Large inter-country and intra-country differences in the HCV cascades of care in people living with HIV in Russia and Ukraine

Olga Fursa, Centre of Excellence for Health, Immunity and Infections (CHIP), Rigshospitalet, Copenhagen, Denmark

Co-authors: Joanne Reekie, Jens D Lundgren, Ihor Kuzin, Alina Kryshchuk, Olena Starychenko, Inna Khodus, Tetiana Maistat, Iryna Pryhoda, Marianna Ahieieva, Olena Varvarovska, Marina Bobkova, Lidiya Sklyar, Natalya Solov'eva, Alexander Pronin, Anton Eremin, Andrey Shemshura, Lars Peters, on behalf of the CARE study group

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Presenter Disclosure Information

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BACKGROUND

- *The WHO Global Health Sector Strategy on viral hepatitis aims to reduce hepatitis C prevalence by **diagnosing 90%** of persons infected with HCV and **treating 80%** of eligible persons by 2030[1].*

- As of 2019, **24%** of people with hepatitis C have been diagnosed and **8%** eligible persons treated in the WHO European Region[2].

- In the EuroSIDA study in HIV/HCV-coinfected persons from the WHO European Region, the largest gaps in HCV diagnosis and treatment coverage were found **in Eastern Europe**: **78.1%** diagnosed with chronic HCV and **44.8%** eligible persons treated[3].

1. *World Health Organization. Global Health sector strategy on Viral Hepatitis. 2016.*
2. *World Health Organization. Global progress report on HIV, viral hepatitis and sexually transmitted infections, 2021.*
3. *Fursa O. et al. HCV cascade of care in HIV/HCV coinfected persons in Europe in the DAA era. CROI 2021.*

STUDY OBJECTIVES

- To construct an HCV cascade of care (CoC) for people living with HIV and exposed to HCV, enrolled in the large Eastern European CARE cohort from Russia and Ukraine
- To describe and compare HCV care indicators between cities within each country
- To compare the results with the WHO targets of diagnosing 90% of persons with chronic HCV and treating 80% of eligible individuals

METHODS

Inclusion criteria:

- PLHIV in care who were positive for anti-HCV antibodies included in the study.
- "In care" - at least one clinical visit, CD4 count measurement or HIV RNA measurement within the CARE project timelines (1/1/2019 – 30/6/2020).

HCV CASCADE OF CARE[1, 2]	
DIAGNOSTIC STAGES	
1	anti-HCV antibody positive
2	ever HCV RNA tested
3	currently HCV RNA positive
TREATMENT STAGES	
4a	ever chronically infected with HCV (an estimated 79% of anti-HCV positive[3])
4b	ever diagnosed with chronic HCV
5	ever started treatment
6	treatment completed
7	sufficient follow-up after treatment
8	follow-up HCV RNA available
9	cured

1. *Amele S. et al. Establishing a hepatitis C continuum of care among HIV/hepatitis C virus-coinfected individuals in EuroSIDA. HIV Medicine 2019.*
2. *Fursa O. et al. HCV cascade of care in HIV/HCV coinfected persons in Europe in the DAA era. CROI 2021.*
3. *Soriano V. et al, Spontaneous Viral Clearance, Viral Load, and Genotype Distribution of Hepatitis C Virus (HCV) in HIV-Infected Patients with Anti-HCV Antibodies in Europe. Journal of Infectious Diseases, 2008.*

STUDY POPULATION

- A total of **2,934** PLHIV positive for anti-HCV antibodies included in the study.

Ukraine (N = 2,040)

71.7% male
Median age 41 years (IQR 37-45)
Mode of HIV infection:
- PWID 70.6%
- MSM 1.2%
- Heterosexual 27.9%

On ART: 97.5%
HIV viral suppression in 66.8%
HCV genotypes:
- 1 – 6.9%,
- 3 – 5.2%,
- missing - 87.8%

Liver fibrosis: F0/F1 – 38.1%, F4 – 3.1%, missing - 54.5%

Russia (N = 924)

