<table>
<thead>
<tr>
<th>P080</th>
<th>High rates of viral suppression in a cohort of HIV-positive adults receiving ART in Ethiopian health centers irrespective of concomitant tuberculosis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reepalu, A*; Tolera Balcha, T; Skogmar, S; Habtamu Jemal, Z; Sturegård, E; Medstrand, P; Björkman, P (Malmo, Sweden)</td>
</tr>
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<thead>
<tr>
<th>P081</th>
<th>Outcomes related to 4864 pregnancies with exposure to lopinavir/ritonavir (LPV/r)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tookey, P; Thorne, C; Martinez-Tristani, M; Norton, M; van Wyk, J* (North Chicago, USA)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>P082</th>
<th>Results from a national treatment database - does it matter which ART combination is prescribed in the real world?</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Scott, G*; Wallace, L (Edinburgh, UK)</td>
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<table>
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<tr>
<th>P083</th>
<th>Determinants of HIV-1 drug resistance in treatment-naïve patients and its clinical implications in an ART program in Cameroon</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Zoufaly, A*; Jochum, J; Hammerl, R; Nassimi, N; Raymond, Y; Burchard, G; Schmiedel, S; Drexlé, J; Campbell, N; Taka, N; Awasom, C; Metzner, K; van Lunzen, J; Feldt, T (Vienna, Austria)</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>P084</th>
<th>Reduced HIV symptoms and improved health related quality of life (HRQoL) correlate with better access to care for HIV-1 infected women: the ELLA study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Baran, R*; Mulcahy, F; Krsznaric, I; d’Arminio Monforte, A; Samarina, A; Xi, H; Cassetti, I; Madruga, J; Zachry, W; van Wyk, J; Martinez, M (North Chicago, USA)</td>
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</table>

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<thead>
<tr>
<th>P086</th>
<th>Stigma reduces and social support increases engagement in medical care among persons with HIV infection in St. Petersburg, Russia</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Kelly, J*; Amirkhanian, Y; Yakovlev, A; Musatov, V; Meylakhs, A; Kuznetsova, A; Chaika, N (Milwaukee, USA)</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>P087</th>
<th>Early HIV diagnosis through use of RDT in the community and direct link to HIV care: a pilot project for vulnerable populations in Athens, Greece</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Kakalou, E*; Papastamopoulos, V; Ioannidou, P; Papanikolaou, K; Georgiou, O; Skoutelas, A (Athens, Greece)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>P088</th>
<th>HIV/AIDS mortality in a south east European country vs. a west European country</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dragovic, G*; Smith, C; Jevtovic, D; Kusic, J; Salemovic, D; Ranin, J (Belgrade, Serbia)</td>
</tr>
</tbody>
</table>

*Indicates presenting author.
Background
Antiretroviral therapy (ART) initiation during treatment for tuberculosis (TB) improves survival in HIV/TB co-infected patients. Data on ART outcome for HIV/TB co-infected patients managed in primary health care in low-income regions is limited.

We compared virological suppression rates, mortality and retention in care in HIV-positive adults receiving care in five Ethiopian health centers with regard to TB co-infection.

Material and Methods
HIV-positive ART-naïve adults eligible for ART initiation were prospectively recruited from October 2011 until March 2013. At inclusion, all patients submitted sputum for microbiological TB testing (smear microscopy, liquid culture and PCR).

Virological suppression rates after 6 months of ART (VS; viral load <40 and <400 copies/mL) with regard to TB status was the primary outcome. The impact of HIV/TB co-infection on VS rates was determined by multivariate regression analysis. Mortality and retention in care were analyzed by proportional hazard models.

Results
Among 812 participants (TB 158; non-TB 654), 678 started ART during the follow-up period (TB 135; non-TB 543). Median CD4 cell counts at ART initiation were 161 cells/µL (interquartile range [IQR], 98-243) and 184 (IQR, 118-256) for TB and non-TB patients, respectively (p=0.05).

No difference in retention in care between TB and non-TB patients was observed during follow-up; 25 (3.7%) patients died, and 17 (2.5%) were lost to follow-up (p=0.30 and p=0.83, respectively).

Overall rates of VS at 6 months were 72.1% (<40 copies/mL) and 88.7% (<400 copies/mL), with similar results for subjects with and without TB co-infection (<40 copies/mL: 65/92 (70.7%) vs. 304/420 (72.4%), p=0.74; <400 copies/mL: 77/92 (83.7%) vs. 377/420 (89.8%), p=0.10, respectively).

CD4 cell count increase during treatment was 87 (IQR, 26-178) and 103 cells/µL (IQR, 38-173) for TB and non-TB patients, respectively, with no significant difference between the two groups (p=0.49).

