

# ATLANTES RESEARCH team participations at the EAPC 2013 Congress

13<sup>th</sup> WORLD CONGRESS OF THE EUROPEAN ASSOCIATION FOR PALLIATIVE CARE

May 30 – June 2, 2013 PRAGUE | CZECH REPUBLIC



[www.eapc-2013.org](http://www.eapc-2013.org)

**Palliative Care**  
*the right way forward*



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Editor

ICS-ATLANTES  
University of Navarra  
31008, Pamplona, Spain

Responsible Person for the Scientific Content

Prof. Dr. Carlos Centeno  
Dept. of Palliative Medicine  
University Of Navarra  
31008 Pamplona, Spain

Email: ccenteno@unav.es

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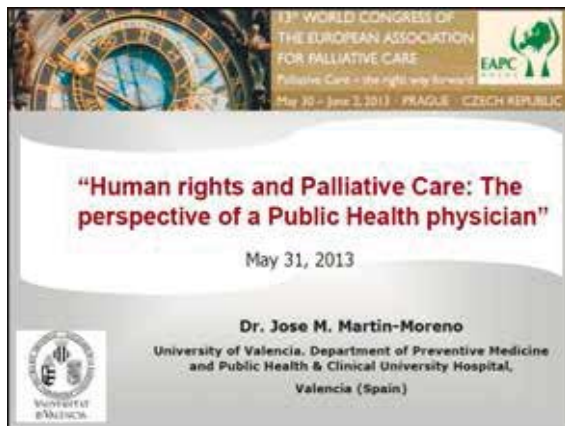
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Human rights and Palliative Care: The perspective of a Public health Physician



*On 10 December 1948, the United Nations General Assembly approved and proclaimed the Universal Declaration of Human Rights*

Human Rights have at their core the recognition that all human beings have an equal moral worth and inherent dignity.

The notion of human rights implies that everyone deserves a basic set of universal and inalienable entitlements to protect their dignity.

European societies have long understood access to healthcare among these.

The elephant in the room...

*"The destiny of human rights is in the hands of all our citizens in all our communities"*

Eleanor Roosevelt

## Human rights and Palliative Care: The perspective of a Public health Physician

... "The relief of suffering is a common goal of both medicine and human rights, and the relief of the pain and suffering of terminally ill patients is a human right."

(Margaret Somerville, 1992)

### Palliative care: Concepts

"An approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual."

(WHO 2002)

### Palliative care as a model for modern medicine\*

1. Patient-centred care rather than disease-centred care
2. Holistic attention to physical and psychosocial aspects
3. Interaction with social and human environment
4. Coordinated teamwork

\*Adapted from Roman-Mestre B. *Medicina Palliativa* 2013

### Palliative care as a model for modern medicine, cont.

5. Objectives based on patients' best interests
6. Humanization of relationship between patient and doctor
7. Comprehensive bioethical perspective
8. Dialogue-based practice
9. Vocational, philosophical and empathetic nature

### Palliative care

- A right for all citizens
- A challenge for all health systems



### National Level

- Many of the world's nations have written constitutions that enumerate the right of their citizens to receive adequate health care.
- Many Member States have adopted palliative care and pain relief laws that enumerate the rights and obligations of patients with life-limiting conditions.

Source: Dr. Liliana De Lima, International Palliative Care Network, Lecture Series 2012



# Human rights and Palliative Care: The perspective of a Public health Physician

### Basic Tenants

- A right can only exist if there is a pre-existing obligation.
- The holder of a right has the capacity to enforce a duty in a person or institution.
- The "other part" has a duty to fulfill that right.

Source: Dr. Usiene De Lima, International Palliative Care Network, Lecture Series 2012

### Palliative Care Obligations

1. The creation and implementation of palliative care policies.
2. Equity of access to services, without discrimination.
3. Availability and affordability of critical medications, including opioids.
4. The provision of palliative care at all levels of care.
5. The integration of palliative care education at all levels of the learning continuum from informal caregivers to health professionals.

Source: Dr. Usiene De Lima, International Palliative Care Network, Lecture Series 2012

### Need to make this right universal

**The right to palliative care and pain treatment may be implied from the expressed right to health:**

- Health: "A state of complete physical, mental (and spiritual)\* and social well-being and not merely the absence of disease or infirmity."

WHO Constitution (1949)

\*WHO-Executive Board's proposal, 1998

### Calls from the International Palliative Care Community

- The Cape Town Declaration (2002)
  - WHO, Diana Princess of Wales Memorial Fund
- The Korea Declaration (2005)
  - WPCA
- The Budapest Commitment (2007)
  - EAPC, IAHP, WPCA
- Joint Declaration (2009)
  - IAHP, WPCA: Signed by more than 4,500 individuals and 600 organizations

Source: Dr. Usiene De Lima, International Palliative Care Network, Lecture Series 2012

### Reality check

*How close are we to realizing the objective of a peaceful, painless and dignified death for all?*

## Human rights and Palliative Care: The perspective of a Public health Physician

### Facts

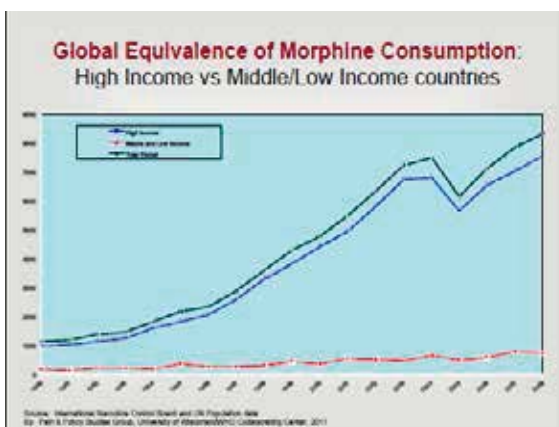
- Worldwide around 60 million people die every year
  - 7.5 million = malignant neoplasm
  - 3 million = AIDS related illness
- Millions suffer and die of:
  - Cardiac, respiratory, renal and hepatic failure and neurological conditions
- 60% of people who die would benefit from palliative care
- Palliative Care is integrated into public health in a few countries of the world.

Source: Dr. Liliana De Lima, International Palliative Care Network, Lecture Series 2012

### Facts

- In 2006, Western Europe and North America together accounted for 89% of global consumption of morphine.
- 80 % of the world population lives in developing countries - consumes only 6 % of the morphine
- More than 50 countries do not have any opioids available
- Opioids are not available in rural areas and in home care in most of the countries.

Source: Dr. Liliana De Lima, International Palliative Care Network, Lecture Series 2012 INCB, Press Release #1 p 11, March 2006



### What's going wrong?

1. Communication disconnect
2. Lack of a health system and policy approach

### Lost in translation

### Scientists/researchers

- Specialized/esoteric/cryptic language
- Understanding problems by their cause and solution
- Just one direction offered (the "best one" from the "scientific" perspective)
- Scientific and sampling uncertainties
- Shedding only limited light
- *More research is warranted*



## Human rights and Palliative Care: The perspective of a Public health Physician

### Politicians/policymakers:

- Succinct, pragmatic and focused on the short term
- Must address not only the cause of the problem, but also different options/solutions, and implementation issues...
- Prefer to be presented with more than one solution (different options), with dichotomous pros and cons
- Short-term needs require simple (sometimes simplistic) solutions/patches

### A problem of format

#### BRIDGE project:

One attempt to address communication challenge through information packaging mechanisms such as...

- systematic review summary
- policy brief

### Enhancing Communication: a key tactical approach to moving forward

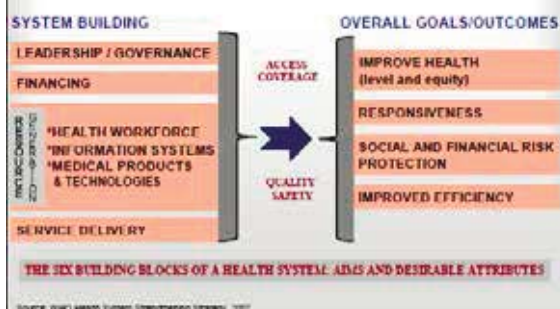
- Creation of a Palliative Care Public Policy Committee
- Engaging with high-level institutions (European Parliament, WHO, etc. ....)
- Creating / ensuring participatory channels

### Integrating health system concepts into the palliative care dialogue

It is not enough to say that palliative care is necessary . . .

We must also show the way.

### The WHO Health System Conceptual Framework



### So . . . what next?

- Three dimensions or disciplines (palliative care, public health and human rights) are interacting.
- Maturing of palliative care = clinical specialty and academic discipline coincided with development of a public health approach to global and community health.
- The care of the dying is a public health issue.
- Accumulation of evidence that patients are not adequately treated = "ethics of under treatment"

Source: Dr. Liliana Bn Uma, International Palliative Care Network, Lecture Series 2012

## Human rights and Palliative Care: The perspective of a Public health Physician

### Public Health and Palliative Care, the way forward

- A start has been made in linking the two approaches
- 'Public health' must be seen in a wide context to involve all stakeholders in the promotion of hospice and palliative care – it is 'bottom up' as well as 'top down'
- Specialist recognition of palliative medicine is an important aspect of gaining public health recognition
- An *alliance* is needed between public health and palliative care specialists, working together on concrete projects



European Association for Palliative Care, EAPC - Themes - Policy - Prague Charter

[www.eapc.eu/Themes/Policy/PragueCharter.aspx](http://www.eapc.eu/Themes/Policy/PragueCharter.aspx)

### Creating opportunities



**The Prague Charter**  
Urging governments to relieve suffering and ensure the right to palliative care

Please click here to sign the petition  
Prague Charter "Palliative Care: a human right!"



Working together to advocate access to palliative care as a human right:

- European Association for Palliative Care (EAPC)
- International Association for Palliative Care (IAPC)
- Worldwide Palliative Care Alliance (WPCA) and
- Human Rights Watch (HRW)

### The EAPC-Prague Charter: The petition

1. Governments should develop **health policies** that address the needs of patients with life-limiting or terminal illnesses:
  - Develop comprehensive health care policies that provide for integrated palliative care
  - Include support to the relatives of patients during the time of care and after the time of death in legislative measures

### The EAPC-Prague Charter: The petition

2. Governments should ensure **access to essential medicines**, including controlled medications, to all who need them:
  - **Eliminate undue barriers** which impede access
  - Develop a system for **estimating their need** for such medications
  - Establish safe and secure **distribution and dispensation systems**

### The EAPC-Prague Charter: The petition

3. Governments should ensure that healthcare workers receive adequate **training on palliative care and pain management** at undergraduate and subsequent levels:
  - Include basic palliative care training in undergraduate curricula for healthcare providers
  - Support the development and implementation of postgraduate and specialty palliative care programs
  - Establish adequate continuing education courses in palliative care for current healthcare workers

### The EAPC-Prague Charter: The petition

4. Governments should ensure the **integration** palliative care into **healthcare systems** at all levels.

Design and develop plans to create and implement palliative care units, groups and programmes

If politics is the *art of the possible*, then health policymaking must be the *art of making the necessary possible*.

- Conclusions**
- Life and... death comes to us all
  - Egalitarian, universal, inalienable, unavoidable

**Dignity in life and death: a human right**

To meet our passing with no pain, no mental anguish, no spiritual distress . . .

To be able to look upon our lives as we have lived them, for good or ill, but with clarity and peace of mind.

Our right as humans is to have this.

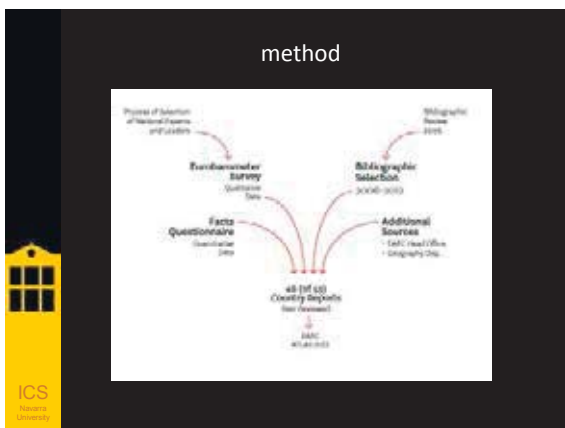
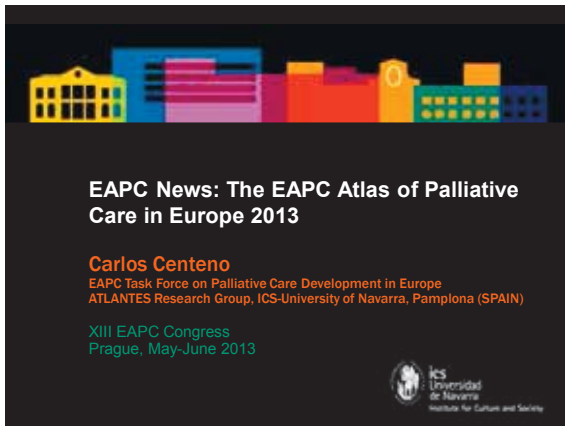
Our responsibility as medical professionals is to fight to bring this to others.

**Thank you!**

*dr.martinmoreno@gmail.com*



The EAPC News: The EAPC Atlas (New Edition of the EAPC Atlas of Palliative Care in Europe)

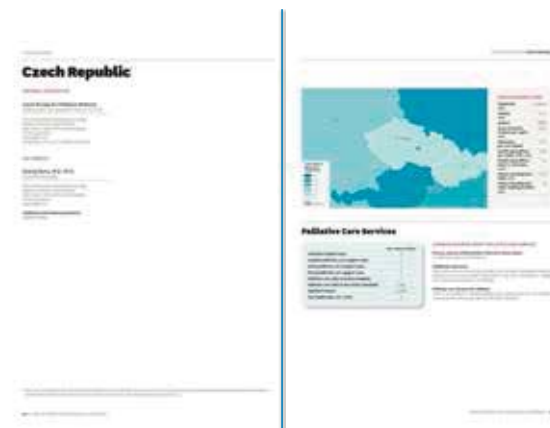
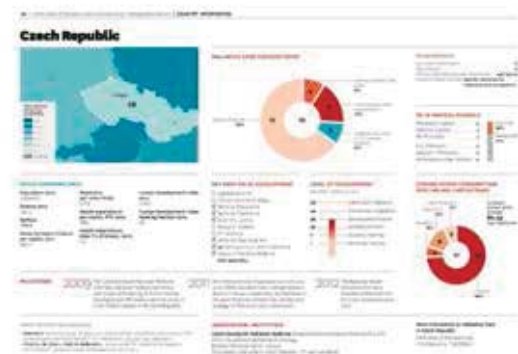
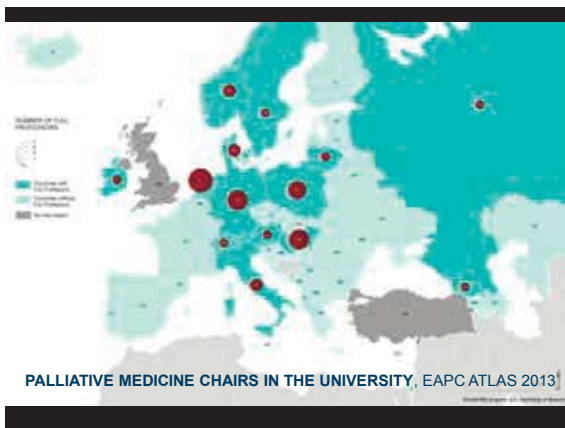
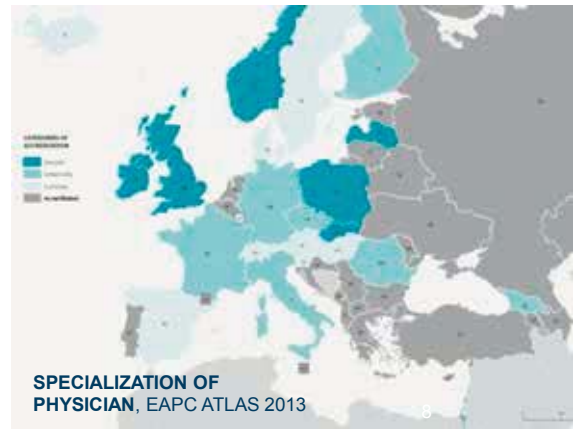


TOTAL SERVICES, EAPC ATLAS 2013

The EAPC News: The EAPC Atlas (New Edition of the EAPC Atlas of Palliative Care in Europe)



SERVICES PER INHABITANTS · EAPC ATLAS 2013







## The EAPC News: The EAPC Atlas (New Edition of the EAPC Atlas of Palliative Care in Europe)



**EAPC Atlas of Palliative Care in Europe 2013 – Cartographic edition**  
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Thanks for your attention  
[ccenteno@unav.es](mailto:ccenteno@unav.es)



# Palliative Care Policies in the National Governments and the European Institutions



**“Palliative care policies in national governments and European institutions”**

June 2, 2013

Jose M. Martin-Moreno  
 Thomas Lynch  
 Eduardo Garralda  
 Carlos Centeno

## This presentation

- Main developments in palliative care since 2006
- National plans in palliative care
- Palliative care through a health systems lens
- Barriers to provision
- Next steps

