

The prevalence of major comorbidities among people living with HIV in Croatia

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Background:

The burden of HIV care is influenced by AIDS-related and non-AIDS related comorbidities (NAIDSC). All people living with HIV (PLWHIV) in Croatia are treated at the University Hospital for Infectious Diseases in Zagreb. The aim of our study was to provide national period prevalence data of major comorbidities in PLWHIV in Croatia in 2019.

Results:

Of 1168 PLWHIV included into the study, 90.2% (1053/1168) were male, median age was 44.6 (Q1–Q3: 37.6–53.5) with age ≥ 50 years in 405 (34.7%), main mode of transmission was sex between men (858, 73.5%) and heterosexual contact (239, 20.5%). Median age of those ≥ 50 was 56.5 years. The overall duration of HIV-1 infection was 7.5 (for those ≥ 50 years: 13.2) years, exposure to antiretrovirals was 6.4 (for those ≥ 50 years: 11.2) years. Chronic hepatitis B had 32 (2.7%) persons; hepatitis C antibodies were positive in 57 (4.9%) of whom 39 (68.4%) had an undetectable HCV viral load. Overall major NAIDSC (without skin cancer) were present in 175 (15.0%, 95%CI: 13.0–17.2; in those ≥ 50 years: N=90, 22.2%) persons (Table). NAIDSC occurred after an HIV diagnosis in 100 (8.6% and 74 (18.3% of those ≥ 50 years old); the most frequent being diabetes followed by ICP, MI and NADC. Of NADC after an HIV-diagnosis Hodgkin's lymphoma was most frequent (n=5). Fractures were predominantly traumatic and there were 4 cases of ESRD and no cases of ESDL. Clinical AIDS and ADC after HIV diagnosis occurred in 90 and 18 persons, respectively (Figure).

Materials and Methods:

Included were Croatian citizens/residents ≥ 18 years who were seen at UHID in 2019 who ever had at least 2-visits >6 months apart. The following comorbidities were analysed: AIDS-defining diseases, myocardial infarction (MI), stroke, invasive cardiovascular procedures (ICPs), cancer both AIDS (ADC) and non-AIDS defining (NADC), end-stage liver disease (ESLD), end-stage renal disease (ESRD), bone fractures and diabetes mellitus. All major comorbidities were expressed as percentages of the total HIV population in care and in those ≥ 50 years old.

Table. The prevalence of major comorbidities in 1168 people living with HIV in Croatia in 2019.

Major comorbidity	Total, N=1168	Age ≥ 50 years, N=405
	N, (%), 95% CI)	N, (%), 95% CI)
Had an AIDS-defining condition ^a	276, (23.6, 21.2–26.2)	137, (33.8, 29.3–38.7)
Myocardial infarction	20, (1.7, 1.1–2.7)	14, (3.5, 2.0–5.9)
Stroke	16, (1.4, 0.8–2.3)	10, (2.5, 1.3–4.6)
Invasive cardiovascular procedures	23, (2.0, 1.3–3.0)	16, (4.0, 2.4–6.5)
Cancer, total	74, (6.3, 5.0–7.9)	42, (10.4, 7.7–13.9)
ADC	46, (3.9, 2.9–5.3)	24, (5.9, 3.9–8.8)
NADC including skin cancer ^b	31, (2.7, 1.8–3.8)	30, (7.4, 5.1–10.5)
NADC excluding skin cancer	25, (2.1, 1.4–3.2)	15, (3.7, 2.2–6.2)
End-stage renal disease	4, (0.3, 0.1–0.9)	4, (1.0, 0.3–2.7)
Bone fractures, total	22, (1.9, 1.2–2.9)	18, (4.4, 2.7–7.1)
Bone fracture, traumatic	21, (1.8, 1.1–2.8)	17, (4.2, 2.5–6.8)
Bone fractures, nontraumatic	1, (0.1, 0.0–0.6)	1, (0.2, 0.0–1.6)
Diabetes mellitus	44, (3.8, 2.8–5.1)	36, (8.9, 6.4–12.2)

ADC, AIDS-defining cancers, NADC, non-AIDS defining cancers, ^aWithin 3-months of HIV-diagnosis for newly diagnosed persons. ^bAll skin malignancies were nonmelanoma cancers.

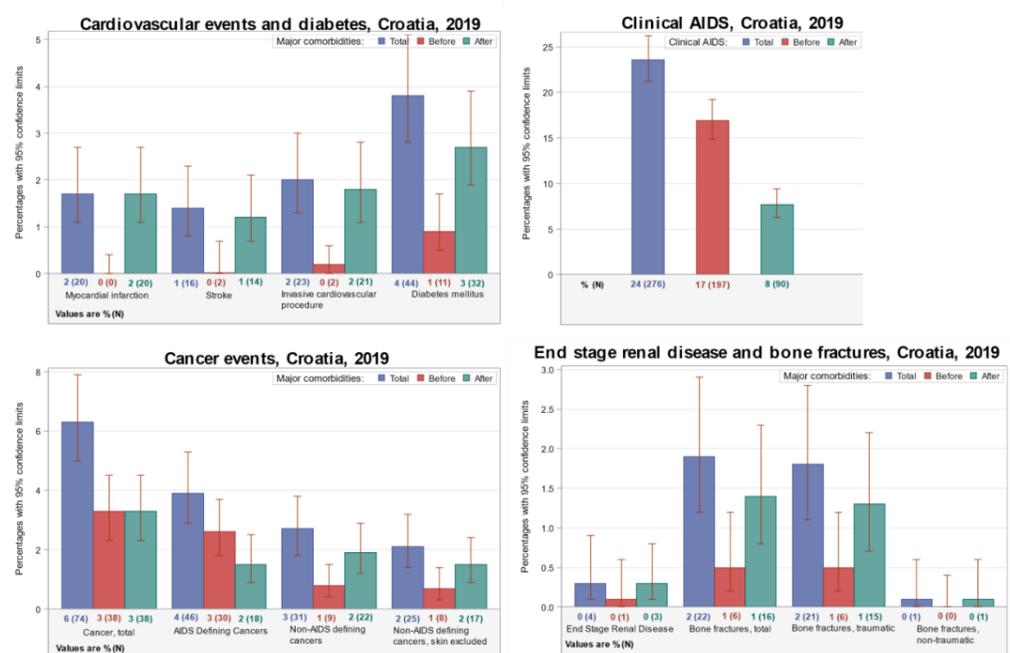


Figure. Prevalence of major comorbidities before and after the HIV-diagnosis in 1168 persons, Croatia 2019

Conclusions:

The overall prevalence of major clinical NAIDSC was 15.0% for the total HIV population and 22.2% for those ≥ 50 years old. The prevalence of individual major NAIDSC for the whole HIV population ranged from 0.0 to 3.8% with diabetes being the most frequent.