

EUROPEAN 

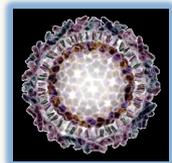
**HIV**

NURSING

CONFERENCE 

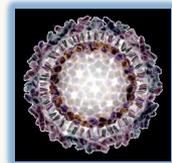


19-20 October 2014 • Barcelona, Spain



# Healthy Ageing with HIV

(It's More than Just Laboratory Values)



Barcelona  
October 19<sup>th</sup> 2014

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# Outline/ Agenda

- 1. What is Ageing?**
- 2. HIV Infection in Older Patients**
- 3. Ageing with HIV**
- 4. Successful Ageing with HIV**
- 5. Nursing Care: Recommendations**



# 1. What is ageing?

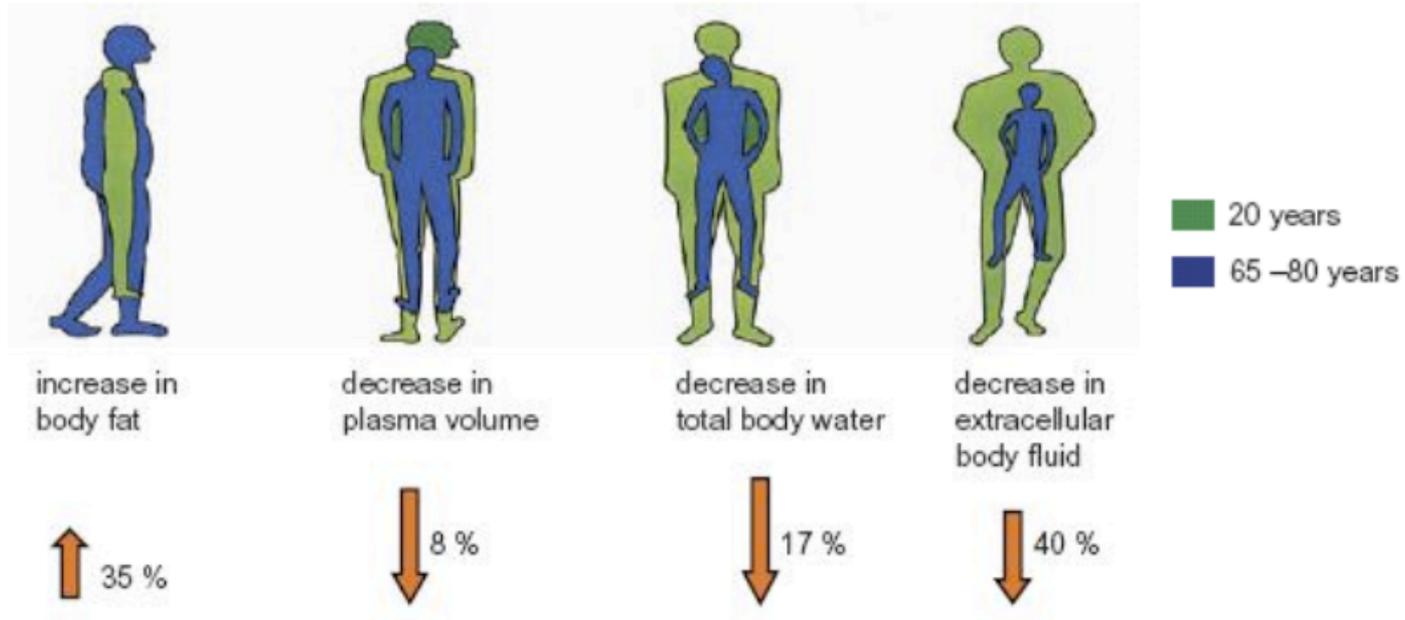
# WHO definition of Elderly

- “Lacking an accepted and acceptable definition, in many instances the age at which a person became eligible for statutory and occupational retirement pensions has become the default definition”.

# What is ageing?

- Progressive deterioration in physiologic function that occurs as a consequence of cumulative molecular, cellular and organ damage
- Impaired ability to maintain physiologic equilibrium with stress
- These changes invariably result in increased susceptibility to disease and death

# Physiological Changes and Ageing



Physiological changes in:

- Absorption
- Hepatic metabolism
- Renal filtrate

Klotz U. Drug Metab Rev. 2009;41(2):67-76.



## 2. HIV infection in older patients

# Higher risk of HIV disease progression

- Tendency to be diagnosed at a later stage
- More rapid progression in natural course of HIV
- Higher risk of complications
- Greater potential for worsening ARV toxicity
- Slower immunological response to ART



## 2.1 Risk of new infection in older people

# Increased risk for HIV acquisition?

- Older Americans know less about HIV/AIDS than younger people.
- Health care workers and educators often do not talk with middle-age and older people about HIV/AIDS prevention.
- Older people are less likely than younger people to talk about their sex lives or drug use with their doctors.
- Doctors may not ask older patients about their sex lives or drug use, or talk to them about risky behaviors.

