EUROPEAN COMMISSION
HEALTH & CONSUMER PROTECTION
DIRECTORATE-GENERAL
Directorate C - Public Health and Risk Assessment

Final report

Models of good practice in drug treatment in Europe ("Moretreat")

AGREEMENT NUMBER - 2006329

October 31th, 2008

Corresponding address:
Centre for Interdisciplinary Addiction Research (CIAR)
Director: Prof. Dr. C. Haasen
Department of Psychiatry, UKE
Martinistraße 52, 20246 Hamburg
Phone: + 49 40 42803 7901, Fax: + 49 40 42803 8351
haasen@uke.uni-hamburg.de, www.zis-hamburg.de

EUROPEAN COMMISSION
HEALTH & CONSUMER PROTECTION
DIRECTORATE-GENERAL
Directorate C - Public Health and Risk Assessment

Content

Models of good practice in drug treatment in Europe
"Moretreat" – consortium

Co-ordinator and co-beneficiaries
Co-ordinator

CIAR Hamburg	Prof. Dr. C. Haasen	haasen@uke.uni-hamburg.de
	Dr. P. Degkwitz	p.degkwitz@uke.uni-hamburg.de
	Dr. H. Zurhold	zurhold@uke.uni-hamburg.de
	B. Schulte	b.schulte@uke.uni-hamburg.de
	K. Thane	k.thane@uke.uni-hamburg.de
	Prof. Dr. H Stöver	hstoever@uni-bremen.de

Co-beneficiaries

SU Stockholm	Prof. Dr. B. Olsson	borje.olsson@sorad.su.se
	M. Lovstrom	marikalovstrom@hotmail.com
IPiN Warsaw	Prof. Dr. J. Moskalewicz	moskalew@ipin.edu.pl
	K. Dabrowska	dabrow@ipin.edu.pl
KCL London	Prof. Dr. M. Gossop	m.gossop@iop.kcl.ac.uk
	Dr. J. Witton	John.Witton@iop.kcl.ac.uk
MUW Vienna	Prof. Dr. G. Fischer	Gabriele.Fischer@meduniwien.at
	J. Hoedlmoser	Julia-Hoedlmoser@gmx.at
	M. Galovic	marian.galovic@uv-medizin.at
TU Dresden	Prof. Dr. J. Rehm	Jtrehm@aol.com
	Prof. Dr. A. Uchtenhagen	uchtenhagen@isgf.unizh.ch
	Dr. Dr. A. Samokhvalov	avsamokhvalov@yahoo.ca
ITACA Rome	Dr. M. Coletti	coletti@itacaeurope.org
	A. Camposeragna	a.camposeragna@itacaitalia.it
	R. Accettura	rita.accettura@gmail.com

2 Guidelines for interventions in drug treatment – fact sheets (summary)

In the following the guidelines for the most relevant drug treatment interventions are presented as short versions (fact sheets).
These versions are delivered also in German and French and will be disseminated to the relevant national and European networks for drug treatment and also to the "best practice" portal" of the EMCDDA.
Starting from the summary the detailed "Guidelines for drug treatment improvement" are presented in chapter 6.

2.1 Brief intervention and brief therapies for illicit drug abuse

A Definition and objectives

1 Problem definition

Illicit drug abuse became a significant social and medical problem in the last decades. In spite of numerous attempts to cut the consumption of drugs in Europe, the number of drug abusers remains high as well as the number of urgent, chronic and disabling medical conditions, related to drugs use. High prevalence of illicit drug use and drug use disorders translates into high treatment demands which cannot be completely satisfied by specialised addictions service institutions. This makes various primary care institutions not specialised in addictions the first providers of medical help for those individuals. Specific treatment settings in these institutions require implementation of short-term, simple and cost-effective treatment models as brief interventions and therapies.

2 Aims and objectives of Brief Interventions and Therapies

Brief interventions are short-term clinical practices comprising one ore few sessions and aimed mostly to analyse the subject's problem and motivate an individual to minimise the harm from his substance abuse either directly during the intervention itself or indirectly – by seeking additional substance abuse treatment.
Brief therapy is a process of systematic and focused assessment, client engagement, and rapid implementation of actual change strategies. Brief therapies usually comprise more sessions than brief interventions and also differ from brief interventions in that their goal is to provide clients with tools to change basic attitudes and handle a variety of underlying problems.

B Evidence base

1 Data availability

Currently there are numerous studies and meta-analytical reviews showing efficacy of brief interventions and therapies for various categories of patients and types of substance abuse, including poly-substance abuse. While reports regarding the psychosocial interventions are mostly concentrated on cannabis and stimulants abuse, literature on opiates abuse is dedicated prevalently to maintenance treatment.

2 Main findings

Research of efficacy of various psychotherapeutic techniques has shown mixed but predominantly positive results for motivational enhancement therapy, high efficacy of cognitive-behavioural therapy apart and in combination with MET, positive effects of family and social therapies and appropriateness of implementation of pharmacological interventions in certain cases.

C Recommendations

1 Motivational Enhancement Therapy

The evidence of effectiveness of motivational enhancement therapy is multiple and diversified, mostly presented for cannabis and stimulants abuse and less – for opiates. While certain studies report poor efficacy of MET, most of them show its high effectiveness.

Motivational enhancement should include informational component and be based on the following key points:

- Medical complications and related disorders, common for major types of substance abuse affecting mental and physical functioning.
- Economic aspects of drug use – amounts spent for drugs and economic benefits of abstinence.
- Social aspects of drug use – Social, family and vocational problems related to drug use.
- Legal status of drug. Potential legal consequences of drug acquisition, use and keeping as well as the legal outcomes of actions and emergency situations.
- Drug dependence and its acknowledgement by patient.

2 Cognitive-behavioural therapy

There are multiple evidences of high efficacy of cognitive-behavioural therapy for substance abuse treatment. Most of the patients with substance abuse have certain patterns of using the drugs. These may be certain situations, friends or companies or

certain life events. Consequently, there are some associative psychological “triggers” that will obviously lead the patient into temptation to continue using the substance.
Analysis of these triggers, better understanding of psychological grounds of addiction and development of coping skills based on it result in relatively higher abstinence rates in the most of related studies.

3 Social and family therapy

Multiple studies of implementation of family- and/or social-based techniques have shown their efficacy in coping of social deprivation and facilitating the treatment process. Thus, it’s desirable that his or her family and friends were involved into the treatment process.
The main goals and potential achievements of engaging the family and friends in the treatment are:

- creating the psychologically comfortable circumstances for treatment;
- encouraging and inspiring the patient;
- preventing “occasional” relapses and
- increasing socialisation of the patient.

4 Pharmacological interventions

While pharmacological treatment is not a part of brief interventions, there may be certain medical complications and related disorders, present or to be predicted. Thus, the implementation of pharmacological interventions is obvious in some cases, both for coping present medical problems and prevention of potential ones.
Pharmacological therapy may and must be used to improve general medical condition of the patient as well.

5 Techniques to be chosen

All psychotherapeutic techniques described in the guidelines are effective. As the clinical evidences show their complementary and cumulative effectiveness we recommend their combined implementation.

6 Number of sessions and duration of treatment

While current evidences report effectiveness of single-session interventions, the effectiveness of treatment is higher when multiple-session therapies are being used.

2.2 Enhancing motivation for change in drug treatment

A Definition & objectives

1 Problem definition

Motivational interviewing is a counselling style based on the following assumptions:

- Ambivalence about substance use (and change) is normal and constitutes an important motivational obstacle in recovery.
- Ambivalence can be resolved by working with your client's intrinsic motivations and values.
- The alliance between you and your client is a collaborative partnership to which you each bring important expertise.
- An empathic, supportive, yet directive, counseling style provides conditions under which change can occur. (Direct argument and aggressive confrontation may tend to increase client defensiveness and reduce the likelihood of behavioral change.)

The Motivational Approach (MoAp) started off as a 'transtheoretical' model to deepen understanding of the motivation for change among drug users and alcoholics.

The MoAp (and its clinical applications) covers the theme of the subject's attitude, his/her actions and reactions faced with the advantages and disadvantages of his/her consumption.

2 Aims and objectives

The motivational approaches are based on the following assumptions about the nature of motivation:

- Motivation is a key to change.
- Motivation is multidimensional.
- Motivation is dynamic and fluctuating.
- Motivation is influenced by social interactions.
- Motivation can be modified.
- Motivation is influenced by the clinician's style.
- The clinician's task is to elicit and enhance motivation.

