HIV in primary care
- a migrant health perspective

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Introduction

• Why is this important?
  • Some facts and figures for context

• What is relevant to us in General Practice?
  • Why, who and how should we test?
  • What not to miss – primary HIV infection
  • Management of HIV patients in primary care and the future

• Helpful contacts/resources
Distribution of new HIV diagnoses by world region of birth: United Kingdom, 2003-2012

*Excludes 13,899 cases diagnosed 2003-2012 where country of birth is not reported
New HIV diagnoses\(^1\) among heterosexual men and women by probable country of infection: UK, 2004-2013

\(^1\) Numbers have been adjusted for missing exposure category and region of birth.

Index of multiple deprivation

- Most deprived
- 2nd most deprived
- 3rd most deprived
- 4th most deprived
- Least deprived

HIV prevalence per 1,000 population

London
Rest of England
Why are migrant populations more vulnerable to HIV?

Less likely to test/disclose status?
• Cultural/linguistic barriers
• Assumptions based on healthcare systems in home country
• Fear of authorities/NHS charges
• Concerns over travel restrictions
• MSM could be illegal in home country
• May be away from their families

Increased risk of ill health?
• Difficulty accessing healthcare
• Other untreated health problems
• Complex social needs
• Housing insecurity
• Increased mental health problems
• Vulnerable to exploitation in workplace
• Late presentation
Estimated number PLWH (both diagnosed and undiagnosed): UK, 2013

107,800 PLWH
81,510 diagnosed
24% undiagnosed
Prompt\(^1\) and late\(^2\) HIV diagnosis in black Africans and black Caribbeans with associated one-year mortality: UK, 2003 - 2012

\(^1\)Prompt diagnosis: CD4 count \(\geq 350\) cells/mm\(^3\) within three months of diagnosis

\(^2\)Late diagnosis: CD4 count <350 cells/mm\(^3\) within three months of diagnosis
Quiz!

• Who should you offer a test to in your practice?

• What percentage of people present with an indicator disease?

• What barriers to HIV testing a migrant population can you identify?
Who to test?

• **Screening**
  – Antenatal clinics
  – TOP services
  – Drug dependency units
  – Hepatitis clinics
  – Lymphoma services
  – TB
  – Where prevalence >2/1000 population

• **Target high risk groups**
  – MSM
  – People from high prevalence country
  – Patients with STIs
  – IVDU

• **Indicator diseases**

• **Any patient with a glandular fever type syndrome - think about primary HIV.**

• Consider Hepatitis B/C test if from high prevalence country or risk

• N.B ongoing risk factors - if a previous test is negative don’t be put off
Prevalence of diagnosed HIV infection by area of residence among population aged 15-59 years: UK, 2013
But remember 75% show no indicator conditions at all!

Damery et al Br J Gen Pract. 2013 Jun
HOW to test?

**Rapid POCT**
Finger prick or saliva test
Results in minutes
“3rd generation” (HIV antibody only),
Longer window (12 weeks)
Confirmatory testing needed
In low prevalence setting can be higher number of false +ve
Not useful for use in seroconversion illness

**Blood test**
“4th generation” (HIV Antibody and p24 Antigen) therefore shorter window period 4 weeks
Results in 2-10d
Recommended in high risk case

**Self sampling/self testing**
Request online for a self-sampling kit

- **What do you need to know?**
  - The benefits of testing for the individual
  - If test positive discuss with health advisors/HIV team (telephone numbers below) regarding follow up BEFORE breaking news
  - HA could see patient same day but must be within 2/52
Barriers to testing in migrant populations

- It takes too long
- It feels inappropriate
- I’m worried about stereotyping people

“...where a large number of people have HIV.... would you like at test?”

“If you have a sexually transmitted infection we recommend you also have an HIV test?”

“We are offering all new patients on our list a routine HIV test.... Would you like one?”

Publicising policies on anti discrimination and confidentiality may help
DID YOU KNOW?

- An estimated £630m was spent in 2012/3 on HIV treatment and care.
- Implementing the NICE guidance on increasing uptake of HIV testing would prevent 3,500 cases of HIV transmission within five years and save £18m in treatment costs per year.

The natural history of untreated HIV

- **Primary HIV infection**
  - CD4 cells/mm³ drop significantly.
  - Viral load increases rapidly.

