IMPORTATION, DEPRIVATION, AND IDEATION: CONSIDERING SUICIDE BEHIND PRISON BARS

LOUIS FAVRIL // 17th European Symposium on Suicide & Suicidal Behaviour
SCOPE OF THE PROBLEM

- Prisoners = high-risk group for suicide
  - Leading cause of mortality in prisons worldwide
  - 2011–2014:

  \[
  \begin{array}{ccc}
  & \text{Men} & \text{Women} \\
  \text{Croatia} & 0.5 (0.4-0.7) & 0.54 \\
  \text{Northern Ireland} & 0.5 (0.4-0.7) & 0.63 \\
  \text{USA} & 1.6 (1.4-1.8) & <0.0001 \\
  \text{Scotland} & 1.7 (0.7-4.1) & 0.24 \\
  \text{Czech Republic} & 1.5 (1.0-2.5) & 0.65 \\
  \text{Ireland} & 2.0 (0.5-8.2) & 0.34 \\
  \text{Belgium} & 2.0 (1.3-4.6) & 0.0241 \\
  \text{New Zealand} & 3.4 (1.5-8.1) & 0.0045 \\
  \text{Finland} & 3.5 (2.2-10.5) & 0.0234 \\
  \text{Spain} & 3.7 (2.4-5.6) & <0.0001 \\
  \text{Iceland} & 3.7 (0.1-191.9) & 0.51 \\
  \text{England and Wales} & 3.9 (3.1-5.6) & <0.0001 \\
  \text{Denmark} & 4.2 (2.1-12.7) & 0.0107 \\
  \text{Germany} & 4.2 (2.5-5.6) & <0.0001 \\
  \text{Sweden} & 5.6 (2.7-11.9) & <0.0001 \\
  \text{Netherlands} & 5.6 (3.0-10.4) & <0.0001 \\
  \text{France} & 5.7 (4.7-6.9) & <0.0001 \\
  \text{Portugal} & 6.5 (3.7-11.2) & <0.0001 \\
  \text{Italy} & 7.7 (5.8-10.2) & <0.0001 \\
  \text{Norway} & 10.2 (4.6-22.7) & <0.0001 \\
  \hline
  \end{array}
  \]

  \[
  \begin{array}{ccc}
  & \text{Men} & \text{Women} \\
  \text{USA} & 3.7 (2.6-5.4) & <0.0001 \\
  \text{New Zealand} & 6.6 (0.1-338.2) & 0.35 \\
  \text{Czech Republic} & 7.2 (0.4-116.3) & 0.16 \\
  \text{Sweden} & 8.3 (0.2-417.5) & 0.09 \\
  \text{Spain} & 8.7 (2.5-50.3) & 0.059 \\
  \text{England and Wales} & 8.9 (2.2-35.6) & 0.0021 \\
  \text{Netherlands} & 10.6 (0.7-169.4) & 0.30 \\
  \text{Germany} & 11.9 (4.0-35.5) & <0.0001 \\
  \text{Belgium} & 12.2 (3.3-117.9) & 0.0302 \\
  \text{Norway} & 16.7 (0.3-848.3) & 0.1605 \\
  \text{Scotland} & 17.4 (2.4-124.7) & 0.0045 \\
  \text{Italy} & 20.5 (4.1-1019) & 0.0003 \\
  \text{Denmark} & 30.3 (0.6-1541.8) & 0.089 \\
  \text{Portugal} & 33.6 (5.7-195.7) & 0.0001 \\
  \text{France} & 41.3 (3.0-682.8) & <0.0001 \\
  \text{Northern Ireland} & 160.7 (36.3-1580.3) & <0.0001 \\
  \hline
  \end{array}
  \]

Figure 1: Rate ratios of suicide in prisoners compared with the general population

Lancet Psychiatry 2017;4(12):946-952
FIGURE 5: SUICIDE RATE PER 10,000 INMATES IN 2015