B Evidence

1 General description of the current situation with regard to the available data

Motivational Interviewing is a well-known, scientifically tested method of counselling clients developed by Miller and Rollnick and viewed as a useful intervention strategy in the treatment of lifestyle problems and disease.

Although the demand for treatment of substance abuse continues to far exceed its availability, changes in health care economics are placing greater pressure on providers and their clients. Payers increasingly demand evidence that the services being provided are not only effective, but cost-effective. Clinicians and programs are increasingly challenged if they do not use research-supported, current methods. Public funding is scarce, and third-party payers exert great pressure to provide treatment that is shorter, less costly, and more effective.
In sum, clinicians are asked to do more with less

2 Short description of the main outcomes all studies

The incorporation of motivational approaches and interventions into treatment programs may be a practical and efficacious response to many of these challenges. Recent research (Brown and Miller, 1993; Kolden et al., 1997; McCaul and Svikis, 1991) supports the integration of motivational interviewing modules into programs to reduce attrition, to enhance client participation in treatment, and to increase the achievement and maintenance of positive behavioral outcomes. Other studies have shown brief interventions using motivational strategies and motivational interviewing to be more effective than no treatment or being placed on a waiting list, and not inferior to some types of more extensive care (Bien et al., 1993a, 1993b; Noonan and Moyers, 1997). A review of the cost-effectiveness of treatments for alcohol use disorders concluded that brief motivational counselling ranked among the most effective treatment modalities, based on weighted evidence from rigorous clinical trials (Holder et al., 1991). Brief motivational counselling was also the least costly--making it the most cost-effective treatment modality of the 33 evaluated. Although cautioning that it was an approximation that requires refinement, the same study found a negative correlation between effectiveness and costs for the most traditional forms of treatment for alcohol use disorders and highlighted a growing trend to favor effective outpatient care over less effective or less studied--but far more expensive--inpatient, hospital-based, or residential care (Holder et al., 1991).
As already noted, MI increases the effect of another treatment, but has not itself been subjected to randomized study. Brief, motivation-enhancing treatment appears to have the same effect as more extensive treatment. The studies, with the exception of Project MATCH, have mainly recruited patients with a lower level of alcohol dependence.

C Recommendations

- MI is considered of great help for professionals of drug treatment. As motivation to change is a predictor for adequate treatment, MI can be used for measuring behaviour and aptitudes of patient toward treatment
- Mi is evidence based and its outcomes can be evaluated
- MI approach could be included in several treatment to increase their results
- MI should be used for high threshold treatment

- MI theoretical corpus should be known by the clinicians, even if not directly involved in MI-based intervention
- MI should be intended as an early module of treatment to assess the readiness of patient for residential and semi-residential treatment, psychosocial treatment (residential or not) in prison milieu, psychosocial treatment in general

2.3 Interventions in blood-borne diseases

A Definition and objectives

1 Problem definition

Drug users and in particular injecting drug users (IDUs) are at risk of infections with blood-borne diseases (BBD). These include especially Human Immunodeficiency Virus (HIV) and hepatitis C (HCV), furthermore other hepatitis infections (HBV and HAV) and tuberculosis, but other infections are rather common as well. In 2005, there were around 3,500 new diagnoses of HIV in the European Union which were traced back to injecting drug use (EMCDDA 2007a). The prevalence of HIV among IDUs differs between the countries and may range from almost zero up to 40%, and the prevalence of Hepatitis C (HCV) among IDUs ranges between 30% and 98% in the European Union (EMCDDA 2007a).

HCV is a virus with potentially devastating hepatic complications, which will get chronic in about 80% of the infected persons, while 20% will clear the virus (Wright and Tompkins 2006). Young IDUs get infected with HCV still in the beginning of their drug use career (EMCDDA 2007a).

Interventions in blood-borne diseases have been developed as an integral part of harm reduction policy with the general aim to minimise harms and reduce risks related to drug use. With respect to the prevention of blood-borne diseases main interventions are

- needle and syringe exchange services,
- drug consumption rooms,
- testing and vaccination and
- information and education.

2 Aims and objectives interventions in blood-borne diseases

In general, interventions in blood-borne diseases aim at reducing the transmission of blood-borne infections in drug users. Priority aim of needle and syringe exchange services is to reduce the sharing of equipment used in drug preparation and injection, and consequently to reduce the transmission of HIV, hepatitis B and C, and other blood-borne infections (Morissette, Cox et al. 2007; Ritter and Cameron 2006; Trimbos instituut 2006). Main aim of testing and vaccination is provide access to testing for hepatitis B and C and HIV, and for hepatitis immunisation in order to prevent blood-

borne diseases. Drug consumption rooms aim at reducing drug-related overdoses and mortality, as well as to establish contact with difficult-to-reach clients and reduction of public nuisance.

3 Client group served

- Needle exchange services provide easy access to all drug injectors.
- Pro-active testing for drug-related infectious diseases and vaccination is targeting at all problem drug users that may practice sharing of injecting equipment or unsafe sex (Trimbos instituut 2006).
- Specific target groups for testing, vaccination and related counselling are drug users infected with HCV, new and young injectors, prisoners, drug addicted sex workers, migrants etc.
- Target groups of drug consumption rooms are mainly high-risk drug users and marginalized drug users.
- Information and education is targeted at drug users, their family, friends and the wider community as well.

B Evidence base

Evidence of effectiveness for harm reduction measures in general is rather scarce, compared to controlled medical research. Evidence base is methodological limited in some points.

1 Evidence for needle and syringe exchange services

There is a strong evidence that the increased availability of needle and syringe provision has contributed considerably to the control of HIV among drug injectors (Henderson, Vlahov et al. 2003; Emmanuelli, Desenclos et al. 2005; Bravo, Royuela et al. 2007).

- The use of NSP is associated with clear benefits of decreased HIV risk behaviour such as the decrease in sharing of injecting equipment.
- Needle exchange programmes seem to be less effective in preventing hepatitis C infection.
- The slow decrease of HCV prevalence is attributed to the continued risk behaviour, the infrequent use of NSP services, and the high risk profile of NSP clients (e.g. due to cocaine injecting).
- There is some evidence that increased access to and utilisation of NSP services is effective in reducing the drug use frequency, the transition from injecting to smoking, and the enrolment and retention in drug treatment.

2 Evidence for testing and vaccination

- There is no clear evidence for the effectiveness of testing for blood-borne diseases and counselling as single interventions. Current results suggest that testing for blood-

borne diseases might be effective in reducing HIV infections in terms of reduced risk behaviour as a consequence of testing and related counselling.
- Testing and counselling may increase drug users enrolment in medical or drug treatment (Trimbos instituut 2006; Samet, Walley et al. 2007).
- Vaccination against viral hepatitis B have been found to be strongly effective in preventing hepatitis B infection after completing the primary course of 3 vaccinations.
- Vaccination against hepatitis B seems to have also a positive influence on the hepatitis C serostatus.

3 Evidence for drug consumption rooms
- There is evidence that health status is stabilised and shows positive outcomes.
- (Re-) integration into drug help services does take place
- Consumption rooms do decrease public disturbances in the vicinity.

Research on information and education
- Information and education may help to reduce drug-related risks, mainly in combination with other prevention strategies.

C Recommendations

1 Location
- In order to provide easy access to needle and syringe exchange services there should be a comprehensive range of these services on local level, including rural areas.
- Outpatient drug services, drug treatment, health care centres, prisons, general practitioners and further services are suitable locations for testing, counselling and vaccination related to blood-borne diseases (Matic, Lazarus et al. 2008), as well as for information and education.
- Since availability of rapid tests which reduce the time between testing and result, and where testing and counselling is provided in settings convenient to clients voluntary testing has increased markedly (WHO 2007).
- Targeted vaccination for injecting drug users seem to be most effective when done in methadone maintenance programmes, at syringe exchange services or in other community based settings that provide prevention of infectious diseases (Edlin, Kresina et al. 2005).

2 Staffing and competencies
- Professional competencies in needle and syringe exchange as well as drug consumption rooms include knowledge about injecting patterns and the provision of harm reduction advice in terms of safer use.

