Earlier Recognition of HIV: A Pressing Need

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CD4 count at start of ART, 2003-2005
42 countries, 176 sites, 33,008 patients

Numbers are median CD4 counts

M Egger, CROI 2007
Number of newly diagnosed HIV infections in the WHO-Europe region
(data missing from several countries incl. I, F, NL, POR, SP + Russia)

Total number of persons living with HIV: app. 2.5 million
% of persons living with HIV but not yet diagnosed: 30% in EU and 50-70% Eastern region

ECDC, 2008
Late presenters in Europe

- Most persons infected with HIV across the European region remain undiagnosed
- Undiagnosed HIV is harmful to the person infected as appropriate health interventions are then delayed until the HIV infection is diagnosed
- It is also detrimental to society as persons unaware of their HIV infection may transmit more frequently to others than persons that are aware of their HIV status
  - + patients in care have access to ART that reduces their risk of transmission
- Finally, late presentation is associated to increased medical costs
Many definitions reported

<table>
<thead>
<tr>
<th>CD4 count</th>
<th>Country and year</th>
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</thead>
<tbody>
<tr>
<td>CD4 &lt; 350</td>
<td>England, 2000</td>
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<tr>
<td></td>
<td>France 2006, 2007</td>
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<tr>
<td></td>
<td>Italy, 2004</td>
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<tr>
<td>CD4 &lt; 50</td>
<td>UK 2004</td>
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<table>
<thead>
<tr>
<th>Time until first ADE</th>
<th>Country and year</th>
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<tbody>
<tr>
<td>&lt; 1 year</td>
<td>European survey, 2006</td>
</tr>
<tr>
<td>&lt; 6 months</td>
<td>England, 2006</td>
</tr>
<tr>
<td></td>
<td>France, 1998</td>
</tr>
<tr>
<td></td>
<td>Italy, 2005</td>
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<tr>
<td>&lt; 3 months</td>
<td>Sweden, 2005</td>
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<tr>
<td></td>
<td>England, 2000</td>
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<tr>
<td></td>
<td>Italy, 2000</td>
</tr>
<tr>
<td></td>
<td>Poland, 2006</td>
</tr>
<tr>
<td>&lt; 8 weeks</td>
<td>Spain, 2002</td>
</tr>
<tr>
<td></td>
<td>Denmark, 2005</td>
</tr>
<tr>
<td>&lt; 1 month</td>
<td>England, 2001</td>
</tr>
<tr>
<td></td>
<td>Italy, 2003</td>
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<tr>
<td>Concurrent AIDS</td>
<td>Poland, 2006</td>
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<tr>
<td></td>
<td>England, 2006</td>
</tr>
<tr>
<td></td>
<td>France, 2000</td>
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</table>
ART CC: Supports Initiating ART at CD4 Threshold of 350 cells/mm$^3$

- N=24,444 (15 cohorts from US and Europe)

Comparison | HR* (95% CI)
--- | ---
1-100 vs 101-200 | 3.35 (2.99-3.75)
101-200 vs 201-300 | 2.21 (1.91-2.56)
201-300 vs 301-400 | 1.34 (1.12-1.61)
251-350 vs 351-450 | 1.28 (1.04-1.57)
351-450 vs 451-550 | 0.99 (0.76-1.29)

*Adjusted for lead-time and unobserved events.

Sterne et al. Lancet 2009
Consensus definition of late presentation

Late presentation is defined as persons presenting for care with a CD4 count below 350 cells/µL or presenting with an AIDS defining event.

Presentation to facility that can monitor for HIV progression and prescribe ART
Based on current ART guidelines (to be reviewed if changing)
Repeat measure of CD4 counts encouraged
Prevalence of late presentation for persons presenting for care in 2008

Thanks to:
ATHENA (F de Wolf)
Brussels St Pierre Cohort (S deWit)
Barcelona cohort (J Gatell)
CHIC (C Sabin)
ClinSurv HIV (O Hamouda)
DHCS (F Engsig)
EuroSIDA (J Reekie)
FHDH ANRS CO4 (D Costagliola)
ICONA (A d'Arminio Monforte)
Swedish Cohort (J Brännström)
SHCS (B Ledergerber)

*: 2007
Trends in % of HIV-infected persons presenting late for care: 2005-2008

% presenting late for care

EuroSIDA

B  DK  F  D  I  NL  S  CH  UK

HIV in Europe
## Reasons for late presentation (LPs)

