

# Drugs in focus

## Key role of substitution in drug treatment

### Substitution now widespread in the EU

Substitution treatment for problem drug users is now widespread in the European Union (EU). Trials, mostly with methadone, started in the late-1960s, mainly in northern Europe. By the mid-1990s, substitution had been implemented in all EU Member States. A substantial European consensus now exists on the benefits of such treatment. However, in some countries, it remains a sensitive topic.

Scientific evidence suggests that substitution treatment can help reduce criminality, infectious diseases and drug-related deaths; and improve the physical, psychological and social well-being of dependent users. However, some argue that it is not a cure but a half-hearted response that fails to provide a real solution to drug-use problems. The EMCDDA believes that the policy debate on this topic should not simply be about the pros and cons. Substitution treatment should be viewed as one element in a wide range of responses to problem drug use, which includes drug-free treatment.

**It is estimated that around half-a-million drug users receive substitution treatment worldwide. More than 300 000 of these are in Europe and an estimated 110 000 in the United States [1].**

Methadone is still the most common substance used, although it is not as exclusive as it once was. Buprenorphine is dominant in France. Other EU Member States have launched trials with substances such as dihydrocodeine, slow-release morphine and levo-alpha-acetyl-methadol (LAAM). However, LAAM has now been suspended on the recommendation of the European Agency for the Evaluation of Medicinal Products (EMA), following life-threatening cardiac disorders among subjects in LAAM therapy. The use of heroin itself in

stabilising chronic opiate users has been under trial in the Netherlands since 1997, in Germany more recently, and is under discussion in other Member States. It has been prescribed on a small-scale, selective basis in the UK for some decades.

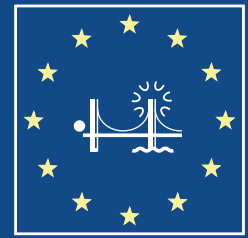
Facts, figures and analyses are obviously a prerequisite to rational debate on this

topic. Until recently, timely data at EU level on the evaluation and quality of substitution treatment were scarce. However, at the end of 2000, the EMCDDA published, in its *Insights* series, *Reviewing current practice in drug-substitution treatment in the European Union* [1] — a comprehensive overview of latest practice.

**Definition:** Substitution treatment is a form of medical care offered to opiate addicts (primarily heroin addicts) based on a similar or identical substance to the drug normally used. It is offered in two forms: maintenance — providing the user with enough of the substance to reduce risky or harmful behaviour; or detoxification — gradually cutting the quantity of the drug to zero. Treatment comes either with or without psycho-social support.

### Key policy issues at a glance

1. Substitution treatment is a key component of a comprehensive approach to drug treatment. It can be effective in reducing the risks of HIV infection, overdoses, use of legal and illegal drugs and drug-related crime.
2. There is a case for backing up substitution treatment with psycho-social care. But in practice this care is frequently lacking, with the focus more on substitution than treatment.
3. Substances currently used include methadone, buprenorphine, dihydrocodeine, slow-release morphine and heroin itself. In nearly all EU Member States, one substance predominates. Overall, methadone is the most common. Both the choice of substance and dosage should be matched to the individual for optimal effect.
4. Access to substitution treatment in the EU varies widely. Some countries and programmes limit access by strict criteria (high threshold). Others only require addiction to opiates as the entry criterion (low threshold).
5. In most EU countries, substitution treatment is delivered either by general practitioners (GPs) or by specialised centres. A combination would be optimal. But caution must be taken to prevent diversion of the substances to illegal use through addicts obtaining prescriptions from different sources and then dealing in the drugs.
6. The estimated proportion of problem opiate users in substitution treatment within the EU varies from a low of about 10 % to a high of over half (see Table 1, p. 3) [2].



**E.M.C.D.D.A.**  
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# Substitution treatment — overview

## 1. A key component of drug-treatment systems

There is considerable evidence to prove that substitution treatment can help reduce HIV transmission, drug use, risk of overdose and drug-related crime, as well as improve the general health of addicts. A comprehensive literature review [3] concluded that methadone treatment dramatically reduced levels of HIV infection and AIDS. It also cut the frequency of heroin injection, the sharing of injecting equipment and sex work to buy drugs. A four-year German study [4] of outpatient methadone treatment showed that drug consumption fell while social skills and relationships improved. Greek evaluation of methadone substitution in Athens [5] demonstrated a large fall in parallel use of heroin.

