Preventive measures for prisoners

25th VHPB meeting
Veyrier du Lac, November 18-19 2004

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Centre Hospitalier du Pays d’Aix
Preventive measures: step by step

**1989:** Mandatory delivery of a condom upon release

**1993:** Instigation of anonymous testing centers in prisons

**1994:** Reorganization of the healthcare system in prison: prevention emphasised

**1996:** Harm reduction tools: opiate maintenance therapy, bleach, condoms

**1997:** « Health – Justice » mission

**2000:** Recommendations of the mission

French prisoners demographics: an increasing population

### Risk behaviours in prison

1998 ORS PACA survey

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>IVDU during lifetime</td>
<td>155 / 1212</td>
<td>13 %</td>
</tr>
<tr>
<td>IVDU in prison</td>
<td>47 / 155</td>
<td>30 %</td>
</tr>
<tr>
<td>First injection in prison</td>
<td>8 / 155</td>
<td>5 %</td>
</tr>
<tr>
<td>Share of material</td>
<td>10 / 47</td>
<td>21 %</td>
</tr>
<tr>
<td>Homosexual interc. in prison</td>
<td>14</td>
<td>1.4 %</td>
</tr>
<tr>
<td>Heterosexual interc. in prison</td>
<td>94</td>
<td>8 %</td>
</tr>
<tr>
<td>No condom at last intercourse</td>
<td>68</td>
<td>66 %</td>
</tr>
<tr>
<td>Tatooing in prison</td>
<td>235</td>
<td>21 %</td>
</tr>
</tbody>
</table>

## European survey: IVDU during imprisonment

<table>
<thead>
<tr>
<th></th>
<th>France</th>
<th>Germany</th>
<th>Italy</th>
<th>Portugal</th>
<th>Spain</th>
<th>Sweden</th>
<th>Belgium</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>IVDU lifetime</strong></td>
<td>155 (13)</td>
<td>144 (33)</td>
<td>192 (28)</td>
<td>279 (52)</td>
<td>48 (48)</td>
<td>196 (64)</td>
<td>26 (22)</td>
</tr>
<tr>
<td><strong>IVDU in prison</strong></td>
<td>47 (30)</td>
<td>50 (35)</td>
<td>44 (23)</td>
<td>145 (52)</td>
<td>31 (65)</td>
<td>121 (62)</td>
<td>9 (35)</td>
</tr>
<tr>
<td><strong>First injection in prison</strong></td>
<td>8 (5)</td>
<td>12 (8)</td>
<td>11 (6)</td>
<td>17 (6)</td>
<td>4 (8)</td>
<td>11 (6)</td>
<td>3 (12)</td>
</tr>
<tr>
<td><strong>Material shared</strong></td>
<td>10 (21)</td>
<td>33 (66)</td>
<td>33 (75)</td>
<td>105 (72)</td>
<td>20 (65)</td>
<td>0</td>
<td>5 (56)</td>
</tr>
</tbody>
</table>

### Factors associated with initiation of injection in prison

**Multivariate analysis**

<table>
<thead>
<tr>
<th></th>
<th>Odds ratio</th>
<th>p</th>
<th>CI 95 %</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>year of starting of injection</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 1983</td>
<td>Ref</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1983-1994</td>
<td>2.57</td>
<td>0.02</td>
<td>1.13 – 5.88</td>
</tr>
<tr>
<td>&gt; 1994</td>
<td><strong>4.61</strong></td>
<td>0.002</td>
<td>1.78 – 11.95</td>
</tr>
</tbody>
</table>

HCV seropositivity on admission

1997 DREES study:
Prevalence based on incoming inmates declarations

HCV seropositivity: 4.4 %

2000 national survey among prison medical units:
81/172 questionnaires returned; Population of 24,045 inmates.

HCV seroprevalence: 6.3 % (0-20)

European survey: HCV prevalence on salivary testing

<table>
<thead>
<tr>
<th></th>
<th>France</th>
<th>Germany</th>
<th>Italy</th>
<th>Portugal</th>
<th>Belgium</th>
</tr>
</thead>
<tbody>
<tr>
<td>participated</td>
<td>1212</td>
<td>437</td>
<td>678</td>
<td>535</td>
<td>115</td>
</tr>
<tr>
<td>tested</td>
<td>954</td>
<td>436</td>
<td>589</td>
<td>418</td>
<td>112</td>
</tr>
<tr>
<td>HCV pos (%)</td>
<td>79 (8)</td>
<td>21 (5)</td>
<td>140 (24)</td>
<td>126 (34)</td>
<td>12 (11)</td>
</tr>
<tr>
<td>Previously tested</td>
<td>335 (31)</td>
<td>164 (41)</td>
<td>255 (42)</td>
<td>278 (54)</td>
<td>15 (14)</td>
</tr>
<tr>
<td>Declared HCV neg.</td>
<td>10 / 76 (13)</td>
<td>2 / 21 (10)</td>
<td>30 / 134 (22)</td>
<td>22 / 125 (18)</td>
<td>1 / 11 (8)</td>
</tr>
</tbody>
</table>