Presented at the NY HIV Research Centers Consortium 2007 Scientific Conference - "Living with HIV: Challenges for Interdisciplinary Research"





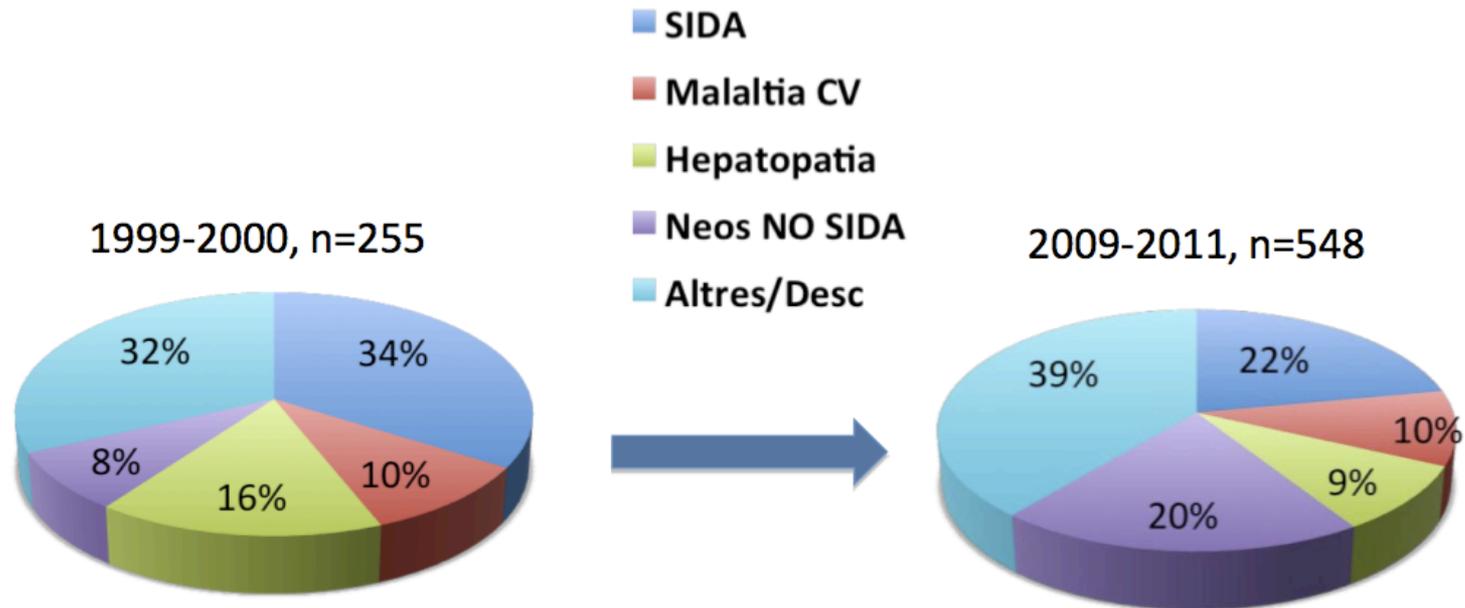
## 3. Ageing and HIV

# Ageing and HIV

- Definition:
  - **Gerontology:** 50 years, the CDC defined in this category of people with HIV / AIDS and over 49 years.
  - **Scientific :** defined as "elderly," people from 50 years and infected by HIV

# Chronic disease: Mortality cause

Mortality cause (cohort D:A:D):