- In specialised drug agencies or needle exchanges medical staff such as nurses should be employed in order to treat minor infections or offer basis health checks.
- Health care professionals have to be offered necessary training in order to achieve an understanding of the dynamics of drug use and drug addiction (Edlin, Kresina et al. 2005).
- Best practice is to ensure that suitable trained staff is available who have the necessary skills and knowledge to advice clients about blood-borne viruses, testing and vaccination, and further treatment.

3 Treatment environment

- Good practice is not to simply distribute sterile needles and syringes, but to combine NSP with advice, risk counselling, primary healthcare for minor infections, overdose prevention, and advice in housing, social welfare or legal issues. Drug users should also be offered referrals to brief interventions and structured treatment.
- All services should provide information and advice about access to routine screening for hepatitis B, C and HIV. Drug users who do not know they are infected cannot take advantage of treatment, care and support, which can considerably improve their health and quality of life.
- Testing for blood-borne diseases requires that professionals carefully prepare clients for testing by providing information and advice on implications of testing for hepatitis and HIV. Pre- and post-test counselling is an essential part of testing in order to discuss with the client procedures of testing and further steps to be taken after receiving the test result.
- Testing and related counselling should be voluntary and confidentiality.

4 Access

- In order to improve uptake of testing and vaccination services should ensure high and easy access, and be designed as low-threshold, free of charge, and confidential services.
- These open-access services have to be sensitive for different groups such as young drug users, women, migrants etc. In general, all clients have to be ensured equal access to testing for hepatitis and HIV, pre-and post-test counselling, hepatitis B vaccination or other medical treatment for infectious diseases (National Treatment Agency 2002).
- Needle exchange services and drug consumption rooms are to be made as accessible as possible with no or low thresholds for eligibility. This kind of open-access service includes drop-in service, no waiting list, minimal identification requirements and informal relationships with staff.
- Vaccination for hepatitis B should be made available for all problem drug users.

5 Assessment

- Assessment is an important part of prevention related to testing for blood-borne diseases as it will result in information which is essential for the care planning process.
- In addition health checks and health information should be provided regularly to clients. As well harm reduction messages on risk reduction and the transmission of blood-borne infections (HIV, HBV, HCV) should be given ongoing. Drug users should be given advice on how to prevent harmful behaviour.
- With regard to NSP services it is good practice to carry out a basic assessment of the clients on their first visit. The initial assessment should cover information on the drug use profile and injecting history, the health status, risk behaviour, and history of referrals to treatment or other services.
- For testing and vaccination a broader risk assessments is required which includes additional information on history of sharing injecting equipment, history of sexual risk behaviour, history of imprisonment, alcohol use, previous testing for hepatitis and HIV, and previous contact to health care for screening of blood-borne diseases.

6 Management

- It is of major importance important to implement a comprehensive approach by providing sterile injecting equipment, and by offering condoms, harm reduction advice, first aid and options for referrals to structured treatment (National Treatment Agency 2002).
- Provider of dedicated needle exchange services should be able to recognise people with physical or severe mental health problems, and to refer them to the most appropriate treatment.
- In prison vaccination for hepatitis B and C, testing and counselling should have a linkage to medical and drug treatment services.
- Drug users should be offered voluntary, confidential testing combined with client-centred pre- and post-test counselling. Counselling has to include an individualised behavioural risk assessment.
- Main competences related to management include (Edlin, Kresina et al. 2005) minimising barriers to participation in testing, vaccination and treatment by allowing flexibility in adherence to appointment schedules and offering drop-in visits.
- In addition, clients have to be informed about appropriate treatments if needed and on adverse effects of treatment. Access and adherence to antiretroviral therapy may be improved if drug users are attending either a medication-based or a psychosocial treatment programme (Altice, Springer et al. 2003; Kapadia, Vlahov et al. 2008). both improved adherence to HIV treatment among drug users.

7 Pathways of care

- Integrated care pathways include that self-referrals and referrals from a variety of services are accepted. Elements of care for drug users comprise a range of preventive interventions covering assessment of risk behaviour, pre- and post-test counselling, offers or referrals for testing for hepatitis and HIV and vaccination against hepatitis A and B viruses.
- Care coordination requires that specialised services for drug users cooperate closely with non-specialist services. Strong linkages with mental health services and the provision psychiatric care are recommended as many IDUs suffer from co-morbid psychiatric disorders.
- As needle exchange services and drug consumption rooms have been found to form a gateway to further treatment clients have to be offered referral to a variety of structured treatment programmes such as brief motivational interventions, counselling, detoxification, substitution treatment with psychological care, and rehabilitation.
- Clients requiring treatment for blood-borne infections or other health problems must be referred to treatment where it is appropriate.
- If testing and vaccination are not provided on-site, local availability of HBV, HCV and HIV testing should be mentioned and those clients who want to be tested should be referred to other services such as GPs, health services or specialist AIDS services etc.
- Clients with hepatitis C are at further risk of becoming infected with hepatitis B. For this reason it is important to ensure that clients with hepatitis C who are not infected with hepatitis B are offered HBV vaccination.
- Countries should increase access to antiviral treatment for drug injectors, and ensure the same access and treatment standards regardless of gender, age, sexual orientation, substance use, imprisonment or migratory status.
- Information and education should be available in all kind of setting for different target groups.

8 Standards

- Standards include assuring quality and efficiency of the needle exchange service. One approach to this task is to transform evaluation results into practice.
- For harm reduction services it is recommended to develop specific working standards and methods – if not already existing – in order to ensure minimum quality standards.
- Data should be collected in a standardised way by adopting the five key-indicators of the EMCDDA to monitor harm reduction.
- For testing and management of infectious diseases a number of guidelines exist at national (Canada, Scotland) and international level (WHO, UNAIDS). To address the problem of undiagnosed HIV infection, WHO and UNAIDS issued a new guidance

on informed, voluntary HIV testing and counselling in the health facilities (WHO/UNAIDS 2007).

9 Performance and outcome monitoring

- With respect to performance it is good practice to regard interventions to assess for, prevent and manage blood-borne diseases as an integral part of treatment.
- Performance and outcome monitoring covers to collect routine information, monitor and evaluate needle exchange services.
- Monitoring of performance includes to develop and implement adequate evaluation protocols for the harm reduction services provided (Trimbos instituut 2006).

2.4 Maintenance treatment

A Definition and objectives

1 Problem definition

Treatment of drug dependence through prescription of a substitute drug (agonists and antagonists) for which cross-dependence and cross-tolerance exists, with the goal to reduce or eliminate the use of a particular substance, especially if it is illegal, or to reduce harm from a particular method of administration, the attendant dangers for health (e.g. from needle sharing), and the social consequences (Demand Reduction – A Glossary of terms, UNDCP).

2 Aims and objectives

- Treatment of opioid dependence consists of pharmacological and psychosocial interventions with the intention of reduction or cessation of opioid use and reduction of harms associated with opioid use.
- The aims of agonist maintenance treatment include: reduction or cessation in illicit opioids, reduction or cessation of injecting and other blood born virus risks, reduction of overdose risk, reducing criminal activity and improving psychological and physical health.
- Opioid agonist maintenance treatment is increasingly recognised to be the most effective management strategy. Agonist maintenance treatment is indicated for all patients who are opioid dependent and are able to give informed consent and for whom specific contra-indications do not exist.
- In recent years, the value of psychosocial treatment has also been demonstrated, particularly when used in combination with pharmacotherapy, be it in the context of opioid agonist maintenance therapy, opioid withdrawal or relapse prevention.

B Evidence base

- Methadone maintenance treatment is known to reduce drug-craving as well as morbidity associated with opioid dependence. Furthermore treatment outcome in methadone maintenance seems to be improved with increased dosages and the provision of adequate psychosocial support.
- Cochrane reviews found the efficacy of buprenorphine maintenance treatment to be comparable to methadone maintenance with advantages in some treatment settings, in alternate day dosing, better safety profile, and milder withdrawal syndrome.
- Slow-release morphine might prove as an alternative to methadone and buprenorphine substitution treatment.
- A rather new development is the prescription of heroin to chronic, treatment-resistance, heroin-dependent patients in some countries of Europe. Heroin-assisted substitution treatment might be an effective option for chronically addicted patients for whom other treatments have failed. However, it requires considerable resources as patients usually inject three times per day under supervised conditions at treatment centres, which need to have long operating hours as well as high demands on personnel and security.
- Codeine (Dihydrocodeine = DHC) is an analgesic agent, which is available for maintenance treatment in a few European countries. Due to a shorter bioavailability compared to other opioid agonists, codeine treatment might require closer monitoring as it has to be administered more than daily.
- The buprenorphine/naloxone combination compound contains buprenorphine, a partial agonist at the μ-opioid receptor, as well as naloxone, an antagonist at the μ-opioid receptor. While there is only a limited number of comparative studies available, buprenorphine/naloxone seems to be equally effective as buprenorphine alone, while buprenorphine/naloxone might be less likely to be misused intravenously.

