

# Harm reduction and Opioid Substitution Treatment (OST) in Prisons: What is clear, what are the barriers, what is New?

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# The Nelson Mandela Rules:

## Rule 24

1. The provision of health care for prisoners is a State responsibility.

Prisoners should enjoy the same standards of health care that are available in the community, and should have access to necessary health-care services free of charge without discrimination on the grounds of their legal status.

# The Nelson Mandela Rules:

2. Health-care services should be organized in close relationship to the general public health administration and in a way that ensures continuity of treatment and care, including for HIV, tuberculosis and other infectious diseases, as well as for drug dependence.

# 1. Epidemiology

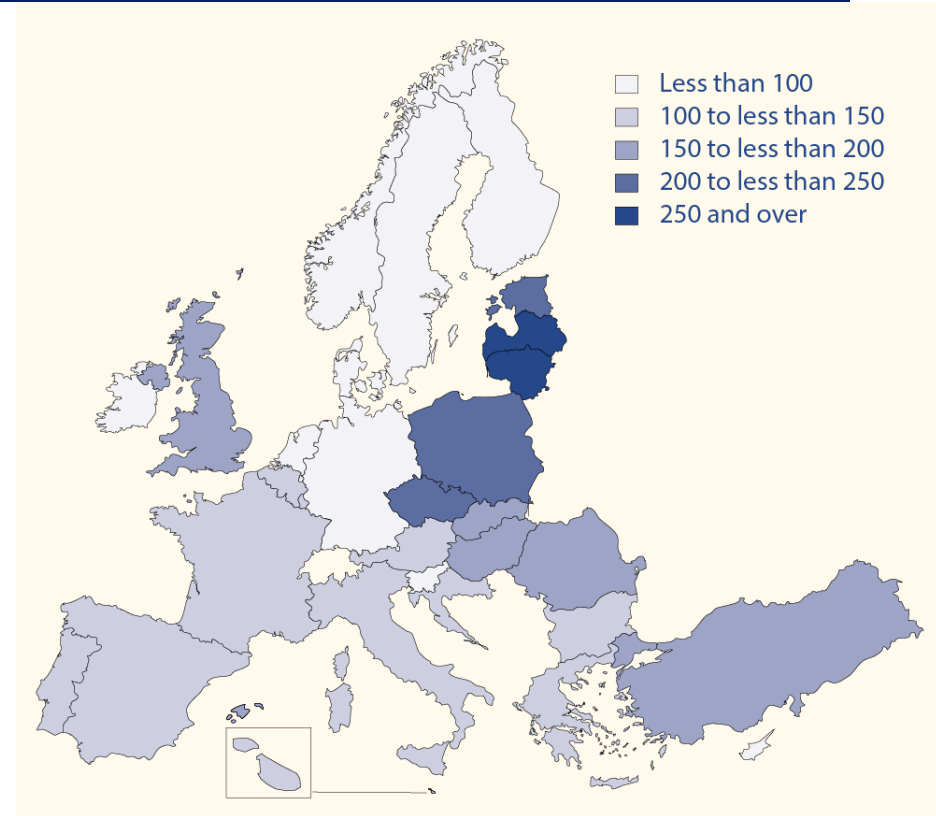
# Global Prison Population

- 10.35 million prisoners (cross cutting )
- annually higher due to turnover
- 1/3 in pre-trial detention
- global incarceration rate has risen by 6% over the past 15 years
- 113 countries noted as having a prison occupancy of more than 100%, including 22 with an occupancy above 200%

# Prison Population in Europe<sup>1</sup>

## ~ 770.000<sup>2</sup>

- ~2000 prisons in EU-30
- Prison Population Rate\*100000:
- EU: 130; Russia: 475; US: 698
- 4 % women (~ 32 000)
- 17 countries with overcrowding
- 16 % average foreigners
- 1 / 4 prisoners no final sentence
- DU mainly short sentences
- High recidivism
- Vulnerable and marginalised



<sup>1</sup> Sources: SPACE 2014 – Council of Europe

- Europe: 28 EU countries, Norway and Turkey;
- International Centre for Prison Studies

<sup>2</sup> 1<sup>st</sup> September 2013 – data collection Linda Montenari et al. EMCDDA

# Drug Users in European Prisons<sup>1</sup>

- ~ One million prisoners per year in Europe
- 15-25% sentenced for drug related offences<sup>2</sup>
- US: 25-50% drug dependent on admission<sup>3</sup>
- Europe: ~ 1 in 6 prisoners problem drug users<sup>4</sup>
- 10–42% report regular drug use in prison
- 1–15% have injected drugs while in prison
- 3–26% first used drugs while incarcerated
- Up to 21% of injectors initiated injecting in prison<sup>4</sup>
- 90% relapse to heroin after release<sup>5</sup>

<sup>1</sup> Stöver & Michels (2010): Drug use and opioid substitution treatment for prisoners.