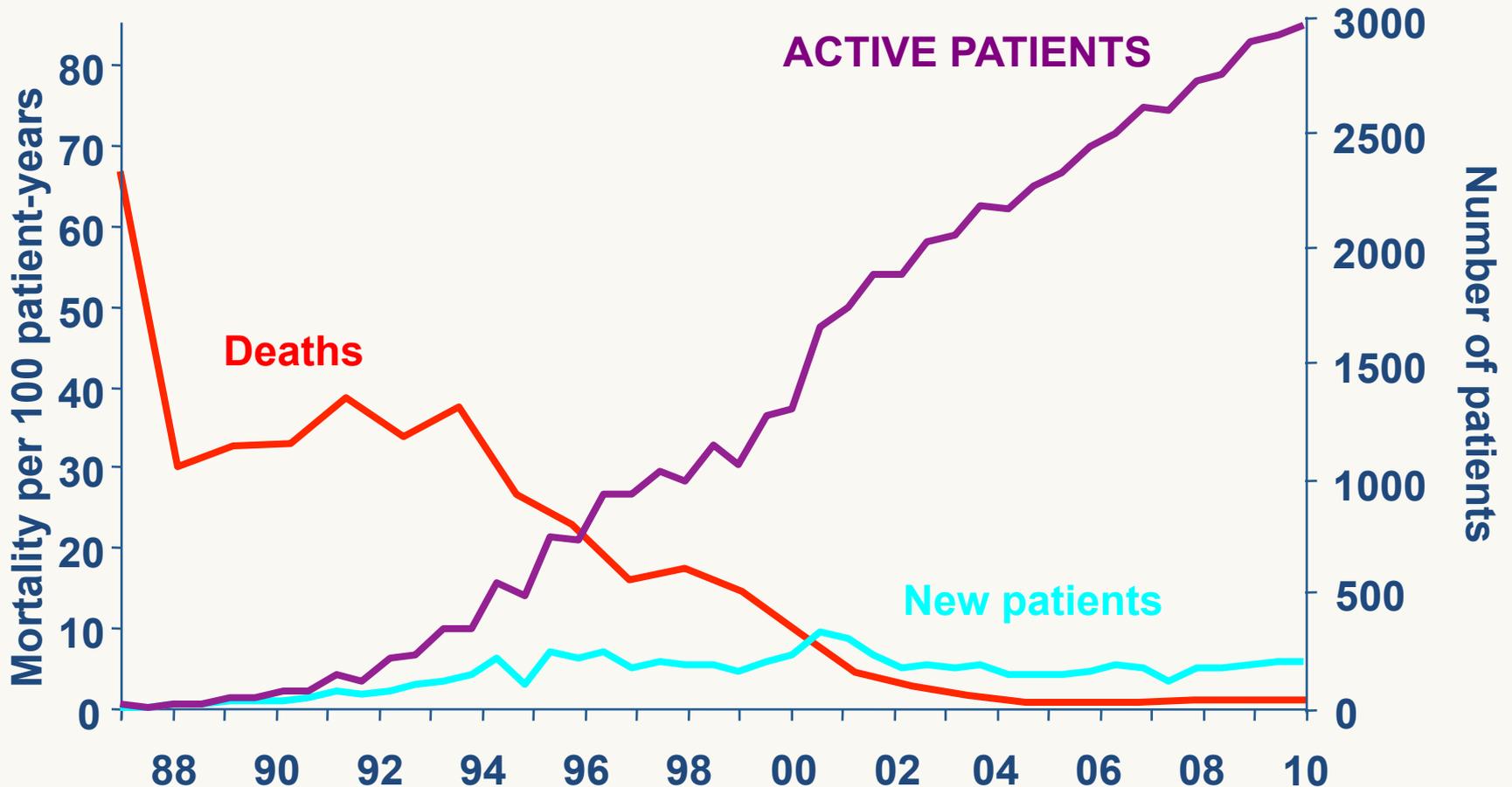


**Mortality rate decreasing from 17.4 to 8.3 death/1000/year**

Weber et al. Abstract THAB0304. XIX IAC. Washington 2012

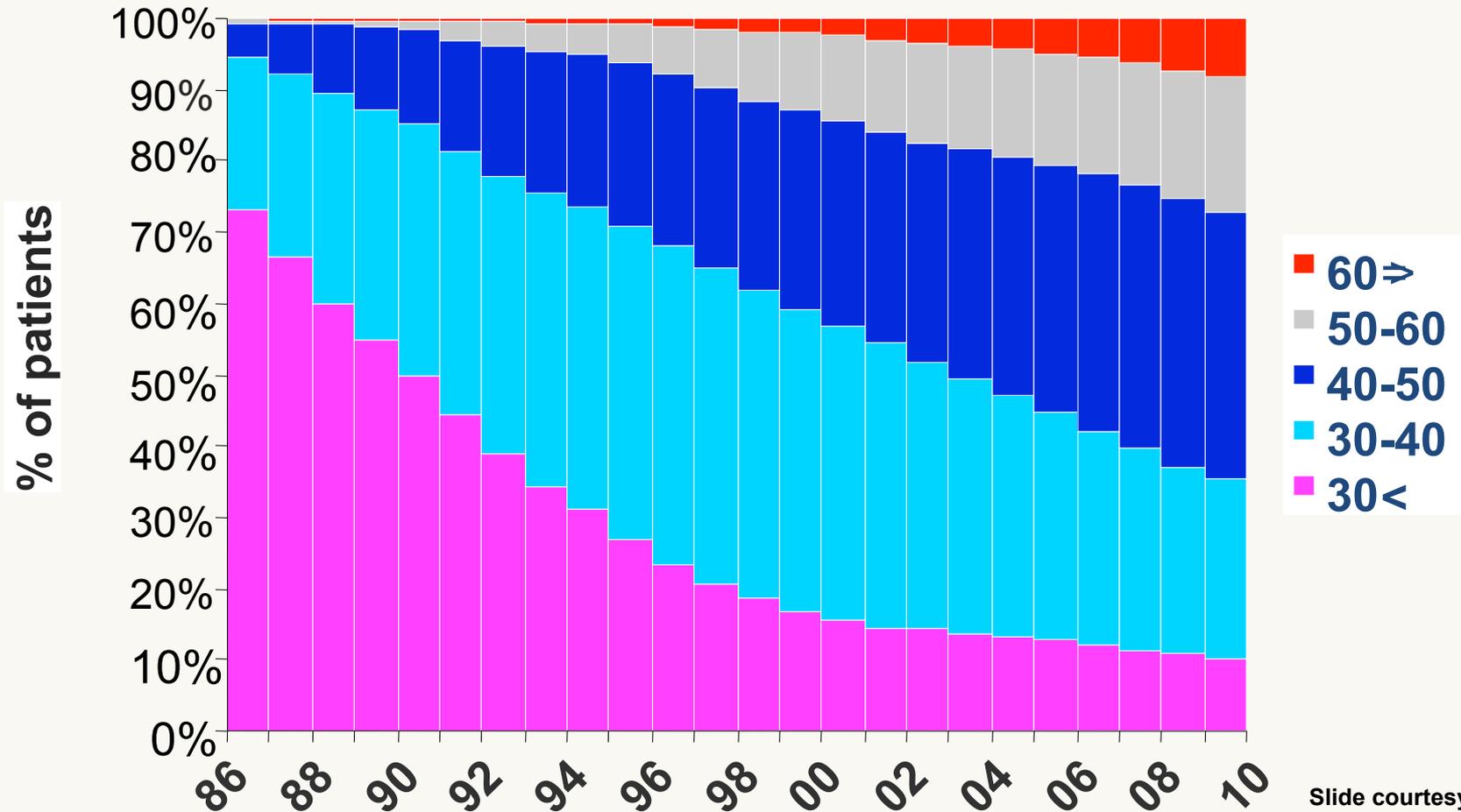
# HIV infection has changed from a fatal disease into a chronic condition