*'In many countries, substitution treatment developed — after initial opposition — in response to the HIV risk associated with injecting opiates and other drugs. It has proved its worth. Along with other harm-reduction measures and increased awareness generally, it contributed to the containment of new HIV cases among injecting drug users in most EU countries in the late 1990s.'*

GEORGES ESTIEVENART,  
EMCDDA EXECUTIVE DIRECTOR

## 2. Substitution rather than treatment?

In most EU countries, regulations for substitution treatment state that it should be backed up by psycho-social care. Research shows the positive effects of treatment rest heavily on such care. But there is very often a gap between theory and practice — the focus often lying more on substitution than treatment. The need for psycho-social care is strengthened by research showing that those in methadone treatment, like other drug-dependent people, are particularly at risk of psychiatric disorders and other health problems, as well as social deprivation [6]. The role of psycho-social care should be examined as a possible catalyst in drug users' progression from dependence to abstinence.

The care of drug users with mental health problems depends on links between psychiatric and drug services. In some countries, good links have been established with specialist dual-diagnosis

wards. In other countries, links between services are poor.

**'The aim of drug treatment is to help people regain control of their lives. Practitioners need to assess constantly whether patients receiving substitute prescriptions are ready to become drug free through a process of detoxification. The provision of psycho-social and practical help during this process is particularly important.'**

MIKE TRACE, CHAIRMAN  
EMCDDA MANAGEMENT BOARD

## 3. What are the substitutes?

Nearly all EU Member States use one predominant substitution substance rather than a wide diversity [7]. Over 90 % of opiate substitution is delivered in the form of methadone, apart from in France, where buprenorphine prevails. EU-wide, the estimated number of drug users on methadone rose sixfold between 1993 and 1997 [1].

Substitution substances have different features. Buprenorphine does not carry the risks of overdose; it also inhibits the effects of parallel heroin use. On the other hand, methadone is easily administered and cheap — around EUR 8 per person a week, compared with EUR 65 for buprenorphine.

Some experts prefer buprenorphine for younger drug users and methadone for older users on a long-term basis. Buprenorphine also seems better for pregnant women, causing fewer neonatal problems than methadone.

Heroin treatment trials are under way in Germany and the Netherlands and are under discussion in other EU Member States. These involve supplying extremely problematic heroin users with their original drug under medically-controlled conditions. With all substances, it is important to match the substitution dosage to the individual's former drug-use level.

## 4. How accessible is it?

Despite an overall expansion in substitution treatment over the last

decade, access to it remains patchy in the EU. For example, coverage seems limited in Greece, Norway, Finland and Sweden.

Substitution care is almost exclusively an outpatient service. This has the advantage of being cheap and allowing drug users to live a normal daily life. However, those in substitution treatment range from relatively well-functioning, often employed, individuals to marginalised and extremely disadvantaged street addicts. Hence, some clients may require more care than outpatient substitution treatment can provide.

Admission criteria vary largely across the EU. Some programmes in some Member States — e.g. Greece and Sweden — have a high threshold, taking into account age, years of drug addiction, number of unsuccessful treatments, etc. Other countries, such as Denmark, Spain, Italy and the Netherlands, demand only opiate dependency and a wish for treatment as the criteria.

The high-threshold approach reaches similar people with similar needs; however, it can exclude those who need help but do not meet the entry requirements.

The low-threshold method reaches most potential clients but cannot always meet their widely-differing needs. Ideally, both should complement each other. Availability of substitution treatment within prisons also varies widely.

## 5. How is substitution treatment delivered?

In general, substitution treatment is delivered either by GPs or specialised centres with services tailored to addicts' needs. Each has its merit: GPs offer wide geographical coverage, while specialised centres have considerable experience and expertise. However, nearly all EU Member States have treatment concentrated in either one or the other. Combining the two — and, at the same time, establishing a system to prevent diversion of substances for illicit purposes — could be more effective. Each also has disadvantages. Services offered by GPs vary considerably and addicts may feel uneasy among regular patients. Specialised centres are not evenly spread geographically, which might lead to disadvantages for drug users in remote areas.

