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# TOP 10 HIGHLIGHTS OF THE YEAR AND THEIR IMPACT ON HIV NURSING

## 1. Further evidence on treatment as prevention



**The NEW ENGLAND  
JOURNAL of MEDICINE**

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**Prevention of HIV-1 Infection with Early Antiretroviral Therapy**

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**ABSTRACT**

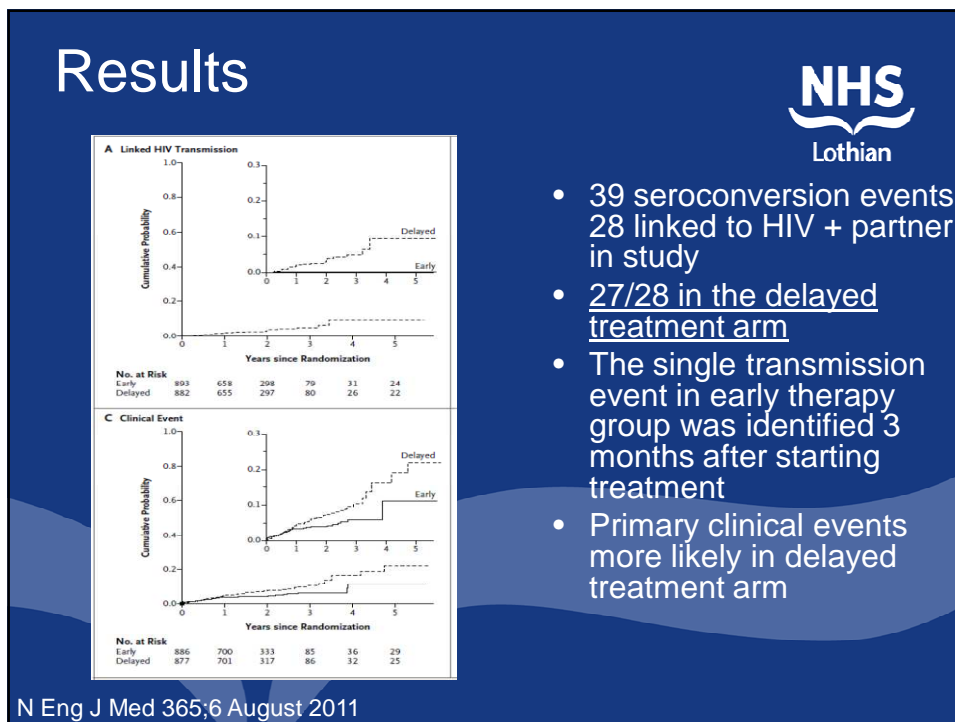
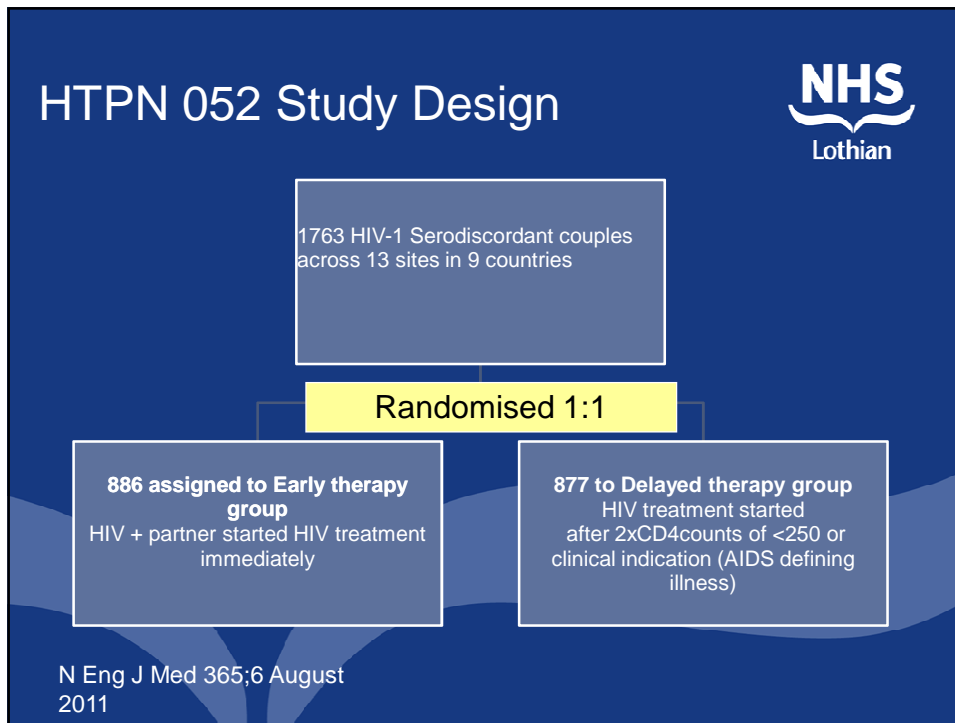
**BACKGROUND:** Antiretroviral therapy that reduces viral replication could limit the transmission of the human immunodeficiency virus type 1 (HIV-1) in serodiscordant couples.