## Recent developments in palliative care

**2006: Data collected for the first edition of the EAPC Atlas of Palliative Care in Europe\***

**What progress has been made since then?**

- Atlantes Group in Pamplona, Spain, has been working to update the Atlas promoted by EAPC
- Some data of this 2013 update presented here and are available (printed copies in the EAPC stand and on internet, Apple store, and Google Play)

\*Published in 2007

## Major advances since 2006

- **Palliative care specialties** newly established or underway in Finland, France, Italy, Israel, Latvia, Norway, Slovakia
- **New national plan or strategy** specific to PC developed in different Member States such as in Albania, Austria, Denmark, Finland, France, Georgia, Italy, Luxembourg, Portugal, Serbia
- Increased emphasis on palliative care in national cancer plans
- Legislation guaranteeing palliative care services
- New service standards and protocols

**Palliative care continues to be consolidated as an important medical field.**

## But services still insufficient

- Despite progress, millions of Europeans still die in pain with psychological distress
- Huge disparities between and within countries, evidence of great unmet needs




# Palliative Care Policies in the National Governments and the European Institutions

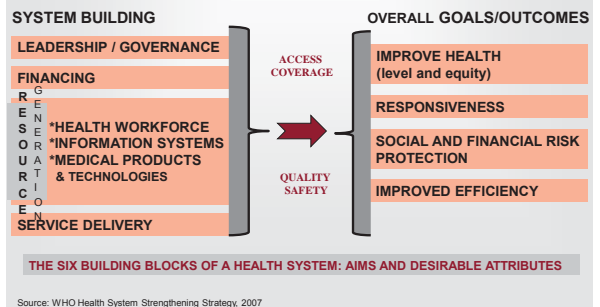


## National legislation and policy in palliative care



## Fostering the development of PC in Europe: the health systems perspective

### The WHO-HS Framework



## Fostering the development of PC in Europe: the health systems perspective

- Further advances in the field of palliative care require overcoming the barriers found within the larger context of the health system:
  - Legislation is of limited use without financing
  - Money goes nowhere without available human and physical resources
  - Service provision needs support from research and policy

*Good governance is required to oversee the comprehensive integration of all these ingredients.*

## Leadership, governance, and policy barriers

- Organizational and coordination issues
- Decentralized competencies that complicate national priority-setting
- Inadequate or insufficient PC services for the population



# Palliative Care Policies in the National Governments and the European Institutions

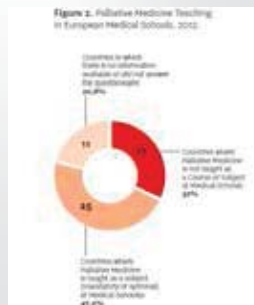
## Financing barriers

- Poor distribution of health budget
- Financial crisis
- Lack of coverage for PC from insurance companies
- PC not always included in health system portfolio



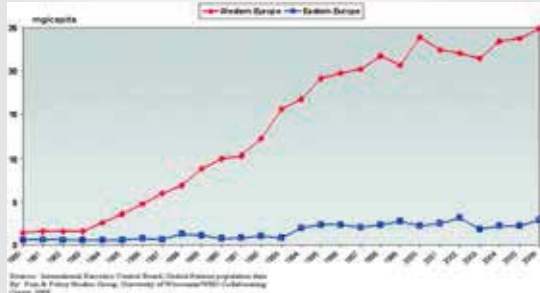
## Human resource barriers: medical undergraduate training

- 13 countries offer palliative care as a subject in ALL national medical schools (Austria, Azerbaijan, Belgium, Cyprus, France, Hungary, Latvia, Malta, Moldova, Norway, Slovenia, Switzerland, UK)
- Other countries offer palliative care as a subject in regular medical training (Spain, Latvia, Lithuania, Germany, Macedonia, Czech Republic, Portugal, Azerbaijan, Italy, the UK)



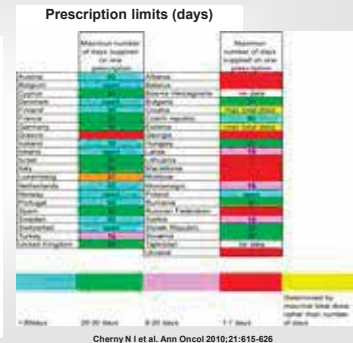
## Barriers in medical products and technologies: Opioid use

Morphine use in Eastern and Western Europe, 1980-2006



## “The impossible prescription”

- Need for special authorization or special prescription
- Limited availability in pharmacies and hospitals
- Lack of availability in emergency care
- Stigma related to addiction



## Service delivery barriers

- Quality guidelines not always available or enforced (heterogeneity /inqualitis; from nothing or just some end of life care... to proper palliative care)
- Unequal access, especially for non-cancer patients, children and rural patients
- Lack of integrated approach (psychosocial as well as physical)
- Few beds available for palliative care

## Information & sociocultural barriers

- Taboos related to death and dying
- Lack of awareness in society of what palliative care is
- Lack of awareness among the political class



# Palliative Care Policies in the National Governments and the European Institutions

## Professional barriers

- Limited research budget and capacity
- Need to bridge gaps among healthcare professionals (multidisciplinarity)

*Need to foster greater respect for the role of palliative care specialists*

## Overcoming the barriers

Three areas for concerted action:

GOVERNMENT



HEALTH PROFESSIONALS



SOCIETY



## Tackling governmental barriers

- Develop an advocacy framework
- Engage policymakers in a two-way knowledge brokering
- Create platforms to raise awareness among policymakers (policy dialogues, policy briefs)
- Strengthen palliative care field from within Ministry of Health

## Overcoming professional barriers

- Foster palliative care training and research ... for all physicians
- Legitimize credentials of pallcare professionals
- Develop (or adapt) palliative care quality guidelines and protocols
- Strengthen multidisciplinary links with other health professionals

## Raise awareness throughout society

- Develop and implement communication strategy for traditional and online media
- Promote advance directives among healthy citizens as a way to raise awareness



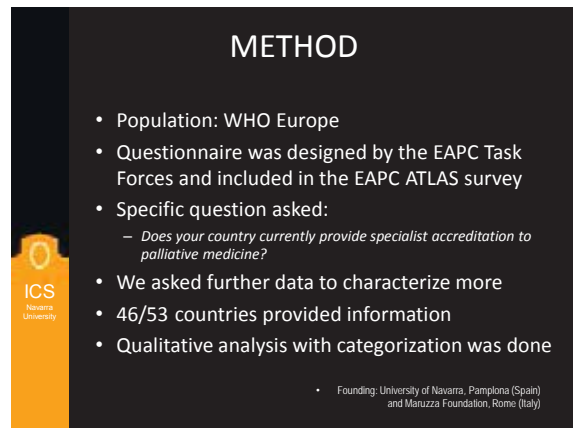
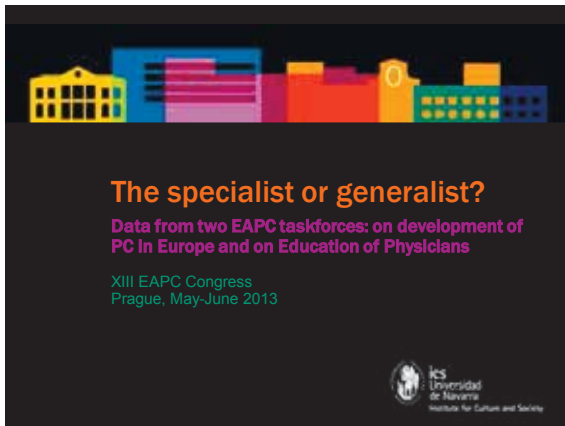
## Palliative care policy: a human mission

Above all, we need to bring home the human necessity of palliative care, to policymakers, health professionals and citizens.



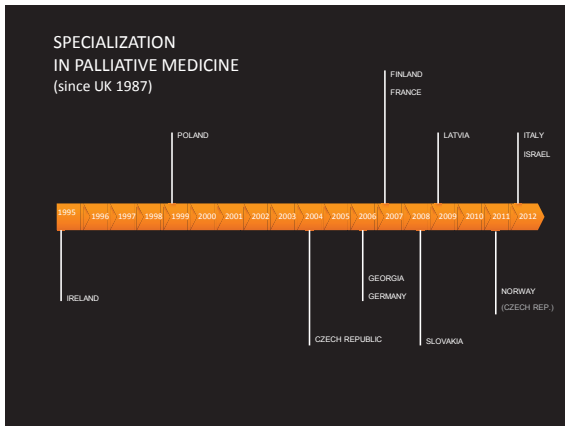
*Part of a complete portfolio of modern health services that serve citizens from birth until death*

# The Specialist or Generalist - Data from the EAPC Taskforce on Development





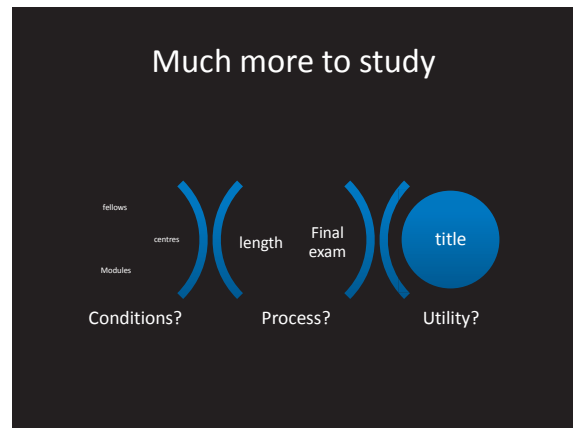
# The Specialist or Generalist - Data from the EAPC Taskforce on Development



**In process of accreditation...**

Country	Date
Denmark	Estimated by 2013
Hungary	Estimated by 2012
Iceland	Not specified
Netherlands	Not specified
Slovenia	Estimated end of 2012
Spain	Estimated by 2013
Sweden	Estimated by 2013
Switzerland	Estimated by 2016
Turkey	Estimated by 2012
Ukraine	Not specified

- What's in the name?**
- SPECIALTY**
    - Palliative medicine (UK, Ireland, Poland, Norway)
    - Palliative care (Latvia)
  - SUB-SPECIALTY**
    - Palliative Medicine (Germany, Slovakia)
    - Palliative Care (Georgia, Israel)
  - OTHERS**
    - Diploma of complementary studies in PC (Romania, France)
    - Specialist Competence in PM (Finland)
    - Post-Specialty Master (Italy)
- ICS Navarra University



**A new EAPC Task Force**

ACADEMIA DELLE SCIENZE DI MEDICINA PALLIATIVA, U OF BOLOGNA

ATLANTES GROUP (ICS) UNIVERSITY NAVARRA

EAPC

ICS Navarra University

**Ideas for a strategy**

**The specialist or generalist?**

# The Specialist or Generalist - Data from the EAPC Taskforce on Development



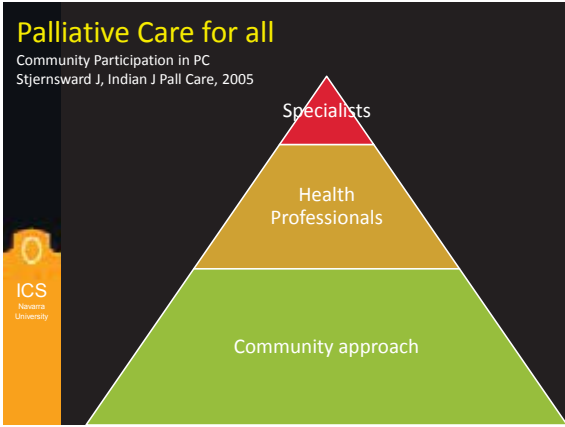
Around 300 physicians with the certification in PM

**POLAND**

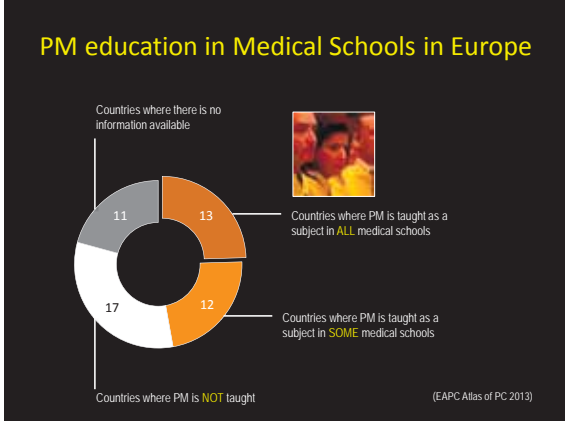
ICS  
Newara University

...there are 252 consultants and 82 non consultant doctors.

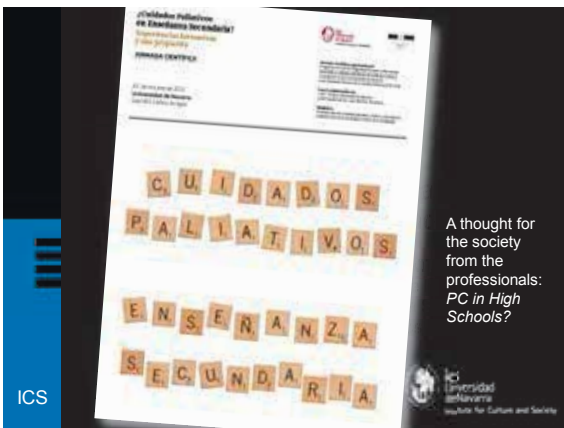
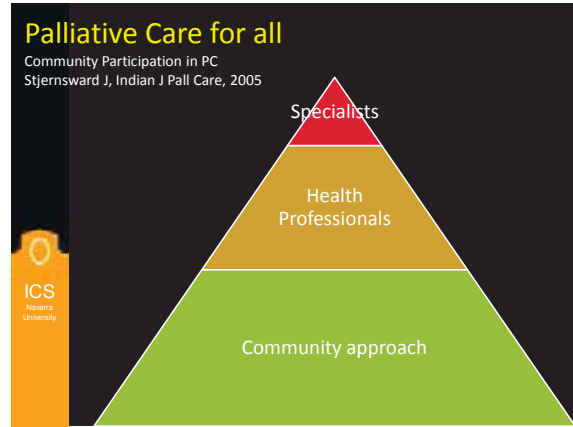
**UK**



**Palliative Care for all...  
...the doctors!!  
...at the medical school !!**



# The Specialist or Generalist - Data from the EAPC Taskforce on Development



### The specialist or generalist?

- Palliative Medicine is an specialty (or equivalent) in 12 European countries
- Specialization is needed and good for the discipline but is not enough
- PC for all the future doctors must to be mandatory
- To introduce PC in High School could be a way to act on the society

ICS  
Universidad de Navarra  
Institute for Culture and Society

Thanks for your attention  
[cccenteno@unav.es](mailto:ccenteno@unav.es)

ICS  
Universidad de Navarra  
Institute for Culture and Society

# Mapping the teaching of Palliative Medicine in European Universities: Report from a 2012 survey

Mapping the teaching of Palliative Medicine in European Universities;  
Report from a 2012 EAPC survey

Thomas Lynch, PhD  
Carlos Centeno, MD, PhD

*EAPC Task Force on the Development of Palliative Care in Europe*

June 2013

## Background

- The lack of palliative care education and training opportunities has been cited as a major barrier to the development of the discipline in both Western European countries (Lynch, et al., 2010) and the countries of Central and Eastern Europe and Commonwealth of Independent States (CEE/CIS) (Lynch, et al., 2009).

## Aim

- The aim of the survey was to conduct an exploratory study of the teaching of Palliative Medicine (PM) in the university throughout 53 European countries.

## Method

- In 2011, the *EAPC Task Force on the Development of Palliative Care in Europe* embarked upon a new programme of work to produce updated information on the status of palliative care in each European country and compile a Second Edition of the *EAPC Atlas of Palliative Care in Europe*.



## Method

- A key aspect of this work was the completion of a survey collecting 'factual' data on palliative care in each European country;
- This quantitative survey ('Facts Questionnaire') was addressed to a previously identified 'key person' – an 'expert' with extensive knowledge of the 'reality' of palliative care in their location.



# Mapping the teaching of Palliative Medicine in European Universities: Report from a 2012 survey

## Method

- The 'key persons' in each country were identified based on recommendations from national associations, participation in previous EAPC surveys or other similar projects, or involvement in the development of the discipline in their respective country.

## Method

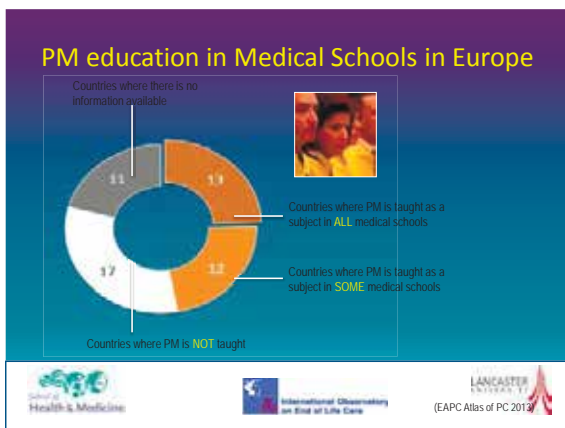
- In total, 46/53 countries from the WHO European region completed the Facts Questionnaire
- In conjunction with the *EAPC Steering Group on Medical Education and Training*, one section of the Facts Questionnaire examined the teaching of PM in each country

## Method

- Questions included the number of universities teaching PM; the level of education; whether the subject is elective or mandatory; and the existence of Chairs/other positions of Professor, etc.

