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BACKGROUND

- Eastern Europe together with Central Asia has the highest HIV incidence of all regions in the world¹.
- While effective ART is needed to stop HIV transmission, only an estimated **63%** of all people living with HIV (PLHIV) aware of their status were on ART in Eastern Europe in 2019².
- On a country level, **87%** of PLHIV aware of their status were receiving ART in Georgia and **80%** in Ukraine². Whereas, in Russia only **53%** were on ART in 2020³.
- No data on viral suppression in Russia reported to UNAIDS.
- Data lacking on **factors influencing viral suppression** in Eastern Europe.

OBJECTIVE

- To describe progress towards the UNAIDS 90-90-90 targets in a cohort of PLHIV in Eastern Europe.

METHODS

Study participants:

PLHIV from Russia, Ukraine, and Georgia enrolled in the CARE East Cohort with at least one clinical visit in 2019-2020 (“in care”) were included in the study.

Statistical analysis:

- Demographic and clinical characteristics of the study population were described overall and by country.
- A diagnosis-based HIV cascade of care was built to estimate the proportion **on ART** among persons in care, and **virologically suppressed (HIV VL <200 copies/mL)** among those on ART.
- Logistic regression was used to assess factors associated with viral suppression among those on ART.

RESULTS

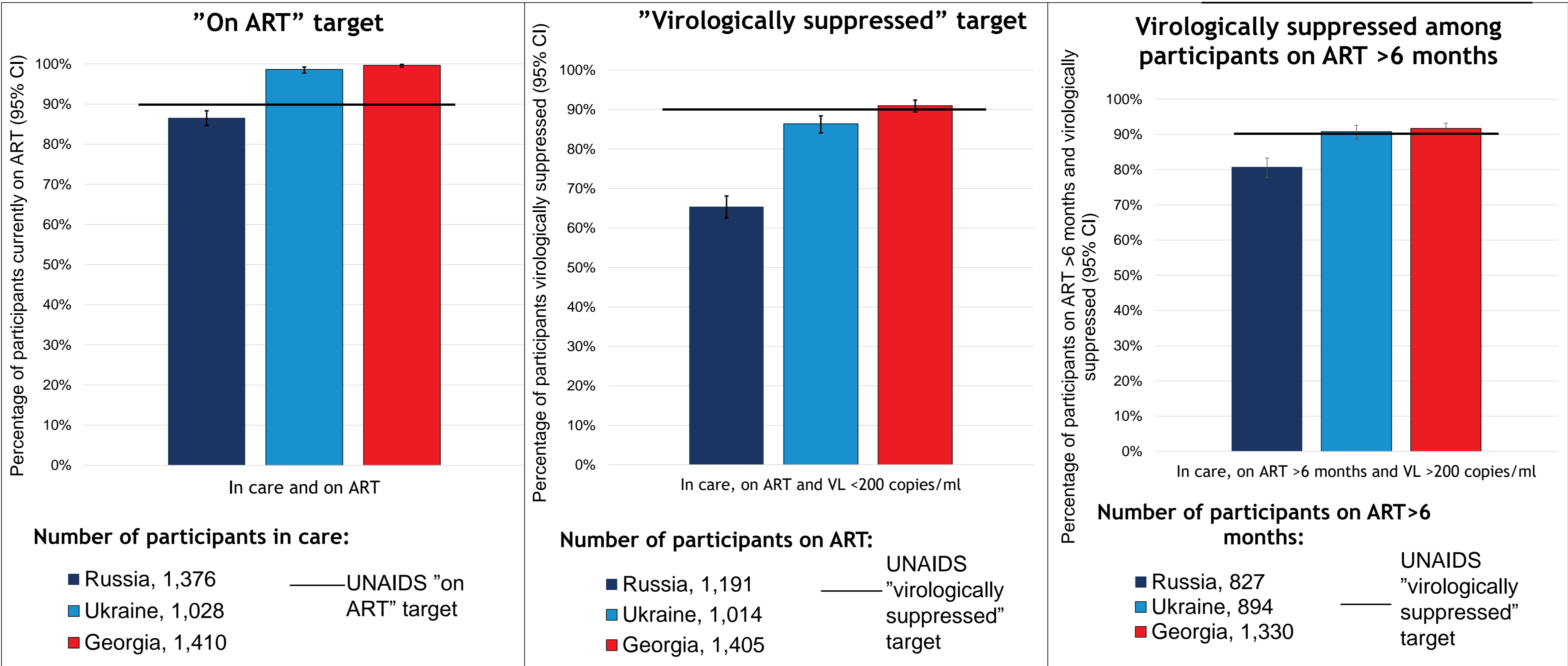
Of **4,035** participants enrolled in the CARE East cohort from three Eastern European countries, **3,814** were eligible for the study analysis. Study population was roughly equally distributed throughout the countries.

