

**HIV in Primary Care**  
*Joint RCGP/BHIVA Multidisciplinary Conference*

British HIV Association  
**BHIVA**

RCGP  
Royal College of  
General Practitioners

**Seminar Two:**

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**HIV & the GP**  
The role of General Practice in HIV  
as a long-term condition

Dr. William Ford-Young  
RCGP/BHIVA 25<sup>th</sup> January 2013

## Introduction

- Informal & interactive – learn from each other
- Evidence base & shared experience
- HIV –similar to or different from other chronic conditions?
- Some specifics
- Information resources
- Discussion

## Similarities with with other chronic conditions

- GPs deal with chronic conditions all the time
- Patient centred, holistic, GP approach (ICE)
- Share care and information with specialist services
- Long-term relationship with patients, their significant others, in their environment
- Coordinate care between agencies & teams
- Advocacy, information & support
- End of life care

## Why is HIV different?

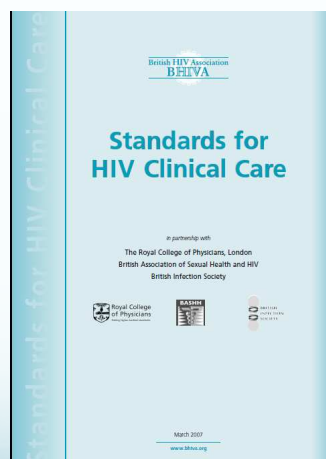
- Discuss

## Why is HIV different?

- Stigma
  - Historical
  - Societal/cultural – means of acquisition
- Concerns re
  - Confidentiality
  - Professionals' knowledge, attitude, understanding
  - Expert patients
- Infectious disease
- Co-morbidity & unknown outcomes

## Some background to why we are here

## BHIVA Standards 2007



## BHIVA – benefits of extended role of GP

- Often easier for pts to attend GP than hospital (access to appts?)
- GPs skilled Mx long term conditions e.g. CVD, lipids, BP, monitoring renal function, mental health, care of elderly, co-ordination social care
- Some pts have poorer outcomes associated with complex psychosocial issues leading to poor OPD attendance or adherence
- GP care *may* be cheaper (GP involvement may prevent more specialist referral)
- But no evidence that it is cheaper to move HIV care into the community

Extending role of primary & care in community care in HIV. BHIVA 2009

## BHIVA Standards & Principles in extending Primary Care engagement

- ...avoid fragmentation of care...all pts networked to specialist services...defined protocols & pathways...urgent referrals
- Good two-way communication
- Every pt must remain under specialist
- Every pt encouraged to register with GP
- Choice for hospital only care or shared care
- Outcomes & adherence to standards & guidelines need monitored (regardless of place of care)
- Clear accountability for governance & funding regardless of place of care

Standards for Clinical Care in HIV. BHIVA 2007

## Medfash – Recommended Standard 5



Medfash 2003

### Medfash St'd 5. Primary Healthcare for people with HIV

- People with HIV should have access to good quality primary healthcare provided by local networks, that are sensitive to the needs of those living with HIV
- ...primary care plays an important role in the general health care of people with HIV
- **Adopting and publicising policies on anti-discrimination and confidentiality within general practice can increase the proportion of patients willing to disclose their HIV status...enabling better quality primary care**

## Medfash St'd 5. Primary Healthcare for people with HIV

- Awareness of services & pathways & communication
- GP can enable access to other & integrated services
- GP teams often best placed to access mental health services
- Prevention (HIV onward transmission) [& co-morbidity]
- See also key interventions & audit indicators

Your practice and HIV

## “HIV testing – we’re making it routine”



### Broken Cross Surgery Equal opportunities statement

- Our aim is to provide high standards of care to all our patients, regardless of the nature of their illness
- We intend never to discriminate against people on the grounds of gender, race, social class, age, ability, religion or sexual orientation
- No matter how young or old you are we will not tell anyone else what you tell us without discussion with you first



## The GP & HIV

### Newly diagnosed or newly registering HIV patient

- Explain confidentiality (whole team) vs secrecy
- Establish information pathways/referral with specialist
- Discuss roles of GP vs specialist (or A&E) & establish terms of accessibility etc. ? Monitoring of immunologically well, ARTs? Who prescribes what. Management of acute illness.
- Health promotion
  - Immunisation
  - Cervical screening
  - Smoking, alcohol, drugs
  - Sexual & reproductive health
  - International travel advice

## Communication & Shared Care

- Ensure good 2-way communication between 1 & 2 care
- Different 2 care providers – different formats
- Minimum essentials – significant diagnoses, CD4 & VL, other investigations (QOF), medications, management plan
- Management of acute illness

