Older Adults with HIV & Long-term Survivors

Michelle Floris-Moore, MD, MS, FIDSA Associate Professor of Medicine Division of Infectious Diseases UNC School of Medicine

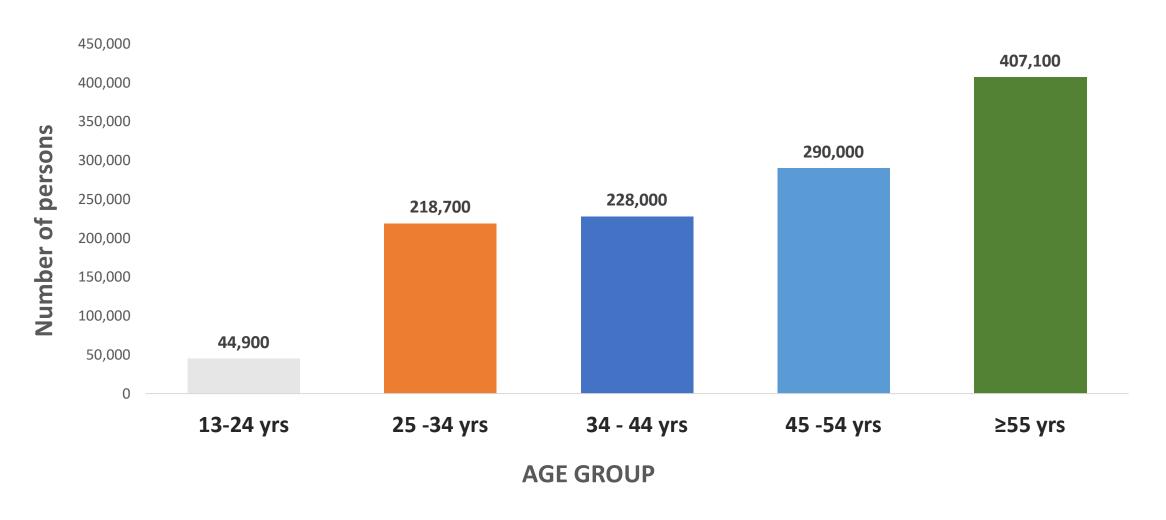




DISCLOSURES

ViiV Healthcare Advisory Board

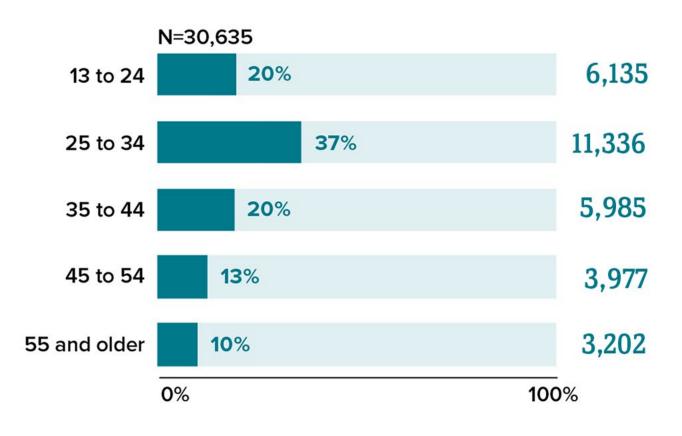
Estimated HIV Prevalence among Persons Aged ≥13 Years in U.S. by Age Group, 2019



CDC. Estimated HIV incidence and prevalence in the U.S., 2015–2019. HIV Surveillance Supplemental Report 2021;26(No. 1).

