Actualització en patologies mèdiques prevalents

Envelliment i multimorbilitat

Hospital Universitari MútuaTerrassa

Esquema

Conflicto de intereses, un articulo y un cuento

Hospital Universitari MútuaTerrassa

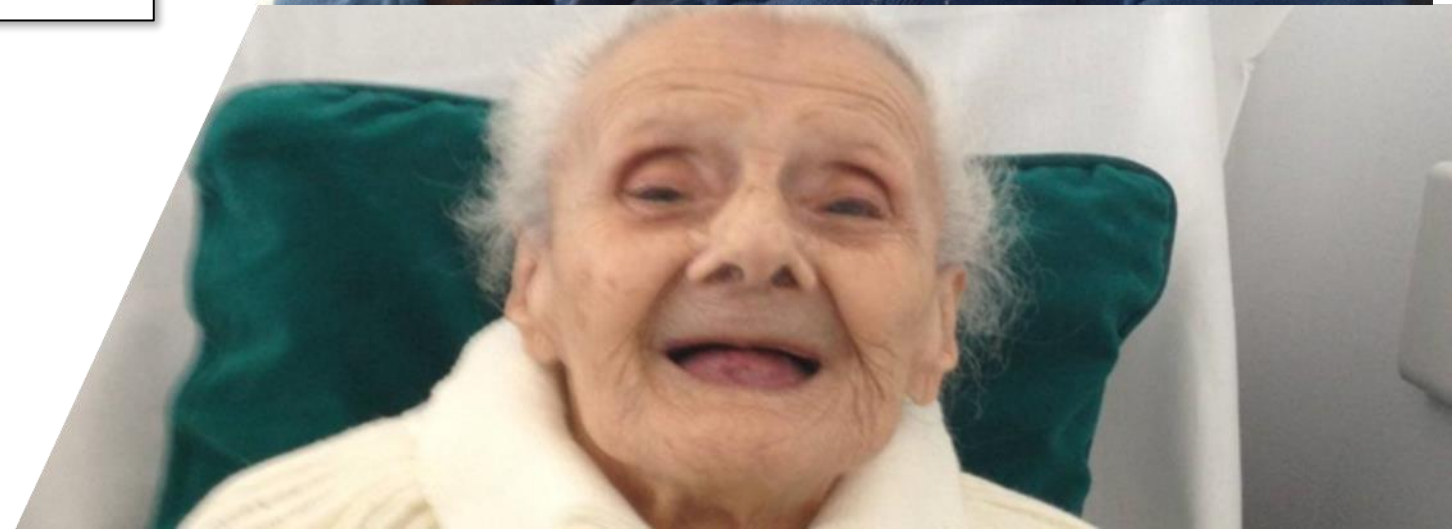
CONFLICTO DE INTERESES

PLOS ONE

RESEARCH ARTICLE

Multimorbidity gender patterns in hospitalized elderly patients

Pere Almagro[1,2]*, Ana Ponce[1,2], Shakeel Komal[1,2], Maria de la Asunción Villaverde[1,2], Cristina Castrillo[1,2], Gemma Grau[1,2], Lluis Simon[1,2], Alex de la Sierra[1,2]



PLOS ONE

RESEARCH ARTICLE

Multimorbidity gender patterns in hospitalized elderly patients

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2 o más de las siguientes
≥75 años
≥2 enf. crónicas avanzadas
Barthel≤75
Pfeiffer ≥3

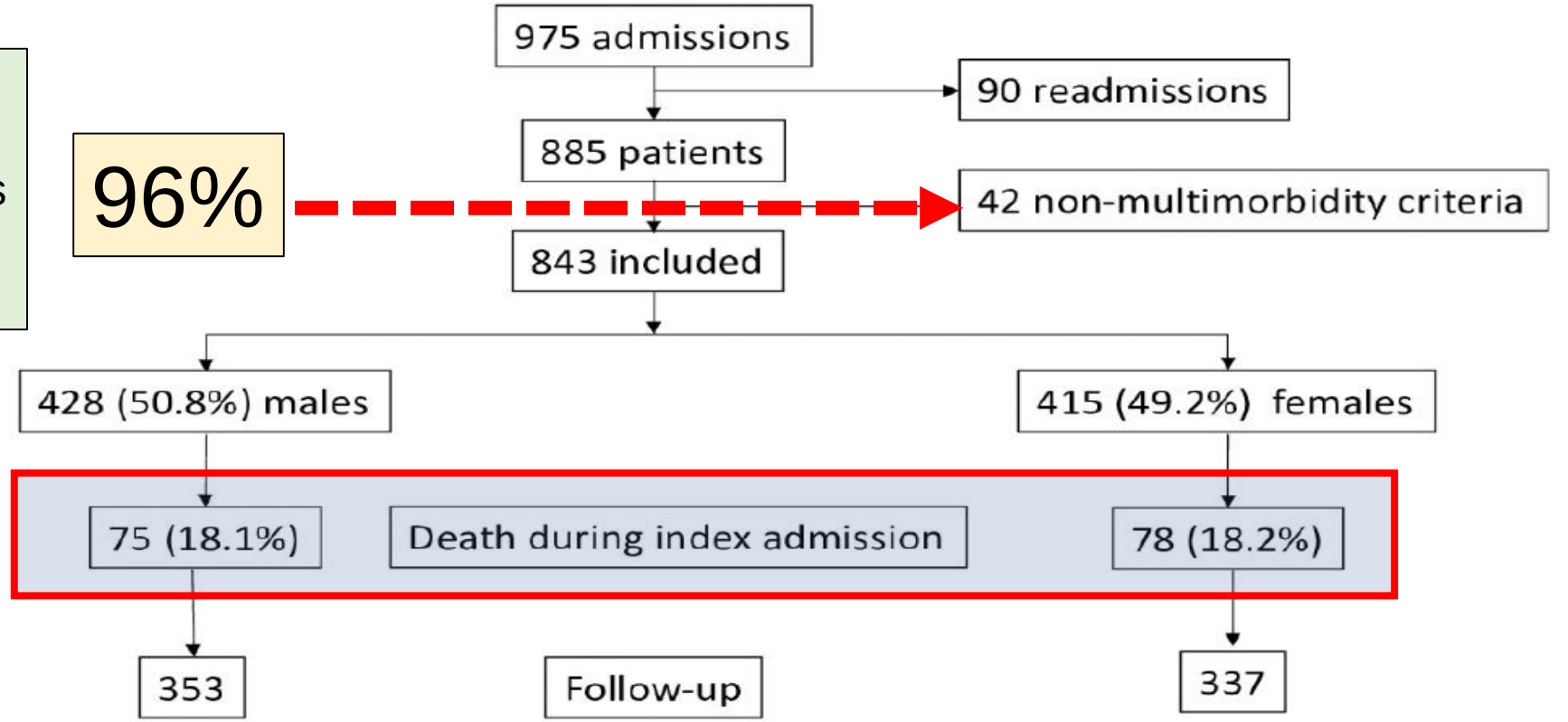
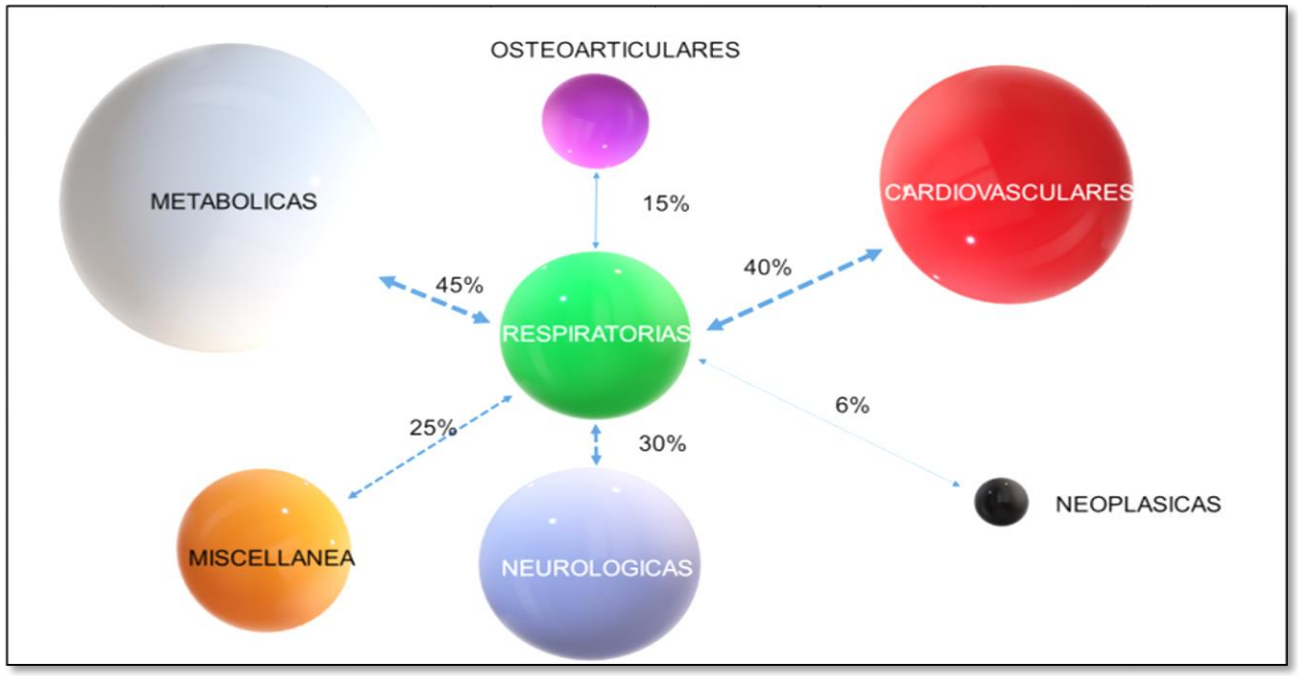


Fig 1. Flowchart of participants.

Variable	Media (DE)	Mediana (IQR)
Edad	82.4 (9.8)	84 (79-89)
Barthel	49.4 (34.4)	50 (15-80)
Pfeiffer	4.2 (5.5)	2 (0-9)
MMSE	21.7 (11.2)	21.7 (15-32)
Charlson	4.9 (3.4)	4 (3-6)
Fármacos	11 (6.3)	9 (6-12)
Estancia	11.1 (8.8)	9 (6-13)
PP escala	3.5 (1.5)	3.5 (2-5)



PLOS ONE

RESEARCH ARTICLE

Multimorbidity gender patterns in hospitalized elderly patients

Pere Almagro[1,2]*, Ana Ponce[1,2], Shakeel Komal[1,2], Maria de la Asunción Villaverde[1,2], Cristina Castrillo[1,2], Gemma Grau[1,2], Lluis Simon[1,2], Alex de la Sierra[1,2]

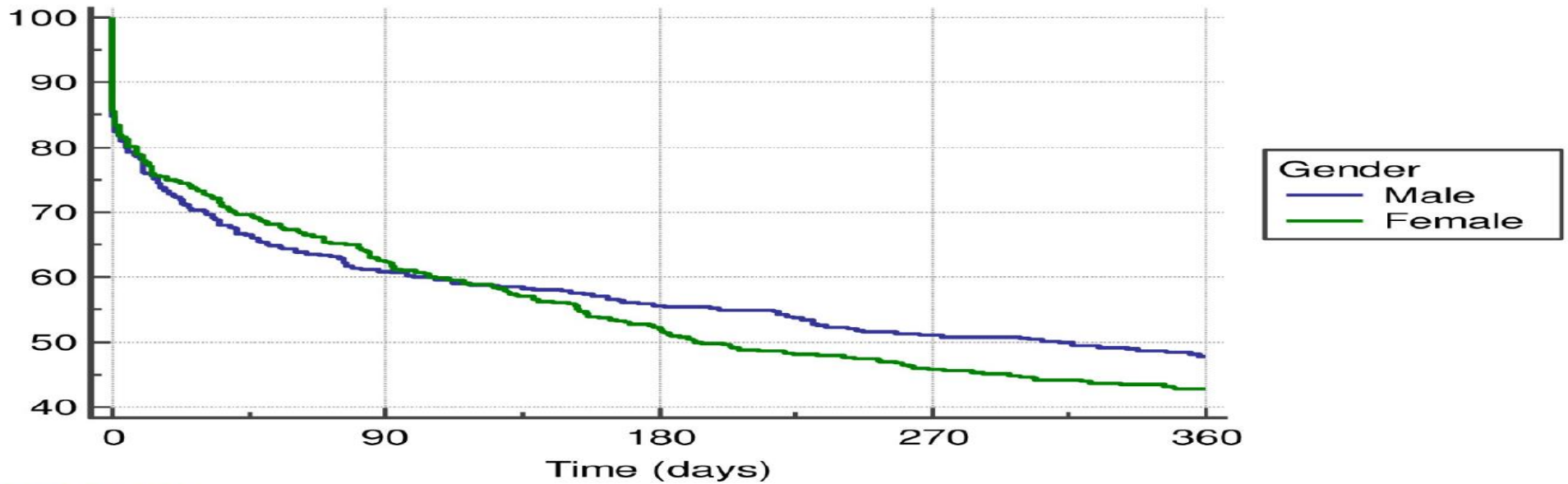
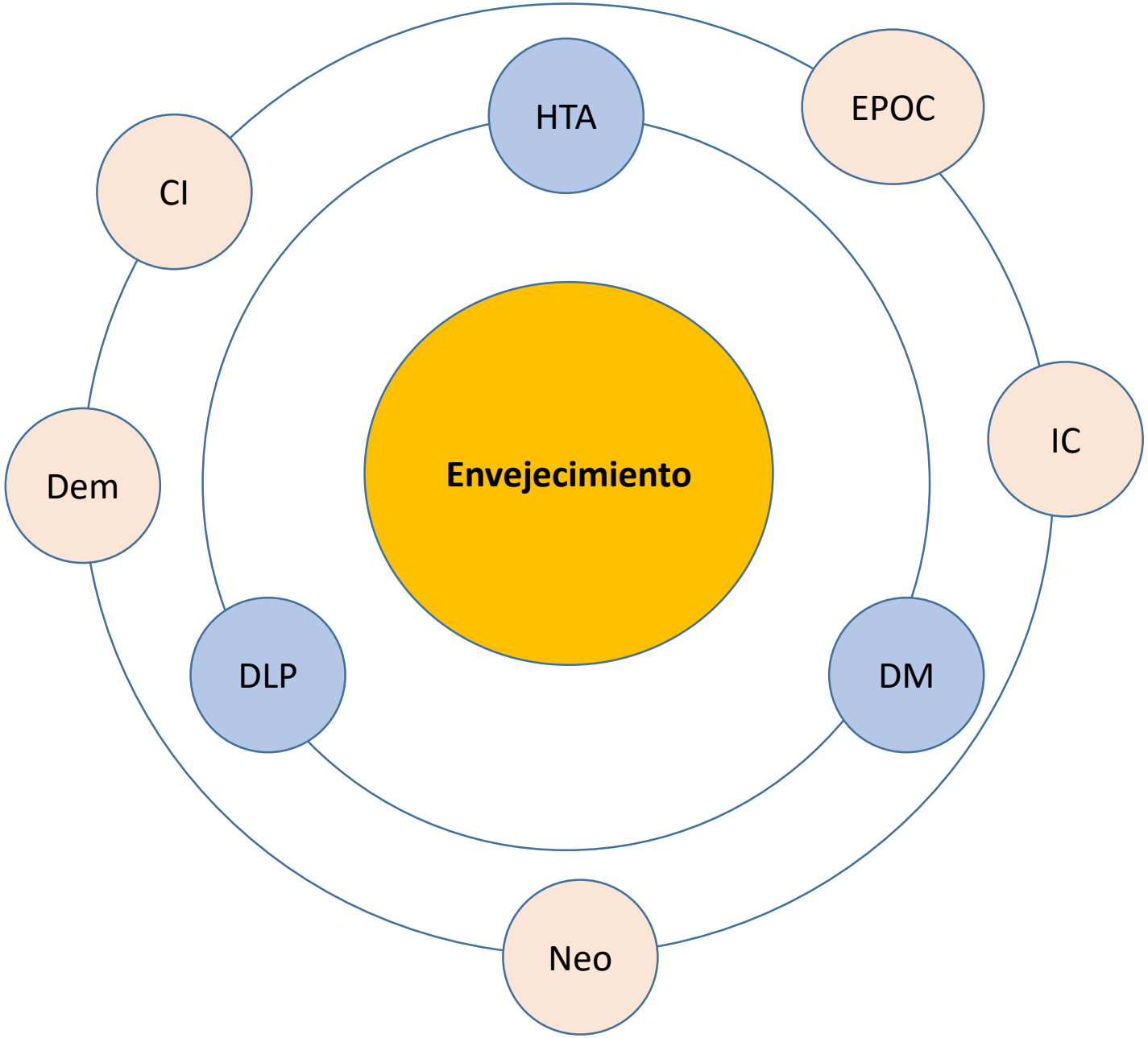


