Why me?

Historical factors affecting Length of Stay of mentally disordered offenders NGRI in a high security facility of Austria

Faculty of Forensic Psychiatry Annual Conference, 6-8 March 2019

Treatment of offenders regarded as not guilty by reason of insanity in Austrian forensic institutions

Thursday 7 March 2019
Introduction

Legal Framework and Scientific Research Questions
Austrian Penal Code (APC)

Preventive Detention of MDOs/NGRI

• ** Preconditions (§ 21/1 APC)**
  → Offence (punishable > 1 year)
  → NGRI
  → Dangerousness

• ** Duration (§ 25 APC)**
  → Open-ended Detention

• ** Release (§ 47 APC)**
  → Probational Release for 5 or 10 years
Not Guilty by Reason of Insanity (NGRI)

Section 11 APC

Lack of "insight" and/or "control" at the time of the offence, caused by:

- mental illness (functional or organic psychoses),
- mental deficiency (severe intellectual disability),
- profound impairment of consciousness or
- other pathological mental states equal to the aforementioned conditions,

makes a person not guilty (NGRI).
Preventive Detention of MDOs/NGRI

**Length of Stay (LOS)**

- **Commitment** (§ 21/1 APC)
- **Preventive Detention** (Inpatient Treatment)
- **Release** (§ 47 APC)
- **Final Release**

**Mental Health Criminality**

**History**

**Offence**

** LOS**

**Probation period**

5 to 10 years (Outpatient Treatment)
Preventive Detention of MDOs/NGRI

Length of Stay (LOS)

Mental Health Criminality

- History
- Offence

Preventive Detention (Inpatient Treatment)

Commitment (§ 21/1 APC)

Release (§ 47 APC)

LOS

N=133

Probation period

5 to 10 years (Outpatient Treatment)

Final Release
Scientific Research Questions

Length of Stay (LOS) – Preventive Detention MDOs/NGRI

1) Is there an association of historical variables with length of stay of forensic patients released from the Prison Göllersdorf/Austria (N = 133)?

2) What historical factors were relevant to the duration of preventive detention?

3) Are there any cluster of variables (group of MDOs) that may assist in estimating length of stay for forensic patients/NGRI (risk of Long Stay)?
Results

Forensic Patients/NGRI – Prison Göllersdorf/Austria
LENGTH OF STAY (LOS)

LENGTH OF STAY (LOS)

<table>
<thead>
<tr>
<th>N</th>
<th>133</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean LOS (yy)</td>
<td>5.32</td>
</tr>
<tr>
<td>Median LOS (yy)</td>
<td>5.00</td>
</tr>
<tr>
<td>Standard deviation (yy)</td>
<td>3.71</td>
</tr>
</tbody>
</table>

LOS (years) / Prison Göllersdorf
LOS/MIGRATION BACKGROUND

Migration Background

Native
1st Generation
2nd Generation

LOS (years)

25,000
20,000
15,000
10,000
5,000
0,000

277
353
305

268
271

308

389
LOS/MIGRATION BACKGROUND

No Association

Migration Background

Native
1st Generation
2nd Generation

LOS (years)

11
Mental Health Factors

Association with Length of Stay (LOS)
LOT/MAIN DIAGNOSIS

![Diagram showing box plots for different main diagnoses with LOS (years) on the y-axis and main diagnoses on the x-axis.]

Main Diagnosis (ICD-10)
LOT/MAIN DIAGNOSIS

No Association
LOT/SUBSTANCE USE HISTORY

Substance Use History (SUH)
LOT/SUBSTANCE USE HISTORY

No Association

Substance Use History (SUH)
LOT/PERSONALITY DISORDER

Personality Disorder (PD) - Comorbid
LOT/PERSOANLITY DISORDER

Personality Disorder (PD) - Comorbid

No Association
LOT/PSYCHOPATHY

Spearman: + 0.24 *

\[ y = 15.08 + 0.22x \]
LOT/PRIOR ADMISSIONS

Spearman: + 0.25 *

Number of prior admissions to psychiatric hospitals

LOS (years)

$y = 4.97 + 0.3x$

$R^2$ Linear = 0.024
LOT/AGE OF ONSET

Spearman: - 0.29 **

Age of onset (main diagnosis)

LOS (years)

$y = 31.25 - 0.83x$
Criminal Factors

Association with Length of Stay (LOS)
LOT/OFFENCE

Index Offence
LOT/OFFENCE

Index Offence

No Association
LOT/SEVERITY OF OFFENCE

Severity of Offence (Taylor 1985)
LOT/SEVERITY OF OFFENCE

No Association

Severity of Offence (Taylor 1985)
LOT/PREVIOUS OFFENCES

Spearman: +0.18 *

Number of previous offences vs LOS (years)

$y = 3.3 + 0.13x$

$R^2$ Linear = 0.007
LOT/AGE - FIRST OFFENCE

Spearman: -0.23 *
**LOT/AGE - INDEX OFFENCE**

Spearman: -0.27 **

- **LOT: Loss of Time**
- **INDEX OFFENCE:** Time of Offence
- **AGE:** Age at the time of index offence/admission
- **LOS (years):** Length of Stay (in years)
Cluster/Typology

