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## **Problems, needs and service provision related to stimulant use in European prisons**

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Published in *International Journal of Prisoner Health*, March 2007; 3(1): 29-42

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### **Abstract**

**Objective.** The objective of this study was to examine practices and policies in place for the provision of targeted prevention and treatment of cocaine and Amphetamine Type Stimulant (ATS) users in prison in nine European countries. **Methodology.** Across nine European member states (Belgium, the Netherlands, Czech Republic, Lithuania, Slovenia, Sweden, Malta, Ireland and Portugal), interviews were conducted with ministerial representatives and professionals (i.e. service providers and security officials) working in prisons and a total of 16 focus groups with a total of 125 prisoners. **Results.** The use of stimulants in prison is associated with aggression and violence, financial problems, and psychological and physical problems in prisoners (depression, anxiety and psychological craving). Both security and healthcare staff in prison often feel ill-equipped to deal with stimulant-related problems, leading to a lack of equivalence of care for stimulant users in prison, therefore the variety and quality of drug services outside is not reflected sufficiently inside prison. There is a need for more specific product information and harm reduction material on stimulants, for clear guidelines for the management of acute stimulant intoxication and stimulant withdrawal, for structural adjustments to improve potential diagnosis of personality and psychiatric disorders, for more non-pharmacological treatment strategies and more opportunities for prisoners to engage in purposeful activities.

**Keywords:** Cocaine, Amphetamine Type Substances, prison, treatment, stimulants

### **Introduction**

Although it is difficult to identify clear-cut European trends due to a lack of a consistent series of surveys, the available data suggest that consumption of stimulants in the general community has increased over the last decade. Recent data suggests a stabilisation, however\*Europe has become an important market for the consumption and distribution of cocaine and cocaine has become a major element in the European drug picture (UNODC, 2003a, 2004). In both Western and Eastern Europe, drug users reveal a high level of recreational use of cocaine in several social settings.

Similarly, consumption of Amphetamine Type Stimulants (the term refers to both the group of amphetamines and the group of ecstasy drugs) has increased over the last two decades. Of the amphetamines, amphetamine seems to be by far the most commonly available in Europe, although, globally, levels of methamphetamine use are increasing (EMCDDA, 2005; UNODC, 2003b). Among younger users, amphetamines were the second most popular substance, but during the 1990s they have been overtaken by ecstasy in practically all European countries (EMCDDA, 2004; UNODC, 2003b).

Please use the following citation: Decorte T (2007) Problems, needs and service provision related to stimulant use in European prisons, (Author postprint) in *International Journal of Prisoner Health*, 3(1): 29-42, [Accessed: (date) from [www.drugsandalcohol.ie](http://www.drugsandalcohol.ie)]

For some users, the use of these stimulants can become problematic. During the last decade, cocaine has become more commonly identified (compared to opiates and cannabis) as the principal drug used by those engaging in drug treatment and accounts for about 10%, predominately by men, of all treatment demands across Europe. However, the use of Amphetamine Type Stimulants is still rarely the primary reason for attending drug treatment (Klee & Morris, 1994).

It is likely that this upward trend in the use of amphetamines and cocaine in the general population is also reflected in prison populations. Although the provision of substitution treatment and other harm reduction strategies for prisoners still lags behind the standards of substitution treatment in the community, the scope of these interventions is extending gradually across Europe. These strategies, however, are mainly targeted at opiate users. For users with stimulant problems there seems to be no well-established and widespread pharmacological treatment available, and overall treatment options for those with cocaine problems until recently were poorly developed. Nevertheless, new treatment responses targeting those with cocaine and/or amphetamine problems are being developed, and new measures and initiatives emphasising the prevention and reduction of health-related harm caused by the use of cocaine, crack and other stimulants have increased.

The development of services to treat stimulant use in the community raises interesting and until recently, under-researched issues, such as the presence of cocaine and Amphetamine Type Stimulant users in prisons, the specific problems and risks associated with it and how these are addressed.

This paper presents findings from a study into provisions for treating cocaine and Amphetamine Type Stimulant use in prisons, in nine European countries (funded by the European Commission and Cranstoun Drug Services/ENDIPP). More specifically, it raises important questions as to whether these users have specific needs and whether these needs are being addressed through the existing provisions for treatment and harm reduction in European prisons.