**METHODS:** In nine countries, we enrolled 1763 couples in which one partner was HIV-1-positive and the other was HIV-1-negative. 54% of the subjects were from Africa, and 50% of infected partners were men. HIV-1-infected subjects with CD4 counts between 350 and 750 per cubic millimeter were randomly assigned to a 1:1 ratio to receive antiretroviral therapy either immediately (early therapy) or after a decline in the CD4 count or the onset of HIV-1-related symptoms (delayed therapy). The primary prevention end point was linked HIV-1 transmissions in HIV-1-negative partners. The primary clinical end point was the earliest occurrence of pulmonary tuberculosis, severe bacterial infection, a World Health Organization stage 4 event, or death.

**RESULTS:** As of February 21, 2011, a total of 39 HIV-1 transmissions were observed (incidence rate, 1.2 per 100 person-years; 95% confidence interval [CI], 0.9 to 1.7). Of these, 28 were vertically linked to the infected partner (incidence rate, 0.9 per 100 person-years; 95% CI, 0.6 to 1.5). Of the 28 linked transmissions, only 1 occurred in the early-therapy group (incidence rate, 0.04, 95% CI, 0.01 to 0.27). In addition, subjects receiving early therapy had lower treatment and partner-discord rates, a 50, 95% CI, 0.46 to 0.55; P=0.001.

**CONCLUSIONS:** The early initiation of antiretroviral therapy reduced rates of sexual transmission of HIV-1 and clinical events, indicating both personal and public health benefits from such therapy. (Funded by the National Institute of Allergy and Infectious Diseases and others; HPTN 052 ClinicalTrials.gov number, NCT00054811.)

N Eng J Med 365:6 August 2011



## Impact on nursing practice




- Patient information /discussion/ advocacy
- Timing of starting treatment
- PEPSE (for heterosexuals)
- Preconception
- ?disclosure and legal position

## **2. Developments in Hep C**



- 9% of people in UK living with HIV also have Hepatitis C
- Progression of liver disease faster in this group
- Historically-Pegylated interferon + Ribavirin for 48 weeks irrespective of genotype.
- success rates somewhere between 24-48% (depending on genotype)


NOW have drugs to add to that pre existing regimen that increase efficacy



## In the last year....

Drug	Dosing	
Boceprevir	4 tablets, 7-9 hourly, with food with SOC	<ul style="list-style-type: none"> <li>• Increased success of SVR</li> <li>• Taken with Peg and Riba</li> <li>• Genotype one only</li> <li>• Drug interactions!</li> </ul>
Telaprevir	2 tablets TDS With fatty food	

• And there is more to come....



## Drug interactions

www.hep-druginteractions.org

**LATEST ARTICLES**

Beliver - Direct-acting antiviral against HCV

Beliver - Treatment of HCV/HIV co-infection

EMA Review of Boceprevir and Telaprevir

Beliver - Nilotinib, Olanzapine, Hepatitis C, supplement

Drug Interactions - Telaprevir and co-trimoxazole

Meeting Report - 6th International Symposium on Hepatitis Clinical Pharmacology

Click here for previous news items.

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**SITE UPDATES**

Boceprevir and Telaprevir - Suspensions and tablets have been added as columns to the interaction charts. (30/06/12)

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**DRUG INTERACTION CHARTS**

Access our comprehensive, user-friendly free, drug interaction charts

**CLICK HERE**

Providing clinically useful, reliable, up-to-date, evidence-based information

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**GUIDE TO CLINICAL TRIALS**

The Guide to Clinical Trials for People with Hepatitis C Treatment Action Group's new publication is a useful resource to help people make informed choices about their healthcare. The Guide contains an outline of the drug development process, including the phases and types of trials, with HCV-specific information.

To download the guide (available in English and Spanish), click here.

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**ASSOCIATED SITES**

**LIVERPOOL**

www.hep-druginteractions.org

A comprehensive info drug-drug interaction resource, freely available to healthcare workers, patients and researchers.

