

Main findings and recommendations
arising from the study on the prevalence
of drug use, including intravenous drug
use, and blood-borne viruses among
the Irish prison population

Executive Summary

1. Background

Responding to drug use and blood-borne viruses in the prison context is an ongoing challenge and access to up-to-date data regarding the extent and nature of the situation is important to inform the response. The National Advisory Committee on Drugs and Alcohol (NACDA) commissioned University College Dublin to carry out research to estimate the prevalence of drug use, including intravenous drug use, among the prisoner population in Ireland in order to determine the need for drug treatment and harm reduction (including needle exchange) services in Irish prisons. This study was jointly funded by the NACDA and the Irish Prison Service.

The report is based on data collected from a cross-sectional study targeting a random sample of the prison population in Ireland. All prisons were included in the study and the samples from each prison were proportionate to size.

Eight hundred and twenty four prisoners took part in the study, giving an overall response rate of 49.5%. The information summarised below was collected in two ways. The results for drug use among prisoners is based on a pre-structured questionnaire¹ and tests for hepatitis C, B and HIV were based on biological fluid samples collected from each study participant.

The report addresses three key areas

- a) prevalence of drug use in prison,
- b) prevalence of intravenous drug use and blood-borne viruses; and
- b) prison drug treatment and harm reduction services.

Key findings are summarised below in Section 2. Section 3 draws conclusions and discusses key implications. The main recommendations are set out in the third and final section of this document.

¹ Taking account of requirements set out by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA).

2. Summary of main findings and key messages

2a. Prevalence of drug use in prisons

Lifetime Use (ever used)

The results from this survey show that the prison population in Ireland is a high risk group and that a disproportionate number of prisoners have histories of drug use. Lifetime prevalence for individual illicit drugs among prisoners ranges from 36% to 87%. The most frequently reported illegal drug ever used was cannabis (87%), followed by cocaine powder (74%), heroin (43%) and crack cocaine (36%).

Recent Use (last 12 months)

The most commonly reported illegal drug used in the twelve months prior to the survey was cannabis (69%) followed by heroin (30%), cocaine powder (29%) and crack cocaine (12%).

Of the other prescription drugs and/or over the counter medicines, 55% reported recent use of benzodiazepines, 46% used sedatives or tranquillisers, 21% methadone and 13% used other opiates.

The variation in prevalence rates for the individual drugs may reflect availability of the drugs in prisons. This may help to explain the fact that among the sub-group who have been in prison for more than a year, the levels of recently used cannabis (67%) and heroin (29%) were very similar to the full sample, but levels are substantially less for crack (7%) and cocaine powder (20%).

Current Use (last month)

In the month prior to the survey 43% had used cannabis, 11% reported use of heroin and 5% cocaine powder. Last month prevalence was 29% for benzodiazepines, 25% for other sedatives and tranquillisers, 13% for methadone and 4% for other opiates.

Gender

Rates of recent use by women were similar to men's for cannabis (both 69%) but were higher for heroin (47% vs 28%), crack cocaine (32% vs 11%) and cocaine powder (42% vs 28%). Recent use was also higher among women for benzodiazepines

(62% vs 54%), other sedatives and tranquillisers (68% vs 45%), methadone (56% vs 19%) and other opiates (20% vs 13%).

Age

For all drugs recent use is higher among those younger than 35 years. The pattern differs between, on the one hand cannabis and cocaine powder which are more prevalent among adults aged 18–24 years and, on the other, heroin and crack cocaine, which are most prevalent among those aged 25–34 years.

2b. Frequency of use and use in prison

Apart from levels of prevalence, the frequency of drug use is an important indicator. This study shows that the frequency of current use (last thirty days) for each of these individual drugs is low ranging from an average of use on two occasions in the last month for both heroin and cocaine, up to five occasions in the last month for cannabis.

Use in prison

Of those who reported using drugs in the last year, many had used while in prison. In relation to cannabis, 88% of recent cannabis users had used the drug in prison, and for recent heroin users 84% had used the drug in prison. Among recent crack cocaine users, 53% had used the drug in prison and among recent cocaine powder users, 44% had done so in prison.