C Recommendations

1 Treatment environment

- Pharmacological treatment programmes and interventions should be integrated or linked with other medical and social services and interventions to ensure possibility of transition of patients to other treatment modalities as their treatment needs change.
- Men and women can be treated in the same facility, providing that culturally appropriate and gender specific needs.

2 Choice of treatment and dosing

- Methadone should be considered the optimal treatment with buprenorphine reserved for patients in whom methadone is not wanted, inappropriate or ineffective, of for

whom it is anticipated that buprenorphine will improve the quality of life in other ways. Buprenorphine might be a safer option but there is not yet sufficient evidence to advocate its value over methadone on this basis.

- Buprenorphine is effective for the treatment of opioid dependence and where available should be offered as alternative to methadone for opioid dependent patients. Reasons for use of buprenorphine include: previous response to buprenorphine or lack of response to methadone; short duration of action of methadone in the past; interaction between methadone and other medications taken; specific adverse effects of methadone; treatment availability; and patient preference.
- Patients being treated with agonist maintenance pharmacotherapy, clinicians should be encouraged to use adequate methadone doses, 60-120mg.
- Patients being treated with agonist pharmacotherapy, clinicians should be encouraged to use buprenorphine doses in the range of 8-24 mg.
- To maximise recruitment into, and retention in agonist maintenance treatment programmes, policies and regulations should allow flexible dosing structures, without restriction on dose levels and the duration of treatment.
- Methadone and buprenorphine are not suitable for people with decompensate liver disease (for example cirrhosis with jaundice and ascites) as they may precipitate hepatic encephalopathy. They may also worsen acute asthma and other causes of respiratory insufficiency.
- Other contra-indications listed by the manufacturers are: severe respiratory depression, acute alcoholism, head injury, raised intracranial pressure, ulcerative colitis, biliary colic, renal colic.

3 Diagnosis and assessment

- The diagnosis of opioid dependence and other medical conditions should be made by trained health care personnel. If the diagnosis leads to agonist maintenance treatment it should be done by a trained physician. Social conditions should be determined by social workers or staff trained in social conditions.
- Patient history and self reported drug use are generally reliable, but for making a diagnosis of drug dependence but these should be correlated with other methods of assessment including and history from family and friends, the clinical examination and relevant investigations.
- A detailed individual assessment of treatment needs includes: past treatment experiences; medical and psychiatric history; living conditions; legal issues; occupational situation; and social and cultural factors, that may influence drug use.
- Patients should have proof of identity before commencing treatment with controlled medicines. The patient must be able to give informed consent before treatment.
- Voluntary testing should be offered as part of an individual assessment, accompanied by pre- and post- test counselling.

- All patients who have not been exposed to hepatitis B should be vaccinated against it, with consideration given to accelerated vaccination schedule to improve completion rates.
- Voluntary pregnancy testing should be offered as part of an individual assessment.

4 Management

- In some cases, a simple and short-term intervention such as assistance with opioid withdrawal will result in an immediate and lasting improvement.
- However, in many others, treatment will have to be regarded as a long-term, or even a life-time process, with the occasional relapse. The aim of treatment services in such instances is not only to reduce or cease opioid use, but also to improve their health or social functioning gradually, to encourage them to try again, or to avoid some of the more serious consequences of drug use.

2.5 Psychosocial interventions

A Definition and objectives

1 Problem definition

Psychosocial treatment is an expanding intervention for the treatment of drug dependence. There is not a single method, but a set of different forms of psychosocial interventions offered to people. There are a vast number of psychosocial methods available for drug dependence, even if the methods on one hand might look very different; they have some common aspects:

- Focus on the misuse
- The treatment is structured around the patient/treatment
- Sufficient amount of time for treatment
- Focus on both the misuse and the psychological factors (Fridell 2007)

The psychosocial methods can be divided into supportive methods, re-educative methods and re-constructive or psychodynamic oriented methods (Berglund et al. 2001 p. 12).

2 Aims and objectives

The idea of psychosocial treatment is that the therapist and the client should cooperate. Cooperation is to avoid direct confrontation and instead base the interaction on trust and understanding. A very important part of the treatment is that the patient should be active and learn about his or her specific situation through self-exploration and data gathering. This data is a ground for discussion in the sessions with the therapist. The role of the therapist is to share knowledge about different factors that may be important reasons for drug- or alcohol misuse. The aim is that the client should learn about those reasons and

be able to understand why he or she has problems and what to do about it. An important part of the therapy is that problematic drug users become more aware of the negative consequences of the dependence and instead develop a larger self-control, become calmer and more active when it comes to choices of life. Different forms of therapy includes role play and concrete practices when it comes to different social areas and skills, such as not being late to appointments, buying food and contact with the social governments.
Inpatient drug and alcohol misuses treatment programmes are designed for drug and alcohol misuse disorders. The aim is to support the addict to get free from his/her drug use and to create a social context.
The residential treatment takes place in many various settings and includes both long-term and short-term placements in residential treatment facilities, prisons and other criminal justice facilities, involuntary institutions and halfway houses.

B Evidence base

- A great deal of the material in this overview comes from the meta analysis the Swedish council of technology assessment in health care (SBU 2001; Berglund et al. 2001) which was an initiative to establish an evidence-based practice platform.
- An important finding is that psychosocial treatment per se has effects on drug dependence, but no individual form of psychosocial treatment is superior to another (see e.g. Socialstyrelsen 2007; Shulte et al. 2006; Berglund 2003).

C Recommendations

1 Counselling

Counselling can effectively be used in different settings and combinations in reducing drug use and enhance treatment retention.
Structured counselling can lead to moderation of cannabis and cocaine use.

2 Cognitive behavioural therapy

- CBT can be provided in many different settings e.g. privately founded care, through and within the primary care system, inpatient/residential care, etc.
- Treatment for drug misuse should always involve a psychosocial component.
- Homework compliance can be used in a CBT to improve outcomes.
- Psychosocial treatment has effects on drug dependence, but no individual form of psychosocial treatment is superior to another. Family therapy dynamic forms of therapy and CBT are more effective when it comes to continued participation in treatment.

3 Community reinforcement approach

- The community reinforcement approach can be carried out in inpatient programmes and in combination with vouchers, but also in outpatient treatment contexts.
- Community Reinforcement Approach (CRA) in combination with vouchers as positive reinforcers can reduce cocaine use.

4 Group therapy

- It is important that the individuals in the group take ownership of the problem.
- If all members in the group are in a similar situation it might be easier to discuss the problems and get social support.
- Group therapy is particularly effective when it comes to treating depression.

5 Motivational interviewing

- Care givers must try to understand the logical reactions, based on previous experiences, that the patient makes, and from there point out the difference in the experienced situation and how the patient would like it to be.
- Methods of Motivational Interviewing (MI) have shown effectiveness particularly for those with initial low motivation and less severe dependency.
- Motivational Interviewing (MI) can be used to effectively enhance motivation, retention rate, and reduction of use.
- Motivational Interviewing can help even as a single-session intervention.

6 Relapse prevention therapy

- Highly structured relapse prevention seems to be more effective than less structured interventions, with regard to cocaine users with co-morbid depression.
- People who have relapsed should be offered an urgent assessment. Immediate access to treatment should be considered.

7 Contingency management

- The staff needs to be trained in “appropriate near-patient testing methods and in the delivery of contingency management”.
- Vouchers and prizes as reinforcers can be used on the short-term to reduce cocaine use.
- The magnitude and immediacy of reinforcement may be critical to the efficacy of vouchers.
- Contingency management in conjunction with pharmacotherapy may increase treatment retention and compliance for opiate dependence.

8 The 12 step programme

- The 12 step programme can be used in both residential and outpatient care.

- The 12 step programme can be used as a control condition for other treatment interventions.

9 Case management

Generalist case management might be appropriate for enhancing treatment participation and retention. It can be combined with other interventions or with more intensive or specialised models of case management.

Intensive case management is most effective for extremely problematic substance abusers. It is also effective for treatment of chronic public inebriates and dual diagnosed individuals.