In: Harm Reduction Journal 2010, 7:17; <sup>2</sup> Source: Council of Europe-SPACE I, Table 7;

<sup>3</sup> Fazel et al. (2006); <sup>4</sup> Hedrich et al. (2012); <sup>4</sup> Stöver & Kastelic 2014, <sup>5</sup>Stöver 2016

# The case of Germany: „Druck-Studie“ Robert-Koch-Institute/Germany: Imprisonment<sup>1</sup> n=2,077

**81%** [79.1-82.5] have been incarcerated\*

average duration in prisons: 5 years, median 3,5 J; (1M – 30 J)

on the average 5,6x imprisoned

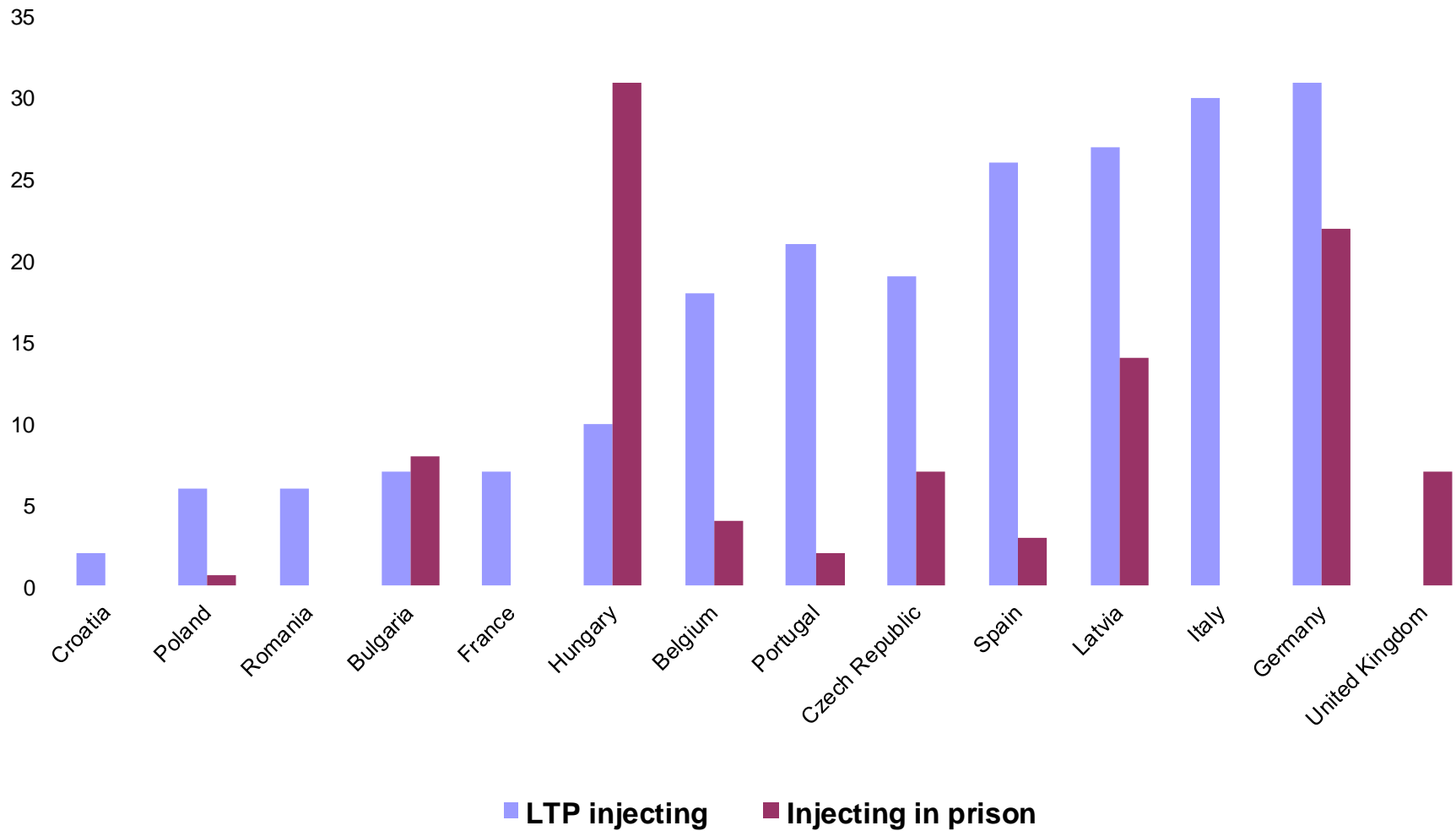
**30%** [27.3-31.7] of those ever incarcerated injected while in prison

**11%** [8.2-13.8] of those ever incarcerated and injected while in prison started their intravenous drug use in prisons

1 Zimmermann, R. et al. (2014): Ausgewählte Ergebnisse der DRUCK-Studie für die Praxis. 6. Fachtag Hepatitis C und Drogengebrauch Berlin, 23.10.2014



# Drug injecting among prisoners (before and within prisons)



Source: Statistical bulletin 2013

BG: heroin; LV: amphetamines; UK: females

Different years ; data: Lisa Montenari, EMCDDA

# People Who Inject Drugs and Infectious Diseases in prisons<sup>1</sup>

- Unprotected sex,
- multiple sexual partners,
- low and inconsistent condom use,
- intravenous drug use incorporating the
- sharing of syringes, needles and drug use paraphernalia,
- tattooing and body piercing

are among the principal drivers of the global HIV epidemic<sup>4</sup>.

