Addictive behaviors and psychiatric comorbidities of incarcerated women in a French overseas territory

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Abstract

**Aim:** To describe addictive behaviors and psychiatric comorbidities of incarcerated women in Reunion Island, France (overseas territory).

**Methods:** From January to October 2015, women incarcerated at the penitentiary of Reunion Island were proposed an interview with the modified Addiction Severity Index (ASI) and the Mini International Neuropsychiatric Interview (MINI).

**Results:** 32 women were included (participation rate 73%) Average age was 35.5 y.o. (SD=12.7 y.). Half of our sample was awaiting trial (n=16). Average duration of incarceration was 19 months (SD=49 months). Sentences ranged from 1 month to 30 years. Sixty percent of subjects (n=19) reported current use of tobacco. Other substances used in the past 30 days were prescribed benzodiazepines (34% n=11) and prescribed opioids (n=1). Fifteen subjects (47%) met criteria for current tobacco dependence, 4 (13%) for alcohol, 4 (13%) for sedatives and 1 (3%) for cannabis. A third of subjects (34% n=11) had received some treatment for addiction in the past. According to the mASI (interviewer severity ratings ≥4), half of the sample (50% n=16) exhibited a current need for tobacco treatment, 25% (n=8) for alcohol, and 16% for other substances. Nearly a third (31% n=10) of women reported substance use during pregnancy. Also, 20 women (63%) were in need of psychological treatment. 41% (n=13) had current mood disorder (75% lifetime), and half (50% n=23) had current anxiety disorder (50% lifetime). Twenty-four women (75%) had received psychological treatment at any time during incarceration.

**Conclusion:** Despite the efforts of prison care services, a large proportion of incarcerated women still remain in need for help for addiction and psychological comorbidities. An improvement in the detection of addictions and psychiatric comorbidities and treatment offer is needed.
Introduction: Reunion Island

- French overseas territory
  - Indian ocean
  - 833,944 inhabitants - 2512 km²
Introduction: Reunion Island

- Insularity
- Young population
- Economic and social insecurity
- Violence against women higher than in mainland France
- Morbidity and mortality related to alcohol higher than in mainland France
- Use of alcohol and substances different from mainland France
Objective

To describe addictive behaviors and psychiatric comorbidities of incarcerated women in Reunion Island, France (overseas territory)
Method – Study design & subjects

• Cross-sectional study

• Subjects: All women incarcerated at the penitentiary of Reunion Island between January and October 2015

• Exclusion criteria: risk of violence (penitentiary staff advice), not residing in Reunion Island, difficulty of comprehension
Method – Procedure & Instruments

- Data collected at the penitentiary (confidentiality)

- 1 interview for presentation of the study, criteria verification, participation agreement

- 1 interview for data collection (trained evaluator)
  - Modified Addiction Severity Index (mASI) (Denis 2015)
    - Characteristics of subjects, Severity of use
  - MINI International Neuropsychiatric Interview (DSM-IV)
    - Dependence & Psychiatric comorbidities diagnosis
Results – Sample description

• 32 women included (73%)
  – 54 women incarcerated January – Oct. 2015
  – 48 eligible, 44 solicited (6 short incarceration missed)
  – 8 refusal, 4 interview missed (short incarceration)

• Average age 39 y.o. (SD= 13 y.)
• 63% (n=20) education < high school
• 50% (n=16) in a relationship
• 88% (n=28) ≥ 1 child
  • Average 3.3 children (SD=2.5)
Results – Incarceration

• 50% (n=16) condemned; 50% awaiting trial
  – Drug charges: 9% (n=3)

• Sentences: 1 month → 30 years

• Incarcerated since 1 month → 20 years
  – Average 19 months (SD=49 m.)

• 47% (n=15) satisfied with conditions of imprisonment

• 38% (n=12) worked

• 75% (n=24) received psychological support
# Results – Severity of use (ASI)

<table>
<thead>
<tr>
<th></th>
<th>Lifetime use (≥ 1 year)</th>
<th>Current use (last 30 days)</th>
<th>Current Problem $^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tobacco</strong></td>
<td>66% (21)</td>
<td>59% (19)</td>
<td>44% (14)</td>
</tr>
<tr>
<td><strong>Alcohol intox.</strong></td>
<td>28% (9)</td>
<td>0</td>
<td>22% (7)</td>
</tr>
<tr>
<td><strong>Sedatives</strong></td>
<td>19% (6)</td>
<td>34% (11) $^1$</td>
<td>9% (3)</td>
</tr>
<tr>
<td><strong>Cannabis</strong></td>
<td>28% (9)</td>
<td>0</td>
<td>6% (2)</td>
</tr>
<tr>
<td><strong>Opiates</strong></td>
<td>3% (1) $^1$</td>
<td>3% (1) $^1$</td>
<td>0</td>
</tr>
<tr>
<td><strong>Other substances</strong></td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Gambling</strong></td>
<td>19% (6)</td>
<td>0</td>
<td>3% (1)</td>
</tr>
<tr>
<td><strong>Gaming</strong></td>
<td>6% (2)</td>
<td>0</td>
<td>3% (1)</td>
</tr>
</tbody>
</table>

