Impact, role, and prevalence of medication assisted treatment (MAT) for opioid users in European prisons

Barriers in the implementation of harm reduction interventions in European prisons. From evidence to practice

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No conflict of interest to declare

HIV-Prevention – The Comprehensive Package: 15 Key Interventions (UNODC et al. 2020)

Prevention of HIV, HBV and HCV

- 1. Information, education and communication
- 2. Condom and lubricant programming
- 3. Prevention of sexual violence
- Needle and syringe programmes and overdose prevention and management
- 5. Opioid substitution therapy and other evidence-based drug dependence treatment
 - Prevention of transmission through medical and dental services
 - 7. Hepatitis B vaccination and prevention of transmission through tattooing, piercing and other forms of skin penetration
 - 8. Post-exposure prophylaxis of HIV

HIV, hepatitis diagnosis and treatment

- 9. HIV testing and counselling services
- 10. HIV treatment, care and support
- 11. Diagnosis and treatment of viral hepatitis

Prevention, diagnosis and treatment of TB

12. Prevention, diagnosis and treatment of tuberculosis

Gender responsive services

- 13. Sexual and reproductive health
- 14. Prevention of mother-to-child transmission of HIV, syphilis and HBV

Occupational safety and health

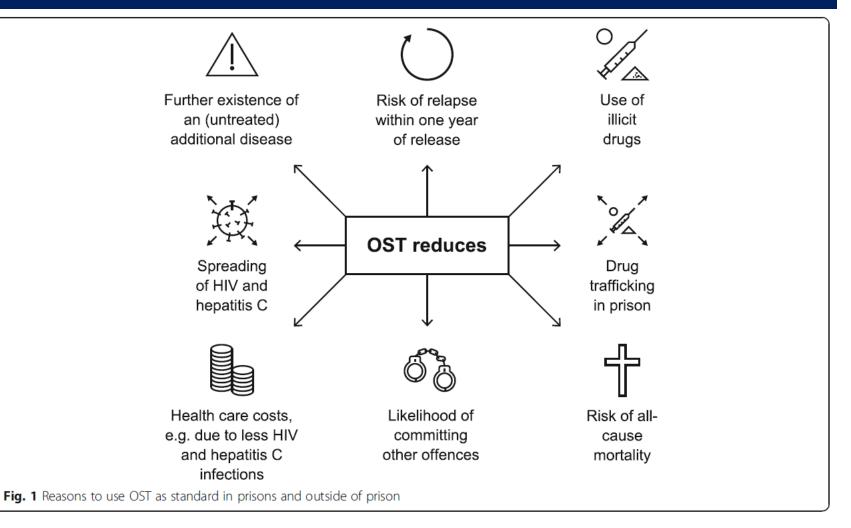
15. Protecting staff from occupational hazards

OAT in Prison Settings (UNODC/WHO 2022)

- Initiation and continuation of OAT in prison and other closed settings is important.
- OAT in these settings supports people with opioid dependence to access treatment and avoid withdrawal.
- Linkage between prison and OAT services in community settings can improve continuity of OAT and reduce recidivism.

OST: evidence and progress

Evidences available for...¹



1 Stöver, Heino; Jamin, Daniela; Michels, Ingo Ilja; Knorr, Bärbel; Keppler, Karlheinz; Deimel, Daniel (2019): Opioid substitution therapy for people living in German prisons - inequality compared with civic sector. Harm Reduction Journal, 16/72, DOI: 10.1186/s12954-019-0340-4

Evidence of OST in prisons¹

One cohort study (Larney et al., 2014) enrolling N=16,715 opioid dependent people who were in prison between 2000 and 2012 showed that:

- being in OST was associated with a 74% lower hazard of dying in prison (adjusted HR (AHR) 0.26; 95% CI 0.13 to 0.50), compared to time not in OST
- being in OST was associated with a 87% lower hazard of unnatural death (adjusted HR (AHR) 0.13; 95% CI 0.05 to 0.35), compared to time not in OST
- being in OST was associated with a 94% lower all-cause mortality hazard during the first 4 weeks of incarceration (adjusted HR (AHR) 0.06; 95% CI 0.01 to 0.48), compared to time not in OST
- being in OST was associated with a 93% lower hazard of unnatural death during the first 4 weeks of incarceration (adjusted HR (AHR) 0.07; 95% CI 0.01 to 0.59), compared to time not in OST
 1 EMCDDA 2021

