

Substitution treatment

EMCDDA 2000 selected issue

In EMCDDA 2000 Annual report on the state of the drugs problem in the European Union

Selected issues

This chapter highlights three specific issues relating to the drug problem in Europe: substitution treatment; prosecution of drug-related offences; and the problems facing women drug users and their children.

Substitution treatment

Substitution treatment first appeared in the EU in the late 1960s in response to emerging opiate use. As such use spread, so too did substitution services, even though their practice varied — and still varies — considerably. Related legislation, prescribing practices and the overall organisation of substitution services also differ substantially within the EU.

Drug users in substitution treatment are prescribed a 'substitute' substance either similar or identical to the drug normally consumed. A distinction is made between detoxification — gradually reducing the quantity of the drug until there is zero intake — and maintenance providing the user with a sufficient amount to reduce risk behaviour and other related harm over a longer period. Heroin (or other opiate) users are the primary clients, with non-opiate users more often prescribed substitution substances for detoxification purposes. This section focuses exclusively on treatment for opiate addiction.

Substitution substances

Substitution substances are either agonists — which activate opiate receptors in the brain thus creating the effect of drug consumption — or agonist-antagonists which while also activating opiate receptors in the brain simultaneously limit or eliminate the effects of other opiates or opioids taken in addition. Some substances, like buprenorphine, combine both agonistic and antagonistic features. Substitution substances used to treat heroin abuse are either opiates — substances derived from the opium poppy such as morphine or codeine, as well as heroin produced from morphine — or opioids synthetic substances with opiate-like effects, such as buprenorphine or methadone.

Different substitution substances work for different periods of time, and this affects how they are administered. The longest-lasting substance is laevo-alphaacetyl-methadol (LAAM), which can be taken as little as three times a week. Slow-release morphine can be given every other day, whereas methadone and Mephenon^R

Table 1	Substitution substances used in the EU			
Substitution substance	Characteristics of the substance	Countries reporting use of the substance (a)	Estimated average price per week of treatment (EUR)(b)	Substance used for detoxification or maintenance
Buprenorphine	Very long-acting agonist-antagonist opioid	Belgium, Denmark, France, Italy, Austria, UK	65	Both
Dihydrocodeine	Short-acting, semi-synthetic, 'weak' agonistic opioid	Belgium, Germany, Luxembourg	40	Both
Heroin	Short-acting, 'strong' agonistic opiate	Netherlands, UK	200	Maintenance
LAAM	Very long-acting, synthetic agonistic opioid	Denmark, Germany, Spain, Portugal	45	Both
Mephenon ^R	Long-acting, synthetic agonistic opioid	Luxembourg	8	Both
Methadone	Long-acting, synthetic agonistic opioid	All EU Member States	20	Both
Slow-release morphine	Long-acting agonistic opiate	Austria	40	Both

(a) Substitution substances reported in less than 20 cases are not included here.
(b) Maintaining a user at: 8 mg buprenorphine a day; 1500 mg dihydrocodeine a day; 400 mg heroin a day; 350 mg LAAM a week; 10 Mephenon^R pills a day; 50 mg methadone a day; or 400 mg slow-release morphine a day

(methadone in pill form) must be taken daily. Heroin and dihydrocodeine must be taken at least twice daily.

Table 1 demonstrates that methadone is still the most commonly used substitution substance in the EU, although it no longer has the exclusive status it once did. Other substances have since appeared which, despite their diverse characteristics, are used for both detoxification and maintenance.

Introduction of substitution treatments in the EU

Following an experiment in 1994–97 to prescribe heroin to chronic drug abusers mainly for maintenance purposes, Switzerland continues to use heroin as an alternative to methadone. The Swiss trial led to debates about heroin prescription in all EU Member States, and although similar trials were proposed in many, only the Netherlands actually launched them in 1997 while in Germany the legal framework for such trials was approved in 1999. French experiences with buprenorphine in 1996 led to similar small-scale experiments in Denmark (1998), Germany (1999) and Austria (1997) and to the licensing of the substance in the UK in 1999 and in Germany in 2000. LAAM trials spread from Portugal in 1994 to Spain in 1997 and Denmark in 1998.