## Immunisation

- “Green book” – [www.dh.gov.uk](http://www.dh.gov.uk) chapter 7 (updated April 2011) based on BHIVA guidelines 2006 but better to see
  - BHIVA guidelines - [www.bhiva.org](http://www.bhiva.org) (2008)  
HIV Medicine (2008), 9, 795–848 (54p document but all you need to know!)
- [also for children see RCPCH [www.rcpch.org.uk](http://www.rcpch.org.uk) or CHIVA [www.bhiva.org/chiva](http://www.bhiva.org/chiva) ]
- Give inactivated vaccines as per usual national guidelines regardless of CD4 but be aware may not mount as good an immune response, “immunisation or boosting of HIV+ve individuals should either be carried out before immunosuppression occurs or deferred until an improvement in immunity is seen”

## Generally recommended immunisations

Hepatitis B	
Influenza (incl swine flu) (parenteral only)	Indication strengthened by other risk factors
Pneumococcal	Indication strengthened by other risk factors
Tetanus-diphtheria – poliomyelitis (parenteral)	If uncertain vaccination status or travel

## Other inactivated vaccines safe in all HIV+ve adults

Anthrax	Occupational
Cholera (WC/rBS) ( <i>Dukoral</i> )	Travel
Hepatitis A	Risk groups/travel
Hib	Risk groups (one as adult)
Japanese encephalitis	Travel
Meningococcus (MenC)	Risk groups
Meningococcus (ACWY)	Travel
Rabies	Travel
Tetanus-Diphtheria- Polio (Parenteral)	Travel
Tick-borne encephalitis	Travel
Typhoid (ViCPS) TyphimVi/Typherix	Travel

## Live vaccines

### OK if CD4 count > 200

Measles Mumps & Rubella (MMR)
Varicella
Yellow fever

### ABSOLUTE CONTRAINDICATION

Cholera (CVD103-HgR) (live vaccine with no safety data)
Influenza (intranasal)*
Oral poliomyelitis (OPV)*
Typhoid (Ty21a)
Tuberculosis (BCG)
*also contraindicated in close contacts

## Recommended for HIV+ve adults if found susceptible

Vaccine	CD4 count (cells/ $\mu$ L)	Comment
Hepatitis B	Any	
MMR	>200	All measles IgG seronegative persons. Rubella seronegative women of child-bearing age
Varicella	>400 Consider if <200	All VZV IgG seronegative persons

## Cervical Screening

- HPV related disease more common in HIV+ve women
- Annual smears should be performed with closer surveillance and lower threshold for colposcopy
- Aidsmap says “women should have a Cx smear on diagnosis, 6m after that then annually”
- What do our laboratories advise us? – do we give them adequate information?

## Lifestyle

## Lifestyle – smoking, alcohol, drugs, obesity....

- Increased cardiovascular risk, metabolic syndrome and diabetes – HIV/ART related
  - Increased health promotion activity & brief interventions re smoking, diet, exercise, alcohol etc.
- Increased risk of many cancers including lung cancer
  - Increased activity re smoking (tobacco & cannabis)
- Recreational drug/alcohol use may be higher in MSM, CSWs etc, increased risk of unsafe sex, onward transmission of HIV & acquisition of other STIs, BBVs, IDU or non-IDU associated infections.

## Sexual & Reproductive Health

- Sexual health support
- Management of STIs
- Management of Hepatitis
- PEPSE
- Pre-conceptual counselling, natural & assisted conception
- Cervical/anal pre-cancers & cancers
- Psychosexual issues
- HIV sexual transmission & ART
- HIV & criminalisation
- Contraception
- Reproductive & sexual health in men
- Erectile dysfunction

BHIVA BASHH & FSRH guidelines - Mx sexual & reproductive health in HIV 2008

## Sexual health STIs Hepatitis

- Initial & FU regular STI screening & treatment
  - Secondary or Primary care?
    - Majority of STIs Rx'd same HIV non HIV
    - Think rashes & proctitis
    - Need PN
    - Good quality health promotional advice
- Hepatitis
  - Initial screen for HAV, HAB & HAC
  - Vaccination B (&A)
  - Annual B&C screen if at risk
  - HIV – HCV coinfection

## Sexual health PEPSE

- UK guideline for use of post-exposure prophylaxis for HIV following sexual exposure (2011)
- Window of opportunity to abort HIV infection by inhibiting viral replication following an exposure (<72 hours)
- Need to be aware local pathways and guidelines
- Risk tables & definition
- Recommended regimes (Truvada & Kaletra) 28 days, support with adherence & side effects. Re-testing.