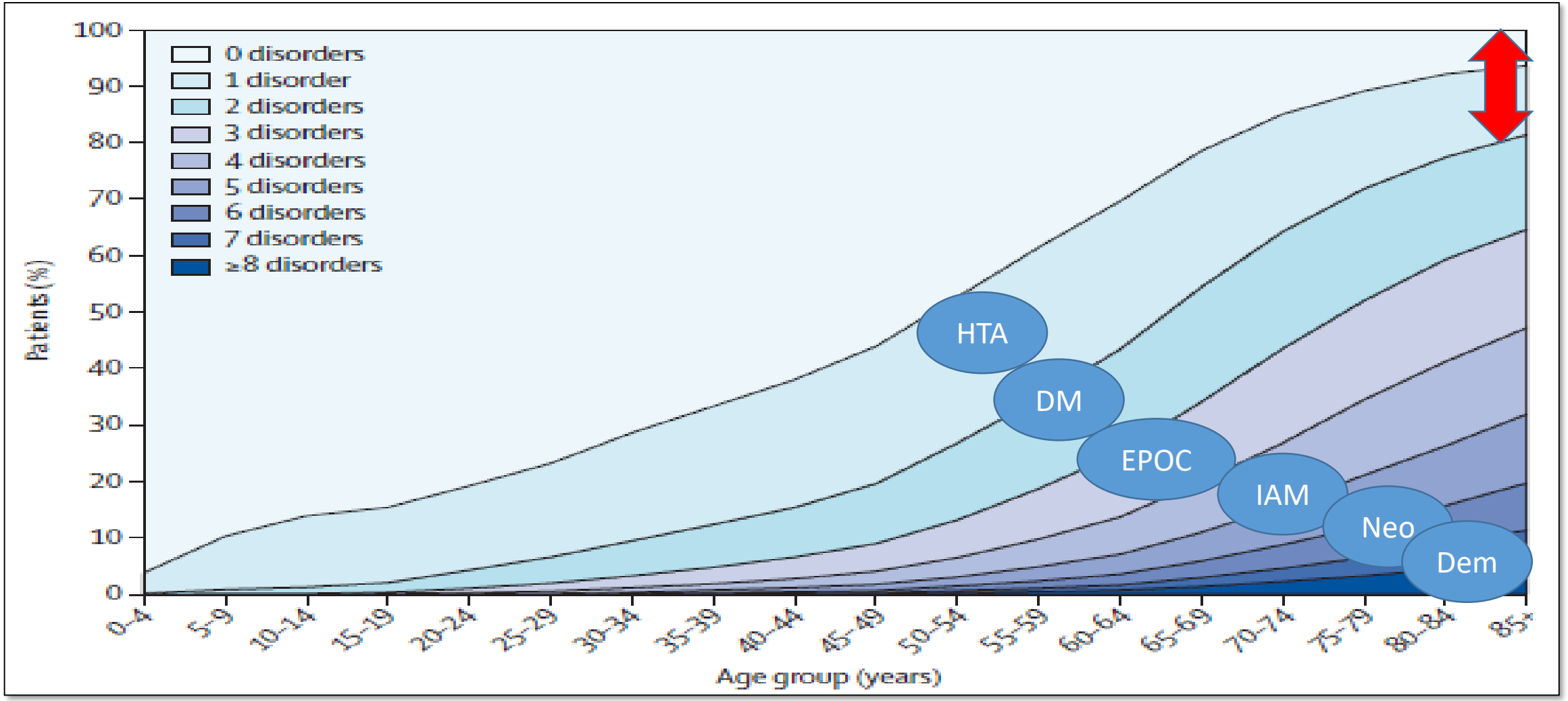
Fig 4. Kaplan-Meier survival curves and gender.


HTA
EPOC
CI
IC
Dem
Envejecimiento
DLP
DM
Neo

Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study

Karen Barnett, Stewart W Mercer, Michael Norbury, Graham Watt, Sally Wyke, Bruce Guthrie

www.thelancet.com Vol 380 July 7, 2012



The New England Journal of Medicine

REVIEW ARTICLE

Aging, natural death, and the compression of morbidity

El modelo biocientífico actual de enfermedad asume que la muerte es siempre el resultado de una enfermedad. Si no existiese la enfermedad no habría mortalidad.

CERTIFICADO MÉDICO DE DEFUNCIÓN

OMC

Colegio de

003950835
Nº Certificado

D. / Dña.
en Medicina y Cirugía, colegiado/a en , con el número
y con ejercicio profesional en

CERTIFICO la defunción de

Nombre del fallecido/a:
1º Apellido del fallecido/a:
2º Apellido del fallecido/a:

Fecha de nacimiento Día Mes Año Sexo: Varón Mujer

Documento de identidad: D.N.I. Número: —
Pasaporte Número:
N.I.E. (Tarjeta de Residencia) Número: — —

Hora y fecha de la defunción Hora : minutos : Día Mes Año

¿En qué lugar ocurrió la defunción?
Domicilio particular Centro hospitalario Residencia socio-sanitaria Lugar de trabajo Otro lugar

Causas de defunción (ver instrucciones al dorso) **Intervalo de tiempo aproximado***

I. (a) **PARADA CARDIACA** Horas Días Meses Años

Debido a

(b) **Causas antecedentes*** Horas Días Meses Años

Debido a

(c) Horas Días Meses Años

Debido a

(d) **Causa inicial o fundamental*** **VEJEZ** Horas Días Meses Años

II. **...sas*** Horas Días Meses Años

¿Ha habido indicios de muerte violenta? Sí No

¿Se practicó autopsia? Sí No

¿La defunción ha ocurrido como consecuencia directa o indirecta de?: (marcar si procede)

Accidente de tráfico Accidente laboral Fecha del mismo: Día Mes Año

En , a de de

Firma del médico

(ver instrucciones al dorso)

Mod. CMD-BED 01

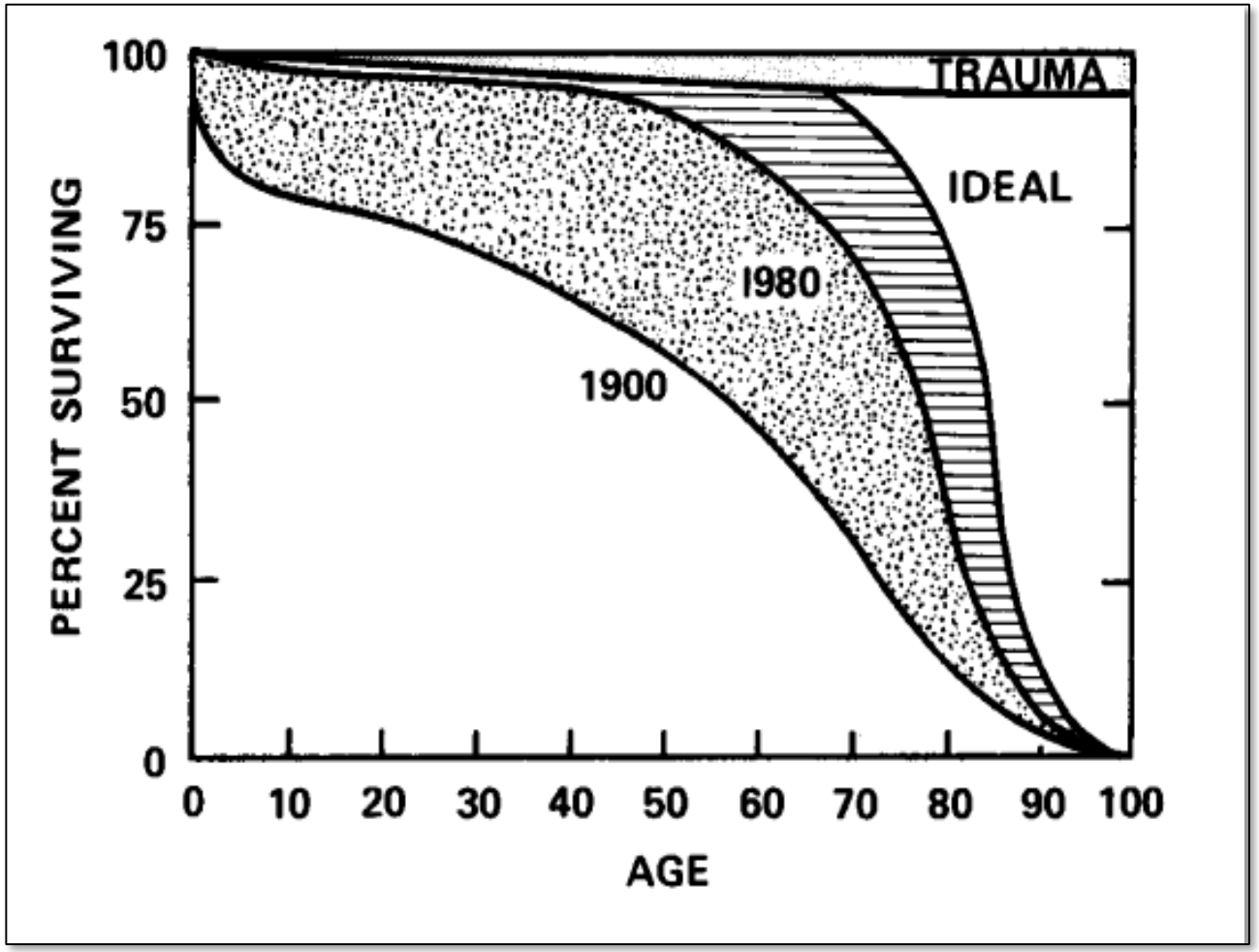
130 THE NEW ENGLAND JOURNAL OF MEDICINE July 17, 1980

SPECIAL ARTICLE

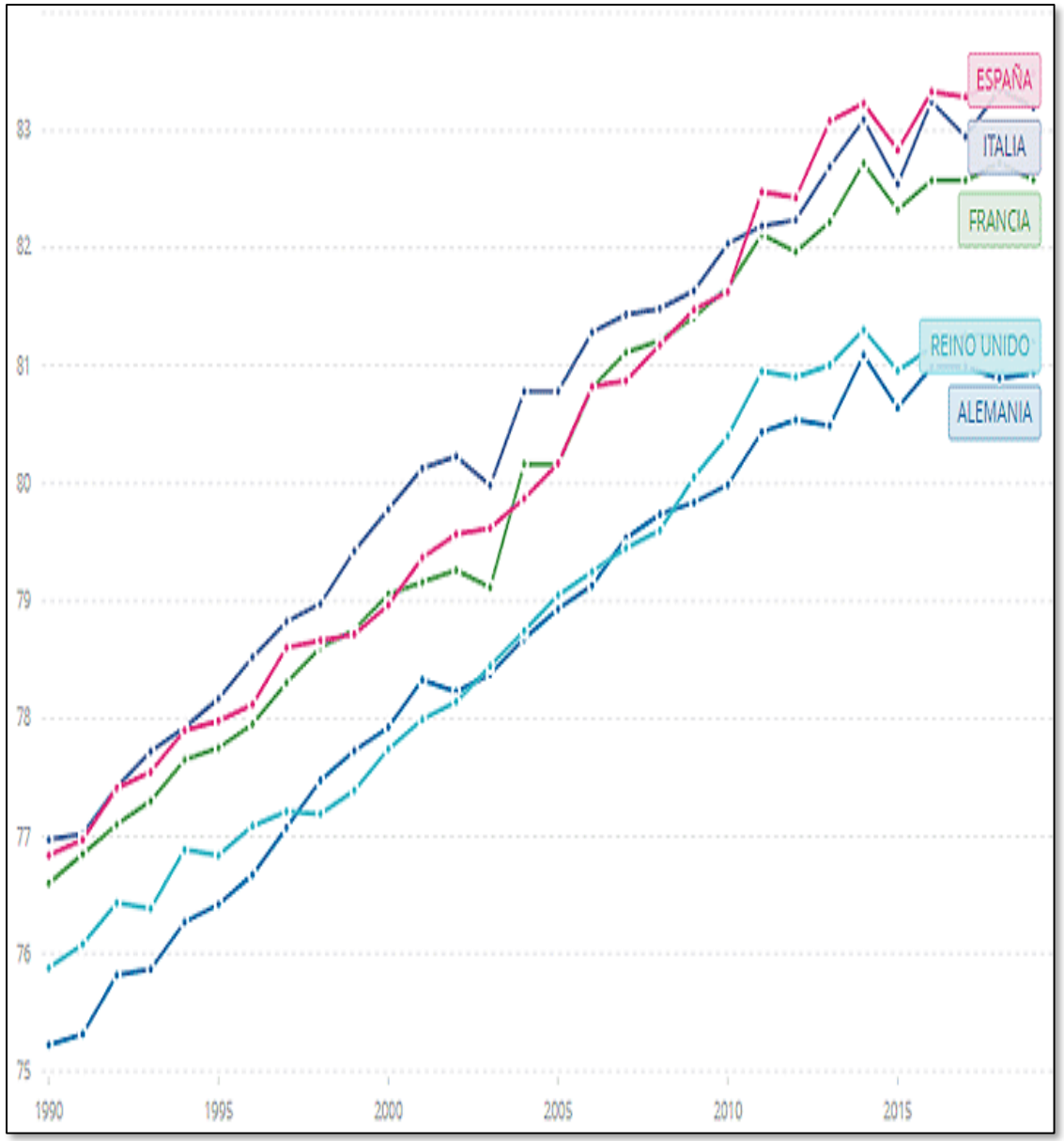
AGING, NATURAL DEATH, AND THE COMPRESSION OF MORBIDITY

JAMES F. FRIES, M.D.