A strong perspective on case management might help to enhance treatment participation and retention among persons with little or no motivations for change.

10 Inpatient and residential treatment

- The same interventions as is available in community settings should be available in residential and inpatient settings.
- All the different psychosocial treatments should be carried out by professional staff.
- Short-term and other less intense programmes are better adapted for less problematic clients.

2.6 Detoxification

A Definition and objectives

1 Problem definition

Detoxification denotes a set of interventions aimed at managing acute intoxication and withdrawal, so that the effects of drugs are eliminated from dependent users in a safe and effective manner. Detoxification is often used as a first step in the patient's drug treatment career, and has the primary aim of providing symptomatic relief from withdrawal while physical dependence on drugs is eliminated. A range of settings have been used for detoxification, including specialist in-patient drug dependence units, psychiatric hospital wards, residential rehabilitation programmes, community-based settings and prisons. Different settings may suit different users in different circumstances or suit the same user at different stages of their career. It should also be considered that detoxification is often not successful, particularly at the first attempt.

Opioids, cocaine and benzodiazepines are the main problem drugs addressed by detoxification programmes. The European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) has estimated an average prevalence of problem opioid use of between four and five cases per 1,000 of the population aged 15-64 in Europe and Norway. The EMCDDA further estimates that this rate suggests that 1.5 million people

experience problem opioid use in Europe. Similar estimates for cocaine are not available for Europe as a whole but available for only three countries, Italy, Spain and the United Kingdom. Here the estimates from these countries are between three and six problem users of cocaine users per 1,000 adults aged 15-64.
Benzodiazepines are infrequently the primary drug reported by those coming for treatment but are widely used by problem drug users. For example, around 25% of treatment clients recorded by the UK Drug Treatment Outcomes Research Study (DTORS) reported benzodiazepine use (Home Office 2007).

2 Aims and objectives

The aim of detoxification is to eliminate or reduce the severity of withdrawal symptoms in a safe and effective manner when the physically dependent user stops taking drugs (WHO 2006). Detoxification programmes should include the following elements:

- An assessment of the psychological, psychiatric, social and physical status of patients using defined assessment schedules.
- An assessment of the degree of misuse and/or dependence on relevant classes of drugs, notably opioids, stimulants, alcohol and benzodiazepines.
- To define a programme of care and to develop a care plan to carry out a risk assessment.
- To prescribe medication safely and effectively to achieve withdrawal from psychoactive drugs.
- To identify risk behaviours and offer appropriate counselling to minimise harm.
- To assess the longer-term treatment needs of patients and provide an appropriate discharge care plan.
- To assess and refer patients to other treatments as appropriate.
- To monitor and evaluate the efficacy and effectiveness of prescribing interventions.
- To provide referral to other services as appropriate (NTA).

B Evidence base - managing opioid detoxification

1 Methadone

The most extensively tested medication for opioid detoxification is the long-acting opioid agonist methadone. Detoxification with tapered doses of methadone shows fewer withdrawal symptoms and fewer drop-outs than placebo. Methadone has been found to have a better adverse-event profile, particularly in relation to hypotension, compared to clonidine and better detoxification completion rates when compared to lofexidine. Extant studies do not indicate a difference between buprenorphine and methadone for detoxification completion rates but there is no data available to compare abstinence outcomes.

2 Buprenorphine

Available studies suggest that the efficacy of buprenorphine with regard to treatment retention, illicit drug use and suppression of withdrawal symptoms compares to that of methadone, although detoxification with buprenorphine can be conducted more quickly than with methadone. There are also no significant differences in completion of withdrawal.

3 Dihydrocodeine

Limited evidence suggests that dihydrocodeine is less likely to lead to abstinence and treatment completion than buprenorphine in detoxification.

4 Clonidine and lofexedine

A recent major review found there was no evidence that clonidine is more effective than lofexedine for managing opioid withdrawal and, because of its greater side effect profile, suggested that clonidine is not used in routine practice. Lofexedine has comparable clinical efficacy to clonidine but has a slight advantage of fewer side effects, and in particular less postural hypotension.

5 Buprenorphine and naloxone

It has been demonstrated that rapid detoxification with buprenorphine-naloxone is safe and well-tolerated by patients with positive outcomes for treatment retention, detoxification completion and abstinence rates in treatment.

6 Other medications for symptomatic treatment

Opiate detoxification when properly conducted usually can be conducted without significant patient discomfort. However patients receiving adequate detoxification doses may still complain of withdrawal symptoms such as diarrhoea or insomnia and which can be treated with adjunctive medications. However, there is no systematic evidence that any of the medications work to improve outcomes.

7 Psychosocial interventions in combination with detoxification

The majority of the studies examining psychosocial interventions combined with detoxification have featured contingency management techniques during community detoxification. Contingency management in these studies usually begun after stabilisation and continued through the detoxification process until treatment was completed. Patients receiving contingency management were more likely to be abstinent at the end of treatment and to complete treatment than those patients who did not receive it. This outcome was found with both short-term and longer term detoxification programmes.

8 Managing benzodiazepine withdrawal

The limited evidence available supports a stepped care approach to benzodiazepine detoxification. Those with low dose benzodiazepine dependence normally do not require special treatment. During early abstinence these patients should be given support and reassurance that the withdrawal effects will soon reduce or disappear. If minimal intervention fails then supervised gradual withdrawal can be initiated. The treatment aim for benzodiazepine detoxification should be to prescribe a reducing regimen for a limited period. Adjunctive therapies such as structured psychosocial interventions, counselling, support groups and relaxation may be helpful to alter negative cognitions related to medication cessation, provide patient education and provide cognitive and behavioural techniques for anxiety reduction and sleep enhancement during withdrawal.

9 Managing stimulant detoxification

Antidepressant drugs such as fluoxetine have been used to manage the depressive episodes associated with stimulant withdrawal. There is no evidence that antidepressants have any effect on the withdrawal effects of stimulants regardless of the type of antidepressant used.

C Recommendations

Due to the limited evidence base for cocaine and benzodiazepine detoxification, the following recommendations largely concern detoxification from opioids.

1 Access to care

Detoxification should be a readily available option for people who are dependent and have expressed an informed and appropriate choice to become abstinent. Information should be made available on criteria for access to detoxification programme. The material should describe who the service is intended for and what are the expected waiting times for entry.

2 Programme duration

Most opioid detoxification treatments with methadone use a linear reduction schedule with regular equal dose decrements from an individually tailored starting dose to zero. Treatment programmes typically last 10-28 days. While research suggests that longer periods in treatment with a critical period of 28 days may predict better outcomes, there is little evidence to support more protracted detoxification schedules which may lead to residual symptoms continuing after treatment has finished.

3 Setting

Inpatient opioid detoxification should provide 24-hour supervision, observation and support for patients who are intoxicated or experiencing withdrawal.

Community-based programmes should be offered to those considering detoxification except for those:

- Have not benefited from earlier community-based detoxification.
- Need medical and/or nursing care because of significant co-morbid physical or mental health problems.
- Require complex polydrug detoxification.
- Are experiencing significant social problems that limit to the benefits of community detoxification (NICE 2007).

In patient care should normally only be considered for people who need a high level of medical and/or nursing support for significant and severe co-morbid physical or mental health problems or need concurrent detoxification from alcohol and other drugs which need a high level of medical and nursing expertise (NICE 2007).

Residential detoxification should normally only be considered for those who have significant co-morbid physical or mental health problems or need sequential detoxification from alcohol and opioids or concurrent detoxification from opioids and benzodiazepines. It may also be considered for those who have less severe levels of dependence e.g. those who have only recently started their drug use, or would benefit from the residential setting during and after detoxification.

4 Assessment

Those presenting for opioid detoxification should be assessed to establish the presence and severity of opioid dependence, as well as misuse of and/or dependence on other substances including alcohol, benzodiazepines and stimulants.

Assessment should include:

- Urinalysis to aid confirmation of the use of opioids and other drug use/ dependence.
- A clinical assessment of the signs of withdrawal if present.
- The taking of a history of drug and alcohol use and previous treatment episodes.
- A review of current and previous physical and mental health problems.
- Risk assessment for self-harm, loss of opioid tolerance and the misuse of drugs or alcohol as a response to opioid withdrawal symptoms.
- An assessment of present social and personal circumstances.
- A consideration of the impact of drug misuse on family members and any dependents.
- Development of strategies to avoid risk of relapse.

