

Hepatitis in Prison Settings

Hepatitis C Community Summit
18 - 19 April 2017 Amsterdam, Netherlands

Heino Stöver

Institute for Addiction Research
Frankfurt University of Applied Sciences/Germany

Acknowledgements:

**Jeffrey V Lazarus,
Kelly Safreed-Harmon,
Samya Stumo,
Geert Robaeys,
Rob Bielen,
Denise Ocampo**

Disclosure

There are no potential conflicts of interest or support that might cause a bias in my presentation!

Equivalence in Prison Health Care

- Prisoners are entitled, without discrimination, to a **standard of health care 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, as well as national prison policy and legislation in many countries.
- **Numerous international instruments and health declarations** detail the generally accepted rules, guidelines, principles, and standards related to prison conditions, prison medical care, and/or **HIV/AIDS/hepatitis** prevention and treatment in prison settings. The standards and norms outlined in these documents reflect established international human rights instruments and good public health practice, and should guide the development of appropriate, ethical, and effective responses to HIV/AIDS in prisons.
- Collaborative, inclusive, and intersectoral cooperation and action
- Evidence-based interventions

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.
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

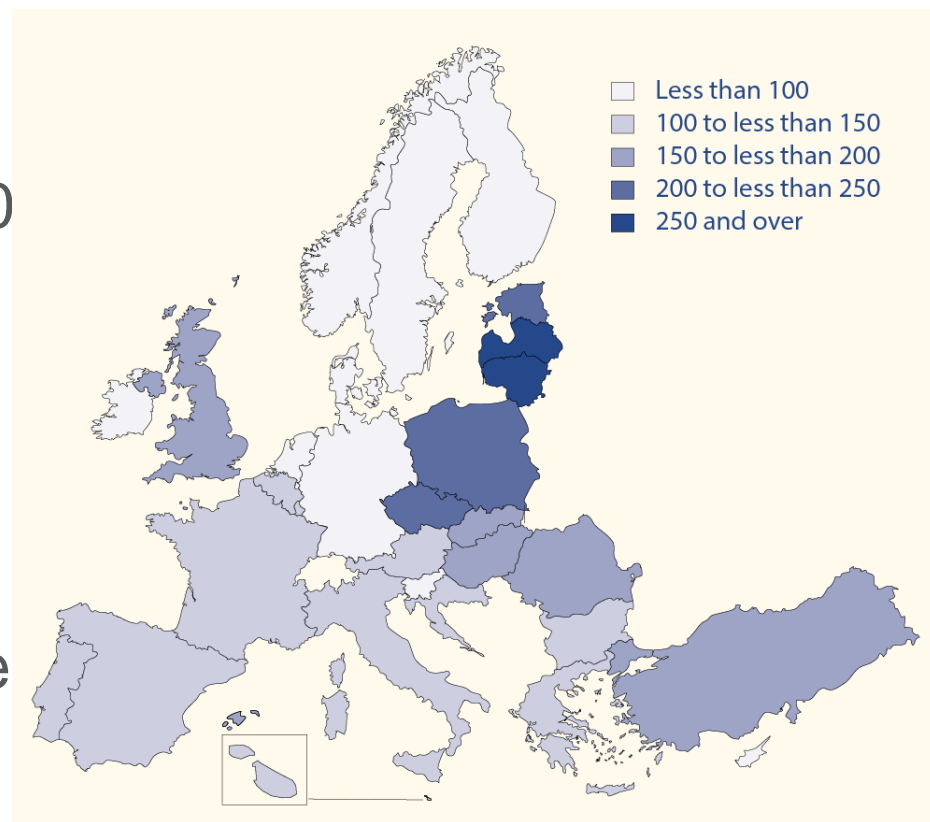
Global Prison Population

- 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 Europe²

- ~2000 prisons in EU-30
- Prison Population Rate*100,000
- 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



1 Sources: SPACE 2014 – Council of Europe

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

2 1st September 2013 – data collection Linda Monteneri et al. EMCDDA

Drug Users in European Prisons

- ~ One million prisoners per year in Europe
- 15-25% sentenced for drug related offences²
- US: 25-50% drug dependent on admission³
- Europe: ~ 1 in 6 prisoners problem drug users⁴
- 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 prison⁴
- 90% relapse to heroin after release⁵

¹ Stöver & Michels (2010): Drug use and opioid substitution treatment for prisoners. In: Harm Reduction Journal 2010, 7:17; ² Source: Council of Europe-SPACE I, Table 7; ³ Fazel et al. (2006); ⁴ Hedrich et al. (2012); ⁴ Stöver & Kastelic 2014, ⁵Stöver 2016

Transmission Risks of Infectious Diseases

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

are among the principal drivers of the global HCV epidemic in prisons¹.