<sup>1</sup> Jürgens R, Ball A, Verster A. Interventions to reduce HIV transmission related to injecting drug use in prison. *Lancet Infectious Diseases*. 2009;9(1):57–66.

# People Who Inject Drugs and Infectious Diseases in prisons<sup>1</sup>

- HIV, STI, hepatitis B&C and TB prevalence **2 - 15 times higher**
- TB incidence rates **23 times higher**

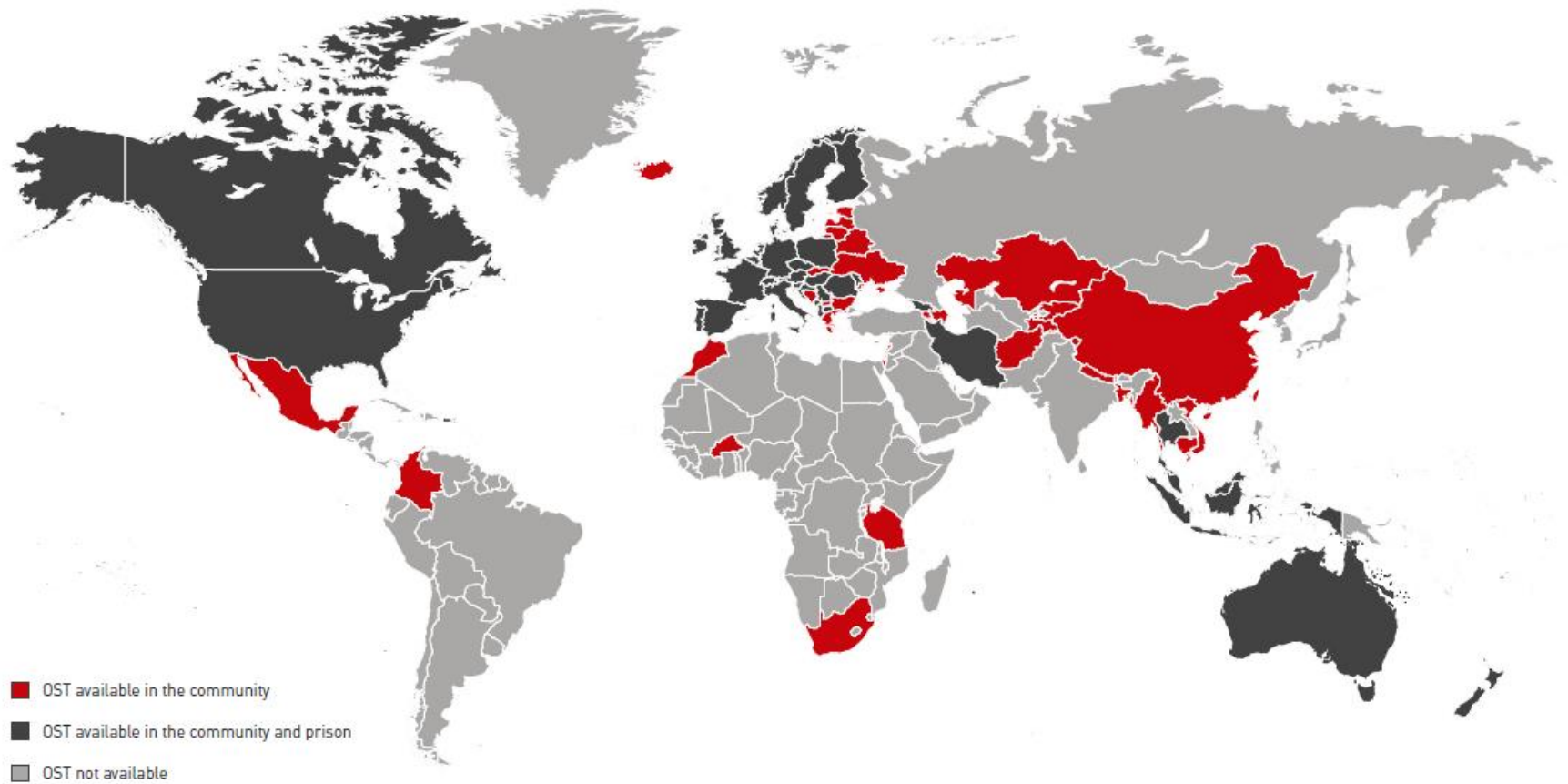


# HIV-Prevention – **The Comprehensive Package: 15 Key Interventions**

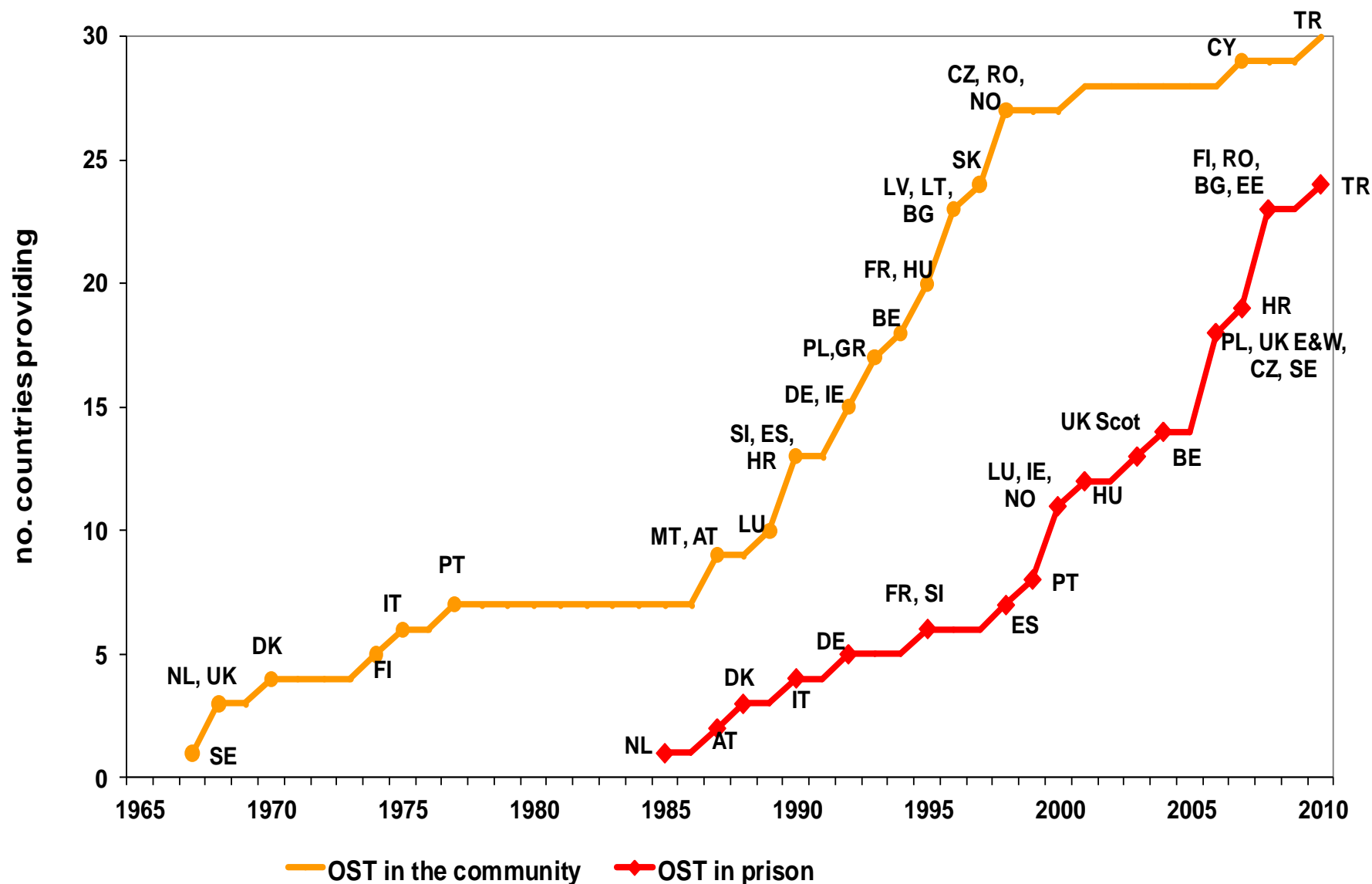
(UNODC/ILO/UNDP/WHO/UNAIDS 2012)

1. Information, education and communication
2. HIV testing and counselling
3. Treatment, care and support
4. Prevention, diagnosis and treatment of tuberculosis
5. Prevention of mother-to-child transmission of HIV
- 6. Condom programmes**
7. Prevention and treatment of sexually transmitted infections
8. Prevention of sexual violence
- 9. Drug dependence treatment => Opioid Substitution Treatment**
- 10. Needle and syringe programmes**
- 11. Vaccination, diagnosis and treatment of viral hepatitis**
12. Post-exposure prophylaxis
13. Prevention of transmission through medical or dental services
- 14. Prevention of transmission through tattooing, piercing and other forms of skin penetration**
15. Protecting staff from occupational hazards

# OST in Community & Prison worldwide<sup>1</sup>



# Time gaps in the official introduction of OST in prisons: ~7-8y (Source: EMCDDA; D. Hedrich et al. 2012,)



# Systematic OST review of prison<sup>1</sup>

- 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 significant increases in HCV incidence.**