$^1$: prescribed use (opiate: antalgic)  
$^2$: Reported by subjects
Results – Severity of use (ASI)

• **72%** (n=23) reported any current problem
• **13%** (n=3) reported ≥ 2 current problems
  – Cannabis + Tobacco (n=2)
  – Tobacco + Cannabis (n=1)

• **31%** (n=10) reported use during pregnancy
Results – Severity of use (ASI)

• 34% (n=11) had addiction treatment history
  – Tobacco: 16% (n=5) / Alcohol: 19% (n=6)

• Specific care needed (ASI Interviewer Severity Ratings ≥4)
  – Tobacco: 50% (n=16)
  – Alcohol: 25% (n=8)
  – Substances: 16% (n=5)
  – Psychological treatment: 63% (n=20)
### Results – Dependence diagnosis (MINI)

<table>
<thead>
<tr>
<th>Substance</th>
<th>% current (n)</th>
<th>% lifetime (n) = current+past</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td>47% (15)</td>
<td>50% (16)</td>
</tr>
<tr>
<td>Alcohol</td>
<td>13% (4)</td>
<td>19% (6)</td>
</tr>
<tr>
<td>Sedatives</td>
<td>13% (4)</td>
<td>13% (4)</td>
</tr>
<tr>
<td>Cannabis</td>
<td>3% (1)</td>
<td>9% (3)</td>
</tr>
<tr>
<td>Opiates/cocaine/stimulants/hallucinogenic/inhalants</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Path. gambling</td>
<td>0</td>
<td>6% (2)</td>
</tr>
</tbody>
</table>
Results – Psychiatric comorbidities (MINI)

Mood disorder: 41% current ; 75% lifetime
Anxiety disorder: 50% current ; 72% lifetime

<table>
<thead>
<tr>
<th>Disorder</th>
<th>% current (n)</th>
<th>% lifetime=current+past (n)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Major Depressive Episode</strong></td>
<td>38% (12)</td>
<td>66% (21)</td>
</tr>
<tr>
<td><strong>Manic Episode</strong></td>
<td>0</td>
<td>8% (25)</td>
</tr>
<tr>
<td><strong>Hypomanic Episode</strong></td>
<td>3% (1)</td>
<td>13% (4)</td>
</tr>
<tr>
<td><strong>Current suicidality</strong></td>
<td>63% (20 – low)</td>
<td>-</td>
</tr>
<tr>
<td><strong>Panic disorder</strong></td>
<td>3% (1)</td>
<td>13% (4)</td>
</tr>
<tr>
<td><strong>Agoraphobia</strong></td>
<td>9% (3)</td>
<td>22% (9)</td>
</tr>
<tr>
<td><strong>Social phobia</strong></td>
<td>3% (1)</td>
<td>16% (5)</td>
</tr>
<tr>
<td><strong>Obsessive-compuls. dis.</strong></td>
<td>9% (3)</td>
<td>19% (6)</td>
</tr>
<tr>
<td><strong>PTSD</strong></td>
<td>38% (12)</td>
<td>53% (17)</td>
</tr>
<tr>
<td><strong>Psychotic disorders</strong></td>
<td>6% (2)</td>
<td>25% (8)</td>
</tr>
<tr>
<td><strong>Antisocial pers. dis.</strong></td>
<td>9% (3)</td>
<td>9% (3)</td>
</tr>
<tr>
<td><strong>Bulimia or Binge Eating Dis.</strong></td>
<td>0</td>
<td>9% (3)</td>
</tr>
</tbody>
</table>
Conclusion

• Despite the efforts of prison care service, a large proportion of incarcerated women still remain in need for help for addictions (especially tobacco) and psychological comorbidities in Reunion Island.

• No comparative study available in mainland France for incarcerated women / Lack of data worldwide.

• Improvements in the detection of addictions and psychiatric comorbidities and treatment offer are needed for incarcerated women.
References cited


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