Infectious Diseases in European Prisons¹

HCV+ among PWID in EU prison up to 91%

Odd Ratios for PWID with Prison/no prison experience

HIV: up to 3 OR

HCV: up to 7 OR

- **Imprisonment is an independent predictor for a HCV infection**
- **High risk of infection in the first period after prison release**
- **Co-infections HIV and HCV**
- SP: 90% of HIV+ are also HCV+
- 30% of HCV+ are also HIV+

Global Picture: Hepatitis in Prisons

- Over 30 million people spend time in prisons
- Among them 15.1% have HCV (1 546 500), 4.8% have chronic HBV (491,500), 3.8% have HIV (389,000 living with HIV), and 2.8% have active tuberculosis (286,000)¹
- Globally, the prevalence of HCV infection among prisoners is an estimated 30%¹
- This situation is often accompanied and exacerbated by high rates of HIV, tuberculosis (TB) STIs), drug dependence, and mental health problems in prison populations

¹ Dolan et al, 2016

Risk Factors

- Increasing prevalence of hepatitis C among prisoners is associated with:
 - Increasing age
 - Being female
 - Repeated imprisonment (AIHW 2010)
- Approx. 30-50% continue injecting while in prison (N. Crofts)

Epidemiology – Prison as High-Risk Environment¹

- **The perfect storm: incarceration and the high-risk environment perpetuating transmission of HIV, hepatitis C virus, and tuberculosis in Eastern Europe and Central Asia**

HCV, HIV in Prisons and General Population: Germany

	PWID	HCV	HIV
Prison	21,9*–29,6 %**	14,3*–17 %**	0,8**–1,2 %*
Literature (D) ¹	17-43%	12-20%	0,7 - 1,6%
Factor X	73–98	26–32	16–24

The case of Germany¹

Representative multi-city study among PWID (n=2077):

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

2. Interventions

HBV Vaccination¹

- There is now a strong realization that prisons provide an excellent opportunity for the delivery of hepatitis B vaccination, and a number of reports from England, France, Spain and the United States report both large and small-scale projects delivering accelerated vaccination programmes
- While compliance in community settings for full vaccination is disappointing, the prison setting enables completion of vaccination over a short period of time to a substantial proportion of the injecting drug-using population, because a significant proportion move through prison at some point during their drug-using career

¹ [Farrell M](#), [Strang J](#), [Stöver H](#). (2010): Hepatitis B vaccination in prisons: a much-needed targeted universal intervention. [Addiction](#). 2010 Feb;105(2):189-90.

Recommendations: screening, testing, diagnostic

- Testing and counseling on a voluntary basis
- **HBV/HCV screening for all prisoners at arrival is recommended** due to the numerous risk factors for hepatitis B and C they are exposed to (high concentration of people most-at-risk, overcrowding, sharing of sharpened objects such as razors and nail clippers, risk of transmission through homosexual intercourse, use of unsterilized instruments for tattoos)
- Prisoners should be **offered testing during their stay** in prison regularly
- Make use of modern non-invasive assessments methods/screening techniques (Fibrotest^(R) + Fibroscan^(R))

Recommendations (cont.)

- screening, testing, diagnostic

- Need to develop approaches to increase the uptake of testing by:
 - Participatory approach => peers
 - Raising awareness amongst prisoners and staff about HBV/HCV infection
 - Optimising testing pathways
 - Ensuring adequate pre- and post-test counselling => training
 - Developing care pathways for HBV/HCV that enable seamless continuity of care
 - Screening for co-infections

Recommendations for the Management of HBV/HCV in Prison Settings¹

- Prisoners should be provided with drug dependence treatment
- Opiate agonist therapy should be administered to opiate-dependent prisoners with hepatitis B and C infections in order to reduce the risks of transmission and reinfection
- There is a need to provide sterile injecting equipment and other harm reduction measures to those who inject while in prison.
- HCV-infected persons should be counselled on how to avoid transmitting HCV to others.
- Incarcerated persons with risk factors for HCV infection should be screened and treated for viral hepatitis infections.