<table>
<thead>
<tr>
<th>Country</th>
<th>Total number of prisoners, both genders (2011-14)</th>
<th>Annual suicide rate per 100,000 prisoners (including pretrial detainees)</th>
<th>Annual suicide rate per 100,000 general population aged 30-49 years</th>
<th>Rate ratio</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eastern Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Croatia</td>
<td>2</td>
<td>0-29</td>
<td>14.6</td>
<td>0.7</td>
<td>0.11-1.4</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>44</td>
<td>39-70</td>
<td>37.8</td>
<td>3.1</td>
<td>1.7-5.6</td>
</tr>
<tr>
<td>Poland</td>
<td>59</td>
<td>22-28</td>
<td>24.6</td>
<td>1.0</td>
<td>0.6-1.6</td>
</tr>
<tr>
<td>Northern Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Denmark</td>
<td>14</td>
<td>60-122</td>
<td>37.9</td>
<td>7.0</td>
<td>4.9-11.8</td>
</tr>
<tr>
<td>Finland</td>
<td>13</td>
<td>100-165</td>
<td>21.0</td>
<td>4.8</td>
<td>2.4-20.2</td>
</tr>
<tr>
<td>Iceland</td>
<td>1</td>
<td>0-487</td>
<td>28.4</td>
<td>5.8</td>
<td>0.1-2972</td>
</tr>
<tr>
<td>Norway</td>
<td>26</td>
<td>98-262</td>
<td>32.9</td>
<td>14.0</td>
<td>6.4-30.5</td>
</tr>
<tr>
<td>Sweden</td>
<td>26</td>
<td>90-118</td>
<td>34.1</td>
<td>7.4</td>
<td>3.4-16.1</td>
</tr>
<tr>
<td>Western Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belgium</td>
<td>57</td>
<td>99-129</td>
<td>24.1</td>
<td>4.7</td>
<td>2.8-8.0</td>
</tr>
<tr>
<td>England and Wales</td>
<td>284</td>
<td>66-100</td>
<td>32.6</td>
<td>6.1</td>
<td>4.8-7.7</td>
</tr>
<tr>
<td>France</td>
<td>467</td>
<td>169-182</td>
<td>49.3</td>
<td>9.4</td>
<td>8.3-10.0</td>
</tr>
<tr>
<td>Germany</td>
<td>220</td>
<td>75-88</td>
<td>32.7</td>
<td>6.4</td>
<td>4.9-8.4</td>
</tr>
<tr>
<td>Ireland</td>
<td>8</td>
<td>32-61</td>
<td>35.7</td>
<td>3.0</td>
<td>0.8-12.2</td>
</tr>
<tr>
<td>Netherlands</td>
<td>43</td>
<td>53-145</td>
<td>33.0</td>
<td>7.6</td>
<td>4.2-14.0</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>21</td>
<td>0-106</td>
<td>20.1</td>
<td>1.5</td>
<td>0.1-23.4</td>
</tr>
<tr>
<td>Scotland</td>
<td>22</td>
<td>44-93</td>
<td>26.2</td>
<td>2.6</td>
<td>1.1-6.1</td>
</tr>
<tr>
<td>Switzerland</td>
<td>26</td>
<td>49-146</td>
<td>31.5</td>
<td>8.5</td>
<td>3.9-18.9</td>
</tr>
<tr>
<td>Southern Europe</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>208</td>
<td>69-93</td>
<td>6.7</td>
<td>1.2</td>
<td>0.9-1.6</td>
</tr>
<tr>
<td>Portugal</td>
<td>59</td>
<td>69-147</td>
<td>10.4</td>
<td>1.0</td>
<td>0.6-17.5</td>
</tr>
<tr>
<td>Spain</td>
<td>95</td>
<td>39-55</td>
<td>7.8</td>
<td>1.3</td>
<td>0.7-8.1</td>
</tr>
<tr>
<td>Australasia</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>37</td>
<td>29-51</td>
<td>37.2</td>
<td>2.3</td>
<td>1.3-4.1</td>
</tr>
<tr>
<td>New Zealand</td>
<td>23</td>
<td>18-115</td>
<td>53.2</td>
<td>5.1</td>
<td>2.2-11.6</td>
</tr>
<tr>
<td>North America</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>311</td>
<td>0-48</td>
<td>31.4</td>
<td>2.3</td>
<td>1.2-4.3</td>
</tr>
<tr>
<td>USA</td>
<td>2143</td>
<td>23-26</td>
<td>37.4</td>
<td>1.3</td>
<td>1.2-1.5</td>
</tr>
</tbody>
</table>