Systematic OST review of prison¹

- Review of 21 studies (incl. 6 RCTs) shows that OST is effective among the prison population:
- ++ reduced heroin use, injecting and syringe-sharing in prison, if doses adequate;
- ++ increases in treatment entry and retention after release;
- ++ post-release reductions in heroin use;
- + pre-release OST reduces post-release deaths;
- +/- evidence regarding crime and re-incarceration equivocal;
- ? lack of studies addressing effects on incidence HIV/HCV;
- Disruption of continuity of treatment, especially due to brief periods of imprisonment, associated with very sigificant increases in HCV incidence.

ADDICTION





doi:10.1111/add.13779

Does exposure to opioid substitution treatment in prison reduce the risk of death after release? A national prospective observational study in England

John Marsden¹, Garry Stillwell¹, Hayley Jones², Alisha Cooper³, Brian Eastwood³, Michael Farrell⁴, Tim Lowden³, Nino Maddalena³, Chris Metcalfe², Jenny Shaw⁵ & Matthew Hickman²

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Study participants

- 15,141 prison releases (12,260 people opiate dependent 'OUD')
 - 82.1% entered the study once; remainder re-entered 2 to 7 times due to re-incarceration
- OST exposed: 8,645 releases (57.1%)
 - 7,614 (88.1%) methadone (40 mg / day)
 - 1,031 (11.9%) buprenorphine (8 mg / day)
- OST unexposed: 6,496 releases (42.9%)
 - 2,369 people (36.5%) lower daily dose medication
 - 2,110 (32.5%) withdrawn from OST in prison
 - 2,017 (31.0%) diagnosed with current OUD but with no record of OST.

Conclusions

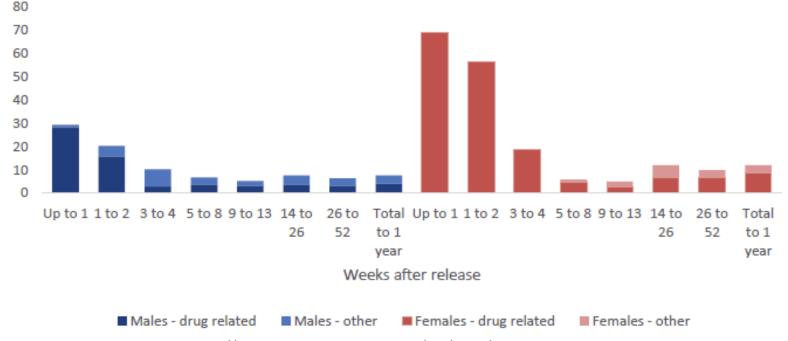
- Prison-based OST (with oral methadone or oral buprenorphine) is a highly effective means of reducing the risk of death (75% reduction) among people in the first 4 weeks after release from prison.
- The protective effect observed for OST in this study was independent of behavioural confounders or admission to community treatment.

Acute risk of drug-related death among newly released prisoners in England and Wales

Michael Farrell & John Marsden Addiction, 103, 251–255

National Addiction Centre, Division of Psychological Medicine and Psychiatry, Institute of Psychiatry, King's College London, UK

Excess mortality rates for released prisoners - drug related deaths & other causes



Histogram from: Rebalancing Act: http://www.revolving-doors.org.uk/file/2049/download?token=4WZPsE8I

Global availability of OST in the community and in prisons¹

M1.2 GLOBAL AVAILABILITY OF OPIOID AGONIST THERAPY (OAT) In the community and in prisons



Source: Harm Reduction International 2020

https://www.hri.global/files/2020/10/27/Global_State_of_Harm_Reduction_2020.pdf

Problems of implementation^{1,2,3}

- Inequality compared with civic sector
- Percent of prisoners receiving OST increasing, but still low in many countries
- Rarely with psychosocial interventions
- Variable doses: same country, state, prison
- Lack of formal guidelines therapy recommendations
- The current delivery of OST in prisons shows inconsistencies and is often carried out in isolation from routine clinical assessments