This means long-term exposure to ART



# Increasing proportion of older HIV+ persons

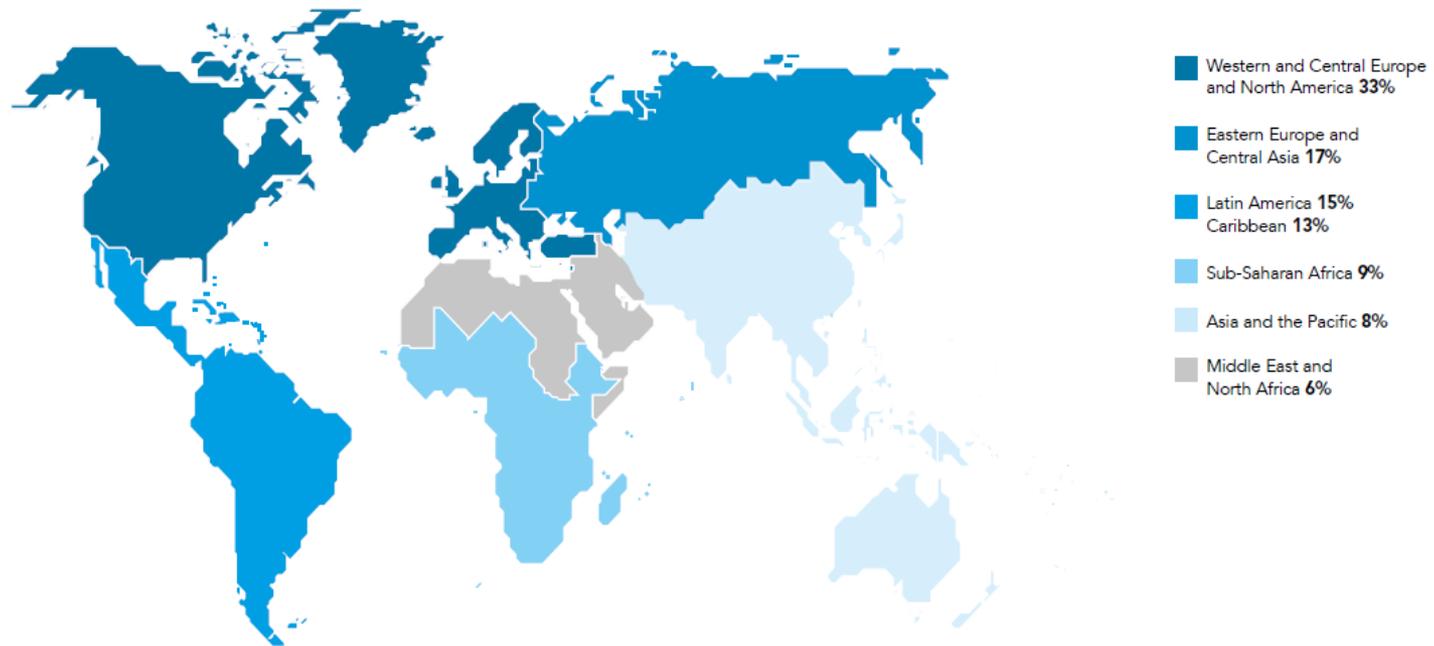
Netherlands ATHENA Cohort 1986-2010



Slide courtesy of Peter Reiss

# Global view: people HIV over 50 years

Estimated percentage of the adult population (15 years and over) living with HIV which is aged 50 years or over, by region, 2012.



Source: UNAIDS.

Globally, 35.3 million people were living with HIV at worldwide, an estimated 3.6 million people aged 50 years and older are living with HIV.

# Diseases associated with ageing and HIV

- Many illnesses associated with ageing also appear to be increased in treated HIV disease
  - Cardiovascular disease (CVD)<sup>1-3</sup>
  - Cancer (non-AIDS)<sup>4</sup>
  - Bone fractures / osteoporosis<sup>5,6</sup>
  - Liver disease<sup>7</sup>
  - Kidney disease<sup>8,9</sup>
  - Cognitive decline<sup>10</sup>
  - Frailty<sup>11</sup>
  - Mental health issues in older adults with HIV<sup>12</sup>
  - Metabolic syndrome<sup>13</sup>
  - Lung disease<sup>14</sup>
  - Sexual dysfunction<sup>15</sup>

1. Klein D, et al. *J Acquir Immune Defic Syndr* 2002; **30**:471–477.

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3. Grinspoon SK, et al. *Circulation* 2008; **118**:198–210.