## Results

- PM is taught at medical schools as either a mandatory or an optional subject (or both) in at least 25 European countries;
- For example, in Georgia, it is a mandatory component on some courses at Tbilisi State Medical University and an optional component on other courses.




Country	% med school that teach	N <sup>o</sup> med school that teach	Compulsory /optional
Switzerland	100%	6	5/1
Norway	100%	4	2/2
Austria	100%	4	3/1
Hungary	100%	4	0/4
Slovenia	100%	2	0/2
Azerbaijan	100 %	1	1/0
France	100%	NA	NA
Cyprus	100%	1	1/0
Malta	100%	1	1/0
Moldova	100%	6	5/1
UK	100%	31	NK
Latvia	100%	4	4/0
Belgium	100%	7	7/0

# Mapping the teaching of Palliative Medicine in European Universities: Report from a 2012 survey

## Results

- Although PM as a subject may be either compulsory or optional, there appears to be a trend towards it being compulsory;
- For example, the National Recommendations for Palliative Care in Denmark insist that all medical degrees contain PPC curricula before the end of 2013.



## Results

- From 2013 onwards PC is a mandatory component of tuition and examination in Germany (by law);
- In Switzerland, the national law for academic training in health care professions stipulates that regular training in palliative care is mandatory for all medical students




## Results

- Some countries are at an earlier stage of development but nevertheless are beginning to build capacity in this area. For example, in Kazakhstan, Karaganda State University has begun to develop a curriculum of palliative medicine



## Results

- An undetermined number of universities may include PM in other Specialty areas such as Oncology, Geriatrics, etc. For example, in medical schools in the Republic of Moldova, palliative medicine is not a separate subject, but is a part of other medical disciplines.



## Challenges

- "Some" aspects of palliative medicine (pain management, psychosocial issues, communication, etc.) are part of the curricula of other disciplines in medical schools.
- In some countries there are both public and private medical schools (for example, Albania); it is not known whether palliative medicine is included in private medical school curricula.



## Results

- Chairs in Palliative Medicine exist in 15 European countries;
- In some countries, Faculties of Medicine have Associate Professors only.



# Mapping the teaching of Palliative Medicine in European Universities: Report from a 2012 survey

## Conclusion

- In 2013, PM is already being taught in a significant number of universities within Europe and Chairs of PM have been identified;
- PM needs to be further integrated into medical and nursing school undergraduate and post-graduate education programmes in both Western Europe and CEE/CIS



## Contact details

- [t.lynch@lancaster.ac.uk](mailto:t.lynch@lancaster.ac.uk)
- [cccenteno@unav.es](mailto:ccenteno@unav.es)
- [www.eolc.observatory.net](http://www.eolc.observatory.net)
- [www.unav.es/centro/cultura-y-sociedad/](http://www.unav.es/centro/cultura-y-sociedad/)





# Hypomagnesemia and Refractory Pain in Advanced Cancer Patients: Case Series



## BACKGROUND:

There are some drugs of frequent use in advanced cancer patients under chemotherapy (cisplatin, cetuximab, cyclophosphamide) or for other indications: antibiotic, Proton Pump Inhibitors (Table 1) that may decrease serum concentrations of magnesium through gastrointestinal or renal mechanisms. Preclinical studies in animals have shown that Mg potentiates the analgesic effect of opioids and can prevent hyperalgesia perhaps through its effect on the N-methyl-D-aspartate receptor (NMDA). Clinically, hypomagnesemia can produce neurological symptoms as irritability, hallucinations, tremors or convulsions, but reports of hypomagnesemia and pain are unusual.

## CLINICAL CASES:

We present four clinical cases (figure 1) of excruciating pain and hypomagnesemia. All patients were hospitalised, with advanced cancer, recent chemotherapy and under opioids. A patient was also with ketamine as adjuvant. The pain was presented in crisis of top intensity with fluctuation and anarchic response to opioids (figure 2). We show the evolution of pain intensity and the blood levels of magnesium. Excruciating pain was associated with magnesium in the range of 1.2-1.5 mg/dl. Intravenous magnesium replacement (12 mEq diluted in saline in 30 minutes) follow by same daily dose to cover requirements was indicated in all of them. Magnesium levels of 1.9 to 2.2 mg/dl were associated with relief pain.

Figure 1: Four patients with pain and values of magnesium

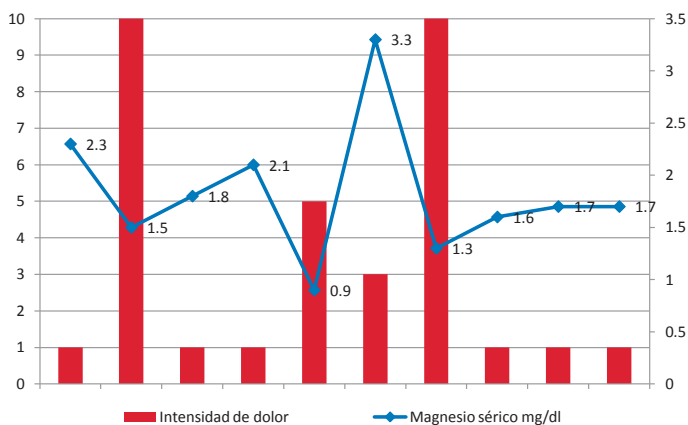
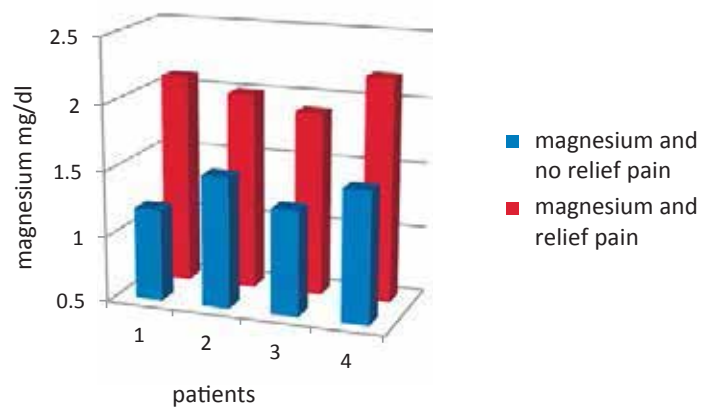


Figure 2: The graph describes a patient. It can be seen that the episodes of severe pain are related to magnesium serum levels < 1.6 mg/dl. On the vertical axis on the left, a verbal pain scale of 0 to 10 is established, based on the clinical notes on the days when magnesium was measured. The right-hand vertical scale corresponds to the range of values within which magnesium serum levels oscillated.

Table 1: Causes of hypomagnesemia relevant to oncology and palliative care patients.

Reduced oral/intravenous intake	• Total parenteral nutrition • Magnesium deficient diet
Reduced absorption	• Intestinal resection • Fistula • Short bowel syndrome
Renal loss	• loop diuretics: furosemide • Antineoplastics: Cisplatin, Cyclophosphamide, Cetuximab • Antibiotics: aminoglycosides, vancomycin, aciclovir, amphotericin B • Other: Proton pump inhibitors, Ciclosporine
Non renal loss	• Chronic vomiting • Excessive sweating
Endocrine disease	• Diabetes mellitus • Hyperparathyroidism • Hyperthyroidism

**Conclusion**  
Correction of hypomagnesemia can be associated with pain relief in situations concreted



# First Spanish version of the Memorial Delirium Assessment Scale (MDAS): Psychometric properties, Responsiveness and Factor Loadings

Antonio Noguera (1), Ana Carvajal (2), Alberto Alonso-Babarro (3), Gary Chisholm (4), Eduardo Bruera (4), Carlos Centeno (2)

(1) Hospital Centro de Cuidados Laguna, Madrid, Spain; (2) Clínica Universitaria, Universidad de Navarra, Pamplona, Spain; (3) Hospital Universitario La Paz, Universidad Autónoma, Madrid, Spain; (4) The University of Texas MD Anderson Cancer Center, Houston, Texas, USA

**Context:** Memorial Delirium Assessment Scale (MDAS) is a reliable and validated instrument with which to assess delirium. Responsiveness to delirium changes detected by the MDAS has been investigated on indirect way. Neurobehavioral and Global cognitive seem to be MDAS main factor loads.

**Objectives:** Primary objective of this study was thus to evaluate MDAS responsiveness and to analyze individual factors on this scale. Secondary objective was to confirm concurrent validity and reliability of the MDAS Spanish version.

**Methods:** A reverse translation method was used to obtain MDAS Spanish version. Delirium diagnosis was determined by clinical *DSM IV TR criteria* and with Confusion Assessment Method in 85 advanced cancer patients. MDAS Responsiveness and Factor loadings were determined with Delirium Rating Scale-Revised-98 (DRS-R-98), Mini-Mental State Examination (MMSE), and MDAS at baseline (0) and 72 hours.

**Results:** Delirium related symptoms in the study population is described in **table 1**. Day 1 disorientation (60%), short-term memory impairment (49%), and decreased or increased psychomotor activity (60%). Day 3 disorientation still is 60 %, moderate or severe short term memory impairment increases to 58%, and psychomotor activity alteration was present in 58% of the patients. Variation in DRS-R-98 scores shows a correlation of  $r = 0.93$ , with variation in MDAS scores at  $P < .001$ . Variation in MMSE scores shows a correlation of  $r = -0.84$ , with variation in MDAS scores at  $P = .015$  (**table 2**). Factor I, neurobehavioral (reduced awareness, reduced attention, perceptual disturbance, delusions, altered psychomotor activity, and sleep-wake cycle disturbance) correlated moderately with MMSE at  $-0.56$ . Factor II, global cognitive (disorientation, short-term memory impairment, impaired digit span, and disorganized thinking), correlated strongly with MMSE at  $-0.81$ . Factor II was significantly more reliable than I  $\rho = 0.7$ ,  $P = .01$  (**table 3**). **Reliability:** The MDAS overall alpha was 0.82, indicating good internal consistency. The MDAS' overall intraclass correlation coefficient was 0.95, indicating excellent interobserver reliability

**Conclusions:** The high responsiveness confirms the value of the MDAS for ongoing delirium assessment. Two differentiated factor loadings points to a potential future need for MDAS subscales.

**Table 2. MDAS concurrent validity and responsiveness**

	Concurrent Validity		Responsiveness	
	Spearman Rho	P <sup>a</sup>	Spearman Rho	P <sup>a</sup>
DRS-R-98	0.80	.02	0.93	<.001
MMSE	-0.74	.23	-0.84	.015

<sup>a</sup> In comparison to the null hypothesis with which  $P < 0.7$  (DRS-R-98) or  $P > .7$  (MMSE)

**Table 1. Delirium phenomenology: Symptoms Frequency and Severity**

	Day 1				Day 3			
	None	Mild	Mod	Sev	None	Mild	Mod	Sev
Awareness	34 (39%)	39 (44%)	15 (17%)	0 (0%)	28 (37%)	31 (41%)	14 (18%)	3 (4%)
Disorientation	12 (14%)	23 (26%)	31 (35%)	22 (25%)	16 (22%)	14 (18%)	21 (28%)	24 (32%)
Memory	24 (27%)	21 (24%)	29 (33%)	14 (16%)	9 (12%)	23 (30%)	27 (36%)	16 (22%)
Digit span	52 (59%)	15 (17%)	15 (17%)	6 (7%)	42 (56%)	8 (11%)	17 (22%)	8 (11%)
Attention	11 (13%)	39 (44%)	35 (40%)	3 (3%)	12 (16%)	34 (45%)	24 (32%)	5 (7%)
Disorganized thinking	29 (33%)	33 (38%)	22 (25%)	3 (4%)	23 (31%)	29 (38%)	14 (19%)	9 (12%)
Perception	46 (52%)	25 (28%)	14 (16%)	3 (4%)	49 (65%)	14 (19%)	11 (14%)	2 (2%)
Delusions	67 (76%)	10 (11%)	8 (9%)	3 (4%)	57 (75%)	6 (8%)	9 (12%)	4 (5%)
Psychomotor activity	5 (6%)	30 (34%)	50 (57%)	3 (3%)	7 (9%)	25 (33%)	39 (51%)	5 (7%)
Sleep-wake cycle	4 (5%)	53 (60%)	29 (33%)	2 (2%)	4 (5%)	43 (57%)	24 (31%)	5 (7%)

**Table 3. Factor pattern MDAS loadings**

Item	Rotated Factor Pattern (Standardized Regression Coefficients)	
	Factor I Neurobehavioral	Factor II Global cognitive
MDAS		
Reduced awareness	1 0.52 *	0.32
Disorientation	2 0.31	0.54*
Short-term memory	3 -0.17	0.70*
Impaired digit span	4 -0.20	0.63*
Reduced attention	5 0.67*	0.14
Disorganized thinking	6 0.32	0.53*
Perceptual disturbance	7 0.54*	-0.11
Delusions	8 0.60*	-0.08
Psychomotor activity	9 0.87*	-0.11
Sleep-wake cycle	10 0.47*	-0.10
Correlation MMSE	-0.56	-0.81

rho = 0.7 (P = .01)

Laguna

HOSPITAL CENTRO DE CUIDADOS



## Nursing Students' Attributed Impact to Palliative Care Learning: Better nurses at the bedside.



### Introduction:

Browse the perception that students have after receiving the teaching of Palliative Care might be useful to better understand the position that this discipline should have in the curriculum.

### Objective:

This study explores the teaching of PC from the side of the students, what nursing students think it meant to them to attend a course on PC at the University.

### Design and methods:

Participants were nursing students undertaking the optional subject of PC in two different Nursing Schools (1 public (So), 1 private (Na)).

Data collection: Over four years all students were asked at the end of the course: What did mean to you, personally or professionally, to participate in this PC course? Answers written by the students presented in the room (n=235) were analysed through content analysis by three researchers independently and periodical meetings were held to review the analysis and achieve consensus. Ethics Committee approved the study. A comparison with a similar study, presented in this congress, undertaken with medicine students, is offered.

### Results:

Four themes were identified.

Themes	Categories	Quotes
<b>PC course provided a comprehensive view of nursing</b>	Students realize that taking care of people is the essence of the profession	<i>"To learn that not only is the art of curing people important, but taking care of them as well" (NUR-So 88)</i> <i>"Everything is interrelated in the nursing profession and everything revolves around the patient" (NUR-Na 1)</i>
	PC highlights the human side of the profession	<i>"I think it is particularly useful for the emphasis placed on the issue of humane and friendly care, stressing that nursing is not all about technical procedures" (NUR-Na 27)</i>
<b>The Palliative Care training qualifies nursing students to care for terminally ill patients</b>	PC qualifies to overcome difficult situations	<i>"To know how to deal with situations in which I was previously paralyzed" (NUR-Na 32)</i>
	Students learn how to care for patients until the end of their life	<i>"I have learnt what a terminally ill patient goes through in the final moments and how we should care for them and their families" (NUR-So 83)</i>
	PC trains to communicate better	<i>"It has taught me to value emotional and communication aspects, and to respect the patient and their family" (NUR-Na 3)</i>
<b>PC promoted a personal growth</b>	It helps develop as professionals but also as individuals	<i>"Because it has made me a more understanding person and a little more mature, growing both as a human being and as a nurse" (NUR-So 56)</i>
	PC course is important for life	<i>"I found the subject very interesting and important for life, and I think that it should be a compulsory subject in all degree courses" (NUR-So 8)</i>
	PC course made it possible to cope with their own grief	<i>"To better understand situations experienced in the past" (NUR-Na 29)</i> <i>"It helped me to deal with my personal problems, because I realized that grief is something that it is necessary" (NUR-So 68)</i>
<b>Palliative Care is a course of great importance</b>	It adds new knowledge	<i>"(It has been useful to me) to learn different aspects about nursing and to understand how to improve end-of-life care for patients" (NUR-Na 5)</i>
	It is different from others	<i>For myself and my classmates, it has been one of the best subjects that we have been able to study" (NUR-So 78)</i>
	PC course should be mandatory	<i>"It should be a compulsory subject since all patients have the right to receive special care at the time of their death" (NUR-So 111)</i>

### Conclusion:

The sample of nursing students explored ascribe to PC learning a positive effect on them at professional and personal level emphasizing its clinical applicability



## Medicine Students' Attributed Impact to Palliative Care Learning: Better doctors who understand better the medical profession

### Background:

Browse the perception that students have after receiving the teaching of Palliative Care might be useful to better understand the position that this discipline should be in the curriculum.

### Objective:

This study explores the teaching of PC from the side of the students, what medicine students think it meant to them to attend a course on PC at the University.

### Design and methods:

Participants were medicine students undertaking the optional subject of PC in a Faculty of Medicine along 4 years. All students were asked at the end of the course: What did mean to you, personally or professionally, to participate in this PC course? Answers written by the students presented in the room (n=284) were analysed through content analysis by three researchers independently. Ethics Committee approved the study. A comparison with a similar study, presented in this congress, undertaken with nursing students is offered.