¹ EMCDDA: Linda Montanari 2017; **2** Alam et al. (2019): Optimising opioid substitution therapy in the prison environment; **3** Stöver et al. (2019): Opioid substitution therapy for people living in German prisons - inequality compared with civic sector. Harm Reduction Journal, 16/72

Problems of implementation I^{1,2}

- Research evaluated in a scoping review on the implementation of OST in the criminal justice settings and/or with justice-involved populations demonstrates that barriers to OST implementation are pervasive, multi-leveled, and inter-dependent across correctional and community settings
- Disruption to the management of addiction and reduced treatment choice for OST adversely influences adequate provision of OST in prison.
- The following patient populations were identified as having concerns beyond their opioid use, and therefore require additional considerations in prison:
 - older people with comorbidities and complex treatment needs;
 - women who have experienced trauma and have childcare issues;
 - those with existing mental health needs requiring effective understanding and treatment in prison.

1 Grella et al. (2020): A Scoping Review of Barriers and Facilitators to Implementation of Medications for Treatment of Opioid Use Disorder within the Criminal Justice System; **2** Alam et al. (2019): Optimising opioid substitution therapy in the prison environment

Barriers: Why is the introduction of OST going so slow¹?

- Abstinence predominant concept
- Juridical concerns
- Lack of knowledge
- Lack of infrastructure
- Mixing up OST medications with street drugs by staff and medical doctors
- Political reasons

OST: how to overcome the obstacles of adequate implementation?

Opioid Substitution Treatment in Custodial Settings A Practical Guide





Also available as E-Learning course; see: www.harmreduction.eu

Editorial Group

Fabienne Hariga (UNODC HQ Vienna/Austria) Karlheinz Keppler (Women's Prison, Vechta/Germany) Rick Lines (IHRA, London/United Kingdom) Morag MacDonald UCE, Birmingham/United Kingdom) David Marteau (Offender Health, London/United Kingdom) Lars Møller (WHO Regional Office for Europe, Copenhagen/DK) Jan Palmer (Clinical Substance Misuse Lead, Offender Health London/United Kingdom) Ambros Uchtenhagen (Zürich/Switzerland) Caren Weilandt (WIAD, Bonn/Germany) Nat Wright (HMP Leeds/United Kingdom)

Adopted to the national situation and translated into several languages (e.g. Russian, Czech, Lithuanian, Latvian, Estonian, German, Turkish etc.)

Therapy recommendations, protocols, MoUs (Alam et al. 2019)

- Establish a clear OST strategy between care team and prisoner at the moment of arrival, noting the individual's specific needs;
- Ensure OST is prompt, reliable and adjustable
- Establish clear protocols for transition to the community on release, with no gaps in care, and no changes, and with adequate safeguards against overdose
- Integrate clinical and psychosocial care, using a fullteam care plan that regards the prisoner as part of the team.

Risks: overdose and diversion

- Risk of overdose can be minimized by proper anamnesis (including information by treating doctor outside)
- Start low and go slow: dosing needs to be done individually
- Confirmation of identity
- Supervision of intake
- Many ways to prevent diversion
- Long acting medications available (1 week, 1 month, 6 months)

How to overcome the barriers?

- Reducing Stigma
- Offering psycho-social care
- Differentiation: Make use of the whole range of medications
- Personalization of treatment
- New long acting medications => Covid 19!
- Manualize treatment protocols¹

1 UNODC/WHO (2022): Establishing and Delivering Evidence-Based, High Quality Opioid Agonist Therapy Services. An operational tool for low and middle-income countries.:

How to overcome the barriers?

- Consensus statement^{1,4} :uninterrupted treatment in custody, integrated with psychosocial care, and clear plans for what happens on release
- Treatment recommendations²
- Educational needs for healthcare providers and administration of OST³
- Inform and involve other staff members³
- Education of stakeholders³
- Training prisoners with experience of OST to provide peer support and advocacy 1 Gross, G. et al al. (2021): Reducing opioid dependence therapy risk in the prison system and the use of extended-release buprenorphine as

1 Gross, G. et al al. (2021): Reducing opioid dependence therapy risk in the prison system and the use of extended-release buprenorphine as an additional treatment option: A consensus statement. Heroin Addict Relat Clin Probl; 2 e.g. State of Northrhine-Westfalia/Germany; 3 Pompidou Group;: Moldova; 4 Orange Book: Independent Excert Working Group 2017/UK .:

How to overcome the barriers?

