Strengthening health services to fight HIV/AIDS

Evidence for Action: What do we know about HIV prevention and treatment in prison settings?

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Satellite meeting on HIV/AIDS in prison settings

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WHO Evidence for Action (E4A) Series:

- **E4A Technical papers**
  - Needle and syringe programmes (2004)
  - Drug dependence treatment (2004)
  - Community-based outreach (2004)

- **E4A Policy briefs**
  - The above three
  - Reduction of HIV transmission in prison (2004)
  - Antiretroviral therapy (2005)

Comprehensive package of harm reduction interventions

1. **Allow IDUs to learn about HIV, their status and provide them with access to prevention**

   Targeted Information and education, VCT

   Needle and syringe programmes (NSP)

   Condom programming

2. **Allow IDUs to access treatment for drug dependence**

   Opioid Substitution Therapy (OST)

3. **Allow IDUs to receive medical treatment**

   HIV care, including ART

   Primary care, prevention and treatment of STI, hepatitis and tuberculosis

- **Universal Access**

Acknowledgments

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Background

- HIV prevalence in prisons higher than in the general population (Dolan et al., 2007)
  - high rates of infections among IDUs and high imprisonment rates of IDUs
  - high rates of HIV in general population
- Hepatitis C rates are even higher (Macalino et al., 2004)

HIV prevalence in prisons in selected countries

Country	HIV prevalence in prisons in %	Est. adult HIV prevalence 2005 in %
Canada	1-12	0.2-0.5
USA	1.9	0.4-1.0
Brazil	3.2-20	0.3-1.6
Estonia	8.8-23.9	1
Spain	Up to 14	0.4-1.0
Russian Federation	4 and higher	0.7-1.8
Viet Nam	28.4	0.3-0.9
Indonesia	4-22	0.1-0.2
Ukraine	16-32 (5 regions)	0.8-4.3
South Africa	41.4	16.8-20.7

Background: risk behaviours in prison

- Risk behaviours are prevalent in prisons around the world (Dolan et al., 2007)
- IDU is of particular concern
- Studies report high levels of IDU in prison
  - many reduce or stop injecting when entering prison, but resume injecting upon release
  - many people start injecting in prison
  - those who inject will usually inject less frequently, but are more likely to share injecting equipment
  - those who inject share with a population with high HIV prevalence

Injecting & needle sharing in prison

Location	N	% injected	% shared	Reference
Australia(NSW)	7 studies	31-74	70-94	Dolan & Wodak 1999
Canada	4,285	11		Correc. Services Canada 1996
Canada	105 (F)	19		Di Censo, Dias, Gahagan 2003
Canada	>1,200	27	80	Small et al. 2005
England	378	11.6	73	Edwards et al 1999
Europe*	871	13		Rotily et al 2001
EU & Nor.		0.2-34		EMCDD 2005
Greece	861	20.2	83	Koulierakis et al 1999
Mauritius	200	2-11		RSA Mauritius 2005
RF	1,044	10	66	Frost, Tscherkov 2002
RF	277	13		Dolan et al 2004
Thailand	689	25	78	Thaisri et al 2003
USA	472	15		Clarke et al 2001

Risk behaviours and their consequences

- Other risk behaviours also prevalent
  - sexual activity, including rape; tattooing; re-use of medical equipment
- Outbreaks of HIV in prisons have been documented (Dolan & Wodak, 1999; MacDonald, 2005; Bobrik et al., 2005; Taylor et al., 1995)
- HIV can spread rapidly among prisoners -and to the community- unless effective action is taken

Comprehensive HIV programmes in prisons

- Most countries introduced HIV programmes in prisons
- Many are small in scale or exclude necessary interventions
- Urgent need to introduce and scale up comprehensive programmes
  - information and education, particularly through peers
  - condoms & other measures to prevent sexual transmission
  - needle and syringe programmes
  - drug dependence treatment, particularly opioid substitution therapy
  - voluntary counselling and HIV testing
  - HIV care and support, including antiretroviral treatment

New E4A papers on HIV in prisons

- **4 Technical papers** on managing HIV in prisons
  - needle and syringe programmes and bleach;
  - provision of condoms and other measures to prevent sexual transmission;
  - opioid substitution therapies and other drug treatment
  - HIV care, treatment, and support

- **A comprehensive review** on *Effectiveness of Interventions to Manage HIV in Prisons*

HIV Education

- Education is least controversial measure
- It leads to increased knowledge (eg, Vaz, Gloyd & Trindade, 1996)
- However, evidence about its effect on behaviour in prison is limited (Braithwaite, Hammett & Mayberry, 1996)
- Peer education is more likely to be effective (Grinstead et al, 1999)
- **Education is not enough**

Needle and syringe programmes (NSPs)

- First prison NSP established in Switzerland in 1992
- Now more than 50 in 11 countries
- In some (Spain, Kyrgyzstan, Moldova) rapid scale-up
- Ukraine, Scotland, Portugal pilot projects in 2007

Evidence NSPs (Stöver & Nelles, 2003; Stark et al., 2005; Rutter et al., 2001)

