TALLINN UNIVERSITY

Suicide registration procedures and practices in Europe

Peeter Värnik, **Merike Sisask***, Airi Värnik, Zrinka Laido, Ullrich Maise, Angela Ibelshäuser, Chantal Van Audenhove, Alexandre Reynders, Rüya-Daniela Kocalevent, Maria Kopp, Agnes Dosa, Ella Arensman, Claire Coffey, Christina M. van der Feltz-Cornelis, Ricardo Gusmão, Ulrich Hegerl

*Estonian-Swedish Mental Health and Suicidology Institute (ERSI)

Safety 2010 World Conference
21st-24th September 2010 – Queen Elizabeth II Conference Centre, London, UK

ERSI

OSPI Europe

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

  Barraclough 1973, Sainsbury & Jenkins 1982, Wasserman & Värnik 1998, Bertolote & Fleischmann 2002

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

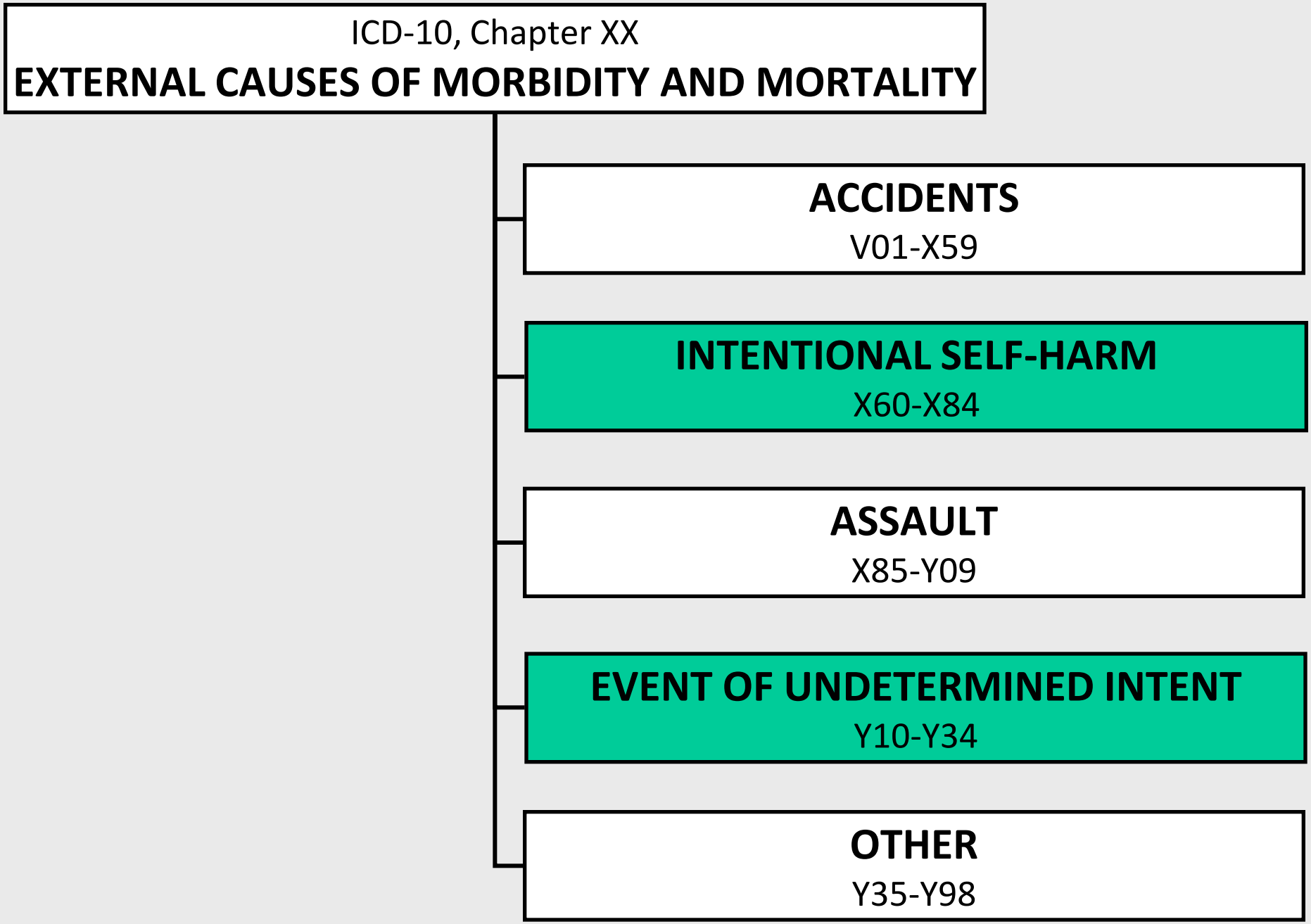
  Barraclough 1973, Atkinson et al 1975, Farberow et al 1977, Monk 1987, O'Carroll 1989, O'Donnel & Farmer 1995, Kelleher et al 1996, Wasserman & Värnik 1998, Linsley et al 2001, Bertolote & Fleischmann 2002, Chisti et al 2003, Breiding & Wiersema 2006, Chang et al 2009,