Conclusions
High rates of VS were achieved in adults receiving ART at Ethiopian health centers managed by non-physician clinicians, with no significant difference with regard to TB co-infection.

These findings demonstrate the feasibility of combined ART and anti-TB treatment at primary health care level in low-income countries.

This study is registered with clinicaltrial.gov, registration number NCT01433796.

Author affiliations
1Infectious Diseases Research Unit, Department of Clinical Sciences, Faculty of Medicine, Lund University, Malmö, Sweden
2Ministry of Health, Addis Ababa, Ethiopia
3Oromia Regional Health Bureau, Addis Ababa, Ethiopia
4Clinical Microbiology, Regional and University Laboratories, Region Skåne, Sweden
5Department of Laboratory Medicine Malmö, Lund University, Malmö, Sweden

Contact information:
Anton Reepalu, Infectious Diseases Research Unit, Lund University, Malmö, Sweden.
Email: anton.reepalu@med.lu.se
**Outcomes Related to 4864 Pregnancies With Exposure to Lopinavir/Ritonavir (LPV/r)**

**HIV Drug Therapy 2014 (Glasgow), Glasgow, Scotland, UK, November 2–6, 2014**

**Presenting author**

Pat A. Tookey, PhD,

Outcomes Related to 4864 Pregnancies With Exposure to Lopinavir/Ritonavir (LPV/r)

METHODOLOGY

**STUDY DESIGN**

The NSHPC is a population-based surveillance study of HIV in pregnant women and children in the United Kingdom (UK) and Ireland, using data from the NSHPC and paediatric reporting schemes. The NSHPC is a population-based surveillance study of HIV in pregnant women and children in the UK and Ireland that collects maternal, perinatal, and pediatric data through both obstetric and pediatric reporting systems.

A retrospective descriptive analysis of individual NSHPC patient data of clinical outcomes related to 1 January 2003 through 31 December 2013 was performed in women with HIV infection, who were exposed to LPV/r exposure and were die or delivered between 1 January 2001 and 31 December 2013, using pregnancy risk of observation was completed.

**DEFINITIONS**

Maternal age was the age at conception.

Infants were defined as follows: first, the first 13 completed gestational weeks; second, 14 and 26 completed gestational weeks; third, 27 completed gestational weeks.

Viral load at baseline, n = N/A 716 3336 N/A

**RESULTS**

A total of 4864 pregnancies in 4118 women with LPV/r exposure were identified, resulting in 4702 deliveries of 4759 live and 46 stillborn infants (Table 1).

Table 1. Characteristics of Live Births Resulting from Singleton Pregnancies (N=4864)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Overall</th>
<th>First Trimester</th>
<th>Second Trimester</th>
<th>Third Trimester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>50.4%</td>
<td>55.8%</td>
<td>49.6%</td>
<td>47.1%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>29.1%</td>
<td>29.6%</td>
<td>29.0%</td>
<td>28.9%</td>
</tr>
<tr>
<td>Black</td>
<td>40.6%</td>
<td>40.7%</td>
<td>40.8%</td>
<td>40.8%</td>
</tr>
<tr>
<td>Other</td>
<td>20.3%</td>
<td>20.7%</td>
<td>20.4%</td>
<td>20.5%</td>
</tr>
<tr>
<td>Age at conception</td>
<td>29 (22–34)</td>
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</tr>
<tr>
<td>Birth weight*</td>
<td>N=4495</td>
<td>3417 (2300–4000)</td>
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</tr>
<tr>
<td>Mode of delivery*</td>
<td>N=4541</td>
<td>1203 (29.8%)</td>
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</tr>
<tr>
<td>Median (IQR)</td>
<td>38 (38–39)</td>
<td>38 (38–39)</td>
<td>38 (38–39)</td>
<td>38 (38–39)</td>
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</table>
| P<0.001

**LIMITATIONS**

- The types of congenital abnormalities most often reported included limb reduction/additions (n=13), heart defects (n=13), malformations affecting both lower limbs/both hands (n=2), chromosome anomalies (n=2), and renal and urinary system defects (n=1).

- Early miscarriages and/or terminations in women who started LPV/r during pregnancy may have been underreported. Results from the NSHPC cohort cannot be extended to women who started taking an antiretroviral drug early in their pregnancy.

- Infection status was assessed using data from the UK Health Protection Agency (UKHPA) and the Welton Foundation. There has been received grants/research support from the Wellcome Trust, UK and UNICEF. Marisol Martinez-Tristani, MD, Michael Norton, and Jean Wyk are employees of AbbVie Inc. and hold company shares or options.