4. Patel P, et al. *Ann Int Med* 2008; **148**:728–736.

5. Triant V, et al. *J Clin Endocrinol Metab* 2008; **93**:3499–504.

6. Arnsten JH, et al. *AIDS* 2007; **21**:617–623.

7. Bica I et al. *Clin Infect Dis* 2001; **32**:492–497.

8. Odden MC, et al. *Arch Intern Med* 2007; **167**:2213–2219.

9. Choi A, et al. *AIDS* 2009; **23**:2143–2149.

10. McCutchan JA, et al. *AIDS* 2007; **21**:1109–1117.

11. Desquilbet L, et al. *J Gerontol A Biol Sci Med Sci* 2007; **62**:1279–1286.

12. High KP et al. *J Acquir Immune Defic Syndr* 2012; **60**(Suppl.1):S1–18.

13. Gazzaruso C et al. *Diabetes Care* 2002; **25**:1253–1254.

14. Crothers K, et al. *Am J Resp Crit Care Med* 2011; **183**:388–395.

15. Fakoya A, et al. *HIV Medicine* 2008; **9**:681–720.

# HIV and frailty

- **Frailty**- vulnerability to health threats
  - Accumulated functional defects
  - Cognitive, physical, social
  - Exhaustion, muscle weakness, slow gait, weight loss, decreased physical activity
  
- Can be measured
  - Fried's Frailty Phenotype
  - Short Physical Performance Battery
  - 400 m walk time

# Diseases associated with ageing and HIV

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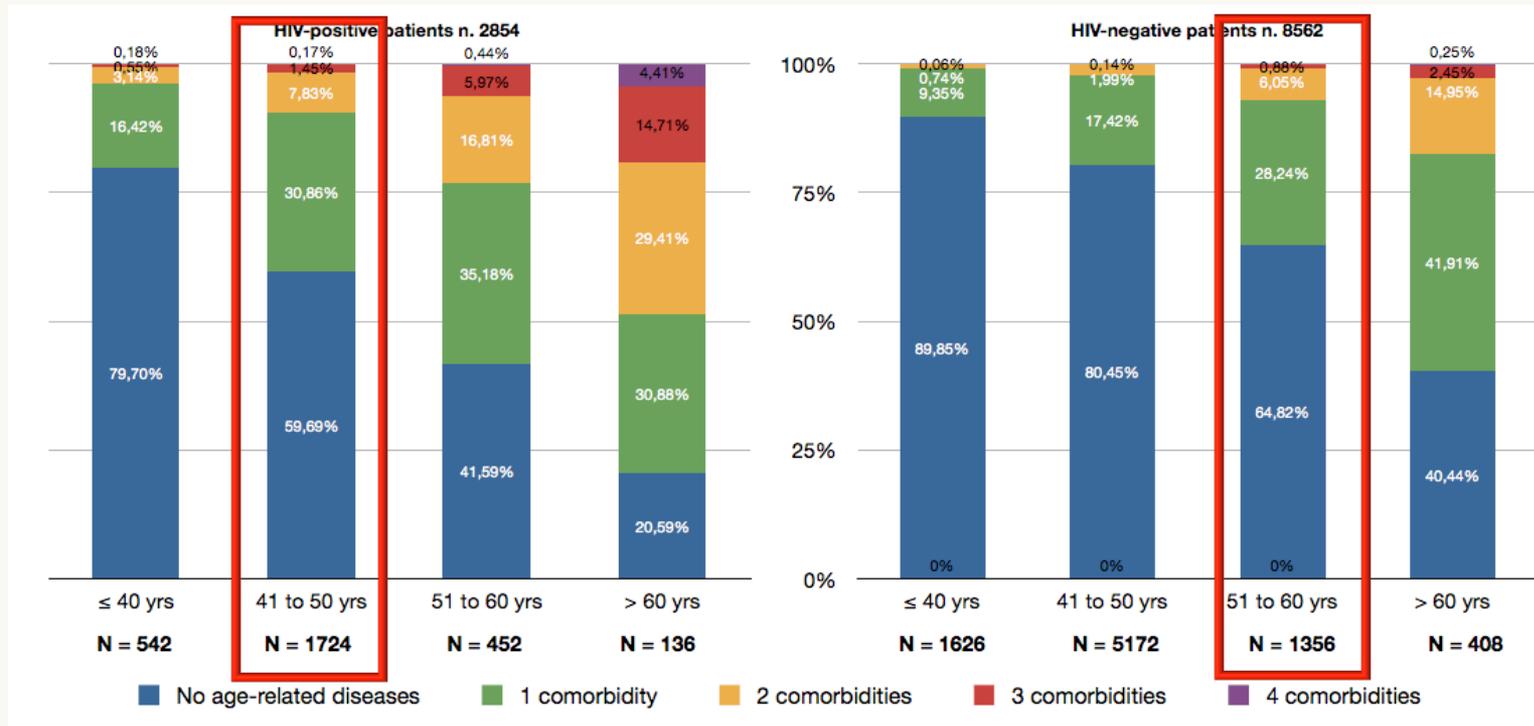
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# Incidence of Multiple Comorbidities Increases with Age in HIV-infected patients