5 Staffing Competencies

Community detoxification should be co-ordinated by competent primary or specialist practitioners. Residential and in-patient detoxification programmes should be staffed by multidisciplinary teams with an emphasis on medical and nursing staff.

2.7 Treatment in Criminal Justice System

A Definition and objectives

At any day more than half a million people are imprisoned in 27 EU countries. The prevalence of drug dependence in individual countries varies from 10 to 48 % among male prisoners and 30 to 60 % in female prisoners. Therefore, questions of their health have to be considered of crucial importance from public health perspective.
The aim of this guideline is identification and depiction of the evidence-based best practices in drug treatment in prisons. It is focusing on illicit drug users and especially on problematic drug users who are subjects to prevention, treatment and harm reduction programmes offered in the framework of the Criminal Justice System. The term "prison" is used for all places of detention no matter if the person is in police detention, pre-trial/remand prison, or prison for sentenced inmates.

B Evidence base

To sum up outcomes of studies presented in the guideline, it can be said that majority of services which are offered in a community can be used after necessary modifications in prison settings, including drug-free treatment, treatment of infectious diseases, methadone maintenance programmes (MMP) and harm reduction measures. A number of studies confirmed that both MMT and harm reduction strategies do not produce any serious unintended side-effects that have been feared of or anticipated by prison administration. Nevertheless, specificity of prison environment has to be taken into consideration, prisoners' needs should be respected and their social capital utilised in treatment process. Assuring continuity of care after release is of outmost significance.

C Recommendations

1 Testing for infectious diseases

Testing for infectious diseases and vaccination is a very important tool to promote and secure health in prison. Vaccination for Hepatitis B and A is highly recommended for prisoners.

2 Drug testing

Even though drug testing may play important role in implementing prison drug policy, mandatory drug testing should be carefully applied as it is rather expensive and can be counterproductive, due to an increasing tensions between prisoners and staff.

3 Treatment of infectious diseases

Prison authorities should ensure that prisoners receive care, support and treatment equivalent to that available for people living within the community, including Anti-Retroviral Therapy (ART). Treating HIV-infected prisoners with ART will not only have an effect on the individual's health but also an impact on public health outside the prison. It has been shown that treatment for HCV is also feasible and successful in prison.

4 Abstinence oriented programmes

Abstinence-oriented programmes should be offered for all who are likely to accept drug-free approach. However, it is important for prison systems to develop particular strategies for prison drug treatment (e.g. drug-free wings) rather than simply just reflecting those strategies that exist in the community. Generally there is a growing consensus that drug treatment programmes in prison can be effective if they are based on the needs and resources of prisoners and are of sufficient length and quality.

5 Detoxification

There is no sufficient literature on this issue to formulate recommendations.
In general, detoxification with adequate medication is rarely available in prisons throughout Europe.

6 Substitution treatment

Substitution treatment in prisons is highly recommended. It can reduce sharing injection equipment, results in decreasing opiate use, diminishing drug-related violence in prisons as well as crime following release. In several studies negative side-effects often feared by prison staff, such as a black market for methadone, were reported not to have occurred. A sufficiently high dosage (more than 60 mg) also seems to be important for an increase in the retention rate. Offenders participating in substitution treatment in prisons are more likely to continue treatment after release and their prison readmission rates are clearly lower.

7 Needle exchange

Prison needle exchange programmes (PNEP) should be offered for those who do not accept drug-free treatment or substitution treatment. A number of reviews gathered evidence for the effectiveness of PNEP, so a further discussion on the implementation is needed. Evidence indicates that the implementation of such measures is possible and feasible with no security problems and no problems in an increase of injecting drug use or drug use in general.

8 Provision of bleach

There is no evidence of effectiveness of decontamination with bleach in the community and therefore it seems rather unlikely to be effective in prison. Disinfection as a means of HIV prevention is of varying efficiency, and is regarded only as a secondary strategy to syringe exchange programmes.

9 Provision of condoms

Condoms are likely to be the most effective method for preventing sexually transmitted infections. No serious negative effects of condom provision in prisons have been found, and the provision of condoms seems feasible in a wide range of prison settings.

10 Case management

Available data do not show compelling evidence of its effectiveness. Nevertheless, some positive effects are noted including reduced drug use and relapse rates, increased treatment participation and retention and less violation of judicial conditions.

11 Clients' needs

Programmes offered in prison should be based on the needs and individual resources of clients and their goals, whether this be maintenance or abstinence, and provide adequate support in this regard. The needs of women must be treated specifically.

12 Continuity of care

Sustainability of successful drug treatment in prison requires a continuum of care that takes a drug-using inmate from the correctional environment to the re-integrative processes of community-based treatment. Facilitation of personal links between a prisoner and potential after release treatment is highly recommended.

13 Staff competences

Prisoners have the right to receive state of the art medical care. To secure this right staff should get professional training including not only medical or therapeutic issues, but also attitudes towards drug using prisoners.

2.8 Treatment of substance abuse clients with co-occurring disorders

A Definition and objectives

1 Problem definition

- Co-occurring disorders (COD) refer to occurrence of both substance use (abuse or dependence) and mental disorder.

- A diagnosis of co-occurring disorders is confirmed when at least one disorder of each type has established independently of the other.

2 Aims and objectives

- The co-occurrence of a severe mental illness and a substance use disorder is highly prevalent; about half of the patients in psychiatric and substance abuse treatment suffer from both disorders.
- Clients with COD represent a major public health problem which predicts poor treatment outcome related to medication compliance, physical co-morbidities, poor health, social dysfunction, and poor quality of life.
- Clients with co-occurring disorders also have poorer outcomes such as higher rates of relapse, hospitalisation, depression, and suicide risk.
- The rates of mental disorders increase as the number of substance use disorders increases and complicating further treatment.

B Evidence base

- Current research indicates that at least three types of interventions are probably effective for drug abusing clients with dual diagnosis: group counselling, contingency management, and long-term residential treatment.
- Group counselling effects are consistent across several types of groups, suggesting a non-specific effect based on common elements such as cognitive-behavioural intervention, education, skills building, and peer support.
- Contingency management interventions tend to be narrowly focused on substance use, but results appear to show an improvement of other factors such as housing and employment. Improvements achieved by contingency management are probably not related to motivation and other cognitive factors, which may be an advantage for clients with COD.
- Long-term residential substance abuse treatment is effective in reducing drug use and crime.
- Other interventions have shown minor effects on substance use outcomes but often lead to improvements in other areas. For example intensive case management is effective to engaging and retaining clients with COD in outpatient treatment. Assertive community treatment is a promising approach to treat mental disorders as it reduces re-hospitalisation and improves the quality of life.

C Recommendations

1 Guidelines for core elements of interventions

The following principles reflect the evidence and experience of models how best to provide COD treatment in substance abuse treatment agencies:

- Providing access: A “no wrong door” policy should be implemented at the initial contact with the service system to the full range of clients with COD.
- Completing screening and full assessment: The aims of assessment are to obtain a comprehensive picture of needs and problems through an ongoing process. Screening is a formal process of testing to determine whether a client does or does not warrant further attention at the current time in regard to a particular disorder and, in this context, the possibility of a co-occurring substance use or mental disorder. A basic assessment consists of gathering information that will provide evidence of COD and mental and substance use disorder diagnoses; assess problem areas, disabilities, and strengths; assess readiness for change; and gather data to guide decisions regarding the necessary level of care.
- Adopting a multi-problem, tailored and phased approached viewpoint: As people with COD generally have an array of mental health, medical, substance abuse, family, and social problems treatment services should be able to integrate care to meet the multidimensional problems. Clients are progressing empirically though identified phases or stages including engagement, stabilisation, treatment, and aftercare or continuing care. The use of these phases enables to develop and use effective, stage-appropriate treatment protocols. As co-occurring disorders arise in a context of personal and social problems, approaches that address specific life problems early in treatment are important. Services for clients with more serious mental disorders should be tailored to individual needs and functioning.
- Providing an appropriate level of care – matching to treatment: A framework should be established for fostering consultation, collaboration, and integration among drug abuse and mental health treatment systems and providers to deliver appropriate care to every client with COD (related to the combination and severity of problems).
- Ensuring continuity of care: As recovery for COD is a long-term process the recovery perspective generates as principles: A treatment plan should be developed that provides continuity of care over time. It is important to reinforce long-term participation in these continuous care settings.