- **Asymptomatic**
  - CD4 cells/mm³ stabilizes.
  - Viral load remains high.

- **Symptomatic/AIDS**
  - CD4 cells/mm³ continues to drop.
  - Viral load remains high.

- **Occasionally CD4 count can plummet dramatically during primary HIV infection**
Primary HIV – Why it matters?

- Patient is highly infectious at this time
- Evidence that much transmission occurs at this stage
- Better chance of partner notification
- Patient can be monitored and treatment started early if necessary
- Avoid a missed opportunity
A case of early diagnosis

33 year old man

PC: 10/7 Fever, sore throat, myalgia, arthralgia

O/E; not much else

If considering GF type illness consider primary HIV

What do you do next?

• Offer an HIV test now

• If negative offer again – 4 weeks after exposure or 12 weeks to be sure

• Other symptoms; rash, LN, diarrhoea, headache, oral or genital ulcers
Primary HIV Infection

- 857 samples from primary care submitted for glandular fever screen
- Overall prevalence of HIV 1.3% (11/857)
- 72% (8/11) missed at first presentation to GP
Quiz

• What percentage of patients under the care of MMC are over 50 years old?

• What are other recognised non communicable diseases associated with HIV?
AIMS OF TREATMENT

– Restore immunity, increase CD4, reduce VL to undectable
– Maintain health and reducing onward transmission
– ART lifelong

– MORE AGE RELATED CONDITIONS
Chronic condition requiring integrated model of care

– MORE MEDICATION
  • ART earlier (START trial ? CD4 >500)
  • Treatment as prevention (Partner study - ART treatment can markedly reduce (by 96%) the risk of transmission to HIV-negative partners
Number of people diagnosed with HIV seen for care by age group: UK, 2004–2013
PLWH at MMC: 2013

- Less than 25: 2%
- 25-34: 12%
- 35-44: 30%
- 45-54: 38%
- 55-64: 14%
- 65-74: 3%
- 75+: 1%

Waters L. Based on local SOPHID data 2013
HIV Disease Contributes to Non-AIDS Events

- Low CD4+ T-cell nadir
- Coinfections (hepatitis, CMV, EBV, and HPV)
- Increased comorbidities
- Persistent inflammations
- Lifestyle (smoking, etc.)
- Cumulative cART exposure
- Aging

Non communicable diseases associated with HIV

1. **Neurocognitive disease**: e.g. neuro-cognitive decline seen in advanced HIV, and other effects such as poor concentration, mental slowing, depression

2. **Cardiovascular disease** (CVD)

3. **Renal disease**: Kidney disease may affect up to 30% of HIV-infected patients. HIV-associated nephropathy (HIVAN)

4. **Effects on bone density**: Reduced bone mineral density more common among HIV-infected patients. Fracture risk > 50y 3 yearly. DEXA in all women > 65y/men > 70y

5. Significant increase in certain **cancers** including lymphoma and other non AIDS malignancies, lung, HCC
HIV Infection Is Associated With Higher Rates of CAD

- Kaiser Permanente: CHD hospitalization rate and MI rate significantly higher in HIV pts vs controls[^1]
- Partners HealthCare System: AMI rates higher in HIV pts[^2]
- Meta-analysis of literature: RR 1.61 for CVD in untreated HIV pts vs uninfected controls; RR 2.0 for CVD in treated HIV pts vs controls[^3]
- VA Aging Cohort: HIV-positive veterans at increased risk of AMI vs uninfected (HR: 1.48; 95% CI: 1.27-1.72)[^4]
  - Excess risk remained among pts with VL < 500 c/mL (HR: 1.39; 95% CI: 1.17-1.66)
- Challenges: low rates of events even in large cohorts
  - DAD study: 517 MIs in 33,347 pts studied for 5.1 yrs = 3/1000 PY[^5]
  - Studies not designed to look at CVD/incomplete data (esp, cigarettes)

Drug interactions

- Highlights importance of communication between services
- Record on repeat prescription screen/set up alerts

Check [www.hiv-druginteractions.org](http://www.hiv-druginteractions.org) or call HIV Pharmacy!