Increase the Uptake of Testing and Treatment

- Scarce data on the implementation of those HCV recommendations in prisons in Europe¹ and globally²
- HBV AND HCV treatment in Europe is offered in only two thirds of European prisons
- In American jails and prisons HCV testing is only partially implemented³
- USA: 41 states 106,266 prisoners were supposed to have hepatitis C(10 percent of their prisoners) known to have hepatitis C on or about January 1, 2015, only 949 (0.89 percent) of those were being treated⁴

HBV/HCV Treatment Uptake in Prisons¹

- Prisons are an important setting for health interventions:
 - possible to monitor patients more closely,
 - opportunity to engage with a difficult-to-reach population
 - average length of sentences good chances for qualified preparation, and support
- Motivated patients
- Positive outcomes on drug use
- Increasing self-esteem of drug users

HBV/HCV Treatment Uptake in Prisons¹

- Upon release only approx. two-third of the prisoners were followed up by infectious disease specialists.
- This loss to follow up of one-third of patients stresses the need of an integrated approach: prison ↔ community

HBV/HCV Treatment

- By the use of **teleconferencing, videoconferencing, and e-mail communication** to connect specialists with primary care providers in prisons and rural areas
- State governments should increase funding for treating infected prisoners
- State departments of corrections should consider collaborating with other government agencies to **negotiate discounts with pharmaceutical companies and with qualified health care facilities to provide medications** through the federal 340B Drug Discount Program ([Beckman AL et al , 2016](#)).

3. Prevention

HIV-Prevention – The Comprehensive Package: 15 Key Interventions (UNODC/ILO 2012)

- 1. Information, education and communication (IEC)**
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

Information, Education, Communication

- During detention health education activities (also using the peer education approach) can be carried out, in particular for persons with no or minimal prior health education
- Safer – use training
- HCV infected persons should be counselled how to avoid HCV transmission to others
- Provide proper information in the respective languages about the offer of vaccination
- Provide a protocol in case of needle stick injuries and utilize these information for preventive purposes
- Include prisoner in the design of the conception of information/education/communication programmes
- Participation of prisoners in broader health education programmes key