*Annual rates calculated based on however many years available between 2011 and 2014. †Annual rates for the year 2012. ‡Total in a 3-year period (2011-13).
<table>
<thead>
<tr>
<th>Year</th>
<th>ADP</th>
<th>Number of deaths&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Number of suicides (% of prison deaths)</th>
<th>Suicide rate per 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>8,464</td>
<td>53</td>
<td>19 (35.8)</td>
<td>224.5</td>
</tr>
<tr>
<td>2001</td>
<td>8,497</td>
<td>52</td>
<td>23 (44.2)</td>
<td>270.7</td>
</tr>
<tr>
<td>2002</td>
<td>8,769</td>
<td>45</td>
<td>22 (48.9)</td>
<td>250.9</td>
</tr>
<tr>
<td>2003</td>
<td>9,008</td>
<td>44</td>
<td>11 (25.0)</td>
<td>122.1</td>
</tr>
<tr>
<td>2004</td>
<td>9,201</td>
<td>31</td>
<td>8 (25.8)</td>
<td>86.9</td>
</tr>
<tr>
<td>2005</td>
<td>9,238</td>
<td>34</td>
<td>13 (38.2)</td>
<td>140.7</td>
</tr>
<tr>
<td>2006</td>
<td>9,579</td>
<td>38</td>
<td>14 (38.8)</td>
<td>146.2</td>
</tr>
<tr>
<td>2007</td>
<td>9,873</td>
<td>49</td>
<td>14 (28.6)</td>
<td>141.8</td>
</tr>
<tr>
<td>2008</td>
<td>9,891</td>
<td>51</td>
<td>16 (31.4)</td>
<td>161.8</td>
</tr>
<tr>
<td>2009</td>
<td>10,238</td>
<td>43</td>
<td>13 (30.2)</td>
<td>127.0</td>
</tr>
<tr>
<td>2010</td>
<td>10,536</td>
<td>46</td>
<td>20 (43.5)</td>
<td>189.8</td>
</tr>
<tr>
<td>2011</td>
<td>10,974</td>
<td>49</td>
<td>12 (24.5)</td>
<td>109.4</td>
</tr>
<tr>
<td>2012</td>
<td>11,330</td>
<td>47</td>
<td>13 (27.7)</td>
<td>114.7</td>
</tr>
<tr>
<td>2013</td>
<td>11,645</td>
<td>56</td>
<td>15 (26.8)</td>
<td>128.8</td>
</tr>
<tr>
<td>2014</td>
<td>11,578</td>
<td>59</td>
<td>20 (33.9)</td>
<td>172.7</td>
</tr>
<tr>
<td>2015</td>
<td>11,041</td>
<td>44</td>
<td>16 (36.4)</td>
<td>144.9</td>
</tr>
<tr>
<td>2016</td>
<td>10,619</td>
<td>53</td>
<td>13 (24.5)</td>
<td>122.4</td>
</tr>
<tr>
<td>&lt;sup&gt;M&lt;/sup&gt;</td>
<td>10,028</td>
<td>46.7</td>
<td>15.4 (33.0)</td>
<td>156.2</td>
</tr>
</tbody>
</table>

Note: ADP = average daily population. <sup>a</sup>Total number of deaths in prison, including suicides (source: Directory-General of Penitentiary Institutions, 2016).
SUICIDE PREVENTION IN PRISON

– World Health Organization: international priority
– National Institute for Health and Care Excellence: identify and understand the factors related to suicide when developing interventions to prevent such outcomes among prisoners

– Belgium
  • No empirical data
  • No national standards nor guidelines for suicide prevention

WHO 2007; Preventing suicide in jails and prisons
NICE 2017; Mental health of adults in contact with the criminal justice system
Mental disorders
Substance (ab)use
Prior suicide attempt
Impulsivity/aggression
Childhood adversity