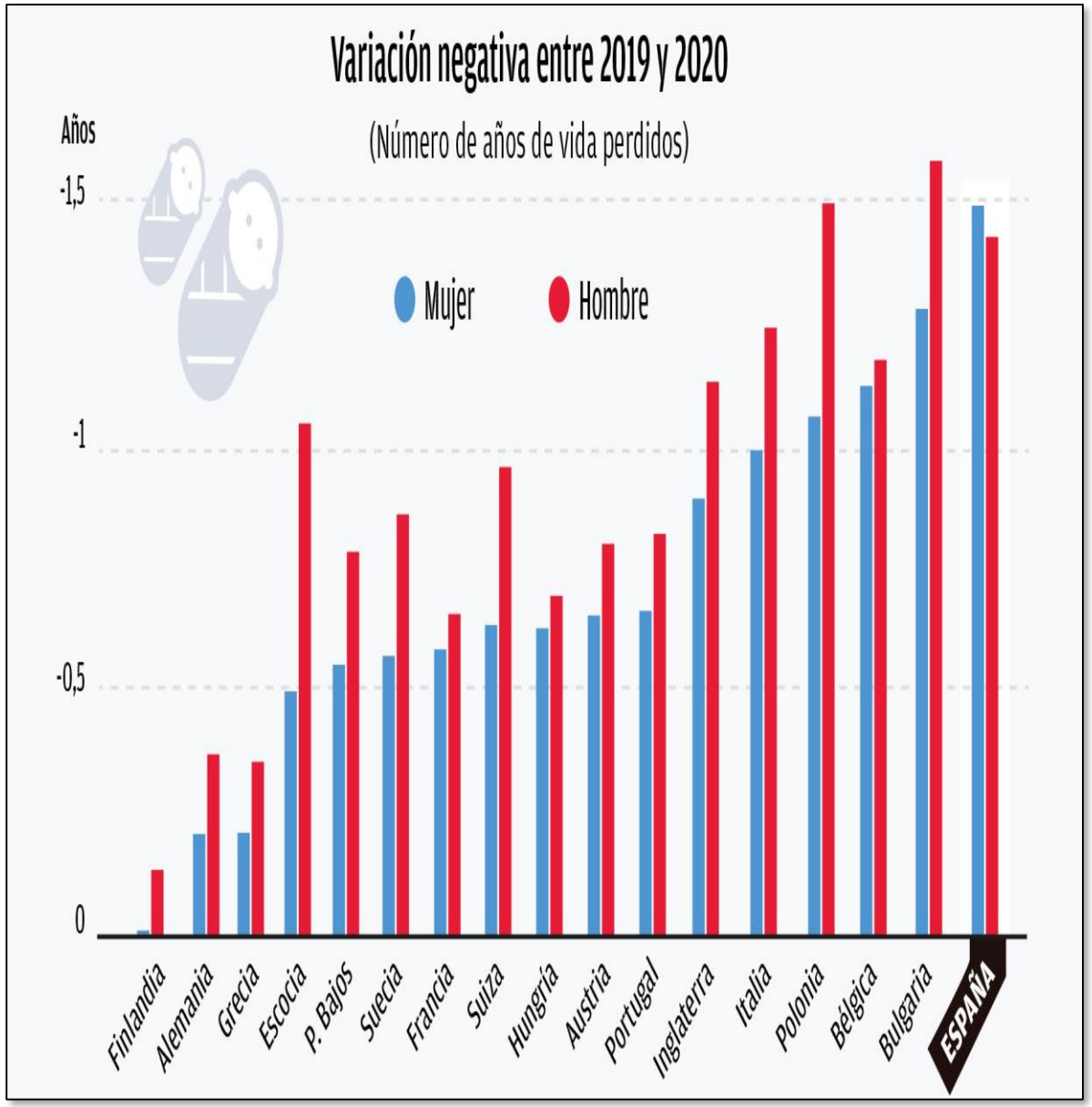
ESPERANZA DE VIDA



La media de la esperanza de vida al nacer será de 82,4 años en el año 2009 y de 85,6 en el año 2018.



Fuente Banco Mundial 2019



Fuente Oxford University

130 THE NEW ENGLAND JOURNAL OF MEDICINE July 17, 1980

SPECIAL ARTICLE

AGING, NATURAL DEATH, AND THE COMPRESSION OF MORBIDITY

JAMES F. FRIES, M.D.

El modelo biocientífico actual de enfermedad asume que la muerte es siempre el resultado de una enfermedad. **Si no existiese la enfermedad no habría mortalidad.** Esto es difícil de mantener.

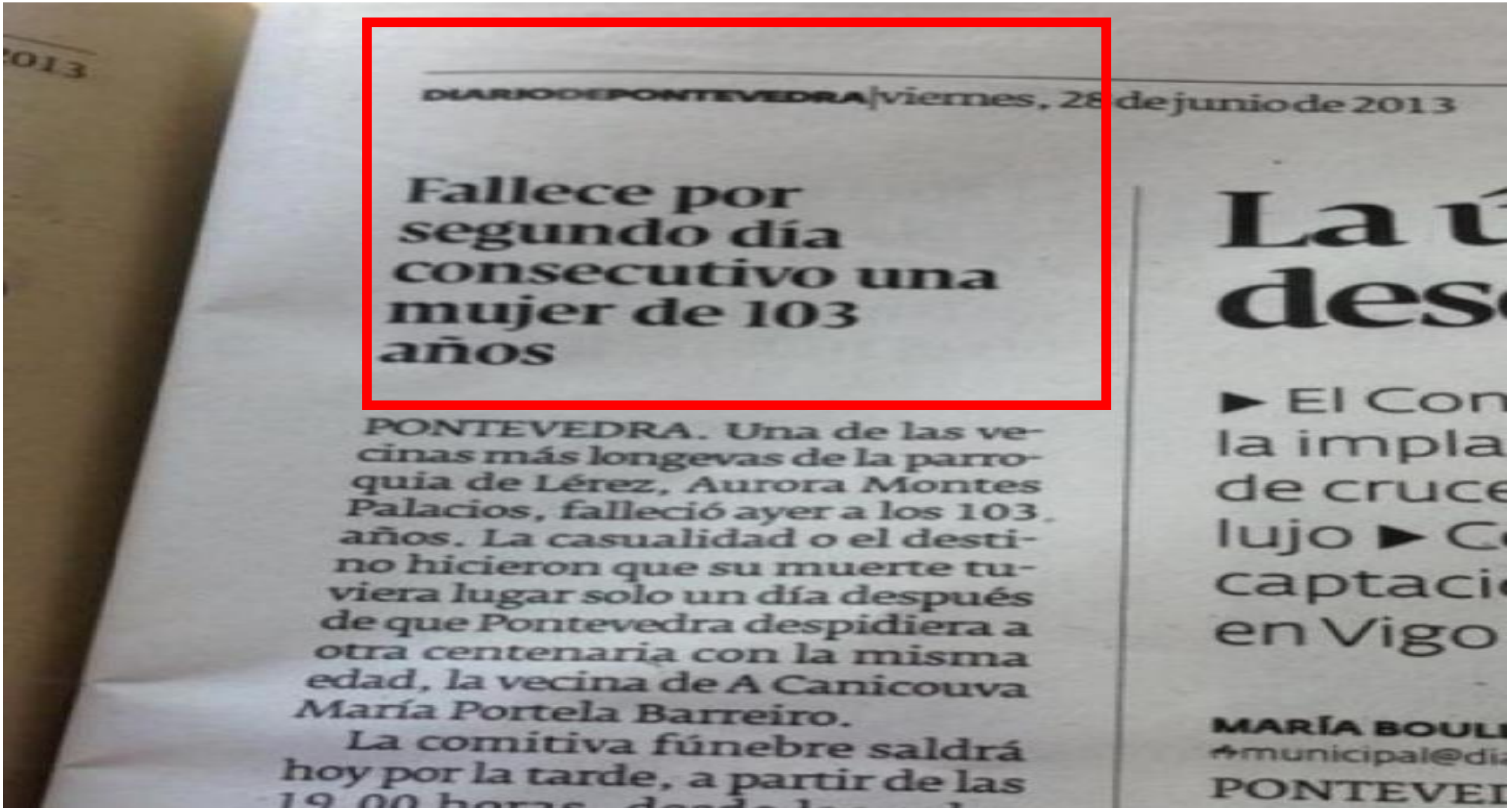
"Las pruebas de la muerte son estadísticas, nadie está a salvo de llegar a ser el primer inmortal.“

JL BORGES

Pero…..

“La tasa de mortalidad no ha cambiado, sigue siendo de uno por persona.”

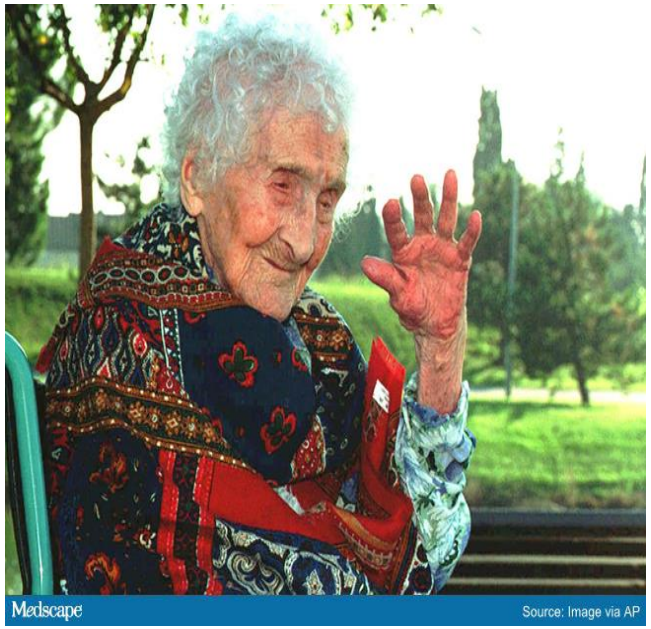
LUIS ROJAS MARCOS

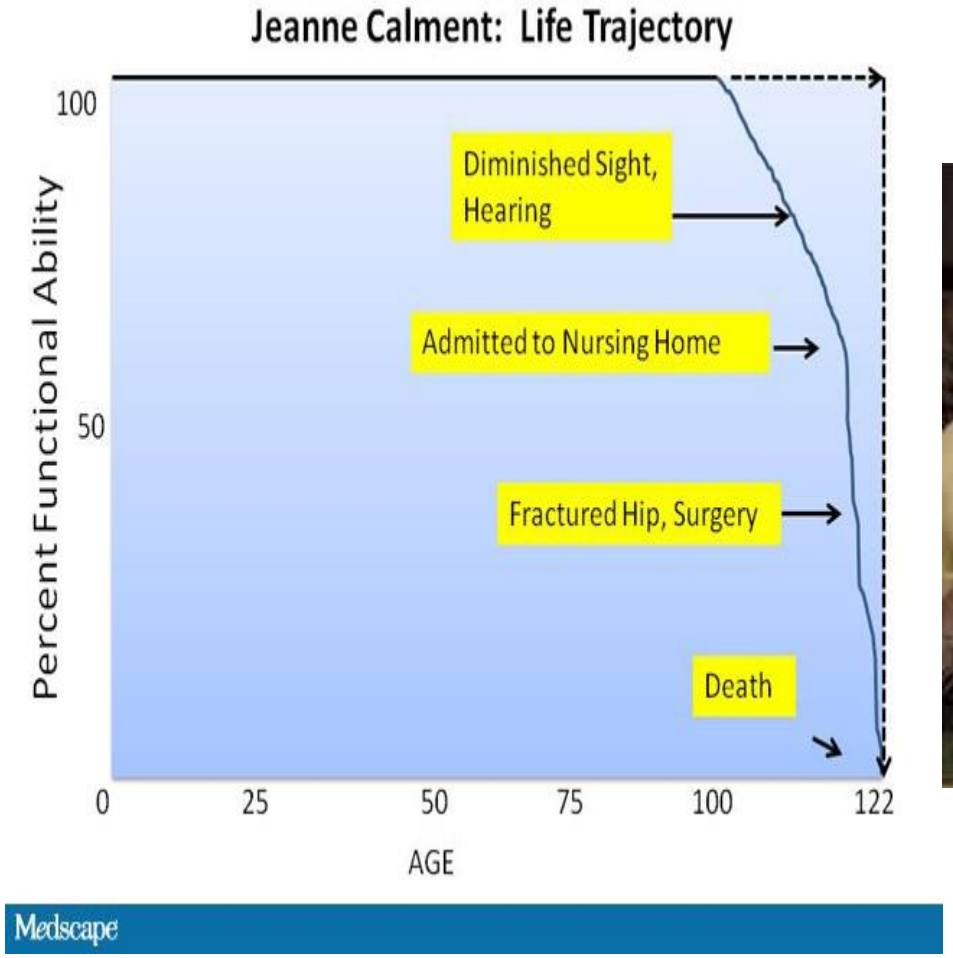


Fallece por segundo día consecutivo una mujer de 103 años

PONTEVEDRA. Una de las vecinas más longevas de la parroquia de Lérez, Aurora Montes Palacios, falleció ayer a los 103 años. La casualidad o el destino hicieron que su muerte tuviera lugar solo un día después de que Pontevedra despidiera a otra centenaria con la misma edad, la vecina de A Canicouva María Portela Barreiro.

La comitiva fúnebre saldrá hoy por la tarde, a partir de las

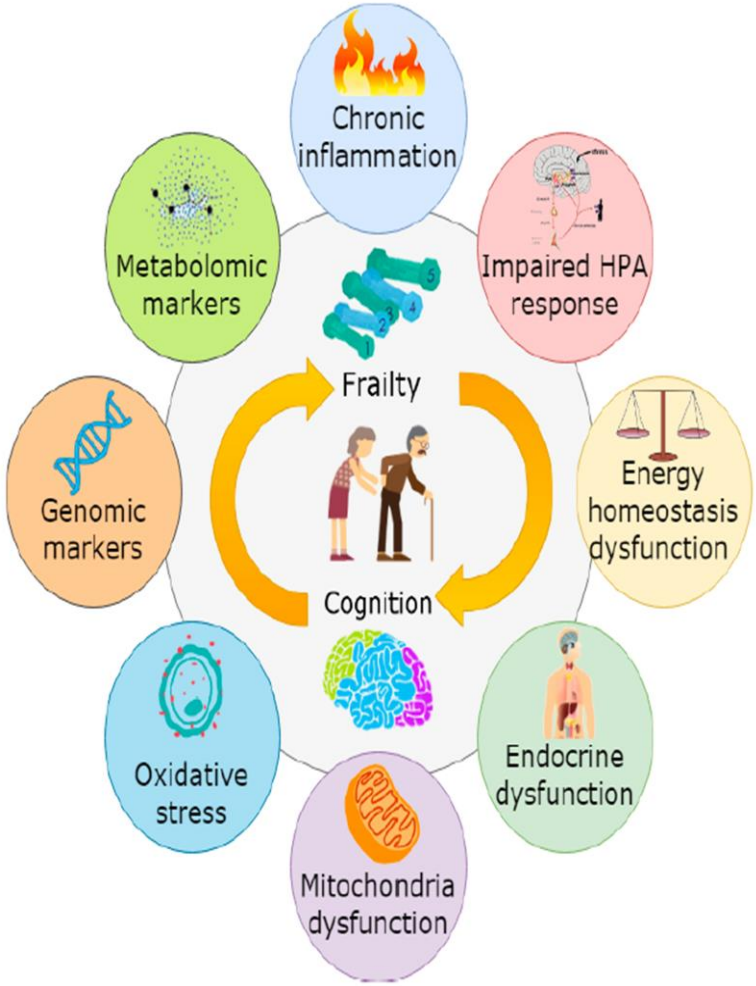

Medscape
Source: Image via AP


Jeanne Calment: Life Trajectory
Percent Functional Ability
100
50
0
Diminished Sight, Hearing
Admitted to Nursing Home
Fractured Hip, Surgery
Death
0
25
50
75
100
122
AGE
Medscape


100

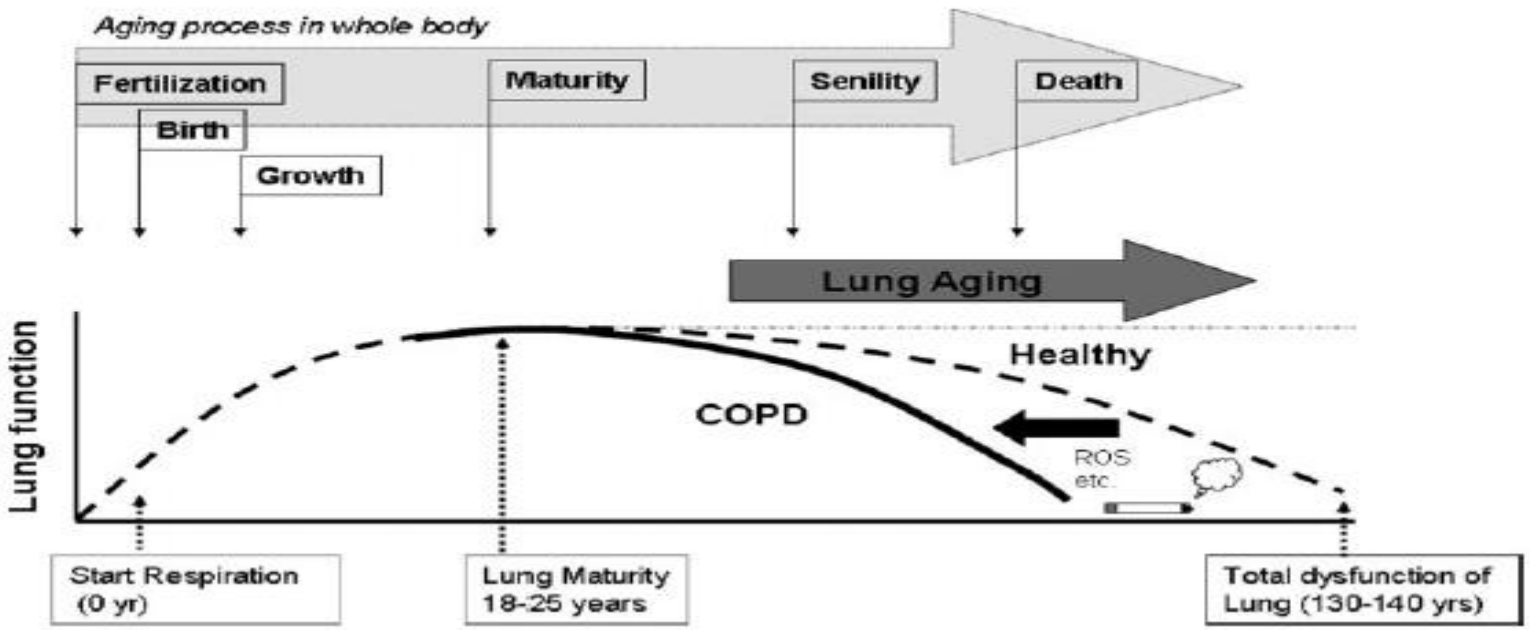
RESERVA FUNCIONAL

La unión entre las enfermedades crónicas y el envejecimiento es la pérdida de la reserva de los órganos, que es común a ambos procesos.