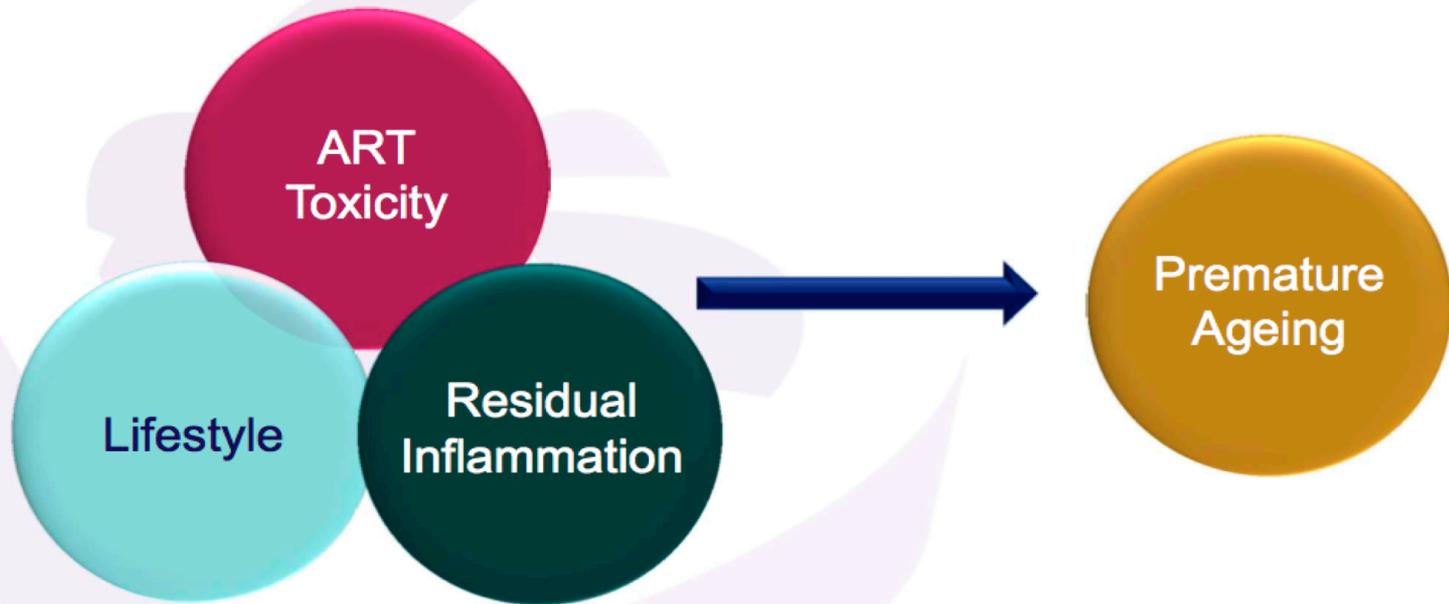


Pp prevalence was higher in cases than controls in all age strata (all p-values <0.001)

Pp prevalence seen cases aged 41-50 was similar to that observed among controls aged 51-60 controls (p=0.282)

Guaraldi, et al. CID 2011; 53:1120

- Many chronic diseases of ageing may be driven by lifestyle factors, inflammation and ART toxicity

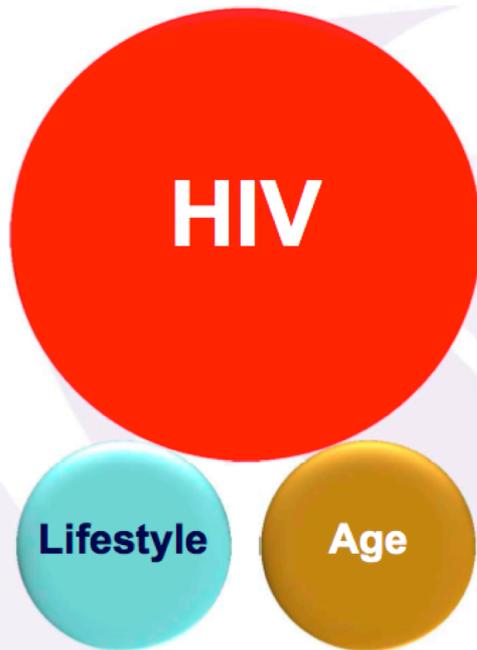


Adapted from Deeks SG, *et al. BMJ* 2009; **338**:a3172.

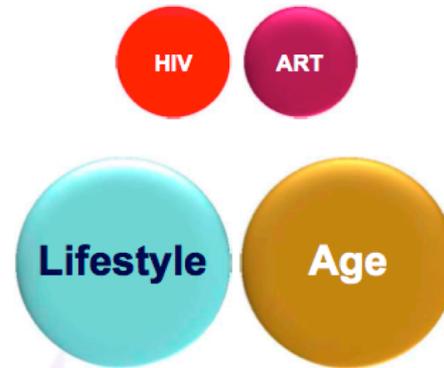
 **HIV** and **HEALTHY**  
AGEING BODY

# Ageing, VIH and ART

Contribution to risk of chronic diseases without ART



Contribution to risk of chronic diseases with ART



Absolute size only for illustration.  
Does not reflect actual values.

 **HIV** and **HEALTHY**  
your **AGEING BODY**  
FORWARD IN A SERVICE TO MEMBERS IN GLOBAL ALLIANCE



## 4. Successful ageing

# Successful ageing

Being cognitively and emotionally functional, having supportive social networks that fulfill personal and intimate needs, and avoiding medical problems while retaining vigor and mobility