Avoiding Imprisonment

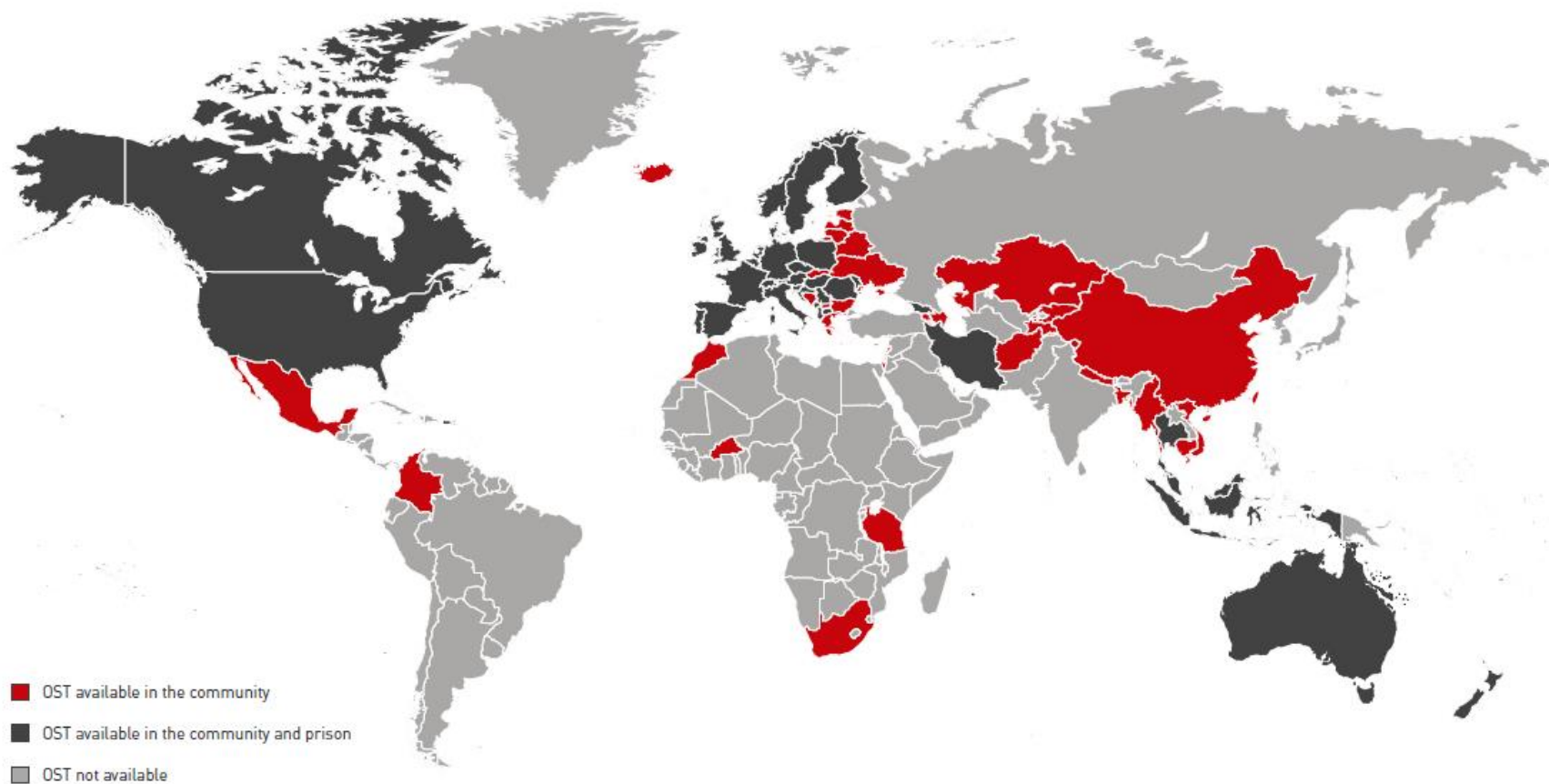
- Putting drug users into a risk environment
- Enormous costs with unproven success rates
- High mortality rates after release
- Not an active coping/learning strategy
- Not supporting people in becoming experts of their disease/disorder
- Hosting drug dependent people causes huge problems for prison management