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

  Monk 1987, Kolmos & Bach 1987, Castro et al 1989, Kelleher et al 1996, Ohberg & Lönnqvist 1998, Linsley et al 2001, Chisti et al 2003, Breiding & Wiersema 2006, Chang et al 2009

ERSI

OSPI Europe


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'**

  Brooke & Atkinson 1974, Atkinson et al 1975, O'Donnell & Farmer 1995, Kelleher et al 1996, Linsley et al 2001

- 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'**

  Brooke & Atkinson 1974, Atkinson et al 1975, Ohberg & Lönnqvist 1998

ERSI

OSPI Europe

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

ERSI

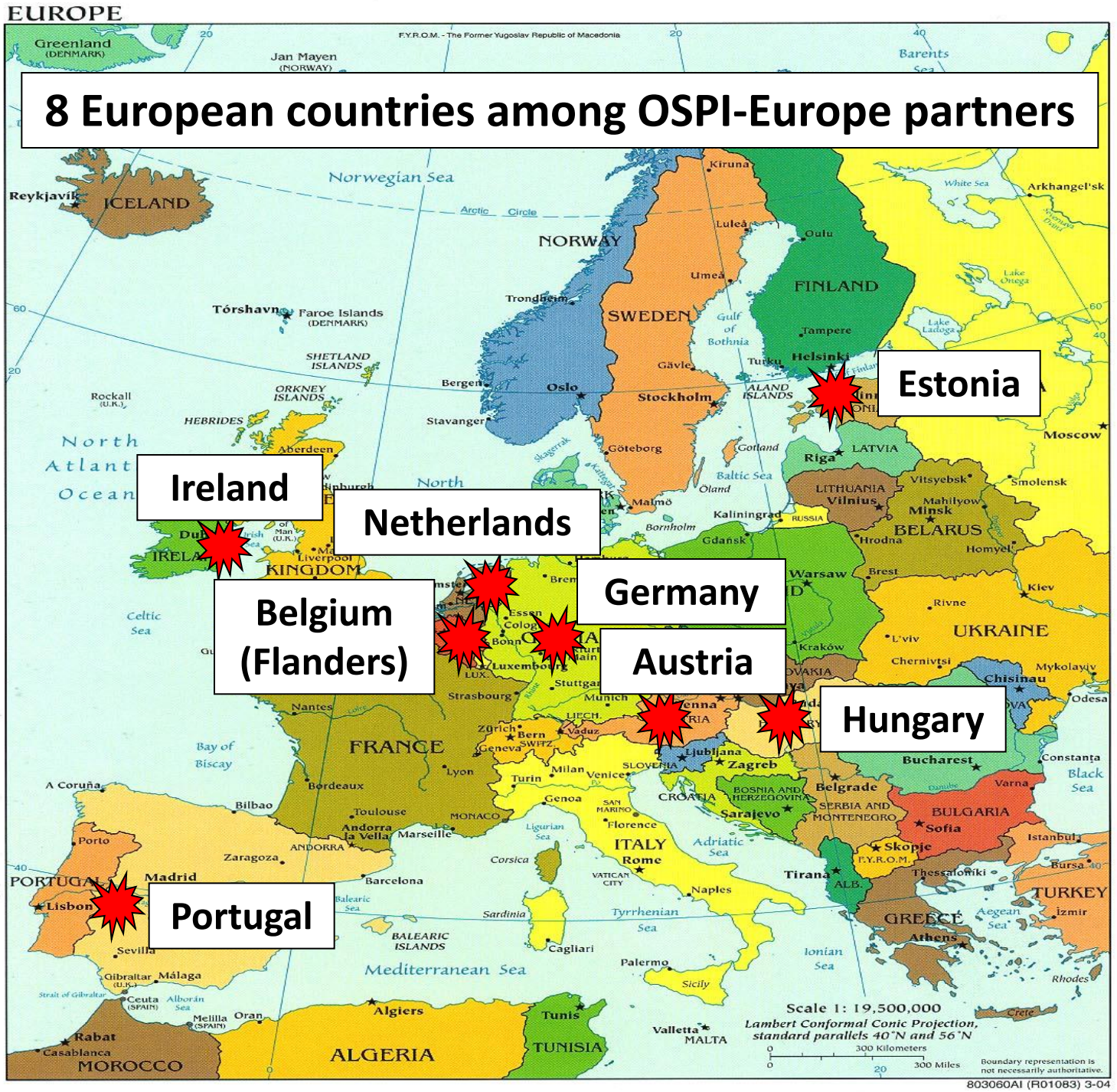
OSPI Europe

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

ERSI

OSPI Europe


EUROPE
8 European countries among OSPI-Europe partners
Estonia
Ireland
Netherlands
Germany
Belgium (Flanders)
Austria
Hungary
Portugal
Scale 1: 19,500,000
Lambert Conformal Conic Projection, standard parallels 40°N and 56°N
Boundary representation is not necessarily authoritative.
803060AI (R01083) 3-04