- **Prevention of disease and disability**

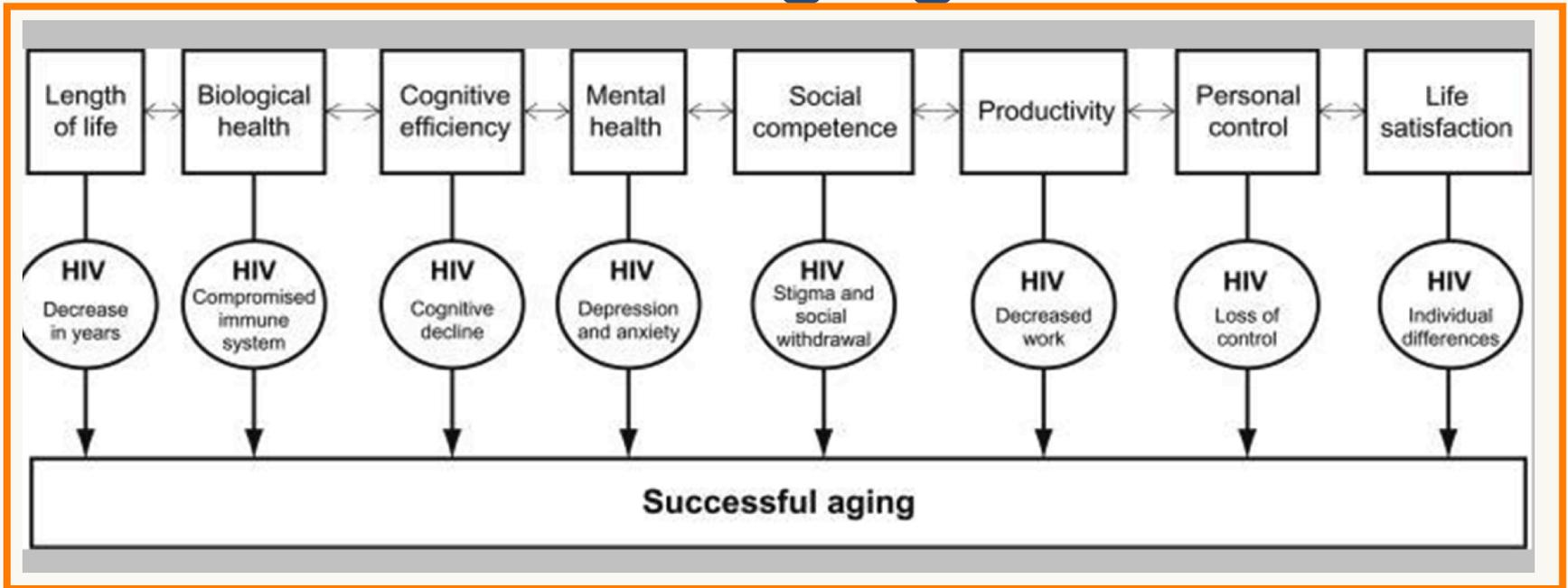
- **Maximizing cognitive and physical functioning**

- **Active engagement in life**

[Vance DE](#). Successful aging with HIV: a brief overview for nursing. [J Gerontol Nurs](#). 2009 Sep;35(9):19-25.



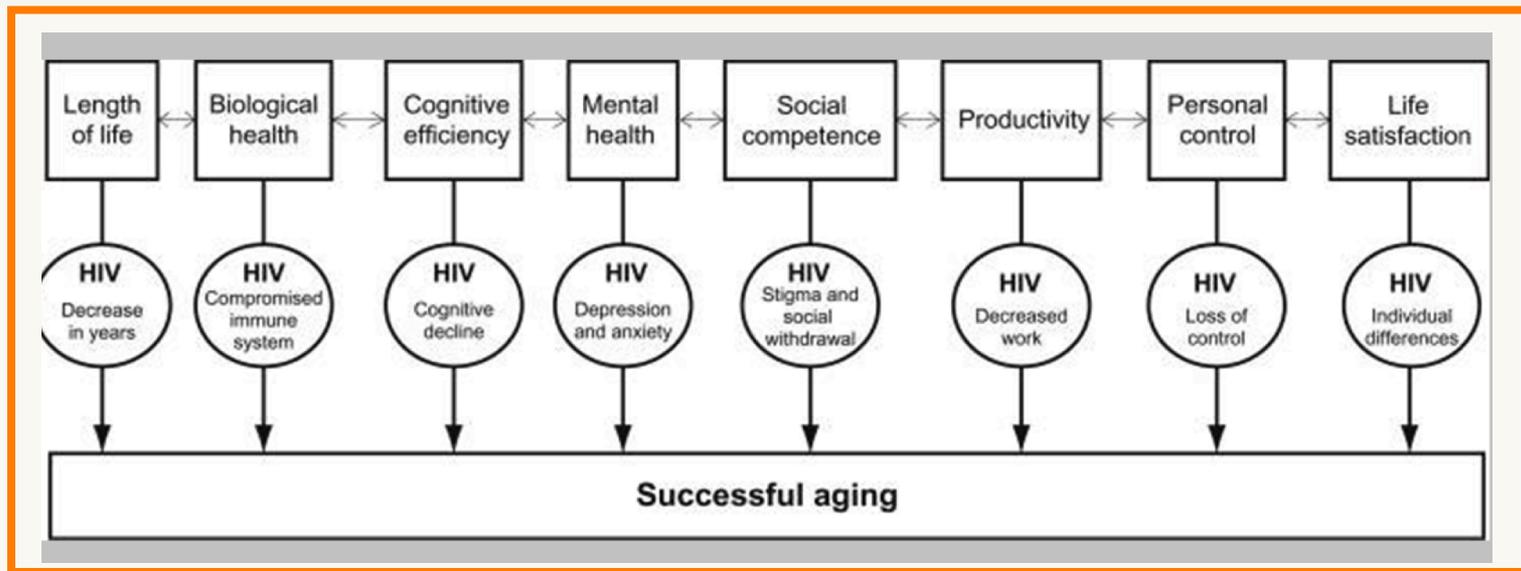
# Successful Aging with HIV



Successful aging is composed of eight factors: length of life, biological health, cognitive efficiency, mental health, social competence, productivity, personal control, and life satisfaction. (Baltes & Baltes).