M. Rotily. Epidémiologie de l’infection à VIH et des hépatites virales en milieu carcéral. Thèse 01 AIX 300 40. 2001
HCV Prevalence on admission
Recent evolution

256 new +

17 new +

C Vernay-Vaisse. 2003 annual activity report. CDAG. Baumettes' prison. CG13
Lower HCV seropositivity among recent injectors

% HCV seropositive

IVDU year of starting:
- <1986
- 1987-90
- 1990-95
- 1996-98
- >1999

C Vernay-Vaisse. 2003 annual activity report. CDAG. Baumettes’ prison. CG13
# Evolution of Risk Behaviours

## 2003 Data from the Baumettes’ CDAG

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ex IVDU</td>
<td>7 %</td>
<td>5 %</td>
<td>7 %</td>
</tr>
<tr>
<td>Active IVDU</td>
<td>2 %</td>
<td>2 %</td>
<td>2 %</td>
</tr>
<tr>
<td>Total IVDU</td>
<td>9 %</td>
<td>7 %</td>
<td>9 %</td>
</tr>
<tr>
<td>Intranasal (non IVDU)</td>
<td>11 %</td>
<td>6 %</td>
<td>11 %</td>
</tr>
</tbody>
</table>

Among 187 intranasal (non IV) DU tested, 98 % were HCV seronegative.

C Vernay-Vaisse. 2003 annual activity report. CDAG. Baumettes’ prison. CG13
Correlation between HCV prevalence and IVDU over-representation in prison

Multicentric European survey:
HCV seropositivity among 2445 inmates tested:

- IVDU: 50%
- Non IVDU: 3.2%

2003 Baumettes’ CDAG data
HCV seropositivity among:

- IVDU: 63%
- Non IVDU: 1.4%

1998 ORS PACA study:
Among 1212 inmates questioned:

- 77% of the IVDU previously incarcerated vs.
- 46% of the non IVDU
HBV seropositivity on admission

1997 DREES study:
HBV seropositivity: 2.3 %

2003 data from the Baumettes’ CDAG:
Prevalence based on proposed testing on admission in prison
Positive HBs Ag : 2 %

C Vernay-Vaisse. 2003 annual activity report. CDAG. Baumettes’ prison. CG13
Incidence of HCV/HBV infections in prison

Prospective scottish cohort study:
Anonymous HCV testing + self-administered questionnaire
Recruitment: 612 / 719 (85% participation rate); Follow-up: 375/441

HCV incidence for 100 person-years of incarceration was:
- 1 for inmates who reported never having injected drugs
- 12 for those who reported ever having injected drugs
- 19 for inmates who reported having injected drugs during f-u
- 27 for inmates who reported having shared needles/syringes during f-u

Australian study:
Two index pts co-infected HIV-HCV shared material during 14 months.

Four HCV seroconversions observed among the potential cohort (14 %)

Less injectors outside
Lower rate of HCV sero+ among DU

Admission

Most urgent and minimal goal to achieve:
A seronegative inmate at admission must remain seronegative on release

Release

High risk behaviours in prison

GENERAL POPULATION

PRISON
Screening for HCV or HBV infection

Harm reduction tools

- Substitution therapy
- Syringe exchange programs
- Material desinfection with bleach
- Condoms
- Familial life units

Educative measures
Screening for HCV and HBV

• The screening policy in France
  On admission - strictly anonymous
  Tests proposed & results transmitted within a counselling clinic
  HCV proposed if risk factors identified

• Prison enables access to tests:
  Previous declared HCV testing had been done in 69 % of the cases in prison

M-C Mouquet et al. La santé à l’entrée en prison. DRESS –Etudes et résultats 1999 4 :1-10
Screening for HCV or HBV infection

**Harm reduction tools**

- Substitution treatments
- Syringe exchange programs
- Material desinfection with bleach
- Condoms
- Familial life units

**Educative measures**
Situation in 2000

On admission:
7% of inmates are on maintenance therapy (90% under HDB)
Active IVDU: 11% under methadone; 34% under HDB.

First weeks of imprisonment:
High rate of cessation of maintenance therapy
Methadone: 13 to 73%; HDB: 22 to 60%.

Increased risk of injection in case of cessation of MT:
30% of A IVDU with cessation of methadone injected in prison
52% of A IVDU with cessation of HDB injected in prison

Heterogenous access to MT

The relation to risk changes in prison: prevention becomes neglected.

