Inserm
Institut national
de la santé et de la recherche médicale

Trends in Healthy Life Years

JM Robine

EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

BRIDGEHEALTH
BRidging Information and Data Generation
for Evidence-based Health Policy and Research

This project is funded by
the Health Programme of
the European Union

Inserm

Institut national
de la santé et de la recherche médicale

Trends in Healthy Life Years in Europe and at global level

EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

BRIDGEHEALTH
BRidging Information and Data Generation
for Evidence-based Health Policy and Research

This project is funded by
the Health Programme of
the European Union

Inserm
Institut national
de la santé et de la recherche médicale

1980's Health theories

- **The compression of morbidity:** According to Fries, life expectancy was close to its maximum in the 1980s. Medical and health behaviors progress can only reduce the number of bad years to a small part of the life expectancy (Fries, 1980).

- The expansion of morbidity: On the opposite side, according to Gruenberg and Kramer, the same medical progress will increase the survival of frail elderly people such as those with dementia (Gruenberg, 1977; Kramer, 1980).

- **The dynamic equilibrium:** Between these two extreme futures, Manton proposed a dynamic equilibrium in which increased survival is offset by better control of chronic diseases, keeping the proportion of life lived in good health more or less constant (Manton, 1982).

EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

BRIDGEHEALTH
BRidging Information and Data Generation
for Evidence-based Health Policy and Research

This project is funded by the Health Programme of the European Union

Inserm
Institut national
de la santé et de la recherche médicale

Monitoring 3 health expectancies

- Life expectancy in good perceived health

How is your health in general? Is it… Very good + Good

- Life expectancy without chronic disease

Do you have any chronic illness or condition? No

- Life expectancy without activity limitation

For at least the past 6 months, to what extent have you been limited because of a health problem in activities people usually do? Not limited at all

EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

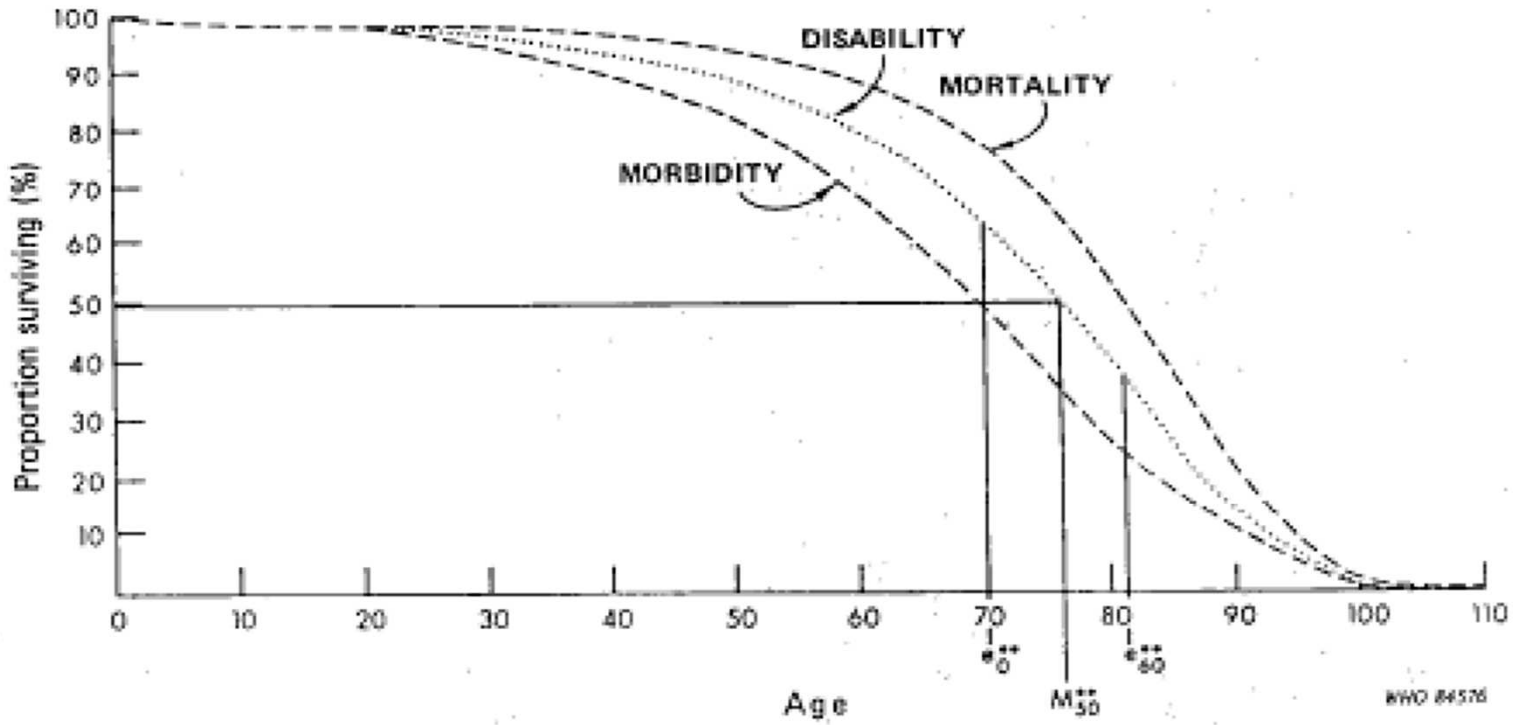
BRIDGEHEALTH
BRidging Information and Data Generation for Evidence-based Health Policy and Research

This project is funded by the Health Programme of the European Union

Institut national
de la santé et de la recherche médicale

General Health Model: WHO (1984)

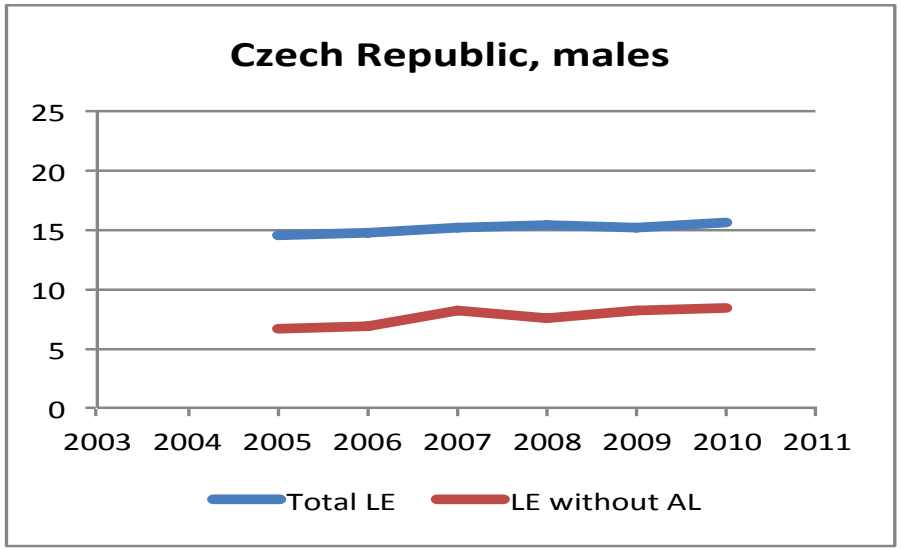
Fig. 4. The observed mortality and hypothetical morbidity and disability survival curves for females in the United States of America in 1980

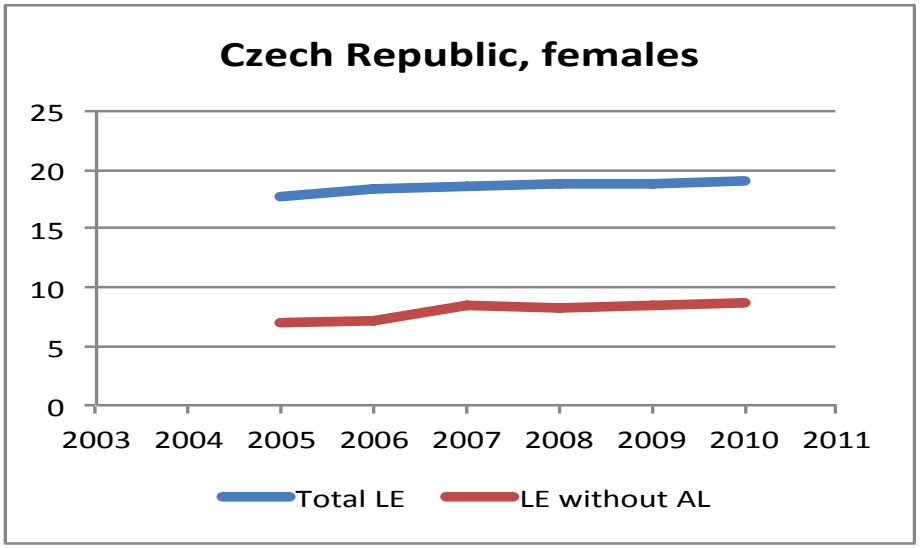


e_0^{**} and e_{60}^{**} are the number of years of autonomous life expected at birth and at age 60, respectively.
M_{50}^{**} is the age to which 50% of females could expect to survive without loss of autonomy.

Inserm
Institut national
de la santé et de la recherche médicale

Compression of disability?