Differences in New HIV Diagnoses by Age

People aged 45 years and older accounted for 23% of new HIV diagnoses in 2020



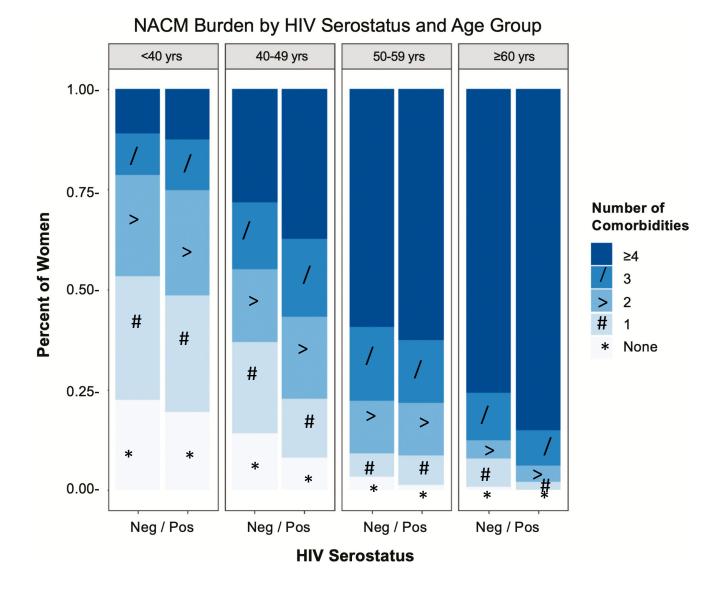


Late-Stage Diagnosis of HIV

- Late-stage diagnosis of HIV remains a major contributor to morbidity and mortality.
- In 2019, 20.4% of persons diagnosed with HIV in the U.S. and dependent areas had Stage 3 HIV/AIDS at time of diagnosis.
- The highest percentages of late-stage HIV diagnosis were seen among:
 - Older persons (31.9% for people aged 45 54 years; 34.5% for people ≥55 years)
 - Men with infection attributed to heterosexual contact (33.4%)
 - People living in rural areas (25.2%)

PREVALENCE OF NON-AIDS COMORBIDITIES: WIHS COHORT

- Compared to HIV seronegative women, women with HIV had:
 - Higher mean number of NACM (3.6 vs 3.0, p<.0001)
 - Higher prevalence of liver disease, dyslipidemia, bone disease, psychiatric illness, and non-AIDS cancer (all p<.01)
- In multivariate analyses, HIV was associated with higher NACM burden among women aged 40-49 and ≥60 years.

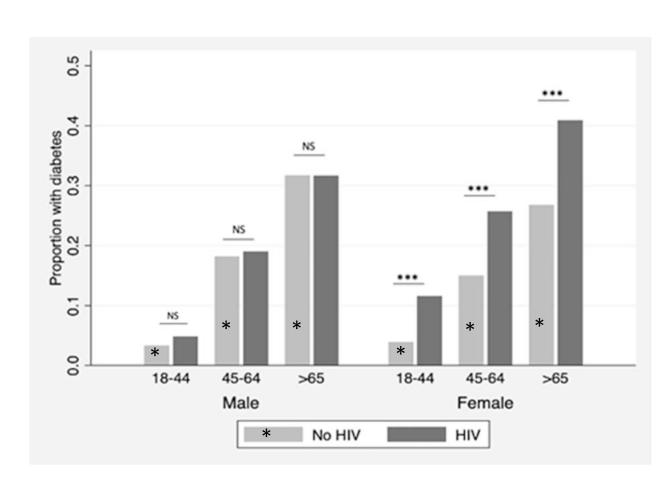




Rates of Diabetes Mellitus among People with HIV

Retrospective cross-sectional analysis of EHR data from 26 health systems across the U.S. from 2016-2021.

- 39,485 PWH and 19,143,240 persons without HIV
- Prevalence of DM among women with HIV was 23%, compared to 16% among men with HIV and 15% among persons without HIV.
- In multivariate analysis, women with HIV had 1.31 the odds of having T2DM compared with women without HIV (95% CI, 1.24–1.38)
- No association between HIV and T2DM was observed among men (aOR 1.01, 95% CI 0.98– 1.05)



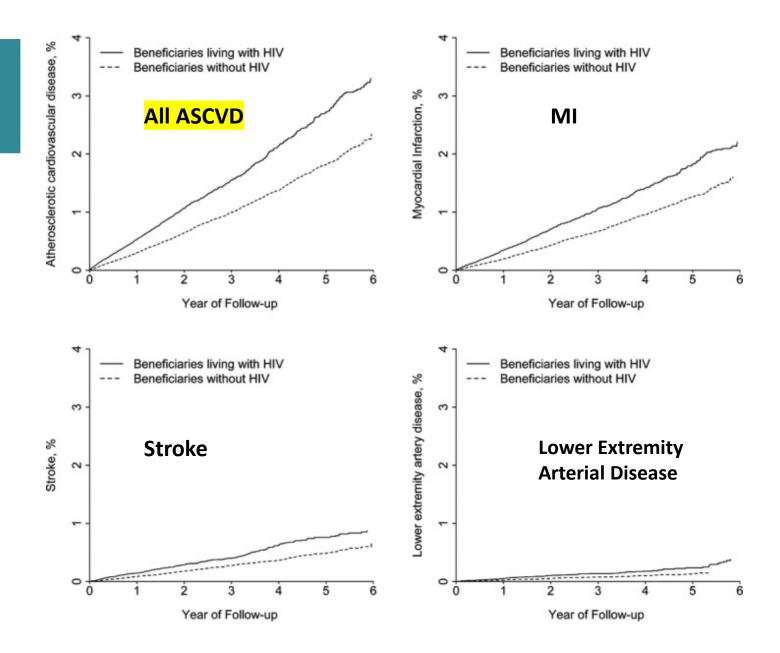
RISK OF Atherosclerotic Cardiovascular Disease in PLWH

