## **CODA-EU Project – Certification of Causes** of Death (MOOC): the Portuguese version

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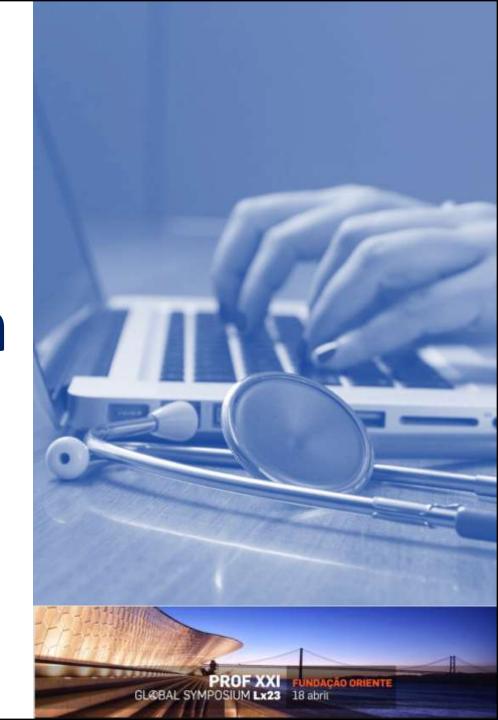
Sara Loureiro Brandão











#### **Intr** Research

 Moi Counting the dead and what they died from: an assessment and of the global status of cause of death data

Colin D. Mathers, 1 Doris Ma Fat, 1 Mie Inoue, 1 Chalapati Rao, 2 & Alan D. Lopez 2

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**Objective** We sought to assess the current status of global data on death registration and to examine several indicators of data completeness and quality.

**Methods** We summarized the availability of death registration data by year and country. Indicators of data quality were assessed for each country and included the timeliness, completeness and coverage of registration and the proportion of deaths assigned to ill-defined causes.

• In till-defined causes.

Findings At the end of 2003 data on death registration were available from 115 countries, although they were essentially complete for only 64 countries. Coverage of death registration varies from close to 100% in the WHO European Region to less than 10% in the African Region. Only 23 countries have data that are more than 90% complete, where ill-defined causes account for less than 10% of total of causes of death, and where ICD—9 or ICD—10 codes are used. There are 28 countries where less than 70% of the data are complete or where ill-defined codes are assigned to more than 20% of deaths. Twelve high-income countries in western

Europe are included among the 55 countries with intermediate-quality data.

**Conclusion** Few countries have good-quality data on mortality that can be used to adequately support policy development and implementation. There is an urgent need for countries to implement death registration systems, even if only through sample registration, or enhance their existing systems in order to rapidly improve knowledge about the most basic of health statistics: who dies from what?

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Keywords Mortality; Cause of death; Data collection/standards; Registries/standards; Vital statistics (source: MeSH, NLM).

Mots clés Mortalité; Cause décès; Collecte données/normes; Registre/normes; Statistique démographique (source: MeSH, INSERM).

Palabras clave Mortalidad; Causa de muerte; Recolección de datos/normas; Registros/normas; Estadísticas vitales (fuente: DeCS, BIREME).

ma BIREN de موجود

الكلمات المفتاحية: معدل الوفيات، سبب الوفاة، جمع المعطيات، معايير جمع المعطيات، معايير السحلات، إحصاءات الأحوال المدنية والمصدر: رؤوس الموضوعات الطبية – المكتب الإقليمي لشرق المتوسط)

Bulletin of the World Health Organization 2005;83:171-177.

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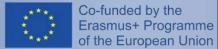




To:

- A. Tackling skills/competencies gap in certification causes of death and co-existing diseases;
- B. Recognizing competencies in managing medical documentation;
- C. Improving digital skills and promoting innovative e-learning and assessment methods among academics;
- D. Establishing open and online educational resources relevant to societal needs in ageing societies;
- E. Starting a strategic partnership between research and academies, and institutions demographers, epidemiologists and medical doctors.









#### **Aims**

- The European CODA-EU project, supported by the Erasmus+ program, aims to provide an innovative learning tool (CODA) to teachers who train medical students, allowing them to improve their knowledge of recommendations and rules set by WHO on certification of causes of death.
- The second aim of this project is to set up a MOOC dedicated to university trainers and professors wishing to adapt the CODA tool to their educational objectives.