Andrej Kastelic, Jörg Pont, Heino Stöver

# Opioid Substitution Treatment in Custodial Settings

## A Practical Guide



world health organisation



UNITED NATIONS  
Office on Drugs and Crime

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**Adopted to the national situation and  
translated into several languages**



# 30y OST in European prisons<sup>1</sup>

## Where have we got from here?

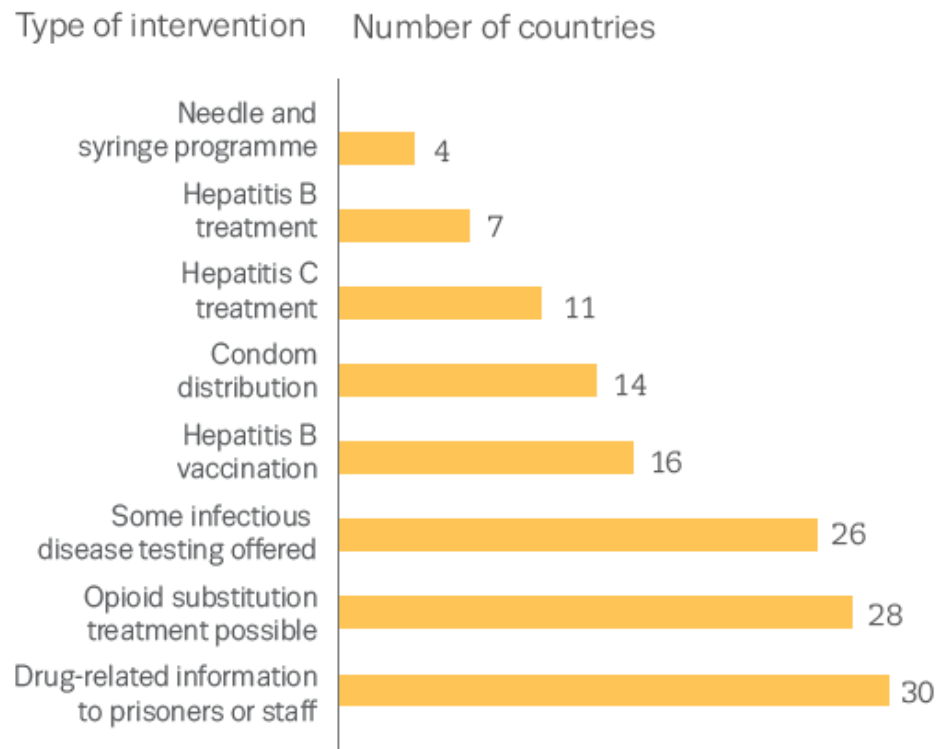
- Coverage low
- Detoxification models heterogenous
- Maintenance varies
- OST as relapse prevention only in few countries
- OST provision in prisons varies
  - from country to country,
  - from region to region,
  - from prison to prison,
  - from doctor to doctor within the same prison

# European Court of Human Rights in the case of Wenner vs. Germany

- manifest and long term dependence to opioids
- denial of opioid substitution treatment (OST) in Bavarian/German prison
- The Court found that the physical and mental strain that Mr Wenner suffered as a result of his untreated or inadequately treated health condition could, in principle, amount to inhuman or degrading treatment.
- the failure to adequately assess Mr. Wenner's treatment needs involved a violation of the prohibition of inhuman or degrading treatment
- **Law more powerful than science!**