**CONCLUSIONS**

This analysis of observational data from comprehensive national surveillance of pregnancies in HIV-positive women in the UK and Ireland includes data on 4864 pregnancies with LPV/r exposure over a 10-year period. It demonstrates the effectiveness of LPV/r-containing regimens in inducing or maintaining suppressed maternal viral loads and substantially reducing the risk of MTCT as one of the interventions during pregnancy to prevent perinatal HIV infection.

- Very low MTCT rates (0.5%–1.1%) were found, which were consistent with the rates reported for the entire NSHPC cohort during the same time period.

- Regardless of timing of antenatal exposure to LPV/r, the congenital abnormality rate (2.9%) in this infant population was similar to the rates previously reported in HIV-infected women and children.

**REFERENCES**


**DISCLOSURES/ACKNOWLEDGMENTS**

The authors and AbbVie scientists designed the study and analyzed and interpreted the data. All authors contributed to the development of the content. All authors and AbbVie reviewed and approved the presentation. The authors maintained control over the final content.

Any author or AbbVie employee who created, reviewed, or edited this document has no relevant financial relationship to disclose.

The United Kingdom (UK) and Ireland’s National Study of HIV in Pregnancy and Childhood (NSHPC; http://www.ucl.ac.uk/nshpc) has conducted comprehensive population-based surveillance of HIV infection in the UK and Ireland, using data from the NSHPC and paediatric reporting schemes.

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| P<0.001

**RESULTS**

A total of 4864 pregnancies in 4118 women with LPV/r exposure were identified, resulting in 4702 deliveries of 4759 live and 46 stillborn infants (Figure 4).
Results from a national treatment database – does it matter which ART combination is prescribed in the real world?

Gordon Scott1, Glenn Codere2, Lesley Wallace2
1. GUM consultant, Chalmers Sexual Health Centre, Edinburgh, Scotland
2. Health Protection Scotland, National Services Scotland, Glasgow, Scotland

Background

Clinical trials frequently show differences in viral load response between antiretroviral therapy (ART) regimes.

Patterns of prescribing vary from country to country (1) and are likely to vary between individual clinics.

Scotland has a national database that records viral load results and specific ART regimes for every patient under care, thus allowing different prescribing patterns between clinical centres to be monitored.

HIV infection monitoring in Scotland

A national system for monitoring new reports of HIV infection was established in Scotland in the 1980s. These data are based on confirmed laboratory reports of infection. This is a disaggregate database containing anonymised demographic and epidemiological information on the cohort of individuals diagnosed and living with HIV in Scotland.

The system has been updated following the advent of antiretroviral therapy and clinical monitoring of disease progression, that is, CD4 T-lymphocyte cell counts (since 1991) and HIV viral load (VL, since 2001). The enhanced surveillance system therefore includes CD4, VL and ART regimen information for all attendances of all HIV infected individuals receiving specialist care in Scotland.

Clinicians who look after HIV-positive patients are a mixture of Infectious Diseases and Genitourinary Medicine specialists. There is no difference in commissioning of HIV services across Scotland, prescribing guidance is the same, and clinicians meet regularly to try to ensure consistency and quality of service delivery. Yet we were aware anecdotally that prescribing patterns varied by region and wondered if there were any differences in outcome as a result.

Materials and methods

We interrogated the national HIV database in Scotland. This contains a record of every viral load result matched against prescribed ART.

More than 7,700 HIV-positive individuals have ever been reported in Scotland, of whom at least 1913 (25%) are known to have died. Allowing for known and presumed migration, it is assumed that there are approximately 4,700 persons currently living in Scotland who have been diagnosed HIV-positive.

Results were censored at the end of December 2013 and are based on the latest attendance of patients who have been in monitoring for at least six months.

For simplicity, the results are presented by class of drug rather than individual drugs, for example Nucleoside Reverse Transcriptase Inhibitor (NRTI) rather than Lamivudine, Abacavir etc.

The data were analysed using univariate Poisson regression.

Results

The anonymised records of 3302 individual patients who attend in 11 separate health service regions were scrutinised.

68 different combinations of antiretroviral regimes were identified.

The most common regimen used by 41% of patients is NRTI/NNRTI/NtRTI, of whom 95% have suppressed viral load.

The prescribing patterns for the five most frequently prescribed regimes in the four largest clinics are shown in Table 1, along with the overall percentage of patients with undetectable viral load.

A higher proportion of patients in Scotland who are prescribed regimes of NRTI×2 or NRTI/NNRTI plus PI have a detectable viral load but this is not statistically significant.

Although the proportion of patients with VL<50 varies between regions 1 and 4 versus regions 2 and 3 this is not statistically significant (p=0.298).