<table>
<thead>
<tr>
<th>REASON</th>
<th>% of LPs(*)</th>
<th>PRINCIPAL SOLUTION</th>
</tr>
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<tbody>
<tr>
<td>Not yet diagnosed</td>
<td>80-30%</td>
<td>Increased testing of at-risk populations – incorporate novel evidenced based approaches as part of testing strategy</td>
</tr>
<tr>
<td>Previously diagnosed but have not yet accessed care</td>
<td>20-70%</td>
<td>Ensure link from testing facilities to facilities that can provide state-of-the-art care</td>
</tr>
</tbody>
</table>

* Varies by setting, health system functionality and political support

+ targeted information campaigns  
(focus: problems, benefits, stigma & discrimination)
ART coverage in low-to-middle income countries in geographical regions in 2007-8

% in need of ART on ART

<table>
<thead>
<tr>
<th>Region</th>
<th>2007</th>
<th>2008</th>
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<tbody>
<tr>
<td>Europe and Central Asia</td>
<td>24%</td>
<td>48%</td>
</tr>
<tr>
<td>Southeast Asia</td>
<td>36%</td>
<td>40%</td>
</tr>
<tr>
<td>Latin America</td>
<td>52%</td>
<td>60%</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>29%</td>
<td>40%</td>
</tr>
</tbody>
</table>

# of patients needing ART in 2008 (x1,000)

- Europe and Central Asia: 370
- Southeast Asia: 1,500
- Latin America: 820
- Sub-Saharan Africa: 6,700

UNAIDS report, 2009

Projected # of lives lost in 2009 in Europe because of late presentation: 100,000

(A Phillips, HIV Medicine 2008)
HIV testing, counselling & referral to care (TCR)

- HIV testing – what can be done (and has been shown to work)
  - improving the quality of TCR services
  - expanding alternatives to traditional on-site, clinical HIV-antibody testing (using rapid tests and in locations/conditions convenient to clients)
  - improving links and access to treatment, care and support, and making the social, legal and policy environment more supportive
  - introducing provider-initiated TCR in prenatal care, STD clinics & in certain other situations
  - using targeted media campaigns to encourage uptake of HIV testing
Effect of HIV prevalence on the cost effectiveness from one-time voluntary HIV TCR (base case):
Cost-effectiveness improves with higher HIV prevalence

Yazdanpanah et al, ICAAC 2009
Missed opportunities by health care system prior to HIV-diagnosis

- 76.4% of patients seen a GP
- 38.3% attended outpatient service
- 15.2% attended inpatient service

N=263 HIV+ Africans in London

Burns et al. AIDS 2008;22:115
What do we mean by indicator disease?

A disease indicating that a HIV test should be considered/performed

- AIDS defining events
- Diseases associated with high HIV prevalence
- Diseases with Implications for management
- Differential diagnosis
The "HIV in Europe" Initiative: Progress Towards Optimal Testing and Earlier Care  
November, 13th 2009 12:45-13:45 – Europasall

Chairs: Nikos Dedes, Greece; José Gatell, Spain

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker/Location</th>
<th>Length</th>
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<tbody>
<tr>
<td>12:55</td>
<td>Mini Lecture: How to Estimate the Size of the Infected Population that is Unaware of their HIV-Infection Status</td>
<td>Andrew Phillips, United Kingdom</td>
<td>15min</td>
</tr>
<tr>
<td>13:05</td>
<td>LS2/1 Controlling the HIV epidemic in the Netherlands</td>
<td>Frank de Wolf, Netherlands</td>
<td>15min</td>
</tr>
<tr>
<td>13:15</td>
<td>LS2/2 Proportion and trend over calendar time of patients with a low CD4 count or AIDS diagnosis at the time of their first contact with clinical care in Italy</td>
<td>Antonella d'Arminio Monforte, Italy</td>
<td>15min</td>
</tr>
</tbody>
</table>
Summary

• Consensus that earlier diagnosis and earlier treatment, care & support are essential, both for individuals & for societies
• Progress with access to treatment, but significant challenges remain
  • 40-50% of persons presents late for care
  • There is not sufficient will to change existing approach to testing (although there is a growing realization across Western Europe that something has to happen)
  • ART coverage is unacceptable low in Eastern Europe and Central Asia
    – Also true for opioid replacement therapy
    – Compounded by economic crisis (e.g. the Baltics) – affordability of ART
  • In other countries, ART may be available, but not accessible
• Health care professionals needs to engage and become advocates
  – Not only to improvement management of persons entering care
  – But also to develop strategies that ensures to engage colleagues outside the “HIV milieu” that sees not yet diagnosed persons earlier in the course of their HIV-infection
  – This can only happen if done in consort with the political leadership and with European and national health authorities
Keep yourself updated:

www.hiveurope.eu