## **Background**

Data regarding the prevalence of stimulant drug use in prisons are limited and it is therefore problematic to view this as representative of the actual situation as previous research has shown that the numbers are by definition an understatement (Knight et al., 1998; Mason et al., 1997). However, studies have highlighted some important issues for consideration such as the different type of drug use prevalent in prisons, and the various factors which explain this. The specific type of drug, e.g. opiates, amphetamines, will often determine the route of ingestion, such as injecting or smoking. The type of drug used prior to imprisonment also impacts on drug user behaviour in the prison and studies have shown that prisoners are more likely to continue to use heroin while in prison, compared to either cocaine or amphetamines (Keene, 1997; Cope, 2000; Strang et al., 2006). Injecting drug use seems to be rare within prisons, and this is often attributed to the lack of needles available (Long et al., 2004). However, in both the community and in prison there is not one homogenous subculture of cocaine users or amphetamine users. One can find various sophisticated typologies of cocaine users or amphetamine users in the international scientific literature (Cohen, 1989; Waldorf et al., 1991; Mugford, 1994; Erickson et al., 1994; Decorte & Slock, 2005).

Stimulant use has been identified as more prevalent in pre-trial prisons, or within pre-trial sections of prisons compared to sentenced prisons (especially on drug-free wings) which is attributed to the presence of more dealers and the absence of urine testing (Mason et al., 1997; Brooke et al., 1998). However, studies have also shown that prisoners usually prefer depressant-type drugs in prison as these can be used more readily to produce relaxation and to relieve boredom (Swann & James, 1998; Bullock, 2003; Strang et al., 2006).

Users of cocaine and Amphetamine Type Stimulants more often show (or show symptoms of) personality disorders or psychiatric problems, such as depression, Attention Deficit Hyperactivity Disorder (ADHD), suicidal tendencies, anxiety disorders, psychotic behaviour, borderline personality traits (Kleinman et al., 1990; Farrell et al., 2002). At the same time stimulant users seem to conceive their drug consumption as non-problematic (Klee & Morris, 1994). The claim for a causal relation between the use of stimulants and these behavioural problems is hard to prove, as they may be a direct consequence of preexisting disorders or pathologies (such as depression, paranoia, psychosis, auto-mutilation and suicidal tendencies) (Farrell et al., 2002), and/or influenced by the general condition of overcrowding in prisons (MacDonald, 2004).

Other problems related to stimulant use are (psychological) craving, insomnia and physical symptoms like heart palpitations, weight loss, exhaustion, hyperthermia, etc. These physical problems are most significant and acute in remand prisons, during the first days and sometimes weeks after arrival in prison (Mason et al., 1997; Brooke et al., 1998).

In comparison with those who use heroin as their main drug of choice, amphetamine users report greater interest in sex and greater frequency of intercourse (Klee, 1993). Moreover, in many countries amphetamine users are less likely to present themselves to treatment services, compared to other users. This is related to the perception amongst amphetamine users that treatment services are primarily oriented toward opiate users and are usually ill-equipped to deal with amphetamine-related problems (Kamieniecki et al., 1998).

The problem is that despite the great deal of effort that has been expended in devising effective treatments for cocaine users, there is no consensus regarding effective treatment (WHO, 2000). The same is true for amphetamine users (WHO, 2001). However, although there is a lack of consensus on effective interventions for stimulant users, some interventions have been found to be more effective than others (Kamieniecki et al., 1998; Rigter et al., 2004). Harm reduction campaigns targeting stimulant users are sometimes difficult to evaluate, but they seem successful, especially when members of the target group are involved in the design of the resources for the campaigns (Kamieniecki et al., 1998).

For the management of acute stimulant intoxication (i.e. management of the toxic complications in stimulant users usually in emergency departments of hospitals) guidelines have been devised by clinicians with extensive experience (Kamieniecki et al., 1998). There has been extensive research on using pharmacological agents to treat stimulant users. Blocking drugs (lithium, ondansetron) have been largely unsuccessful in treating stimulant users, and aversive drugs (phenelzine, tranylcypromine) appear to be too dangerous to use. Drugs to decrease the discomfort of stimulant withdrawal and craving (such as desipramine, pphenytoin) have demonstrated efficacy in at least some studies, but further research is Provisions for stimulant users in prisons needed. The use of replacement drugs in treating amphetamine users (such as dexamphetamine) appears potentially promising, but most studies have been uncontrolled.

Controlled trials of the prescription of cocaine have indicated that prescribing cocaine significantly reduced relapse to heavy, illicit cocaine use and reduced cravings for the drug (Kamieniecki et al., 1998).