≈ general population

As these factors reflect characteristics of the mainstream prison population (and thus shared by non-suicidal peers) screening may be over-inclusive, erroneously flagging risk for suicide
Yet, most prisoners, all exposed to a stressful prison environment, do not go on to engage in suicidal behaviour (heterogeneous group)

Suicidal thoughts/behaviour

Loss of liberty, autonomy
Poor social support
Bullying, threats, violence
Lack of purposeful activity
Overcrowding
Shame, guilt, uncertainty
Mental illness
Substance use
Prior suicide attempt
Impulsivity/aggression
Physical health
Coping

Pains of imprisonment
Social support
Bullying, violence
Lack of purposeful activity
Overcrowding
Shame, guilt, uncertainty

Suicidal thoughts/behaviour

IMPORTATION MODEL
pre-prison vulnerability
diathesis

DEPRIVATION MODEL
prison-specific stressors “pains of imprisonment”
stress

Suicidal thoughts/behaviour
AIMS AND METHODOLOGY

- Suicidal ideation
  - Paucity of research (lifetime frame + importation factors)
  - Major risk factor for suicide in custody (OR=15)
  - Marker of profound psychological distress
  → Prevention: target early stages of suicidal process

- Cross-sectional study in 15 Flemish prisons
  - Random sample of 1,203 men (85% response)
    - 12% of the male ADP in Belgium (N = 10,134)
    - M$_{\text{age}}$ = 37.7 (range 18–77), 34% on remand, all offences
  - Survey
    - Exposure: both importation and deprivation (MQPL; Liebling)
    - Outcome: recent suicidal ideation while incarcerated
RESULTS

FIGUUR 1 Lifet imeprevalentie van suïcidaal gedrag: huidige studie vs. algemene Belgische populatie

Algemene Belgische bevolking (Gisle 2014) Vlaamse gevangenissen

Percentage individuen [%]

Mannen 43,1 12,9 20,3
Vrouwen 14,7 36,6 5,1
Totaal 44,4 36,6 21,8

Suïcidale ideatie
Suïcidepoging(en)
Table 2
Participants’ characteristics stratified by past-year suicidal ideation (N = 1203).