First time use in prison

A very large number of lifetime opiate users, in particular those who use heroin (43%) were initiated to the drug whilst in prison. This is the case for 38% of lifetime methadone users.

2c. Intravenous drug use (IDU) and blood-borne infections

The European Monitoring Centre of Drugs and Drug Addiction (EMCDDA) explain that intravenous drug users are a key target group for measuring prevalence of drug-related infections. While data on current injecting practices are valid for the purpose of estimating prevalence of injecting drug use, for the purpose of monitoring the EMCDDA recommends that the appropriate definitions are lifetime injecting of drugs for non-medical reasons and any injecting of

drugs in the last 12 months (recent IDUs). Applying these definitions to the prison study, the results show that just over a quarter (26%) of prisoners reported ever injecting drugs. Women were significantly more likely to have a lifetime history of injecting drugs than men (44% vs 24%).

In total 10% of the prison population (and 5% of those in prison for more than 1 year) had injected in prison at least one of the drugs surveyed for last year use.

The survey also shows that among those who use heroin and cocaine, the principal mode of administration are methods other than intravenous use (no further details available).

The drugs reported as injected in the last year by the largest proportion of prisoners was heroin (7%) followed by cocaine powder and benzodiazepines (each 3%), mephedrone and steroids (each 2%). Of the heroin injectors, 17% had injected in prison. Of those injecting cocaine powder 29% did so in prison. With regard to the mephedrone injectors, 22% had injected in prison. Among those injecting benzodiazepines in the last year, 30% had done so in prison. For steroids the proportion was the largest, with 68% of injectors having done so in prison.

Sharing drug paraphernalia

This study shows that 13% of all prisoners or 58% of all intravenous drug users in the study reported ever sharing drug use equipment in their life. A far greater proportion of women than men indicated they have shared injecting equipment for drug use at some stage in their life (100% vs 53%). The lifetime prevalence of sharing drug use equipment is much higher among those prisoners who are contained in prisons identified in the study report as 'high drug risk prisons'.

Blood-borne viruses (BBV)

The results show that the prevalence rates for blood-borne viruses are relatively low. The serological test results are 13% for hepatitis C, 2% for HIV and 0.3% for hepatitis B. The authors of the report conclude that the rates of hepatitis B and hepatitis C infections may have fallen over time in prisons in Ireland. Noteworthy is that women are more likely than men to be infected with HIV (9% vs 2%) and hepatitis C (22% vs 12%).

The most important factors associated with blood-borne viruses among participants found in this study are having a history of intravenous drug use and a history of sharing injecting equipment.

2d. Provision of drug treatment options

The main report from the study highlights disparities in treatment provision particularly in high drug risk prisons/settings. Methadone maintenance, detoxification from opiates, detoxification from benzodiazepines and information on infectious diseases were reported by prisoners to be services that are readily available when needed. However a substantial gap between availability and need exists in relation to drug-free wings or landings, drug-free treatment programmes, information on overdose prevention and narcotics anonymous. In general respondents indicated a high degree of willingness to use these services when available to them.

2e. Specific circumstances and needs

The data show considerable variation among prison settings in terms of the propensity for risk of using drugs associated with prison settings. A focus on high risk drug use (e.g. drug use in 'high use' contexts or among vulnerable groups) would be useful in order to provide a greater focus on understanding the needs of certain groups such as intravenous drug users and those located in high drug risk prisons. Future research should incorporate this into the design and sampling stages of the work.

Reflecting a pattern found consistently in the international literature the number of women in prison in Ireland is lower than the number of men. It is important to note however that women in prison are a discrete group with particular needs. Drug use seems to be particularly acute amongst the female prison population. A higher proportion of women prisoners inject drugs and share drugs and drugs paraphernalia than men. Women are also more likely than men in prison to be infected with HIV and hepatitis C. A specific strategy needs to be developed to address the use of illicit substances among women, to and to maximise their chances of rehabilitation.