The non-pharmacological interventions which have demonstrated the most efficacy in treating stimulant users are relapse prevention, cue exposure/response prevention, cognitive-behavioural interventions and possibly multifaceted behavioural treatment. Other forms of non-pharmacological interventions have not been evaluated properly (Rigter et al., 2004).

## **Methodology**

The general objective of this study was to examine practices and policies in place for the provision of targeted prevention and treatment of cocaine and Amphetamine Type Stimulant users in prison in nine European countries. The specific objectives of this study were (a) to undertake a review of the national strategies to address Amphetamine Type Stimulant use for detainees; (b) to examine in detail the policies and the implementation of services in two sample institutions which address the needs of Amphetamine Type Stimulant users; (c) to establish the needs of Amphetamine Type Stimulant users in the two sample institutions; (d) to identify gaps in and barriers to accessing service provision among Amphetamine Type Stimulant users in the two sample institutions; and (e) to promote awareness of the initiatives operating in the area of Amphetamine Type Stimulant use for prisoners.

The study was based on a similar research design as previous studies commissioned by Cranstoun Drug Services (for example Stoever et al., 2004; MacDonald, 2004; Stoever, 2001), using qualitative methods such as guided interviews and focus groups. Qualitative methods have proven to be suitable for public health studies and complex contexts as well as for charting the differing views of those involved. The choice of a qualitative approach reflects the fact that the drug-related health strategies (especially harm reduction measures) in prisons are a controversial issue in many countries and require a sensitive approach. Indeed, qualitative methods are a relevant and useful research tool to reach a deeper understanding of the phenomenon of drug-related services in prisons, as well as to evaluate it from the perspective of those involved in it.

This study is therefore not comparative or representative, but explorative. The researchers were not concerned with testing pre-existing hypotheses. Instead, the focus was on gaining knowledge, experiences, attitudes and perceptions of different groups involved in specific health interventions. Using qualitative methods enabled the researchers to better understand participants' experiences, views and opinions and present findings within the context of the settings of the research and the issues raised by it.

The research took place in nine European countries: Belgium, the Netherlands, Czech Republic, Lithuania, Slovenia, Sweden, Malta, Ireland and Portugal. In each of these countries, national facilitators were identified through the ENDIPP-network. These country co-ordinators, usually working in the national prison service, played a key role in the process of this research. They assisted in collection and, if necessary, translation of relevant documents, in identification of experts and potential interviewees, in the selection of two sample prisons for a field visit, and in the general organisation of the fieldwork.

Between 2005 and 2006 two sample prisons were visited in each country, except Malta. During each field visit, guided interviews were conducted with ministerial and nongovernmental organisation representatives, and with professionals working in prison from health and security. These professionals included the drug treatment team (i.e. medical doctor, psychiatrist and nurse), the psycho-social team (i.e. psychologist, social worker, pedagogue, educator), guards, management team and the governor and/or deputy governor. Participants were asked open-ended questions, preferably in face-to-face interviews. On two occasions, some participants were interviewed together, according to available resources and local organisation. Each interview lasted approximately 45-75 minutes.

In each prison, prisoners with a history of cocaine or Amphetamine Type Stimulant use and/or experiences with drug treatment while in prison and/or in the community were invited to take part in a focus group interview. In addition, a professional involved in treatment or services for drug users, identified by the ENDIPP national facilitators, organised the interviews according to the researchers' requirements, which were communicated prior to the field visit. Prisoners were interviewed in a neutral

room within the prison and in the sole presence of the researcher. Further to prisoners' consent, the focus group interview was tape-recorded for data analysis purpose, and remained in the sole possession of the researcher. Open-ended questions were asked in focus groups with prisoners. Focus groups, which included on average 7.8 prisoners per group, lasted approximately 90 minutes. In total, 16 focus groups in 16 prisons across 8 countries were conducted, reaching a total number of 125 prisoners.

Participants were interviewed in their native language either directly by the researchers (in Belgium and the Netherlands, because they spoke the language) or via an interpreter (in Ireland, Slovenia, Portugal, Sweden, Czech Republic and Lithuania). Participants were briefed and debriefed on the research goals and ethical issues. Their participation was voluntary, confidential and anonymous.