**Table 1: Substitution treatment among problem drug users**

Country	Estimated prevalence of problem drug use <sup>(1)</sup>	Estimated number of clients in substitution treatment	Substitution coverage rate (%) <sup>(2)</sup>
Belgium	20 200	7 000 (1996)	35 <sup>(3)</sup>
Denmark	12 752–15 248	4 398 (4 298 methadone, 100 buprenorphine) (1 January 1999) <sup>(4)</sup>	27–34
Germany	80 000–152 000	50 000 (2001) <sup>(4)</sup>	33–63
Greece	n.a.	966 (1 January 2000) <sup>(4)</sup>	n.a.
Spain	83 972–177 756	72 236 receiving methadone (1999)	41–86
France	142 000–176 000	71 260 (62 900 receiving buprenorphine and 8 360 receiving methadone) (December 1999) <sup>(4)</sup>	40–50
Ireland	4 694–14 804	5 032 (31 December 2000) <sup>(4)</sup>	34–100 <sup>(5)</sup>
Italy	277 000–303 000	80 459 (1999) <sup>(4)</sup>	27–29
Luxembourg	1 900–2 220	864 (164 in the official programme and +/- 700 prescribed Mephenon® (methadone in pill form) by GPs; 2000) <sup>(4)</sup>	38–45
Netherlands	25 000–29 000	11 676 (1997)	40–47
Austria	15 984–18 731	4 232 (1 January 2000) <sup>(4)</sup>	23–26
Portugal	18 450–86 800	6 040 (1 January 2000)	7–33
Finland	1 800–2 700 <sup>(6)</sup>	240 (170 buprenorphine and 70 methadone)	9–13
Sweden	1 700–3 350 <sup>(6)</sup>	621 (31 May 2000) <sup>(4)</sup>	19–37
United Kingdom	88 900–341 423 <sup>(7)</sup>	19 630	6–22
Norway	9 000–13 000	1 100 (2001)	8–12

NB: n.a. = Data not available.

<sup>(1)</sup> Methods for estimating problem drug use vary widely in EU Member States. For more details on national prevalence and problem drug use, see section on problem drug use in Chapter 1 (EMCDDA 2001 *Annual report*) and online Table 1 OL at: <http://annualreport.emcdda.org>. Estimates of problem drug use mainly refer to opiate users, except for Finland and Sweden where amphetamine use is significant. Here, estimates for Finland and Sweden exclude amphetamine users.

<sup>(2)</sup> Estimated proportion of problem drug users in substitution treatment.

<sup>(3)</sup> Prevalence figure only covers injecting drug users, which may result in an overestimated substitution coverage rate.

<sup>(4)</sup> Information collected directly from national focal point.

<sup>(5)</sup> A substitution coverage rate of 100 % seems implausible, which suggests that the prevalence estimate of 4 694 may underestimate current prevalence.

<sup>(6)</sup> Opiate users only.

<sup>(7)</sup> More precise data for the UK: prevalence of problem drug use (opiates) = 162 000–244 000; clients in substitution treatment = 35 000; coverage rate = 14–22 %.

*'Establishing new centres for the provision of treatment can be particularly difficult. Drug services can be seen to attract undesirable elements into localities and to be associated with loitering, drunkenness, intoxication and burglaries. Most countries report some community resistance to treatment programmes. However, [such] resistance ... has been found to be most common before programmes and centres are established and, once they become operational, the neighbourhoods seem to accept them.'* [1]

## 6. Drug users in substitution treatment

Table 1 shows estimated numbers of problem drug users (mainly opiate users) in the EU and estimated percentages in substitution treatment. The latter vary remarkably between Member States. In some countries, they are as low as around 10 %; in others, they exceed half.

It has to be borne in mind that estimates of problem drug use still lack precision and are not easily comparable. Low coverage implies that a large number of drug users may be at increased risk of overdose, health damage, HIV and other infectious diseases, and social exclusion.

However, it has to be remembered that substitution is only useful in countering problem opiate use. There is no similar

solution for amphetamine or cocaine problems. In northern EU Member States, more problems are caused by amphetamines than by heroin; and, in the EU generally, cocaine use cannot be ignored.