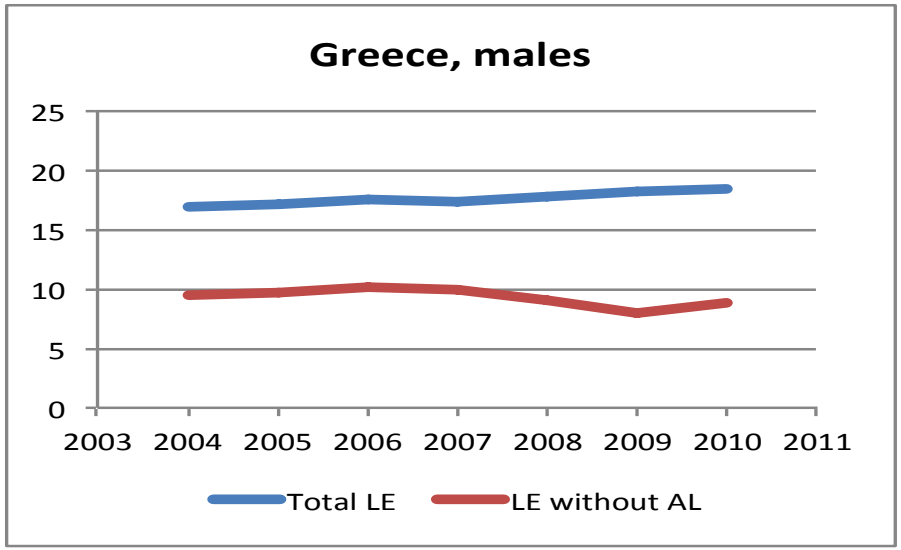
EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

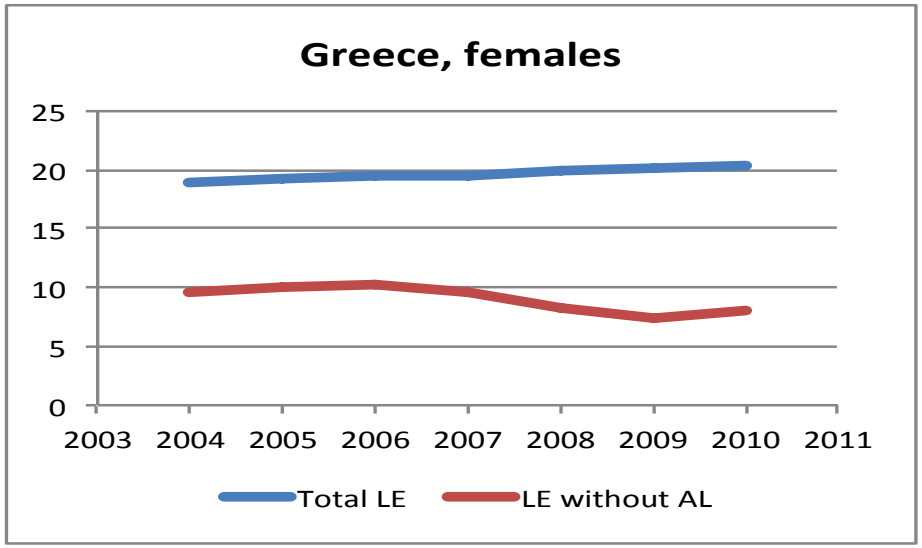
BRIDGEHEALTH
BRidging Information and Data Generation
for Evidence-based Health Policy and Research

This project is funded by the Health Programme of the European Union

Inserm
Institut national
de la santé et de la recherche médicale

Expansion of disability?





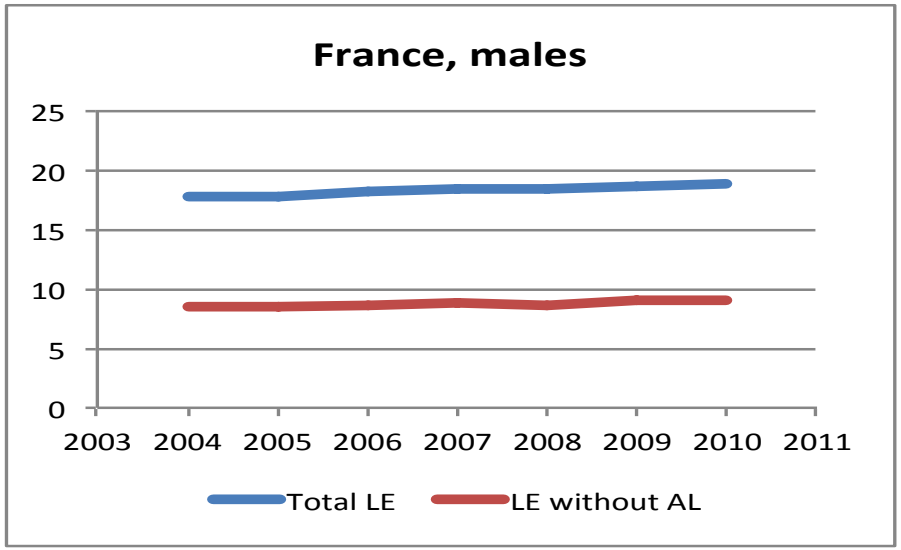
EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

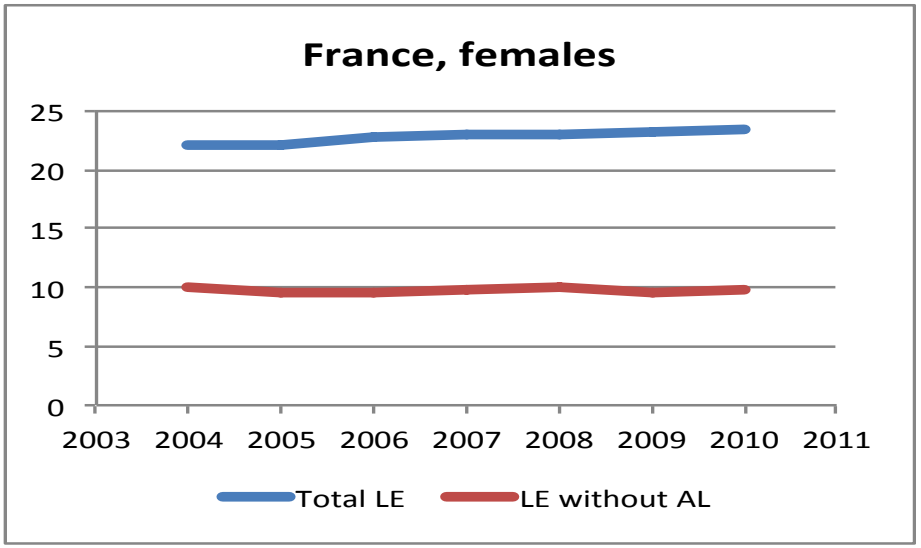
BRIDGEHEALTH
BRidging Information and Data Generation
for Evidence-based Health Policy and Research

This project is funded by the Health Programme of the European Union

Inserm
Institut national
de la santé et de la recherche médicale

Dynamic equilibrium?





EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

BRIDGEHEALTH
BRidging Information and Data Generation
for Evidence-based Health Policy and Research

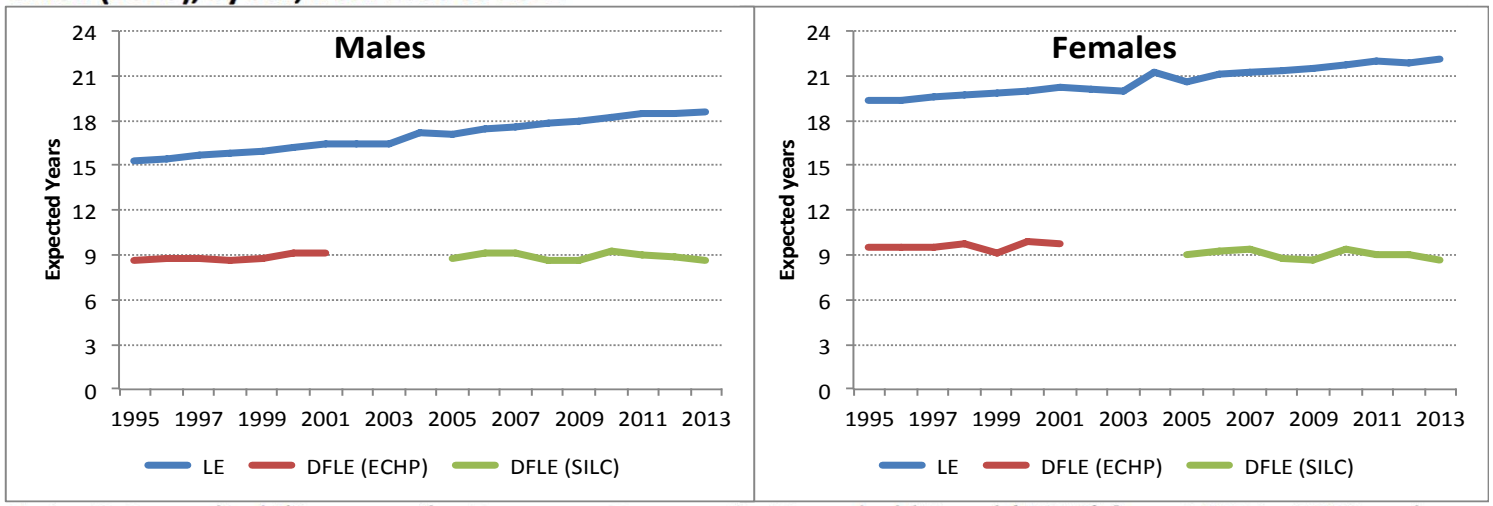
This project is funded by the Health Programme of the European Union

Inserm

Institut national
de la santé et de la recherche médicale

LE and DFLE at age 65, EU15, 1995-2013

Life expectancy (LE) and disability-free life expectancy (DFLE) at age 65 in 15 members of the European Union (EU15), by sex, from 1995 to 2012



Note: Data on disability come the European Community Household Panel (ECHP) from 1995 to 2001 and from the European Statistics on Income and Living Conditions (EU-SILC) since 2005. No data are available for 2002-2004; Calculation: www.eurohex.eu