Due to time and resource constraints, data on Malta were collected through distant data collection techniques. These include review of the available data on Malta in databases such as those produced by the EMCDDA, and library and internet searches. The location of key stakeholders and staff members from relevant external organisations was also established via the Internet or obtained through colleagues. On several occasions these participants were contacted (by e-mail, by telephone, by fax) and invited to supply information on relevant research questions by e-mail or fax. Distant data collection techniques have obvious disadvantages, as they can be impersonal and time consuming and exclude the views of prisoners on service provision, as they cannot be contacted in the same way as staff and other professionals. Therefore, these are not included within the data from the Maltese Correctional Facility.

The qualitative data collected through the interviews and focus groups were analysed using a content analysis method, which generated themes and categories. Because the results are primarily based on field visits conducted in a limited number of prisons, with a limited number of participants, the findings are not representative.

### **Limitations of the present study**

It is evident that this study only offers snapshots of the services provided for cocaine and ATS users in European prisons. Considering the heterogeneity of treatment programmes across European prisons, the findings provide a limited basis for comparison. Moreover, the Provisions for stimulant users in prisons descriptions obtained during the field visits do not generate a generalised picture of a country. Instead, they reflect the subjective experience of some individuals involved with drug-related measures and reflect some specific practices in different prisons and countries.

A qualitative design, such as the one used in this study, does not produce reliable, comparable and meaningful hard statistics or a quantitative analysis of the prevalence of drug users in a particular prison, the prevalence of different types of substances (such as stimulants) in that prison, and\*to a lesser extent\*the patterns of use of different substances within that prison setting.

### **Results**

#### *Prevalence of cocaine and Amphetamine Type Stimulant users in prison*

Most interviewees in our study report a general increase of stimulants use in prisons. In some countries, such as the Czech Republic and Sweden, the use of Amphetamine Type Stimulants is not a very recent phenomenon, but in other countries indirect indicators of drug use in prison already seem to reflect the general upward trend of stimulant use in the community. Using or trafficking cocaine or Amphetamine Type Stimulants is an illegal act in all of the countries in this study (and by extension in all European countries), and thus subject to criminal justice sanctions.

Both in general society and in a prison setting, people tend to conceal their drug use. Under these conditions, admitting and talking about drug use to other people is often hindered by a general sense of

embarrassment, as using drugs is perceived by many as a sign of personal weakness, psychological malfunctioning or even a disease, both outside and inside the prison. Moreover, admitting or talking about drug use often implies that security staff, medical or social staff will initiate a range of strategies with the intent of controlling, changing or adjusting the individual's behaviour. When a person is not ready or not willing to allow others to interfere or help him/her with drug-related issues, he/she will prefer to keep the use of any (illegal) drug hidden. As one prisoner noted "[. . .] there are a lot of cocaine users here . . . who aren't here [i.e. in the focus group] because they fear supervision" (Prisoner, Hasselt prison, Belgium).

Even if the number of seizures of stimulants are low in prison and self-reports of cocaine use by prisoners are rare, this should not automatically lead to the assumption that actual use of these substances is low. Some of the people interviewed claimed that there was no need for concern, as the available indicators did not show Stimulant use:

You do not see stimulant use. Cocaine is a big problem on the outside, but does not seem to have crossed into prison [. . .] They may have used it in the past, maybe in the community but they do not in prison. Are the prisoners saying that they use in the prison? (Medical staff, Mountjoy prison, Ireland).

We must add that concepts or categories such as 'cocaine users' and 'speed users' partly lose their usefulness, as in most countries, our respondents have indicated that polydrug use is a widespread phenomenon. Incidences of combined use of opiates (heroin or methadone) and cocaine, of alcohol and opiates or cocaine, of amphetamines and other drugs and combinations with cannabis and legal prescription drugs were reported in all countries involved in this study.

#### *Routes of ingestion*

Cocaine and Amphetamine Type Stimulants show a great diversity in the ways in which they can be taken. In the general population, snorting is the most widespread method. In general, most respondents claimed that injecting stimulants in European prisons is rare. This view was shared by most of the representatives of the National Prison Administrations of the countries visited and by several staff members in several of the sample prisons. The two most frequently heard explanations for this are that there are few needles available in prison and that most prisoners seem to be aware of the risks associated with intravenous use of drugs (such as the contraction of blood-borne viruses). According to these respondents, the fact that seizures of needles in prison are rare is proof of the low prevalence of intravenous use. The fact that cocaine and Amphetamine Type Stimulants can be snorted, swallowed or in some cases inhaled ('chasing the dragon' or 'freebasing'), seems to be perceived by prisoners as 'safer', even though there are some risks associated with these methods:

I did a line together with my cell mate. We watched football and had a nice evening. It felt like an evening out. People think that snorting coke brings a milder crash than smoking crack. But I don't like snorting. I always smoke cocaine. And when I got raw cocaine I make base by myself. Of course ammonia (to make base coke) is hard to get inside\*but then I just took urine\*it's working too. We are real professors in this field (prisoner, PI Vught, The Netherlands).