CHEST Translating Basic Research Into Clinical Practice

COPD as a Disease of Accelerated Lung Aging*



The Senile Lung*

Comparison with Normal and Emphysematous Lungs

1. Structural Aspects

Erik K. Verbeken, M.D.; Michel Cauberghs, B.S.; Ingrid Mertens, M.D.; Jacques Clement, M.D.; Joseph M. Lauweryns, M.D., Ph.D.; and Karel P. Van de Woestijne, M.D., Ph.D.

As part of a study of the structural-functional correlations of excised human lungs obtained at autopsy, the parenchyma and peripheral airways were examined by means of morphometric techniques. Among the 30 lungs characterized by the absence of fibrosis, ten differed from the normal and emphysematous lungs by a homogeneous dilatation of the airspaces, in excess of the dimensions predicted on the basis of age. Study of the standard deviations of the mean linear intercepts showed that the airspace dilatation was more regular than in emphysematous lungs; in addition, there was no clear-cut destruction, as estimated from the number of alveolar attachments. These lungs were characterized in addition by an increased thickening of alveolar septa, without inflammation or fibrosis, normal size of the diameter, and reduced density of the membranous bronchioles. Since these lungs were from people older than 60 years, it is assumed that they represent cases of exaggerated airspace enlargement of the aging lung, differing from emphysema by the absence of destruction of alveolar walls. The term "senile lung" is proposed for this condition.

(Chest 1992; 101:793-99)

AA = alveolar attachments; CLE = centrilobular emphysema; CV = coefficient of variation; $\bar{d}$ = mean diameter; Lm = mean linear intercept; Lma = Lm air; Lmw = Lm wall mean transection length per airspace; n/sq cm = density; NI = number of intercepts; SD_{NI} = standard deviation of NI

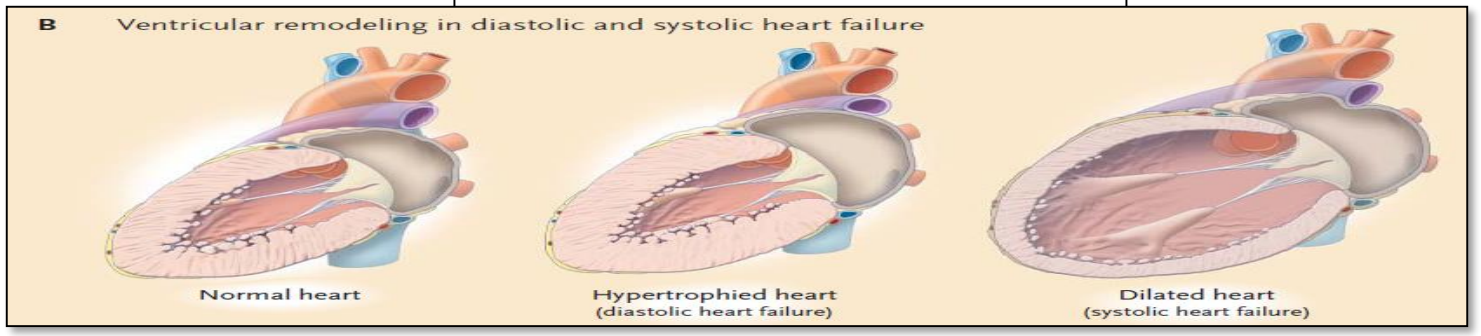
Journal of Geriatric Cardiology (2019) 16: 1–11

Research Article · Open Access ·

Diagnosing heart failure in centenarians

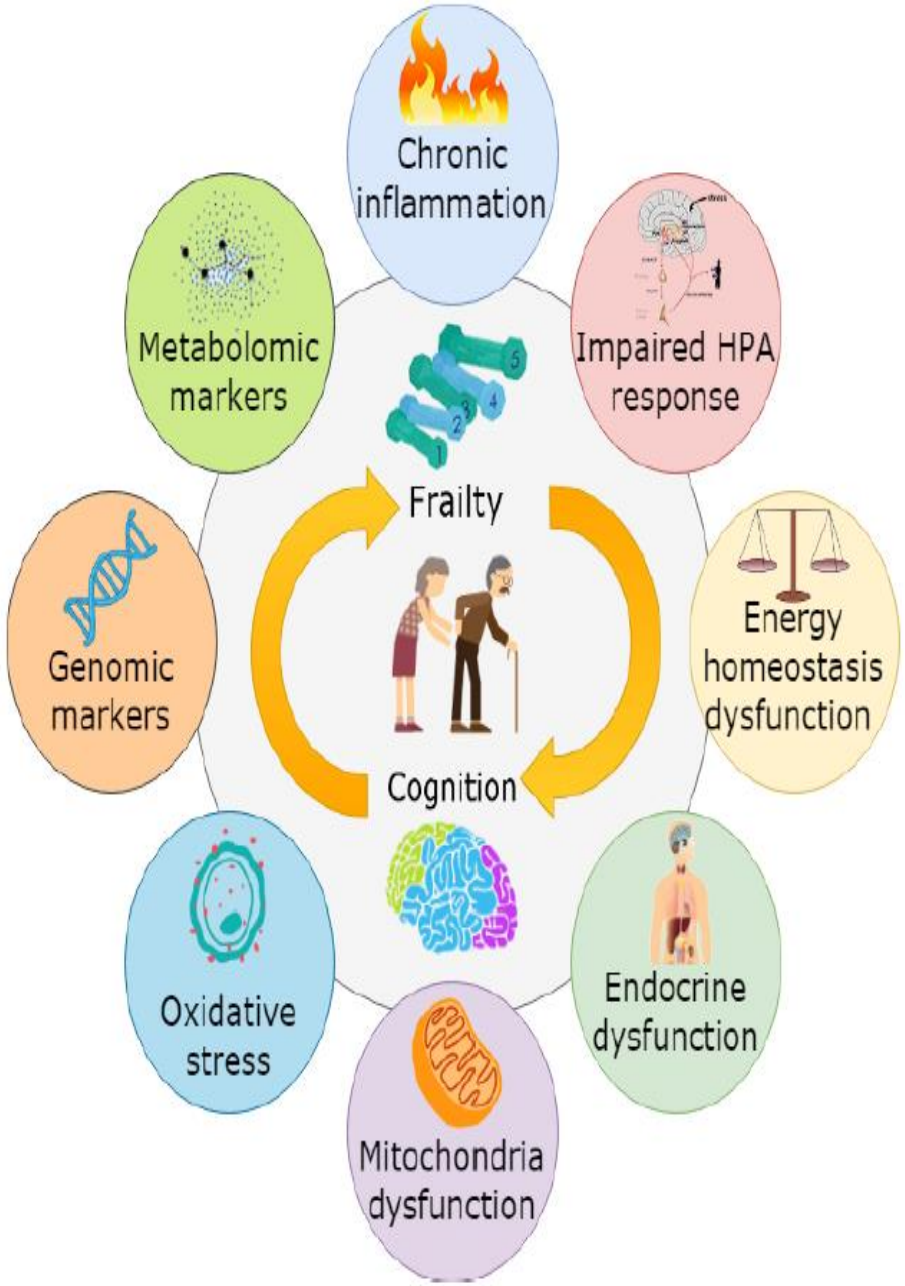
90

12 (13%) NO CONCLUYENTE	53 (59%) DISFUNCION DIASTOLICA	25 (28%) SIN DISFUNCION



INFANCIA Y ENFERMEDADES CRÓNICAS

lems. They are widespread conditions that originate in early life and develop insidiously; the probability of their occurrence increases with age. They can be considered, broadly, as problems of accelerated loss of organ reserve. Generally, they develop slowly and asymptomatically below a clinical threshold, at which the process becomes clinically evident, progresses, and often culminates in death or disability.



Todas las células vivas se deterioran y se reparan, pero esta capacidad de regeneración se va agotando.

Desde este punto de vista **empezamos a envejecer al nacer.**


The natural history of chronic bronchitis and emphysema

AN EIGHT-YEAR STUDY OF EARLY CHRONIC OBSTRUCTIVE LUNG DISEASE IN WORKING MEN IN LONDON

CHARLES FLETCHER
RICHARD PETO
CECILY TINKER
FRANK E. SPEIZER

OXFORD UNIVERSITY PRESS

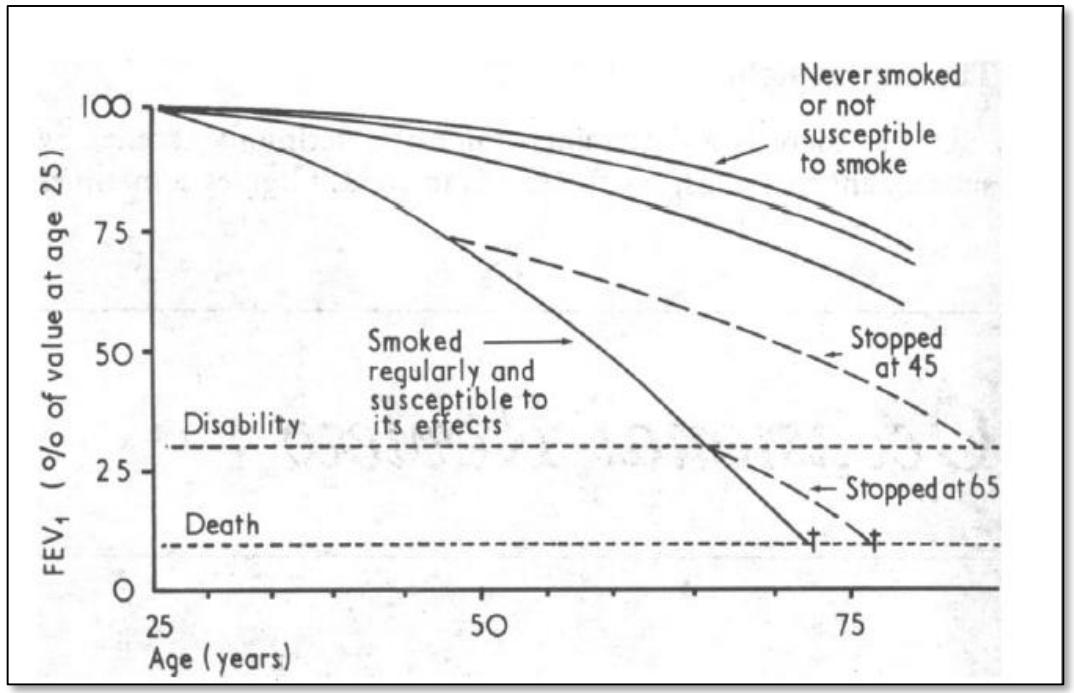
Occasional Review

The natural history of chronic airflow obstruction

CHARLES FLETCHER, RICHARD PETO

British Medical Journal, 1977, **1**, 1645-1648

disease processes, chronic airflow obstruction and the hypersecretory disorder (including infective processes).

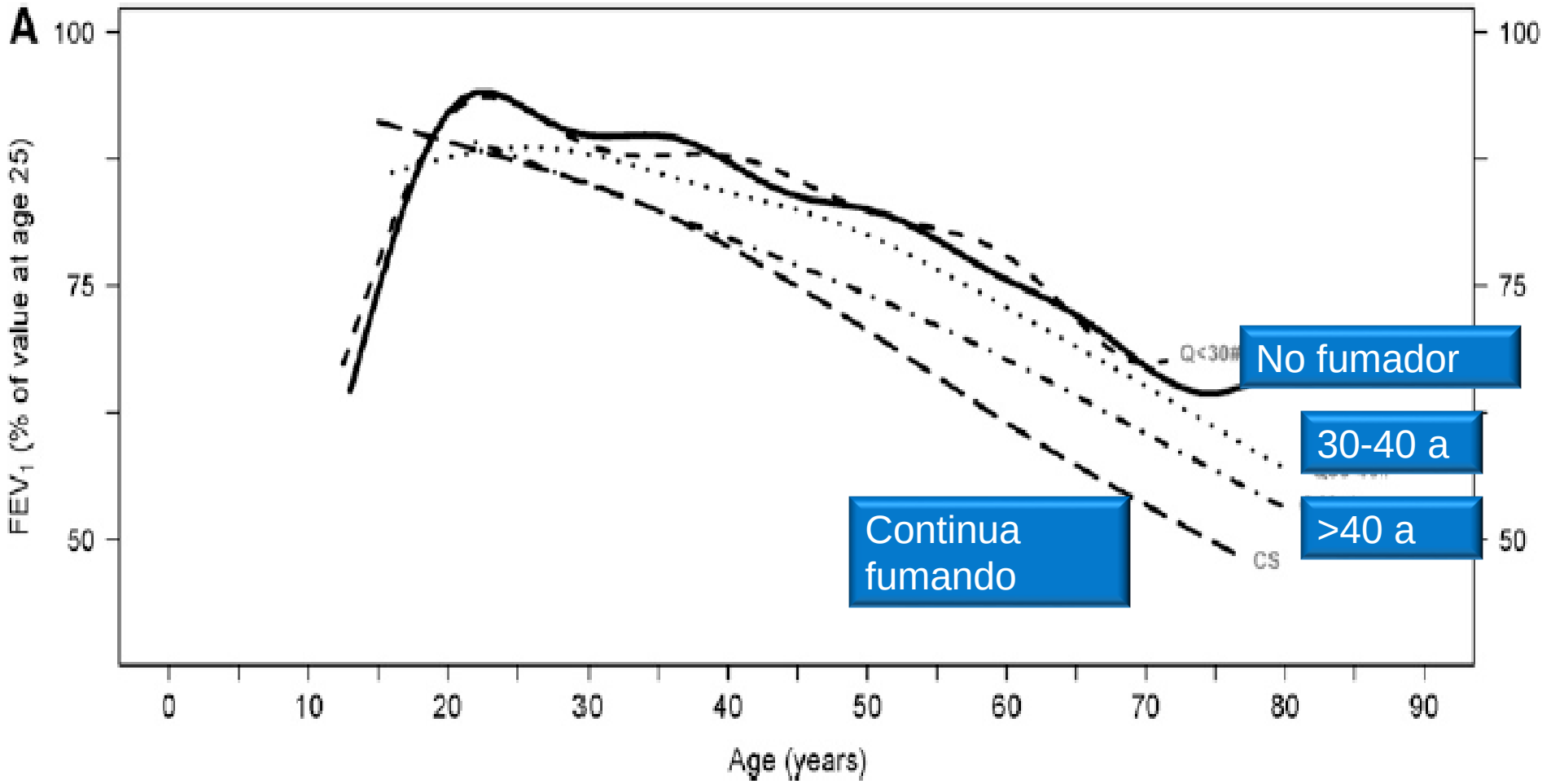


The Natural History of Chronic Airflow Obstruction Revisited

An Analysis of the Framingham Offspring Cohort

Robab Kohansal[1,2], Pablo Martinez-Camblor[1,3], Alvar Agustí[1,4,5], A. Sonia Buist[6], David M. Mannino[7], and Joan B. Soriano[1,4]