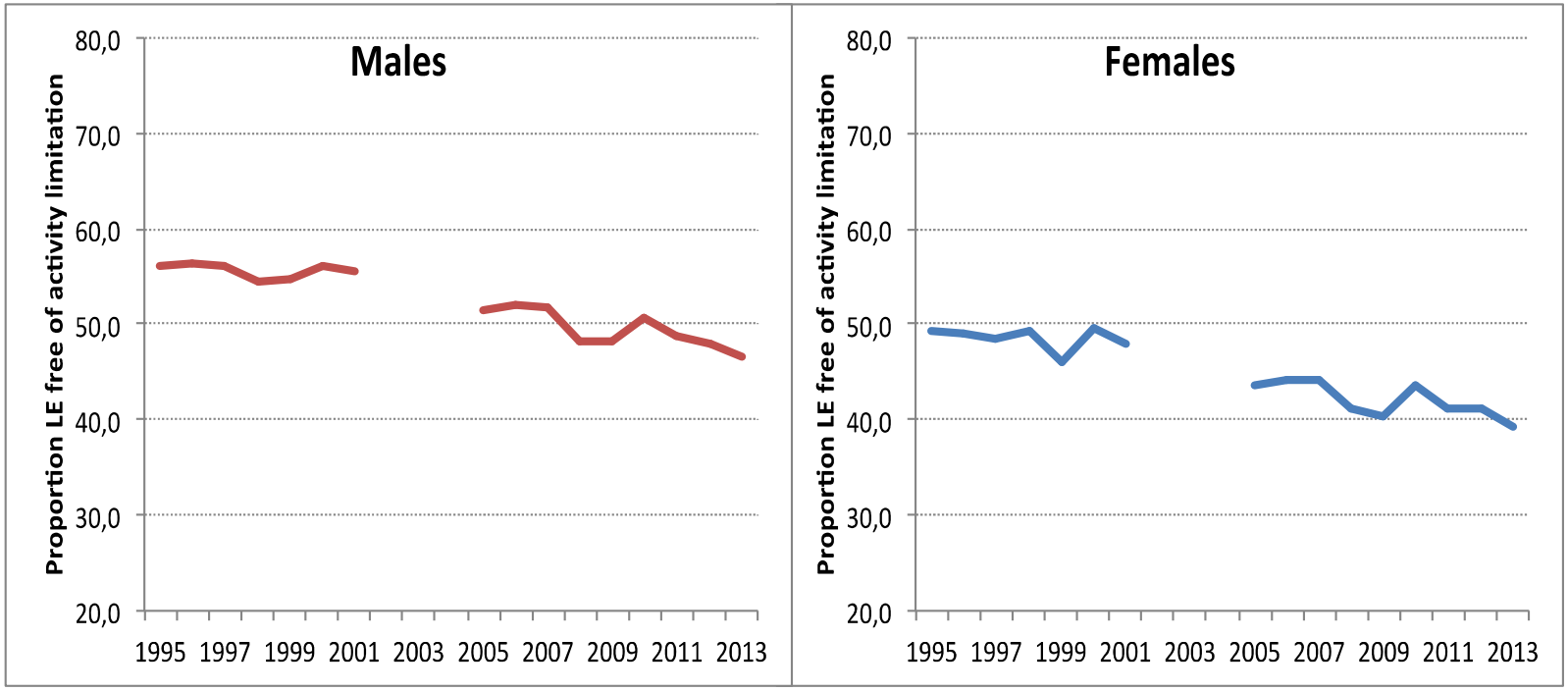
EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

BRIDGEHEALTH
BRidging Information and Data Generation
for Evidence-based Health Policy and Research

This project is funded by the Health Programme of the European Union

Inserm
Institut national
de la santé et de la recherche médicale

Proportion of life expectancy (LE) free of activity limitation at age 65, EU15, 1995-2013



EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

BRIDGEHEALTH
BRidging Information and Data Generation
for Evidence-based Health Policy and Research

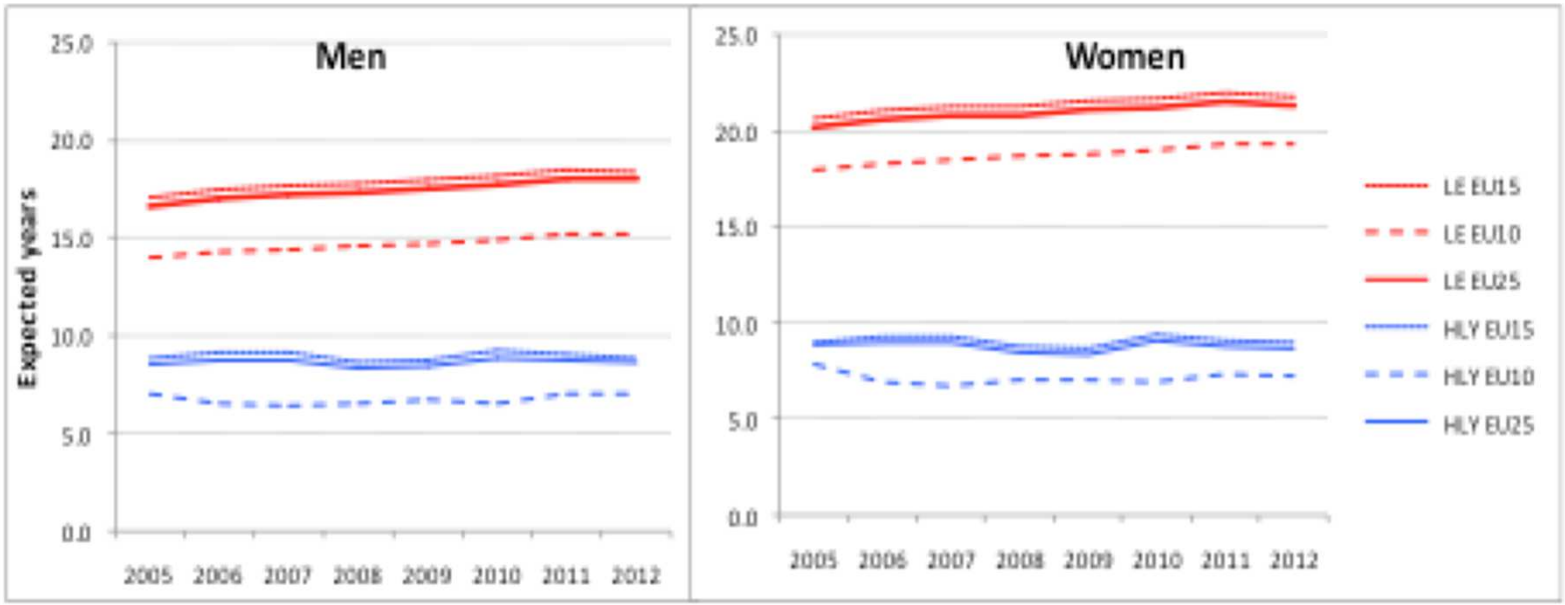
This project is funded by the Health Programme of the European Union

Inserm

Institut national
de la santé et de la recherche médicale

LE and DFLE at age 65, EU15 vs. EU10, 2005-2012

Trends in total life expectancy (LE) and life expectancy without activity limitation (HLY) at age 65 in the European Union (EU25, EU15 and EU10) from 2005 to 2012



EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

BRIDGEHEALTH
BRidging Information and Data Generation
for Evidence-based Health Policy and Research

This project is funded by the Health Programme of the European Union

Inserm

Institut national
de la santé et de la recherche médicale

In the USA

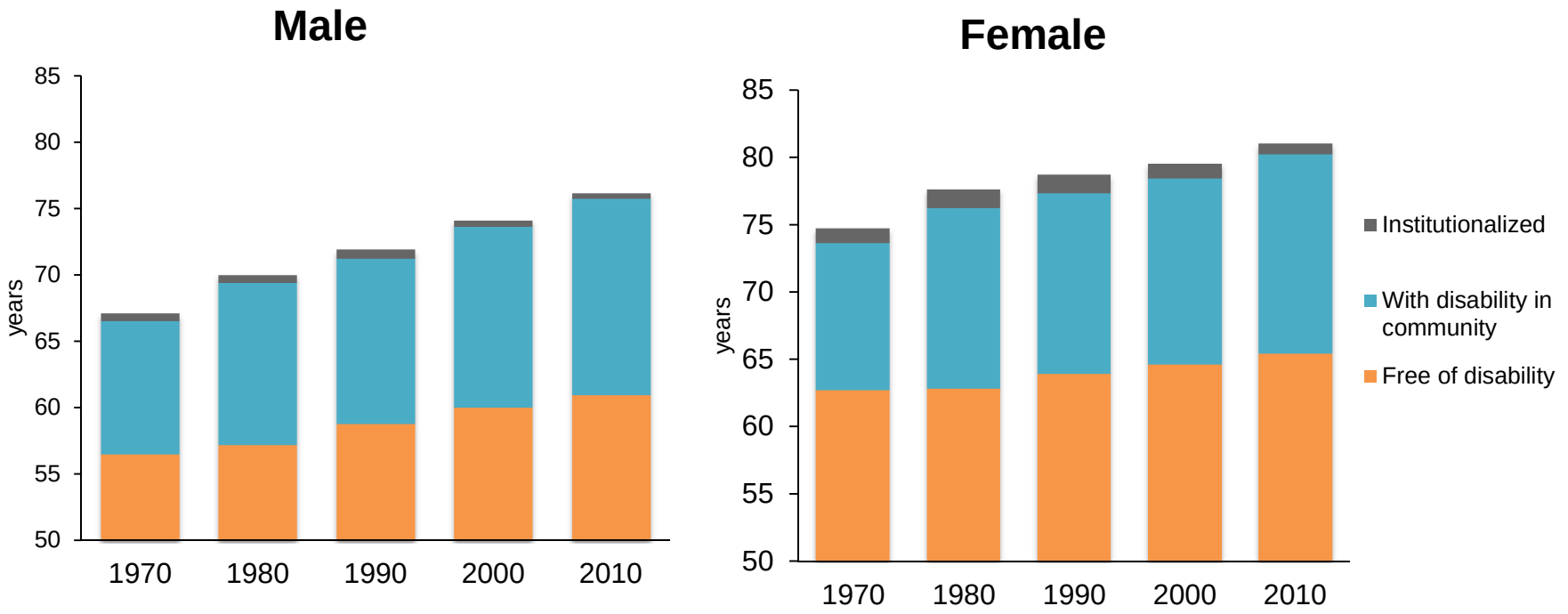
EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

BRIDGEHEALTH
BRidging Information and Data Generation
for Evidence-based Health Policy and Research