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

ERSI

OSPI Europe

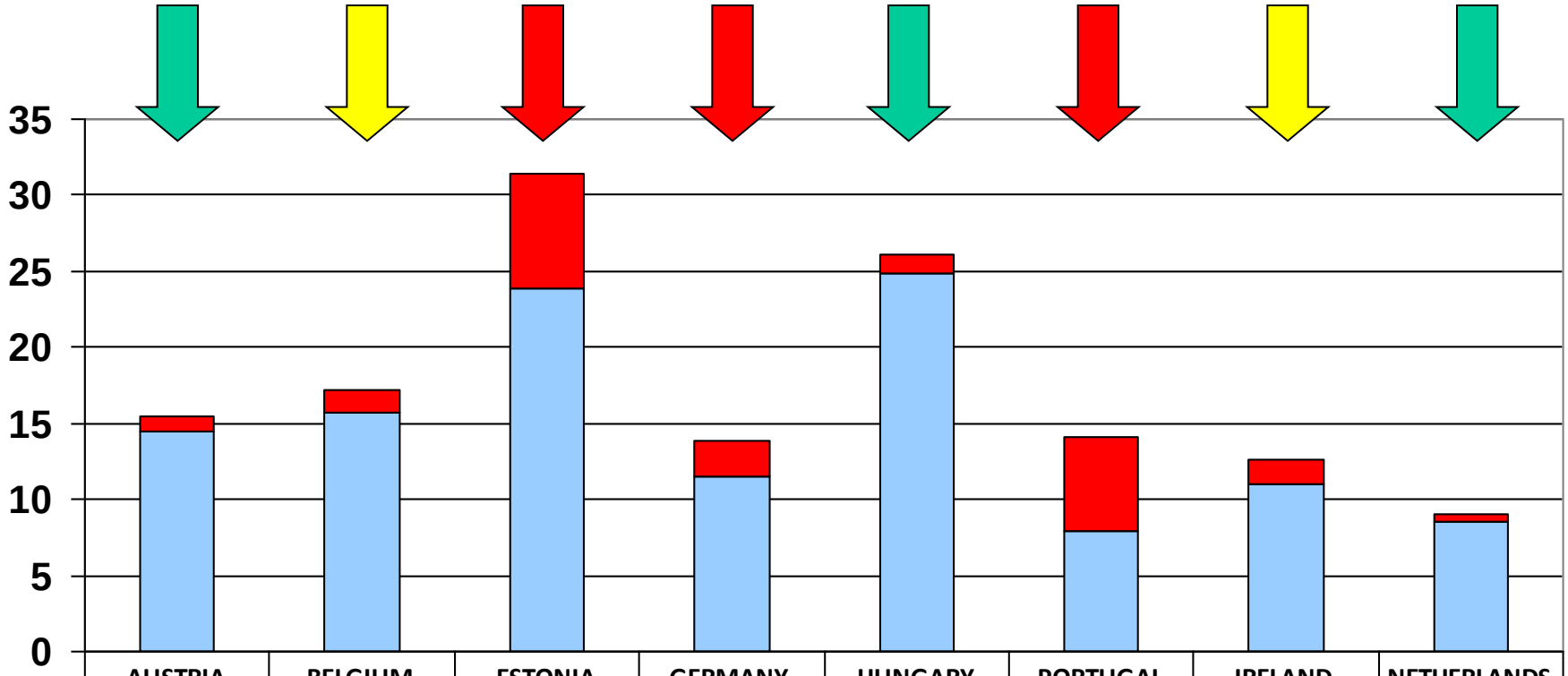
Medico-legal and coronial systems

- 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

ERSI

OSPI Europe

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)



	AUSTRIA 2003-2007 U/S ratio 0,07	BELGIUM 2003-2007 U/S ratio 0,09	ESTONIA 2001-2005 U/S ratio 0,32	GERMANY 2000-2004 U/S ratio 0,21	HUNGARY 2001-2005 U/S ratio 0,05	PORTUGAL 2000-2004 U/S ratio 0,78	IRELAND 2001-2005 U/S ratio 0,15	NETHERLANDS 2003-2007 U/S ratio 0,06
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)

ERSI

OSPI Europe

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)

ERSI

OSPI Europe

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

ERSI

OSPI Europe

Forensic Science International xxx (2010) xxx–xxx

Contents lists available at ScienceDirect

Forensic Science International

journal homepage: www.elsevier.com/locate/forsciint

Suicide registration in eight European countries: A qualitative analysis of procedures and practices

Peeter Värnik [a,b,*], Merike Sisask [a,b], Airi Värnik [a,b], Zrinka Laido [a,b], Ullrich Meise [c,d], Angela Ibelshäuser [d], Chantal Van Audenhove [e], Alexandre Reynders [e], Rüya-Daniela Kocalevent [f], Maria Kopp [g], Agnes Dosa [g], Ella Arensman [h], Claire Coffey [h], Christina M. van der Feltz-Cornelis [i,j], Ricardo Gusmão [k], Ulrich Hegerl [f]

[a] Estonian-Swedish Mental Health and Suicidology Institute (ERSI), Õie 39, Tallinn 11615, Estonia
[b] Tallinn University, Narva mnt 25, Tallinn 10120, Estonia