- Emergency contraception – IUD or double dose levonelle? ellaOne
“the big blue one”

http://www.aidsmap.com/resources/Antiretroviral-drugs-chart/page/1412453/
GP has vital role in management of PWLH

- Better placed to manage complex comorbidities of ageing HIV population
- Increased risk of mental health problems (46% patients with h/o depression)
- Greater awareness of social context
- Ongoing prescriptions
- Avoid duplication between services
- End of life care
Could information be included in template form?

- Document last CD4, On/off ART
- Annual cervical smear
- Vaccinations – Hep A & B; Flu (annual –parenteral only), pneumococcal. Check green book
- Sexual and reproductive health
- Mental health screen
- Smoking cessation, drugs and alcohol
- Record ART and set Alerts
- Children and partner notification
- Consider copying in HIV team on other referrals
- End of life care
- If HIV negative add alert for repeat test in high risk patients
Case discussion – what do you need to consider?

- 38 yr female pt from Zimbabwe with HIV
- Presents with cough
- Likely URTI
- BMI 36
- Examination normal
- Latest bloods show total cholesterol 6.7
- PMH: Asthma, IUD

Recent letter from HIV team;
CD4 450
VL < 50
Truvada/Atazanavir/Ritonavir
Case

38 yr female pt from Zimbabwe with HIV
Presents with cough
Likely URTI
BMI 36
Examination normal
Latest bloods:
6.7
PMH: Asthma, IUD
Recent letter from HIV team:
CD4 450
VL < 50
Truvada/Atazanavir/Ritonavir

• Does she have any children?
• Are symptoms related to her HIV?
• Cardiovascular risk – health promotion
• Does she need a statin?
• Is she on a steroid inhaler?
• Is the IUD safe?
• Has she had a cervical smear?
• Has she been vaccinated?
• Has she been screened for Hep B?

And of course all in 10 minutes!
Contacts

- Philippa.harris1@nhs.net

- HIV Consultant on call – advice/referrals 0203 3175077

- UCLH switchboard 0203 4567890 for admission/inpatients or if acutely unwell and ask for;
  - HIV “Immune” SpR
  - ID SpR for advice or A+E OOH

- Mortimer Market Centre outpatients
  - Medical secretaries 0203 315244
  - HIV Pharmacy 020 3317 5228
  - Hepatitis advice and referrals 0203 3175454
  - Bloomsbury outpatient clinic sees all patients with HIV - 0203 3175100
  - On call emergency HIV walk in clinic (for Bloomsbury patients only);
    - Monday 09:00 – 13:00
    - Tuesday 09:00 – 13:00
    - Wednesday 13:00 – 15:00
    - Thursday 09:00 – 13:00
    - Friday 09:00 – 13:00
Resources

• [www.bhiva.org](http://www.bhiva.org)
• [www.hiv-druginteractions.org](http://www.hiv-druginteractions.org)
• [www.aidsmap.com](http://www.aidsmap.com) - ART list
• [www.medfash.org.uk](http://www.medfash.org.uk) - HIV in primary care booklet
• www.tht.org.uk - home testing enquiries
• [www.hpa.org.uk](http://www.hpa.org.uk)
• Immunisations – Green book online
• [http://i-base.info](http://i-base.info)
Early diagnosis of HIV enables better treatment outcomes and reduces the risk of onward transmission. Have an HIV test if you think you may have been at risk. Get tested regularly for HIV if you are one of those most-at-risk:

- **Men who have sex with men** are advised to have an HIV and STI screen at least annually, and every three months if having unprotected sex with new or casual partners.
- **Black-African men and women** are advised to have an HIV test and a regular HIV and STI screen if having unprotected sex with new or casual partners.

Always use a condom correctly and consistently, and until all partners have had a sexual health screen.

Reduce the number of sexual partners and avoid overlapping sexual relationships. Unprotected sex with partners believed to be of the same HIV status (serosorting) is unsafe. For the HIV positive, there is a high risk of acquiring other STIs and hepatitis. For the HIV negative, there is a high risk of HIV transmission (over 7,000 of MSM and 13,000 black African heterosexuals were unaware of their HIV infection) as well as of acquiring STIs and hepatitis.
How to get an HIV test:

- Go to an open access sexually transmitted infection (STI) clinic (some clinics in large cities are offering ‘fast-track’ HIV testing) or go to a community testing site (http://www.aidsmap.com/hiv-test-finder).

- Ask your GP for an HIV test – nowadays there is no need for lengthy discussion about the test, it just involves having blood taken, or even a finger prick.