Scientific coordinator: Agnieszka Fihel - Projet manager: Thomas Wiest

#### Project partners



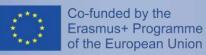


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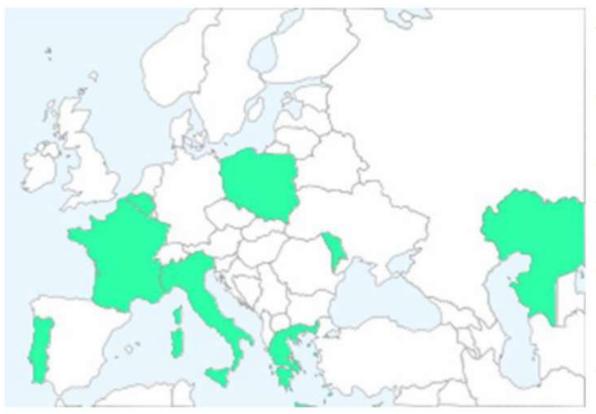








#### Associate partners



- Secretary of Medical Students, Italy
- Government Population Council, Poland
- Statistics Poland, Poland
- Kazakh National University, Kazakhstan
- Nicolae Testemiţanu State University of Medicine, Moldova
- Association of Medical Schools in Europe, Belgium
- Standing Committee of European Doctors, Belgium









- It's a free online course.
- The e-learning takes place in France, Greece, Poland and Portugal -Official languages.
- The training materials were jointly prepared by experts from research and academic institutions of these four countries.
- Addressed to medical doctors, medical students and other health professionals for whom the competencies in cause-of-death certification are important.
- The course takes approximately 3 hours (including the final test).
- Final certificate for those who complete the assessment.

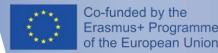




#### Role of the Portuguese team

- Material translation and revision (text, PowerPoint, images, graphs)
- Review the Portuguese system regulation concerning death certificates by:
  - Presenting the system architecture and functioning
  - Providing guidelines on how to fill in the Portuguese death certificate form
  - Listing official Portuguese websites, manuals and legislation as supplement materials for students
- MOOC Dissemination (materials, channels)





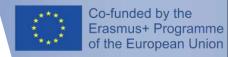


#### **Course structure**

- 1. Initial test
- 2. Introduction
- 3. Certification of causes of death
  - 1. ICD-10

- 4. Case studies (scenarios)
- 5. Final test
- 6. Resources





#### Initial test

1. Indicate the underlying cause of death

#### Descrição do cenário

A 40-year-old man was driving a car too fast, lost control of the car and hit a tree. He suffered multiple crushing injuries leading to rhabdomyolysis. The man was taken to the intensive care unit where he died soon afterwards.

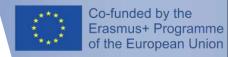
car collision with fixed or stationary object, driver injured in a traffic accident

striking against or struck by other objects, traffic accident

crushing injuries involving thorax with abdomen, lower back and pelvis

Send





### Questionário inicial | 3. Indique a causa de morte subjacente

#### Descrição do cenário

Um homem de 70 anos caiu das escadas em casa, fraturou a tíbia e sofreu uma lesão intracraniana. O paciente morreu a caminho do hospital. A autópsia revelou hemorragia intracraniana no tronco cerebral. Tinha como antecedentes um enfarte cerebral há 10 anos.

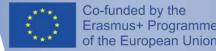
hemorragia intracraniana no tronco cerebral

lesão intracraniana

queda das escadas em casa

Reposta correta: queda das escadas em casa







#### **Course structure**

- Initial test
- 2. Introduction

ICD-10

- 3. Certification of causes of death

4. Case studies (scenarios)

- 5. Final test
- 6. Resources







- Presentation of the course and its aims.
- Importance of accurate data on causes of death for health policy.







5. Final test

4. Case studies (scenarios)

#### **Course structure**

- 1. Initial test
- \_ . . . . .
- 2. Introduction
- 3. Certification of causes of death 6. Resources
  - 1. ICD-10

# Co-funded by the Erasmus+ Programme

#### Module 1. Legal and organisation aspects of death registration in Portugal

- Understand the national regulations concerning stating the death and issuing the death certificate
- Know what to do in case of suspicious circumstances of death

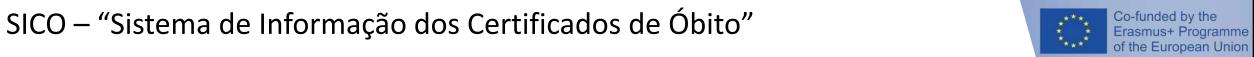
## Module 2. International Statistical Classification of Diseases and Related Health Problems

- Understand how the contents of the Classification are arranged
- Find out the specifics of four important chapters of the ICD

#### Module 3. The most common errors in the certification of causes of death

- Learn about recommendations regarding the choice of death causes
- Find out the most common errors when filling in the death causes sections





- The official Portuguese online platform for death certificates since 2014
- It allows:
  - The dematerialization of death certificates and statistical updates on death causes
  - The update of the National Health System patient's data
  - Online communication of death certificates to national civil registration services.



