Am J Respir Crit Care Med Vol 180. pp 3–10, 2009



The NEW ENGLAND JOURNAL of MEDICINE

REVIEW ARTICLE

Jeffrey M. Drazen, Editor, *M.D.*

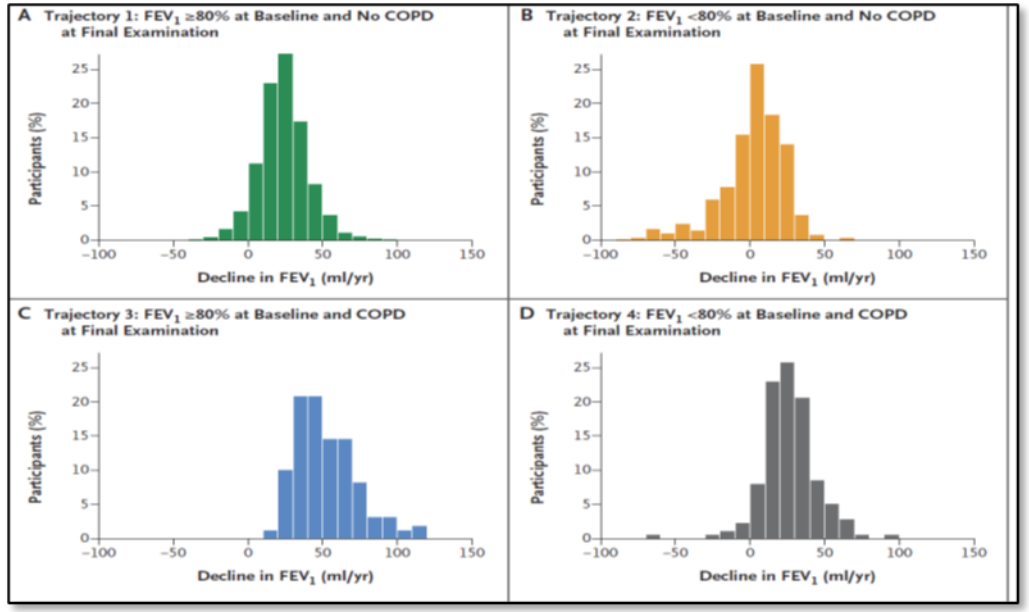
Early-Life Origins of Chronic Obstructive Pulmonary Disease

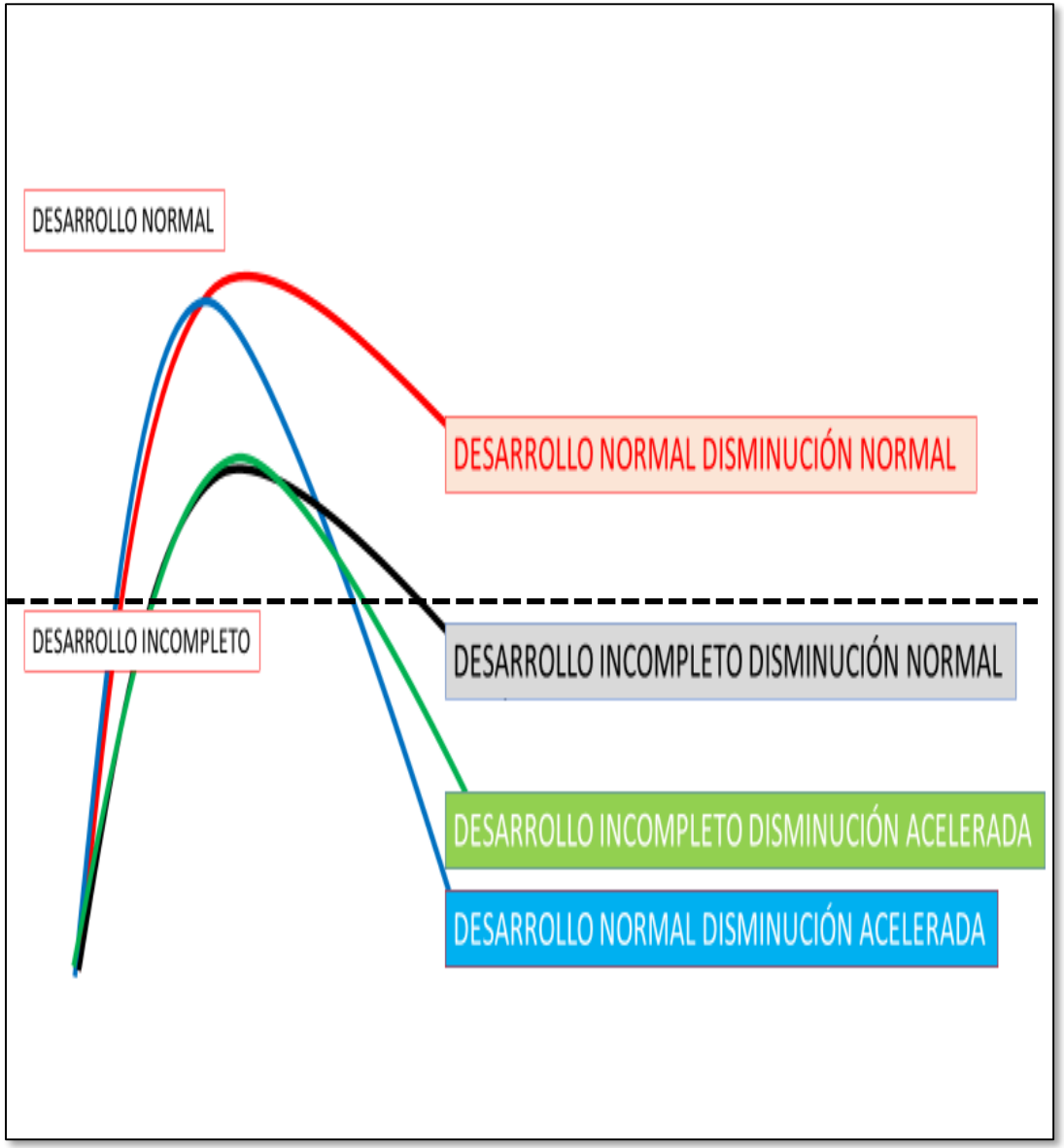
Fernando D. Martinez, M.D.

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 JULY 9, 2015 VOL. 373 NO. 2

Lung-Function Trajectories Leading to Chronic Obstructive Pulmonary Disease



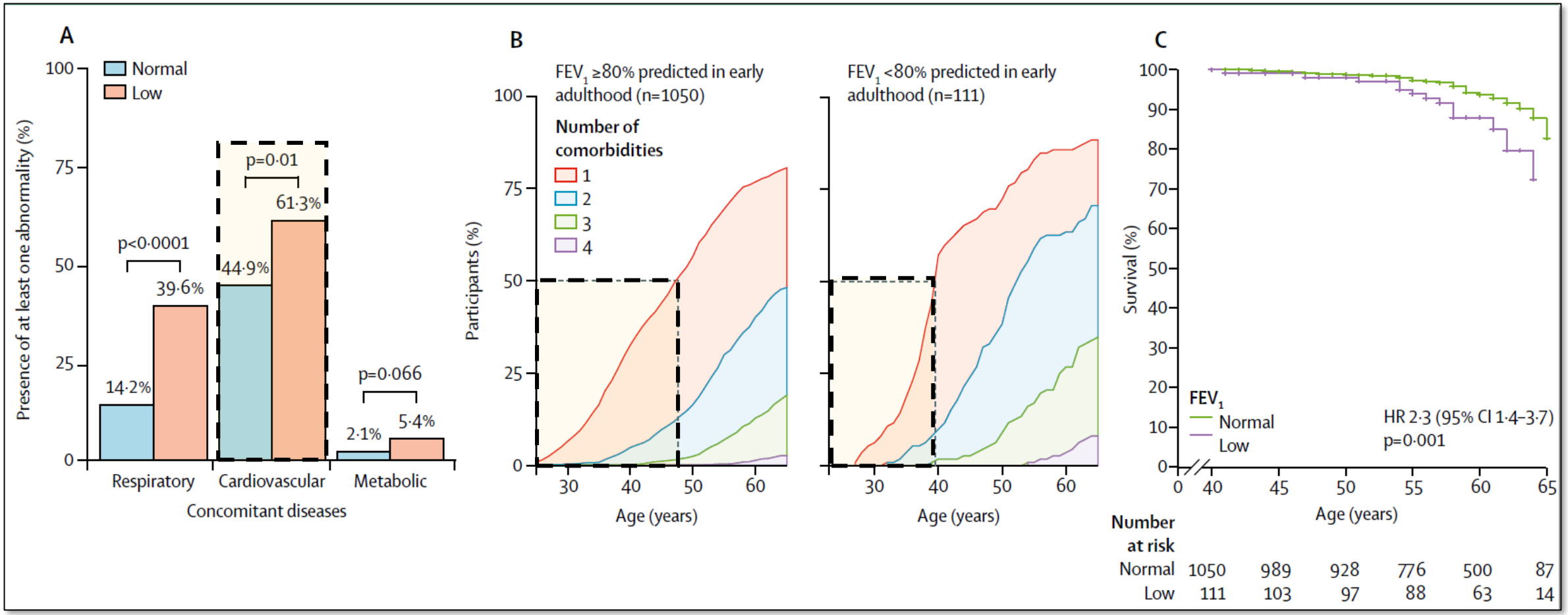


Personal View

Lung function trajectories in health and disease

Alvar Agusti, Rosa Faner

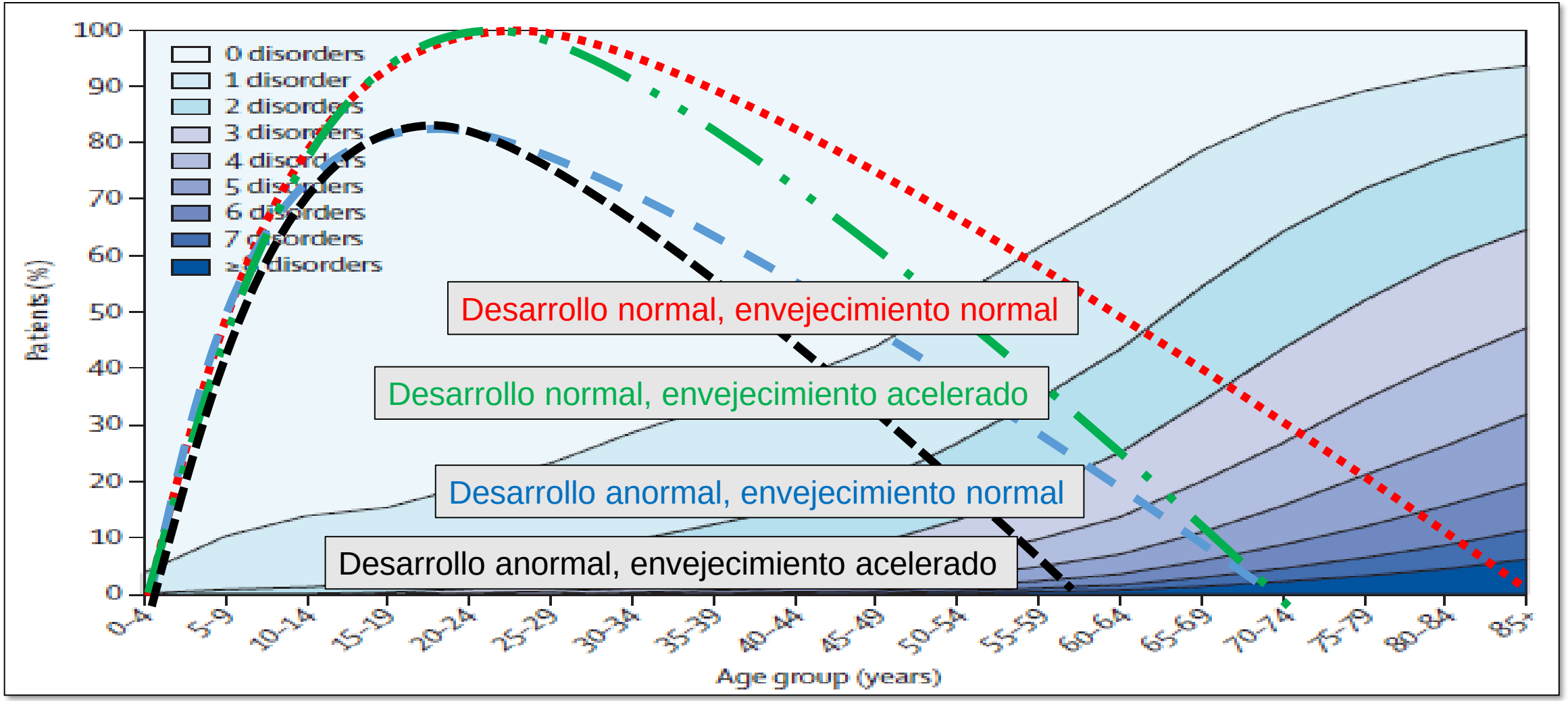
Lancet Respir Med 2019



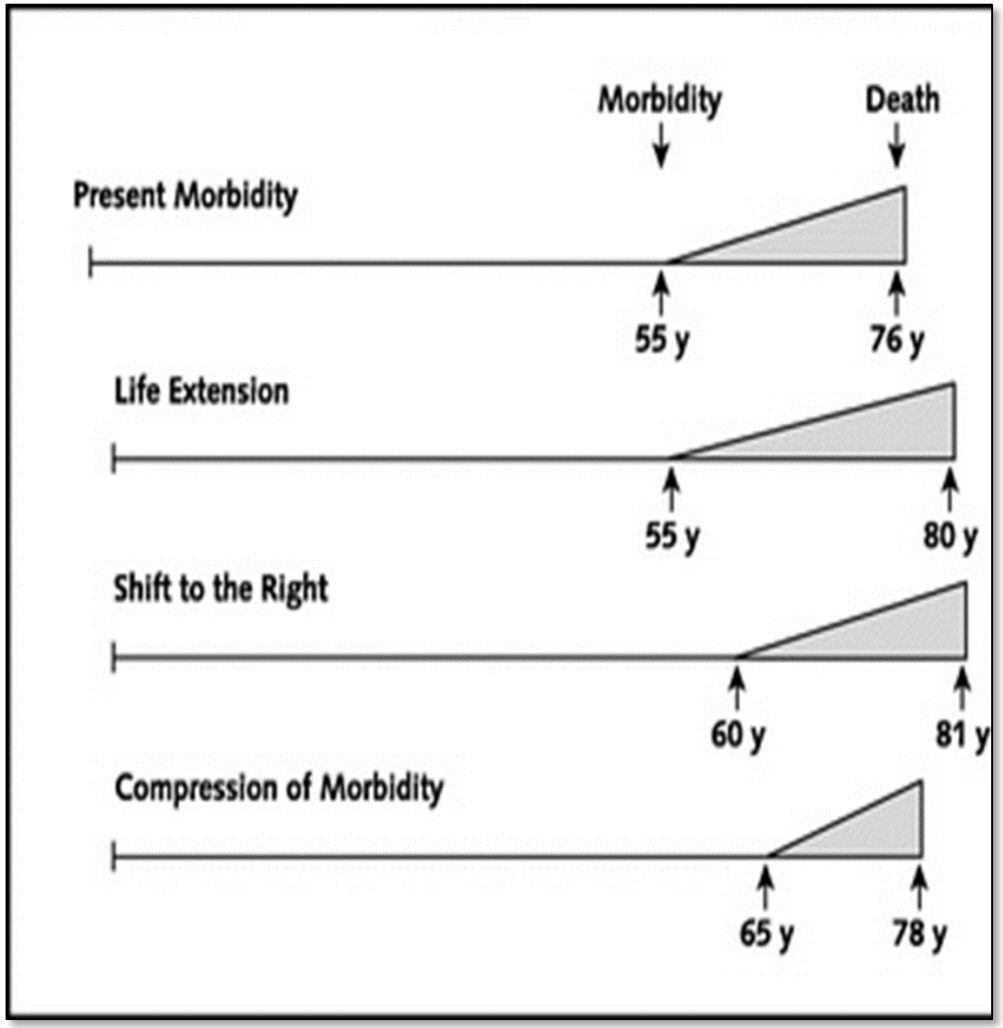
Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study