This project is funded by
the Health Programme of
the European Union

Inserm
Institut national
de la santé et de la recherche médicale

Life Expectancy at birth: Disability-Free, Community Disabled, Institutionalized



Sources: Crimmins, Zhang and Saito, 2015

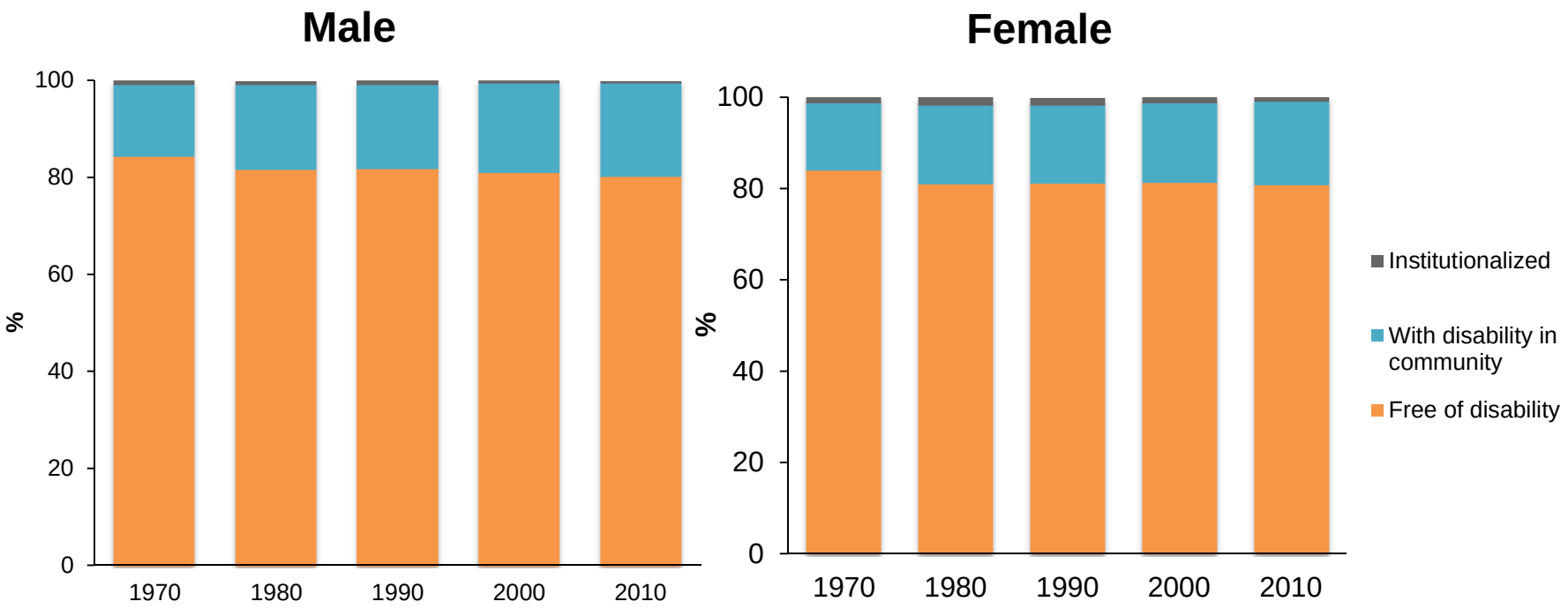
EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

BRIDGEHEALTH
BRidging Information and Data Generation for Evidence-based Health Policy and Research

This project is funded by the Health Programme of the European Union

Inserm
Institut national
de la santé et de la recherche médicale

Proportion of Life at birth with and without Disability



Sources: Crimmins, Zhang and Saito, 2015

EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

BRIDGEHEALTH
BRidging Information and Data Generation for Evidence-based Health Policy and Research

This project is funded by the Health Programme of the European Union

EHLEIS Country Reports
Issue 9 – October 2015

Health Expectancy in Belgium

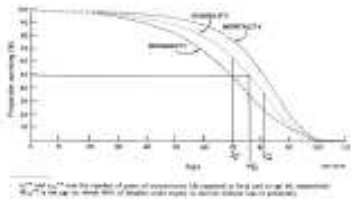
What is health expectancy?

Health expectancies were first developed to address whether or not longer life is being accompanied by an increase in the time lived in good health (the compression of morbidity scenario) or in bad health (expansion of morbidity). So health expectancies divide life expectancy into life spent in different states of health, from say good to bad health. In this way they add a dimension of quality to the quantity of life lived.

How is the effect of longer life measured?

The general model of health transitions (WHO, 1984) shows the differences between life spent in different states: total survival, disability-free survival and survival without chronic disease. This leads naturally to life expectancy (the area under the 'mortality' curve), disability-free life expectancy (the area under the 'disability' curve) and life expectancy without chronic disease (the area under the 'morbidity' curve).

The general model of health transition (WHO, 1984): observed mortality and hypothetical morbidity and disability survival curves for females, USA, 1980.



There are in fact as many health expectancies as concepts of health. The commonest health expectancies are those based on self-perceived health, activities of daily living and on chronic morbidity.

How do we compare health expectancies?

Health expectancies are independent of the size of populations and of their age structure and so they allow direct comparison of different population sub-groups: e.g. sexes, socio-professional categories, as well as countries within Europe (Robine et al., 2003).

Health expectancies are most often calculated by the Sullivan method (Sullivan, 1971). However to make valid comparisons, the underlying health measure should be truly comparable.

To address this, the European Union has decided to include a small set of health expectancies among its European Core Health Indicators (ECHI) to provide summary measures of disability (i.e., activity limitation), chronic morbidity and perceived health. Therefore the Minimum European Health Module (MEHM), composed of 3 general questions covering these dimensions, has been introduced into the Statistics on Income and Living Conditions (SILC) to improve the comparability of health expectancies between countries.* In addition life expectancy without long term activity limitation, based on the disability question, was selected in 2004 to be one of the structural indicators for assessing the EU strategic goals (Lisbon strategy) under the name of **"Healthy Life Years" (HLY)**.

> Further details on the MEHM, the European surveys and health expectancy calculation and interpretation can be found on www.eurohex.eu.

What is in this report?

This report is produced by the European Health and Life Expectancy Information System (EHLEIS) as part of a country series. In each report we present:

- Life expectancies and Healthy Life Years (HLY) at age 65 for the country of interest and for the overall 28 European Union member states (EU28), using the SILC question on long term health related disability, known as the GALI (Global Activity Limitation Indicator), from 2004 to 2013. The wording of the question has been revised in 2008;
- Prevalence of activity limitation in the country of interest and in the European Union based on the GALI question by sex and age group;
- Health expectancies based on the two additional dimensions of health (chronic morbidity and self-perceived health) for the country of interest, based on SILC 2013;
- Life expectancy and HLY at age 65 in the member states of European Union in 2008 and 2013, by gender.

References

Jagger C., Gillies C., Moscone F., Cambois E., Van Oyen H., Nusselder W., Robine J.-M., EHLEIS Team. Inequalities in healthy life years in the 25 countries of the European Union in 2005: a cross-national meta-regression analysis. *The Lancet*. 2008;372(9656):2124-2131
Robine J.-M., Jagger C., Mathers C.D., Crimmins E.M., Suzman R.M., Eds. *Determining health expectancies*. Chichester UK: Wiley, 2003.
Sullivan D.F. *A single index of mortality and morbidity*. HSMHA Health Reports 1971;86:347-354.
World Health Organization. *The uses of epidemiology in the study of the elderly: Report of a WHO Scientific Group on the Epidemiology of Aging*. Geneva: WHO, 1984 (Technical Report Series 706).

* Before the revision of 2008, the translations of the module used in some countries were not optimum (See Eurostat-EU Task Force on Health Expectancies common statement about the SILC data quality). This revision is being evaluated.

EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

Life expectancy (LE) and Healthy Life Years (HLY) at age 65 for Belgium and the European Union (EU28) based on SILC (2004-2013)

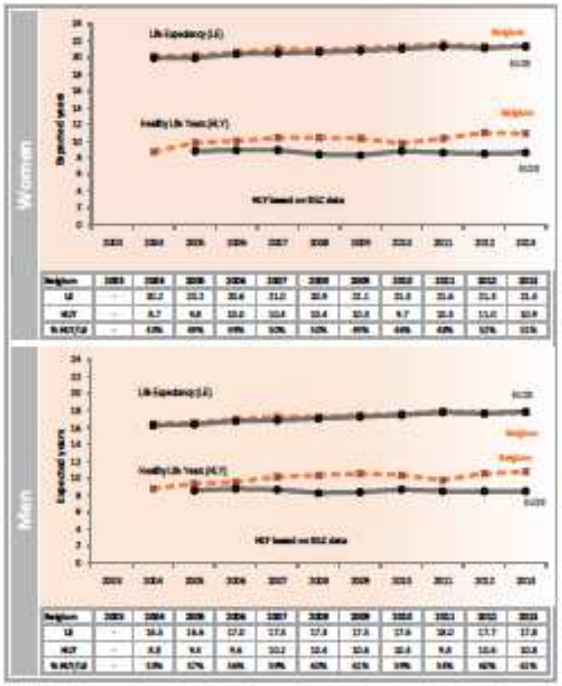
Key points:

Belgian life expectancy (LE) at age 65 has increased by 1.2 years for women and 1.3 years for men over the period 2004-2013. By 2013 LE was almost similar to the EU28 average for women (21.3) and for men (17.9).

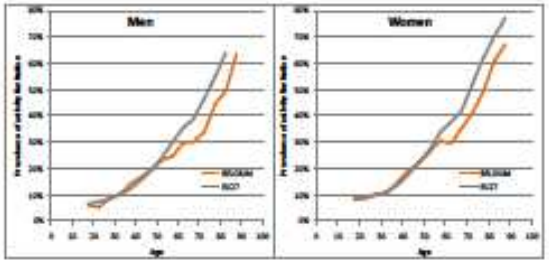
The new HLY series, initiated in 2004 with the SILC data, shows values for Belgium being in 2013 above the EU28 average (8.6 for women and 8.5 for men) by 2.3 years for women and men.

In 2013 women and men at age 65 can expect to spend 51% and 61% of their life without *self-reported long-term activity limitations* respectively. HLY decreased slightly for women and increased slightly for men between 2012 and 2013.

Note that the wording of the GALI question was slightly changed in Belgium in 2005 to better reflect the EU standard.



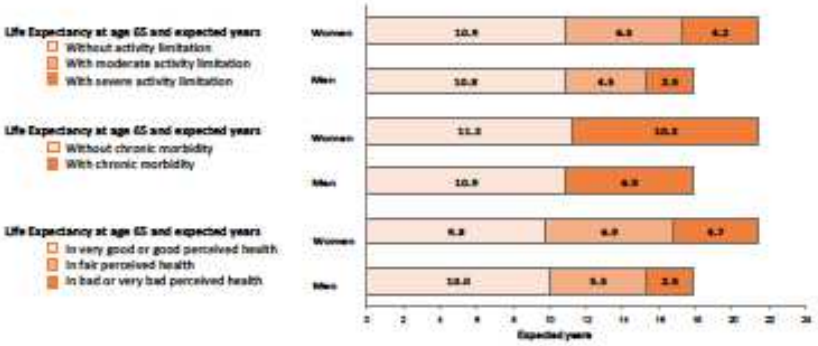
Prevalence of activity limitation in Belgium and in the European Union (EU27) based on the GALI question, by sex and age group (SILC, Mean 2011-2013)



Reports of limitation in usual activities strongly increase with age in the European Union and women systematically report slightly more activity limitation than men. Compared to the mean trajectory by age, observed in the European Union in the 3 years (2011-2013), Belgium tends to display same prevalence rates of activity limitation before the age of 50 years for men and 45 years for women and lower prevalence rates after this age for both sexes.

