the context of defined outcomes. This last point is fundamental, as evidence only makes sense in the context of specific outcomes, carefully measured with reference to a particular population and setting. Changing any of these parameters will increase uncertainty. Similarly just because a response has been shown to work in one setting, or with one population, it cannot be assumed that it will work in the same way elsewhere or with different groups. This means the interpretation and application of what we know about 'what works' is never going to be simple. Using evidence is best thought of as an ongoing process; a conclusion and a key message emerging from this guide. It also means accepting that for many problems, interventions always have to be based on a partial set of information, and they will always need to be tailored to match the specific contexts in which they will be used.

In all areas, it is therefore essential to continue developing the knowledge base, not only with respect to whether different types of responses, both new approaches and those of longer standing, can work and under what circumstances, but also on the extent to which they are being implemented and how effectively. Co-ordination and cooperation within Europe in research, monitoring and sharing of good practice in relation to health and social responses to drug problems will be important to increasing effectiveness and efficiency in this area.

The benefits of systems thinking and partnerships

The value of a systems-level perspective has been emphasised in this guide, and it is increasingly recognised that different interventions have to be co-ordinated and work in joined-up ways. This is not only because individuals may have multiple needs, but also because drug problems are complex and often interact or coexist with other health or social problems. Many examples of where there are opportunities to make drug responses better co-ordinated and integrated with other areas have been highlighted in this guide, including: community prevention initiatives; prisons and the criminal justice system; sexual and mental health care; and housing and social support services. These are all areas where better co-ordinated responses are likely to both deliver significant health gains and contribute to a more efficient use of scarce resources. Some population groups have particular needs for integrated services, for example, ageing opioid users who are particularly vulnerable to health problems. This is likely to require drug services to reach out and form new partnerships with a broader group of generic health and social-care providers, such as geriatric health services. In some cases, specialist care services will need to be developed — a development already seen in some parts of Europe.

Integral to a systems approach, and another overarching conclusion emerging from this guide, is the particular importance of partnerships for developing effective responses in the drugs area. This is necessary because the multifaceted nature of drug problems requires multi-service cooperation and the need to embed services successfully in local contexts requires the engagement and support of communities. Moreover, service users, family members and the wider community are all affected by drug problems in different ways. Their differing perspectives and experience can provide an invaluable input to service development and implementation.

The added value from partnerships also applies at the EU and international levels. This guide highlights some examples of EU-funded research projects and good practice initiatives, such as those developing standards for interventions in nightlife settings or the development of e-health applications. Interagency partnerships are also important and have contributed to the development of guidelines for health and social responses in a number of areas that have been drawn on in this guide.

Maintaining a focus on harms and deaths

The importance of responding to hepatitis infections has been emphasised in the guide, as this group of diseases now account for a considerable share of health costs associated with drug use in Europe. Moreover, without effective action, the future costs associated with a hepatitis C infection, in particular, are likely to grow exponentially. Currently, a window of opportunity exists with the emergence of new treatments, and the eradication of this disease now appears a realistic possibility. To achieve this ambition, however, will require investment and better co-ordination between drug services and specialist liver services. This is necessary, not only to ensure adequate treatment coverage, but also to ensure that those at risk are identified and measures are put in place to help prevent future reinfection.

Intervening effectively to reduce drug overdoses remains a clear gap in current responses, with the numbers of fatal drug overdoses remaining high in many countries and even increasing in some. This is despite the fact that many of the risk factors associated with fatal overdose are now well known. Some potentially important advances have been made recently, for example, the wider use of opioid antagonists like naloxone. Important questions in this area include: Are we seeing a new generation of young opioid and

polydrug users in some countries? Is Europe's cohort of opioid users becoming more vulnerable to overdose as they age and, if this is so, what implications does it have for service provision? How best to respond to the threat posed by the recent appearance of highly potent synthetic opioids, like the fentanils, which may play a role in fatal overdoses but sometimes go undetected? With the increase in the availability and importance of new and novel substances in the drugs market, increased toxicological and forensic capacity is now needed as part of the frontline response to drug problems. Currently, however, this is lacking in most countries, meaning our capacity to detect and respond to new problems in this area is underdeveloped.