4. Opioid Substitution Treatment (OST)

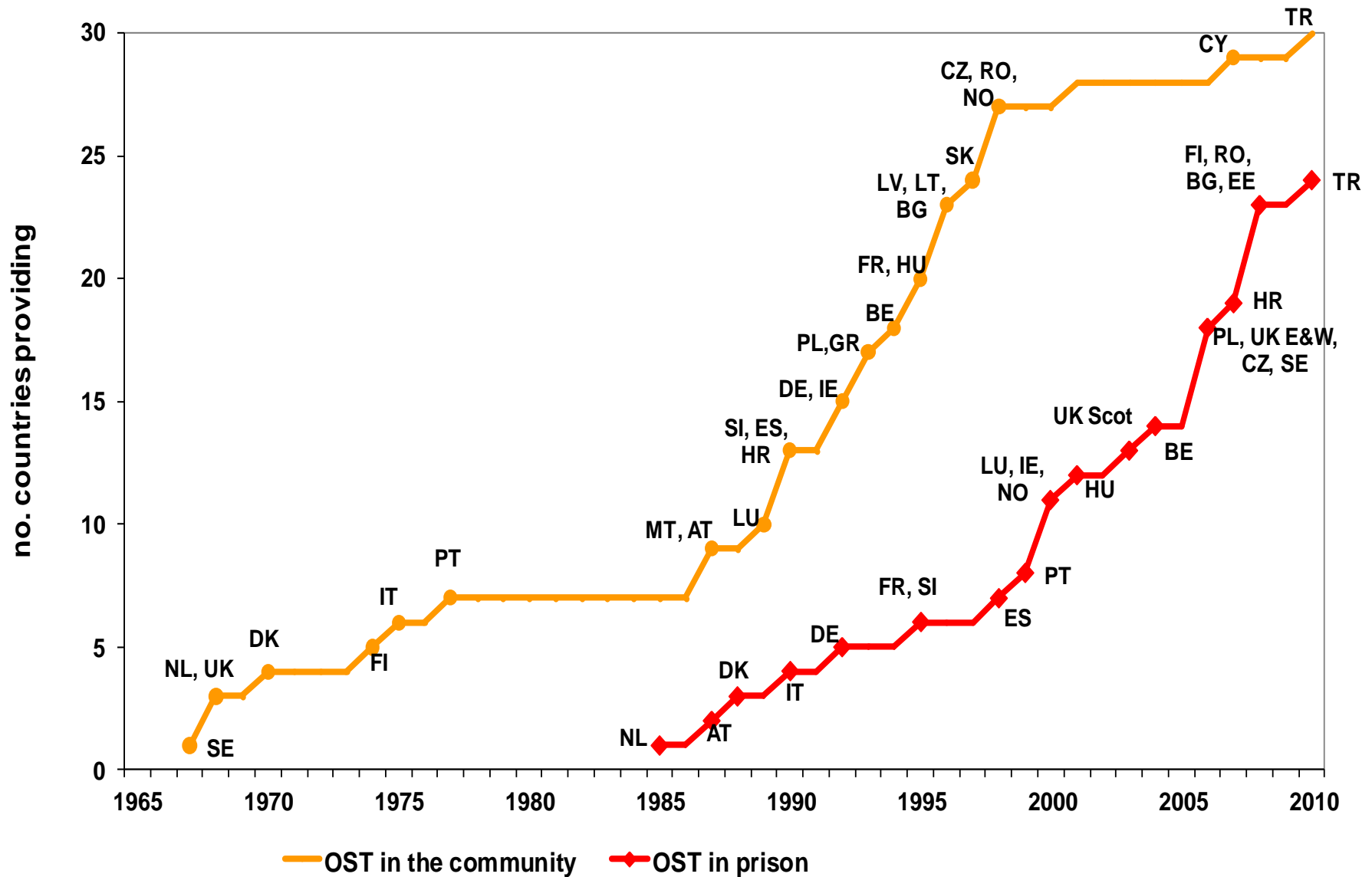
Implementation of OST¹

- OST provision varies from country to country, from region to region within the same country, and from prison to prison, even within the same prison
- Mainly used as continuation from community - 8 countries possible to initiate (AT, EE, FIN, FR, GE, LU, SI, SP)
- Percentage of prisoners receiving OST in Europe:
 - >10% in 7 countries; 3-10% in 9 countries; <3% in the other countries
 -)
- Variable doses: e.g. LU: 21 mg; RO 100 mg
- Increasing OST provision, but still low in prison
- Distinction between formal guidelines/recommendations and actual implementation

OST in Community & Prison



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



OST is effective!

- Review of 21 studies (incl. 6 RCTs)¹ 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.**