2 Guidelines for interventions and programme elements

Both substance use and mental disorder interventions are targeted to the management or resolution of acute symptoms, ongoing treatment, relapse prevention, or rehabilitation of a disability associated with one or more disorders, whether that disorder is mental or associated with substance use.

- Maintaining therapeutic alliance: Guidelines for addressing therapeutic alliance should be part of all interventions.
- Motivational Interviewing: Several well-developed and successful strategies for motivational enhancement from the substance abuse field should being adapted for COD.

- Contingency Management (reinforcement approaches): Approaches with reinforcement as Contingency Management (CM) maintain that the form or frequency of behaviour can be altered through the introduction of a planned and organised system of positive and negative consequences.
- Cognitive-behavioural Therapy (CBT): Cognitive-behavioural Therapy (CBT) uses the client's cognitive distortions as the basis for prescribing activities to promote change.
- Relapse Prevention (RP): Relapse Prevention (RP) has proven to be a particularly useful substance abuse treatment strategy and it appears adaptable to clients with COD.
- Ensure proper medication: The use of proper medication is an essential programme element, helping clients to stabilise and control their symptoms, thereby increasing their receptivity to other treatment.
- Outpatient programmes with key elements of Assertive Community Treatment (ACT) or Community Reinforcement Approach (CRA): Outpatient treatment programmes serve the greatest number of clients and should use the best available treatment models to reach the greatest possible number of persons with COD. Assertive Community Treatment (ACT) and Community reinforcement Approach (CRA) employ extensive outreach activities, active and continuing engagement with clients, and a high intensity of services. These approaches should be introduced in Europe.
- Intensive Case Management (ICM): The goals of ICM are to engage individuals in a trusting relationship, assist in meeting their basic needs (e.g. housing), and help them access and use brokered services in the community. The fundamental element of ICM is a low caseload per case manager, which translates into more intensive and consistent services for each client.
- Modifications in residential settings: The principles and methods of residential models (see special guideline to psychosocial interventions) have to be adapted to the circumstances of the client, making the following alterations: increased flexibility, more individualised treatment, and reduced intensity. A number of continuing care (aftercare) options should be made available for clients with COD who are leaving treatment.
- Aid for self help approach: These approaches apply a broad spectrum of personal responsibility and peer support principles, often employing 12-Step methods that provide a planned regimen of change.
- Promotion of coordination and continuity of care: Continuity of care refers to coordination of care as clients move across different service systems and is characterised by consistency among primary treatment activities and ancillary services, seamless transitions across levels of care, and coordination of present with past treatment episodes.

- Implementation of integrated interventions: Integrated interventions are specific treatment strategies or therapeutic techniques in which interventions for both disorders are combined in a single session or interaction, or in a series of interactions or multiple sessions. Integrated interventions can include a wide range of techniques.

2.9 Treatment for stimulant use disorders

A Definition and objectives

1 Problem definition

Stimulant users include users of powder cocaine, crack cocaine and amphetamines. At present there is not a complete treatment package that has been demonstrated to achieve abstinence and prevent relapse for stimulant users. Consequently treatment for stimulant users should include an initial phase of seeking the cessation of stimulant use, a second phase involving relapse prevention and a third phase that seeks to maintain abstinence through the learning of new skills to achieve this. However stimulant users, like other problem drug users, may experience a range of medical problems or emergencies, psychiatric problems or crises or various social, legal or employment problems which may need the involvement of a range of services beyond drug treatment services.

Estimates of the extent of problem cocaine use in Europe are available for only three countries, Italy, Spain and the United Kingdom. Here the estimates from these countries are between three and six problem users of cocaine users per 1,000 adults aged 15-64.

Using its Treatment Demand Indicator data the EMCDDA has recorded cocaine as a secondary problem drug for around 15% of all outpatient clients. Most countries in Europe report a low proportion of cocaine users among all clients in drug treatment, although the Netherlands and Spain have reported high proportions of 35% and 42% respectively in 2004.

2 Aims and objectives

Treatment for stimulant users aims to achieve cessation of stimulant use, prevent relapse and maintain abstinence through the learning of new skills to achieve this. Programmes to treat stimulant misuse should include the following:

- An assessment of the psychological, psychiatric, social and physical status of patients using defined assessment schedules.
- An assessment of the degree of misuse and/or dependence on relevant classes of drugs, notably opioids, stimulants, alcohol and benzodiazepines.
- To define a programme of care and to develop a care plan to carry out a risk assessment.
- To prescribe medication safely and effectively to achieve withdrawal from psychoactive drugs.

- To identify risk behaviours and offer appropriate counselling to minimise harm.
- To assess the longer-term treatment needs of patients and provide an appropriate discharge care plan.
- To assess and refer patients to other treatments as appropriate.
- To monitor and evaluate the efficacy and effectiveness of prescribing interventions.
- To provide referral to other services as appropriate.

B Evidence base

1 The available data

Patients with a cocaine or other stimulant use problem generally do not require treatment in an inpatient setting as withdrawal syndromes are not severe or medically complex. The limited evidence available suggests that most patients can be effectively treated in intensive outpatient programmes. Studies have demonstrated that patients offered rapid entry to treatment are more likely to attend initial appointments.

2 Prescribing for stimulant dependence

Antidepressants (notably desipramine and fluoxetine), dopamine agonists (notably amantamide, bromocriptine and pergolide, and anticonvulsants (notably carbamazepine and phenytoin) and mood stabilisers (notably lithium) have been trialled for the treatment of cocaine dependence and there is no evidence to support their effectiveness. Other medications, including modafinil, are currently being trialled.

3 Maintenance therapy

There is no evidence to support the use of stimulant maintenance therapy for stimulant users. Studies have shown that providing methadone or buprenorphine maintenance therapies for those with opiate dependence problems but also use cocaine, can lead to reductions in cocaine use, an effect enhanced when used in combination with contingency management techniques or disulfiram.

4 Psychosocial Interventions

5 Contingency management

Research evidence has found that contingency management is acceptable to patients, contributes to patient retention and is effective in achieving initial abstinence.

6 Psychotherapeutic interventions including Cognitive-Behavioural Therapy

The results of studies of cognitive-behavioural therapies (CBT) with cocaine dependence are inconsistent. Whilst one study found better long-term outcomes for CBT than clinical management, other studies found no long- or short-term positive effects for CBT. A recent RCT on brief cognitive behavioural interventions for

amphetamine users found that the number of treatment sessions had a significant effect on the level of depression, and also abstinence rates were better in those attending at least twice or more (Baker et al. 2005).

7 Relapse prevention and skills training

Several studies have failed to demonstrate greater efficacy of skills training or relapse prevention over control approaches. Those patients with CST in addition to their treatment programme experienced shorter and less severe relapses.

8 Motivational interviewing

Studies have shown that motivational interviewing may help patients with lower initial motivation or ambivalence about treatment.

C Recommendations

There is a limited evidence base to guide treatment practice.

1 Access to care

Treatment should be a readily available option for people who have a stimulant problem and have expressed an informed and appropriate choice to seek help. Information should be made available on criteria for access to the treatment programme. The material should describe who the service is intended for and what are the expected waiting times for entry. Services should respond quickly and positively to initial telephone enquiries and schedule appointments with minimal delay.

2 Programme Duration

The limited data available and clinical experience suggest that treatment programmes of 12-24 weeks in duration are commonly used for treating stimulant misusers. Studies have found that the benefits of treatment among those in residential therapeutic communities were concentrated among those who had stayed for at least three months.

3 Setting

The majority of stimulant users are likely to be seen in an out-patient setting, while crisis management services may be needed for some users with an acute crisis. Patients with multiple needs are more likely to benefit from intensive residential rehabilitation which can be provided on a day-care basis.

4 Assessment

Those presenting for problematic stimulant use should be assessed to establish the presence and severity of stimulant use, as well as misuse of and/or dependence on other substances including alcohol. Assessment should be brief and focussed to avoid

becoming a barrier to treatment for stimulant users who want quick access to treatment. Assessment should include:

- Urinalysis to aid confirmation of the use of stimulants and other drug use.
- The taking of a history of drug and alcohol use and previous treatment episodes.
- A review of current and previous physical and mental health problems.
- Risk assessment for self-harm.
- An assessment of present social and personal circumstances.
- A consideration of the impact of drug misuse on family members and any dependents.
- Offer screening for hepatitis, HIV and sexually transmitted infections.
- Development of strategies to avoid risk of relapse.