Table 1: Prescribing patterns of the five most frequently prescribed regimes in the four largest clinics: proportion of patients in each region on each regimen and overall proportion with undetectable viral load.

<table>
<thead>
<tr>
<th>Region</th>
<th>NRTI×2 +PI</th>
<th>NRTI×2 +NNRTI</th>
<th>NRTI/PI</th>
<th>NRTI/NNRTI</th>
<th>NRTI/NtRTI</th>
<th>NRTI/NtRTI/PI</th>
<th>%VL&lt;50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region 1</td>
<td>7%</td>
<td>6%</td>
<td>16%</td>
<td>61%</td>
<td>1%</td>
<td>91%</td>
<td></td>
</tr>
<tr>
<td>Region 2</td>
<td>6%</td>
<td>14%</td>
<td>9%</td>
<td>35%</td>
<td>5%</td>
<td>96%</td>
<td></td>
</tr>
<tr>
<td>Region 3</td>
<td>3%</td>
<td>11%</td>
<td>5%</td>
<td>38%</td>
<td>5%</td>
<td>96%</td>
<td></td>
</tr>
<tr>
<td>Region 4</td>
<td>4%</td>
<td>4%</td>
<td>25%</td>
<td>47%</td>
<td>8%</td>
<td>87%</td>
<td></td>
</tr>
<tr>
<td>Scotland Total</td>
<td>5%</td>
<td>11%</td>
<td>11%</td>
<td>41%</td>
<td>5%</td>
<td>95%</td>
<td></td>
</tr>
</tbody>
</table>

Conclusions

- A high proportion of HIV patients attending specialist care in Scotland are on therapy (88%) and 97% of these are achieving viral suppression. (2)
- Patterns of ART prescribing in Scotland do vary by region but there are no significant differences in outcome with regard to undetectable viral load.
- There is a non-significant trend which may be accounted for by differing levels of PI prescribing.

References

2. Health Protection Scotland, National Services Scotland, Glasgow, Scotland

Acknowledgements

We would like to acknowledge some statistical support from Dr Amanda Weir, Glasgow Caledonian University.

Poster produced by the Graphics Section, Health Protection Scotland.
Determinants of HV-1 Drug Resistance in Treatment-naive Patients and Its Clinical Implications in an ART Program in Cameroon


Introduction:

- Scale up of ART in sub-Saharan Africa has led to favorable results.
- Poor retention in care, inadequate adherence, stock outs of ART are all associated with poor outcomes
- Up to 7.4% of European ART naive patients harbor a primary drug resistant virus, although data from central Africa are scarce

Methods:

238 HIV+ patients starting first-line ART in Bamenda, North Western Cameroon, were included. Clinical, immunological and virological parameters and adherence were regularly assessed. Tests for minority drug-resistance at Cameroon, were included. Clinical, immunological and virological parameters baseline, and drug-resistance and drug plasma levels were done in patients with virologic failure (>1000 HIV RNA copies/ml) and controls.

Results:

Up to 7.4% of European ART naive patients harbor a primary drug resistant virus, although data from central Africa are scarce.

Introduction:

1. WHO. Consolidated guidelines on general HIV care and the use of antiretroviral drugs for treating and preventing HIV infection: recommendations for a public health approach. WHO Library

Table 1: Patient Characteristics

<table>
<thead>
<tr>
<th>Treatment success (N=1000 RNA copies/ml)</th>
<th>Virological failure (N=1000 RNA copies/ml)</th>
</tr>
</thead>
<tbody>
<tr>
<td>median (min-max)</td>
<td>median (min-max)</td>
</tr>
<tr>
<td>Age (years)</td>
<td>38 (19-58)</td>
</tr>
<tr>
<td>CD4 count (per 100 cells/mm3 lower)</td>
<td>1.41 1.02 1.96 0.04</td>
</tr>
<tr>
<td>Female sex (versus male)</td>
<td>0.71 0.49 1.02 0.07</td>
</tr>
<tr>
<td>Compliance ratio (per 1% lower)*</td>
<td>1.05 1.02 1.08 &lt;0.001</td>
</tr>
<tr>
<td>Number of patients (%)</td>
<td>0.91 0.76 1.09 0.33</td>
</tr>
<tr>
<td>Current tuberculosis (yes versus no)</td>
<td>0.96 0.44 2.07 0.91</td>
</tr>
<tr>
<td>Nevirapine at baseline (yes versus no)</td>
<td>1.24 0.56 2.77 0.59</td>
</tr>
<tr>
<td>Efavirenz at baseline (yes versus no)</td>
<td>0.26 0.03 0.78</td>
</tr>
<tr>
<td>Adherence ratio (per 1% lower)*</td>
<td>1.96 0.95 4.02 0.07</td>
</tr>
<tr>
<td>Hemoglobin at baseline (per mg/dl higher)</td>
<td>1.38 0.61 3.11 0.43</td>
</tr>
<tr>
<td>WHO stage 3 or 4 (yes versus no)</td>
<td>1.38 0.61 3.11 0.43</td>
</tr>
<tr>
<td>Male sex</td>
<td>1.04 1.02 1.07 0.04</td>
</tr>
<tr>
<td>CD4 baseline (per 100 cells/mm3 lower)</td>
<td>1.47 0.12 4.15 0.04</td>
</tr>
<tr>
<td>Female sex (versus male)</td>
<td>0.95 0.05 2.07</td>
</tr>
</tbody>
</table>