¹ Hedrich et al. 2012; Addiction; ² Marsden, J. et al. (2017): Addiction

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

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**

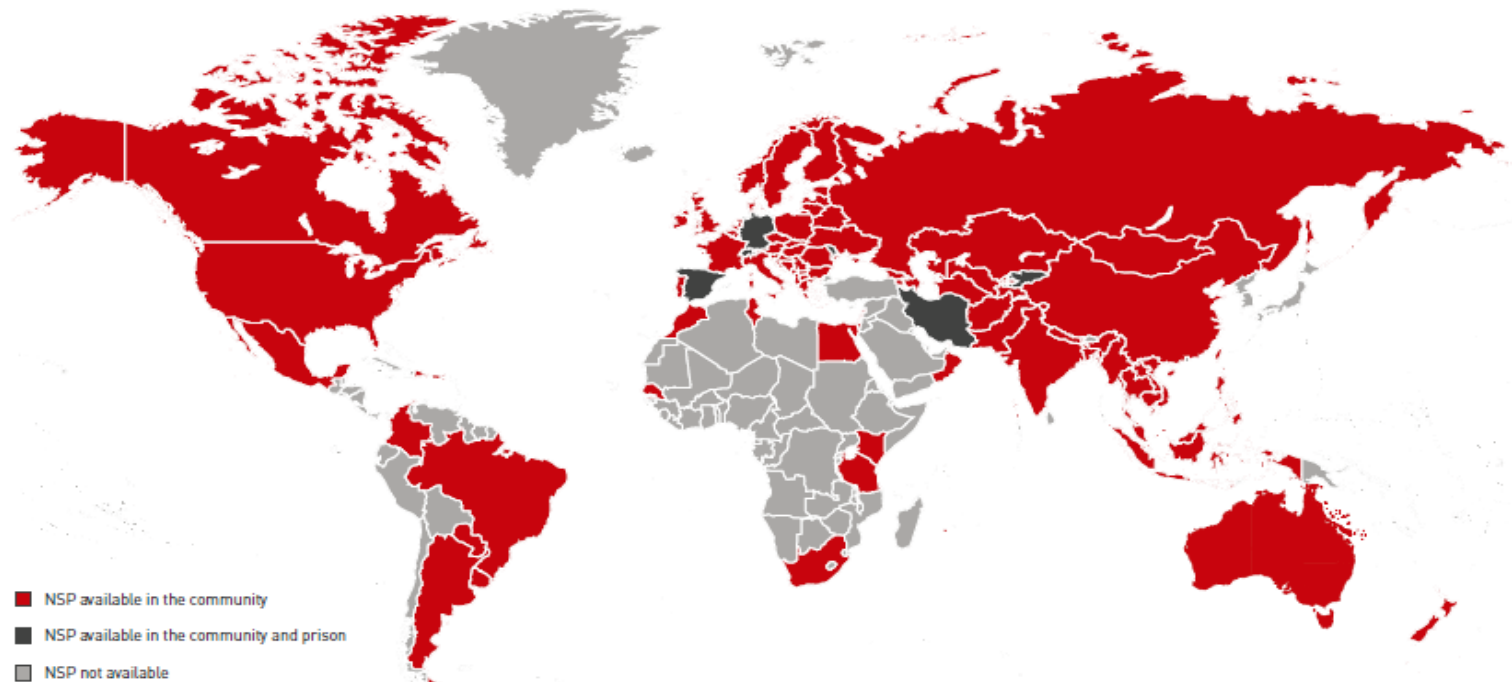
European Court of Human Rights

- The case 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!**



Prison-Based Needle Exchange

Prison-based Needle Exchange in Community & Prison



Evaluations of PNSPs¹

- 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

¹ 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



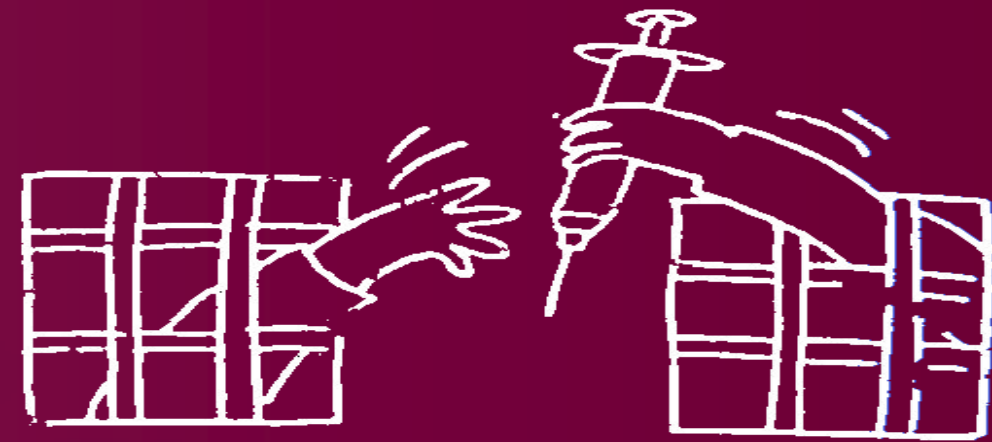
20y of Prison-Needle Exchange – Where have we got from here?

- **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



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.**
- A **multidisciplinary approach** through the collaboration of hepatologists, infectious disease experts, clinical psychologists, nurses and prison physicians should be adopted

From harm production to harm reduction

- The coverage of OAT and NSPs is insufficient in European prison settings. Only a minority of HCV infected patients are offered an antiviral treatment.
- 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“

From harm production to harm reduction

- Utilizing international standards for changes in treatment (e.g. **the Nelson Mandela Rules**, CPT)
- 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.

Contact

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

Prof. Dr. Heino Stöver

Frankfurt University of Applied Sciences, Faculty: Health and Social Work

Nibelungenplatz 1

D-60318 Frankfurt

T.: +49 69 1533-2823 oder /-2819 Mobil/e: +49 (0)162 133 45 33

hstoever@fb4.fra-uas.de

www.isff.info

+

www.HarmReduction.eu (new prison health website)