## Situation in 2003

<table>
<thead>
<tr>
<th>Date</th>
<th>n Inmates</th>
<th>% Inmates under MT</th>
<th>% Opiate Dependant Inmates under MT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mar. 1998</td>
<td>52,000</td>
<td>2 %</td>
<td>6 %</td>
</tr>
<tr>
<td>Nov. 1999</td>
<td>50,000</td>
<td>3.3 %</td>
<td>11 %</td>
</tr>
<tr>
<td>Dec. 2001</td>
<td>47,000</td>
<td>5.4 %</td>
<td>18 %</td>
</tr>
<tr>
<td>Mar. 2003</td>
<td>11,168</td>
<td>7.8 %</td>
<td>NA</td>
</tr>
</tbody>
</table>

Higher % in prisons with specialized addiction care centers: 9.64 % vs 6.26 %

Lower % in long term sentence prisons: 5.7 % vs 8.57 %

Rapport pour la commission nationale consultative des traitements de substitution. L. Michel. 01 avril 2003.
Screening for HCV or HBV infection

Harm reduction tools
- Substitution treatments
- Syringe exchange programs
- Material desinfection with bleach
- Condoms
- Familial life units

Educative measures
Syringe exchange programs

1994 Hindelbank’s prison in Switzerland.

Less material share: 8/19 before vs 1/19 one year later
No abcess. No more Overdose. No DU increase

1996 Vechta and Lingen prison in Germany

252 inmates participated to the program.
Exchange via automatic distributor more appreciated
Syringes return rate: 98 %
Material share decrease: 54 / 142 vs 4/ 142 two years later
No assault with a syringe. No DU increase

1997 Basauri prison in Spain

Syringe exchange programs

2004: no experimental program in France

Despite propositions such as distribution of syringes pre-filled with injectable buprenorphin or methadone

Paradoxe of preventive measures that imply acceptation and tolerance of IVDU in prison and a legislative context which forbids it

Screening for HCV or HBV infection

Harm reduction tools

- Substitution treatments
- Syringe exchange programs
- Material desinfection with bleach
- Condoms
- Familial life units

Educative measures
Relevance of sterilisation with bleach

In France: 12° conditionned bleach (3.6 % active chlore)

Efficient on HIV, HBV and HCV if protocol respected:
Mechanical rinsing with water
Total contact time with bleach of at least one minute

Numerous risk factors including material share: tattooing, piercing, hairdressing

Tattooing = independant risk factor for being HCV seropositive in two surveys among inmates (questionnaire & HCV testing)

Screening for HCV or HBV infection

Harm reduction tools

- Substitution treatments
- Syringe exchange programs
- Material desinfection with bleach
- Condoms
- Familial life units

Educative measures
Conclusions of the Health-Justice mission in 2000

Condoms available in 23 / 25 prisons questioned

Most often in the medical units: 16 % only propose other locations

Lack of information : 34% believe there is no condom in prison

Access too controlled : 29% declare condoms must be required for

Specific difficulties: homophobia, violent intercourses

In 2004

One unique prison, the Baumettes in Marseille, has succeeded in implanting a condom distributor inside the prison

Screening for HCV or HBV infection

**Harm reduction tools**
- Substitution treatments
- Syringe exchange programs
- Material desinfection with bleach
- Condoms
- Familial life units

**Educative measures**
The ongoing french experience

UEVF: Experimental units of familial visits
Three pilot centers (long term sentences)
Started September 2003 at the CD of Rennes
Visits authorized once a trimester
Special training for the prison officers in charge
Evaluation planned first semester 2005

UVF Communiqué de synthèse du ministère de la justice 29 septembre 2003
A program of educative actions yearly defined

Prison social teams strongly invested in this educative mission

True partnerships established in terms of actors and of fundings (associations, institutions: DDASS, DRASS, CODES, CRES.)

Example of the PACA region experience:
  DRSP co-funding educative measures since 2000
  Overall educative measures multiplied by 2 since 2000
  In 2004, 9 various educative actions on HIV, HBV, HCV theme

Qualitative observations:
  Work on the relation more than on the tool
  Promote peer education via peer training programs
HBV Immunization

Low rate of complete HBV immunisation on admission: 14 - 28 %

Decreasing post- immunisation status
24 % of the inmates tested in 2003 presented an isolated Anti-HBs antibody versus one third in 2002

Poor knowledge of a previous immunization:
Two thirds of the inmates with a post-immune serological status did not know they had been vaccinated.

Communication problem:
69 % of the inmates would accept an immunisation if proposed

Medical teams: inmates refuse the proposed immunisation

M. Rotily. ORS PACA. Rapport final 1998 pour la mission santé justice;
C Vernay-Vaisse. 2003 annual activity report. CDAG. Baumettes’ prison. CG13
Conclusions

Larger and more homogeneous access to opiate maintenance treatments
Innovative pilot programs
Development of educative measures

Little explanation concerning material sterilisation with bleach
Difficult delivery of condoms outside the medical units
Conclusions

Reconduct a large serological and behavioral survey (consider PCR confirmation when HCV seropositive)

Focus on new behaviours, HBV infection & immunisation

Promote intra-muros partnerships on concrete objectives

Necessary public debate on legislation to promote a pragmatic preventive strategy
Thank you to

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