These results should be interpreted with caution as sample sizes in the SILC survey vary remarkably; for instance in 2013 they ranged from 5429 in Denmark to 38,039 in Italy. In 2013, the sample size for Belgium comprised 6025 women and 5686 men aged 16 years and over.

Life and health expectancies at age 65 based on activity limitation (Healthy Life Years), chronic morbidity and perceived health for Belgium (Health data from SILC 2013)



Key points:

In 2013, LE at age 65 in Belgium was 21.4 years for women and 17.8 years for men.

Based on the SILC 2013, at age 65, women spent 10.9 years (51% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 6.3 years (29%) with moderate activity limitation and 4.2 years (20%) with severe activity limitation.*

Men of the same age spent 10.8 years (61% of their remaining life) without activity limitation compared to 4.5 years (25%) with moderate activity limitation and 2.5 years (14%) with severe activity limitation.*

The number of years lived in very good or good perceived health, the years lived without chronic morbidity and the HLY were greater for women than men. However, compared to men, women spent a larger proportion of their life in ill health, and spent more years with severe health problems.

These results should be interpreted cautiously given the lack of the institutional population, such as people living in nursing homes.

** These may not sum to Life Expectancy due to rounding*

Publications and reports on health expectancies for Belgium

Berger N., Charafeddine R., Tafforeau J., Van Oyen H. Espérances de vie en bonne santé par région et par niveau socio-économique en Belgique. WIV-ISP, Direction Opérationnelle Santé Publique et Surveillance, 2012: Bruxelles, N° de dépôt légal/2012/2505/44.

Van Oyen H., Charafeddine R., Deboosere P., Cox B., Lorant V., Nusselder W., & Demarest S. Contribution of mortality and disability to the secular trend in health inequality at the turn of century in Belgium. *Eur J of Public Health. 2011, 21(6):781-787.*

Charafeddine R., Gadeyne S., Deboosere P., Berger N., Demarest S., Van Oyen H. Social inequalities in Healthy Life Expectancy. Alternative methods of estimation in the absence of the national census. WIV-ISP, Direction Opérationnelle Santé Publique et Surveillance, 2011: Bruxelles, N° de dépôt légal/2011/2505/41.

Van Oyen H., Charafeddine R., Deboosere P., Cox B., Lorant V., Demarest S. The evolution of social inequality in health expectancy. In: Van Oyen H., Deboosere P., Lorant V., Charafeddine R (Eds). *Social inequality in health in Belgium.* Series Society and Future (In Dutch: Reeks: Samenleving en Toekomst). Federaal Wetenschapsbeleid. Academia Press, Chapter 3: 27-43, Gent, 2011.

Van Oyen H., Cox B., Demarest S., Deboosere P., Lorant V. Trends in health expectancy indicators in the older adult population in Belgium between 1997 and 2004. *Eur J Ageing.* 2008 Jun;5(2):137-146.

Cox B., Van Oyen H., Cambois E., Jagger C., Le Roy S., Robine JM, Romieu I. The reliability of the Minimal European Health Module. *Int J Public Health.* 2009 (54): 55-60.

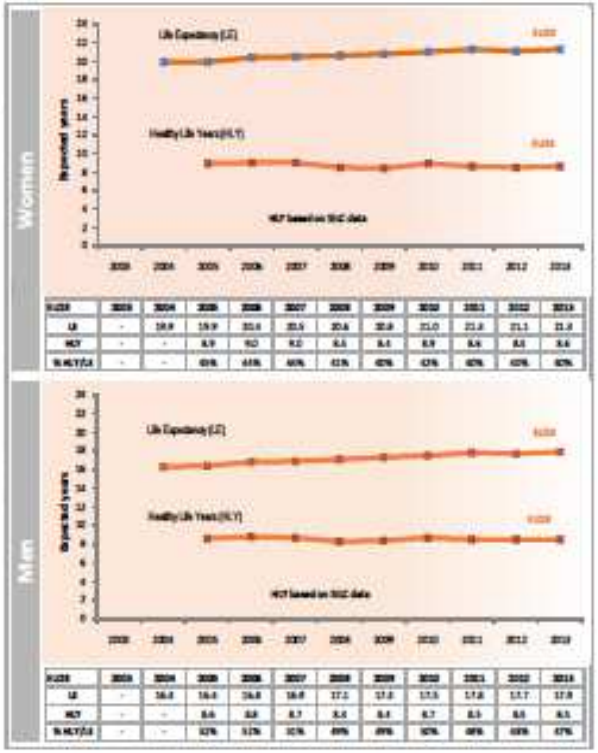
Belgium
Issue 9
Pages 2-3

Life expectancy (LE) and Healthy Life Years (HLY) at age 65 for the European Union (EU28) based on SILC data (2004-2013)

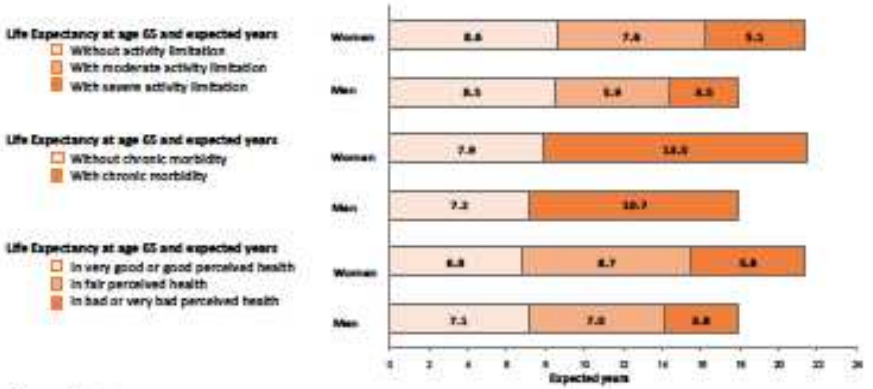
Key points:

Between 2004 and 2013 life expectancy (LE) of the EU28 at age 65 increased by 1.4 years for women and 1.6 years for men.

The HLY series based on SILC data shows that HLY remained almost stable over the period despite the fact that the wording of the GALI question of the SILC survey have been changed even several times in a few countries until 2007. In 2008, a coordinated revision of the wording has occurred in several countries based on the scientific translations of the GALI performed for the first wave of the European Health Interview Survey (EHIS). Therefore, the proportion of the remaining life expectancy without *self-reported long-term activity limitations* at the age of 65 years regularly decreases from 45% in 2005 to 40% in 2013 for women and from 52% in 2005 to 47% in 2013 for men.



Life and health expectancies at age 65 based on activity limitation (Healthy Life Years), chronic morbidity and perceived health for EU28 (Health data from SILC 2013)



Key points:

In 2013, LE at age 65 in EU28 was 21.3 years for women and 17.9 years for men.

Based on SILC 2013 data, women at age 65 spent 8.6 years (40% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 7.6 years (36%) with moderate activity limitation and 5.1 years (24%) with severe activity limitation.*

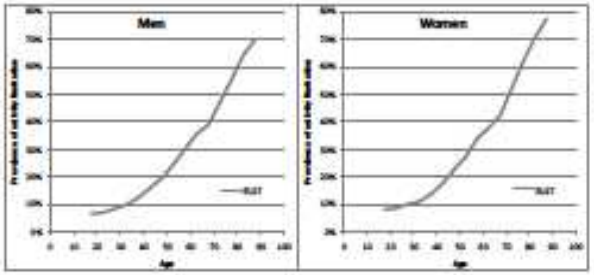
Men of the same age spent 8.5 years (47% of their remaining life) without activity limitation compared to 5.9 years (33%) with moderate activity limitation and 3.5 years (20%) with severe activity limitation.*

Although the total number of years lived by men were less than those for women, the number of healthy life years (HLY) were similar for men and women on. Women spent a little bit more time without chronic morbidity and men in good perceived health. Therefore, compared to men, women spent a larger proportion of their life in ill health and these years of ill health were more likely to be years with severe health problems.

These results should be interpreted with caution as health states of people living in institutions or nursing home are not surveyed.

** These may not sum to Life Expectancy due to rounding*

Prevalence of activity limitation in the European Union (EU27) based on the GALI question, by sex and age group (SILC, Mean 2011-2013)



Reports of limitation in usual activities strongly increase with age in the European Union and women systematically report slightly more activity limitation than men.

Publications and reports on health expectancies for EU28

Jagger C., Robine J.-M., Van Oyen H., Cambois E. *Life expectancy with chronic morbidity.* In: European Commission, editor. *Major and chronic diseases - report 2007.* Luxembourg: European Communities; 2008. p. 291-304.

Jagger C., Gillies C., Mascone F., Cambois E., Van Oyen H., Nusselder W.J., Robine J.-M., EHLEIS team. Inequalities in healthy life years in the 25 countries of the European Union in 2005: a cross-national meta-regression analysis. *The Lancet.* 2008; 372(9656):2124-2131.

Lievre A., Jusot F., Barnay T., Sermet C., Brouard N., Robine J.-M., Brieu A.-M., Forette F. Healthy working life expectancies at age 50 in Europe: a new indicator. *J Nutr Health Aging.* 2007; 11(6):508-514.

Jagger C., EHEMU team. *Healthy life expectancy in the EU 15.* In: Institut des Sciences de la Santé, editor. *Living longer but healthier lives: how to achieve health gains in the elderly in the European Union Europe Blanche XXVI, Budapest, 25-26 November 2005.* Paris: ISS; 2006. p. 49-62.