BASHH & BHIVA UK guideline PEPSE 2011

## Contraception

- condoms
- HIV+ve women not on ART – all methods available
- choice and information
- COC, POP, patch & implants may be affected by ART and enzyme induction
- IUD, IUS, depot all ok
- emergency contraception – IUD, double Levonelle, ?ellaOne (data yet?)

BHIVA BASHH & FSRH guidelines - Mx sexual & reproductive health in HIV 2008

## Erectile dysfunction

- ED common in HIV+ve men (?more common, discuss)
- Similarities & differences in investigation & management
  - PDE5 inhibitors
  - Intracorporeal alprostadil – injection & BBVs Syphilis etc.
- Loss of desire
  - oestrogen/testosterone balance altered with ART
- Delayed ejaculation
  - Psychological – peripheral neuropathy

BHIVA BASHH & FSRH guidelines - Mx sexual & reproductive health in HIV 2008



## Pre-conception & conception advice

- UPSI & discordant couples
- +ve -ve
  - sperm washing
  - Insemination donor sperm
- +ve
  - Expert preconception counselling
  - ART or not ART
  - Expert advice and support in pregnancy, child birth & puerperium & FU of child

BHIVA BASHH & FSRH guidelines - Mx sexual & reproductive health in HIV 2008

## Pregnancy & HIV

- RCOG Green-top Guideline 39 BHIVA
- If on ART for own health continue
- If not on ART initiate at 20-28 weeks till delivery
- VL >50 - Elective CS @ 38 weeks
- VL <50 - planned NVD if VL <50 or CS >39 for obstetric reasons
- Avoid breast feeding

## HIV sexual transmission & ART

- ART reduces risk of HIV transmission
- Continue to promote condom use
- Detailed counselling but GPs can support basic principles
- Discordant couples
  - Criminalisation
- Concordant couples & risk of superinfection – resistant strains

BHIVA BASHH & FSRH guidelines - Mx sexual & reproductive health in HIV 2008

## Anti-Retroviral Treatment (ART)

- When to start determined by patient's clinical condition, surrogate markers (VL & CD4 count), resistance patterns, specialist advice & (hopefully) informed decisions of the patient
- Combination therapy necessary – may lead to high pill burden
- GPs can help support this process – ART is not an easy ride, significant side effects, hypersensitivities, complications, drug interactions, & strict adherence necessary to avoid drug resistance

## ART and the GP

- No need to be experts in mechanism of action or expect to initiate or change therapy, or necessarily prescribe ART
- Need to support patient and be aware of side effects, serious ones to report to specialist, minor ones to help with symptomatic measures etc
- Support patient with and emphasise importance of adherence
- Understand aim to reduce viral load to undetectable in 3-6 months of starting Rx
- Understand significance of interactions (toxicity or sub therapeutic ART levels & resistance)

## ART side-effects

- NAM-AIDSMAP chart (next slides)
- Basic monitoring & management easy in GP if not done in secondary care
  - FBC, renal & hepatic function, lipids & glucose, B12 etc.
  - ECG
  - Skin rashes – minor – serious
  - Mental health – minor depression – serious psychosis
  - Sleep disturbance
  - Peripheral neuropathy

**nam aidsmap** Antiretroviral drug chart

Generic name	Trade name	Formulation	Standard adult dose	Pills/day	Major side-effects	Food restrictions
<b>Nucleoside reverse transcriptase inhibitors (NRTIs)</b>						
<b>3TC, lamivudine</b>	EpiVir	150 and 300mg tablets	150mg twice a day or 300mg once a day	2 1	<b>Common:</b> Nausea, vomiting, diarrhoea, headache, abdominal pain, hair loss, fever, insomnia (difficulty sleeping), rash, tiredness, runny nose, joint pain <b>Rare:</b> Lactic acidosis, liver damage	Take with or without food
<b>Abacavir</b>	Zigen	300mg tablet	300mg twice a day or 600mg once a day	2	<b>Common:</b> Rash, nausea, vomiting, diarrhoea, fever, headache, tiredness, loss of appetite <b>Rare:</b> Hypersensitivity reaction, lactic acidosis	Take with or without food
<b>AZT, zidovudine</b>	Retrovir	100 and 250mg capsules	250mg twice a day	2	<b>Common:</b> Nausea, vomiting, fatigue, headache, dizziness, weakness, muscle pain, loss of appetite, fever <b>Rare:</b> Blood disorders, lipodystrophy, lactic acidosis	Take with or without food
<b>d4T, stavudine</b>	Zenit	20, 30 and 40mg capsules	People over 60kg: 40mg twice a day People under 60kg: 30mg twice a day	2	<b>Common:</b> Lipodystrophy, peripheral neuropathy, nausea, diarrhoea, abdominal pain, heartburn, dizziness, tiredness, rash, itching <b>Rare:</b> Pancreatitis, lactic acidosis	Take with or without food
<b>ddI, didanosine</b>	VidexEC	125, 200, 250 and 400mg capsules	People over 60kg: 400mg once a day or 200mg twice a day People under 60kg: 250mg once a day or 125mg twice a day	1 or 2	<b>Common:</b> Peripheral neuropathy, nausea, vomiting, diarrhoea, abdominal pain, rash, headache <b>Rare:</b> Pancreatitis, lactic acidosis	Take at least two hours after and two hours before eating or drinking anything except water
<b>FTC, tenofovir</b>	Emtriva	200mg capsule	200mg once a day	1	<b>Common:</b> Nausea, diarrhoea, headache, raised kinase levels, skin darkening in children	Take with or without food