There have also been outbreaks of deaths associated with tablets with high MDMA content as well as linked to some classes of new psychoactive substances, such as synthetic cannabinoids. The emergence of these new substances also serves to remind us that as Europe's drug problem has changed, to some extent our responses have failed to keep pace. In these areas our understanding of what constitute effective prevention, treatment and harm reduction approaches remains limited. This represents an important challenge for future responses, as some of the health issues and, therefore, potential interventions associated with these drugs are likely to be different. It appears that, for example, a greater focus may need to be given to acute harms, psychiatric comorbidity and sexual health issues. Greater engagement is also likely to be needed with new groups, some of whom may not recognise that they have problems or necessarily see traditional specialist drug services as appropriate to their needs.

Identifying new policy arenas for exploration and action

A future challenge for European drug responses also potentially comes from changing public opinions and some new policy perspectives in the cannabis area. There is, for example, a growing interest in some countries in reducing barriers to the use of this drug for 'medical purposes' and, overall, the general direction of travel appears to be towards making policies less restrictive or punitive in respect to cannabis. Any developments in this area have implications for prevention, treatment and harm reduction responses to this drug, some of which may be specific to the European context. For example, in contrast to elsewhere, in Europe cannabis is often consumed with tobacco, highlighting another potentially important area of articulation between public health policy priorities. As such it is an area where policymakers and planners will need to keep up-to-date on new developments and evidence as it emerges.

More generally, viewing drug problems in a substance-specific manner has become increasingly inappropriate for many of those seeking help, who often experience problems associated with their use of multiple substances, including alcohol or misused medicines. In around half of EU countries, drug responses are now organised under the broader policy heading of responding to addiction and substance misuse. This is consistent with the health-systems approach promoted here, and it will be important to identify the benefits or costs that come from this development. It also has implications for the evaluation of national drug policies and strategy documents, in which there is growing interest. Developing logic models that recognise broader inputs and lead to measures of wider impacts will be important.

There are also opportunities in terms of new approaches to developing and implementing responses. Highlighted in this report are, for example, behavioural insights that have the potential to improve responses through their use in identifying opportunities for new interventions, improve their design and implementation, and support evaluation. They

can be valuable not only with respect to new responses, but also in reviewing why some programmes are not working as expected. Demonstrating the usefulness of these new approaches could be a fruitful area for further work.

Ensuring flexible and timely responses to drug problems

The emergence of new psychoactive substances, as well as recent events in North America, where a problem with the misuse of prescription opioid pain medication appears to have evolved into a major opioid health crisis, remind us that modern drug problems can change quickly and have the potential to overwhelm existing drug policies and response models. These challenges are also evident in the way social and political problems occurring outside of the European Union have led to human migration and demographic changes within some European countries. Here, social exclusion, psychological trauma, and social displacement may potentially increase the vulnerability of individuals to developing substance misuse problems, and it will be important to consider the needs of new migrants when designing future drug responses. As in other arenas, the lessons learnt from successful engagement with other populations are likely to be transferable here, particularly the need to work in partnership with community members to build trust, recognise diversity and to develop culturally appropriate service models.

Against the contemporary backdrop of sociodemographic and economic change, globalisation and digital developments, epidemiological monitoring, early warning and threat assessment are essential to ensuring that our responses to drug problems remain commensurate with needs. Rapid information assessment and response approaches are also likely to increasingly play a central role in appropriate and timely responses to new trends and developments. The EMCDDA's current operational strategy is based on the belief that the agency can best contribute to the health and security of European citizens by providing an analysis of the problems combined with a critical review of potential responses alongside practical tools to support policy decisions and practice. This guide is our most ambitious attempt yet to assemble the information available in one easily accessible form. By highlighting gaps in knowledge and practice alongside opportunities for improvement and development, it can provide the basis for a refreshed programme of work in the health and social responses area for the next three years and beyond.

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About this guide

This guide and the associated package of online materials provides a reference point for planning or delivering health and social responses to drug problems in Europe. The most appropriate responses will depend on the specific drug problems, the contexts in which these occur and the types of intervention that are possible and socially acceptable. By providing key information on some of the most important drug issues for Europe and the responses available, this guide aims to assist those involved in tackling these challenges to develop new programmes and improve existing ones.

About the EMCDDA

The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) is the central source and confirmed authority on drug-related issues in Europe. For over 20 years, it has been collecting, analysing and disseminating scientifically sound information on drugs and drug addiction and their consequences, providing its audiences with an evidence-based picture of the drug phenomenon at European level.

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