Addiction
EDITORIAL
doi:10.1111/j.1360-0443.2011.03694.x

Opioid maintenance in European prisons: is the treatment gap closing?

Opioid maintenance treatment (OMT) is effective in prison, as it is in the community. Of 30 European countries, 24 sanction prison OMT, but only eight provide coverage that matches average EU community levels. It is important to challenge negative perceptions of prison OMT and promote equivalence of care and continuity of treatment.

The systematic review by Hedrich *et al.* in this issue [1] concludes that opioid maintenance treatment (OMT) is an effective treatment option for opioid-dependent prisoners that offers benefits similar to those reported in community settings.

This is an important conclusion because problem opioid users are over-represented in prison populations compared to the community [2–5]. One international review of mainly US studies found that between 25 and 50% of people received into custody were clinically assessed as having serious drug problems, often including opioid dependence [5]. There are insufficient studies to draw firm conclusions about Europe, although available data suggest that rates in most European countries might be lower. None the less, considering that European Union (EU) prisons contain more than 600 000 inmates on a given day [6], we can assume that at least 100 000 of them may have serious opioid problems. Because many inmates serve short sentences or are remanded in prison for brief periods before trial, the annual turnover of prisoners who might benefit from drug treatment in prison would be considerably higher.

Prison-based OMT offers important benefits in several ways. It ensures continuity of treatment for inmates in OMT prior to incarceration and provides opportunities to recruit into treatment problem opioid users who were not receiving treatment previously. For both groups it reduces illicit opioid use, injecting and associated risks while in prison and potentially minimizes the likelihood of overdose on release. If there are effective links with community-based services, then prison-based OMT facilitates continuity and retention in treatment after release so that the wider benefits of OMT can be realized in the longer term. Continuity of treatment is a key theme, not only because positive outcomes of OMT in general are associated with duration and stability of treatment [7,8] but also because disruption of treatment, due especially to brief periods of imprisonment, has been linked to very significant increases in HCV seroconversion [9]. Further, prison-based OMT is cost-effective and offers potential for important gains in public health and subsequent cost savings [10].

This is a timely review, because concern about the adequacy and quality of health services for prisoners and about equivalence of care between community and prison has become more prominent over recent years [11,12]. The World Health Organization (WHO) and United Nations Office on Drugs and Crime (UNODC) have recommended OMT in prisons, and some countries have introduced changes [8,13–15]. This is encouraging, but delivering services means more than making recommendations and changing policies. A recent review of international implementation of opioid substitution treatment in prisons concluded that despite an increase in programmes, many prisoners remained unable to access them [16].

In Europe, the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) reports that 24 of its 30 Member States* have officially sanctioned OMT in prisons [17]. All 24 foresee continuation of pre-prison OMT, but only 19 currently allow initiation of OMT in prison. However, new data collected by the EMCDDA on prisoners receiving OMT reveal large differences between countries. Although data quality varies, they show that in 2008, in addition to the six countries where prison OMT was not available, the proportion of the prison population in OMT was less than 1% in eight countries and below 5% in three more. Six countries reported 5–10% and a further six between 10% and 20%.

So what can be concluded about the treatment gap?

The estimated average coverage of community OMT in the EU is approximately 50% [18]. The level of prison OMT needed to match this level depends on the proportion of prisoners dependent on opioids. This varies by country, and although prevalence studies on opiate dependence in prison populations are scarce, the data allow provisional order-of-magnitude assessments to be made.

First, eight countries provide OMT both in prison and in the community at a level that roughly equals or surpasses the EU average of 50%. Conversely, 14 countries provide no or very low levels of prison OMT (mostly under 5% coverage), while eight countries are somewhere in between.

Secondly, a regional pattern is apparent. Countries with no or very low levels of prison OMT are all in central, northeast and southeast Europe, including long-standing as well as recent members of the EU. In some cases (e.g. Czech Republic or Sweden), the predominance of

*The 27 EU Member States, Croatia, Turkey and Norway are members of the EMCDDA.

amphetamine-type stimulants or other drugs among problem drug using populations may partly account for this. However, significant opiate-using groups exist in all these countries. Several (e.g. Germany) have long-standing opioid-dependent populations, while others (e.g. Estonia) have experienced serious increases in opioid use, injecting and human immunodeficiency virus (HIV) infection over the past decade [19].

Thirdly, countries with low rates of prison OMT are often, although not always, those with lower levels of OMT in community settings, a case of equivalence of lack of care. In several countries, recent developments include up-scaling of community OMT, thus increasing the treatment gap between community and prison.

Fourthly, overcoming barriers to prison-based OMT takes time, just as it took time to gain acceptance as an effective, mainstream treatment option in the community. Since the late 1980s, the average time-lag between the introduction of community and prison OMT has been 7–8 years.

Finally, a word of caution: the data presented above are purely numerical. Regardless of levels of OMT and equivalence of care, they reveal nothing about treatment quality. This includes ensuring that continuity and potentially risky disruptions in treatment due to arrest, imprisonment and discharge are handled effectively, that dosages are adequate and that treatment is accompanied by psychosocial care. Delivering quality may prove as challenging as increasing numbers.

Encouraging progress is being made in several European countries towards closing the treatment gap between community and prison. In most countries, however, equivalence of care is an aspiration rather than a reality, and important obstacles remain. It is necessary to challenge negative perceptions of prison OMT observed among policy makers and prison administrators and to develop training programmes for prison staff and professionals. It is important to improve identification of need for treatment in prison populations, to foster stronger links between prison and community services and to improve quality, so that the benefits of OMT and of continuity of treatment can be better realized.