<table>
<thead>
<tr>
<th>Sociodemographic</th>
<th>Total sample (N = 1203)</th>
<th>NSI group (N = 918)</th>
<th>SI group (N = 285)</th>
<th>OR (95% CI)</th>
<th>p-valueb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, years</td>
<td>37.7 ± 11.9</td>
<td>37.6 ± 12.1</td>
<td>37.7 ± 11.1</td>
<td>1.01 (.99–1.02)</td>
<td>.963</td>
</tr>
<tr>
<td>Non-Belgian nationality</td>
<td>27.9</td>
<td>30.6</td>
<td>19.1</td>
<td>.54 (.39–.74)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Religiousness</td>
<td>71.2</td>
<td>72.5</td>
<td>66.9</td>
<td>.77 (.58–1.02)</td>
<td>.069</td>
</tr>
<tr>
<td>Partner/married</td>
<td>40.0</td>
<td>39.8</td>
<td>40.7</td>
<td>1.04 (.79–1.36)</td>
<td>.777</td>
</tr>
<tr>
<td><strong>Criminological</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous incarceration</td>
<td>58.9</td>
<td>59.8</td>
<td>56.1</td>
<td>.86 (.65–1.13)</td>
<td>.272</td>
</tr>
<tr>
<td>Violent/sexual offence</td>
<td>25.5</td>
<td>23.7</td>
<td>31.4</td>
<td>1.48 (1.10–1.99)</td>
<td>.010</td>
</tr>
<tr>
<td>Sentenced status</td>
<td>65.7</td>
<td>67.1</td>
<td>61.1</td>
<td>.77 (.58–1.01)</td>
<td>.060</td>
</tr>
<tr>
<td>Duration incarceration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1 month</td>
<td>10.0</td>
<td>9.4</td>
<td>11.9</td>
<td>1.71 (1.00–2.90)</td>
<td>.049</td>
</tr>
<tr>
<td>1–6 months</td>
<td>28.0</td>
<td>27.3</td>
<td>30.5</td>
<td>1.50 (.98–2.31)</td>
<td>.063</td>
</tr>
<tr>
<td>&gt;6–12 months</td>
<td>10.9</td>
<td>10.1</td>
<td>13.3</td>
<td>1.76 (1.05–2.96)</td>
<td>.031</td>
</tr>
<tr>
<td>&gt;1–3 years</td>
<td>21.1</td>
<td>22.7</td>
<td>16.1</td>
<td>.95 (.59–1.54)</td>
<td>.848</td>
</tr>
<tr>
<td>&gt;3–5 years</td>
<td>13.1</td>
<td>12.6</td>
<td>14.7</td>
<td>1.56 (.95–2.57)</td>
<td>.080</td>
</tr>
<tr>
<td>&gt;5 yearsc</td>
<td>16.8</td>
<td>17.9</td>
<td>13.3</td>
<td>1.00</td>
<td>–</td>
</tr>
<tr>
<td><strong>Clinical</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illicit drug use in prison</td>
<td>35.1</td>
<td>32.1</td>
<td>44.6</td>
<td>1.70 (1.29–2.23)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>History of psychiatric treatment</td>
<td>38.9</td>
<td>35.2</td>
<td>50.9</td>
<td>1.91 (1.46–2.49)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Lifetime psychiatric diagnosis</td>
<td>44.8</td>
<td>39.8</td>
<td>61.1</td>
<td>2.38 (1.81–3.12)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Psychotropic medication</td>
<td>34.4</td>
<td>29.7</td>
<td>49.5</td>
<td>2.31 (1.76–3.04)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td><strong>Suicidality</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifetime suicide attempt</td>
<td>20.3</td>
<td>13.0</td>
<td>43.9</td>
<td>5.25 (3.87–7.10)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Familial history</td>
<td>24.7</td>
<td>21.4</td>
<td>35.4</td>
<td>2.02 (1.51–2.70)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Exposure suicidal behaviour</td>
<td>47.8</td>
<td>44.1</td>
<td>59.6</td>
<td>1.87 (1.43–2.45)</td>
<td>&lt;.0001</td>
</tr>
</tbody>
</table>
Table 2
Participants’ characteristics stratified by past-year suicidal ideation (N = 1203).

|                                | Total sample (N = 1203) | Past-year suicidal ideation | OR (95% CI) | p-value
|--------------------------------|-------------------------|-----------------------------|-------------|-------
|                                |                         | NSI group (N = 918)         | SI group (N = 285) |         |
| **Institutional**              |                         |                             |              |       |
| Single cell accommodation      | 50.3                    | 50.1                        | 49.8         | .98 (.75–1.27) | .856 |
| Perceived overcrowding         | 22.2                    | 18.9                        | 32.4         | 2.05 (1.52–2.77) | <.0001 |
| Working activity in prison      | 53.9                    | 57.2                        | 43.5         | .58 (.44–.75) | <.0001 |
| **Quality of prison life**     |                         |                             |              |       |
| Autonomy                       | 2.8 ± .76               | 2.9 ± .74                   | 2.5 ± .75    | .48 (.40–.58) | < .0001 |
| Contact family/friends         | 3.0 ± .98               | 3.1 ± .96                   | 2.7 ± .98    | .67 (.58–.77) | < .0001 |
| Staff-prisoner relationships   | 2.8 ± .88               | 2.9 ± .88                   | 2.7 ± .86    | .72 (.62–.84) | < .0001 |
| Safety                         | 3.2 ± .82               | 3.3 ± .79                   | 2.9 ± .82    | .51 (.43–.60) | < .0001 |
| Decency                        | 2.6 ± .76               | 2.7 ± .75                   | 2.4 ± .77    | .64 (.53–.77) | < .0001 |
| **Perceived social support**   |                         |                             |              |       |
| No lack\(^c\)                  | 29.3                    | 32.6                        | 19.1         | 1.00   | –    |
| Moderate lack                  | 23.3                    | 23.0                        | 24.0         | 1.78 (1.19–2.65) | .005 |
| Severe lack                    | 47.4                    | 44.4                        | 56.9         | 2.19 (1.55–3.08) | < .001 |

Note: NSI = Not Sufficient Ideation, SI = Sufficient Ideation.

