P171 Women living with HIV: how far to fulfil the gap?

Cervo A. [1] , Pellegrino M. [2] , Casari F. [2] , Puzzolante C. [1] , Guaraldi G. [1,2], Mussini C. [1,2]
[1] University Hospital Policlinico of Modena, Infectious Diseases Unit, Modena (MO), Italy
[2]University of Modena and Reggio Emilia, Infectious Diseases Unit, Modena (MO), Italy

Background

The aim of this study was to define the clinical profile of women living with HIV (WLWH) to find potential gaps in care and to implement strategies for retention and improving quality of life.

Methods

Retrospective study including cis-gender WLWH attending HIV Clinic in Modena since 1996. Active follow-up defined as presence of at least one visit after 1st Jan 2023. Demographic, metabolic, HIV-related and ART-related characteristics were compared according to ethnicity in WLWH in active follow-up. Virological failure (VF) was defined if HIV RNA >200 copies/ml on ART and/or no visit for more than 18 months.

Results

Nine-hundred-sixty-four women had at least one access in HIV Clinic: 67.6% Caucasian, 28% African, 1% Asiatic and 3% Central/South-American. Among those, 29.5% were lost to follow-up (40.5% and 55% of them were African and Caucasian, respectively), 5.1% moved to other centre, 12.2% deceased. Among 491 women in active follow-up, 368 (72%) and 123 (24%) were Caucasian and African, respectively, as shown in Table 1. Caucasian WLWH were more frequently smokers and dyslipidemic (p<0.01). African women were more frequently obese and diabetic (p<0.01); they experienced more frequently VF (p=0.021) and had lower CD4 cell count (p=0.05) and CD4/CD8 ratio (p=0.001) at the last follow-up.

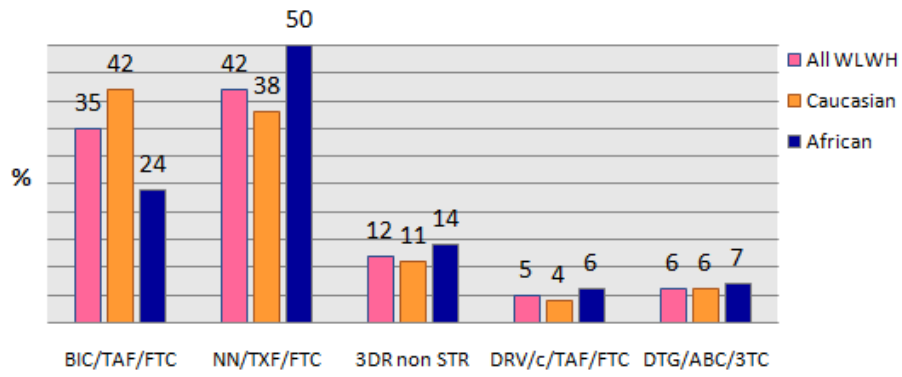
Table 1. Characteristics of women living with HIV (African versus Caucasian)