This is confirmed by some prisoners, who claim that needles are hard to get and that, among prisoners, intravenous drug use is perceived as marginal. If inmates do inject, they tend to do it alone and secretly, or within a very small group of fellow intravenous users. However, there are indications that in some prisons injecting drugs (including cocaine and Amphetamine Type Stimulants) is on the rise, or already

widespread, according to prisoners. For some, there is an economic aspect to this route of ingestion: if you inject drugs you can get more of an effect than if you inhale or sniff it.

#### *Factors influencing stimulant use in prison*

The use of stimulants in prison is influenced by many factors. Of course, there may be a relationship between drug use within prison and the type of drug used prior to imprisonment, but this is not always an absolute relationship. Our findings suggest that changes in the drug-taking behaviour of drug users after imprisonment vary according to the type of drug being taken. Prisoners are more likely to continue to use heroin while in prison, compared to either cocaine or amphetamines.

An obvious factor which influences cocaine or Amphetamine Type Stimulant use in prison is availability (or the lack of availability). There is no reason why the smuggling of stimulant drugs into prisons would be more difficult than that of heroin. According to prisoners, availability of cocaine and Amphetamine Type Stimulants is higher in remand prisons or pre-trial sections than in other sections due to the presence of more dealers and the absence of urine testing and lower in drug-free wings or treatment sections.

Clearly, availability of stimulants in prison is itself influenced strongly by demand factors, such as the high price. Cocaine is, in most countries, an expensive drug and price levels in prison are generally higher than in society, as suppliers charge the costs and risks of smuggling to the consumer. Although the objective price level of a substance is an important factor for stimulant users in prisons, it must be stressed that there is of course an individual element in the perception of prisoners, according to their financial situation. What is not affordable to some prisoners, may well be affordable to others. Therefore, some prisoners may have sufficient resources to pay for cocaine in prison, and some may not. The high price of stimulants such as cocaine may also cause serious financial problems in prison after a while, in terms of debts to suppliers:

I see people in prison, they have a lot of money [in] the beginning and they use stimulants [. . .]. But they spend their money very soon and then there is a crisis, and they sell everything, the computer, clothes (ex-prisoner of Ljubljana prison in Slovenia).

Another important demand factor influencing the availability of stimulants in prison is their inappropriateness for a prison environment. As noted by one member of the focus group, ‘Heroin is the prison drug. [. . .] What is the point of being out of your head and locked in your cell? You would go mad and out of your head on your own’ (Prisoner, Dochas Centre, Ireland).

Our interviews suggest that prisoners usually prefer depressant-type drugs in prison as these can be used more readily to produce relaxation and to relieve boredom. Many outside users of stimulants become users of opiates, cannabis or depressant prescription drugs in prison. However, some prisoners stated they would use stimulants in prison, as they ‘make time go faster’, they are less easily detected (compared to cannabis), they reduce hunger, and can counter and mask the effects of opiates.

Availability of substances in prison in some countries may also be significantly lower in institutions for female prisoners. According to some respondents, this is related to ‘better’ drug supply networks in male prisons and the fact that women generally chose different coping strategies to adapt to prison life.

Many of our interviewees contend that the presence of activities, such as employment, training facilities, fitness and other leisure activities and the presence of therapeutic programmes (in drug-free zones), can

act as useful alternatives to using drugs. Prisoners who work, attend educational training, or have sufficient access to leisure facilities tend to be less interested in using drugs.

#### *Profiles of stimulant users in prison*

Some of our respondents suggested that stimulant users in prison tend to be younger people, with a larger proportion of women. As to the socio-economic backgrounds, perceptions vary significantly from country to country. Stimulant users are also more likely to display symptoms of personality disorders or psychiatric problems, but are also less likely to view their drug use as problematic.

#### *Problems and risks related to stimulant use in prison*

The question as to whether the use of stimulants in prisons represents specific problems and risks is not easy to answer. Many factors related to the prison setting itself intensify feelings of stress, anxiety and paranoia in most inmates, whether they use drugs or not. Moreover, the prison population contains a higher proportion of people with psychiatric problems and or personality disorders, irrespective of their substance use.