Despite the expansion in substitution treatment in recent years, most Member States still report a lack of quality control, monitoring and assessment of individual programmes.

## Conclusions

### Substitution treatment — policy considerations

This policy briefing summarises some of the key data and evaluations available on the state of substitution treatment in the EU today, and indicates primary sources for those who wish to know more. On the basis of current findings, the following conclusions could be the foundation of future policy considerations:

1. Substitution should be viewed as part of a comprehensive treatment system for opiate drug addicts. It should be a key component of HIV prevention strategies in countries with a high potential of transmission through intravenous drug use.
2. It should be accompanied systematically by psycho-social care.
3. A broader and more diversified range of substances and dosages should be offered to match the profile of the person entering treatment.
4. There should be greater availability of, and access to, substitution treatment, with both low- and high-threshold options offered as part of a balanced approach.
5. Both general practitioners and specialised services should be involved in delivery.
6. The proportion of problem drug users covered by substitution treatment should be examined regularly by geographical region to monitor the delivery of services.

### Key sources

#### 1. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2000), *Reviewing current practice in drug-substitution treatment in the European Union*, EMCDDA Insights series No 3, Office for Official Publications of the European Communities, Luxembourg, 2000.

(Contains a comprehensive bibliography on substitution treatment.)

#### 2. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2001), *2001 Annual report on the state of the drugs problem in the European Union*, Table 1: Substitution treatment among problem drug users, Office for Official Publications of the European Communities, Luxembourg, 2001, p. 28.

Office for Official Publications of the European Communities, Luxembourg, 2001, p. 28.

#### 3. Drucker, E., Lurie, P., Wodak, A. and Alcabes, P. (1998), 'Measuring harm reduction: the effects of needle and syringe exchange programs and methadone maintenance on the ecology of HIV', *AIDS*, 12 (suppl. A), pp. 217–230.

Office for Official Publications of the European Communities, Luxembourg, 2000, p. 29.

#### 4. Küfner, H., Vogt, M. and Weiler, D. (1999), *Medizinische Rehabilitation und Methadon-Substitution*, Schneider Verlag Hohengehren, Baltmannsweiler.

Office for Official Publications of the European Communities, Luxembourg, 2000, p. 29.

#### 5. EDDRA database entry (2001), *Second unit of the methadone substitution programme in Athens* (<http://www.reitox.emcdda.org:8008/eddra>), EMCDDA, Lisbon.

#### 6. Farrell, M., Howes, S., Taylor, C., Lewis, G., Jenkins, R., Bebbington, P., Jarvis, M., Brugha, T., Gill, B. and Meltzer, H. (1998), 'Substance misuse and psychiatric co-morbidity: an overview of the OPCS national psychiatric morbidity survey', *Addictive Behaviours*, 23, No 6, Elsevier Science Ltd, Oxford, pp. 909–918.

Office for Official Publications of the European Communities, Luxembourg, 2000, p. 29.

#### 7. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) (2000), *2000 Annual report on the state of the drugs problem in the European Union*, Table 1: Substitution substances used in the EU, Office for Official Publications of the European Communities, Luxembourg, 2000, p. 29.

Office for Official Publications of the European Communities, Luxembourg, 2000, p. 29.

### Web information

EMCDDA (drug treatment):  
[http://www.emcdda.org/responses/themes/drug\\_treatment.shtml](http://www.emcdda.org/responses/themes/drug_treatment.shtml)

EMCDDA (legal database):  
<http://eldd.emcdda.org>

*Reviewing legal aspects of substitution treatment at international level:*  
[http://eldd.emcdda.org/databases/eldd\\_comparative\\_analyses.cfm#](http://eldd.emcdda.org/databases/eldd_comparative_analyses.cfm#)

Euro-Methworks:  
<http://www.q4q.nl/methwork>

National Treatment Outcome Research Study:  
<http://www.ntors.org.uk>

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**OFFICIAL PUBLISHER:** Office for Official Publications of the European Communities.

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**EDITORS:** Kathy Robertson, John Wright.

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**GRAPHIC CONCEPTION:** Dutton Merrifield, UK.

Printed in Italy