EU28
Issue 9
Pages 2-3

Life expectancy (LE) and Healthy Life Years (HLY) at age 65 for Spain and the European Union (EU28) based on SILC (2004-2013)

Key points:

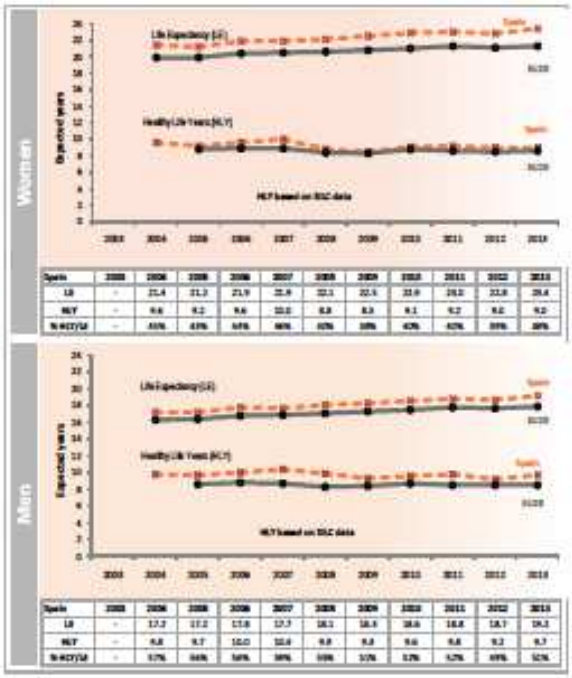
Spanish life expectancy (LE) at age 65 has increased by 2.0 years for women and men over the period 2004 -2013. LE was above the EU28 average (21.3 for women and 17.9 for men) in 2013.

The new HLY series, initiated in 2004 with the SILC data, shows values for Spain being in 2013 0.4 year above the EU28 average (8.6 for women and 8.5 for men) for women and 1.2 year above for men.

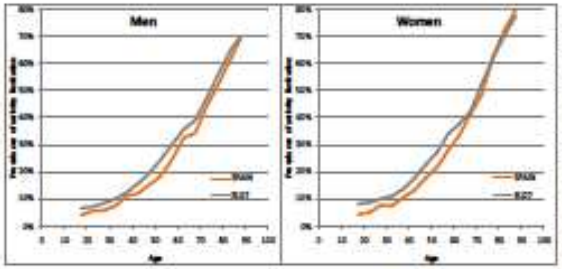
In 2013 women and men at age 65 can expect to spend 38% and 51% of their life without *self-reported long-term activity limitations* respectively.

Note that the wording of the GALI question was changed in Spain in 2008 to better reflect the EU standard.

This may explain the strong decrease in HLY observed for men and women between 2007 and 2008. Between 2010 and 2011 HLY increased for both sexes, decreased slightly in 2012 and by 2013 rose to its previous level



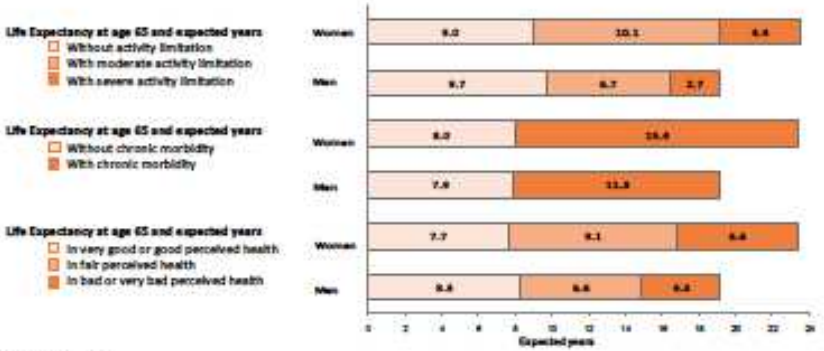
Prevalence of activity limitation in Spain and in the European Union (EU27) based on the GALI question, by sex and age group (SILC, Mean 2011-2013)



Reports of limitation in usual activities strongly increase with age in the European Union and women systematically report slightly more activity limitation than men. Compared to the mean trajectory by age observed in the European Union in the 3 years 2011-2013, Spain tends to display lower prevalence rate of activity limitation at all ages except at age 85 and over where the prevalence become slightly higher than EU27 for women only.

These results should be interpreted with caution as samples sizes in the SILC survey vary remarkably; for instance in 2013 they ranged from 5429 in Denmark to 38039 in Italy. In 2013, the sample size for Spain comprised 14004women and 12879 men aged 16 years and over.

Life and health expectancies at age 65 based on activity limitation (Healthy Life Years), chronic morbidity and perceived health for Spain (Health data from SILC 2013)



Key points:

In 2013, LE at age 65 in Spain was 23.4 years for women and 19.2 years for men.

Based on the SILC 2013, at age 65, women spent 9.0 years (38% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 10.1 years (43%) with moderate activity limitation and 4.4 years (19%) with severe activity limitation.*

Men of the same age spent 9.7 years (51% of their remaining life) without activity limitation compared to 6.7 years (35%) with moderate activity limitation and 2.7 years (14%) with severe activity limitation.*

Although total years lived by men were less than those for women, for life expectancy in very good or good perceived health and for life expectancy without activity limitation the years of life spent in positive health were greater for men than women. Therefore compared to men, women spent a larger number of years and a larger proportion in ill health and these years of ill health were more likely to be years with severe health problems.

These results should be interpreted cautiously given the lack of the institutional population, such as people living in nursing homes.

* *These may not sum to Life Expectancy due to rounding*

Publications and reports on health expectancies for Spain

- Martín U, Etxezarreta S. Changes in social inequalities in disability-free life expectancy in Southern Europe: the case of the Basque Country. Int J Equity Health. 2014 Sep 20; 13(1):74.
- Ministerio de Sanidad, Servicios Sociales e Igualdad. Indicadores de Salud 2013. Evolución de los indicadores del estado de salud en España y su magnitud en el contexto de la Unión Europea. Madrid: Ministerio de Sanidad, Servicios Sociales e Igualdad, 2014.
- Solé-Auró A, Alcañiz M. Are we living longer but less healthy? Trends in mortality and morbidity in Catalonia (Spain), 1994-2011. Eur J Ageing 2014 DOI 10.1007/s10433-014-0317-9.
- Gutiérrez-Fisac JL, Suárez M, Nebra M, Regidor E. Esperanzas de vida en salud en España 2007-2011. Años de vida saludable en España y sus comunidades autónomas. Madrid: Ministerio de Sanidad, Servicios Sociales e Igualdad, 2013.
- Gutiérrez-Fisac J.L., Regidor E., Alfaro M. *Healthy Life Expectancies in Spain 1986-2007.Disability-free life expectancy and Life expectancy in good perceived health in Spain and its Autonomous Communities*. Madrid: Ministry of Health, Social Policy and Equality, 2010.
- Morata L.B., Loxilla C.B., Estany M.G., Gondolbeu E.M. Tipologíassociodemográficas de individuos con dependencia en España y susupervivencia en estado de Salud [Sociodemographictypologies of individualswithdependence in Spain and healthylifeexpectancy]. *RevEspGeriatrGerontol*. 2008; 43(1):19-31.
- Jagger C., Gillies C., Moscone F., Cambois E., Van Oyen H., Nusselder W.J., Robine J.-M., EHLEIS team. Inequalities in healthy life years in the 25 countries of the European Union in 2005: a cross-national meta-regression analysis. *The Lancet*. 2008; 372(9656):2124-2131.
- Gómez Redondo R., Génova R., Robles E. *Envejecimiento, Longevidad y Salud. Bases demográficas en España*. In: Ballesteros S, editor. *Envejecimiento Saludable: AspectosBiológicos, Psicológicos y Sociales*. Madrid: UNED-Editorial Universitas; 2007. p. 41-75.
- Gispert R., Ruiz-Ramos M., Rabes M.A., Viciana F., Clot-Razquin G. Differences in disability-free life expectancy by gender and autonomous regions in Spain [Differences in Disability-Free Life Expectanc… *EspSalud*…
- Sagardui-… I.R., Rodr… Expectanc… *Med Sci*…
- Ruiz-Ram… calidad de… 267.

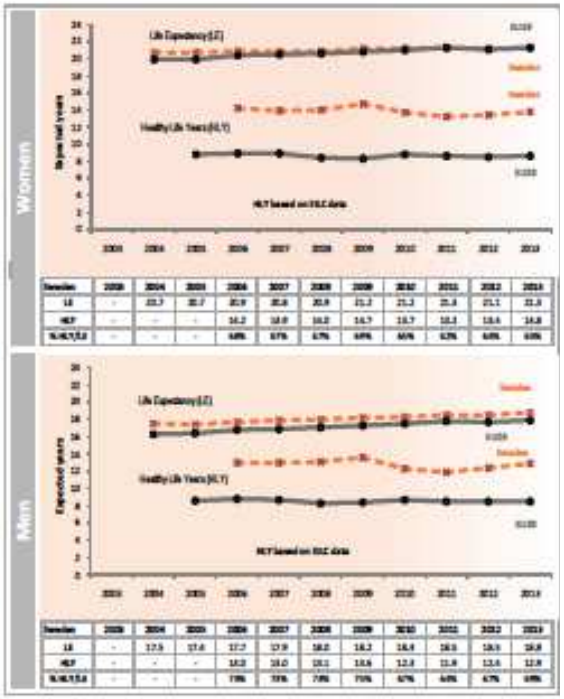
Spain
Issue 9
Pages 2-3

Life expectancy (LE) and Healthy Life Years (HLY) at age 65 for Sweden and the European Union (EU28) based on SILC (2004-2013)

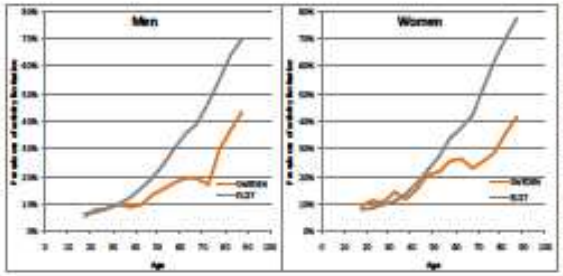
Key points:

Swedish life expectancy (LE) at age 65 has increased by 0.6 years for women and 1.3 years for men over the period 2004-2013. LE was similar to the EU28 average (21.3 for women and 17.9 for men) for women and was 0.9 year above for men in 2013.