The factors necessary for successful aging with HIV presented in Figure are dynamic and interact with each other in innumerable ways.

[David E Vance](#), et col. Successful aging and the epidemiology of HIV. Clin Interv Aging. 2011; 6: 181–192



**Length of life**



**Biological health.**

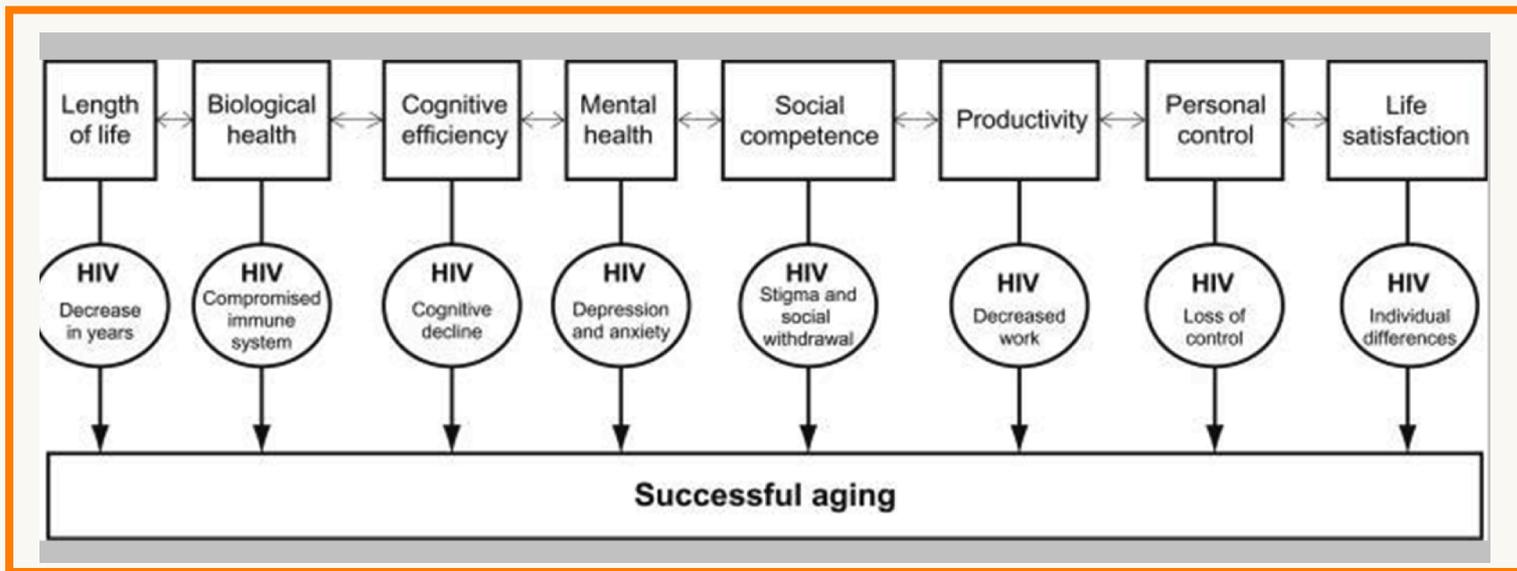


**Cognitive efficiency**

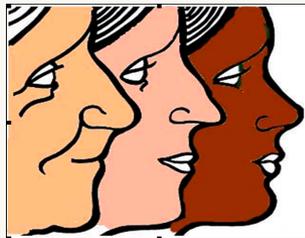


**Mental health**





**Social competence**



**Productivity**

**Personal control**



**Life satisfaction**



## 5. Recommendations and health promotion

# Reflections to consider:

**HAART:** oo trials

**Women:** Menopause occurs from 10 to 15 years before

**Sexuality** (active):

Men: Erectile dysfunction due HAART

Women: Decrease of libido.

Thinner mucosal membranes in the genital area

**STI:** Annual monitoring.

**Smoking:** HIV accelerates the harm of smoking.

**Cognitive status:** In HIV cognitive impairment is premature.

Robau M, et al. Prevenir más cuidar mejor. Cuidados de enfermería y VIH/sida. AIDS Cyber 2013; 16 (3): 52-61

# Health care providers



You need to create new dynamic links between the different interdisciplinary teams, due to age-related changes, comorbidities and polypharmacy, eg HIV specialist, geriatrician and family physician

Nursing care of excellence.

- Convey: Aging with HIV is **possible**.
- Assess: **Adherence**.
- Ensure: Promote **healthy lifestyles**.
- Evaluate: **Emotional state**
- Detect: Active substances addition.
- Know: Community sources.
- Give emotional support and maintains a strong link between patient and carer.

Vance DE et al. Aging with HIV: clinical considerations for an emerging population. Am J Nurs. 2010 Mar; 110(3):42-7.

# Summary

## **Interdisciplinary team**

Good communication, efficient management, and foster a good relationship towards the patient

## **Empower the patient**

To follow up the care and people with compromised health due to HIV and ageing

## **Biopsychosocial care**

Nursing interventions: lifestyle, diet, providing emotional support and maintaining the link established



**thank you**  
**moltes gràcies**