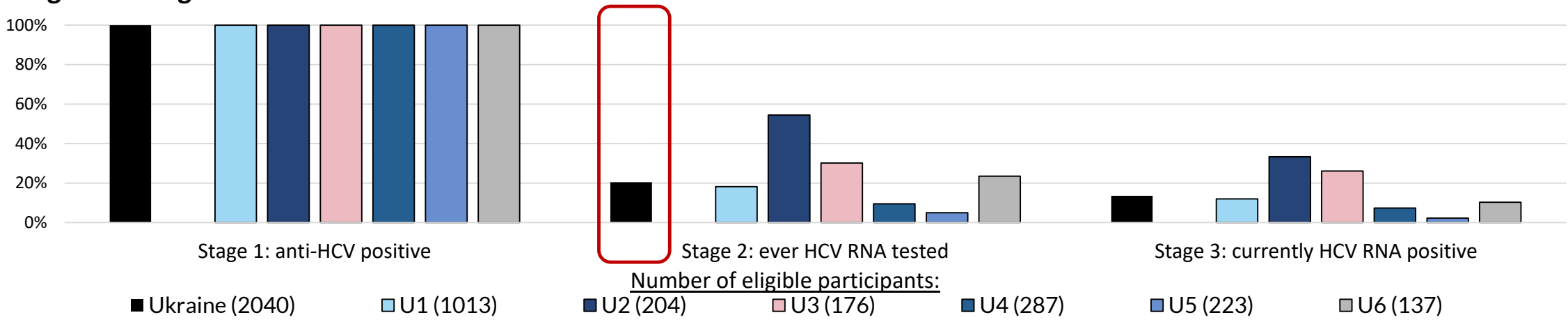
65.4% male
Median age 39 years (IQR 35-44)
Mode of HIV infection:
- PWID 73.5%
- MSM 2.0%
- Heterosexual 27.5%

On ART: 67.3%
HIV viral suppression in 39.7%
HCV genotypes:
- 1 – 19.5%,
- 3 – 13.1%,
- missing - 67.2%

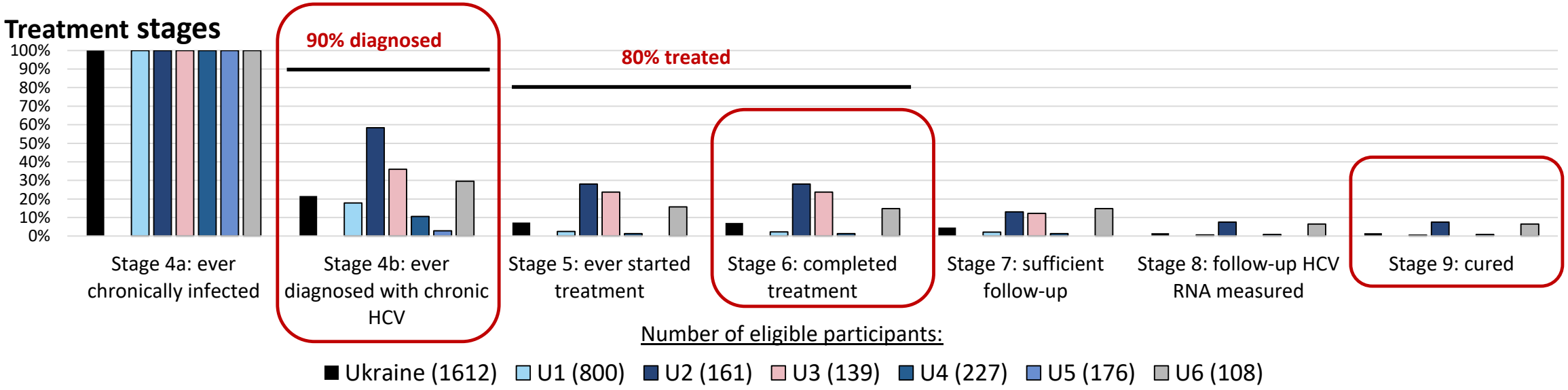
Liver fibrosis: F0/F1 – 68.8%, F4 – 6.4%, missing - 16.7%