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## Impact on nursing practice



- Keep patients informed of developments
- Take part in research studies where available
- Drug interactions! Consider even when starting HAART

## **3. New drugs here or in the pipeline**



- Rilpivirine /Eviplera  
On their way...
- QUAD (elvitegravir, cobicistat, Truvada)
- Dolutegravir
- Tenofovir Pro drug GS7340

## Impact on nursing practice



- More treatment options
- Cost implications?

## **4. Prioritising Mental Health**



First ever UK Standards for Psychological Support for People living with HIV (BPS, BHIVA, MedFash)

Advising a Stepped Care approach (Levels intervention range from 1-4 )

British studies demonstrating link between depression and health outcomes in HIV

## ASTRA study results



- Data on first 1227 participants reported
- One in three UK HIV outpatients were either receiving treatment for depression or had symptoms of depressive disorder.
- Among ART-treated patients, strong link between depressive symptoms and non-suppression of VL

Oral abstract 010 2012 British HIV Association, HIV Medicine, 13 (Suppl. 1), 1–11

## Impact on nursing practice



- Mental health screening
- Do it within first three months after diagnosis
- Incorporate psych support & mental health screening as part of routine care
- Have access to further assistance if need identified. Be able to implement step care model
- Local area defined pathways

UK Standards for Psychological Support for People living with HIV. BPS, BHIVA, MedFash

## 5. PrEP- Where are we?



### Pre Exposure Prophylaxis

- Previously best evidence was from iPrEx study
- Four major studies reported this year with conflicting results
- Several common themes



Study	Results
TDF2 (CDC 4940) in Francistown Botswana	63% ↓ overall (Male-10 truvada /2 placebo Female 7 truvada/14 placebo)
Partners PrEP In SSA	TDF arm showed 62%↓ TDF/FTC showed 75%↓
Fem PrEP In Kenya,SA Tanzania	28new infections in both arms- stopped for futility
VOICE (MTN-003) In Ug,SA,Zamb	TDF&TDF gel arms stopped for futility



## Impact on nursing practice

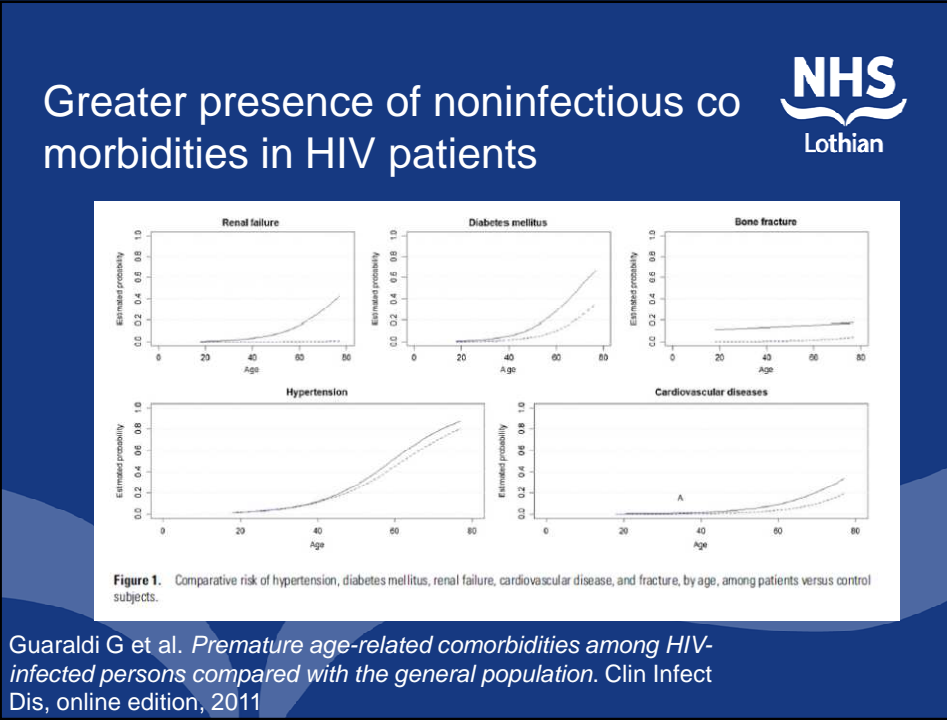
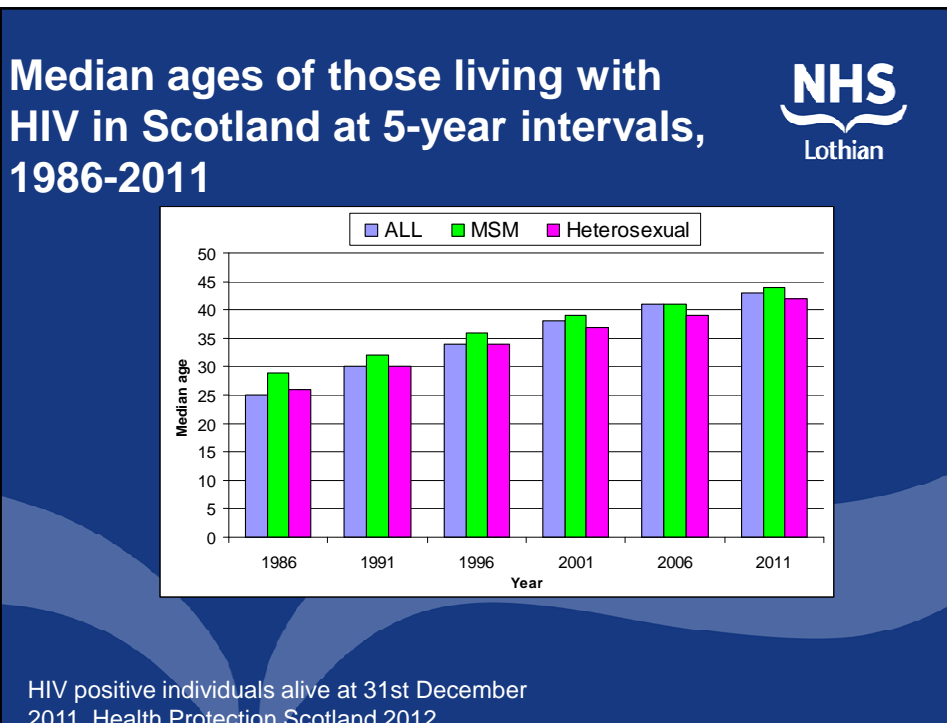