The use of stimulants in prison is often associated with higher levels of aggression, violence and bullying, and can result in more unpredictable behaviour. The increase in violence may also be related to conflicts between prisoners, related to the drug trade and bargaining and financial disputes (irrespective of the type of drug):

The withdrawal symptoms of heroin are more physical and it's possible to use medication to take care of that. I am a pure pervitin user. The withdrawal with amphetamines is more mental or psychic, anxiety or paranoia (Prisoner, Rynovice Prison, Czech Republic)

Other problems related to stimulant use are (psychological) craving, insomnia, and physical symptoms like heart palpitations, weight loss, exhaustion, hyperthermia, etc. These physical problems are most significant and acute in remand prisons, during the first days and sometimes weeks after arrival in prison. Several interviewees indicated that these symptoms might initially be very intensive and problematic and require close follow-up and assistance from staff, but that these symptoms generally wear off as the prisoner goes through withdrawal, as the body gains weight and recovers from exhaustion.

In our interviews with prison staff, a high prevalence of psychological symptoms, such as depression, anxiety, mood swings, paranoia and hallucinations was related to frequent amphetamine use and use by injection. A considerable proportion of amphetamine users are clinically depressed (and probably a considerable proportion of prisoners in general), and the use of stimulants aggravates this problem.

Within prison systems, whose key aims are control, calmness and order, the typical nervous and hyperactive behaviour of stimulant users is often seen as a difficult aspect to manage. Some respondents claimed that this is one of the reasons why stimulant users seem to end up much more frequently in disciplinary or isolation cells.

In addition, many stimulant users in prison do not see themselves as having a drug problem, in that they do not identify themselves with a subculture of drug users and, therefore, often refuse help. For security staff, it was found that specifically identifying stimulant users was difficult and among medical and treatment staff, the main problem identified was that they lack experience and guidelines in handling stimulant users:



The ones who use opiates, they practically are sure that they have a great risk of becoming addicts. The ones who use amphetamine somehow believe that it's not such a problematic thing and they won't get addicted (psychologist, Marijampole prison, Lithuania).

A risk regularly associated with amphetamine use in the international literature, but oddly enough not mentioned in any of our interviews, is the effects of stimulants upon sexual activity and a sex life enhanced by these drugs. A large proportion of these users also engage in unprotected sex, increasing the risk of HIV infection, and infection with sexually transmittable diseases. The fact that this issue was never mentioned during our fieldwork may indicate several things. First of all, it may illustrate the taboo on sexual activity within prisons. Second, it may illustrate the lack of awareness among staff and prisoners related to the links between stimulant use and sexual risk behaviour. Third, there is very little information on the effect of stimulant use in a prison setting on sexual interest and sexual activity. For some users, the prison setting itself may decrease the interest in sex, but not the interest in drugs.

#### *Needs of prisoners and staff regarding stimulant use*

First of all, there is a need for more specific information on stimulants, both for security and treatment staff, in order to help them recognise use of these substances among prisoners and address associated problems. There is also a need for specific, non-judgmental and useful harm reduction material for prisoners\*for example, to increase knowledge regarding needle cleaning procedures, methods of minimising 'comedown', managing symptoms of withdrawal, the importance of sleep and good diet, the need to avoid dehydration, the dangers of combined use or polydrug use and measures to prevent overdoses, particularly on release from prison.

Both prison hospital staff and medical staff in the sample prisons highlighted the need for guidelines about the management of acute amphetamine and cocaine intoxication, based on literature and the experience of leading clinicians and healthcare services in the field.

Many of the physical and psychological problems reported above are most acute when these users arrive in prison (in remand prisons for example) and when these users go through some weeks of detoxification. Medical and healthcare staff should be provided with detailed guidelines for the management of stimulant withdrawal, as this can be very different to that of opiate withdrawal. This should include guidelines regarding the use of benzodiazepines and antipsychotic agents, but the use of these medications on their own is insufficient to deal with stimulant withdrawal. Strategies other than pharmacotherapy, such as organising support, non-pharmacological means of coping with cravings, tips to improve sleep, relaxation techniques, coping with mood swings, aches and pains, eating properly, concentrating only on the immediate future and so on, may each work to some extent:

There's no help for cocaine users; if you're a heroin user, you get methadone and then you're ok, you're minding your own business but if you're cocaine user, you can't get anything because they don't know what to give you. They don't even give sedatives (Prisoners, Ljubljana prison, Slovenia).