The new HLY series, initiated in 2004 with the SILC data, shows values for Sweden in 2013 being above the EU28 average (8.6 for women and 8.5 for men) by 5.2 and 4.4 years for women and men respectively. In 2013 women and men at age 65 can expect to spend 65% and 69% of their life without *self-reported long-term activity limitations* respectively. The HLY trends should be interpreted with caution. Before 2006 (values not displayed) the wording of the GALI question was not comparable with the later years. The new wording was again changed in 2008. Between 2008 and 2010 HLY strongly increased in Sweden for women and men but slightly decreased in2011. In 2012 HLY slightly increased for both sexes and continue to increase in 2013.



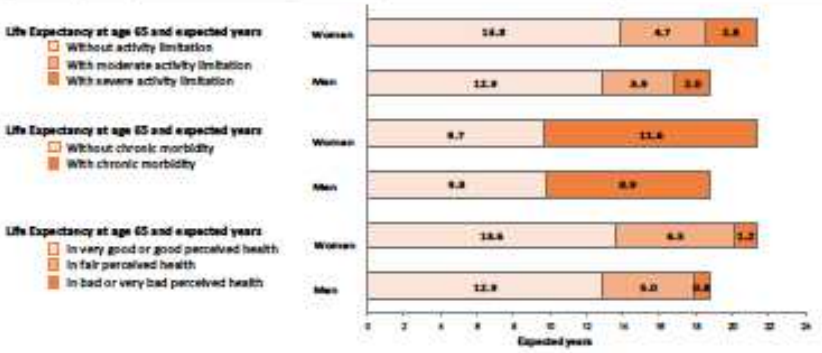
Prevalence of activity limitation in Sweden and in the European Union (EU27) based on the GALI question, by sex and age group (SILC, Mean 2011-2013)



Reports of limitation in usual activities strongly increase with age in the European Union and women systematically report slightly more activity limitation than men. Compared to the mean trajectory by age observed in the European Union in the 3 years (2011-2013), Sweden tends to display much lower prevalence rate of activity limitation after the age of 30 years for both sexes. Indeed this prevalence reaches only about 40% for men and women at age 85 and over versus 70% and 75% in the European Union.

These results should be interpreted with caution as samples sizes in the SILC survey vary remarkably; for instance in 2013 they ranged from 5429 in Denmark to 38039 in Italy. In 2013, the sample size for Sweden comprised 3171 women and 3030 men aged 16 years and over.

Life and health expectancies at age 65 based on activity limitation (Healthy Life Years), chronic morbidity and perceived health for Sweden (Health data from SILC 2013)



Key points:

In 2013, LE at age 65 in Sweden was 21.3 years for women and 18.8 years for men.

Based on the SILC 2013, at age 65, women spent 13.8 years (65% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 4.7 years (22%) with moderate activity limitation and 2.8 years (13%) with severe activity limitation.*

Men of the same age spent 12.9 years (69% of their remaining life) without activity limitation compared to 3.9 years (21%) with moderate activity limitation and 2.0 years (10%) with severe activity limitation.*

Although for all the health expectancies the years of life spent in positive health were greater for women than men, women spent a slightly larger proportion of their life in ill health.

These results should be interpreted cautiously depending on response rate problems in the SILC survey.

* *These may not sum to Life Expectancy due to rounding*

Publications and reports on health expectancies for Sweden

- Jagger C., Robine J.-M., Van Oyen H., Cambois E. *Life expectancy with chronic morbidity.* In: European Commission, editor. *Major and chronic diseases - report 2007.* Luxembourg: European Communities; 2008. p. 291-304.
- Jagger C., Gillies C., Moscone F., Cambois E., Van Oyen H., Nusselder W.J., Robine J.-M., EHLEIS team. Inequalities in healthy life years in the 25 countries of the European Union in 2005: a cross-national meta-regression analysis. *The Lancet.* 2008; 372(9656):2124-2131.
- Braungart Fauth E., Zarit S.H., Malmberg B., Johansson B. Physical, cognitive, and psychosocial variables from the disablement process model predict patterns of independence and the transition into disability for the oldest-old. *Gerontologist.* 2007 Oct; 47(5):613-624.
- Jagger C., EHEMU team. *Healthy life expectancy in the EU 15.* In: Institut des Sciences de la Santé, editor. *Living longer but healthier lives: how to achieve health gains in the elderly in the European Union Europe Blanche XXVI, Budapest, 25-26 November 2005.* Paris: ISS; 2006. p. 49-62.
- Burström K., Johannesson M., Diderichsen F. Increasing socio-economic inequalities in life expectancy and QALYs in Sweden 1980-1997. *Health Economics.* 2005;14(8):831-850.
- Minicuci N., Noale M., Pluijm S.M.F., Zunzunegui M.V., Blumstein T., Deeg D.J.H., Bardage C., Jylhä M., CLESA working group. Disability-free life expectancy: a cross-national comparison of six longitudinal studies on aging. The CLESA project. *Eur J Ageing.* 2004;1(1):37-44.
- Wilhelmson K., Allebeck P., Steen B. Improved health among 70-year olds: Comparison of health indicators in three different birth cohorts. *Aging Clin Exp Res.* 2002; 14(5):361-370.
- Lagergren M., Batljan I. *Will there be a helping hand: macroeconomic scenarios of future needs and costs of health and social care for the elderly in Sweden, 2000-30;* Stockholm: Ministry

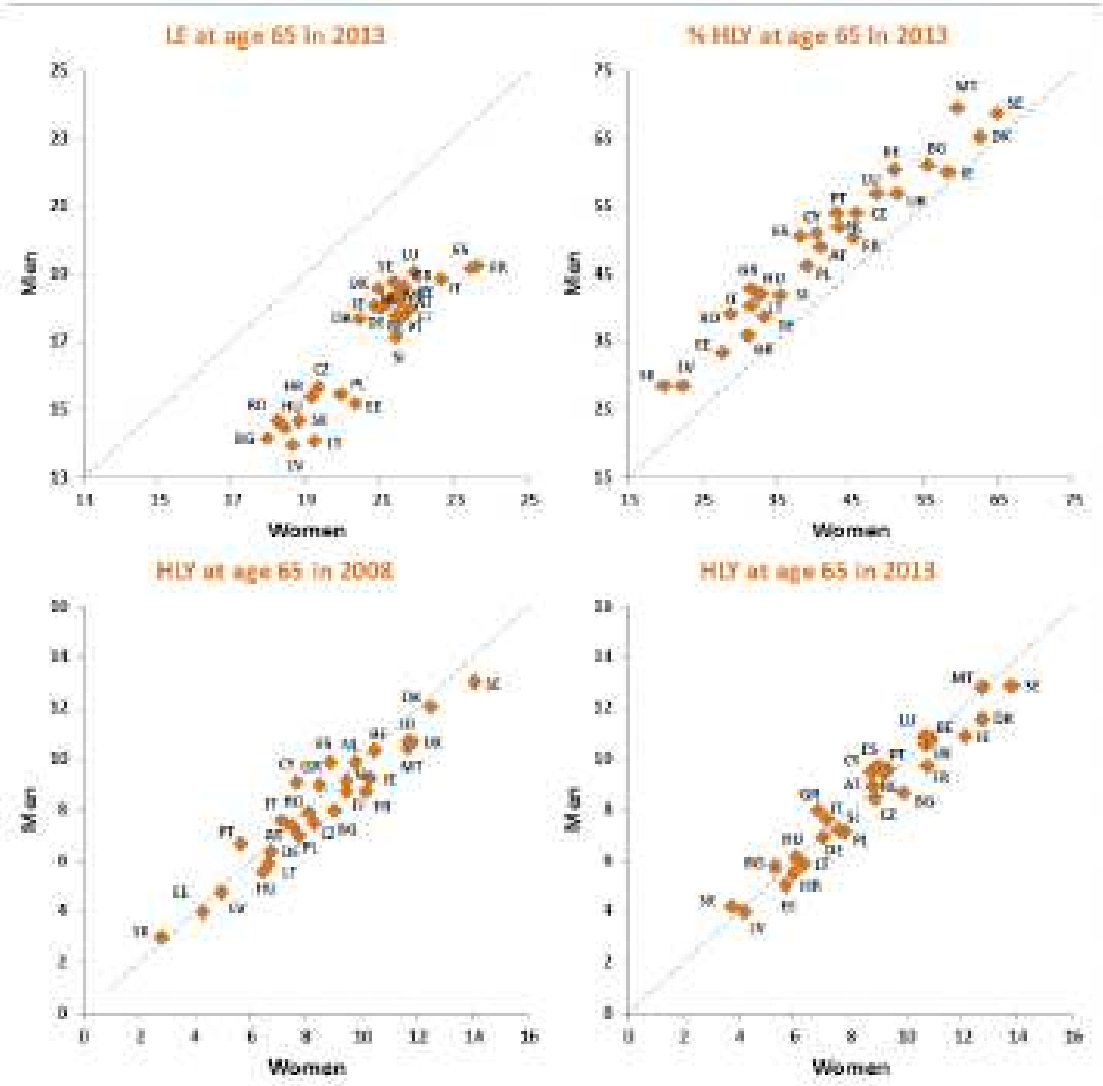
Sweden
Issue 9
Pages 2-3

Life expectancy (LE) and healthy life years (HLY) at age 65 in the member states (MS) of the European Union (EU) in 2008 and 2013: Correlation between genders

In 2013, LE at age 65 varies by 9,7years in the EU from 13.9 years for men in Latvia to 23.6 years for women in France. In each MS, LE for women is always higher than for men – around 3.4 years on average.

The proportion of LE free of activity limitation (corresponding to HLY) varies by country from 19.8% to 68.9%. Even ignoring potential outliers there still appears to be considerable cross-national variation.

Men and women live about the same amount of time without activity limitations. Next to the 7 MS where the number of HLY was already slightly larger for men than for women in 2008, a slightly larger HLY in men is observed in an additional 5 MS in 2013.



EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

Inserm
Institut national
de la santé et de la recherche médicale

Thank you for your attention

EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

BRIDGEHEALTH
BRidging Information and Data Generation
for Evidence-based Health Policy and Research

This project is funded by
the Health Programme of
the European Union

isp wiv
WETENSCHAPPELIJK INSTITUUT VOLKSGEZONDHEID
INSTITUT SCIENTIFIQUE DE SANTÉ PUBLIQUE

Thank you for your attention

www.eurohex.eu

EUROPEAN HEALTH & LIFE EXPECTANCIES INFORMATION SYSTEM

BRIDGEHEALTH
BRidging Information and Data Generation for Evidence-based Health Policy and Research

This project is funded by the Health Programme of the European Union

Inserm

Institut national
de la santé et de la recherche médicale

Activity board

	Issue 4 - 2011 (2008 figures)					Issue 5 - 2012 (2009 figures)					Issue 6 - 2013 (2010 figures)					Issue 7 - 2014 (2011 figures)						Issue 8 - 2015 (2012 figures)						Issue 9 - 2015 (2013 figures)					
	Drafted	Reviewed	Released	Translated	Posted	Drafted	Reviewed	Released	Translated	Posted	Drafted	Reviewed	Released	ranslated	Posted	Drafted	Reviewed	Released	ranslated	Posted	Extra P.	Drafted	Reviewed	Released	ranslated	Posted	Extra P.	Drafted	Reviewed	Released	Translated	Posted	xtra Page
Austria	OK	OK	OK			OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK				OK	OK				
Belgium	OK	OK	OK			OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK				OK	OK		OK		
Bulgaria	OK	OK	OK			OK		OK			OK	OK	OK			OK	OK	OK				OK		OK				OK					
Croatia	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	OK		OK				OK	OK				
Cyprus	OK	OK	OK			OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK	OK				OK	OK				OK
Czech Republic	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK				
Denmark	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK	OK		OK		OK
Estonia	OK		OK			OK		OK			OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		OK	OK				
France	OK	OK	OK	OK		OK	OK	OK	OK		OK	OK	OK	OK		OK	OK	OK	OK		OK	OK	OK	OK	OK		OK	OK	OK	OK		OK		OK
Finland	OK	OK	OK			OK	OK	OK			OK		OK			OK		OK				OK		OK									
Germany	OK	OK	OK			OK		OK			OK	OK	OK	OK		OK		OK				OK		OK				OK	OK				
Greece	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK	OK		OK		OK
Hungary	OK	OK	OK	OK		OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK				OK					
Ireland	OK	OK	OK			OK	OK	OK			OK	OK	OK			OK	OK	OK				OK		OK				OK					
Italy	OK	OK	OK	OK		OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK	OK				OK
Latvia	OK	OK	OK	OK		OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK	OK				
Lithuania	OK	OK	OK			OK	OK	OK			OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK	OK		OK		OK
Luxembourg	OK	OK	OK			OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			OK	OK						
Malta	OK		OK		OK	OK	OK	OK		OK	OK	OK	OK		OK	OK	OK	OK		OK	OK	OK	OK	OK			OK	OK						
Netherlands	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK					OK
Poland	OK	OK	OK			OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK				OK	OK					
Portugal	OK	OK	OK			OK		OK			OK	OK	OK	OK	OK	OK	OK	OK				OK	OK	OK				OK	OK		OK			
Romania	OK		OK			OK		OK			OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK	OK			OK						
Slovakia	OK		OK		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		OK	OK		OK			
Slovenia	OK	OK	OK	OK		OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK				OK	OK					
Spain	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK	OK			OK	OK					
Sweden	OK	OK	OK			OK	OK	OK	OK		OK	OK	OK	OK		OK	OK	OK			OK	OK		OK				OK	OK					
United Kingdom	OK	OK	OK			OK	OK	OK			OK	OK	OK		OK	OK	OK	OK		OK	OK	OK	OK	OK				OK	OK					OK
TOTAL	27	23	27	10	4	27	22	27	17	7	27	26	27	20	21	27	25	27	19	19	19	28	22	28	13	3	10	27	21		7		8	

EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

BRIDGEHEALTH
BRidging Information and Data Generation
for Evidence-based Health Policy and Research

This project is funded by the Health Programme of the European Union

	Country Report posted on website
Austria	http://www.oeaw.ac.at/vid/downloads.shtml
Belgium	https://www.wiv-isp.be/epidemio/hisia/healthexp.htm
Bulgaria	
Cyprus	
Czech Republic	http://www.uzis.cz/jaehleis
Denmark	http://www.sst.dk/Sundhedsdatagit/Dataformidling/Sundhedsdata/Nogletal/Internationale%20nogletal.aspx
Estonia	http://www.tai.ee/en/health-data/research-reports
France	
Finland	
Germany	
Greece	http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p_param=A1699&r_param=SHE23&y_param=2011_00&mytabs=0
	http://www.statistics.gr/portal/page/portal/ESYE/PAGE-themes?p_param=A2103&r_param=SHE23&y_param=2011_00&mytabs=0
Hungary	http://www.ksh.hu/elef/nemzetkozi.html
Ireland	
Italy	http://www.istat.it/it/archivio/7740
	http://www.istat.it/it/files/2011/01/Italia_web.pdf
Latvia	http://www.csb.gov.lv/en/dati/e-publikacijas/health-expectancy-latvia-38142.html
Lithuania	http://www.hi.lt/images/EHLEIS%2011-19%20LT.pdf
Luxembourg	http://www.statistiques.public.lu/fr/actualites/conditions-sociales/sante-secu/2013/05/20130514/index.html
Malta	http://ehealth.gov.mt/HealthPortal/chief_medical_officer/healthinfor_research/healthy_life_expectancy/concept_and_definition.aspx
Netherlands	http://www.nationaalkompas.nl/gezondheid-en-ziekte/sterfte-levensverwachting-en-daly-s/gezonde-levensverwachting/achtergrondgegevens-bij-internationale-verschillen-in-g
Poland	http://www.pzh.gov.pl/page/index.php?id=1534
Portugal	
Romania	http://www.insse.ro/cms/sites/default/files/field/publicatii/[illegible].pdf
Slovakia	http://slovak.statistics.sk/wps/portal/ext/themes/demography/population/indicators
	http://slovak.statistics.sk/wps/wcm/connect/636aecf7-2f2c-4c85-ba4e-f2afbbe653c2/EHLEIS_projekt_narodna_sprava_2009_2010_sk.zip?MOD=AJPERES
Slovenia	www.nijz.si/hly
Spain	http://www.msssi.gob.es/estadEstudios/estadisticas/sisInfSanSNS/vidaSaludable.htm
Sweden	
United Kingdom	http://www.instituteofhealthequity.org/projects/health-expectancy-in-united-kingdom-issue-6

EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

REGISTRATION

Participation is free.
Registration is compulsory:
www.wiv-isp.be/HAA

Number of places are limited.

MEETING VENUE:

Scientific Institute of Public Health (WIV-ISP)

Room NELIS
rue Juliette Wytsmanstraat, 14
1050 | BRUSSELS

Info: hly@wiv-isp.be

Public transports:
Bus 59 (Etterbeek-Ixelles), 95 (Rodin)
Tram 7, 25 (Etterbeek Station)
Train (Etterbeek Station)

Scan the QR code with your smartphone or tablet to get more information about the venue

ORGANISERS

| BRIDGE Health |

Bridging Information and Data Generation for Evidence-based Health Policy and Research (BRIDGE Health) aims to prepare the transition towards a sustainable and integrated European health information system.
www.bridge-health.eu

| EHLEIS |

European Health & Life Expectancy Information System (EHLEIS) monitors and analyses health trends and gaps in Europe. EHLEIS promotes the use of the Structural indicator Healthy Life Years (HLY).
www.eurohex.eu

| WIV-ISP |

The Scientific Institute of Public Health (WIV-ISP) is the scientific reference in the field of public health. Through innovative research, analyses, monitoring activities and expert advice, it supports health policy and policy-making. That way it contributes to a healthy life for all.
www.wiv-isp.be

ISP WIV

BRIDGEHEALTH
BRidging Information and Data Generation for Evidence-based Health Policy and Research

EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

| Brussels, October 30th 2015 |

The EU healthy and active ageing target: aiming for two additional healthy life years at birth by 2020.

At midpoint, where do we stand?

As the European population ages, increasing healthy life years (HLY) means a reduction of the burden on formal and informal care structures and contributes to a long-term sustainability of health and social systems.

The European Innovation Partnership on Active and Healthy Ageing (the EIP on AHA) sets a headline target of two additional healthy life years at birth by 2020 in the EU on average

The feasibility of this ambitious goal and the approach have been criticized as global targets for HLY move attention from inter-country differences and may contribute to increased health inequalities.

The objectives of the stakeholders' workshop is to evaluate:

- the progress towards the goal and
- the possible effect of the target on inter-country differences.

PROGRAM

| MORNING |

Registration and coffee **10:00**

Healthy ageing in Europe today **11:00**

Chair: H Brønnum-Hansen (DK)

o Welcome | H Van Oyen (BE) & JM Robine (FR)

o European Union 2020 strategy: the flagship initiative on active and healthy ageing: an overview | J Antunes (DG-Sante)

o Old age is normal | D Deeg (NL)

o Trends in Healthy Life Years in Europe and at global level | JM Robine (FR)

o What factors divide EU countries on Healthy Life Years | C Jagger (UK)

Lunch break **13:00**

| AFTERNOON |

Round Table 1 **14:00**

Keeping people healthy and active longer: What do we know and how can we move forward?

Chair: F Vandenbroucke (BE)

o Intro to round table| F Vandenbroucke (BE)

o Gender gap in Healthy Life Years| E Cambois (FR)

o Social position inequality in Healthy Life Years | W Nusselder (NL)

o East-West divide in Healthy Life Years | E Nolte (UK)

o Disease and lifestyle determinants of gaps in Healthy Life Years | H BrØnnum-Hansen (DK)

o Round table discussion

Coffee break **15:00**

Round Table 2 **15:20**

Keeping people healthy and active longer: Policy views

Chair: E Nolte (UK)

o Intro to round table| E Nolte (UK)

o Monitoring strategic health policies such as the active and healthy ageing 2020 policy in Europe. Strength and limitations of the Healthy Life Years indicator| P Wolff (Eurostat)

o Validity of the health measure of the Healthy Life Years | H Van Oyen (BE)

o Healthy Life Years and policy. Reflection of:
→ DG-Sante | J Antunes (DG-Sante)
→ MEP
→ a Member State | J De Cock (BE)

Round up | J Peeters (BE) **17:20**

Drink **17:30**

Inserm

Institut national
de la santé et de la recherche médicale

EUROPEAN HEALTH & LIFE EXPECTANCIES
EHLEIS
INFORMATION SYSTEM

BRIDGEHEALTH
BRidging Information and Data Generation
for Evidence-based Health Policy and Research

This project is funded by
the Health Programme of
the European Union