Healthy Ageing with HIV
(It’s More than Just Laboratory Values)

Barcelona
October 19th 2014

Margarita Robau Gassiot
mrobau@clinic.ub.es
Hospital Clínic Barcelona
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 accrues 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

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

the problematic of old age is not age
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

HIV infection has changed from a fatal disease into a chronic condition. This means long-term exposure to ART.

Data from Hospital Clinic, Barcelona (Spain)
Slide courtesy of Jose Gatell
Increasing proportion of older HIV+ persons

Netherlands ATHENA Cohort 1986-2010

% of patients

- 60+
- 50-60
- 40-50
- 30-40
- 30<
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)\(^1\)\(^-\)\(^3\)
  - Cancer (non-AIDS)\(^4\)
  - Bone fractures / osteoporosis\(^5\),\(^6\)
  - Liver disease\(^7\)
  - Kidney disease\(^8\),\(^9\)
  - Cognitive decline\(^10\)
  - Frailty\(^11\)
  - Mental health issues in older adults with HIV\(^12\)
  - Metabolic syndrome\(^13\)
  - Lung disease\(^14\)
  - Sexual dysfunction\(^15\)

---

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

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

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.
Ageing, VIH and ART

Contribution to risk of chronic diseases without ART

Contribution to risk of chronic diseases with ART

HIV

Lifestyle

Age

HIV

ART

Lifestyle

Age

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

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.

Length of life

Biological health

Cognitive efficiency

Mental health
Social competence

Productivity

Personal control

Life satisfaction
5. Recommendations and health promotion

the problematic of old age is not age
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.

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.

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