Many of our respondents complained about the lack of a substitution therapy similar to methadone for opiate users. Pharmacological agents (such as blocking drugs, aversive drugs and replacement drugs) have been used in the past to treat stimulant users, but the efficacy of these products is controversial (see below).

Some stimulant users in prison are ‘walking bombs’ in the sense that they have very complex psychiatric problems, which are sometimes not diagnosed. There is a need to make structural adjustments to improve potential diagnosis of personality and psychiatric disorders and to provide adjusted guidance in specific detention settings or specialised prison sections.

However, the most commonly identified gap in provisions for stimulant users is the need for strategies that surpass the basic medical or product-oriented approach, including psychological support. Many prisoners expressed that this was a greater need compared to simply providing more medication, in order to address the psychological dependence, and the psychosocial aspects of their drug-taking behaviour. There is also a need for staff to be better trained in recognising stimulant-related problems and in more appropriate ways of reacting towards the problems mentioned earlier.

Finally, many prisoners use drugs to relieve boredom and to kill time. There is clearly a need for a more meaningful prison regime, in which prisoners are kept busy, through work, training, education and leisure activities. The views of staff and prisoners for a more meaningful imprisonment and for more psychosocial assistance (rather than product-oriented strategies) also demonstrates the inappropriateness of imprisoning problematic drug users, as within this setting, the range of strategies needed to treat drug use are not widely available.

#### *Targeted interventions in prison*

In this study almost no targeted interventions towards stimulant users in prison were found. In several countries, staff members and representatives suggested the issues of cocaine use or amphetamine use had come up in group sessions or in individual counselling, or in information sessions by external organisations. However, when these interviewees were asked for more details on the nature and the extent of these sessions, no evidence for a systematic, guided approach towards stimulant users was found. None of the prisoners acknowledged the existence of targeted interventions towards stimulant users. In those countries with explicit national drug policies in prison, no differentiation is made between stimulants and opiates. And even in those countries that have a ‘tradition’ of higher prevalence of amphetamine use, no targeted or very specific interventions were uncovered.

A claim made by several respondents to explain the lack of targeted interventions towards stimulant users was that there are no targeted interventions in the community either. In many countries this seems an acceptable argument, as most provisions and services offered by local NGOs and treatment centres are not differentiated for opiate users and stimulants users, or (in the case of substitution treatment for example) mainly targeting opiate users.

#### **Conclusions and recommendations**

The use of cocaine and Amphetamine Type Stimulants in prison does raise some concerns, even if the available indicators do not show an increase. Their use is associated with aggression and violence, financial problems and psychological and physical problems in prisoners. Additionally, prison staff (both medical and security staff) often feel ill-equipped to deal with stimulant-related problems. These conditions are detrimental to the health of these prisoners and increase the risk of HIV transmission, encourage drug use in response to boredom or stress and increase stress among inmates, which negatively affects their mental health, or exacerbates pre-existing mental health problems. Both in the community and in prison there is not one homogenous subculture of cocaine users or amphetamine users. One can find various sophisticated typologies of cocaine users or amphetamine users in the international scientific literature (Cohen, 1989; Waldorf et al., 1991; Mugford, 1994; Erickson et al., 1994; Decorte & Slock, 2005), and from our interviews, it became clear that one can find various types of users in prison as well.

The reasons given for the lack of targeted efforts for stimulant users were related to barriers and problems that hinder the provision of services and harm reduction strategies in prison in general. Many of these barriers and problems have been identified in several previous studies, such as the lack of evidence-based policies, the one-sided and unilateral focus on supply reduction, budget constraints, the over-incarceration of drug users, the general negative attitude towards drug users, staff shortage, qualifications and training of security staff and healthcare staff, the need for multidisciplinary action, the suspicion towards and therefore lack of structural agreements with outside drug service providers (NGOs) and overcrowding within prisons (MacDonald, 2004). Another factor hampering the development of targeted interventions towards stimulant users is that much of the intervention literature for stimulant users has come from the United States and has primarily involved cocaine users. However, many types of interventions have been conducted with stimulant users, including preventive interventions and the provision of harm reduction information, the management of acute stimulant intoxication, withdrawal management, pharmacological and non-pharmacological treatments and interventions for stimulant users with co-morbid psychiatric disorders.