### Results:

Themes	Categories	Quotes
PC course prepares to be and act as a physician	It prepares you to be a PHYSICIAN	"The knowledge I have learned is necessary for the well-doing of a physician, independently of the medical speciality" (P-Na 44)
	It provides essential qualification for any future physician	"It is fundamental for any medical student as you learn about Palliative care but also about dealing with difficult situations, giving bad news, team work... and all this is useful for any physician" (P-Na 98)
	It is necessary to cope as doctor at end of life	"This course has helped me a lot to differentiate that although the patient is going to die, you have the chance to help him and his family during the last days" (P-Na 278)
PC teaches that medicine includes holistic care and family	It teaches to care in a global/holistic way	"The lecturers and the physicians during the clinical practice, I have seen the different way of understanding medicine, the relationship with the patient. It is very different to what I had seen before" (P-Na 64)
		"I have seen the importance of the family, something I had isolated" (P-Na 264)
PC course opens a new area of knowledge	You learn to treat the pain and other symptoms	"The subject provides a lot of knowledge and review important concepts about general and specific symptoms, such as pharmacology" (P-Na 48)
	It adds other type of knowledge (spirituality, team view, difficult questions, communication..)	"The subject is important from the medical point of view and from a spiritual perspective" (P-Na 303)
		"It is the best option to understand how it really works team work" (P-Na 18)
It makes you reflect, grow and adds humanity	"The Palliative Care experience makes physicians clouds reduction for what the real purpose of the Physician is: to always accompany the patient" (P-Na 65)	
	"In my opinion it is a much needed course in medicine, because it makes you get the human side, and helps you deal with sad situations that tomorrow we will have to face" (P-Na 128)	
PC clinical experience is essential to learn the topic and all students need it.	Clinical practice is the most important of the course	"The practices are necessary to understand the value of this field and its importance, clinical practice at the Palliative unit is worthy" (P-Na 21)
	More clinical practice the better	"It would be good to have more days of clinical practice" (P-Na 151)
	Clinical practice adds a lot	"Practices, despite being short are useful to have contact with the specialty and analyze the battlefield" (P-Na 272)
	All students should do clinical practice in PC	"I have really enjoyed the practice in the hospital, I think if you could somehow get everyone do practices would be best for the student" (P-Na 45)
Flattering expressions about PC	Their learning showed surprise or importance ("stimulating", "revealing", "thanks for teaching it"...) )	"I found the subject very interesting because you learn things that are not explained in other subjects" (P-Na 206)
		"Palliative care course teaches different cases that although may seem logical we are not aware of" (P-Na 136)
		"The subject has been of the ones I've liked most from my degree" (P-Na 8)

### Conclusion

The sample of medicine students explored ascribe to PC learning a positive effect on themselves at professional and personal level let them understand medicine deeper.

# International Medical Education in Palliative Care: Pilot Research on Undergraduates (IMEP)

The Marie Curie  
Palliative Care Institute  
LIVERPOOL

Mason S<sup>1</sup>, Biasco G<sup>2</sup>, Blumhuber H<sup>3</sup>, Centeno C<sup>4</sup>, Cetto G<sup>5</sup>, Dall'Olio F<sup>2</sup>, De Conno F<sup>6</sup>, Elsner F<sup>1</sup>, Eychmuller S<sup>8</sup>, Filbert M<sup>9</sup>, Larkin P<sup>10</sup>, Pastrana T<sup>7</sup>, Sweeney C<sup>11</sup>, Vaquero J<sup>4</sup> and Ellershaw JE<sup>1</sup>.

<sup>1</sup> Marie Curie Palliative Care Institute Liverpool, <sup>2</sup> Università Bologna, <sup>3</sup> EAPC Onlus, <sup>4</sup> Universidad de Navarra, <sup>5</sup> Università degli studi di Verona, <sup>6</sup> National Cancer Institute Milan, <sup>7</sup> RWTH Aachen University, <sup>8</sup> University Hospital Bern, <sup>9</sup> University Lyon, <sup>10</sup> University College Dublin, <sup>11</sup> University of Cork

## Background

Palliative Medicine is a rapidly evolving speciality that often challenges both practitioners' clinical expertise and professional development; the practical, emotional and interpersonal difficulties encountered in caring for dying patients have been extensively reported upon.<sup>1,2</sup> However, 'care of the dying' is an area that has traditionally received little or no attention within existing curricula for medical training.<sup>3</sup> Assessing the preparedness of newly qualified doctors to meet the challenges of practising palliative care is crucial as all doctors are likely to have increased contact with palliative care patients. The number of patients with palliative care needs will increase year on year due to changes in health and demographic variables; for example, the WHO project that by the year 2050 the proportion of the European population over the age of 65 will rise from a current 16.3% to 27.8%.<sup>4</sup> Accordingly, an ageing population is likely to lead to an increase in the number of patients with cancer and other chronic incurable diseases requiring palliative care.

## Aims

The aim of this pilot project is evaluate how prepared newly qualified physicians are to practice palliative medicine.

Key Objectives are to:

- develop EORTC<sup>5</sup> structured translated versions (French, German, Italian & Spanish) of validated assessment scales: The Self-Efficacy in Palliative Care Scale (SEPC)<sup>6</sup> and the Thanatophobia Scale (TS)<sup>7</sup>
  - The SEPC is a 3 themed, 23 item validated questionnaire that assesses respondents perceived efficacy in practicing palliative care on a 100mm visual analogue scale. The Thanatophobia Scale, developed within the acute care setting in the United States, is a validated measure which assesses respondents attitudes towards caring for dying patients on a 7 point likert scale. Together, these measures provide a theoretically robust measure of the preparedness of physicians to practice.
- test the applicability of the translated instruments and provide illustrative data for nominal national comparison

## Methods

### Translation of Scales:

Organised as a Taskforce of the EAPC Steering Group on Medical Education, the IMEP study group facilitated EORTC translations of the SEPC and Thanatophobia Scale using EORTC criteria.<sup>3</sup>

### Data Collection:

Convenience sampling of pilot data, via administration of the translated scales, was collected from each country (targetted sample size = 40). Data was collected in a maximum of two clinical sites per country, from newly qualified physicians with a minimum of 4 months clinical practice. The process for data collection was established locally in accordance with required ethical approvals and access to physicians within linked/associated University Hospitals.

## Results

Data was collected from 6 sites associated with University Hospitals across five countries (Table 1).

Table 1 – Data collection - collaborating sites

Country	Site	Sample Size
France	University Lyon	n = 22
Ireland	University of Cork	n = 40
Italy	Università Bologna	n = 40
	Università degli studi di Verona	n = 40
Spain	Universidad de Navarra	n = 46
UK	University of Liverpool	n = 40

From the 232 data entries, the amount of hours teaching received by the newly qualified clinicians varied within and across countries (Table 2).

Table 2 - Exposure to Teaching in Palliative Care

Country	< 1 Day	< 1 Week	< 2 Weeks	< 3 Weeks	< 4 Weeks	> 4 Weeks
France	45%	41%	1%			
Ireland	92.5%	5%			2.5%	
Italy	87%	7.5%	1.25%		1.25%	2.5%
Spain	57%			9%		34%
UK	5%	20%	5%		42.5%	27.5%

Mean Scores for SEPC subscales are presented in Table 3. Unsurprisingly, Kruskal Wallis analysis of the data distribution across SEPC Subscales and Thanatophobia by country identifies statistically significant differences.

Table 3 – Mean scores for SEPC and Thanatophobia					
Country	Statistic	SEPC Communication**	SEPC Patient Management**	SEPC Team working*	Thanatophobia**
France	Mean (SD)	53.38 (15.3)	56.39 (14.3)	56.26 (15.7)	2.87 (1.1)
	Range	55.5	57.1	59.9	4.0
Italy	Mean (SD)	37.77 (14.8)	47.20 (14.3)	58.28 (16.8)	3.76 (1.1)
	Range	81.9	71.1	80.4	5.1
Ireland	Mean (SD)	43.16 (18.3)	44.36 (15.9)	54.66 (13.2)	2.83 (1.2)
	Range	82.5	87.5	59.9	4.71
Spain	Mean (SD)	44.23 (18.9)	48.41 (14.3)	65.87 (16.8)	2.97 (1.1)
	Range	87.4	72.5	65.6	4.71
UK	Mean (SD)	60.95 (13.5)	61.80 (11.6)	58.92 (17.4)	2.05 (0.8)
	Range	52.6	37.8	57.8	2.71

Kruskal Wallis Analysis \*\*p>0.001 \*p<0.05

Further, Spearman's correlations show a relationship between educational exposure and Self-Efficacy and Attitude scores (Table 4).

Table 4 – Spearman correlations of scale scores against educational exposure				
Variable	SEPC Communication**	SEPC Patient Management**	SEPC Team working*	Thanatophobia**
Undergrad Education	r = 0.35	r = 0.25	r = 0.16	r = -0.32

Spearman Correlation \*\*p>0.001 \*p<0.05

## Discussion

The pilot data collected in this study illustrates that the EORTC structured translated versions of the SEPC and the Thanatophobia Scale are viable instruments for use in assessment. Further, although limited, the pilot data itself prompts some interesting questions. For example, the variation in exposure to the teaching of palliative medicine both within and across countries is interesting to note. Variations in exposure to teaching is likely to be the result of training at different universities (e.g. the UK sample is populated with clinicians who received training from six separate universities). Equally, the finding that exposure to teaching correlates with perceived self-efficacy across all three domains of the SEPC, and the Thanatophobia scale is interesting. Although this perhaps is not surprising, it may be useful for those looking for support to increase the number of hours of Palliative Medicine within undergraduate curricula.

Limitations: This pilot does have a number of limitations, and feedback from the data collection may prompt changes in future versions of the composite questionnaire which houses the two scales. For example, the format for recording the total hours of teaching exposure may benefit from being structured as interval level data (number of hours) rather than categorical. Equally, it is not implied that the data presented is representative of national patterns, or of the institutions from where data has been collected. Nevertheless, pilot data is still being collected, and it is expected the current data field will be expanded from contribution from Universitätsklinikum Aachen in Germany, and the University of Cambridge UK.

The availability of multiple translations of these validated psychometric assessment tools will enable intra and international assessment of how existing undergraduate curricula is preparing tomorrow's doctors to meet the needs of the expanding cohort of palliative care patients. Such evidence may help influence the integration and strengthening of Palliative Medicine within existing curricula.

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# Current Overview of Palliative Medicine Teaching in the Spanish University



## Introduction

There are many recommendations of national and international organizations to incorporate palliative care teaching at the medical school. European Higher Education Area ("Bologna process") has supposed a curriculum review in every academic degree. The aim of this study was to determine which medical schools in Spain have included palliative care in their new curricula.

## Method

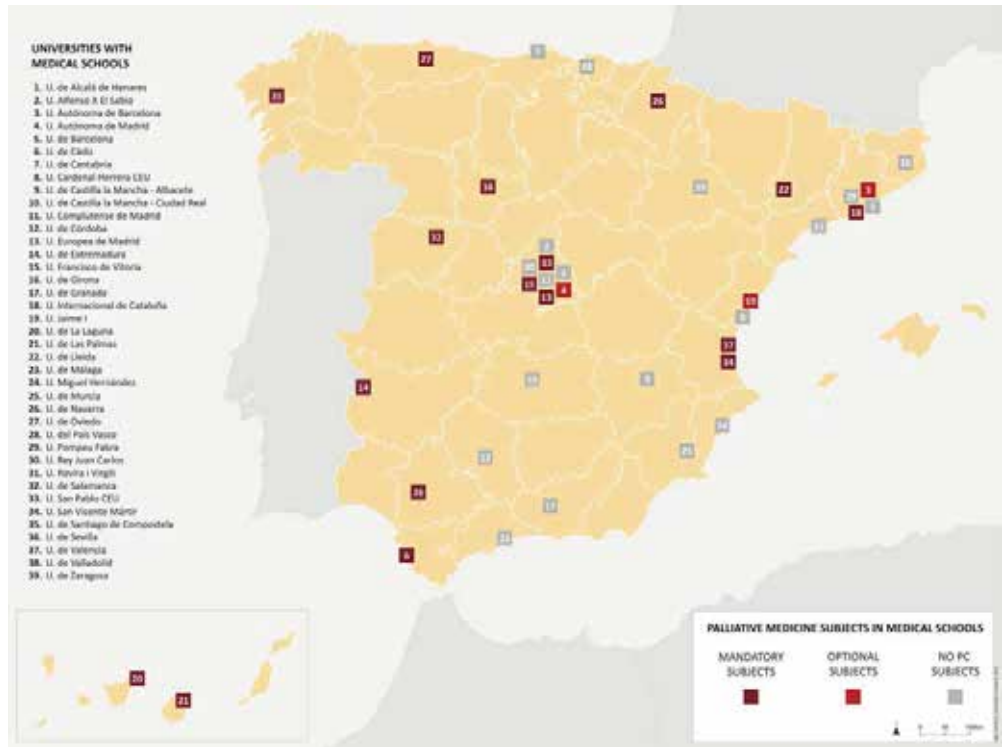
We reviewed the medicine curricula of all the Spanish faculties web page, identifying the subjects with "palliative medicine" or "palliative care" words included in their denomination.

### Data collection

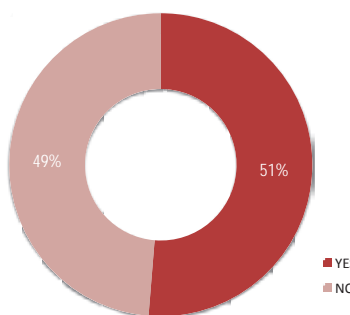
National Conference of Deans of Medicine website  
14 schools

Website of the 39 medical faculties <math>\times</math> Personal contact with other professionals  
3 schools <math>\times</math> 3 schools

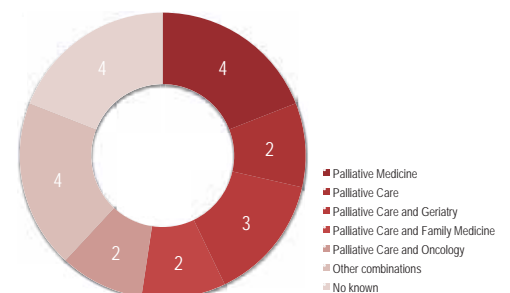
Faculties with "Palliative Medicine" or "Palliative Care" denomination in their curriculum  
20 schools



Proportion of faculties with PC subjects



Denominations of Palliative Care subjects



## Results

20 of 39 medical schools have a palliative care course. At six faculties is taught as a single subject, with an average of 3 academic credits (ECTS).

When palliative care is taught with other subjects (as Oncology, Geriatrics, Family Medicine and so on) the number of credits is variable. Is a mandatory subject at 14 of the 20 centers and 5<sup>th</sup> course is the principal course where is taught.

We found that in the oldest and non-statal faculties, the incorporation of palliative care is present.

## Conclusion

- Half of the medical schools in Spain include palliative care course in their new curricula
- Palliative medicine it's being gradually incorporated into the training of the future Spanish physicians

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# Imminence of death among a national cohort of hospital patients in Scotland: a record linkage study

## Background

There is a dearth of evidence on the numbers of hospital patients at any one time who are in the last year of life – and therefore on how hospital policies and services can be better oriented to their needs.

- Can we assess the proportions & characteristics of those in hospital nearing the end of life?
- Knowing more about this group would create greater possibilities for advance care planning for groups of patients, even if individual prognostication is problematic

## Aim

To establish the likelihood of death within twelve months of all patients in Scottish teaching and general hospitals on a given census date

- what proportion of inpatients in hospitals on a given date will die during the index admission up to 12 months later?
- how does the proportion vary by age, gender and deprivation score?

Record linkage study of patients in all 25 of Scotland's teaching and large general hospitals on 31 March 2010.

Mortality established at 7 & 30 days and 3, 6, 9 & 12 months using record linkage.

Relationship between age & survival rate calculated using univariate linear regression in STATA/IC12.1

Deprivation scores derived from the Scottish Index of Multiple Deprivation 2009 (SIMD 09);

### Source of hospital data

National Scottish Morbidity Record Scheme 01 (SMR01) records all inpatient and day case discharges from non-obstetric & non-psychiatric specialities in NHS hospitals in Scotland.

### Source of the deaths information

National Records of Scotland death records.

## Design

Number and Percentage of Patients Dying in Teaching and General Hospitals in Scotland on 31<sup>st</sup> March 2010, Dying at Intervals after Census Date

Age Group	Male		Female		Total	
	No. (n)	%	No. (n)	%	No. (n)	%
0-14	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
15-19	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
20-24	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
25-29	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
30-34	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
35-39	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
40-44	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
45-49	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
50-54	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
55-59	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
60-64	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
65-69	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
70-74	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
75-79	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
80-84	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
85-89	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
90-94	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
95-99	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1
100+	1,000 (0.1)	0.1	1,000 (0.1)	0.1	2,000 (0.1)	0.1

## Results

10,743 hospital inpatients on the census date;

3,098 (28.8%) died within 12 months;

Proportion of patients dying after discharged:

- After 7 days: 2.9%
- After 30 days: 8.9%
- After 3 months: 6.0%
- After 6 months: 21.2%
- After 9 months: 25.5%
- After 12 months: 28.8%

1001 patients (9.3%) died during recorded period of admission

- accounts for 32.3% of all deaths within 1 year in the sample.