While Table 2 again illustrates the predominance of methadone, it also demonstrates how long it took before

Table 2 Introduction of substitution treatments in the EU

Country	Methadone treatment introduced	Introduction of other substitution substances (ª)	
Belgium	1994	Occasional use of buprenorphine (b), dihydrocodeine	
Denmark	1970	Buprenorphine (b, c) and LAAM (both 1998) (c)	
Germany	1992	Dihydrocodeine (1985), heroin (1999) (°), LAAM (1999), buprenorphine (2000) (b)	
Greece	1993	No other substance prescribed	
Spain	1983	LAAM (1997)	
France	1995	Buprenorphine (1996) (b)	
Ireland	1970	No other substance prescribed	
Italy	1975	Buprenorphine (1999) (b, c)	
Luxembourg	1989	Dihydrocodeine (1994) (°), Mephenon ^R (d)	
Netherlands	1968	Heroin (1997) (°)	
Austria	1987	Slow-release morphine (1997), buprenorphine (1997) (^{b, c})	
Portugal	1977	LAAM (1994) (°)	
Finland	1974	Buprenorphine (1997) (b)	
Sweden	1967	No other substance prescribed	
UK	1968	Buprenorphine (1999) (b)	

Notes: (a) Dates refer to the year the political decision was taken to prescribe the substance.
(b) Buprenorphine is in the form of Subutex^R and not Temgesic^R as this only contains small amounts of the substance.
(c) Trial only.
(d) Date not known.

methadone was introduced in all EU countries. Although in many countries newer substitution substances are still only on trial, they are increasing in importance.

An evaluation of outpatient methadone treatment in Germany from 1995 to 1999 carried out by the Institute for Therapy Research (IFT), Munich, revealed that drug consumption declined while social skills and relationships improved over the period.

A 1997 Dutch study showed that up to 90 % of clients on an average daily dose of 50 mg methadone also used cocaine and heroin, and 70 % used alcohol. First results of a study, initiated by the minister for health, into the effect of different methadone dosages on experimental groups show that the group receiving a higher dose became more stable, their health and social skills deteriorated less frequently and even improved somewhat more often.

In Austria, a 1997 evaluation reported that buprenorphine can be prescribed for pregnant women since babies born to mothers taking the substance do not demonstrate opiate-related abstinence syndromes as do babies of mothers taking methadone.

Whereas substitution trials with LAAM in the Netherlands failed in the early 1990s because addicts refused to participate, Portugal reported overall positive results, with 64 % of the 99 participants remaining in the programme. In a follow-up of 38 patients, 61 % did not relapse.

Extent and settings of substitution services

Despite overall expansion in the EU in the last 30 years, substitution treatment is still scarce in some regions and settings. Services in Greece, Finland and Sweden, for example, have limited geographical coverage and may not reach potential clients in other districts. Availability of substitution treatment in prisons also varies, both between and within Member States.

Few Member States report limited in-patient substitution treatment, although the provision does, in theory, exist within the EU. Instead, substitution care is almost exclusively an outpatient service, possibly because outpatient treatment is cheaper than in-patient treatment but also because the effect on the clients' daily life is minimal. The outpatient setting does not, however, address the fact that those in substitution treatment range from relatively well-functioning often employed individuals to marginalised and extremely disadvantaged street addicts who may require more care than an outpatient facility can provide.

Despite substantial increases in the evaluation of substitu-

S: Limited, but increasing treatment slots available (now 800) NL: Heroin trials in progress FIN: Limited substitution treatment available IRL: LAAM and lofexidine under consideration DK: LAAM and buprenorphine trials in progress UK: Buprenorphine now prescribed D: Heroin and buprenorphine trials in progress B: Major increase in methadone prescription A: Slow-release morphine increasingly used L: Morphine, Mephenon^R and dihydrocodeine prescribed EL: Two new substitution treatment units opened P: LAAM now prescribed E: Major increase in methadone use; F: Buprenorphine use I: Buprenorphine trials buprenorphine trials in progress

An overview of substitution treatment in the European Union

tion treatment in the past five years, most Member States still report a lack of quality control, monitoring and assessment of individual programmes.

Prosecution of drug-related offences

Possession of heroin

In 11 EU Member States, the judicial authorities prosecuting the possession of small quantities of heroin or similar drugs must assess whether the substance is for personal use or not. Possession solely for personal use is considered less serious than possession for other purposes and the average sentence varies from administrative sanctions — such as confiscation of a driving licence or passport — to a fine or a custodial sentence for up to 12 months.

In practice, however, it may be impossible to define common criteria for prosecution — even within the same country — since the authorities must take into account such a broad range of factors, including the specific national drug laws, the status of the individual offender

and where and when the offence occurred.

Some common elements can, however, be identified. In general, petty first-time offences — such as possession of very small quantities for personal use — lead to warnings, cautions and confiscation of the substance rather than more severe penalties. In Denmark, however, users possessing a single dose for their personal use may be allowed to keep it. In these cases confiscation is seen as counter-productive since a crime would probably have to be committed to pay for another dose.

Given its highly addictive nature, possession of heroin is likely to be a repeated offence, and recidivism is a major problem. In most Member States, recidivists face harsher prosecution measures, such as probation or custodial sentences, when the repeat offence involves 'considerable' quantities.

Possession of drugs such as heroin is still sentenced in markedly different ways in the EU. In Denmark, for example, a warning or fine may be imposed. In Greece,