2f. Conclusions and final comments

The authors of the main report point out that the extent of drug use among prisoners is far greater than in the general population. Results demonstrate that lifetime, last year and last month prevalence rates of drug use are higher than the general population, however this is not unexpected as prison populations both nationally and internationally are among the most socio-economically deprived communities characterised by high unemployment, poor education, housing and family breakdown. Poorer physical and mental chronic disease manifestation, drug and alcohol problem also feature more than in the general population. In this context it is not surprising that higher prevalence drug use is found among our prison population.

Although the frequency of current use is not high, among those who consumed drugs in the last year, a majority had used heroin, crack cocaine and cannabis whilst in prison and a significant minority had used cocaine powder in prison. Among recent cannabis users, high numbers reported using the drug in prison (88%). This must be considered in the context of increasing international concerns regarding high levels of THC, particularly in herbal cannabis and its side effects on the brain which can include psychosis.

The findings of this report demonstrate that significant improvements have taken place when compared with reports from earlier work (Allwright et al 1999), particularly in the area of drug treatment provision and access to support services such as addiction counselling and nursing. The study shows that many of the medical and other supports that are available in the community for those in need of drug treatment are now also available in the prison system. However the report highlights gaps in two important respects. First where a need for drug treatment and support was identified, inconsistency in availability of treatment and support was evidenced. Second, there needs to be a strengthening of the integration of psychosocial and pharmacological treatment methods. This approach is widely accepted to be effective for rehabilitation and for relapse prevention. For example, withdrawal management alone is unlikely to lead to sustained abstinence from drugs of dependence. The high rates of use for benzodiazepines and other sedatives and tranquillisers found in this study, whether with or without prescription, is a case in point where the provision of psychosocial treatment is an important element of effective aftercare. Yet, the study shows

that the levels of availability of addiction counsellors and addiction psychiatrists in prisons are low relative to the levels of expressed need and willingness to avail of these.

Responding to IDU and eliminating sharing of drug use equipment

Given that prisons generally can be high-risk environments for the transmission of blood-borne infections and that these viruses/diseases are so often contracted through sharing drug injecting equipment, the finding of a relatively low prevalence of blood viral infections is welcome. The study indicates that work done, both at community and prison level, has positively impacted on the prevalence of the blood-borne viral infections Hepatitis B, C & HIV. An earlier study (Grogan et al 2005) of drug using populations demonstrated Hepatitis B prevalence rates of 2%, whereas this current study reveals a 0.3% prevalence. The significant decrease in the prevalence of Hepatitis C from 37% in 1999 (Allwright et al 1999) to 13% in the current work suggests a clear improvement. It should be noted however that the rate for Hepatitis C among prisoners in Ireland is still disproportionately high when compared to the general population in Ireland (circa 1%) (Thornton et al., 2011). The greatest risk factor for Hepatitis C virus in the general population in Ireland has been drug use. Community drug treatment services dealing with intravenous drug use, including prisons, have a policy of actively encouraging the uptake of vaccination and this may contribute to the lowered prevalence. This shows that widespread availability of testing for infectious diseases and appropriate vaccination in a prison setting is a very significant factor to ensure the prisoner's health while in prison as well as contributing to the health of their families and friends after discharge.

This is particularly relevant for those in prison who have not stopped using drugs, who continue problematic drug use and in particular, are injecting. With regard to intravenous drug use, the study showed² that a total of 10% of the prison population (and 5% of those in prison for more than 1 year) had injected in prison at least one of the drugs surveyed for last year use. In terms of gauging the extent of involvement in risky behaviour, these estimates translate into approximately 400 people who may have engaged in injecting practices in the last year and up to 200

² Table 4.42 and text accompanying table 4.42.

people who may have done so in prison. Given the close association between drug injecting, sharing of equipment and the contraction of blood-borne infection among prisoners generally, there is a clear need to continue to implement measures that will minimise or eliminate prisoners sharing drug use equipment.