Propensity to die closely related to age and gender.

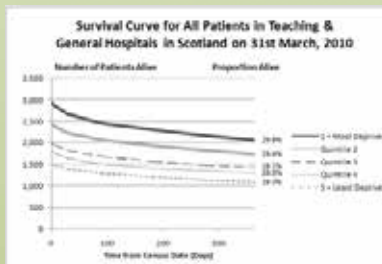
Risk of death at 12 months:

- 13.1% for patients under 60
- 45.6% for patients over 85

Each increase of 5 years = 4.2% higher risk of death (95% CI 2.9-5.5%)

Men more likely to have died by 12 months than women (30.4% v 27.5%; p=0.001)

Most deprived patients were 2x as prevalent (SIMD09 Q1: 2.936, Q5: 1.515) but not more likely to die (Q1: 29.8%, Q5: 28.0% p=0.215)



Large numbers of hospital inpatients have entered the last year of their lives;

The culture and organisation of hospitals need to become more attuned to the high proportion of inpatients in imminent need of end of life care;

This data could:

- assist in advocacy for these patients;
- influence end of life care strategies in hospital.

## Conclusion

David Clark  
Professor of Medical Sociology  
School of Interdisciplinary Studies  
University of Glasgow  
david.clark.2@glasgow.ac.uk

Matthew Armstrong  
Principal Information Analyst  
Healthcare Information Group  
NHS National Services, Scotland

Ananda Allan  
Senior Health Intelligence Analyst  
Department of Public Health  
NHS Dumfries and Galloway, Scotland

Fiona Graham  
General Practitioner,  
Glengens Medical Practice  
New Galloway, Scotland

Andrew Carnon  
Consultant in Public Health Medicine  
Department of Public Health  
NHS Dumfries and Galloway, Scotland

Christopher Isles  
Consultant Physician  
Dumfries and Galloway Royal Infirmary  
NHS Dumfries and Galloway, Scotland

## Mapping Specialization in Palliative Medicine across Europe: A Report from a 2012 EAPC Survey



**Background:** Palliative medicine has been a specialization in the UK since 1987 and in Ireland since 1995. In 2007, the EAPC Task Force on the Development of Palliative Care in Europe reported that in five countries PM was a sub-specialty for which secondary certification was required.

**Aim:** to review the specialization of palliative medicine across Europe.

**Method:** The study was designed by two groups of experts from EAPC Task Forces: Education on Physician and Develop of PC in Europe. A questionnaire was designed to explore the situation in each country including official certification name or title, year of approval, process of certification, number of physicians certified to date, etc. Qualitative analysis of answers was undertaken with categorization in three groups. The questionnaire was part of the EAPC Facts Questionnaire which was completed by a 'key person' in 47/53 European countries



Country	Year	Certificate	Denomination	Comments
UK	1987	Specialty	Palliative Medicine	In the UK, the specialty of palliative medicine exists in which doctors are required to undertake 4 to 5 years of specialist training.
IRELAND	1995	Specialty	Palliative Medicine	The specialization takes four years of university training (to date 27 healthcare professionals have been accredited in Ireland).
POLAND	1999	Specialty	Palliative Medicine	Currently under review: there will be 2 possibilities: accreditation following training or directly after graduation - 5 years of specialization divided into two years of general education and then 3 years of specialization in Palliative Medicine.
ROMANIA	2000	Sub-specialty	Diploma of complementary studies in PC	Training consists of 18 months, including a 12-week course (eight weeks theoretical training and four weeks clinical practice).
CEZCH REPUBLIC	2004	Sub-specialty	Palliative Medicine	Rotation in clinical services provides accreditation in education of Palliative Medicine; this involves 20 days of theoretical courses within a twelve-month period. Accreditation commenced in Palliative Medicine and Pain Management (2004), and in Palliative Medicine (2011).
GERMANY	2006	Sub-specialty	Palliative Medicine	Content: 40 hr basic course in palliative care and; 12 months practical continuous training in a palliative care service, headed by a physician with certification for postgraduate medical training in palliative medicine. If physicians attend a [certified] 120 hour case seminar, the practical training may be shortened accordingly.
GEORGIA	2006	Sub-specialty	Palliative Care	Since 2006, Palliative Care has been afforded the status of sub-specialisation within the following disciplines: oncology, family medicine, geriatrics, internal medicine, neurology.
FRANCE	2007	Sub-specialty	Diplômes d'études spécialisées complémentaires	Accreditation consists of two years training – six months studying pain management in a pain clinic and eighteen months in a palliative care unit.
FINLAND	2007	Sub-specialty	Specialist Competency in PM	The training includes 150 hours theory and 2 years clinical practice: there is also the Nordic Specialist Course in Palliative Medicine.
SLOVAKIA	2008	Sub-specialty	Subspecialty in Palliative Medicine	Since 2008, palliative medicine has existed as a sub-specialty in Slovakia for clinical oncology, family medicine, geriatrics, internal medicine, neurology, pediatrics and intensive care medicine. The sub-specialty consists of two components – theory and practice. To date, four professionals have been accredited in Slovakia.
LATVIA	2009	Specialty	Specialist in PC	A minimum of one-year postgraduate training (theory and practice) is required to be accredited.
NORWAY	2011	Specialty	Palliative Medicine	The candidate needs to undertake two years full-time clinical work in palliative care and complete a two-year theoretical training course (Nordic Specialist Course in Palliative Medicine, 180 hours) to be approved in the formal competence field of Palliative Medicine. Clinical training must take place in an approved service.
ITALY	2012	Sub-specialty	Post-Specialty Master	The Master's degree (Post-Specialty Master of Higher Education and Qualification in PC) consists of 1500 hours classroom teaching and 1500 hours practical training (inpatient unit/hospice/home care/consultation).
ISRAEL	2012	Sub-specialty	Palliative Care	Palliative care was recognized as a clinical subspecialty for physicians by the National Medical Scientific Council in 2012.

**Conclusion:** We have identified 14 countries with process of certification for palliative medicine as specialty, sub-specialty or others. Further comparative analysis is required to examine the accreditation process and the meaning attributed to such 'specialization' within professional practice.



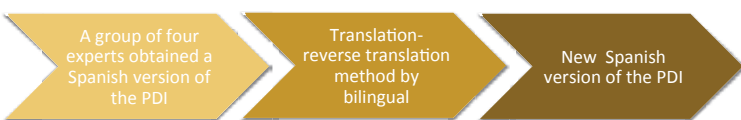
# Spanish Version of Patient Dignity Inventory (PDI): Translation process and preliminary psychometric data



## INTRODUCTION

The Patient Dignity Inventory (PDI) was designed to measure different sources of distress related to dignity at the end of life patients. PDI is a novel tool developed by Chochinov et al, 2008, with 25 items that shows excellent internal consistency showing a Cronbach's Alpha of 0.93. The original language was English. Our aim was to obtain a Spanish version of the PDI and to measure the psychometric aspects in patients with advanced cancer.

## METHOD



### Criteria of inclusion

- ✓ 35 patients from Oncology and Palliative Care Department
- ✓ Full cognitive abilities according to clinical criteria.
- ✓ Spanish native speakers and with informed consent

### Assessment Tools

- PDI
- ESAS
- HADS
- FACIT-sp-12

### Psychometric aspects evaluated

- Internal consistency (Cronbach's Alpha)
- Concurrent validity
  - PDI-ESAS,
  - PDI-HADS,
  - PDI-FACIT-sp-12
- Discriminant validity
  - Between inpatients and outpatients
  - Between different performance status (KPS)
- Utility: obtained by the time of completion and patients perception

Local Ethics Committee on Clinical Research approved the study

## INITIAL FINDINGS

Characteristics	N=35	Aspect	Instrument	Statistical test	Results N= 35
Age (Mean)	(30-84) 61,31 y	RELIABILITY	PDI	Cronbach Alpha	0.89
Gender	Male 20 Female 15				
Patients Setting	Outpatients 13	VALIDITY	PDI & ESAS PDI & HADS PDI & FACIT-sp-12	Spearman's Rho	0.61 p< 0,001 0.75 p< 0,001 0.41 p= 0,014
	Inpatients 22				
Receiving PC	Yes 7 No 28	UTILITY	PDI between inpatients and outpatients	Mann-Whitney U test	0.04
IK (Mean)	78,28				
Tumor	Gastrointestinal 17	UTILITY	PDI in patients with different performance status (KPS)	Spearman's Rho	0.48 p=0,004
	Genitourinary 5				
	Breast 5 Others 8				
			Time of completion Patients Perception	Qualitative Analysis	5,33 min Clear and easy to complete

## CONCLUSION

- An adequate translation of the IDP into Spanish was obtained
- The preliminary data of the validation shows that the Spanish version of the instrument has good psychometric properties.
- A larger study is ongoing with 125 patients to measure other psychometric properties as test-retest and factor analysis.





# An Update on Use of Opioids in Terminal Patients and Survival



## Studies about the use of opioids and their influence on the survival of oncological patients 1987-2010.

**Table 1: Studies with no significant differences between use opioids and survival**

Year and author	Study Objectives	N	Study type	Patient location	Groups Studied and opiate dose	Survival	Statistical test	P Value.
Regnard, 1987	To compare the last day of life of patients receiving a double opioids dose at night with those receiving a single dose.	137	Retrospective from notes in clinical histories	Admitted to general hospital	Group A: Single dose at night 22:00 hours (n= 87) Group B: double dose at night 22:00 hours (n=50)	No significant differences between A and B were observed: 41% died overnight in A and 32% in B	Chi squared	p= 0.28
Bercovitch, 1999	To verify if the use of high morphine doses affects patient survival	453	Retrospective. To compare patients treated with > 300 mg/day morphine with the other patients treated	Admitted to hospice	Group A: < 300 mg (n=399) Group B: > 300 mg (n=55)	No significant differences between A and B were observed: 14 vs 15 days	Kaplan-Meier survival curve	Not included
Thoms, 2000	To assess whether the use of opioids for symptom control is associated with life shortening	238	Retrospective. Comparing patients with a marked dose increase in the last two days of life (> 50% with respect to the previous day), with the other patients	Patients in their last week of life admitted to a palliative care unit	Group A: > 50% doses in last 48 h. (n=28) Group B: < 50% doses in last 48 h. (n=210)	No significant differences were observed between A and B: 9 vs 3 days	t-test	p= 0.7
Merita, 2001	To examine the effect on survival of the use of opioids and sedatives in the last 48 hours	172	Prospective observational. Compares patients administered different ranges of doses	Admitted to a palliative care unit.	Group A: 240mg (n=114) Group B: 240-599mg (n= 29) Group C: >600mg (n=16)	No significant differences were observed between A, B and C. A, B and C: 20 vs 35 vs 50 days	Univariate analysis Multivariate analysis	P= 0.23 p= 0.27

### BACKGROUND:

Opioids are drug frequently used in palliative care. However the someone physicians think that those drug hasten of death. Few is study over survival and use opioids. A bibliographic review was therfored carried out to examine this.

### METHODS:

We reviewed all studies about of effect opioids use on survival from 1987-2010. The methods used included electronic searching (Pubmed, Trip Database, MEDLINE), snowballing, hand searching of the literature, and personal contact with physicians in palliative care.

**Table 2: Studies with significant differences between use opioids and survival**

Year and author	Study Objectives	N	Study type	Patient location	Groups Studied and opiate dose	Survival	Statistical test	P Value.
Bercovitch, 2004	To evaluate the effect of the use of high morphine doses on survival	435	Retrospective. Compares patients administered different doses	Patients in their homes with palliative care	Group A: 5-299 mg/day (n=396) Group B: 300-599 mg/day (n=37) Group C: >600mg/day (n=7)	Higher survival is observed with higher doses A, B and C: 22 vs 27 vs 37 days	Mantel-Cox and Breslow analysis	p= 0.001 p= 0.029
Good, 2005	To evaluate the effect of opioids and sedatives in palliative patient survival.	229	Retrospective. Comparing patients on different doses from their admission to their death	Patients admitted to a palliative care unit	Group A: <120 mg/day Group B: 120-299 mg/day. Group C: >300 mg/day.	The higher the dose the longer the survival is observed in A, B and C: 11 vs 13 vs 18 days	log-rank test	p= 0.01

**Table 3: Cohorts studies with significant differences between use opioids and survival**  
Special interest publication

Year and author	Study Objectives	N	Study type	Patient location	Groups Studied and opiate dose	Survival	Statistical test	P Value.
Portenoy, 2006	To determine whether high and very high opioids doses affect survival	725	Cohort, prospective multicentre. Comparing the mean length of stay of patients treated with different doses of morphine (normal doses vs high doses: cut-off point 600 mg; and not-very high doses vs very high doses, cut-off point 1800 mg)	Patients admitted to 13 different hospices in the U.S.A.	A1: < 600 mg/day (n=640) A2: > 600 mg/day (n=85) B1: <1800mg/day(n=706) B2: >1800 mg/day. (n=19)	The final opiate dose was one of the significant factors associated with shorter survival, although it only explains 6% of the variance	Multivariate analysis with least square regression R <sup>2</sup>	p < 0.05
Bengochea, 2010	To determine if the total opioids dose and the increase in dose during the last days affects survival.	223	Retrospective cohort. Comparing patient subgroups with different doses of opioids and whether or not they duplicated the previous dose in the studied period.	Terminal cancer patients in their homes receiving palliative care	A1: < 120 mg/day (n=124) A2: ≥120 mg/day (n=99) B1: did not duplicate previous dose (n=156) B2: duplicated previous dose (n=67)	A1: 2 days. A2: 6 days. B1: 9 days. B2: 22 days.	log-rank test A1 vs A2, B1 vs B2 Multivariate analysis Cox Regression	p= 0.010; p=0.0001 p<0.0001

### RESULTS:

Eight studies filled the inclusion criteria: five retrospective, one prospective and two cohorts one multicenter). The literature review discovered eight research papers designed with the aim to assess the impact on survival of opioid use in hospice. In these studies there is no statistically significant difference in the survival of patients with higher doses of opioids or higher increases of dose for pain relief during the last days of life. Nor is the practice of applying double dose represents risk areas for survival.

### Conclusion

**It hasn't been shown to shorten the survival opioids when used to treatment symptoms in terminal patients.**

## ATLANTES Research Program: “Human dignity, advanced illness and palliative care”. A Project within the Institute for Culture and Society (ICS) of the University of Navarra.



### WHAT IS IT?

Late stage illness and the prospect of death raise profound questions within modern culture. Palliative care is one response to such concerns in the form of an advanced medicine for end-of-life care. In 2012 the Institute for Culture and Society (ICS) embarked upon the ATLANTES Research Program “Human dignity, advanced illness and palliative care”. The work of the program is interdisciplinary, international and with a strong focus on the contribution of the humanities and social sciences, and with the goal of improving scientific and public understanding of the work of palliative care.

### WHAT FOR?

The overall objective of this five-year program is to promote in society a positive attitude toward the care of patients with advanced, irreversible illness, from a perspective based on the dignity of the person and the role of medicine itself. ATLANTES will adopt perspectives from history, psychology, sociology and anthropology to illuminate the understanding of palliative care. It will also encompass contributions from public health, geography, communication studies and education.

### WHAT IS IT FOCUSED ON?

ATLANTES will promote reflection on fundamental aspects of palliative care as well as the implementation of strategies to promote palliative care at institutional, professional and societal levels. Among its sub-projects will be a study of the intangibles in the interaction between palliative care and the individual; the anthropological and spiritual foundation of palliative care; a ranking of the development (and an associated Atlas) of palliative care in Europe and Latin America; education in palliative medicine, a workshop on "The message of palliative care" and a Think Tank on ethics and advanced illness.

### WHY...

#### ...THE INTANGIBLES?

- The Project seeks to demonstrating the intangible aspects and little-known aspects of the value of living and care giving up to the end: gratitude, dignity, coping, meaning...are some of the “intangibles” of palliative care
- It is quite possible that this new specialty will become better understood with a rigorous qualitative investigation applied to so many intangibles.

#### ...ANTHROPOLOGICAL AND SPIRITUAL FOUNDATIONS?

- The lives of pioneers and samples of clinical practice may demonstrate the principles of spirituality in palliative care.
- Today's society demands and claims palliative care as a human right and includes the right to receive palliative care within fundamental laws. Nevertheless, an anthropological and sociological perspective must explore the reasons why caring is “a must” and “always”. Is palliative care truly a human right? Is it something demanded for the dignity of every human being? And if so, why?