6 Staffing Competencies

Staff involved in treating stimulant users should include nursing and medical staff, social workers and care managers, psychologists and counsellors. Staff should be trained in crisis management, specific counselling techniques and trained in mental health issues.

2.10 Pregnancy and parenting in drug treatment

A Definition and objectives

- Substance abuse in pregnancy leads to consequences for the pregnant women, the foetus and neonate in two ways: direct consequences due to substance use or abuse as well as indirect outcomes resulting from the influence of living environment.
- Abstinence of opioids during pregnancy is difficult to maintain, but it presents the ideal goal. Opioid maintenance therapy is the recommended treatment approach during pregnancy and there appear to be few developmental or other effects on these children in the long term.
- Poly-substance dependence and misuse of either licit or illicit substances lead to the manifestation of a neonatal abstinence syndrome (NAS). The incidence of NAS in neonates of opioid-dependent women is between 70% and 95%. NAS is characterised by a variety of symptoms of variable intensity: sneezing, yawning, hyperactive Moro reflex, sleeping after feeding, tremor, increased muscle tone, myoclonic jerks, high pitched crying, excoriation, mottling, generalised seizure, convulsions, fever, sweating, nasal stuffiness, tachypnea, retractions, nasal flaring, poor feeding, excessive sucking, vomiting, diarrhoea, failure to thrive, excessive irritability and, in very rare cases, convulsions.

B Evidence base

- Methadone in the context of comprehensive care is associated with more prenatal care, increased foetal growth and less neonatal morbidity and mortality than continued opioid abuse.
- Although methadone is clearly beneficial, it has been estimated that 60–87% of the infants born to methadone-maintained mothers need treatment for NAS.
- Buprenorphine, approved in Europe since 1999 for the treatment of non-pregnant opioid-dependent adults, may reduce the incidence and/or severity of NAS. Buprenorphine demonstrates safety for mother and child, and shows effectiveness in the treatment of opioid-dependence during pregnancy, although limited controlled data are published so far.
- NAS may start any time during the first postnatal 24 hours up to 10 days, depending on the medication administered during pregnancy or substance abused. The withdrawal syndrome of heroin in the neonate sets in during the first 24 hours. With methadone, the symptoms don not develop until after 48 hours. An even later onset of withdrawal symptoms can be observed if the neonate was exposed to buprenorphine, benzodiazepines or barbiturates *in utero.*
- It is not easy to determine which substances are the most beneficial in the treatment of NAS, as there are currently no double-blind controlled studies available. The effectiveness and safety of opiate treatment in neonates has been dealt with in a recent Cochrane Review, which concludes that opiates represent the preferred initial therapy for NAS, particularly for infants of mothers taking opioids during pregnancy.

C Recommendations

1 Maintenance therapy during pregnancy

- Methadone maintenance therapy is the gold standard pharmacotherapy. There is a growing body of evidence regarding the use of buprenorphine while it was shown effective in recent studies.
- Methadone is the gold standard treatment during pregnancy because there is more evidence on the safety of methadone than buprenorphine in pregnancy. If women are being well treated with buprenorphine then the risks of transferring to an alternative treatment should be weighed against the certainty of methadone effects.
- Women who are in treatment should be encouraged to remain in treatment during pregnancy.

2 Management of NAS

- Clinicians should use opioids or barbiturates for the management of NAS. Untreated NAS can cause considerable distress to infants and in rare cases seizures. Cochrane

reviews indicate that opioids and barbiturates are more effective than placebo or benzodiazepines. Of the two, opioids are probably more effective than barbiturates.

3 Access to treatment

- Every maternity unit should ensure that it provides a service that is accessible to and non-judgemental of pregnant problem drug users and able to offer high quality care aimed at minimising the impact of the mother's drug use on the pregnancy and the baby.
- Every maternity unit should have effective links with primary health care, social work children and family teams and addiction services that can enable it to contribute to safeguarding the longer-term interests of the baby.

4 Breastfeeding

- For women on methadone and buprenorphine, breast feeding is safe and should not be precluded. Breastfeeding is not recommended if the mother is infected with HIV or Hepatitis C virus. If an opioid-maintained mother wants to breastfeed her child, this should be encouraged: it can be helpful for mother-child bonding, and it might decrease NAS symptoms.

5 Blood borne viruses

- Pregnant female drug users should be routinely tested, with their informed consent, for HIV, hepatitis B and hepatitis C, and appropriate clinical management provided including hepatitis B immunisation for all babies of drug injectors. Transmission of these viruses from an infected mother to her baby can occur during pregnancy or birth or through breastfeeding.
- Elective Caesarean section appears substantially to reduce the rate of transmission.

2.11 Systemic aspects of drug treatment

A Definition and objectives

Across Europe enormous resources are committed for drug treatment. Their share in overall drug policy expenditures vary form about 50% in Ireland to around 90% in Portugal, Hungary and France. However, distribution of these funds among different treatment modalities does not seem to be related to any pragmatic evidence-based standards. E.g. in UK and Luxembourg about 90% of all treatment expenditures goes for out-patients interventions while in France residential services consume 60% and in Poland over 80% of all drug treatment funds. This huge variation cannot only be attributed to different epidemiological situation. It is more likely that contrasting financial priorities reflects vested interests, petrified power structures and treatment traditions of individual countries.

Therefore an urgent need exists to elaborate special recommendations for drug treatment to become a system of inter-related interventions that offer the optimal balance between individual treatment needs and individual outcomes. In addition to individual level perspective, a public health outcomes should be achieved including satisfactory access to treatment, high coverage rates, optimal cost/benefit rates of different treatment modalities, low relapse rates as well as diminished morbidity and mortality associated with drug use.
In addition, social indicators should be considered such as welfare expenditures and crime rates.

B Evidence

There are very few studies available on systemic aspects of treatment. Research focus is more on characterizing treatment populations, individual treatment approaches, problems associated with drug use at the individual level, and even to a lesser extent on individual assessment and case co-ordination. Nevertheless, there are some studies available focusing on systemic aspects of the one hand as well as guidelines provided by international organizations as well national guidelines that may serve as a background for a set recommendations.

C Recommendations

1 Evidence based treatment policy

Drug treatment policy should be formulated and adopted by relevant authorities at the national, regional and local levels. Treatment policy should be integrated within general drug policy on the one hand, and with general treatment policy, on the other. Instead of promoting dominant treatment approaches, drug treatment policy should encourage development of drug treatment system(s) at the national and local levels composed of coordinated network of open-access and structured services. Treatment policy should be based on evidence of effectiveness and cost-effectiveness rather than on existing traditions and convictions.

2 Comprehensive needs assessment

Needs assessment at the national and local level should precede decisions aiming at expanding or ameliorating existing treatment system. Needs assessment should be methodologically sound but politically – participatory including commitment from local authorities as well participation of current and potential clients. Comprehensive assessment includes not only epidemiological data but also expectations of potential users of a treatment system as well as available treatment resources with focus on human resources, their competence, attitudes and commitments.

3 Implementation of a differentiated treatment system

Treatment system should offer a range of services and be tailored to a range of specific needs of heterogeneous target groups. System must offer services which are accessible, of different intensity, requiring varying client's commitment. Clients' needs are very likely to go beyond health needs and to include social, legal and economic dimensions. Therefore, treatment system should spread across different sectors: health, social welfare, criminal justice, employment et cetera.

4 Care oordination

Coordination between different elements of the system including inter-sectoral coordination is crucial. It will take into account systemic coordination i.e. appropriate distribution of tasks and resources as well as individual case coordination. To this end, effective communication structures should be established to secure efficient referrals and continuity of care.

5 Evaluation and research

Research on drug treatment as a system should be among top priorities among EU research programmes as well as national and regional research funding schemes. Drug treatment system studies do not need to be expensive. Simple approaches work and bring useful information on treatment demand, needs assessment, adequacy of treatment, feasibility, effectiveness and even cost-effectiveness. New approaches need to be invented to study continuity of treatment, level of system integration and population impact of treatment.

6 Tailoring to specific needs

Population impact of drug treatment system should be continuously studied. This includes proportion of population in-need that receives treatment (coverage rates), morbidity and mortality due to drug-specific causes such as HIV, hepatitis, overdose, social marginalisation (e.g. homelessness, unemployment), crime rates