- Not currently approved in UK
- Efficacy? Monitoring? Toxicity? Resistance?
- Adherence support and information
- Other STIs? CONDOMS!
- Need evidence from more different communities and UK. Watch out for PROUD Study (England and Wales).

## **6. Evidence on ageing and HIV**



- Despite dramatic increase in life expectancy, mortality still higher in people living with HIV
- Not only due to illnesses due to immunodeficiency – >50% due to non infectious co morbidities
- What is going on?



## But also...



- Danish population based cohort study (2,267 patients) and matched controls (9068 controls)
- Categorised according to four groups according to risk factors
- Probability of survival from 25 to 65 was lower in HIV cohort **HOWEVER** in HIV patients with no other risk factors survival was equivalent to general population

And European data from COHERE study shows that mortality levels among non IVU patients with HIV are similar to general population

Obel et al Impact of non HIV and HIV risk factors on survival in HIV Infected patients on HAART: a population based nationwide cohort study

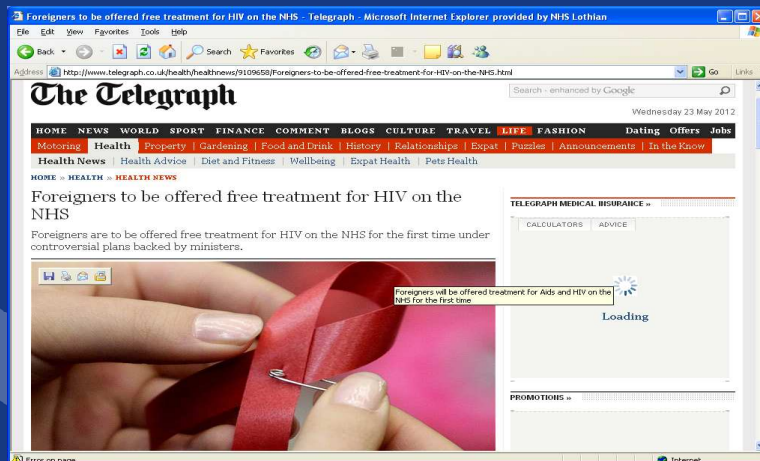
Lewden et al. All cause mortality in HIV infected adults with CD4  $\geq 500/\text{mm}^3$ : IJE online 2012:41: 433-445

## Impact on nursing practice



- **Lifestyle factors**
- HIV positive patients should be considered old when  $>50$  years
- Diagnose and treat co morbid conditions
- Oldest patients with longer length of infection are most at risk
- Monitoring
- Be clear where responsibility lies, role of GP etc

## 7. HAART regardless of immigration status



No vaccine, No cure: HIV and AIDS in the United Kingdom

**“Charging people for their HIV treatment and care is wrong for public health, practical and ethical reasons.”**



Government Report to House of Lords October 2011

## Impact on nursing practice



- Equity.
- Now no need now for trusts to try to secure payment
- Can encourage all patients to test-  
Decrease late diagnosis?