#### ...COMPARATIVE ANALYSIS OF PALLIATIVE CARE DEVELOPMENT?

- Describing the reality of a certain problem, analyzing the differences, and identifying barriers and opportunities are essential steps to conclude any strategy. State health authorities and healthcare professionals are especially prone to emulate equivalent successes in similar surroundings

#### ...PALLIATIVE CARE EDUCATION AT UNIVERSITY?

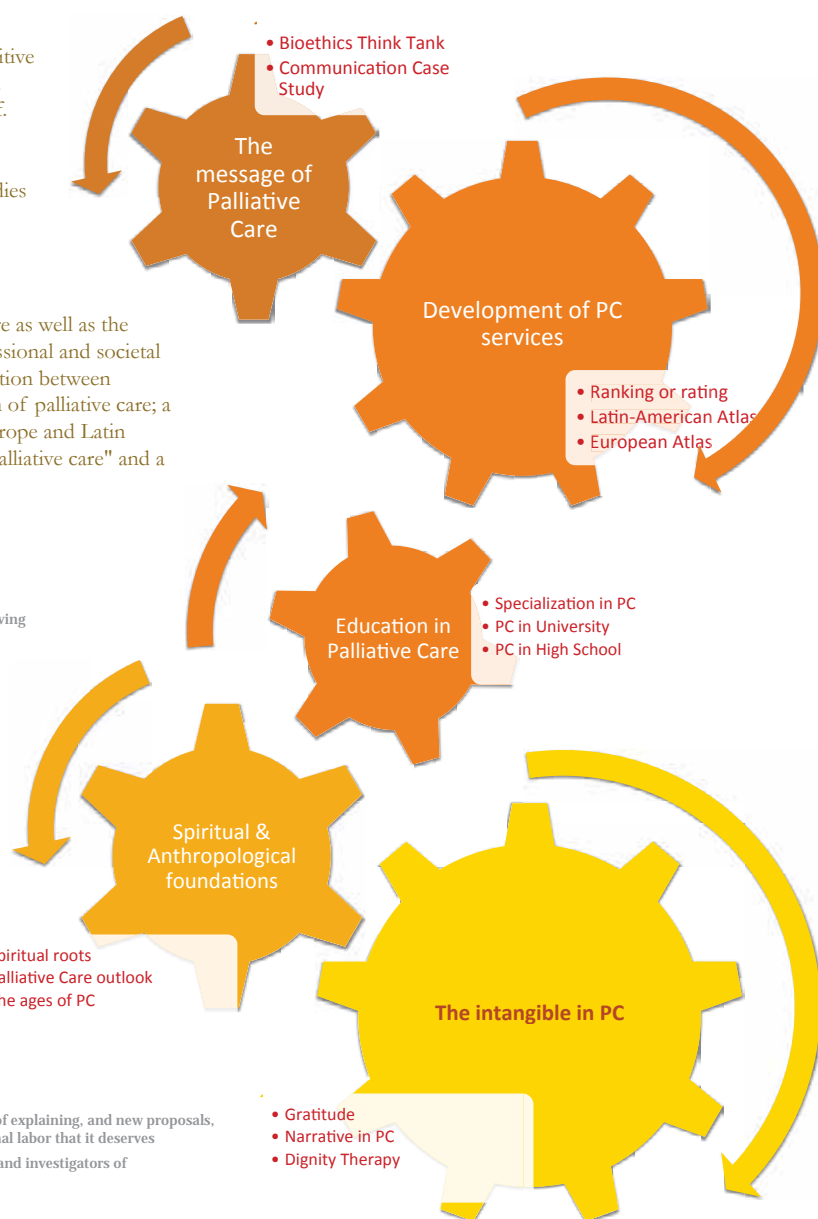
- We consider as a work hypothesis that it is possible to change people’s vision about the end of life and terminal care, by exposing them at the university level, (and even prior to University) to the practice and principles of palliative care

#### ...A NEW MESSAGE?

- At the beginning of the 21st Century, it has become impossible to wait any longer to find new ways of explaining, and new proposals, a new message, with positive focus to promote, the recognition and extension of this new professional labor that it deserves
- We think that the time has come to seek contribution and systematic participation of professionals and investigators of communication and media in the world of Palliative Care

### HOW DO IT?

ATLANTES will approach these issues in a manner consistent with the work of an academic institution: scientific investigation, professional training and dissemination of the knowledge acquired. This will be done in ways which are consistent with the institutional characteristics and Christian perspective of the University of Navarra, and with a clear willingness to co-operate with other institutions that work for similar objectives, as well as those who may adopt differing perspectives.





# Towards a Public Health Model for Palliative Care in Europe

Jeroen Hasselaar PhD<sup>1</sup>, Carlos Centeno MD PhD<sup>2</sup>, Yvonne Engels PhD<sup>1</sup>, Kris Vissers MD PhD<sup>1</sup>

1. Radboud University Medical Center Nijmegen, Nijmegen, the Netherlands
2. University of Navarra, Pamplona, Spain

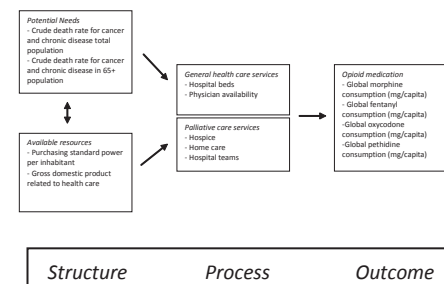
## Introduction

Due to the ageing of European society, dying of cancer and chronic disease is expected to increase the coming years and involves a considerable burden for society. This calls for a European public health strategy on palliative care. Palliative care is an approach aiming at the quality of life of people with a life threatening disease and their families. However, the availability of palliative care services in European countries largely differs as does access to opioids for symptom relief. Whether this is related to population needs rather than population living standards needs further investigation. This study aims to draw a palliative care public health model based on publicly available datasets.

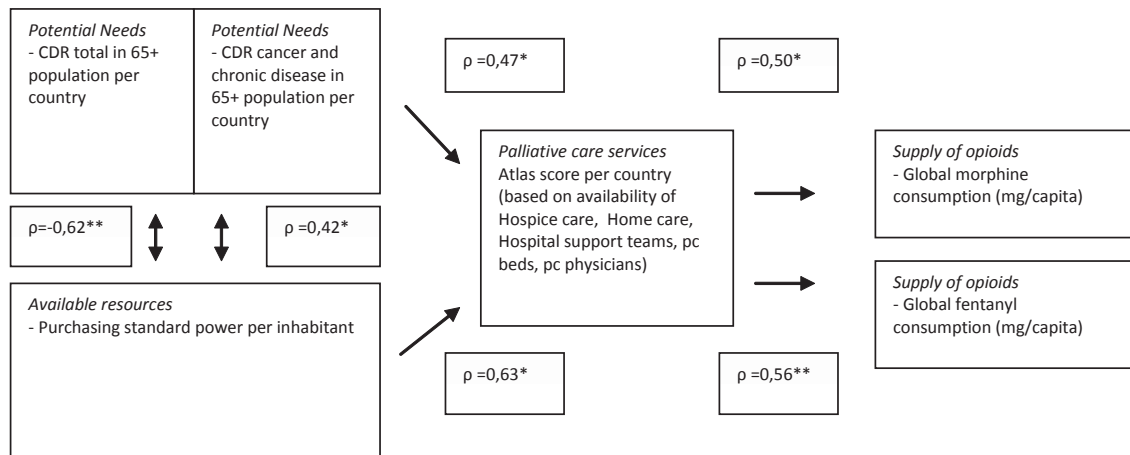
## Methods

A palliative care public health model is drawn combining publicly available data of the EU-27 countries. Aspects of the model are potential needs based on crude death rates in the 65 population (CDR) and standards for purchasing power (PPS) based on Eurostat data as structure parameters; the Atlas project score for palliative care services availability as a process parameter; and the global opioid consumption (mg/capita) based on data from the International Narcotics Control Board as an outcome parameter. Correlations are tested with spearman's rank test.

## Design of palliative care public health model



## Results: Palliative care public health model, filled with data of EU-27 countries



### Legend:

$\rho = \text{rho}$ , measuring correlation between variables according to Spearman's rank test;  $^* \alpha < .05$ ;  $^{**} \alpha < .001$

## Discussion and conclusion

This study shows that palliative care availability in a country is both related to a country's potential population needs *and* a country's population living standards. Palliative care availability also positively relates to a higher supply of opioids in a country. Interestingly, (lower) purchasing power standard relate to a higher 65+ total CDR but a lower 65+ CDR/cancer&chronic disease, possibly reflecting an underlying relationship between high deaths due to acute disease and a country's (lower) living standards.

Future research should concentrate on further refinement of a palliative care public health model including the involvement of other variables and testing in a larger set of countries (perhaps in other continents). This will also support (inter)national palliative care health policy. Outcome parameters measuring the effect of palliative care treatment need to be further developed, implemented, and measured systematically.



# Is an Atlas the way to monitor and report on the status of palliative care in a Region?

Tania Pastrana<sup>1</sup>, Carlos Centeno<sup>2,3</sup>, Roberto Wenk<sup>4,5</sup>, Jorge Eisenchlas<sup>6</sup>, Carolina Monti<sup>6</sup>, Javier Rocafort<sup>7</sup>, Liliana De Lima<sup>5,6</sup>

<sup>1</sup>University Hospital RWTH Aachen, Department of Palliative Medicine, Aachen, Germany; <sup>2</sup>Universidad de Navarra, Pamplona, Instituto Cultura y Sociedad, Pamplona, Spain; <sup>3</sup>European Association for Palliative Care, (EAPC), Task Force Development of Palliative Care; <sup>4</sup>Fundación FEMEBA (PAMP-FF), Buenos Aires, Argentina; <sup>5</sup>International Association for Hospice and Palliative Care (IAHPC); <sup>6</sup>Latin American Association for Palliative Care (ALCP); <sup>7</sup>Laguna Hospice Hospital, Madrid, Spain

## Introduction

Information on provision of care, models of care and available facilities is often unknown in many countries, including Latin America (LA). Demographic data related to palliative care (PC) is scarce and mainly anecdotal. The monitoring of the status of PC through a database containing systematically collected information concerning the current provision and practice of hospice and PC is of paramount importance to help advance the field of palliative care in the region.

The aim of this project was to determine the degree of palliative care development in Latin America and to evaluate the applicability of the EAPC Atlas methodology in other regions of the world.

## Method

Using the expertise of several of the EAPC Atlas board members; and advice from the Pan American Health Organization, the ALCP developed a project called Atlas of Palliative Care in Latin America.

Fifty-six PC workers of 19 countries were selected across the region as collaborators. Semi-structured interviews were conducted (in Spanish or Portuguese) covering main aspects in PC development, number of PC services, educational resources and professional activities. Consensus had to be achieved among the collaborators before the data was recorded.

## Results



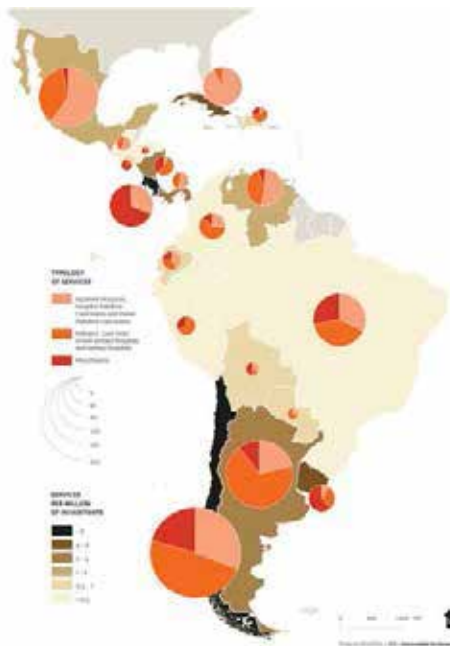
Map 2: Accreditation of PC in LA\*

Palliative Medicine is recognized as a specialty or sub-specialty in 4 countries.



Map 3: Education in PC in LA\*

Ten countries have an postgraduate educational program. 11% of medical schools offer PC in the undergraduate level.



Map 1: PC services in LA\*

The number of PC services for LA is 1.6 per million inhabitants, while at the national level it ranges between 16.1 and 0.24 (Chile and Honduras respectively).



Map 4: PC Associations in LA\*

Eleven countries reported having a national PC association.



Map 5: National law and programs in PC\*

Three countries have a national law of Palliative Care. There are national plans/programs of PC in 7 countries.

\*Maps from: Pastrana T, De Lima L, Pons JJ, Centeno C (2013). Atlas de Cuidados Paliativos de Latinoamérica. Edición cartográfica 2013. Houston: IAHPC Press.

## Conclusions

*The Atlas of PC in LA indicates vast differences and similarities among the countries but above all, highlights that the availability of PC in LA is very limited. This project also demonstrates that the Atlas is an adequate resource to monitor and report on the degree of PC development and that the methodology applied for the EAPC Atlas Europe may be adapted and applied in other regions of the world. Further studies are needed to evaluate the use and impact of this information to improve national health policies and patient care.*

This project was founded by a grant from the Open Society Foundations and contributions of IAHPC, SECPAL and the ALCP.

**Human rights and palliative care: the perspective of a public health physician  
Martin-Moreno J.M.**

Universidad de Valencia, Dep. Medicina Preventiva y Salud Publica  
& Hospital Clinico Universitario, Valencia, Spain  
Contact address: [jose.maria.martin@uv.es](mailto:jose.maria.martin@uv.es)

The notion of human rights implies that everyone deserves a basic set of universal and inalienable freedoms and entitlements to protect their dignity. European societies have long understood access to healthcare among these. Indeed, medicine and public health embody the best of humanity: intelligence, cooperation, solidarity and kindness. Doctors and healthcare professionals are with us in the most vulnerable moments of our lives – in birth and in sickness – and they also usher us to death. This transition is, perhaps, one of the greatest potential threats of all to human dignity. Terminal illness, if unattended, strips individuals of basic comfort, autonomy and personal freedom. Palliative care restores these dignities, offering pain relief, spiritual comfort and grief support. If healthcare is part of the foundation of human rights protection, then palliative care is a cornerstone, incarnating the principles that underpin the concept of human rights. It enshrines the objectives that modern medicine strives to achieve in all fields: (i) patient-centred care rather than disease-centred cure; (ii) holistic attention to both physical and psychosocial aspects; (iii) interaction with the social and human environment; (iv) coordinated teamwork; (v) objectives based on the patients' best interests; (vi) humanisation of the relationship between patient and doctor; (vii) comprehensive bioethical perspective; (viii) dialogue-based practice; and ix) an intense vocational, philosophical and empathetic nature. With all of this in mind, and from a public health perspective, health systems are compelled to include palliative care services in their portfolio of basic health services. Death comes to us all, and all wish to meet it with dignity and peace. Universal, inalienable, egalitarian ... we all deserve the protection that this human right offers to our passing.



**EAPC News: the EAPC Atlas  
(new edition of the EAPC Atlas  
of Palliative Care in Europe)  
Centeno C.**

University of Navarra, Institute for Culture and Society.  
ATLANTES Research Program, Pamplona, Spain  
Contact address: [ccenteno@unav.es](mailto:ccenteno@unav.es)

The second edition of the EAPC Atlas of Palliative Care in Europe is the result of three years of work of the EAPC Task Force on the Development of Palliative Care in Europe working in partnership with the ATLANTES Research Programme of the Institute for Culture and Society (ICS) of the University of Navarra. Our surveys have collected data on the national development of palliative care (PC) in 53 European countries from a variety of sources: leaders of PC in each country, experts in national development of the discipline, bibliography and other sources. A peer review process has been implemented in order to improve the quality of the information provided. With a rate of answer of around 85% in the surveys, the Atlas will provide country reports, thematic maps, and more graphic information on a country-by-country basis. The diffusion of data related to the development of PC at a national level is the engine of that very development because it: a) allows society to estimate whether a country's citizens receive adequate care when suffering from advanced and terminal illnesses and b) provides a comparison with other countries in that region, so that healthcare professionals, institutions and politicians can plan and make strategic decisions in terms of the nation's health. The full second edition of the EAPC Atlas of PC in Europe will be available in PDF format due to its excessive size (approximately 500 pages in length). Consequently, we offer this time a smaller edition (EAPC Atlas of Europe Cartographic Version) in order to present the most important information in thematic maps and one-page graphic country reports. This information will be accessible in multiple formats; for example, via the internet and also in printed format to provide both visibility and credibility. The free availability of maps in diverse formats will enhance the use of the Atlas in professional public presentations and will also be effective in dissemination among politicians and planners.

**Abstract number:** PS 27.2

**Abstract type:** Parallel Symposium

**Palliative Care Policies in the National Governments and the European Institutions**

Martin-Moreno J.M.<sup>1</sup>, Lynch T.<sup>2</sup>, Garralda E.<sup>2</sup>, Centeno C.<sup>2</sup>  
<sup>1</sup>Universidad de Valencia, Dep. Medicina Preventiva y Salud Publica & Hospital Clinico Universitario, Valencia, Spain,  
<sup>2</sup>Universidad de Navarra, Instituto de Cultura y Sociedad, Programa de investigacion ATLANTES, Pamplona, Spain  
Contact address: [jose.maria.martin@uv.es](mailto:jose.maria.martin@uv.es)

**Aims:** Approximately 5 million Europeans need palliative care (PC) every year. The objective of this presentation is to review the initiatives of European governments and institutions addressing this need.