Karen Barnett, Stewart W Mercer, Michael Norbury, Graham Watt, Sally Wyke, Bruce Guthrie

www.thelancet.com Vol 380 July 7, 2012



COMPRESION DE LA DISCAPACIDAD



The Compression of Morbidity

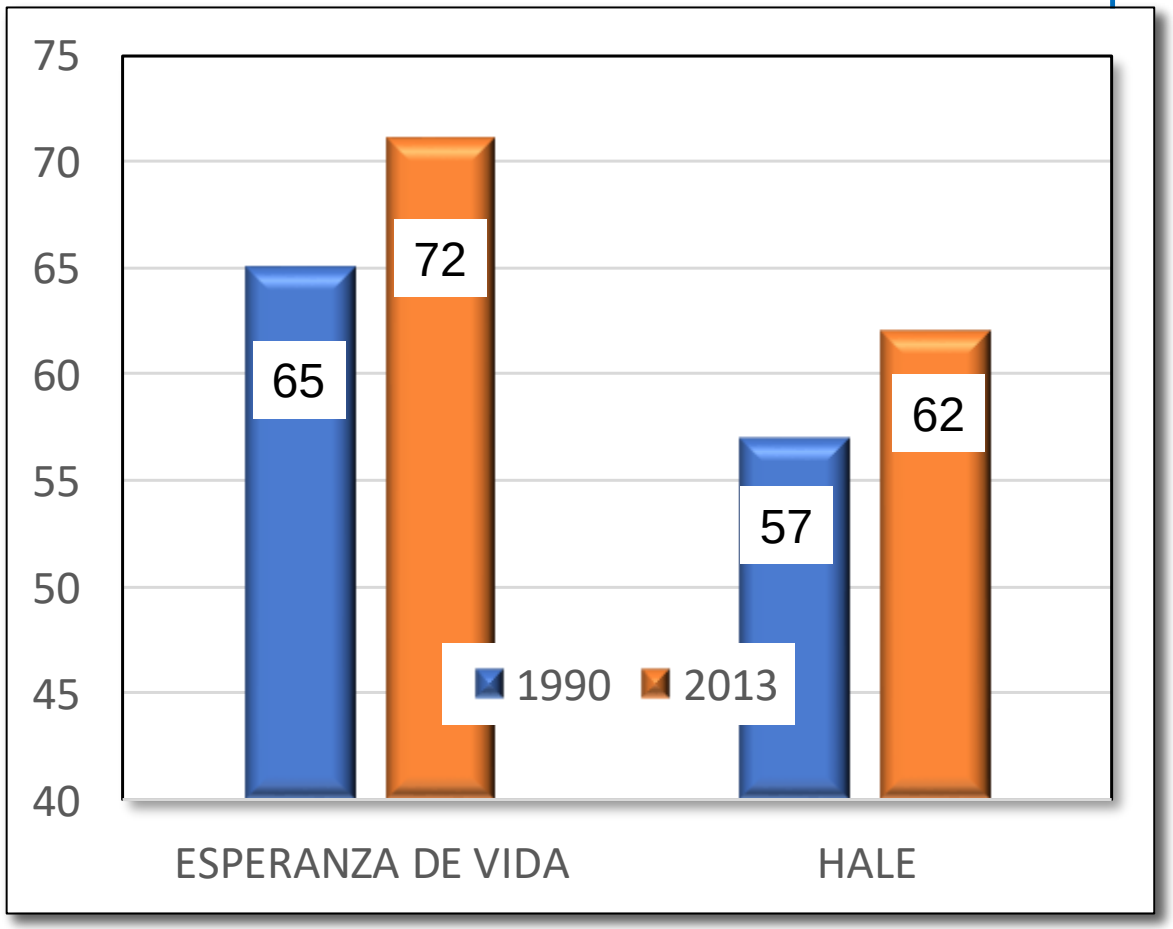
The amount of disability can decrease as morbidity is compressed into the shorter span between the increasing age at onset of disability and the fixed occurrence of death. The end of the period of adult vigor will come later than it used to. Postponement of chronic illness thus results in rectangularization not only of the mortality curve but also of the morbidity curve.

Global, regional, and national disability-adjusted life years (DALYs) for 306 diseases and injuries and healthy life expectancy (HALE) for 188 countries, 1990–2013: quantifying the epidemiological transition

GBD 2013 DALYs and HALE Collaborators*

HALE=Esperanza de vida sin discapacidad

DALYs= Años de vida perdidos o vividos con discapacidad



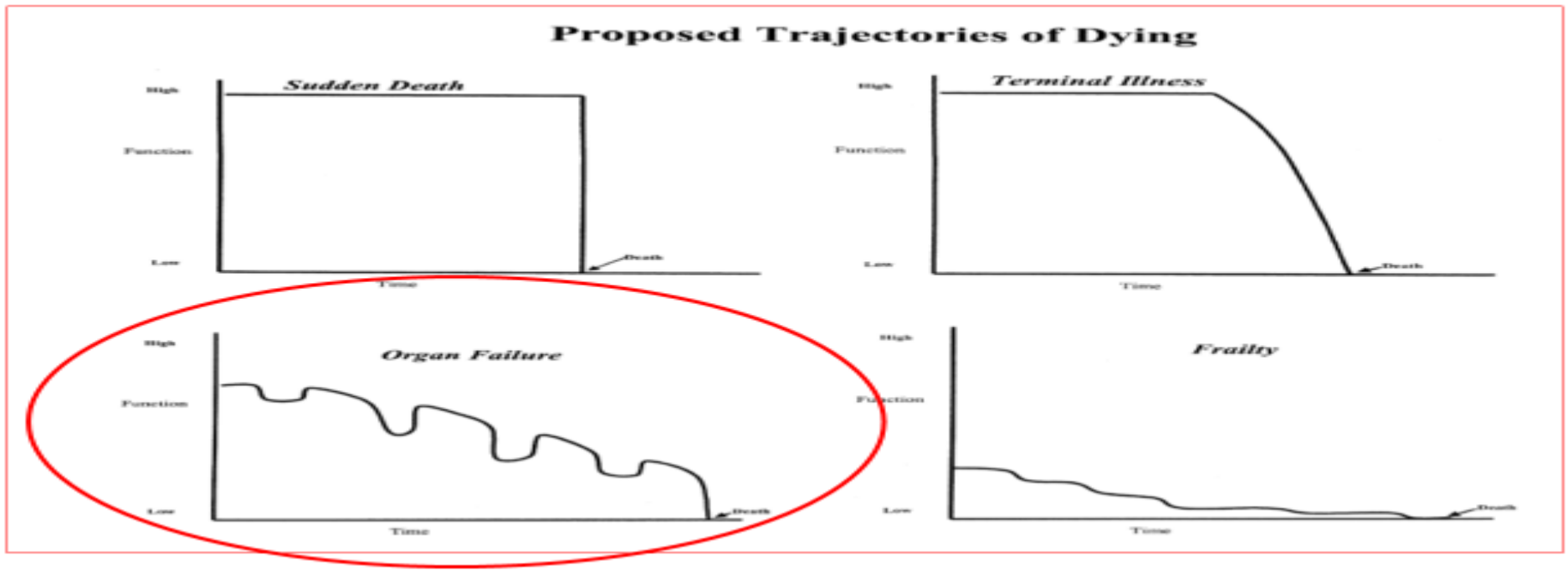
DALYS/100.000
3,6% GLOBAL
27% AGE-ADJUSTED

BRIEF REPORTS

Profiles of Older Medicare Decedents

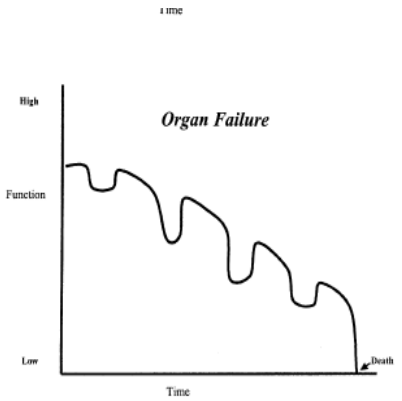
June R. Lunney, PhD, RN, Joanne Lynn, MD, MA, MS,† and Christopher Hogan, PhD‡*

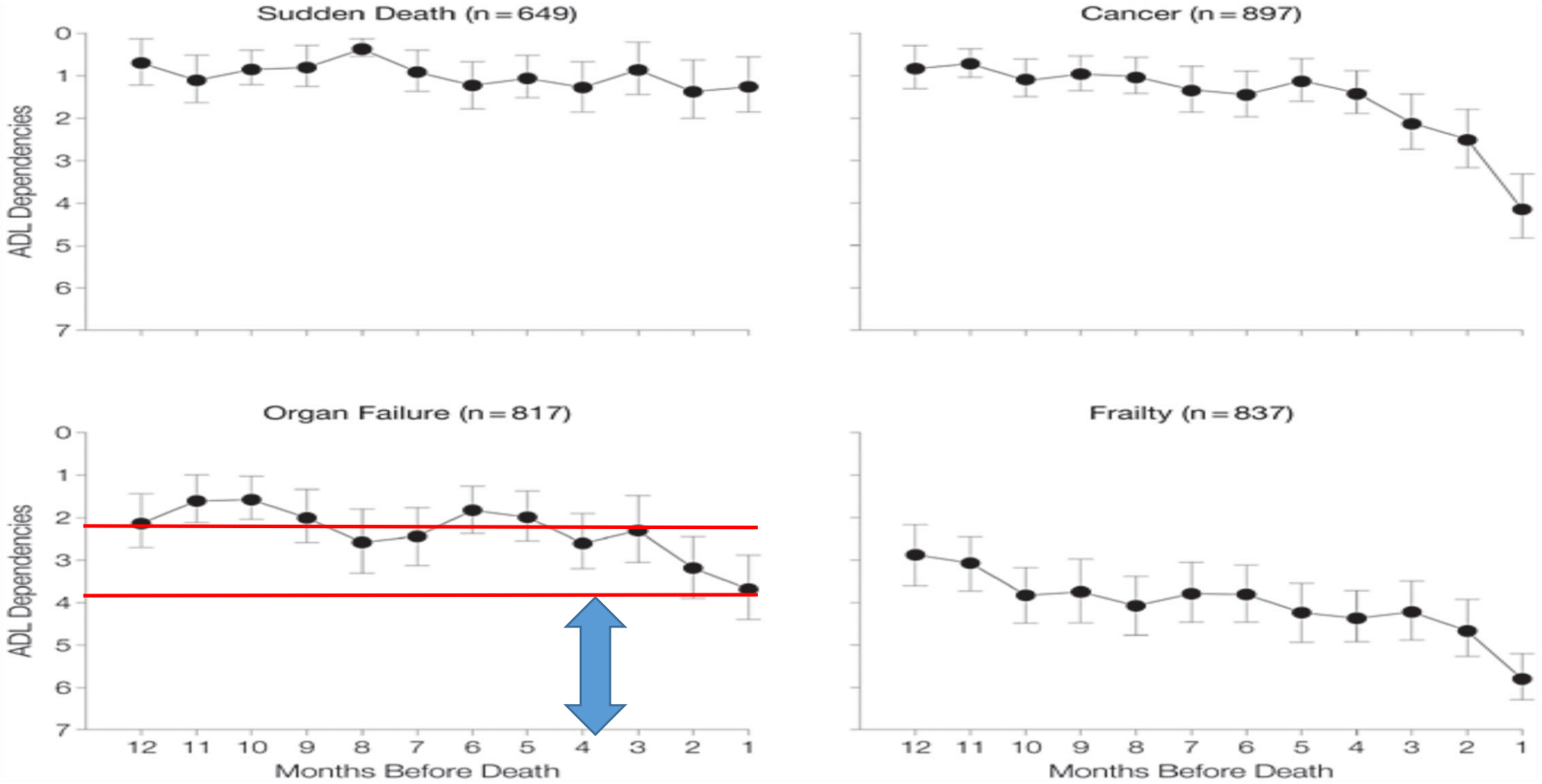
J Am Geriatr Soc 50:1108–1112, 2002.



From: **Patterns of Functional Decline at the End of Life**

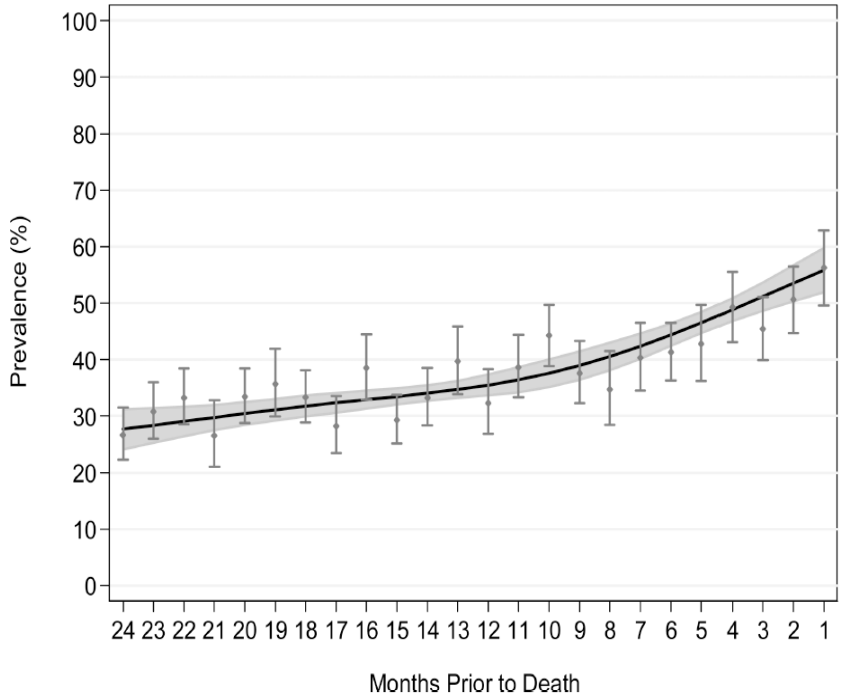
JAMA. 2003;289(18):2387-2392. doi:10.1001/jama.289.18.2387

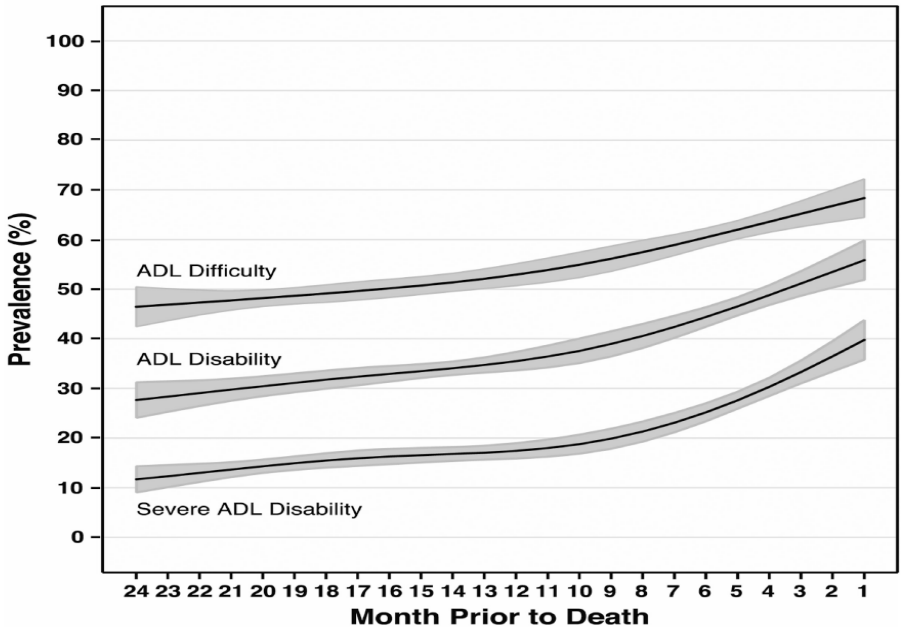




Published in final edited form as:
JAMA Intern Med. 2013 September 9; 173(16): 1506–1513. doi:10.1001/jamainternmed.2013.8738.