Forensic Patients/NGRI – Prison Göllersdorf/Austria
LOT – RELEVANT VARIABLES

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>SE</th>
<th>Wald</th>
<th>df</th>
<th>Sign.</th>
<th>Exp(B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior admissions to psychiatric hospitals</td>
<td>0.479</td>
<td>0.016</td>
<td>8.674</td>
<td>1</td>
<td>0.003</td>
<td>1.049</td>
</tr>
<tr>
<td>Number of previous offences</td>
<td>0.272</td>
<td>0.016</td>
<td>7.35</td>
<td>1</td>
<td>0.003</td>
<td>1.049</td>
</tr>
<tr>
<td>Age at the time of the first offence</td>
<td>0.217</td>
<td>0.016</td>
<td>5.67</td>
<td>1</td>
<td>0.017</td>
<td>1.245</td>
</tr>
<tr>
<td>Psychopathy (PCL-R)</td>
<td>0.156</td>
<td>0.016</td>
<td>3.50</td>
<td>1</td>
<td>0.061</td>
<td>1.167</td>
</tr>
<tr>
<td>Migration background</td>
<td>0.872</td>
<td>0.016</td>
<td>8.674</td>
<td>1</td>
<td>0.003</td>
<td>2.389</td>
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<tr>
<td>Age at the time of the index offence</td>
<td>0.735</td>
<td>0.016</td>
<td>7.35</td>
<td>1</td>
<td>0.007</td>
<td>1.017</td>
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<tr>
<td>Severity of the index offence (Taylor 1985)</td>
<td>0.069</td>
<td>0.016</td>
<td>4.50</td>
<td>1</td>
<td>0.034</td>
<td>1.071</td>
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<tr>
<td>Personality disorder</td>
<td>0.021</td>
<td>0.016</td>
<td>3.50</td>
<td>1</td>
<td>0.061</td>
<td>1.021</td>
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<tr>
<td>Substance use history</td>
<td>0.074</td>
<td>0.016</td>
<td>5.67</td>
<td>1</td>
<td>0.017</td>
<td>1.074</td>
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<tr>
<td>F0</td>
<td>2.409</td>
<td>0.016</td>
<td>12.46</td>
<td>1</td>
<td>0.000</td>
<td>1.049</td>
</tr>
<tr>
<td>F2 (main diagnosis)</td>
<td>2.821</td>
<td>0.016</td>
<td>12.46</td>
<td>1</td>
<td>0.000</td>
<td>1.049</td>
</tr>
<tr>
<td>F6 (main diagnosis)</td>
<td>0.000</td>
<td>0.016</td>
<td>0.00</td>
<td>0</td>
<td>1.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

a. Chi-Quadrat = 8.729/12 df Sig. = .726
### Component Matrix

<table>
<thead>
<tr>
<th></th>
<th>Component</th>
<th>1 (28.5%)</th>
<th>2 (25.2%)</th>
<th>3 (19.7%)</th>
</tr>
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<tbody>
<tr>
<td>Age at the time of first offence</td>
<td>+ 0.88</td>
<td>- 0.15</td>
<td>+ 0.14</td>
<td></td>
</tr>
<tr>
<td>Age of onset – main diagnosis</td>
<td>+ 0.82</td>
<td>- 0.15</td>
<td>+ 0.38</td>
<td></td>
</tr>
<tr>
<td>Number of previous offences</td>
<td>- 0.02</td>
<td>+ 0.85</td>
<td>- 0.08</td>
<td></td>
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<td>+ 0.77</td>
<td>+ 0.01</td>
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<tr>
<td>LOS (Prison Göllersdorf)</td>
<td>- 0.31</td>
<td>+ 0.49</td>
<td>- 0.73</td>
<td></td>
</tr>
<tr>
<td>Severity of index offence (Taylor 1985)</td>
<td>- 0.22</td>
<td>- 0.36</td>
<td>+ 0.70</td>
<td></td>
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# ATTEMPT/TYPOLGY

## Component Matrix

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# ATTEMPT/TYPOLGGY

## Early Starters

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<th>Percentage</th>
<th>Correlation</th>
</tr>
</thead>
<tbody>
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<td>Age at the time of first offence</td>
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<td>+0.14</td>
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<td>+0.70</td>
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Discussion
Length of Stay (LOS)

Sedgwick et al. 2016
Length of Stay (LOS)

Sedgwick et al. 2016
Conclusion

LOS of MDOs/NGRI in Austria
Summary

Length of Stay of MDOs/NGRI in Austria

- Length of Stay (mean LOS) of forensic patients (NGRI) released from the Prison Göllersdorf /Austria (N=133): 5 years (SD 3.7)
- No association with LOS: Index Offence, Severity of Index Offence, Main Diagnosis, Substance Use History or Comorbid Personality Disorder
- Relevant association with LOS: Age of onset (Main Diagnosis), Age at the time of the Index Offence
Summary

Length of Stay of MDOs/NGRI in Austria

• Cluster associated with higher LOS:
  - young age of onset
  - high number of prior admission to psychiatric hospitals
  - young age at the time of the first offence
  - high number of previous offences
  - high PCL-R score

• Conclusion:
  Within the population of forensic patients NGRI, the pattern “Early Starter“ may indicate a higher risk for becoming a “Long Stay Patient“.
Thank you for your attention

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