## 8. Late Diagnosis –an ongoing issue



- Numbers remain worrying
- Named one of 61 public health indicators (Jan 2012 DOH,Eng)
- Persistent role of an AIDS diagnosis in mortality rates underlines the importance of early Dx

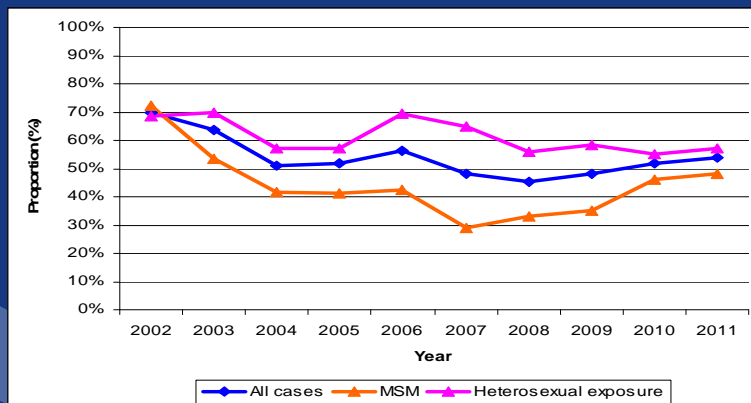
Mortality in treated HIV Infected Adults in Europe. Lewden et al. International Journal of Epidemiology 2012 ;41: 433-445

### Trends in late diagnosis (<350 cells/mm<sup>3</sup>) by exposure group UK 2001-2010



Health Protection Agency. HIV in the United Kingdom: 2011 Report. November 2011

### Late diagnosis: (CD4 count <350), 2002-2011 (Scotland)



Health Protection Scotland 2011

## Impact on nursing practice



- Reasons for late presentation multifactoral
- Evidence from qualitative study in Brighton found four main themes:
  - Psychological barriers
  - Stigma of HIV
  - Perceived low risk
  - Barriers in healthcare

### Need to consider our role in tackling all of these

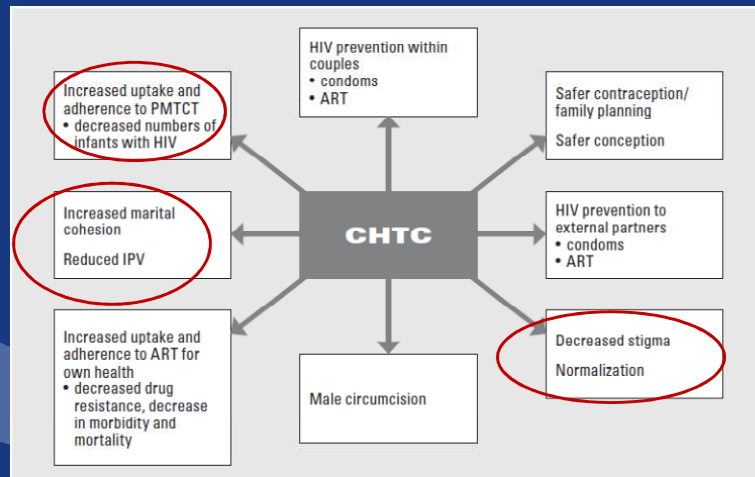
- Look back at missed opportunities?

Dowson et al (2011): Why some MSM present late for HIV testing: a qualitative analysis, AIDS Care, DOI:10.1080/09540121.2011.597711

## 9. WHO guidelines on testing couples



## Potential benefits to taking this approach where possible



Guidance on Couple HIV testing and Counselling. World Health Organisation. April 2012

## Impact on nursing practice

- Consider when possible
- Support and info for colleagues who are testing (MW, community)
- Getting involved before first test?



## 10. Commitment to a Cure



<http://www.iasociety.org/>

### Impact on nursing practice



- Knowledge and information
- Still in early stages
- Look at CROI website! (pause, rewind, watch again...)



Thank you!

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