Table 2: Resistance pattern in patients with virologic failure and selected controls with virologic success

Conclusions:

- Minority drug mutation at baseline were detected in substantial number of patients (16%) but no association with virological failure
- Lower CD4 count at baseline and poorer adherence are both associated with higher risk for virological failure
- Strategies for an uninterrupted supply chain are necessary in Africa to warrant high virological success rates

Table 3: Risk factors for virological failure

References:

Reduced HIV symptoms and improved health related quality of life (HRQoL) correlate with better access to care for HIV-infected women: The ELLA study

Robert W Baran, RPh, PharmD; Fiona Mukhaly, MD; Isabel Cassetti, MD; Jose Valdez Ramalo Madruga, MD; Ivanka Krmatic, MD; Antonella d’Armonio Monforte, MD; Anna Samarina, MD, PhD; He Xi, MD; Woodie Zachry, PhD, RPh; Jean van Wyk, MD; Marisol Martínez, MD;

AbbVie Inc., North Chicago, Illinois, United States; St James Hospital, Dublin, Ireland; Helios Salud, Buenos Aires, Argentina; Centro de Referencia e Treinamento DST/AIDS, São Paulo, Brazil; Medical Center for Infectious Diseases Berlin (MI), Berlin, Germany; Clinic of Infectious and Tropical Diseases, Department of Health Sciences, University of Milan, Milan, Italy; Saint Petersburg HIV Centre, Russia; Infectious Disease Department, Guangzhou 8th People’s Hospital, Guangzhou, PR China

BACKGROUND

- Global prevalence of human immunodeficiency virus (HIV) is currently estimated at 33.2 million people, 1 in 130 of the world’s population.
- Despite awareness of effective antiretroviral therapy (ART), women infected with HIV are less likely to seek out care.

STUDY OBJECTIVE

To assess the associations of barriers to care, oral CD4+ and CD8+ counts with HIV-related symptoms and HRQoL among HIV-infected women from different geographical regions.

METHODS

STUDY DESIGN

- Conducted multi-country, cross-sectional, cross-cultural, and longitudinal study to investigate the association between barriers to care and HRQoL among HIV-infected women living with HIV.
- Used the Health Status Assessment questionnaire (HSAQ) from January 2012 to June 2013.
- Participants were recruited in Brazil, the Czech Republic, Canada, Spain, Italy, Portugal, France, Russia, Chile, and China.
- Data collected from 792 women.

STUDY MEASURES

- BARRIERS TO CARE (BACS) index was calculated using the HSAQ (2012–2013) and included 20 items.
- HRQoL was assessed using the EORTC QLQ-C30 questionnaire.
- Clinical status was assessed using the Last VL loaded (VL) test.
- Variables included age, gender, employment status, education, region, and ART use.

RESULTS

1. In Brazil, women experienced higher BACS scores (6.2) compared to women in the Czech Republic (2.2).
2. Factors associated with the BACS index were explored using a multilevel Poisson regression method.
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CONCLUSIONS

- HIV-infected women from different geographical regions experienced disparities in access to health care.
- Stigma is highly prevalent among all regions as a barrier to care.
- Reduced barriers to care, lower VL, greater CD4+ counts, and reduced symptoms correlate with improved HRQoL.

REFERENCES


DISCLOSURES AND ACKNOWLEDGEMENTS

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BACKGROUND

Widescale uptake of antiretroviral treatment (ART) can preserve health and prevent onward disease transmission on a population level, reducing future disease incidence. Achieving this objective requires that a high proportion of persons living with HIV infection (PLH) are engaged and maintained in medical care over sustained periods. High proportion of PLH globally are not presently in HIV care. In the USA, approximately half of PLH have not had recent care visits. Very little is known about why many HIV+ persons are not in treatment.