Disability during the Last Two Years of Life

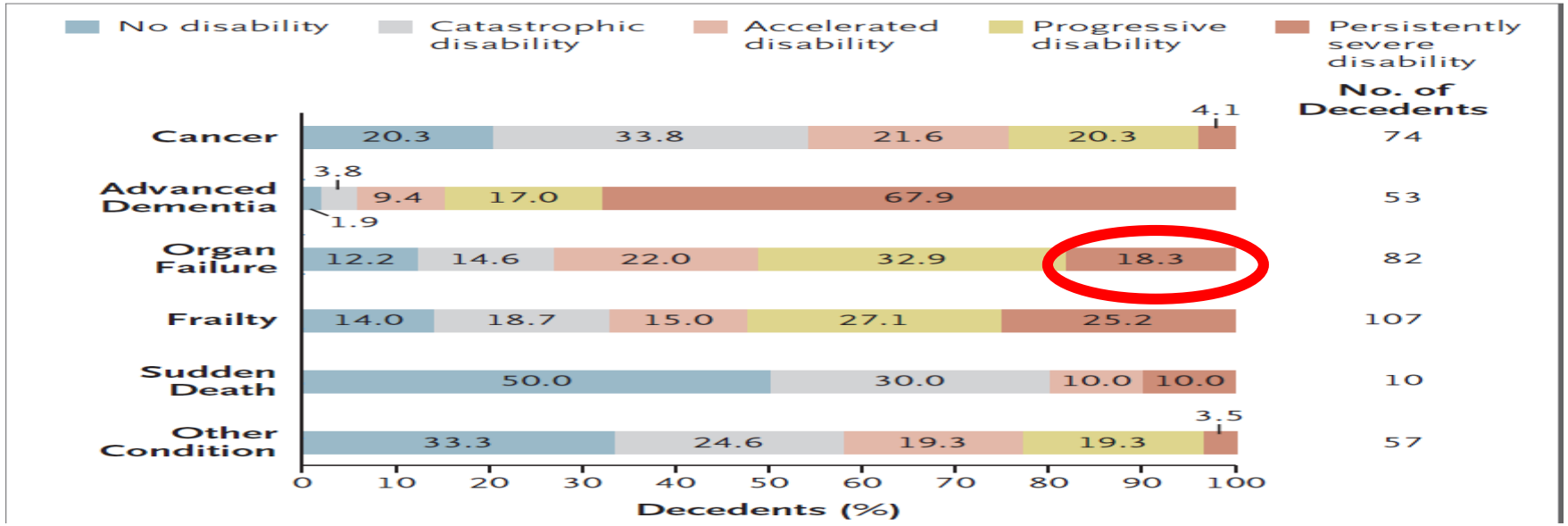




The NEW ENGLAND JOURNAL of MEDICINE

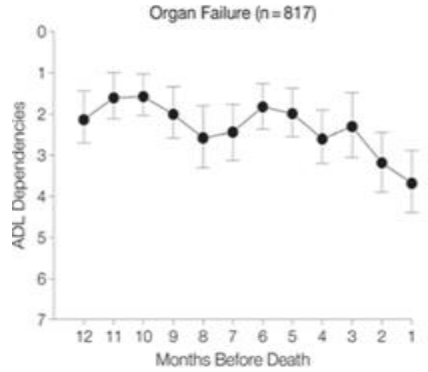
ESTABLISHED IN 1812 APRIL 1, 2010 VOL. 362 NO. 13

Trajectories of Disability in the Last Year of Life



CONCLUSIONS

In most of the decedents, the course of disability in the last year of life did not follow a predictable pattern based on the condition leading to death.



Palliative Medicine 2007; **21:** 95–99

Dying trajectories in heart failure

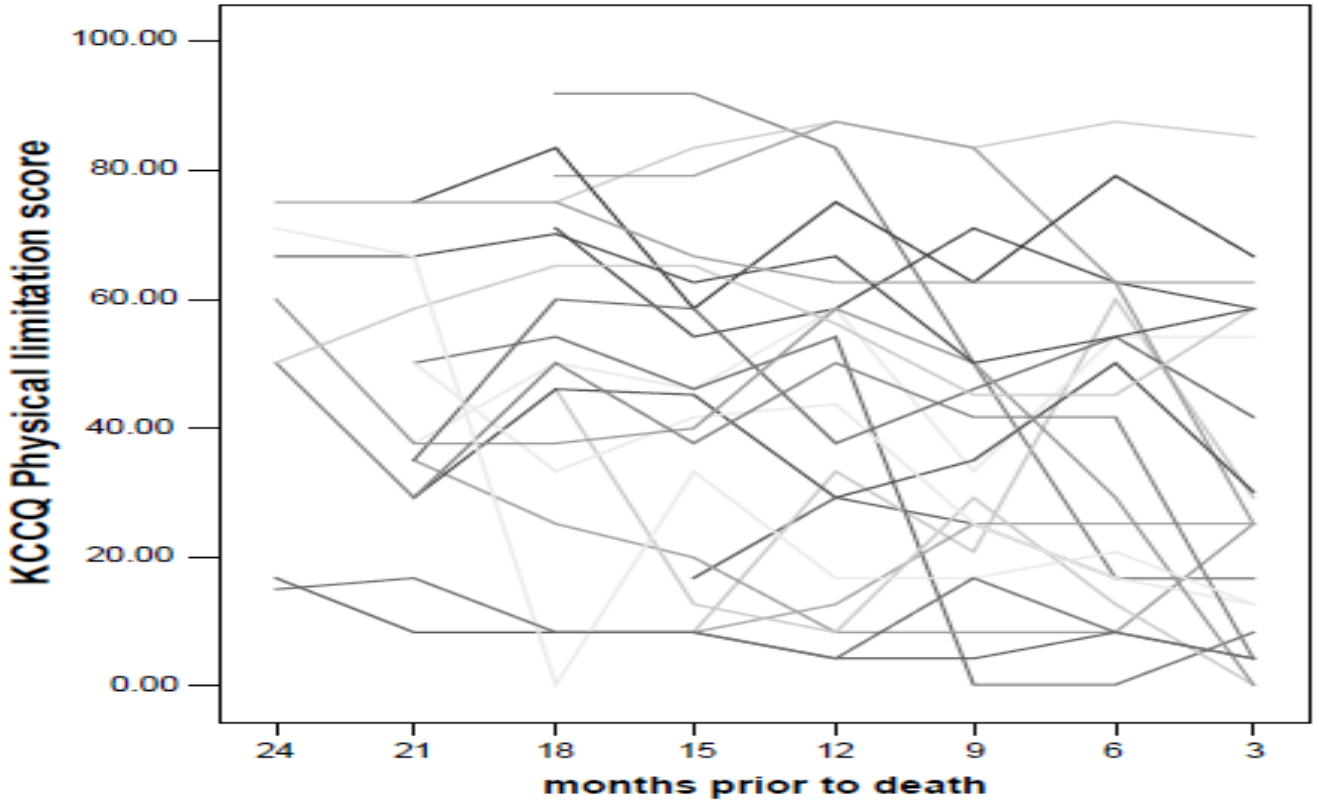


Figure 1 Trajectories showing KCCQ physical limitation scores of 27 patients for 24 months prior to death

COMPRESION DEL ENVEJECIMIENTO

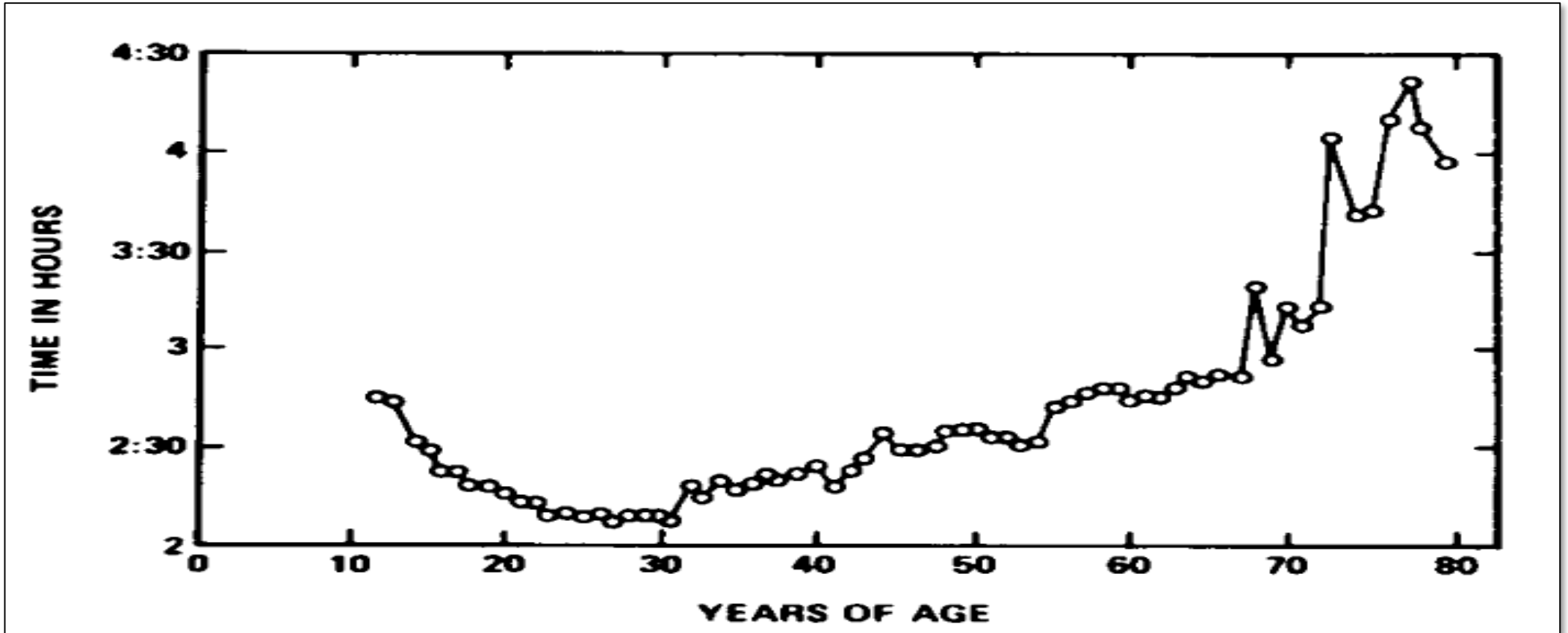


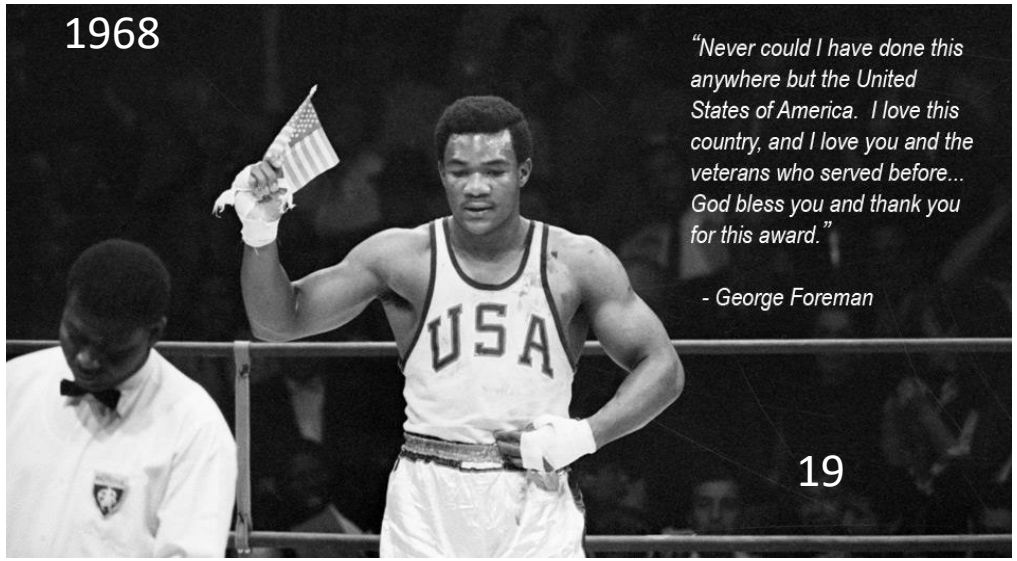
Figure 4. World Marathon Records for Men.
Note the slow but linear decline in maximum performance between the age of 30 and 70.


www.sporting-heroes.net


real
HAILE
real
35. BERLIN
real


80


5075
FAUJA
100
SINGH
100


1968
"Never could I have done this anywhere but the United States of America. I love this country, and I love you and the veterans who served before... God bless you and thank you for this award."
- George Foreman
19


1973
24


1974


1994
48

COMPRESION DEL ENVEJECIMIENTO

6 horas

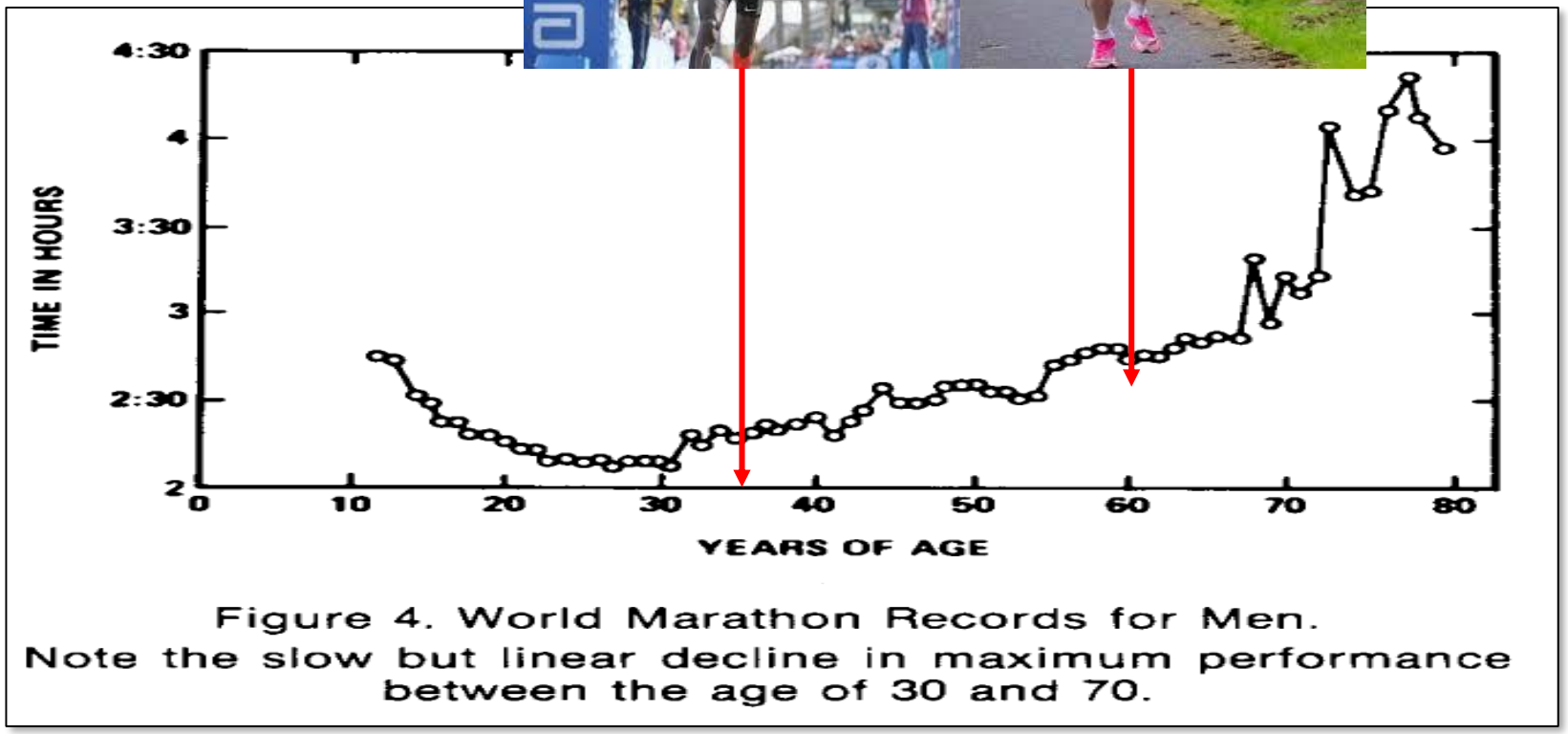


Figure 4. World Marathon Records for Men.
Note the slow but linear decline in maximum performance between the age of 30 and 70.