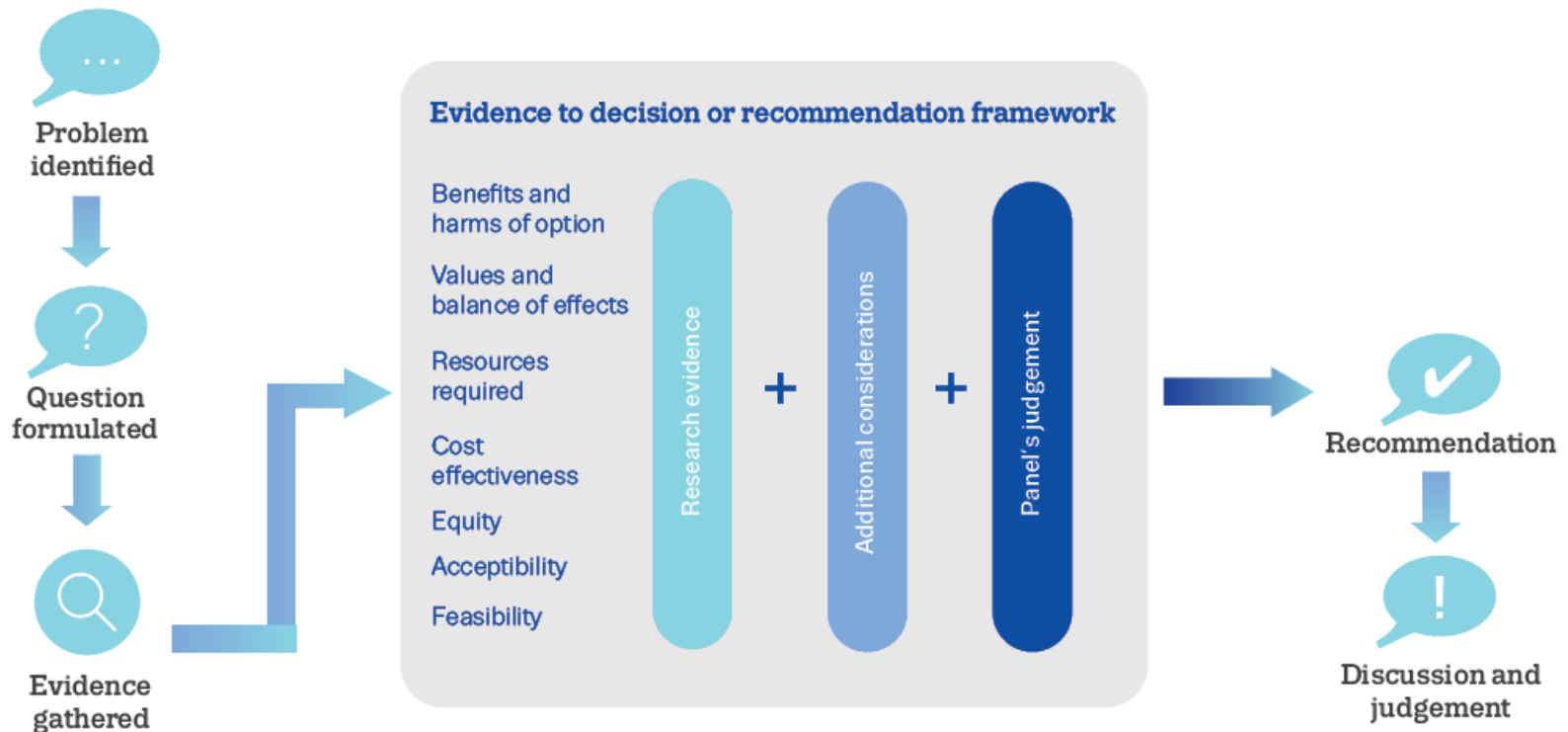
# Harm Reduction in European Prisons

FIGURE 4.1  
Availability of harm reduction interventions in prisons in Europe, 2015/16



# Implementation

FIGURE 5.1  
Using the DECIDE framework for evidence-based decision-making



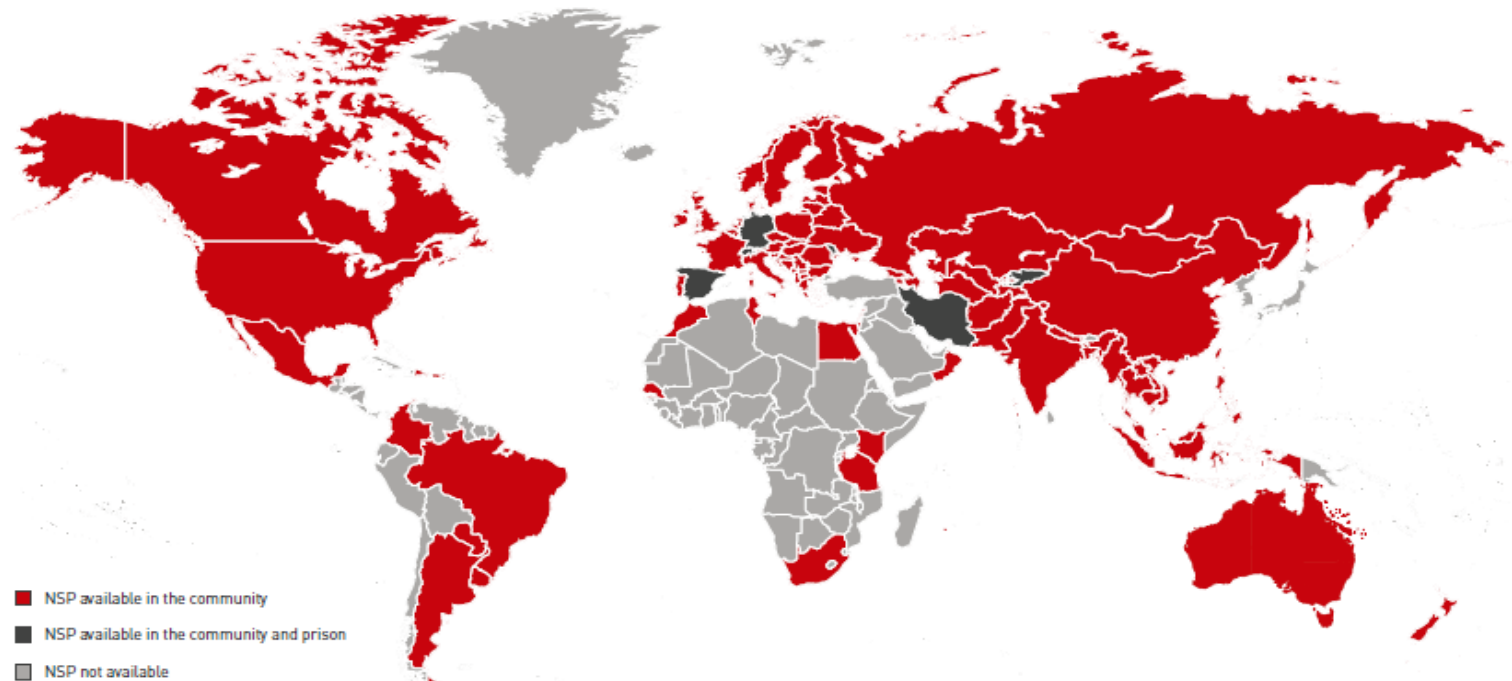
NB: This graphic is based on an image originally produced by Dr Sarah Rosenbaum, Norwegian Institute of Public Health, Oslo, Norway.