Other high risk activity

The data relating to sexual activity in prison is less clear. However, it is clear that condom use in general (in or out of prison) seems low. This has implications for sexual health education strategy.

Sixty eight % of prisoners had a tattoo or borstal marks and 35% (190/538) have these done in prison, this would be considerably higher than in our neighbouring jurisdiction Scotland. There are implications for the IPS in developing a health promotion strategy to reduce risk associated with this practice.

Next steps

Useful harm reduction provides for a continuum of approaches and education and health promotion are also appropriate for those with a history of intravenous drug use and/or sharing equipment. In this study the most important factors found to be associated with blood-borne viruses in this study were a history of intravenous drug use and 26% said they had a history of injecting drug use for non-medical reasons; 11% reported a history of sharing. Information and education, as prevention initiatives, need to target prison entrants, particularly those with a history of injecting.

Prevention measures, such as information and education, but also drug-free areas are needed to tackle the problem of new prison entrants who have no history of drug use from being exposed to and thereby initiating drug use whilst in prison. The provision of designated drug-free areas in high drug use prison contexts provides a rare opportunity for many drug users to be located away from drug use and its associations. This is particularly relevant to supporting the completion of detoxification. These drug-free areas not only help to protect non-dependent prisoners from drugs but also serve to protect against relapse.

Monitoring risks for intravenous drug use and developments in psychoactive substances

It is heartening to find that despite high prevalence (26%) of 'ever injected' drugs among prisoners, the last month injecting prevalence was as low as 2%. Among those whose length of time in prison exceeded a month, less than 1% had injected any of the individual drugs surveyed. Also of those who had reported using drugs while in prison, the frequency of use was low – of those who reported drug use in the previous 30 days median frequency was found to be 2–5 times. There are however frequently reports of changes in the patterns of drug use (volume, type of drug, method of use) when preferred drugs become scarce.

In terms of trends in prisoners' drug use of significant value for IPS planning purposes, is the findings relating to steroid use and first time drug use in prisons. Further detailed analysis of these findings is required. In particular regarding first time drug use, the report states *"Taking a particular drug for the first time in prison is likely to be associated with the age at which the drug was first taken (as evidenced by cannabis), and with the point in an individual's drug taking experience that they have reached when they are ready to progress to another drug. For example, for those who reported first use of a drug in prison, it is not known on how many occasions they had been in prison before that time, or whether they just happened to be in custody when they reached the point where they were ready to take the step and this should be noted when interpreting the following results"* (main report³). Measures such as health promotion workshops based on evidence based approaches should be systematically provided to all prisoners. In addition levels and patterns of intravenous drug use should continue to be monitored for changes in conditions of supply and consequent changing trends: for example the effects of a sustained reduction in supply or change in purity could result in either an increase in injecting and/or the use of drugs other than heroin or cocaine in an effort to cope.

3 Drummond, A., Codd, M., Donnelly, N., McCauseland, D., Mehegan, J., Daly, L., and Kelleher, C. (2014) Study on the prevalence of drug use, including intravenous drug use and blood-borne viruses among the Irish prisoner population. Dublin: National Advisory Committee on Drugs and Alcohol.

3. Recommendations

The findings from this research provide an important evidence base to formulate recommendations. For recommendations to be valid and strong the link between recommendations and the supporting evidence should be clear. The main purpose of conducting a study on drug prevalence and blood-borne viruses in prisons was to determine the need for drug treatment and harm reduction (including needle exchange) services in Irish prisons (NACD, 2010). In formulating recommendations from the research, the results should be examined with this purpose in mind.

Harm reduction measures that minimise or eliminate prisoners sharing drug use equipment are needed to manage the risks associated with injecting drugs in prisons. Specific harm reduction interventions that reduce the spread of blood-borne viruses (BBVs) and overdose include:

- a) Needle exchange services i.e. the provision and disposal of needles, syringes and other injecting equipment (e.g. spoons, filters, citric acid);
- b) Prison reception health screening provides a good opportunity to identify injecting drug users and those who have already been treated for BBVs. Advice and support on safer injecting and reducing injecting and reducing initiation of others into injecting;
- c) Advice and support on preventing infectious disease and on the risk of overdose;
- d) Risk assessment and referral to other treatment services; and
- e) Provision of opioid substitution treatment.