100 años

Physical and cognitive functioning of people older than 90 years: a comparison of two Danish cohorts born 10 years apart

Kaare Christensen, Mikael Thinggaard, Anna Oksuzyan, Troels Steenstrup, Karen Andersen-Ranberg, Bernard Jeune, Matt McGue, James W Vaupel

Findings The chance of surviving from birth to age 93 years was 28% higher in the 1915 cohort than in the 1905 cohort (6·50% *vs* 5·06%), and the chance of reaching 95 years was 32% higher in 1915 cohort (3·93% *vs* 2·98%). The 1915 cohort scored significantly better on the mini-mental state examination than did the 1905 cohort (22·8 [SD 5·6] *vs* 21·4 [6·0]; p<0·0001), with a substantially higher proportion of participants obtaining maximum scores (28–30 points; 277 [23%] *vs* 235 [13%]; p<0·0001). Similarly, the cognitive composite score was significantly better in the 1915 than in the 1905 cohort (0·49 [SD 3·6] *vs* 0·01 [SD 3·6]; p=0·0003). The cohorts did not differ consistently in the physical performance tests, but the 1915 cohort had significantly better activities of daily living scores than did the 1905 cohort (2·0 [SD 0·8] *vs* 1·8 [0·7]; p<0·0001).

NONAGENARIOS 1905-1915
MAYOR ESPERANZA DE VIDA
MENOS DEMENCIA
MENOS DISCAPACIDAD

FUTILIDAD TERAPEÚTICA

Las intervenciones para prolongar la vida en un paciente que ha agotado su reserva orgánica deben ser reconocidas como fútiles.

Aplicar medidas médicas extraordinarias al final de la vida de estos pacientes es absurdo.

Ethical Considerations in End-of-life Care in the Face of Clinical Futility

ETHICAL AND MEDICOLEGAL ISSUES

2018
2018

CHEST CLINIC

CASE BASED DISCUSSIONS

COPD, end of life and Ceiling of Treatment

D Robin Taylor

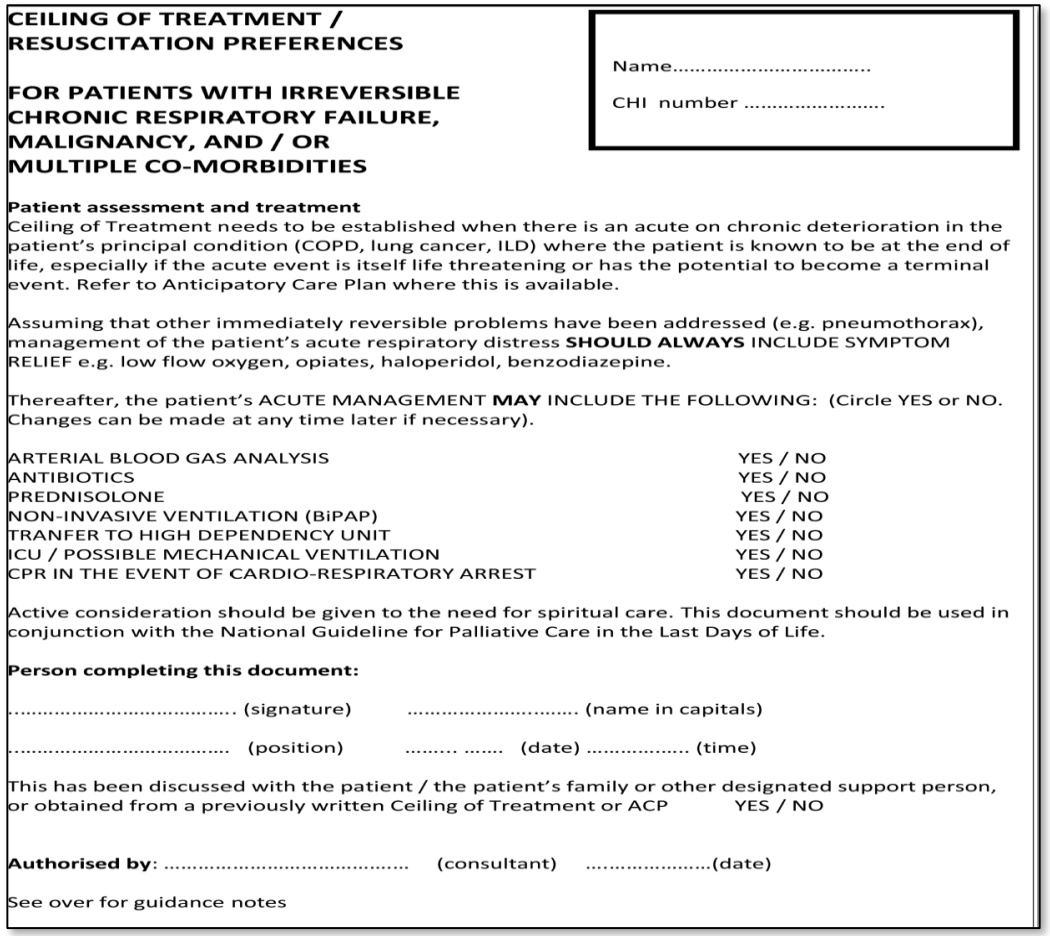
2013

CASE BASED DISCUSSIONS

COPD, end of life and Ceiling of Treatment

D Robin Taylor

La muerte es inevitable.
A veces puede ser prevenible, pero finalmente sólo pospuesta.
Esta verdad nos afecta a todos.



CEILING OF TREATMENT / RESUSCITATION PREFERENCES

Name.....

CHI number .....

FOR PATIENTS WITH IRREVERSIBLE CHRONIC RESPIRATORY FAILURE, MALIGNANCY, AND / OR MULTIPLE CO-MORBIDITIES

Patient assessment and treatment
Ceiling of Treatment needs to be established when there is an acute on chronic deterioration in the patient's principal condition (COPD, lung cancer, ILD) where the patient is known to be at the end of life, especially if the acute event is itself life threatening or has the potential to become a terminal event. Refer to Anticipatory Care Plan where this is available.

Assuming that other immediately reversible problems have been addressed (e.g. pneumothorax), management of the patient's acute respiratory distress **SHOULD ALWAYS** INCLUDE SYMPTOM RELIEF e.g. low flow oxygen, opiates, haloperidol, benzodiazepine.

Thereafter, the patient's ACUTE MANAGEMENT **MAY** INCLUDE THE FOLLOWING: (Circle YES or NO. Changes can be made at any time later if necessary).

ARTERIAL BLOOD GAS ANALYSIS	YES / NO
ANTIBIOTICS	YES / NO
PREDNISOLONE	YES / NO
NON-INVASIVE VENTILATION (BiPAP)	YES / NO
TRANFER TO HIGH DEPENDENCY UNIT	YES / NO
ICU / POSSIBLE MECHANICAL VENTILATION	YES / NO
CPR IN THE EVENT OF CARDIO-RESPIRATORY ARREST	YES / NO

Active consideration should be given to the need for spiritual care. This document should be used in conjunction with the National Guideline for Palliative Care in the Last Days of Life.

Person completing this document:

..... (signature) ..... (name in capitals)

..... (position) .... (date) ..... (time)

This has been discussed with the patient / the patient's family or other designated support person, or obtained from a previously written Ceiling of Treatment or ACP YES / NO

Authorised by: ..... (consultant) .....(date)

See over for guidance notes

BECOMING A PHYSICIAN

Tolerating Uncertainty — The Next Medical Revolution?

Arabella L. Simpkin, B.M., B.Ch., M.M.Sc, and Richard M. Schwartzstein, M.D.

"At once it struck me what quality went to form a Man of Achievement . . . when a man is capable of being in uncertainties, mysteries, doubts, without any irritable reaching after fact and reason."

— *John Keats, December 1817*[1]

These words penned by John Keats, who was a physician as well as a poet, remind us of the human struggle to live in a gray-scale space where uncertainty is rife — a space that is neither black nor white. Our quest for certainty is central to human psychology, however, and it both guides and misguides us.

Although physicians are rationally aware when uncertainty exists, the culture of medicine evinces a deep-rooted unwillingness to acknowledge and embrace it. Embodied in our teaching, our case-based learning curricula, and our research is the notion that we must unify a constellation of signs, symptoms, and test results into a solution. We demand a differential diagnosis after being presented with few facts and exhort our trainees to "put your money down" on a solution to the problem at hand despite the powerful effect of cognitive biases under these conditions. Too often, we focus on transforming a patient's gray-scale narrative into a black-and-white diagnosis that can be neatly categorized and labeled. The unintended consequence — an obsession with finding the right answer, at the risk of oversimplifying the richly iterative and evolutionary nature of clinical reasoning — is the very antithesis of humanistic, individualized patient-centered care.

We believe that a shift toward the acknowledgment and acceptance of uncertainty is essential — for us as physicians, for our patients, and for our health care system as a whole. Only if such a revolution occurs will we thrive in the coming medical era.

In medicine today, uncertainty is generally suppressed and ignored, consciously and subconsciously. Its suppression makes intuitive sense: being uncertain instills a sense of vulnerability in us — a sense of fear about what lies ahead. It is unsettling and makes us crave black-and-white zones, to escape this gray-scale space. Our protocols and checklists emphasize the black-and-white aspects of medicine. Doctors often fear that by expressing uncertainty, they will project ignorance to patients and colleagues, so they internalize and mask it. We are still strongly influenced by a rationalist tradition that seeks to provide a world of apparent security.

Yet the reality is that doctors continually have to make decisions on the basis of imperfect data and limited knowledge, which leads to diagnostic uncertainty, coupled with the uncertainty that arises from unpredictable patient responses to treatment and from health care outcomes that are far from binary. Key elements for survival in the medical profession would seem, intuitively, to be a tolerance for uncertainty and a curiosity about the unknown. Have we created a culture that ignores and denies that requirement? Could our intolerance of uncertainty, in turn, be contributing to the accelerating rates of burnout and the rising cost of health care? For there is no doubt that absolute truth and certainty are hard to come by in clinical medicine.

Great tensions are created by the conflict between the quest for

certainty and the reality of uncertainty. Doctors' maladaptive responses to uncertainty are known to contribute to work-related stress.[2] Physicians' difficulty in accepting uncertainty has also been associated with detrimental effects on patients, including excessive ordering of tests that carry risks of false positive results or

Debemos ir a un concepto radicalmente diferente de la esperanza de vida, en el que la vida sea física, emocional e intelectualmente vigorosa hasta casi el final de la misma, cuando como en el maravilloso cuento, "The wonderful One-hoss-shay" todo se desintegra a la vez y la reparación es imposible.

THE WONDERFUL “ONE-HOSS-SHAY”

Se hizo pedazos todos a la vez. De repente, y nada primero.
Igual que las burbujas cuando estallan.

OLIVER WENDELL MEDICO
POETA
HUMORISTA
1809-1894

One DALY can be thought of as one lost year of "healthy" life. The sum of these DALYs across the population, or the burden of disease, can be thought of as a measurement of the gap between current health status and an *ideal health situation where the entire population lives to an advanced age, free of disease and disability.*

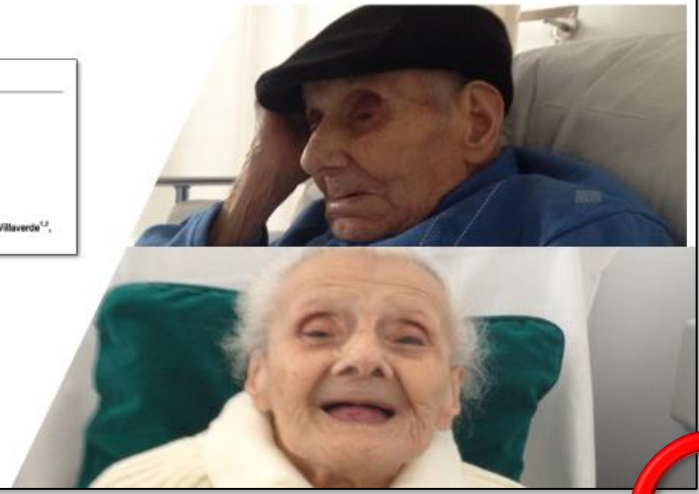
CONFLICTO DE INTERESES

PLOS ONE

RESEARCH ARTICLE

Multimorbidity gender patterns in hospitalized elderly patients

Pere Almagro[1,2]*, Ana Ponce[1,2], Shakeel Komal[1,2], María de la Asunción Villaverde[1,2], Cristina Castrillo[1,2], Gemma Grau[1,2], Lluis Simon[1,2], Alex de la Sierra[1,2]



The New England Journal of Medicine

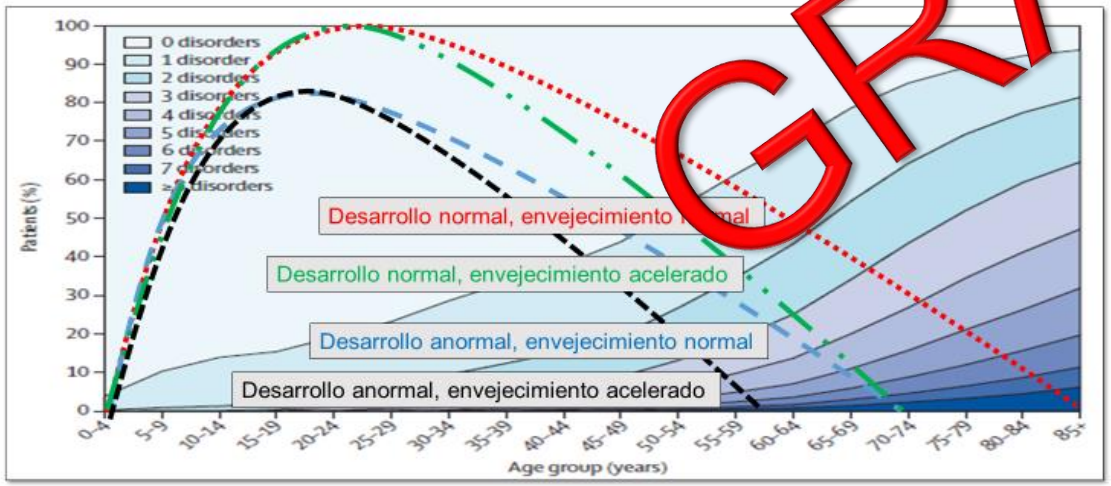
REVIEW ARTICLE

Aging, natural death,
and the compression of morbidity

GRACIAS

Epidemiology of multimorbidity and implications for health care, research, and medical education: a cross-sectional study

Karen Barnett, Stewart W Mercer, Michael Norbury, Graham Watt, Sally Wyke, Bruce Guthrie



THE WONDERFUL "ONE-HOSS-SHAY"

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