	Total (n=491)	Caucasian (n=368)	African (n=123)	*p*
Age at HIV diagnosis (years), median (IQR)	29.9 (18.5-53.2)	28.8 (18.2-54.7)	31.2 (18.7-48.4)	0.05
Age at last FU (years), median (IQR)	55 (34-70)	57 (37-71)	46 (30-59)	0.000
Risk factors, n (%)				0.000
Sex	347 (70.7)	237 (64.4)	110 (89.4)	
Vertical	4 (0.8)	4 (1.1)	0 (0)	
IVDU	104 (21.2)	103 (28.0)	1 (0.8)	
Transfusions	9 (1.8)	6 (1.6)	3 (2.4)	
Unknown	27 (5.5)	18 (4.9)	9 (7.3)	
AIDS, n (%)	83 (16.9)	67 (18.2)	16 (13.0)	0.115
HCV, n (%)	141 (28.7)	139 (37.8)	2 (1.6)	0.000
HbsAg, n (%)	22 (4.5)	9 (2.4)	13 (10.6)	0.001
Viro-immunological characteristics				
CD4 cell count at diagnosis (cells/mmc), median (IQR)	427 (42-1167)	458 (39-1232)	326 (42-715)	0.000
CD4/CD8 ratio at diagnosis, median (IQR)	0.53 (0.08-1.30)	0.58 (0.11-1.95)	0.39 (0.05-0.98)	0.000
HIV RNA >50 copies/ml at last FU, n (%)	27 (5.5)	16 (4.3)	11 (8.9)	0.044
Number of VF, median (IQR)	0 (0-3)	0 (0-2)	0 (0-4)	0.021
Last value of CD4 (cells/mmc), median (IQR)	773 (282-1433)	789 (288-1512)	702.9 (251.5-1290)	0.046
Last ratio CD4/CD8, median (IQR)	1.09 (0.30-2.30)	1.13 (0.36-2.37)	0.94 (0.19-2.26)	0.001
Antiretroviral regimen at last follow up				
Three drug-based regimen, n (%)	270 (55)	171 (46.5)	99 (80.5)	0.000
Two drug-based regimen, n (%)	214 (43.6)	192 (52.2)	22 (17.9)	
PI, n (%)	52 (10.6)	38 (10.3)	14 (11.4)	0.439
INSTI, n (%)				0.000
RAL	18 (3.7)	12 (3.3)	6 (4.9)	
DTG/BIC/CAB	319 (65.0)	262 (71.2)	57 (46.3)	
NNRTI, n (%)				0.113
RPV/NEV/EFV	178 (36.3)	124 (33.7)	54 (43.9)	
DOR	24 (4.9)	18 (4.9)	6 (4.9)	
TAF-based regimen, n (%)	220 (44.8)	142 (38.6)	78 (63.4)	0.000
Biochemistry at last follow up visit				
Hb (g/dl), median (IQR)	13.6 (11.1-15.3)	13.8 (11.6-15.3)	12.7 (10.7-14.6)	0.000
LDL Cholesterol > 130 mg/dl, n (%)	108 (22.0)	88 (23.9)	20 (16.3)	0.130
Triglycerides> 150 mg/dl, n (%)	57 (11.6)	52 (14.1)	5 (4.1)	0.002
Comorbidities				
Smoking, n (%)	154 (31.4)	147 (39.9)	7 (5.7)	0.000
Hypertension, n (%)	179 (36.5)	130 (35.3)	49 (39.8)	0.174
Diabetes, n (%)	45 (9.2)	26 (7.1)	19 (15.4)	0.005
Dyslipidemia, n (%)	310 (63.1)	250 (67.9)	60 (48.8)	0.000
Cardiovascular disease, n (%)	22 (4.5)	16 (4.3)	6 (4.9)	0.471
BMI > 30, n (%)	81 (16.5)	45 (12.2)	36 (29.3)	0.000
Osteoporosis*, n (%)	98 (20.0)	90 (24.5)	8 (6.5)	0.015
Menopause*,* n (%)	214 (43.6)	196 (53.2)	18 (14.6)	0.000
Cancer***, n (%)	108 (22.2)	92 (25.3)	16 (13.0)	0.005

*data on osteoporosis were available for 237 and 41 Caucasian and African women, respectively. **data on menopause were available for 259 and 58 Caucasian and African women, respectively. ***data on cancer were available for 366 and 117 Caucasian and African women, respectively.

Regarding current ART (Figure 1), African WLWH were more frequently on three-drug regimen (3DR) (p<0.001), often TAF-based (p<0.001); main use of NNRTI/TXF/FTC in single-tablet regimen was prevalent in African women than Caucasian ones (50% vs 38%)(p=0.012), while 2nd generation INSTI were less used (p<0.01). Among 221 women on dual therapy (45%), 22 (10%) were African; only 9 were in long-acting regimen, mainly Caucasian.

Figure 1. Three-drug regimen distribution in WLWH according to ethnicity in Modena (Total=262; Caucasian=164; African=98)



BIC=bictegravir; TAF=tenofovir diproxil alafenamide; FTC=emtricitabine; NN=non-nucleoside reverse transcriptase inhibitor; STR=single tablet regimen; DRV/c=darunavir/cobicistat; DTG=dolutegravir; ABC=abacavir; 3TC=lamivudine

Conclusion

African WLWH were generally less adherent, with higher rate of loss to follow-up and virological failure than Caucasian women. Moreover, they were characterised by higher burden of comorbidities, in particular obesity and diabetes. That led to multiple vicious circles, enhanced by different cultural, social and economic determinants: treatment choice of 3DR versus dual regimen, difficulties in screening and management of comorbidities, lower rate of cancer screening. More efforts are needed to fulfil the gap among African WLWH, adopting different retention-in-care, screening and preventive strategies in order to improve their quality of life.

Corresponding Author: Adriana Cervo, cervo.adriana@aou.mo.it

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