- The care engagement picture in Russia is far worse. The proportion of PLH in Russia who are in care and on ART is lower than in sub-Saharan Africa.
- Little research has explored reasons why PLH are not in care from their own perspectives, information needed to guide the development of interventions to improve care engagement.
- We recruited HIV+ persons in and out of care to gain an understanding of the reasons for nonengagement care from the perspectives of HIV+ persons themselves.

METHODS

Participants were recruited in St. Petersburg, Russia at HIV care sites and community by means of online PLH forums and web sites, outreach needle exchange, and chain referral. Out-of-care PLH purposively selected to maximize diversity with respect to exposure mode, gender, age, and recent or longstanding serostatus knowledge. The sample included 30 service providers and 50 male and female PLH including persons who inject drugs (PID), men who have sex with men (MSM), and persons reporting heterosexually transmitted infection.

- In-depth interviews lasted 75 minutes and were audio recorded.
- The interviews elicited detailed information about participants’ experiences, circumstances, and barriers responsible for not being in care. For PLH who were in care, interviews elicited factors facilitating care engagement.
- Verbatim interview transcriptions were coded using MAXQDA and were analyzed to identify emerging themes.

RESULTS

CARE ENGAGEMENT BARRIERS

Two types of care engagement barriers most often emerged. Some related to medical services, others to the family and social environment.

- The most frequent medical service barriers were poor treatment infrastructure and access; dissatisfaction with quality of services; and concerns over confidentiality and HIV status disclosure.

"I was shocked seeing that the nurse almost spilt on my side and crossed herself when she knew that I had HIV infection. I was in such a situation for the first time, and it was very unpleasant." —Female, age 37

"The doctor says—to tests and be almost happy that you are still alive. I did not get the answers that I would like to have. Sometimes, there was dialogue—just elementary check of my health." —Male, age 36

"They [my parents] were informed by the doctor on the phone. But, I think he was not supposed to do it. They said that I had to come… My mom asked about the reason for the visit, and the doctor told her that I had HIV infection. Naturally, my mother was in panic." —Female, age 34

"Even in large regions, there is only one center where people can come. And if this center is not convenient for a patient, it means that the patient is rejected by the society, by the medical community." —State provider

("[Providers] do not always have individual offices where a client can enter from the yard; to the contrary, a patient has to go through the whole clinic and everybody can see him/her in a person as a patient. Accordingly, it can be a barrier." —NGO provider

- Social barriers were fears of potential harm to family relationships, risk of losing a job, and stigma.

"My grandfather and my dad do not know still. I cannot imagine how to tell them...it seems that he will kill me! And again—how to be told not to communicate with other family members." —Female, age 32

"Why do I need my status at work? Because I am a kindergarten teacher. However, work, I work there for many years. Children love me, I love them, I admire them. I do not want to be fired just because of my HIV status." —Female, age 32

"I informed my boss directly, because we were close friends. He reacted normally, but three weeks later I was fired anyway. Or he simply did not extend my contract." —Male, age 31

"We had a young person who received his sick leave with the written diagnosis. He was immediately fired. And, accordingly, he cannot find a new place to work." —NGO provider

CARE ENGAGEMENT FACILITATORS

The most common factors that facilitate care engagement were social support, taking care of one’s health, being forced into treatment, and trusting one’s doctor.

- Social support from the PLH community and from family and close friends facilitated care engagement.

"It told to my friends and they supported me so much. Without their support, I was ready to commit suicide, really. And, we began to look for information together, we began to analyze information somehow." —Female, age 26

"My relatives supported me from the very beginning, they helped me to register and to stay under observation. No barriers, only some type of support." —Male, age 33

"It’s quite boring to visit a doctor alone; I live with my girlfriend, and she also should visit a doctor. She receives treatment. Well, may be as a companion, together it is much simpler, more fun." —Male, age 29

"It took a year to accept the fact that I am infected with HIV. And I was saved from this spin by HIV infected guys who told me that I can live with infection, that they lived more than 15 or 15 years, that it is possible to live with this disease." —Female, age 33

"Communications with similar infected persons helps the most to people. Even waiting in the queue, they see good people of different ages—elderly and very young, some with parents. The person sees that he or she is not alone, it is psychologically easier." —State provider

- Care of oneself and one’s family facilitated care engagement

"I have a wife and a child. My mom is alive. I have a family whom I should think about. I would like to live more and to see our child go to school. This supports me very much." —Male, age 37

"I am mainly supported with the fact that I am under observation, that I want to live for the sake of our child." —Female, age 33

"Once I had a better social life, I am afraid— and hurry to take tests. Because some responsibility appears for people who are close to me." —Male, age 30

"Females are better motivated for keeping better health—to raise their children, to keep the family together." —State provider

- Care engagement followed an urgent illness issue (opportunist infections) or was enforced through hospitalization or imprisonment.