**Methods:** Using primary data on 46 countries from the EAPC Atlas (2nd ed., 2012), the presentation will consist of an analysis of governmental barriers impeding the development of PC; a review of the main legislative initiatives adopted since 2006; and an examination of which countries currently have a national PC plan. We will also provide a qualitative analysis of the most important political and legal changes affecting PC development, according to professional leaders in each country. Finally, a systematic review of available information, including from scientific literature and EU and WHO websites, will be presented.

**Results and discussion:** Specific laws on PC exist in at least Belgium, France and Germany. Many other countries include the right to PC in their general health legislation (e.g., Spain, the Netherlands, Poland and the UK). In addition, 23 out of 46 countries have developed a national PC plan. Obstacles include problems related to national health policy: poor distribution of the health system budget, insufficient services, problems with organization and coordination affecting PC provision, geographical inequity in the distribution of services, limited access to existing services for patients, and lack of coverage by insurance companies. In November 2012, and within the framework of noncommunicable disease control, WHO approved as an indicator of access to PC the consumption of strong opioids (in equivalent dosage of morphine) for cancer deaths.

**Conclusion:** The rising need for PC requires clear action from EU Member States and European institutions. The study of PC policies should be promoted in order to ensure accountability in an area which constitutes an ethical responsibility as well as a matter of health system efficacy and efficiency.

**Abstract number:** PS 24.3  
**Abstract type:** Parallel Symposium  
**The Specialist or Generalist - Data from the  
EAPC Taskforce on Development**

Centeno C.

University of Navarra, Institute for Culture and Society.  
ATLANTES Research Program, Pamplona, Spain  
Contact address: [cccenteno@unav.es](mailto:ccenteno@unav.es)

Integrative Palliative Care (PC) is a new paradigm for all professionals working in palliative services around Europe. Today, best practices, new consolidated experiences and new evidence support a new model where palliative medicine specialists has to play in key role that demand communication skills and the decision of work in a bigger team with other specialist and primary care professionals. The EAPC Task Force on the development has explored the situation of the official certification in 53 countries and have collected the most updated information regarding pathways of specialization in Europe. A questionnaire was designed to explore the situation in each country including official certification name or title, year of approval, process of certification, number of physicians certified to date, etc. Qualitative analysis of answers was undertaken with categorization in three groups. The questionnaire was part of the EAPC Facts Questionnaire (FQ) which was completed by a 'key person' in 47/53 European countries; the information from the FQ is incorporated within the Second Edition of the EAPC Atlas of PC in Europe. Our results show that there are several countries where PM is officially certified: UK, Ireland, Poland, Romania, Germany, Malta, Latvia, Czech Republic, Norway, France, Finland; in Italy a "Master Universitario" as official certification is legally regulated. 8 countries with certification 'in process' also were identified: Austria ("Diploma in Special PM"), Denmark ("Field of competence"), Spain ("Specific Capacitation Area"), and Hungary, Iceland, Slovenia, Sweden and Switzerland (sub-specialization). Further comparative analysis is required to examine the process of PC accreditation and the meaning attributed to such 'specialization' within professional practice. We continuing working in the field through a dedicated Task Force with a membership of a physician per country where is already certificated PC.

**Abstract number:** FC 7.2

**Abstract type:** Oral

**Mapping the Teaching of Palliative Medicine in European Universities: Report from a 2012 EAPC Survey**

Centeno C.1, Lynch T.1, Garralda E.1, Vaquero J.1, Ellershaw J.2, Elsner F.3

1ATLANTES Research Program, Institute for Culture and Society, University of Navarra, Pamplona, Spain, 2University of Liverpool, Liverpool, United Kingdom, 3RWTH Aachen University, Aachen, Germany

**Background:** Teaching Palliative Medicine (PM) at medical schools is a relatively new topic in the scientific literature.

**Aim:** To conduct an exploratory study of the teaching of PM in the university across 53 European countries.

**Method:** A questionnaire was designed to explore the situation in each country: questions included the number of universities teaching PM; the level of education; whether the subject is elective or mandatory; and the existence of Chairs/other positions of professor, etc. A combination of quantitative/qualitative analysis was undertaken on the data. The questionnaire was part of the EAPC Facts Questionnaire (FQ) which was completed by a 'key person' in 47/53 European countries; the information from the FQ is incorporated within the Second Edition of the EAPC Atlas of Palliative Care in Europe.

**Results:** PM is taught at medical schools in the university in at least 21 European countries. PM is taught at each medical school in nine countries (Switzerland, Norway, Austria, Hungary, Slovenia, France, Cyprus, Malta, and Moldova). In other countries (Poland (9/15), Spain (21/41), Latvia (2/4), Lithuania (4/9), Germany (21/36), Macedonia (1/3), Czech Republic (2/7), Portugal (2/7), Italy (3/45) and also UK (no detailed data available, NDDA) Georgia (NDDA), and Turkey (NDDA)) PM is offered at some medical schools. PM as a subject may be either compulsory or optional but there is a trend towards it being compulsory. Chairs in PM exist in UK, Hungary, Germany, Poland, Norway, Netherlands, Sweden, Slovakia, Lithuania, Georgia, Denmark and Austria. In some countries, Faculties of Medicine only have associate professors (Belgium, Spain, Netherlands and Slovenia).

**Conclusion:** In 2012, PM is already being taught in a significant number of universities and countries within Europe. Chairs of PM have been identified in countries with high development of palliative care (PC) and may be used as a further indicator of PC development.

**Abstract number:** P1-022

**Abstract type:** Poster

**Hypomagnesemia and Refractory Pain in  
Advanced Cancer Patients: Case Series**

Lopez-Saca M.<sup>1,2</sup>, Vaquero J.<sup>1,2</sup>, Larumbe A.<sup>3</sup>, Centeno C.<sup>1,2</sup>  
1Clinica Universidad de Navarra, Palliative Care, Pamplona,  
Spain, 2Universidad de Navarra Pamplona, Instituto de Ciencia  
y Cultura ICS, Pamplona, Spain, 3Clinica Universitaria.  
Universidad de Navarra, Palliative Care, Pamplona, Spain

**Background:** There are some drugs of frequent use in advanced cancer patients under chemotherapy (cisplatin, cetuximab) or for other indications (antibiotic, PBI) that may decrease serum concentrations of Mg through gastrointestinal or renal mechanisms. Preclinical studies in animals have shown that Mg potentiates the analgesic effect of opioids and can prevent hyperalgesia perhaps through its effect on the N-methyl-D-aspartate receptor. Clinically, hypomagnesemia can produce neurological symptoms as irritability, hallucinations, tremors or convulsions, but reports of hypomagnesemia and pain are unusual.

**Clinical cases:** We present four clinical cases of excruciating pain and hypomagnesemia. All patients were hospitalised, with advanced cancer, recent chemotherapy and under opioids. A patient was also with ketamine as adjuvant. The pain was presented in crisis of top intensity with fluctuation and anarchic response to opioids. We show the evolution of pain intensity and the blood levels of Mg. Excruciating pain was associated with Mg in the range of 1.2-1.5 mg/dl. Intravenous Mg replacement (12 mEq diluted in saline in 30 minutes) followed by same daily dose to cover requirements was indicated in all of them. Mg levels of 1.9 to 2.2 mg/dl were associated with relief pain.

**Conclusion:** Correction of hypomagnesemia can be associated with pain relief in concreted situations.

**Funding:** None



**Abstract number:** P1-073

**Abstract type:** Poster

**Responsiveness to Delirium Severity Variations,  
Neurobehavioral and Global Cognitive Factors  
of the Memorial Delirium Assessment Scale**

Noguera A.1, Carvajal A.2, Alonso A.3, Chisholm G.4, Bruera E.4, Centeno C.2

1Hospital Centro de Cuidados Laguna, Madrid, Spain, 2Clinica Universitaria, Universidad de Navarra, Pamplona, Spain, 3Hospital La Paz, Madrid, Spain, 4MD Anderson Cancer Center, Houston, TX, United States

**Background:** The Memorial Delirium Assessment Scale (MDAS) is a reliable and validated instrument with which to assess delirium. Responsiveness to delirium changes detected by the MDAS has not been investigated. Two factor loads in the MDAS, neurobehavioral and global cognitive, have been previously defined. This study's primary objective was to evaluate the MDAS' responsiveness and analyze individual factors on this questionnaire.

**Methods:** Study subjects included 85 advanced cancer patients with delirium diagnoses who were admitted to 3 palliative care units. Delirium diagnosis was determined by clinical DSM IV TR criteria; the Confusion Assessment Method Instrument also was used. Patients were evaluated at baseline (0) and 72 hours with the Delirium Rating Scale-Revised-98 (DRS-R-98), Mini-Mental State Examination (MMSE), and MDAS.

**Results:** The variation in DRS-R-98 scores shows a correlation of  $r = 0.93$ , with variation in MDAS scores at  $P < .001$ . The variation in MMSE scores shows a correlation of  $r = -0.84$ , with variation in MDAS scores at  $P = .015$ . Factor I, neurobehavioral (reduced awareness, reduced attention, perceptual disturbance, delusions, altered psychomotor activity, and sleep-wake cycle disturbance) correlated moderately with MMSE at  $-0.56$ ; Factor II, global cognitive (disorientation, short-term memory impairment, impaired digit span, and disorganized thinking), correlated strongly with MMSE at  $-0.81$ . Factor II was significantly more reliable than I  $\rho = 0.7$ ,  $P = .01$ .

**Conclusions:** The high responsiveness confirms the value of the MDAS for ongoing delirium assessment. The existence of 2 differentiated factor loadings points to a potential future need for MDAS subscales.

**Abstract number:** P1-146

**Abstract type:** Poster

**Nursing Students' Attributed Impact to Palliative Care Learning: Better Nurses at the Bedside**

Arantzamendi M.<sup>1,2</sup>, Ballesteros M.<sup>1,3</sup>, Centeno C.<sup>1,4</sup>  
1University of Navarra, Institute for Culture and Society (ICS), ATLANTES Research Program, Pamplona, Spain, 2University of Navarra, School of Nursing, Pamplona, Spain, 3University of Valladolid, Nursing Department, Soria, Spain, 4University of Navarra, Clinica Universidad de Navarra. Department of Palliative Medicine and Symptom Management, Pamplona, Spain

Contact address: [marantz@unav.es](mailto:marantz@unav.es)

Students' perception after receiving Palliative Care teaching might be useful to better understand the position that this discipline should have in the curriculum. This study explores the teaching of PC from the side of the students, what nursing students think it meant to them to attend a course on PC at the University.

**Methods:** Participants were nursing students undertaking the optional subject of PC in two different Nursing Schools. All students were asked at the end of the course: What did it mean to you, personally or professionally, to participate in this PC course? Answers written by the students presented in the room (n=235) were analysed through content analysis by three researchers independently and periodical meetings were held to review the analysis and achieve consensus. Ethics Committee approved the study. A comparison with a similar study, presented in this congress, undertaken with medicine students, is offered.

**Results:** Categories were,

- a) PC learning provided a holistic view of nursing,
- b) had a special contribution to nursing curriculum,
- c) qualified them to care for terminally ill patients and
- d) promoted a personal growth.

The students' emphasised PC learning showed them clearly that person care is the essence of the profession and highlighted the human part of the profession. Students identified that PC learning had its own entity and should be compulsory for all nursing students. Students stated that the subject had qualified them to understand better the patient and to know how to act with him. Finally they identified that PC teaching made them question about end of life, while helping to know them better and promote a personal

development. In comparison with medicine students is observed that nurses give more relevance to practice aspects of palliative care learning.

**Conclusion:** The sample of nursing students explored ascribe to PC learning a positive effect on them at professional and personal level emphasizing its clinical applicability.

**Abstract number:** P1-147

**Abstract type:** Poster

**Medicine Students' Attributed Impact to Palliative Care Learning: Better Doctors who Understand Better the Medical Profession**

Arantzamendi M.<sup>1,2</sup>, Ballesteros M.<sup>1,3</sup>, Centeno C.<sup>1,4</sup>  
1University of Navarra, Institute for Culture and Society (ICS), ATLANTES Research Program, Pamplona, Spain, 2University of Navarra, School of Nursing, Pamplona, Spain, 3University of Valladolid, Nursing Department, Soria, Spain, 4University of Navarra, Clinica Universidad de Navarra. Department of Palliative Medicine and Symptom Management, Pamplona, Spain

Contact address: [marantz@unav.es](mailto:marantz@unav.es)

Students' perception after receiving Palliative Care teaching might be useful to better understand the position that this discipline should have in the curriculum. This study explores the teaching of PC from the side of the students, what medicine students think it meant to them to attend a course on PC at the University.

**Design:** Medicine students undertaking the optional subject of PC in a Faculty of Medicine were asked at the end of the course: What did it mean to you, personally or professionally, to participate in this PC course? Answers written by the students presented in the room (n=284) were analysed through content analysis by three researchers independently and periodical meetings were held to review the analysis and achieve consensus. Ethics Committee approved the study. A comparison with a similar study, presented in this congress, undertaken with nursing students is offered.

**Results:**

- a) Flattering expressions about PC learning showed surprise or importance ("stimulating", "revealing", "thanks for teaching it" ...);
- b) prepares to be and act as a physician: it prepares you to be a PHYSICIAN (it should be compulsory, essential qualification for any future physician and to cope as doctor at end of life;
- c) medicine includes holistic care and family: it teaches to care in a global/holistic way;
- d) opens a new area of knowledge: you learn to treat the pain and other symptoms and many others (spirituality, team view, difficult questions, communication);
- e) it makes you reflect, grow and adds humanity;

f) PC clinical experience is essential to learn the topic and all students need it.

In comparison with nursing students is observed that students of medicine emphasise more that they have discovered a better and broader vision of the medical profession after the palliative care learning.

**Conclusion:** The sample of medicine students explored ascribe to PC learning a positive effect on themselves at professional and personal level let them understand medicine deeper.



**Abstract number:** P1-183

**Abstract type:** Poster

**International Medical Education in Palliative Care: Pilot Research on Undergraduates (IMEP)**

Mason S.R.1, Blumhuber H.2, Centeno C.3, Cetto G.L.4, De Conno F.2, Elsner F.5, Eychmuller S.6, Filbert M.7, Larkin P.8, Sweeney C.9, Vaquero Cruzado J.A.3, Ellershaw J.E.1, EAPC Steering Group on Medical Education and Training

1University of Liverpool, Marie Curie Palliative Care Institute Liverpool, Liverpool, United Kingdom, 2EAPC Onlus, National Cancer Institute Fondazione IRRCCS, Milan, Italy, 3Clinica Universidad de Navarra, Medicina Paliativa, Pamplona, Spain, 4Universita degli Studi di Verona, Cattedra di Oncologia Medica, Verona, Italy, 5Universitätsklinikum Aachen, Klinik für Palliativmedizin, Aachen, Germany, 6University Hospital Bern, Palliative Care, Bern, Switzerland, 7Centre Hospitalier Lyon SUD, Centre de Soins Palliatifs, Lyon, France, 8University College Dublin, School of Nursing, Midwifery and Health Systems & Our Lady's Hospice and Care Services, Dublin, Ireland, 9University College Cork, School of Medicine, Cork, Ireland  
Contact address: [stephen.mason@liverpool.ac.uk](mailto:stephen.mason@liverpool.ac.uk)

**Background:** The provision of education and training in palliative medicine for medical undergraduates across Europe is variable. Hence, it is likely that newly qualified physicians are entering practice with variable skill sets. Accordingly, assessing the preparedness and attitudes of newly qualified physicians in practicing palliative care is crucial. Such data will inform the ongoing development of medical curricula, which is crucial in light of demographic challenges facing Europe in the coming decades.

**Aim:** To establish four translations (Spanish, French, German & Italian) of two validated psychometric assessment tools (Self-Efficacy in Palliative Care - SEPC; Thanatophobia Scale), and collect illustrative pilot data across seven European countries.

**Design:** Organised as a Taskforce of the EAPC Steering Group on Medical Education, the IMEP study group will complete backward and forward translations of the SEPC and Thanatophobia Scale using EORTC criteria. Using convenience sampling, pilot data from each country (per country, n = 40) will be collected to test the applicability of the translated instruments and provide illustrative data for nominal comparison.

**Results:** To date, EORTC structured translations in French and Spanish have been achieved, with German and Italian translations due for completion late 2012. Pilot data already

collected from Ireland and England will be collated with developing data sets from Spain and France, and data to be collected in Germany, Italy and Switzerland.

**Conclusion:** The availability of multiple translations of these validated psychometric assessment tools will enable intraand international assessment of how existing undergraduate curricula is preparing tomorrow's doctors to meet the needs of the expanding cohort of palliative care patients. Such evidence may help influence the integration and strengthening of Palliative Medicine within existing undergraduate medical curricula.

**Abstract number:** P1-193

**Abstract type:** Poster

**Current Overview of Palliative Medicine Teaching in the Spanish University**

Vaquero J.A.<sup>1,2</sup>, Lopez-Saca J.M.<sup>3</sup>, Urdiruz J.<sup>3</sup>, Centeno Cortes C.<sup>2,3</sup>  
1Clinica Universitaria, Universidad de Navarra, Palliative Medicine, Pamplona, Spain, 2Universidad de Navarra, ATLANTES Program, Institute for Culture and Society (ICS), Pamplona, Spain, 3Clinica Universitaria, Universidad de Navarra, Pamplona, Spain

**Introduction:** There are many recommendations of national and international organisations to incorporate palliative care teaching in the medical school. European Higher Education Area ("Bologna process") has supposed review of the curriculum in every academic degree. The aim of this study was to determine which medical schools in Spain have included palliative care in their new curricula.