CUMULATIVE RISK OF ASCVD

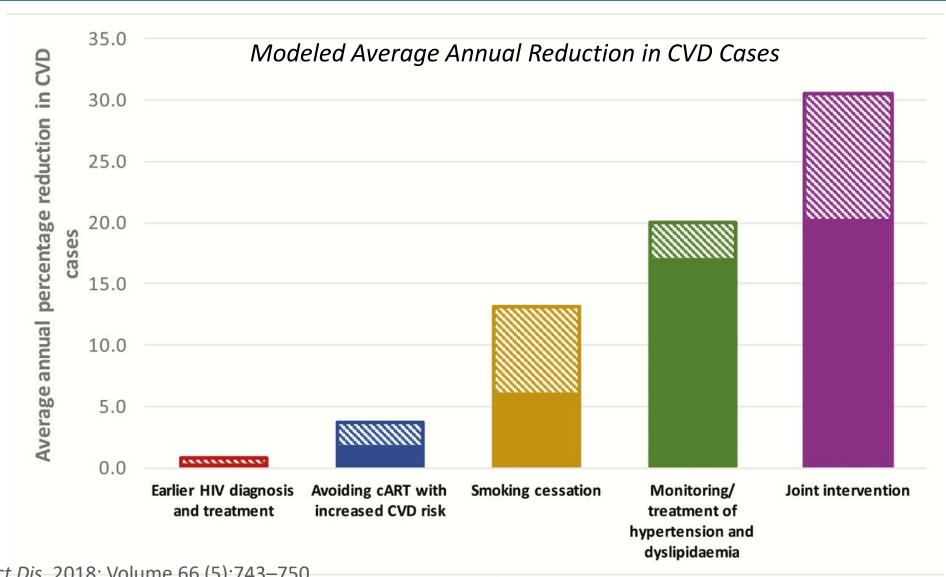
- o PWH (n = 82,426)
- Age-, sex-, and calendar year-matched seronegative comparison group (N = 329,704)
- o 84% male
- 57% ≥45 years old

4.5% of HIV+ and 3.4% of controls had baseline h/o CHD, Stroke, Lower Extremity Arterial Disease (LEAD)

HIV+ had higher incidence of all ASCVD (HR 1.29) and of MI, Stroke and LEAD (HRs 1.26, 1.30, and 1.46)



Relative CVD Risk Reduction With Different Interventions



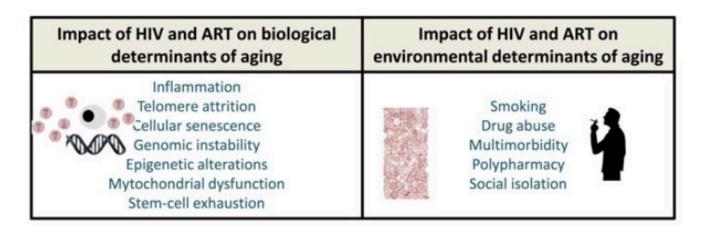
Smit, M. Clin Infect Dis, 2018; Volume 66 (5):743–750,

https://doi.org/10.1093/cid/cix858

Frailty in People with HIV

Serrano Villar. Open Forum Infectious

Diseases · May 2016



Loss of Physiological redundance

Impaired nutrition/Sarcopenia

Cumulative loss of function

Health vulnerability

Organ-specific disease
Cardiovascular disease
Chronic Kidney disease
Emphysema/COPD
Osteoporosis
Malignancies
Neurocognitive decline