\(^a\) Odds ratio.

\(^b\) p-value for chi-square test.

\(^c\) No lack: No suicidal ideation; Moderate lack: Sufficient ideation; Severe lack: Very serious ideation.
Table 3
Multivariate logistic regression for past-year suicidal ideation while incarcerated.

<table>
<thead>
<tr>
<th>Sociodemographic</th>
<th>aOR (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>1.01 (.99-1.03)</td>
<td>.237</td>
</tr>
<tr>
<td>Non-Belgian nationality</td>
<td>.65 (.43-1.01)</td>
<td>.053</td>
</tr>
<tr>
<td>Religiousness</td>
<td>1.04 (.72-1.49)</td>
<td>.836</td>
</tr>
<tr>
<td>Partner/married</td>
<td>1.18 (.83-1.68)</td>
<td>.351</td>
</tr>
<tr>
<td><strong>Criminological</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Previous incarceration</td>
<td>.61 (.42- .89)</td>
<td>.010</td>
</tr>
<tr>
<td>Violent/sexual offence</td>
<td>1.29 (.84-1.99)</td>
<td>.246</td>
</tr>
<tr>
<td>Sentenced status</td>
<td>.72 (.46-1.12)</td>
<td>.142</td>
</tr>
<tr>
<td><strong>Duration incarceration</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1 month</td>
<td>3.24 (1.43-7.34)</td>
<td>.005</td>
</tr>
<tr>
<td>1-6 months</td>
<td>2.53 (1.30-4.93)</td>
<td>.006</td>
</tr>
<tr>
<td>&gt;6-12 months</td>
<td>3.68 (1.83-7.39)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>&gt;1-3 years</td>
<td>1.53 (1.84-2.77)</td>
<td>.161</td>
</tr>
<tr>
<td>&gt;3-5 years</td>
<td>1.86 (.90-3.45)</td>
<td>.051</td>
</tr>
<tr>
<td><strong>Clinical</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illicit drug use in prison</td>
<td>1.21 (1.81-1.80)</td>
<td>.355</td>
</tr>
<tr>
<td>History of psychiatric treatment</td>
<td>.76 (0.49-1.17)</td>
<td>.205</td>
</tr>
<tr>
<td>Lifetime psychiatric diagnosis</td>
<td>1.69 (1.09-2.62)</td>
<td>.020</td>
</tr>
<tr>
<td>Psychotropic medication</td>
<td>1.30 (0.88-1.92)</td>
<td>.184</td>
</tr>
<tr>
<td><strong>Suicidality</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifetime suicide attempt</td>
<td>2.97 (1.99-4.41)</td>
<td>&lt;.0001</td>
</tr>
<tr>
<td>Familial history</td>
<td>1.15 (0.79-1.68)</td>
<td>.467</td>
</tr>
<tr>
<td>Exposure suicidal behaviour</td>
<td>2.05 (1.43-2.96)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td><strong>Institutional</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Single cell accommodation</td>
<td>1.30 (0.89-1.89)</td>
<td>.178</td>
</tr>
<tr>
<td>Perceived overcrowding</td>
<td>1.23 (0.83-1.81)</td>
<td>.302</td>
</tr>
<tr>
<td>Working activity in prison</td>
<td>.69 (.49-.98)</td>
<td>.039</td>
</tr>
<tr>
<td><strong>Quality of prison life</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomy</td>
<td>.66 (.51- .86)</td>
<td>.002</td>
</tr>
<tr>
<td>Contact family/friends</td>
<td>.81 (.67-.98)</td>
<td>.030</td>
</tr>
<tr>
<td>Staff-prisoner relationships</td>
<td>1.03 (0.84-1.24)</td>
<td>.536</td>
</tr>
<tr>
<td>Safety</td>
<td>.69 (.55-.87)</td>
<td>.002</td>
</tr>
<tr>
<td>Decency</td>
<td>.96 (.72-1.30)</td>
<td>.809</td>
</tr>
<tr>
<td><strong>Perceived social support</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderate lack</td>
<td>1.92 (1.19-3.10)</td>
<td>.008</td>
</tr>
<tr>
<td>Severe lack</td>
<td>2.26 (1.47-3.48)</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>
IMPLICATIONS: VULNERABILITY