Declarations of interest

None.

Keywords Equivalence of care, opioid maintenance treatment, prisons.

DAGMAR HEDRICH[1] & MICHAEL FARRELL[2]
EMCDDA, Cais do Sodré, 1249-289 Lisbon, Portugal[1] *and National Drug and Alcohol Research Centre (NDARC), University of New South Wales, Sydney, NSW 2052, Australia*[2].
E-mail: dagmar.hedrich@emcdda.europa.eu

References

1. Hedrich D., Alves P., Farrell M., Stöver H., Møller L., Mayet S. The effectiveness of opioid maintenance treatment in prison settings: a systematic review. *Addiction* 2012; **107**: 501–17.
2. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). *Statistical Bulletin 2010: Drug Users in Prison*. 2010. Available at: http://www.emcdda.europa.eu/stats10/dup (accessed 8 October 2011) (Archived by WebCite® at http://www.webcitation.org/62HkkkvJx).
3. Vandam L. Patterns of drug use before, during and after detention: a review of epidemiological literature. In: Vander Laenen F., Vander Beken T., Cools M., Ponsaers P., Pauwels L., Vermeulen G. *et al.*, editors. *Contemporary Issues in the Empirical Study of Crime*. Governance of Security (GofS) Research Paper Series, vol. 1. Antwerp, Belgium: Maklu Publishers; 2009, p. 227–55.
4. Carpentier C., Royuela L., Noor A., Hedrich D. Ten years of monitoring illicit drug use in prison populations in Europe—issues and challenges. Forthcoming in: *Howard J Crim Justice* 2012; **51**: 37–66.
5. Fazel S., Bains P., Doll H. Substance abuse and dependence in prisoners: a systematic review. *Addiction* 2006; **101**: 181–91.
6. Aebi M. F., Delgrande N. *Council of Europe Annual Penal Statistics—SPACE I—Survey 2008*. Document: pc-cp\space\documents\pc-cp(2010)07-e. Strasbourg: Council of Europe; 22 March 2010. Available at: http://www3.unil.ch/wpmu/space/space-i/annual-reports/ (accessed 8 October 2011). (Archived by WebCite® at http://www.webcitation.org/62HlQqPen).
7. Amato L., Davoli M., Minozzi S., Ferri M. Methadone at tapered doses for the management of opioid withdrawal. *Cochrane Database Syst Rev* 2004; (4) CD003409.
8. World Health Organization (WHO). *Guidelines for the Psychosocially Assisted Pharmacological Treatment of Opioid-dependence*. Geneva: World Health Organization; 2009. Available at: http://whqlibdoc.who.int/publications/2009/9789241547543_eng.pdf (accessed 8 October 2011) (Archived by WebCite® at http://www.webcitation.org/62HkUNi0w).
9. Dolan K. A., Shearer J., White B., Zhou J., Kaldor J., Wodak A. D. Four-year follow-up of imprisoned male heroin users and methadone treatment: mortality, re-incarceration and hepatitis C infection. *Addiction* 2005; **100**: 820–8.
10. Warren E., Viney R., Shearer J., Shanahan M., Wodak A., Dolan K. Value for money in drug treatment: economic evaluation of prison methadone. *Drug Alcohol Depend* 2006; **84**: 160–6.
11. Møller L., Stöver H., Jürgens R., Gatherer A., Nikogasian H. *Health in Prisons. A WHO Guide to the Essentials in Prison Health*. Copenhagen: World Health Organization Regional Office for Europe; 2007.
12. Fazel S., Baillargeon J. The health of prisoners. *Lancet* 2010; **6736**: 1–10.
13. World Health Organization, United Nations Office on Drugs and Crime, Joint United Nations Programme on HIV/AIDS (WHO/UNODC/UNAIDS). *Substitution maintenance therapy in the management of opioid dependence and HIV/AIDS prevention: position paper*. Geneva: World Health Organization; 2004. Available at: http://www.unodc.org/documents/hiv-aids/Position%20Paper%20sub.%20maint.%20therapy.pdf

(accessed 8 October 2011) (Archived by WebCite® at http://www.webcitation.org/62HlFHeyg).

14. Department of Health. *Updated guidance for prison based opioid maintenance prescribing* (no year). Available at: http://www.emcdda.europa.eu/best-practice/standards/treatment (accessed 8 October 2011) (Archived by WebCite® at http://www.webcitation.org/62HkbqUmq).
15. Michel L., Maguet O. Traitements de substitution en milieu carcéral: guide des bonnes pratiques [Guidelines for substitution treatments in prison populations]. *L'Encéphale* 2005; **31**: 92–7.
16. Larney S., Dolan K. A literature review of international implementation of opioid substitution treatment in prisons: equivalence of care? *Eur Addict Res* 2009; **15**: 107–12.
17. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). *Statistical Bulletin 2010: Health and social responses.* Table HSR-09. 2010. Available at: http://www.emcdda.europa.eu/stats10/hsrtab9 (accessed 8 October 2011) (Archived by WebCite® at http://www.webcitation.org/62Hl0Yzw6).
18. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). *Annual report 2010, the state of the drugs problem in Europe*. Luxembourg: Publications Office of the European Union. 2010. Available at: http://www.emcdda.europa.eu/publications/annual-report/2010 (accessed 8 October 2011) (Archived by WebCite® at http://www.webcitation.org/62Hl8RDGy).
19. Uusküla A., Kalikova A., Zilmer K., Tammai L., DeHovitz J. The role of injection drug use in the emergence of Human Immunodeficiency Virus infection in Estonia. *Int J Infect Dis* 2002; **6**: 23–7.