Prison	Incidence HIV&HCV	Needle sharing	Drug use	Injecting
Am Hasenburg (D)	No data	Strongly reduced	No increase	No increase
Basauri (Es)	No seroconv	Strongly reduced	No increase	No increase
Hannoversand (D)	No data	Strongly reduced	No increase	No increase
Hindelbank (CH)	No seroconv	Strongly reduced	Decrease	No increase
Lehrter Strasse & Lichtenburg (D)	No HIV but HCV	Strongly reduced	No increase	No increase
Linger 1 (D)	No seroconv	Strongly reduced	No increase	No increase
Realta (CH)	No seroconv	Single cases	Decrease	No increase
Vechta (D)	No seroconv	Strongly reduced	No increase	No increase
Vierlande (D)	No seroconv	Little change or reduction	No increase	No increase

Evidence: NSPs (The example of Spain)

- 1st pilot project in 1997
- Evaluation showed positive results
- Order to implement NSPs in all prisons

- Between 2000 and 2004:
  - HCV seroconversion rate down from 5.1 to 2.0%
  - HIV seroconversion rate down from 0.6 to 0.2%

(Public Health Agency of Canada, 2006)

NSPs (Absence of negative consequences)

- **No** evidence that prison-based NSPs have **negative consequences**
- Needles are not used as weapons
- No increase in drug use

NSPs: Determinants of success

- Easy and confidential access to prison NSPs
  - an effective model of distribution by fellow prisoners trained by health-care staff or NGOs
- Support by prison staff and prisoners
- Emphasizing the benefits for prisoners, staff, and the public

Recommendations NSPs

- Need to introduce NSPs urgently and expand implementation to scale
- Prisoners need to have easy, confidential access to NSPs
- Pilot programmes should not delay the expansion of NSPs
- Additional research in resource-poor settings to identify service delivery models

Bleach and decontamination strategies

- Distribution is **feasible** and does **not compromise security**
- **Doubts about the effectiveness**
  - Conditions in prisons reduce probability of effective decontamination
- **Second-line strategy to NSPs**

Sources: Dolan et al., 1994; Dolan et al., 1996; CSC, 1999, WHO, 2004, Small, 2005; Taylor & Goldberg, 1996)

Recommendations Bleach

- Bleach programmes **where authorities** continue to **oppose to NSPs**
- **However, they cannot replace NSPs**
- Need to **continue efforts** to introduce NSPs

Opioid Substitution Therapies (OST) 1

- OST most effective treatment for opioid dependence (WHO, 2004; WHO, 2005)
- Effectiveness & acceptability of OST *in prisons* have been shown (Australia: Dolan et al., 2003; Iran: Bayanzadeh et al., 2004; Puerto Rico: Heimer et al., 2005; Spain: Boguna, 1997; Canada: Johnson et al., 2001)
- Adequate OST programmes reduce IDU and associated needle sharing
- Studies found additional benefits:
  - OST in prison facilitates post-release treatment
  - Reduced re-incarceration
  - Positive effect on institutional behaviour
  - OST helps reduce risk of overdose upon release

2. Recommendations OST

- Need to introduce OST urgently in prisons in countries with OST in the community
- Expand to scale
- Continuity of care

Other forms of drug dependence treatment

Other forms of drug dependence treatment may play a role in managing HIV, but:

- Few programmes have been subject to rigorous outcome evaluations
- Little data on effectiveness *as an HIV prevention strategy*
- No evidence that participation in boot camp programmes reduces recidivism or drug use (Pearson & Lipton, 1999; Mitchell, Wilson, MacKenzie, 2006)
- Nevertheless, *in addition to OST,* prison systems should offer other drug dependence treatment options

Aftercare and alternatives

- Aftercare is essential
- Reducing prison population
  - Alternatives to imprisonment

"Governments may … wish to review their penal admission policies, particularly where drug abusers are concerned, in the light of the AIDS epidemic and its impact on prisons." (WHO, 1987)

Condoms

- Providing condoms in prisons is feasible in a wide range of prison settings (Correctional Service Canada, 1999; Dolan, Lowe & Shearer, 2004; May and Williams, 2002; Yap et al., 2007).
- No prison system allowing condoms has reported security problems or any other negative consequences
- Prisoners use condoms to prevent infection when accessible and available
- **Prison authorities should make condoms easily and discreetly accessible in all prisons**

Other measures to reduce sexual transmission

- Provision of condoms is required, but not enough
- Prison systems also need to take measures to combat rape and other forms of **sexual abuse**
- Provide **post-exposure prophylaxis (PEP)**

HIV care, treatment & support (1)

- Prisoners respond well to ART (Springer et al., 2004; Srisuphanthavorn et al., 2006; Winarso et al., 2006)
- Adherence rates in prisons as high/higher than in the community (Soto Blanco, Perez, March, 2005; Pontali, 2005)
- Careful discharge planning and linkage to community care (Wood et al., 2003; Palepu, 2003; Stephenson et al., 2005; Springer et al., 2004)

Recommendations HIV care, treatment, & support

- As ART is becoming available in low- and middle- income countries, it must also become available in prison systems
- Prison systems must be included in all aspects of scale-up
- Ministries of Health and prison systems should collaborate closely
- At *Regional and Local level*, prisons should
    - Form partnerships with health clinics, hospitals, universities and NGOs
    - Develop integrated rather than parallel care and treatment programmes

Recommendations HIV care, treatment, support (2)

- Ensuring **continuity of care**
- Easy access to **voluntary HIV testing and counselling**

Conclusion: From evidence to action

"All prisoners have the right to receive health care, including preventive measures, equivalent to that available in the community." (WHO, 1993)

For further information…

- Evidence for action papers
  http://www.who.int/hiv/idu/en/index.html
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