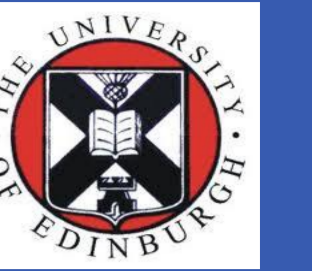


# Audit on clinical management of patients co-infected with HIV and HBV

Laura Ceccarelli<sup>1</sup>, Sheila Morris<sup>2</sup>, Alan Wilson<sup>2</sup>, Clifford Leen<sup>2</sup>

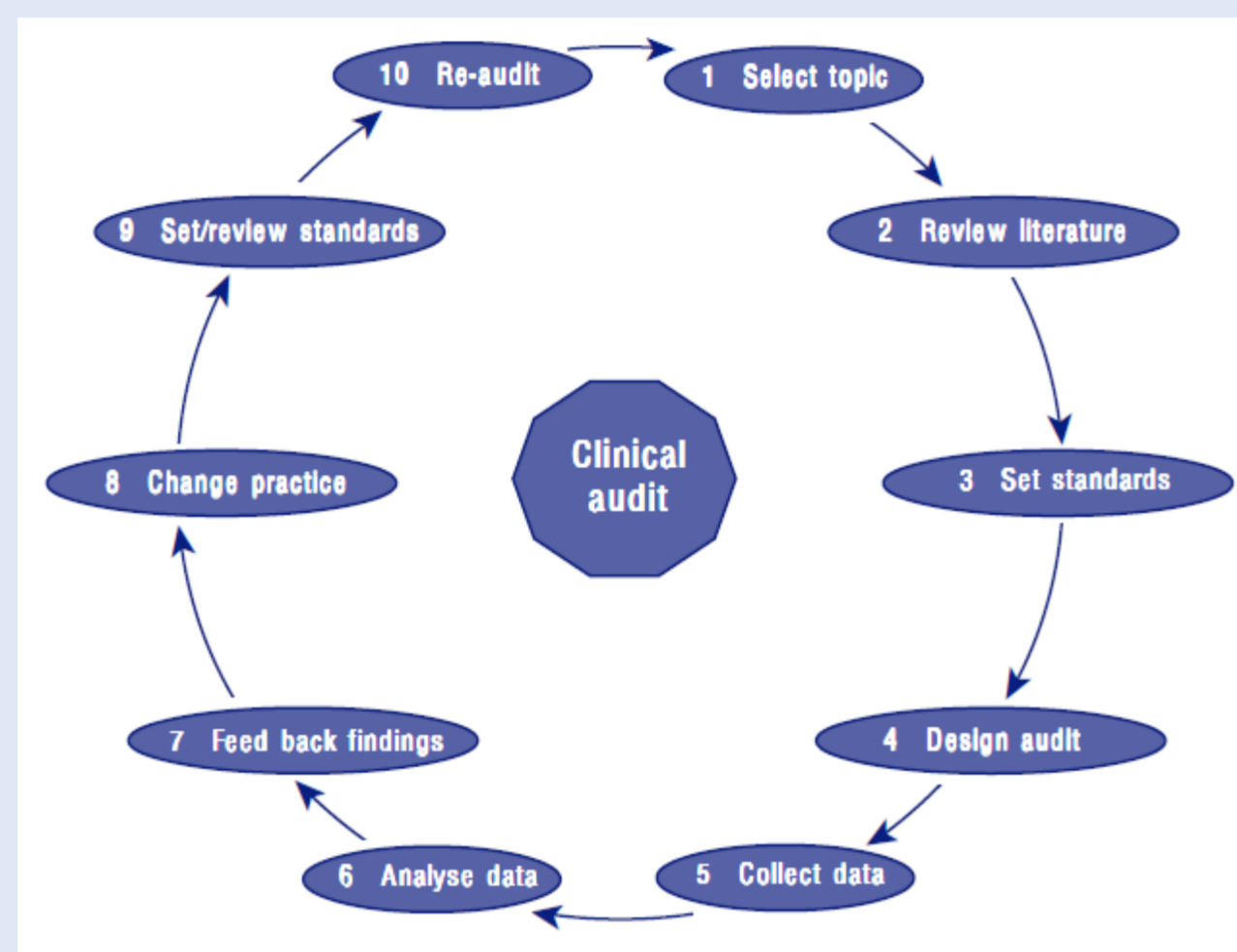
1 - Tor Vergata University-Hospital, Department of Experimental Medicine and Biochemical Sciences, Rome, Italy

2 - Western General Hospital, Department of Infectious Diseases, Edinburgh, Scotland, UK



## Background

Clinical audit is a quality improvement process that seeks to improve patient care and outcomes through systematic review of care against explicit criteria and the implementation of change (National Institute for Health and Clinical Excellence). The audit was led in the Department of Infectious Diseases at Western General Hospital in Edinburgh and was supported by EASL in form of Scholarship.