Harm reduction and prevention

- 1 Both last month prevalence and frequency of injecting of drugs in prisons are relatively low, which suggests there is currently not a high need for needle exchange programmes in Irish prisons. There are indications however of a need for a health promotion strategy across the prison system that would include;
 - Sexual health;
 - Overdose prevention;
 - Steroid avoidance; and
 - Safe tattooing.

2. Viral screening and appropriate vaccination programmes, implemented according to national guidelines should be routinely provided to prisoners in Ireland.

Drug Treatment

3. Arrangements should be made to ensure, where possible, that each prisoner receiving opioid substitution treatment within a prison be placed on a Health Service Executive drug treatment services clinic list or with a GP so that they can continue to receive this treatment, as prescribed, on their release. The practice of releasing prisoners without these arrangements being in place may prove life-threatening and a contributory factor to early relapse.
4. Where a prisoner has established a counselling relationship with a counsellor inside the prison, every effort should be made to source a counsellor in the community or with the HSE drug treatment services so that the person has the opportunity to be supported in their transition out of prison and into the community.
5. Comprehensive drug treatment options should be available and adequately resourced in all closed prisons in Ireland.
6. Drug treatment options must be within an integrated clinical and psychosocial treatment approach. Specifically, evidenced-based psychosocial approaches to complement the treatment of the misuse of sedatives and tranquillisers, in particular the use of benzodiazepines, where needed should be available to prisoners.
7. Drug-free wings aim to help prisoners remain abstinent from drugs while in prison. Consideration needs to be given to finding ways to increase drug-free areas in prison not only to protect against lapse/relapse occurring but also to protect non-dependent prisoners from exposure to drugs.
8. A specific strategy needs to be developed to address the use of illicit substances among women in prison in order to maximise their chances of rehabilitation. Developing a suitable gender-sensitive approach and being able to understand and address the particular health needs of women in prison properly and effectively requires increasing gender-disaggregated data on women's health and health needs in prison and stimulating research in this field.

Research and monitoring

9. Future research on this area in Ireland should focus on developing an understanding of risk in relation to drug use in prisons. In this regard data on specific groups such as intravenous drug users, women and those located in high drug risk prisons should be key objectives in the design of future research in this area.
10. Although the levels of current injecting drug use in prisons are shown to be relatively low in this study, levels and patterns of drug use including intravenous use, can change in accordance with a range of influences. Generally levels and patterns of drug use should continue to be monitored in order to detect changes that may arise. Particular attention should be given to any changes in demand/supply factors and/or purity of controlled substances in Ireland and the implications for behavioural responses such as increases in injecting and/or the substitution of drugs.

References

National Advisory Committee on Drugs (July 2010), Tender to Undertake a Study on the Prevalence of Drug Use, including Intravenous Drug Use, and Blood-Borne Viruses among the Irish Prisoner Population

Grogan L. Tiernan M. Geoghegan N. Smyth B. Keenan E (2005), "Bloodborne virus infection among drug users in Ireland: a retrospective cross-sectional survey of screening, prevalence, incidence and hepatitis B immunisation", *Irish Journal of Medical Science*, 174 (2): 14–20.

Allwright, S., Barry, J., Bradley, F., Long, J. and Thornton, L. (1999). *Hepatitis B, hepatitis C and HIV in Irish prisoners: prevalence and risk*. Dublin: The Stationery Office.

Published by the NACDA



NACDA

National Advisory
Committee on Drugs
and Alcohol

National Advisory Committee on Drugs and Alcohol (NACDA)

Hawkins House
Hawkins St
Dublin 2

Tel: 00 353 1 635 4283

Email: nacda@nacda.ie

Web: www.nacda.ie

April 2014