"It took only four years for my disease to progress with many serious opportunistic infections. After being almost dead, everybody will value each leaf and each green grass under foot. When I receive therapy, I think that such bad situation will not happen." —Female, age 36

"He was very frightened with what happened to him, and he does not want to have such situation again. Also, when he is in a hospital ward, together with severely ill patients, and see all those awful things and horrors, that can happen with him. He does not want to be in such a situation as his neighbor in the ward." —State provider

- Finally, trusting one’s doctor facilitated care engagement.

"Communication with doctors, moral support first of all [is important]. It means that if a doctor tells something about your disease, and supports you—it will be easier for you to cope with it, of course." —Male, age 36

"The person most likely will stay within this system [when he] visits the same medical facility. He knows where to go, he knows the doctors, he will find his personal doctor in the clinic. When they refer you to another place, a person can be afraid." —State provider

CONCLUSIONS

- Care engagement and treatment uptake are critical to efforts to eradicate HIV infection. Identifying both barriers and facilitators of care engagement are therefore also critical.
- Care system infrastructural issues, concerns over confidentiality, as well as negative attitudes of medical staff were often cited as barriers. Care providers and PLH advocates must mutually collaborate to address existing barriers on a daily basis.
- Poor treatment, negative experiences with providers, and inaccessibility to clinical care were all common barriers to care engagement. By contrast, providers who were open and trusted facilitated care engagement.
- Social and family-level barriers were also frequently cited, including fears of losing one’s job or being forced from one’s family, as well as extreme stigma associated with HIV+ status. Continuous general public programs to reduce HIV stigma and myths are lacking but needed in Russia.
- Overcoming barriers should go hand-in-hand with creating social conditions that facilitate care engagement.
- Social support facilitated care engagement. Receiving support from family and friends requires HIV status disclosure and having or building an understanding social environment (spouse or others in the family or friends).
- Taking care of oneself, the desire to live a longer life, as well as a sense of responsibility to loved ones emerged as strong motivators of care engagement.
- Trust in one’s doctor as well as perceived emotional and informational support from providers were also cited as important care facilitators.
- Some care engagement facilitators were due to deteriorating health caused by an AIDS-related disease. An important objective must be to encourage early rather than late entry to care in Russia.
INTRODUCTION & BACKGROUND

An increase in the incidence of HIV new infections among IDUs by 1500%, was noted in the center of Athens in 2011. Increasing problematic drug use, homelessness, health cuts in relative community services (eg. needle distribution activities) amidst the economic crisis, have contributed to the epidemic. New cases doubled within a year, challenging the HIV care delivery system [1].

ART delivery sites had been already overwhelmed with average time for appointments for newly enrolled patients anywhere between 2-6 months. There was also no experience dealing with the complex issues that IDU HIV+ patients are facing when approaching health care services. OKANA (the national organization against drugs) quickly deployed additional services for OST treatment, offering a quick path to care (1-3 months) to HIV+ IDUs (normal waiting times had been around 4 years). However, there was no comprehensive package of care offered, poor linkage between services and providers and no “one-stop shop” services.

MATERIALS & METHODS

A pilot project funded by the NSFR (National Strategic Framework) 2007-2013 of the EU, was launched from August 2012 to March 2014. It was a partnership between the HIV Clinic of Evangelismos Hospital and the NGO PRAKSIS. The project aimed at offering early diagnosis and a comprehensive care to hard to reach populations. RDT diagnosis through mobile units, direct linkage to care, elimination of waiting times, flexibility, psychosocial support and link to harm reduction services for active IDUs were offered to the beneficiaries. Also linkage with a person of the HIV care team was offered within hours after the initial diagnosis, immediate confirmation testing, cultural mediation services, support for migrants, legal services, tracking of beneficiaries through street work, use of a day care service operated by PRAKSIS, escorting to harm reduction programs and direct linking as well as services for imprisoned beneficiaries were included in the spectrum of activities. The project could also offer DOT for HIV & TB for a number of homeless co-infected patients that were migrants with no legal papers.