- Involving doctors and NGOs from the community
- Involve people living in prisoners
- Continuity of OST after release

OST Quality Management:

- Availability of OST in your prison currently?
- Efficiency of OST service generally?
- Recent trends in prison OST provision?
- Extent of user/prisoner choice around substance, maintenance or withdrawal, and dose?

1 Gross, G. et al al. (2021): Reducing opioid dependence therapy risk in the prison system and the use of extended-release buprenorphine as an additional treatment option: A consensus statement. Heroin Addict Relat Clin Probl; 2 e.g. State of Northrhine-Westfalia/Germany; 3 Pompidou Group;: Moldova; 4 Orange Book: Independent Exoert Working Group 2017/UK; 5 Russel et al. (2022): Barriers and facilitators to opioid agonist treatment (OAT) engagement among individuals released from federal incarceration into the community in Ontario,

How to overcome the barriers¹?

- What are the practicalities in terms of choice and diversion of medication?
- What are the challenges facing OST programmes?
- What are the important features of best practice in OST provision?
- Alternate-day dosing possible?
- Injecting behaviours: OST plus Prison-Based Needle Exchange possible?^{2,3}

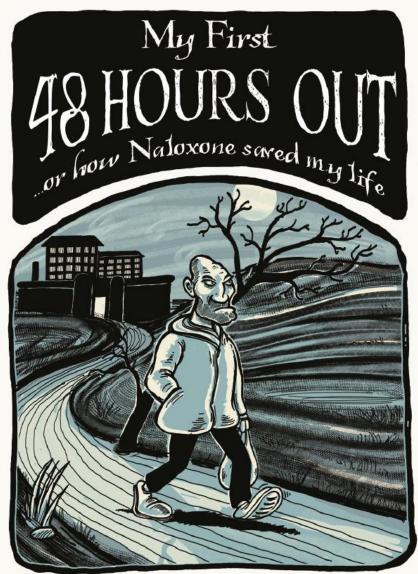
1 Alam et al. (2019); 2 Cunningham et al. 2018; 3 Lazarus, J.V., Safreed-Harmon, K., Hetherington, K.L., Bromberg, D.J., Ocampo, D., Graf, N., Dichtl, A., Stöver, H. and Wolff, H. (2018), "Health outcomes for clients of needle and syringe programs in prisons", Epidemiologic Reviews, Vol. 40 No. 1, pp. 96-104.

Topics (at least) to be tackled in OST recommendations¹?

- OST initiation
- Integrating clinical and psychosocial care in prisons
- Diverse prison populations need tailored provision of OST
- The older offender
- The mentally ill
- Women
- Ethnic and cultural minority populations

1 Alam et al. (2019); 2 Cunningham et al. 2018; 3 Lazarus, J.V., Safreed-Harmon, K., Hetherington, K.L., Bromberg, D.J., Ocampo, D., Graf, N., Dichtl, A., Stöver, H. and Wolff, H. (2018), "Health outcomes for clients of needle and syringe programs in prisons", Epidemiologic Reviews, Vol. 40 No. 1, pp. 96-104.

Combine with Take-Home-Naloxon



Naloxone provision upon release from prison and other custodial settings

Conclusions

- Prison-based OST is a highly effective means of treating opioid use disorder
- OST is a starting point and stable therapy for treating other disorders and infectious diseases
- Highly effective of reducing the risk of death (75% reduction) among people in the first 4 weeks after release from prison.
- Principle of equivalence and continuity of care
- Should be combined with Take-Home-Naloxone

"… Prisoners are the community. They come from the community, they return to it. Protection of prisoners is protection of our communities "

(Joint United Nations Programme on HIV/AIDS (UNAIDS) Statement on HIV/AIDS in Prisons)

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