MULTIMORBIDITY
FLUCTUATING DISABILITY
FRAILTY
INCREASE CARE NEEDS

Polypharmacy and Falls among Women with HIV

- Compared to use of ≤4 non-ARV medications, adjusted for HIV status, demographics, comorbidities and substance use:
- Use of 5 9 non-ARV meds was associated with higher odds of:
 - a single fall (OR_{adi} 1.52, 95%Cl 1.22-1.90)
 - multiple falls (**OR**_{adi} **1.71**, 95%Cl 1.34-2.19)
 - <u>falls with injury</u> (**OR**_{adi} **1.85**, 95%CI 1.39-2.45)
- Use of >9 non-ARV meds was associated with even higher odds of:
 - a single fall (OR_{adi} 2.08, 95%Cl 1.60-2.69)
 - multiple falls (**OR**_{adj} **2.69**, 95%Cl 2.00-3.62)
 - <u>falls with injury</u> (**OR**_{adi} **2.43**, 95%CI 1.74-3.37)

HIV+ (N = 1315)	HIV- (N = 557)	P
		0.0002
648 (49.3)	329 (59.1)	
433 (32.9)	161 (28.9)	
234 (17.8)	12.0	
		0.01
732 (55.7)	349 (62.7)	
288 (21.9)	95 (17.1)	
295 (22.4)	113 (20.3)	
295 (22.)	113 (20.3)	
	648 (49.3) 433 (32.9) 234 (17.8) 732 (55.7) 288 (21.9) 295 (22.4)	433 (32.9) 161 (28.9) 234 (17.8) 12.0 732 (55.7) 349 (62.7) 288 (21.9) 95 (17.1) 295 (22.4) 113 (20.3)

Psomas CK. J Acquir Immune Defic Syndr 2022;90(3):351-359.

DOI: 10.1097/QAI.000000000002955

What can we do?

Keeping viral load suppressed decreases risk of HIV-associated and non-associated comorbidities.

Early diagnosis of HIV infection and initiation of ARVs at higher CD4+ cell counts may be beneficial.

Management of metabolic and cardiovascular disease risk factors is an important component of care for older people with HIV

Combatting social isolation is an important aspect of successful aging

Addressing impact of stigma on older people living with HIV is crucial in order to improve health outcomes.

Enhanced Approaches to Caring for Older People with HIV

Weill Cornell Medicine: Incorporation of a comprehensive geriatric assessment into HIV Primary Care Clinic.

- Geriatricians provide on-site consultative services in the HIV Clinic
- Patients referred by Primary HIV provider/Nurse/Social Worker
- Interdisciplinary team meeting after Geriatrics consultation to finalize recommendations.
- Cognition was most frequent patient concern. Other topics frequently discussed: Non-AIDS comorbidities, functional status, community support

Comprehensive geriatric assessment (CGA)

- Discussion of health and aging-related concerns including vision, hearing, falls,
- ➤ PHQ-4,
- > Frailty screen
- Assessment of ADLs and IADLs
- Grip strength
- > FRAX (Fracture Risk Assessment tool)
- ➤ VACS (Veterans Aging Cohort Study Index)
- ➤ MoCA (Montreal Cognitive Assessment)
- > Physical exam.

Siegler EL et al. HIV/AIDS Res Palliative Care. 2021;13:467-74

Enhanced Approaches to Caring for Older People with HIV

NORTHERN POINT: Heart and Mind

Components: Cardiology clinic on-site, brain health and memory classes, cognitive assessment testing

WESTERN POINT: Dental, Hearing and Vision

Components: Medical assistant navigation to these three services



SOUTHERN POINT: Network and Navigation

Components: Social support groups, link with community programs, peer navigators and helpers

EASTERN POINT: Bones and Strength Components: Frailty and fall assessments, chair exercise classes, DEXA machine on-site (coming)

Golden Compass Program – San Francisco General

- Multidisciplinary approach to management of HIV and age-related comorbidities
- Co-located HIV and non-HIV care in HIV Primary Care setting (Geriatrics, Cardiology, Cognitive evaluations)
- Linkage to other subspecialty care
- Nursing, Pharmacy, Social Work, Case Management.
- On-site exercise and brain health classes.

THANK YOU

Michelle Floris-Moore, MD, MS, FIDSA
UNC School of Medicine
Chapel Hill, NC
mfloris@med.unc.edu