RESULTS

A total of 117 patients enrolled in the program following offer of HIV testing with RDTs by the mobile units of the NGO PRAKSIS in the community and a small number having a positive result through another service but lacking linkage to care, many times months or even more than a year after initial diagnosis. A total of 7,000 RDTs were done with a positivity rate of 1.4%. Of those 68% were IDUs, 12% MSM and 19.5% heterosexuals. Men were 74.3% and women 25.6% of the cohort. Country born patients were 43.5% and non country born 56.4%. 9 people were HIV negative but needed PEP, treatment for hepatitis C (the was also RDT done for Hep C) and 1 test was confirmed to be false positive. 2 deaths occurred and 6 people were lost to follow up due to deportation to their home countries. Of the remaining 100 patients, 84 managed to enroll in the program and be registered at the HIV clinic. Of those 77% (65/84) remained in care 3 and 6 months after the end of the project. Care retention was 73.5% (39/53) for IDUs, 91% (10/11) for MSM and 80% (16/20) for heterosexuals, 73% (25/35) for country born and 82% (40/49) for non country born. Those that remain in care were mostly late presenters at 83% (54/65) and 42/54 were on ART 3 months after the end of the project and 46/54 after 6 months. Mean value of CD4 cells at enrollement was 298 cells/mm3. At follow up 3 months after the end of the project the mean value of CD4 cells was 464 cells/mm3. Among those on treatment more than 90% have undetectable viral load and all the rest that have detectable viral loads have values less than 1000 copies/ml.

CONCLUSIONS

The project has proven the feasibility of a novel approach of active case finding in the community with direct link to care. Retention to care was satisfactory as most of those patients would not have been able to access care through the normal ART delivery model of the Public Health System. However, more obstacles to care remain. Being homeless, poor nutrition, complicated access to harm reduction services, lack of “One Stop Shop” services and police operations in the city center impede further progress [2,3]. More long – term follow up of the initial cohort and rising numbers of patients that are enrolled through the same project (funding has stopped but the 2 partners continue their collaboration with use of own resources even if at a more limited scale), is needed for the appraisal of this model of delivery of care. Expansion of services and especially low threshold and One Stop Services are needed.

References

INTRODUCTION

The Republic of Serbia (RS) is a low-middle income non-European Union country, with a low prevalence rate (0.2%) of HIV infection. In RS combination antiretroviral therapy (cART) has been available and fully covered by the National health insurance system, although cART in Serbia depends its availability, regardless of current international treatment guidelines.

Contrary, in the United Kingdom (UK), a high-income country member of the European Union (EU), antiretroviral therapy is available and fully covered.

OBJECTIVES

The objective of this study was to compare cART regimens introduced as a first line therapy in antiretroviral drug-naive patients and mortality rates in a low-middle income setting, such as RS, and a high-income setting, such as UK.

We also wanted to compare the frequency of viral and immunological monitoring and the frequency of making switches within cART regimens in these two settings.

METHODS

This study included treatment-naive patients who had initiated antiretroviral therapy from the 1st January 2003 until the 1st June 2011. cART was considered as combination of two nucleoside reverse transcriptase inhibitors (NRTI) with the third drug, such as non-nucleoside reverse transcriptase inhibitor (NRTI), or protease inhibitor (PI), or fusion and entry inhibitor (FI), or integrase inhibitor (II).

Patients from Serbia, were attendees at the HIV/AIDS Center, University Hospital for Infectious and Tropical Diseases in Belgrade (HCB). Patients form the UK were attendees at the outpatient clinic at the Royal Free Hospital, London (RFH).

We described the characteristics of the patients at the time of cART initiation focusing on NRTI's backbone prescribed together with the third drug used as a first line therapy in drug naive patients. Also, frequency of virological and immunological outcome monitoring, CD4+ T-cell counts and HIV-RNA plasma viral load were compared in those two settings. Comparisons of the two cohorts were made using a chi-square test or Fisher’s exact test for categorical variables and using a Mann-Whitney U-test for continuous variables. Kaplan Meier survival curves were compared using the logrank test. Death rates per 1000 PY were calculated for all patients included in the study.

All patients provided written informed consent to participate in the study, which was approved by the local Ethics committees.

RESULTS

We included 597 patient from HCB and 1763 patient from RFH, who were introduced cART during 8 years of follow-up.

There were significant differences in the frequency of CD4+ T-cells and HIVRNA pVL monitoring between two centers. At the HCB, the total (median, IQR) CD4+ T-cells count measurements in the 1st year of cART was 2 (1, 2), while it was statistically significant higher at the RFH 5 (3, 7), respectively (p < 0.0001).

At the RFH, it appeared that the cART switching is more often due to patient’s preference or toxicity (46%), while the lack of supply and toxicity (37%) were the most important reasons for treatment change at the HCB within the same period of time (p < 0.05).

Figure 1. Mortality: HCB vs. RFH during the first 3 years of cART introduction.

CONCLUSION

At the HCB, low testing rate is the main reason for the introduction of cART at an advanced stage of disease, having a high mortality rate as a consequence, almost double higher in comparison with the RFH during the first three years of cART introduction. Thus, early testing is still an issue in the low-middle income countries, such as Serbia. Timely cART introduction could not only markedly decrease ongoing HIV transmission, but could also prolong live span in HIV infected individuals.