More information on the DECIDE project is available at <http://www.decide-collaboration.eu>.

# Prison-Based Needle Exchange Programmes



# NSP in Community & Prison worldwide<sup>1</sup>



# Evaluations of PNSPs<sup>1</sup>

- Scientific evaluations conducted in 11 prisons with syringe distribution programmes
- The provision of syringes did not lead to an increase in drug consumption or an increase in injecting
- Syringes were not used as weapons, and safe disposal of used needles was not a problem
- Syringe sharing disappeared almost completely
- In prisons where blood testing was performed, no new cases of HIV or Hepatitis infection were found

<sup>1</sup> Stöver, H. & Nelles, J.: Ten years of experience with needle and syringe exchange programmes in European Prisons. In: *International Journal of Drug Policy* Dec./2003, volume 14, Issues 5-6), pp 437-444

# Prison-based needle and syringe programs – UNODC Handbook

**In 60 prisons worldwide – in 9 countries**





# 20y of Prison-Needle Exchange –

## Where have we got from here?

- **Quantity**
  - Only little increase in the Number of PNSP
  - Numbers of clients decreasing
  - Coverage poor and patchy
  - Independent from responsibility of prison health care
- **Quality**
  - Confidentiality the key problem
  - Access often arbitrary
  - Perception of drug use important
  - Continuous work on the programme needed
  - HIV/AIDS no longer the driver

# Reduction of post-release mortality

# Factors contributing to increased risk of acute death upon release in people with opioid use disorder (OUD)

- Physiological: desensitisation to opiates
  - Fatal OD if pre-incarceration dose is consumed at liberty
- Behavioural:
  - Acute injection (increases drug bioavailability and respiratory effects )
  - Concurrent with alcohol and benzodiazepine (tranquilliser) (exacerbates suppression of respiratory drive)
  - Concurrent with cocaine (induction of cardiovascular arhythmias)

# Drug Related Death after Release

- Excess mortality risk in the first weeks after release
- European studies on excess mortality risks:
  - England/Wales (first week): X 29 (M) X 69 (F)
  - Denmark (first two weeks): X 62 (M/F).
  - France (first year): X 24 (M 15-34); X 274 (M 35-54)
  - Ireland: comp. Drug Related Deaths prison/no prison:
    - 28% of DRD had left prison since one week
    - 18 % of DRD had left prison since one month