STUDY POPULATION					
		Overall	Russia	Ukraine	Georgia
Number of participants		3,814	1,376	1,028	1,410
Gender: male (%)		63.8	57.6	58.6	73.6
Age, years - median (IQR)		40 (34-46)	40 (35-45)	39 (35-44)	41 (33-49)
HIV acquisition mode	heterosexual (%)	59.3	63.6	56.3	57.4
	PWID (%)	25.8	26.5	30.2	21.9
	MSM (%)	14.3	9.7	13.0	19.6

HIV CASCADE OF CARE

Both **UNAIDS targets were achieved in Georgia** (99.6% and 91.0%, respectively), with only **“on ART” target achieved in Ukraine** (98.6% and 86.4%, respectively) and **neither achieved in Russia** (86.6% and 65.4%, respectively).

A higher proportion of PLHIV from Russia started ART <6months ago (5% in Georgia, 12% in Ukraine and 31% in Russia). In the **sensitivity analysis in the subgroup over 6 months on ART**, the largest increase in viral suppression was in Russia (from 65.4% in the main analysis to 80.7%). Still, Russia did not achieve the viral suppression target in this analysis, unlike Ukraine and Georgia.



FACTORS ASSOCIATED WITH VIRAL SUPPRESSION

- Older age and non-PWID HIV risk group were associated with increased likelihood of viral suppression;

- While enrolment in Russia, a more recent year of HIV diagnosis, HIV/HCV coinfection and protease inhibitor-containing ART were associated with lower odds of viral suppression.

CONCLUSIONS

- The target of 90% PLHIV on ART was achieved in Georgia and Ukraine, but not in Russia, while the target of 90% virologically suppressed was only achieved in Georgia.

- In the subgroup on ART >6 months, only Russia did not achieve the viral suppression target.

More effort is recommended to improve treatment coverage and viral suppression in PLHIV in care in Eastern Europe, especially in Russia.

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Participating sites – Russia:

Gamaleya Center for Epidemiology and Microbiology, Moscow
Moscow Regional Center for Prevention and Control of AIDS and Infectious Diseases
Clinical Center of HIV/AIDS of the Ministry of Health of Krasnodar Region

Participating sites – Ukraine:

Public Health Center of the Ministry of Health of Ukraine, Kyiv
Kyiv City AIDS Prevention and Control Center
Kyiv Regional Center for Public Health

Participating site – Georgia:

Infectious Diseases, AIDS and Clinical Immunology Research Center, Tbilisi

More information on CARE at <https://www.careresearch.eu/> and <https://chip.dk/Research/Studies/CARE>

¹ World Health Organization. Global progress report on HIV, viral hepatitis and sexually transmitted infections, 2021. ² 2020 Global AIDS Update — Seizing the moment — Tackling entrenched inequalities to end epidemics. ³ Rosпотребнадзор. Spravka “VICH-infekciya v Rossijskoj Federacii na 30 sentyabrya 2020 g.” [HIV infection in the Russian Federation as of 30 September 2020].