The principle of equivalence means that the healthcare measures (medical, psychiatric and psychosocial) successfully proven and applied outside prison should also be applied inside prison. Prisoners are entitled, without discrimination, to a standard of healthcare equivalent to that available in the outside community, including preventive measures. This principle of equivalence is fundamental to the promotion of human rights and best health practice within prisons, and is supported by international guidelines on prison health and prisoners' rights (by the United Nations, the World Health Organization and UNAIDS), as well as national prison policy and legislation in many countries.

With regard to support for drug-using inmates, and especially cocaine- and Amphetamine Type Stimulant-using inmates, and to those with underlying personality disorders and psychiatric problems, the principle of equivalence is still wishful thinking. Differentiation and quality of drug services outside is not reflected sufficiently inside prison. General barriers to implementation of effective prison healthcare strategies have been described and identified a long time ago and in various other studies. It is clear that a lot needs to be done to make imprisonment more than a punitive institution. If reintegration of prisoners in general, and drug users in prison in particular, is truly an objective and a function of our prison systems, then these barriers and problems in organising healthcare in prison need to be tackled in a much more convincing way.

In our interviews with prison staff a high prevalence of psychological symptoms, such as depression, anxiety, mood swings, paranoia and hallucinations was related to frequent amphetamine use, and use by injection (see also: Louie et al., 1989; Kleinman et al., 1990; Hall & Hando, 1994a,b). A considerable proportion of amphetamine users are clinically depressed (and probably a considerable proportion of prisoners in general), and the use of stimulants aggravates this problem. Some prisoners have experiences of psychological symptoms prior to their initiation to stimulant use, but most of these symptoms increase in prevalence after the onset of stimulant use (Farrell et al., 2002).

In many countries, a significant percentage of the prison population is comprised of individuals who are convicted of offences directly related to their own drug use (i.e. those incarcerated for the possession of small amounts of drugs for personal use, those convicted of petty crimes specifically to support drug habits). The incarceration of significant numbers of drug users increases the likelihood of drug use inside prisons and, therefore, an increase in unsafe injecting practices and the risk of HIV-transmission. Drug users do not belong in prison, and prison settings are not the ideal setting for drug treatment. Action should be taken to reduce prison populations and prison overcrowding, as an integral component

of a comprehensive strategy to improve prison healthcare towards drug users (including stimulant users). Legislative and policy reforms should be pursued to change criminal law and penalties with the objective of reducing the criminalisation of non-violent drug offences and significantly reducing the use of incarceration for non-violent drug users.

In order to reduce the number of drug users sent to prison, the overall prison population and the levels of prison overcrowding, alternatives to prison and non-custodial diversions for people convicted of offences related to drug use should be developed. If imprisonment itself cannot be avoided, then treatment and preventive steps have to be taken from the first day of imprisonment (Stöver, 2001). That includes comprehensive medical care of withdrawal symptoms from stimulant use, as well as access to health and social workers both from inside prison and from community services in order to define individual problems and disorders.

With regard to medical treatment, increased efforts need to be undertaken in prisons to ensure that (stimulant) using prisoners receive care, support and treatment equivalent to that available in the community. Prisoners suffering from withdrawal symptoms (among others from stimulants) should have equal access to narcotics routinely given for pain relief, reduction of anxiety and paranoia to patients outside. Prisoners should be allowed equal access to investigational drugs and nonconventional therapies for stimulant users outside. There is also a need to address problems associated with dual diagnosis, i.e. drug users who are also identified as having mental health problems, through the development of adjusted guidance in specialised detention settings.

Inmates should have access to voluntary treatment options that exist in the community, such as relapse prevention, cue exposure/response prevention, cognitive behavioural interventions and multifaceted behavioural treatment. The claim made by Stoöver (2001) is still relevant, in that correctional healthcare needs to evolve from a reactive sick-call system to a proactive system emphasising early detection of personality disorders and psychiatric problems, health promotion among drug users, and prevention.

## Acknowledgements

This research project was part of one of the activities of Cranstoun Drug Services' networks, the 'European Network on Drug and Infections Prevention in Prison' (ENDIPP) and was partly funded by the European Commission. The author is grateful to the European Commission, Cranstoun Drug Services and ENDIPP, the Director Generals of the Prison Services and Health Ministries in the different countries, national facilitators, national experts, the prison governors and staff, the prisoners, the representatives of NGOs, and the interpreters for their support with the study.

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