Mental health care

“inadequate care”

authority of Justice, not Public Health
IMPLICATIONS: STRESSORS

“Whilst a number of risk factors are, to a large degree, set on arrival within the institution, the effects of additional stress presented by the prison environment can be manipulated by staff and managers to decrease the risk of suicide.”

– Purposeful activity
– Autonomy/control
– Safety (bullying)
– Social support/peers
– Postvention
Crisis 2016;37(5):323-334

**Targeted strategies**
- Treatment of psychiatric disorders and psychosocial problems
  - Pharmacological and/or psychological interventions
  - Specialist support
  - Information materials
  - Peer support (e.g. Listeners)
  - Reducing access to means of suicide

**Population strategies**
- Improvements to the regime and built environment
  - Social support
  - Anti-bullying interventions

**Staff training and support**

**Evidence-based practice and learning from previous incidents**

**Information flow and multi-agency working**

**Pre-reception**
- Diversion of offenders with severe mental illness

**Reception**
- Screening for suicide risk
  - First Night Centres

**Incarceration**
- Ongoing monitoring of risk

**Release**
- Pre-release screening

**Targeted strategies**
- Referral to community or psychiatric inpatient services

**Population strategies**
- Resettlement and aftercare
Preventing suicide in community and custodial settings

In development [GID-PHG95]  Expected publication date: 10 September 2018
Suicidal ideation while incarcerated: Prevalence and correlates in a large sample of male prisoners in Flanders, Belgium

Louis Favri 1,a, Freya Vander Laenen a, Christophe Vandeviver a, Kurt Audenaert b

1 Institute for International Research on Criminal Policy (IRCP), Faculty of Law and Criminology, Gent University, Belgium
2 Department of Psychiatry and Medical Psychology, Faculty of Medicine and Health Sciences, Gent University, Belgium

ARTICLE INFO
Article history:
Received 11 January 2017
Received in revised form 5 September 2017
Accepted 3 October 2017
Available online 5 November 2017

Keywords:
prison
offenders
suicidal process
suicidal thoughts
suicide prevention

ABSTRACT
Prisoners constitute a high-risk group for suicide. As an early stage in the pathway leading to suicide, suicidal ideation represents an important target for prevention, yet research on this topic is scarce in general prison populations. Using a cross-sectional survey design, correlates of suicidal ideation while incarcerated were examined in a sample of 1203 male prisoners, randomly selected from 15 Flemish prisons. Overall, a lifetime history of suicidal ideation and attempts was endorsed by 43.1% and 20.3% of respondents, respectively. Approximately a quarter of all prisoners (23.7%) reported past-year suicidal ideation during their current incarceration, which was significantly associated with both imported vulnerabilities (psychiatric diagnoses and a history of attempted suicide) and variables unique to the prison experience (lack of working activity, exposure to suicidal behaviour by peers, and low levels of perceived autonomy, safety and social support) in the multivariate regression analysis. A first-ever period of imprisonment and a shorter length of incarceration (<12 months) were also associated with increased odds of recent suicidal ideation. Collectively, the current findings underscore the importance of both vulnerability factors and prison-specific stressors for suicidal ideation in prisoners, and hence the need for a multi-faceted approach to suicide prevention in custodial settings. In addition to the provision of appropriate mental health care, environmental interventions that target modifiable aspects of the prison regime could provide a substantial buffer for the onset and persistence of suicidal ideation in this at-risk population.

© 2017 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).
LOUIS FAVRIL
Academic assistant, PhD researcher

CAMPUS AULA
Universiteitstraat 4
9000 Ghent — Belgium

E louis.favril@ugent.be
T +32 9 264 84 61

www.ugent.be
www.ircp.org

Ghent University
@ugent
Louis Favril