[c] Universitätsklinik für Allgemeine Psychiatrie und Sozialpsychiatrie, Department for Psychiatry and Psychotherapy at the Medical University Innsbruck, Innsbruck, Austria
[d] Society for Mental Health - pro mente tirol, Gesellschaft für Psychische Gesundheit - pro mente tirol, Karl-Schönherr-Str. 3, A-6020 Innsbruck, Austria
[e] LUCAS Centrum voor Consultancy and Zorgonderzoek, Katholieke Universiteit Leuven, Kapucijnenvoer 39, Bus 5310, B-3000 Leuven, Belgium
[f] Leiterin Forschungsnetz Psychische Gesundheit Klinik und Poliklinik für Psychiatrie Universität Leipzig, Semmelweisstr 10, 04103 Leipzig, Germany
[g] Semmelweis University Budapest, Institute of Behavioural Sciences, Nagyvárad tér 4, H-1089 Budapest, Hungary
[h] National Suicide Research Foundation, 1 Perrott Avenue, College Road, Cork, Ireland
[i] Research Program Diagnosis and Treatment of Trimbos Instituut, PO Box 725, 3500 AS Utrecht, The Netherlands
[j] Department of Psychiatry of VU University Medical Centre EMGO Instituut, Amsterdam, The Netherlands
[k] Departemento de Saúde Mental, Faculdade de Ciências Médicas, FCM, Universidade Nova de Lisboa, Campo dos Mártires da Pátria 130, 1169-056 Lisboa, Portugal

The research leading to these results has received funding from:

- The EC 7FP OSPI-Europe, Grant Agreement No. 223138
- The Estonian Ministry of Social Affairs
- The Estonian Scientific Foundation, Grant No. 7132

Dissemination of the results at the ESSSB13 was supported by
SA Archimedes, Grant 16-3.3/1400

Merike Sisask

E-mail: merike.sisask@neti.ee

Estonian-Swedish Mental Health and Suicidology Institute (ERSI)

Web-page: www.suicidology.ee

ERSI

OSPI Europe