**Method:** We reviewed the curricula of medicine from all spanish faculties identifying subjects with the words "Palliative Medicine" or "palliative care" included in their denomination.

**Results:** 20 of 39 medical schools have a palliative care course. In six faculties is taught as a single subject, with an average of 3 academic credits. When palliative care is taught with other subjects (as Oncology, Geriatrics, Family Medicine and so on) the number of credits is variable. In 14 of 20 centres is a mandatory subject.

**Conclusions:** A half of medical schools in Spain including a palliative care course in their new curricula. Palliative medicine is gradually incorporated into the training of future physicians Spanish.

**Abstract number:** P2-201

**Abstract type:** Poster

**Imminence of Death among a National Cohort of Hospital Patients in Scotland**

Clark D.1, Armstrong M.2, Allan A.3, Graham F.4, Isles C.4,  
Dumfries and Galloway End of Life Care Research Group  
1University of Glasgow, School of Interdisciplinary Studies,  
Dumfries, United Kingdom, 2NHS National Services Scotland,  
Information Services Division, Edinburgh, United Kingdom,  
3Dumfries and Galloway Health Board, Public Health, Dumfries,  
United Kingdom, 4Dumfries and Galloway Health Board,  
Dumfries, United Kingdom  
Contact address: [david.clark.2@glasgow.ac.uk](mailto:david.clark.2@glasgow.ac.uk)

**Background:** There is growing interest in policies to promote end of life care in hospital settings. Some attempts have been made to estimate the numbers of hospital patients that might be in need of palliative care, but there is little understanding of what portion of the hospital population is in the last stages of life - and therefore of how best hospital services can be oriented to end of life needs.

**Aim:** To establish in one jurisdiction (Scotland) the likelihood of death within 12 months, of all patients in hospital on a given census date.

**Design:** Record linkage study of patients in all 25 of Scotland's teaching and large general hospitals on the night of 31 March 2010.

**Results:** We identified 10,743 hospital inpatients on the census night, of whom 3,098 (28.8%) died within the next 12 months. 1,001 patients (9.3 %) died during the recorded period of admission which accounted for 32.3% of all deaths within one year. We established how many had died at 7 days (2.9%); 30 days (8.9%); 3 months (16%); 6 months (21.2%); 9 months (25.5%) and 12 months (28.8%).

Propensity to die was closely related to age and also to gender: men of all ages were more likely to die within 12 months than women (30.4% vs. 27.5% -  $p=0.001$ ); and between the ages of 60 (22.6%) and 85 (45.6%) each increase of 5 years in admission age was equivalent to 4.2% higher risk of death ( $R^2 = 0.95$ ). The most deprived patients were twice as likely to be admitted (SIMD09 Q1: 2,936, Q5: 1,515) but were not more likely to die (Q1: 29.8%, Q5: 28.0%  $p = 0.215$ ).

**Conclusion:** We are not aware of any other study of this kind, since the required record linkage is not readily available. The data indicate the large numbers of patients nearing the end of life that are in the hospital in-patient system at any one time. Such data could assist in advocacy



**Abstract number:** P2-077

**Abstract type:** Poster

**Mapping Specialization in Palliative Medicine  
across Europe: Report from a 2012 EAPC Survey**

Centeno C.1, Lynch T.1, Garralda E.1, Filbet M.2  
1ATLANTES Research Program, Institute for Culture and Society,  
University of Navarra, Pamplona, Spain, 2University of Lyon,  
Lyon, France

**Background:** Palliative medicine (PM) has been a specialization in the UK since 1987 and in Ireland since 1995. In 2007, the EAPC Task Force on the Development of Palliative Care in Europe reported that in five countries PM was considered a sub-specialty for which secondary certification was required.

**Aim:** To review the specialization of palliative medicine across Europe.

**Method:** A questionnaire was designed to explore the situation in each country including official certification name or title, year of approval, process of certification, number of physicians certified to date, etc. Qualitative analysis of answers was undertaken with categorization in three groups. The questionnaire was part of the EAPC Facts Questionnaire (FQ) which was completed by a 'key person' in 47/53 European countries; the information from the FQ is incorporated within the Second Edition of the EAPC Atlas of Palliative Care in Europe.

**Results:** There are 10-13 countries where PM is officially certified: there is specialization in UK and Ireland, and subspecialization in Poland, Romania, Germany, Malta, Slovakia, Latvia, Czech Republic and Norway. France has the certification "Diplômes d'études spécialisées complémentaires de la Douleur et Médecine Palliative"; in Finland there is an award entitled "Specialist Competency in PM"; in Italy there is national official certification ("Master Universitario di Alta Formazione e Qualificazione in Cure Palliative per medici specialist") that is legally regulated and possesses curricular importance but not professional recognition. Eight countries with certification 'in process' were identified: Austria ("Diploma in Special PM"), Denmark ("Field of competence"), Spain ("Specific Capacitation Area"), and Hungary, Iceland, Slovenia, Sweden and Switzerland (sub-specialization).

**Conclusion:** Further comparative analysis is required to examine the process of PM accreditation and the meaning attributed to such 'specialization' within professional practice.

**Abstract number:** P2-209

**Abstract type:** Poster

**The Hospice Friendly Hospitals Programme in Ireland**

Graham F.1, Clark D.2

1NHS Dumfries and Galloway, Oncology, Dumfries, United Kingdom, 2University of Glasgow, School of Interdisciplinary Studies, Dumfries, United Kingdom

**Background:** The Hospice Friendly Hospitals (HFH) Programme in Ireland is a multi centre intervention to develop end of life care capacity, advocate for patients and families and create systems level change in the delivery of hospital care at the end of life. The programme has been developed and supported within the Irish Hospice Foundation (IHF).

**Aim:** To construct a narrative history of HFH in its first five years (2007-12) drawing conclusions to influence its future development and sustainability.

**Design:** Documentary analysis of programme documents, reports, minutes of meetings, media outputs, promotional and educational materials; qualitative interviews with HFH staff and stakeholders (n=42); field and ethnographic observations.

**Results:** We identified key milestones in the development of HFH from as early as 1996, to 2012. The programme consisted of four main components: design and dignity/the physical environment; communication/competence and compassion; integrated care/planning and co-ordination; patient autonomy/an ethical approach. Major contributions were made in the production of standards for end of life care in hospitals and in a baseline 'audit' of end of life care in Irish hospitals. Total funding in 2007-12 was c10m Euros.

**Conclusion:** HFH is an ambitious, multi-faceted programme that has involved over 40 acute and community hospitals and has developed in partnership with the Health Service Executive. Whilst elements of the four programme components struggled to achieve impact, significant successes occurred in the roll out of communications training, in standards development, in the use of symbolic resources at ward level and in aspects of the audit. The programme now moves into a phase of more limited funding, when it will seek to 'mainstream' its activities within the participating hospitals - aiming at achieving sustainable impact.

**Abstract number:** P2-080

**Abstract type:** Poster

**Spanish Version of Patient Dignity Inventory (PDI): Translation Process and Preliminary Psychometric**

Martinez-Garcia M.1,2, Rullan M.3, Centeno C.1,2, Carvajal A.3  
1Universidad de Navarra, Instituto Cultura y Sociedad, ICS, Pamplona, Spain, 2Clinica Universidad de Navarra, Medicina Paliativa, Pamplona, Spain, 3Universidad de Navarra, Pamplona, Spain

**Introduction:** The Patient Dignity Inventory (PDI) was designed to measure different sources of distress related to dignity at the end of life patients.

**Aim:** Obtain a Spanish version of the PDI and measure the psychometric aspects in patients with advanced cancer.

**Method:** A translation-reverse translation method was used by bilingual following the guide of the European Organisation for Research and Treatment of Cancer (EORTC). The Ethics Committee on Clinical Research approved the study. Advanced cancer both inpatients and outpatients from the Oncology and Palliative Care department were included, with full cognitive abilities according to clinical criteria, Spanish native speakers and with informed consent. In addition to PDI, patients completed ESAS, HADS and FACIT-sp-12 surveys in Spanish validated version. The psychometric aspects evaluated were: internal consistency (Cronbach's Alpha); concurrent validity with the PDI-ESAS, PDI-HADS and PDI-FACIT-sp-12; discriminant validity between inpatients and outpatients, and between different performance status. The utility was obtained by the time of completion and patients perception.

**Results:** 37 patients were recruited and 35 completed the study. The Cronbach's Alpha coefficient was of 0.89. The PDI correlated well with the ESAS ( $r_s=0.61$ ,  $p<0.001$ ) and HADS ( $r_s=0.75$ ,  $p<0.001$ ), however the correlation with the FACIT was lower ( $r_s=-0.41$ ,  $p=0.014$ ). The survey distinguish between outpatient and inpatients and among patients with different performance status obtained by the KPS ( $r_s=-0.48$ ,  $p=0.004$ ). The Patients took an average of 5.33 minutes to complete the PDI and considered that the instrument was clear and easy to complete.

**Conclusion:** The preliminary data of the validation shows that the Spanish version of the instrument has good psychometric properties. A larger study will be done to measure other psychometric properties as test-retest and factor analysis.

**Abstract number:** P2-217

**Abstract type:** Poster

**An Update on Use of Opioids in Terminal Patients and Survival**

Lopez-Saca M.<sup>1,2</sup>, Lopez-Guzman J.<sup>3</sup>, Centeno C.<sup>1,2</sup>

<sup>1</sup>Clinica Universidad de Navarra, Palliative Care, Pamplona,

Spain, <sup>2</sup>Universidad de Navarra Pamplona, Instituto de Ciencia

y Cultura ICS, Pamplona, Spain, <sup>3</sup>Universidad de Navarra

Pamplona, Humanidades Biomedicas, Pamplona, Spain

**Background:** Opioids are drug frequently used in palliative care. However, a common thought among some physicians is that those drugs hasten of death. Few studies have addressed the relationship between survival and of opioids use. The aim of the present work was to thoroughly review published data on this issue.

**Methods:** We reviewed all studies about the effect of opioids use on survival from 1987 to 2012. Methods included database searching (Pubmed, MEDLINE), snowballing, specialized books and personal contact with physicians in palliative care.

**Results:** Eight studies fulfilled the inclusion criteria: five retrospective, one prospective and two cohorts, one of them multicenter. These papers were designed with the aim to assess the impact on survival of opioid use in hospice. In these studies there was no statistically significant difference between the survival of patients with high doses of opioids or dose increases during the last days of life. In addition there was no difference between applying double dose and risk of decreased survival.

**Conclusion:** It has not been demonstrated that opioids used to treat symptoms in terminal patients shorten the survival

**Abstract number:** P2-218

**Abstract type:** Poster

**ATLANTES Research Program: "Human Dignity, Advanced Illness and Palliative Care". A Project within the Institute for Culture and Society (ICS) of the University of Navarra**

Centeno C.1, Arantzamendi M.1, Lynch T.1, Vaquero J.1, Clark D.2  
1ATLANTES Research Program, Institute for Culture and Society, University of Navarra, Pamplona, Spain, 2School of Interdisciplinary Studies, University of Glasgow, Glasgow, United Kingdom

**Background:** Late stage illness and the prospect of death raise profound questions within modern culture. Palliative care is one response to such concerns in the form of advanced medicine for end-of-life care. In 2012 the Institute for Culture and Society (ICS) embarked upon the ATLANTES Research Program.

**Aim:** To improve scientific and public understanding of the work of palliative care. The overall objective of this five-year program is to promote in society a positive attitude toward the care of patients with advanced, irreversible illness, from a perspective based on the dignity of the person and the role of medicine.

**Method:** ATLANTES will adopt perspectives from history, psychology, sociology and anthropology to illuminate the understanding of palliative care. It will also encompass contributions from public health, geography, communication studies and education.

**Results:** ATLANTES will promote reflection on fundamental aspects of palliative care as well as the implementation of strategies to promote it at institutional, professional and societal levels. Among its sub-projects will be a study of the intangibles in the interaction between palliative care and the individual; the anthropological and spiritual foundation of palliative care; a ranking of the development (and an associated Atlas) of palliative care in Europe and Latin America; education in palliative medicine, a workshop on "The message of palliative care" and a "Think Tank" on ethics and advanced illness.

**Conclusion:** ATLANTES will approach these issues in a manner consistent with the work of an academic institution: scientific investigation, professional training and dissemination of the knowledge acquired. This will be done in ways which are consistent with the institutional characteristics and Christian perspective of the University of Navarra, and with a clear willingness to co-operate with other institutions that work for similar objectives, as well as



**Abstract number:** P2-350

**Abstract type:** Poster

**Towards a Public Health Model for Palliative Care in Europe**

Hasselaar J.1, Centeno C.2, Engels Y.1, Vissers K.1  
1Radboud University Nijmegen Medical Centre (RUNMC),  
Nijmegen, Netherlands, 2Universidad de Navarra, Pamplona,  
Spain

**Research aims:** Due to the ageing of European society, dying of cancer and chronic disease is expected to increase the coming years and involves a considerable burden for society. Palliative care is an approach aiming at the quality of life of people with a life threatening disease and their families. However, the availability of palliative care services in European countries largely differs as does access to opioids for symptom relief. Whether this is related to population needs rather than population living standards needs further investigation.

**Methods:** A palliative care public health model is drawn combining publicly available data of the EU-27 countries. Aspects of the model are potential needs based on crude death rates in the 65+ population (CDR) and standards for purchasing power (PPS) based on Eurostat data as structure parameters, the Atlas project score for palliative care services availability as a process parameter, and the global opioid consumption (mg/capita) based on data from the International Narcotics Control Board as an outcome parameter. Correlations are tested with spearman's rank test.

**Results:** PPS related negatively to total crude death rate in 65+ population ( $p=-0.62$ ;  $P < .01$ ) and positively to the CDR for cancer and chronic disease in the 65+ population ( $p=0.42$ ;  $P < .05$ ). Both PPS ( $p=0.63$ ;  $P < .05$ ) and CDR ( $p=0.47$ ;  $P < .05$ ) correlated positively to the Atlas score for availability of palliative care resources. The Atlas score correlated positively to consumption of morphine ( $p=0.50$ ;  $P < .05$ ) and fentanyl ( $p=0.56$ ;  $P < .05$ ) within a country.

**Conclusion:** Palliative care availability in a country related both to potential population needs and population living standards. Palliative care availability relates to a higher supply of opioids. Future research should concentrate on further refinement of the model including the relation between CDR, PPS and palliative care outcome. This will further improve (inter)national palliative care policy making.

**Abstract number:** P2-355

**Abstract type:** Poster

**Is an Atlas the Way to Monitor and Report on the Status of Palliative Care in a Region?**

Pastrana T.1, Centeno C.2,3, Wenk R.4,5, Eisenclas J.6, Monti C.6, Rocafor J.7, De Lima L.5

1University Hospital RWTH Aachen, Department of Palliative Medicine, Aachen, Germany, 2Universidad de Navarra, Pamplona, Instituto Cultura y Sociedad, Pamplona, Spain, 3European Association for Palliative Care, Task Force Development of Palliative Care, Pamplona, Spain, 4Fundacion FEMEBA (PAMP-FF), Buenos Aires, Argentina, 5International Association for Hospice and Palliative Care, Houston, TX, United States, 6Latin American Association for Palliative Care-ALCP, Buenos Aires, Argentina, 7Sociedad Espanola de Cuidados Paliativos SECPAL, Madrid, Spain

**Objective:** The aim of this project was to determine the degree of Palliative Care (PC) development in Latin America (LA) and evaluate the applicability of the EAPC Atlas methodology in other regions of the world.

**Method:** Based on the EAPC Atlas, using the expertise of several of the EAPC Atlas Committee members; and expert advice from the Pan American Health Organization, the Latin American Association for Palliative Care (ALCP) developed a project called Atlas of Palliative Care in Latin America.

Fifty-six PC workers were selected across the region as collaborators. Semi-structured interviews were conducted (in Spanish or Portuguese) covering main aspects in PC development, number of PC services, educational resources and professional activities. Consensus had to be achieved among the collaborators before the data was recorded.

**Results:** Data was collected from 19 countries (RR100%). The number of PC services for LA is 1.2 per million habitants, while at the national level it varies between 14.6 and 0.23 (Costa Rica and Honduras respectively). Palliative Medicine is recognized as a sub-speciality in 4 countries, with postgraduate educational programs in 10. Eleven percent of medical schools offer PC in the undergraduate level. Eleven countries reported having a national PC association. There is ongoing collaboration in the countries with partners in USA, Spain, UK and Canada.

**Conclusion:** The Atlas of PC in LA describes vast differences among the countries and also similarities but above all, highlighted that the availability of PC in LA is very limited. This project also demonstrates that the Atlas is an adequate resource to monitor and report on the degree of PC

development and that the methodology applied for the EAPC Atlas Europe may be adapted and applied in other regions of the world. Further studies are needed to evaluate the use and impact of this information to improve national health policies and patient care.