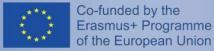
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Male, 55 years old, with a history of infection by the Hepatitis C Virus with 10 years of evolution. In the last 5 years, he developed chronic hepatitis, progressing to cirrhosis of the liver. He was admitted to the ER tachycardic (130 bpm) and hypotensive (BP 80/50 mmHg). During transport to the ER, he had several episodes of vomiting with blood. Analytically had a haemoglobin of 8.0 g/dL. He died a few hours after hospital admission. The autopsy concluded that the patient died following a hemorrhagic shock because of a rupture of oesophagal varices.





Farter 0
a) Causa directa: Indicar qual a doença, traumatismo ou complicação que levou directamente à morte *
I8501 Haemorrhagic shock
b) Devida ou consecutiva a:
I8511 Esophageal varices with bleeding
c) Devida ou consecutiva a:
K74 Fibrosis and cirrhosis of the liver
d) Devida ou consecutiva a:
B182 Chronic viral hepatitis C

# CODA-EU



### Tipos de exercícios

Há três conjuntos de exercícios

#### Conjunto 1.

Exercises with commentaries that facilitate understanding the rules of cause-of-death certification. 11

#### Conjunto 2.

Exercises that require indicating the underlying cause of death. 8

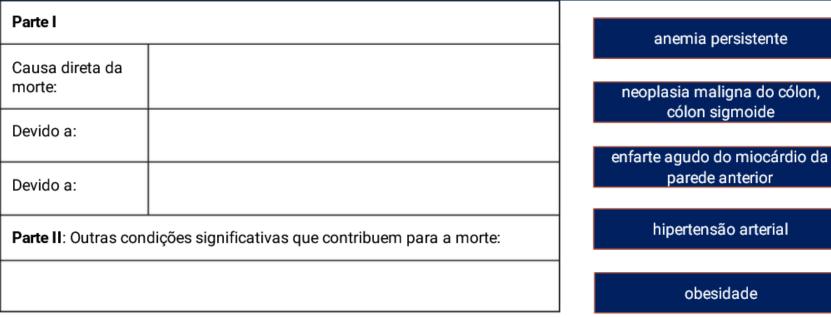
#### Conjunto 3.

Exercises that require filling in all medical sections of death certificate. 20

Número de exercícios: 20



Uma mulher de 75 anos foi admitida no serviço de urgência por forte dor precordial. Tinha sido diagnosticada há 3 meses com uma neoplasia maligna do sigmoide, após colonoscopia feita em contexto de anemia persistente, mas recusou a cirurgia. No serviço de urgência, atendendo ao tipo de dor, aos níveis de troponina e aos resultados do ECG, chegou-se ao diagnóstico de enfarte agudo da parede anterior do miocárdio. Morreu um dia depois. A paciente era obesa e tinha antecedentes de hipertensão arterial com 25 anos de evolução.





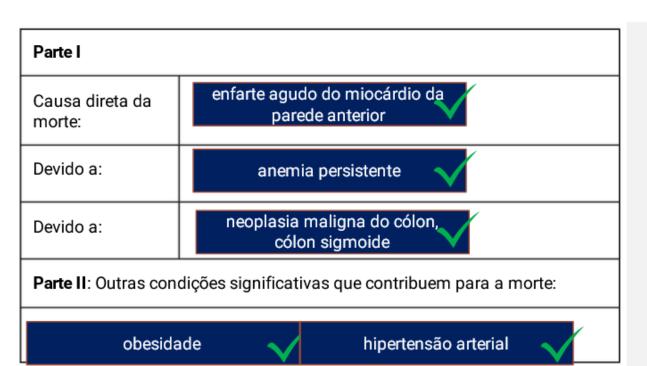






#### Cenário 1

Leia a seguinte descrição e preencha a certidão de óbito.



Comentário Avançar







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#### Teste final Informações introdutórias



Número de perguntas: 20

Nota de aprovação: 50% (10/20)

Número de tentativas: 2

60 minutos, uma hora Duração:

Durante o teste final pode consultar a classificação CID. A ligação à classificação pode ser encontrada no separador RECURSOS no canto superior direito.

Se interromper o exame e o curso, tal será interpretado como uma das duas tentativas permitidas de fazer o exame.







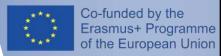
#### Dissemination

- Seminar
- Social media
- Email
- Whatsapp

362 registrations
Started 17/04/2023







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