Drug Revised in the UK August 2012

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## ART drug interactions

- Important to have communication from specialist
- Record on pt repeat Rx screen
  - EMIS & other systems will alert
  - (we record drug, dose & frequency, but quantity of 1 & pharmacy text stating “not to be dispensed in community – hospital dispensing only”)
  - Don't rely on your computer or BNF – use [www.hiv-druginteractions.org](http://www.hiv-druginteractions.org)
  - Don't forget non-prescribed preparations – (herbals, dietary supplements etc)

## Drug interactions – case 1

- 45y male on ART 1 year
  - Atazanavir 300mg od
  - Ritonavir 100mg od
  - Truvada 1 od
- VL undetectable CD4 450
- Not started on efavirenz due to PH depression
- Needs a statin (which one?)
- Now depressed & decision to treat with antidepressant

## Drug interactions – case 2

- 59y male - PH treatment failure & drug resistance (allergic to penicillins)
  - Darunavir 600mg bd
  - Ritonavir 100mg bd
  - Etravirine 200mg bd
  - Tenofovir 245mg od
- COPD – suggest starting symbicort
- Infective exacerbation – Clarithromycin? Doxycycline

## Mental health

- Depression/anxiety
- Insomnia
- Psychosis
- Dementia
  - HIV related or age related
  - When to stop ART
  - End of life care
- Psychosexual

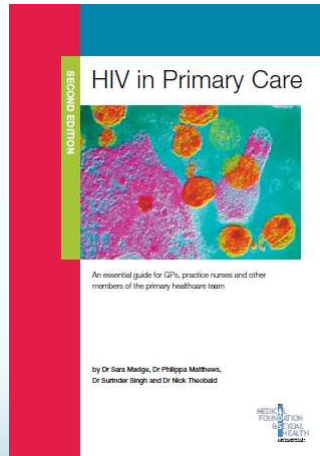
## End of life care

- Advance care planning – when to stop medication
- Gold standards framework – palliative care/MDT meetings in practice
- Liverpool pathway for the care of the dying
- Hospice & local support
- Potential problems re family vs carers/significant others
- Wills etc.
- Certification of cause of death

## The acutely ill HIV+ patient

- Is it HIV related?
  - CD4
  - Medication
  - Emphasises need for good communication
- Will my management affect HIV management (drug interactions)
- When do I need to d/w HIV physicians?

## Further information [www.medfash.org.uk](http://www.medfash.org.uk)



## Further information

- [www.medfash.org.uk](http://www.medfash.org.uk)
- [www.aidsmap.com](http://www.aidsmap.com)
- [www.bhiva.org](http://www.bhiva.org)
- [www.hiv-druginteractions.org](http://www.hiv-druginteractions.org)
- [www.hpa.org.uk](http://www.hpa.org.uk)
- [www.rcgp.org.uk](http://www.rcgp.org.uk)
- [www.bashh.org](http://www.bashh.org)
- [www.fsrh.org](http://www.fsrh.org)
- [www.tht.org.uk](http://www.tht.org.uk)
- [www.nat.org.uk](http://www.nat.org.uk)
- [www.hpa.org.uk](http://www.hpa.org.uk)
- [www.rcgp.org.uk](http://www.rcgp.org.uk)



## Key Points

- ideal skills
- difference
- confidentiality
- vaccinations
- art
  - adherence
  - side effects
  - drug interaction
- sexual health
  - smears
  - contraception
  - STIs Syphilis & Hepatitis
  - pre-conceptual advice
  - PEPSE
- Mental health
- treatment failure
- end of life care

Thank you

If you can't prevent it reduce the  
risks