Suicide registration procedures and practices in Europe

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Introduction (1)

- Validity and reliability of suicide statistics has been addressed in a number of studies

- Errors in the reporting suicides are fairly randomized over the years and official suicide statistics are considered to be reliable
  

- One universal opinion among researchers is that suicides tend to be underreported (socio-cultural reasons, methodological variations in death registration procedures)


- The most common category for ‘hidden suicides’ is injury death of undetermined intent (‘undetermined death’)

ICD-10, Chapter XX
EXTERNAL CAUSES OF MORBIDITY AND MORTALITY

ACCIDENTS
V01-X59

INTENTIONAL SELF-HARM
X60-X84

ASSAULT
X85-Y09

EVENT OF UNDETERMINED INTENT
Y10-Y34

OTHER
Y35-Y98
**Introduction (2)**

**LEGAL APPROACH**
Applied mainly in coronial systems

– The decision to classify a death as suicide is expected to be ‘beyond reasonable doubt’

– The legal approach may result in systematic exclusion of particular types of suicide (significant evidence indicating suicidal intent is required)

**MEDICAL APPROACH**
Applied mainly in medico-legal systems

– The decision is reached as for any other diagnosis, i.e. ‘balance of probabilities’
Introduction (3)

- The accuracy of coding and registration of underlying cause of death is important for the quality of mortality statistics
- Suicide is an important primary outcome measure for evaluating the effectiveness of intervention programmes
- Failing an improvement in the reliability of suicide statistics, any evaluation of such programmes is questionable
Aims of the study

- To describe and compare procedures for suicide registration in eight European countries
- To pinpoint potential deficiencies in these countries’ suicide registration systems
- To provide recommendations on how best to improve the quality of suicide registration in the EU
Methods

- Qualitative data collection and analysis
- Expert interviews (Delphi method, four clarification rounds)
- Structured questionnaire
  (1) Legal inquiry
  (2) Forensic autopsy
  (3) Certifier
  (4) Final decision
  (5) Burial arrangements
  (6) Coding
  (7) National suicide mortality statistics
8 European countries among OSPI-Europe partners

- Estonia
- Ireland
- Netherlands
- Belgium (Flanders)
- Germany
- Austria
- Hungary
- Portugal
Results

- In every country, the process starts after the **fact of death** has been ascertained by a physician and any suspicion of injury death has arisen.

- It ends with registration of the **cause of death** in the national mortality statistics.

- Between these stages, several elements that are crucial to the consistency of suicide registration were identified:
  1. Professional background the authorities involved
  2. Cooperation among the authorities involved
  3. Performance of the legal inquiry and forensic autopsy
  4. Certification and final decision-making
  5. Coding and registry system
Medico-legal and coronial systems

- Medico-legal system was applied in six countries
  Austria
  Belgium (Flanders)
  Estonia
  Germany
  Hungary
  Portugal

- Coronial system was applied in two countries
  Ireland
  The Netherlands

- Differences not only between, but also within these two systems emerged
Suicides and events of undetermined intent, total rate per 100 000, average of the last five years available and rate ratios of events of undetermined intent to suicides (U/S)

<table>
<thead>
<tr>
<th>Country</th>
<th>Period</th>
<th>U/S ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>2003-2007</td>
<td>0,07</td>
</tr>
<tr>
<td>Belgium</td>
<td>2003-2007</td>
<td>0,09</td>
</tr>
<tr>
<td>Estonia</td>
<td>2001-2005</td>
<td>0,32</td>
</tr>
<tr>
<td>Germany</td>
<td>2000-2004</td>
<td>0,21</td>
</tr>
<tr>
<td>Hungary</td>
<td>2001-2005</td>
<td>0,05</td>
</tr>
<tr>
<td>Portugal</td>
<td>2000-2004</td>
<td>0,78</td>
</tr>
<tr>
<td>Ireland</td>
<td>2001-2005</td>
<td>0,15</td>
</tr>
<tr>
<td>Netherlands</td>
<td>2003-2007</td>
<td>0,06</td>
</tr>
</tbody>
</table>

Undetermined: 1,0 1,5 7,6 2,4 1,3 6,2 1,6 0,5
Suicide: 14,5 15,7 23,9 11,5 24,9 7,9 11,0 8,5
Deficiency examples

- Poor and one-sided communication between the medical and legal authorities involved in the suicide registration process (Estonia, Germany and Portugal)
- Potential errors in the transcription of handwritten information from documents (Germany and Portugal)
- A small number of forensic autopsies (Portugal)
- An absence of centralized coding (Germany)
- Coders who lack medical training (Portugal)
Best practice examples

- Good and reciprocal communication between medical and legal authorities (Austria)
- Autopsy in all suicide cases, repeated autopsies and modification of the cause of death by the forensic medical doctor following an inquiry (Hungary)
- Both inquiry and forensic autopsy results available to the final decision-maker (the Netherlands)
Conclusions

A model for recording suicides with maximum accuracy should include:

(1) A comprehensive, accurate and time-limited legal inquiry
(2) Obligatory forensic autopsy in all cases of injury death
(3) Reciprocal and accurate communication among the authorities involved
(4) Electronic data transmission
(5) Final decision-makers’ access to comprehensive information
(6) Specially trained coders entitled to obtain additional information from the legal authorities and the certifiers
Suicide registration in eight European countries: A qualitative analysis of procedures and practices

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