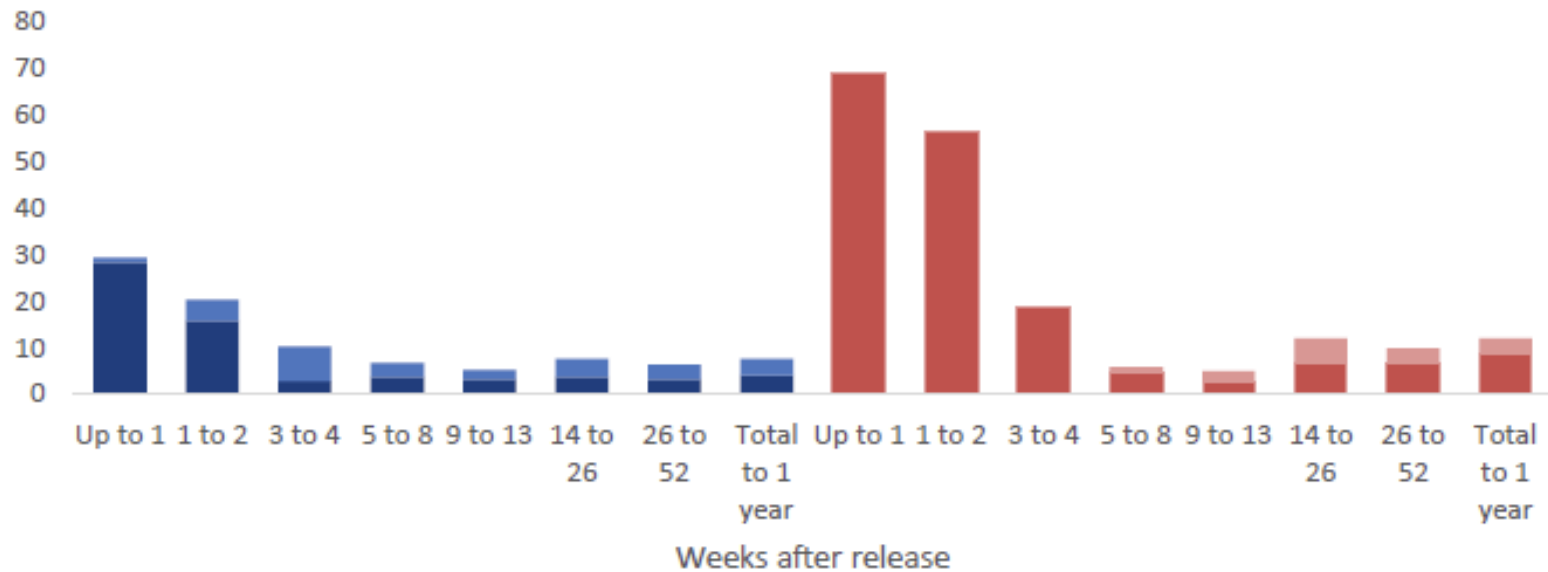


# Acute risk of drug-related death among newly released prisoners in England and Wales

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



■ Males - drug related ■ Males - other ■ Females - drug related ■ Females - other

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

**John Marsden<sup>1</sup> , Garry Stillwell<sup>1</sup>, Hayley Jones<sup>2</sup>, Alisha Cooper<sup>3</sup>, Brian Eastwood<sup>3</sup>, Michael Farrell<sup>4</sup>, Tim Lowden<sup>3</sup>, Nino Maddalena<sup>3</sup>, Chris Metcalfe<sup>2</sup>, Jenny Shaw<sup>5</sup> & Matthew Hickman<sup>2</sup>**

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Health & Wellbeing Journal Club - 03/03/2017

Maciej Czachorowski

Epi-scientist

PHE National Health & Justice Team

# 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.



**Take Home Naloxone (THN) for  
opioid overdose prevention in  
people who use drugs on  
release**

# THN: Example of Scotland

- Peer trainers/educators are used with success in Scotland to conduct **training on naloxone**
- **Giving out the kit** right in advance of release
- Several pilots worldwide
- Mortality rate reduced<sup>1</sup>

<sup>1</sup>Bird, S.; McAuley, A.; Perry, S.; Hunter, C. (2016): Effectiveness of Scotland's National Naloxone Programme for reducing opioid-related deaths: a before (2006–10) versus after (2011–13) comparison. In: *Addiction*, Volume 111, Issue 5 May 2016; pp. 883–891

# **Sexual Risks and Condom Programs**

# Condoms: from Maputo (Mozambique) to Munich (Germany) to Maseru (Lesotho)

- **Maputo/Mozambique:** ca. 24% of prisoners HIV+ - no condoms: „...might increase sexual activity ...“
- **Munich/Germany:** HIV-prevalence among prisoners 1,5% of men, that is 30-times higher than in the general population
- condoms available only via application – medical service
- 2005-2007 provision of 43 condoms to 13,000 prisoners
- Official legitimation: „prisoners are informed to behave responsibly right in the beginning“<sup>1</sup>
- Lesotho prison service has installed „condotainer“

<sup>1</sup>Bayerische Staatszeitung vom 29.08.2014

# 3. Conclusions



# Conclusions: from harm production to harm reduction

- Drug using/dependent prisoners are discriminated in a double sense: (i) incarcerated for coping symptoms of their drug dependence and (ii) not benefitting from the progresses in drug treatment/harm reduction, which have been achieved in the community.
- Putting drug users into prisons in high numbers (approx. 30%), means putting them at high risk of relapses, violence, sexual exploitation, debts, risks of infectious diseases.

# Future developments

- More attention on the particular situation of drug users in prisons is needed
- Abstinence-oriented treatment can only be one element of a comprehensive drug treatment service – it needs to be supplemented by harm reduction measures
- Integration of drug using prisoners: „Nothing about us without us“
- Utilizing international standards for changes in treatment (e.g. **the Nelson Mandela Rules**, CPT)

# Conclusions: from harm production to harm reduction

- A shift in the responsibility of healthcare from Justice to the ministry in charge of healthcare generally – like WHO, UNODC and many other international player are recommending – would probably lead to more and efficient healthcare, closely connected to community services.
- Alternatives to imprisonment would be an effective treatment to avoid health risks and health and social inequality.