HCV CoC in Ukraine overall and by clinical site

Diagnostic stages

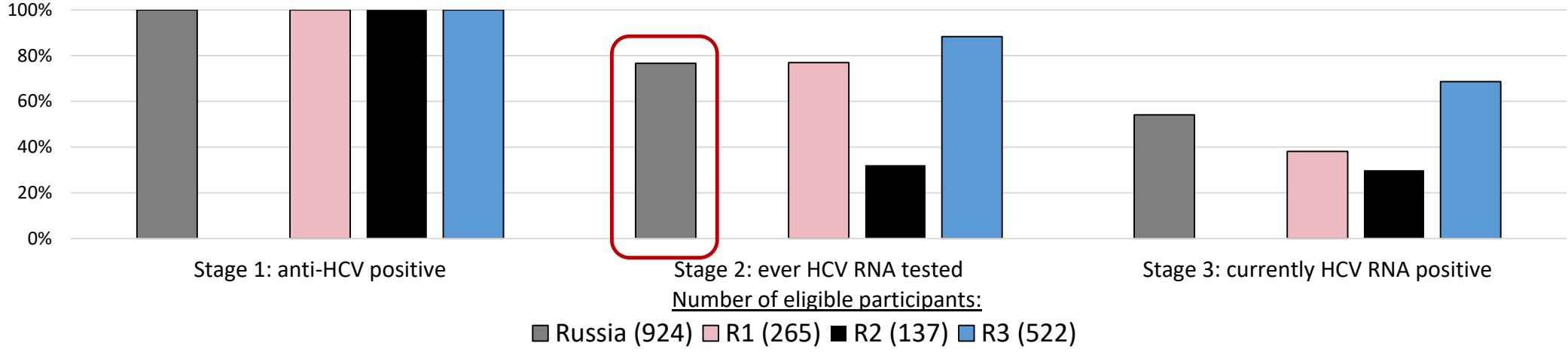


Treatment stages

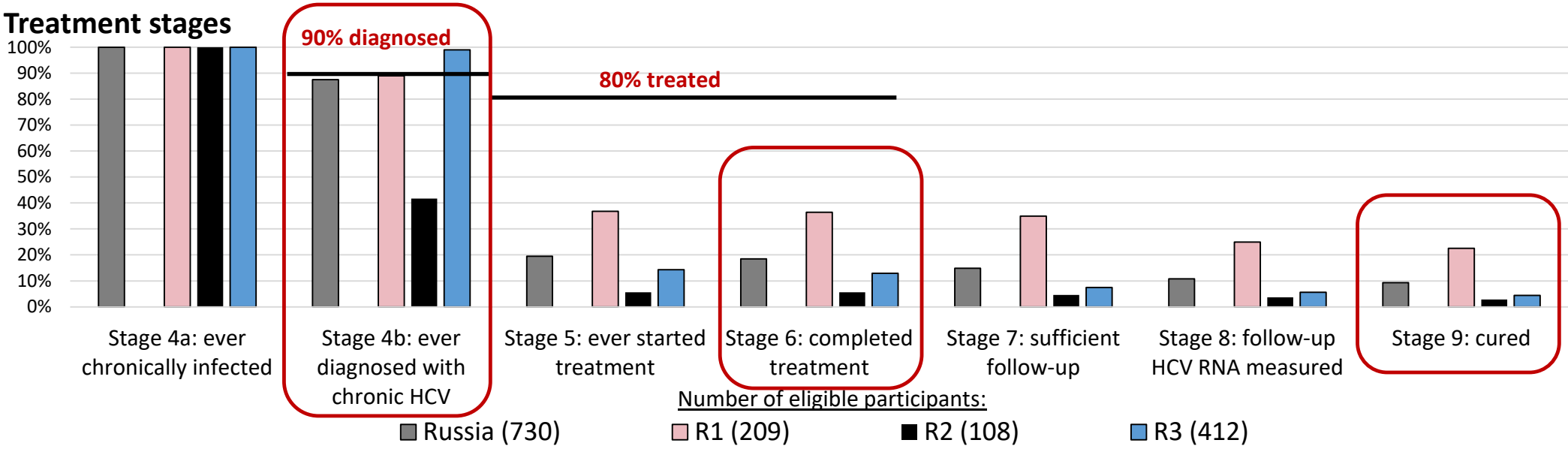


HCV CoC in Russia overall and by clinical site

Diagnostic stages



Treatment stages



HCV CARE SURVEY

A representative from each participating site filled out a survey on access to free HCV RNA testing and treatment in their clinic.

- HCV RNA testing proportion **exceeded 50%** in three out of nine centers providing free testing for everyone and was **below 35%** in the centers where patients should pay for the tests.

- Treatment proportion was driven by the amount of available DAA courses, while providing IFNs for everyone resulted in a **cure rate of 3.9%.**

- In two clinics where participants should have paid for the follow-up HCV RNA test after treatment, **less than 30%** eligible participants have been tested.

LIMITATIONS

- Study participants were not enrolled in direct proportion to the total infected population in each country. Participants enrolled in **3 out of 85 regions in Russia** and in **6 out of 27 regions in Ukraine.**

- CARE enrolled participants attending HIV care primarily from clinics in large cities and does not include information on institutionalized persons.

CONCLUSIONS

1. While Russia had better HCV RNA testing coverage than Ukraine, treatment gaps were large in both countries. Striking heterogeneity between cities is explained by differences in testing and treatment availability.

2. Increased access to free HCV RNA testing and DAAs are required to achieve HCV elimination in Russia and Ukraine.

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Participating sites – Russia:

- Gamaleya Center for Epidemiology and Microbiology, Moscow
- Territorial Clinical Center for Prevention and Control of AIDS and Infectious Diseases, Vladivostok
- 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
- Regional Clinical Center for AIDS Prevention and Control of Kharkiv Regional Council
- Mariupol City Hospital №4 named after I.K. Matsuka
- Odesa City AIDS Prevention and Control Center
- Regional Medical Specialized Center of Zhytomyr Regional Council

More information at:

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