## Objectives

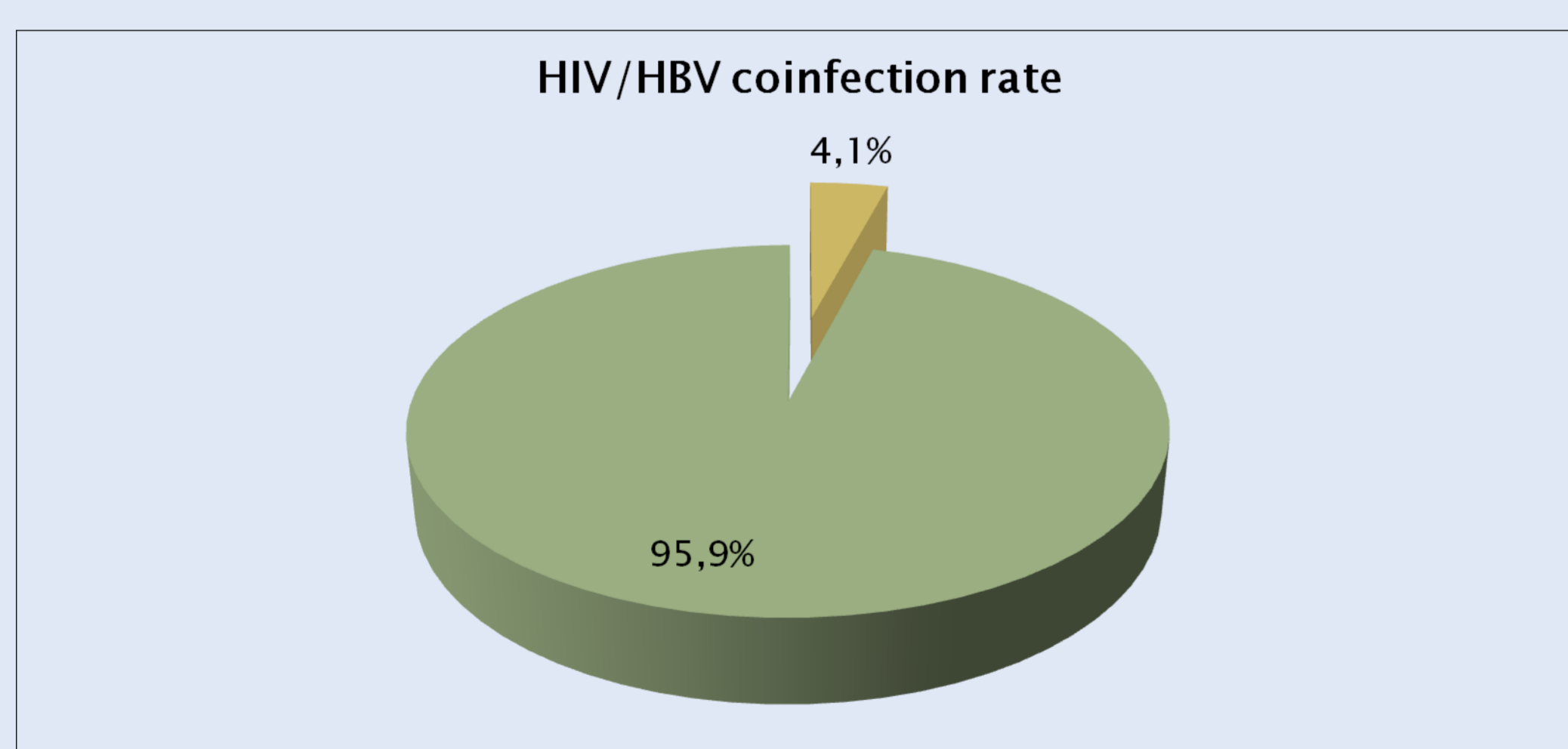
- To evaluate the degree of adherence to current British HIV Association (BHIVA) guidelines for the management of co-infection with HIV-1 and hepatitis B virus 2010
- A retrospective systematic review of HIV-HBV case notes (2010-2011) was carried out

## Results

### 1 - All HIV positive patients should be screened for Hepatitis B

- 640/687 patients infected with HIV were screened for HBV → 93,1%
- 47/687 patients were not tested

HIV-HBV co-infected patients → 4,1% (n = 26)



### 2 - All HIV positive patients should be vaccinated against Hepatitis A if non-immune

- 17/26 patients were immune (HAV antibodies positive)
- 6/9 patients were vaccinated → 66,6%
- 3/9 patients were NOT vaccinated → 33,3%

### 3 - All HBV-infected patients should have documented evidence in their case notes of a discussion on alcohol avoidance, transmission risk reduction and partner notification

- 13/26 patients had the documentation in their case notes → 50%

### 4 - All patients who are HBsAg positive should have a clear antiviral treatment plan written in their notes at least once a year

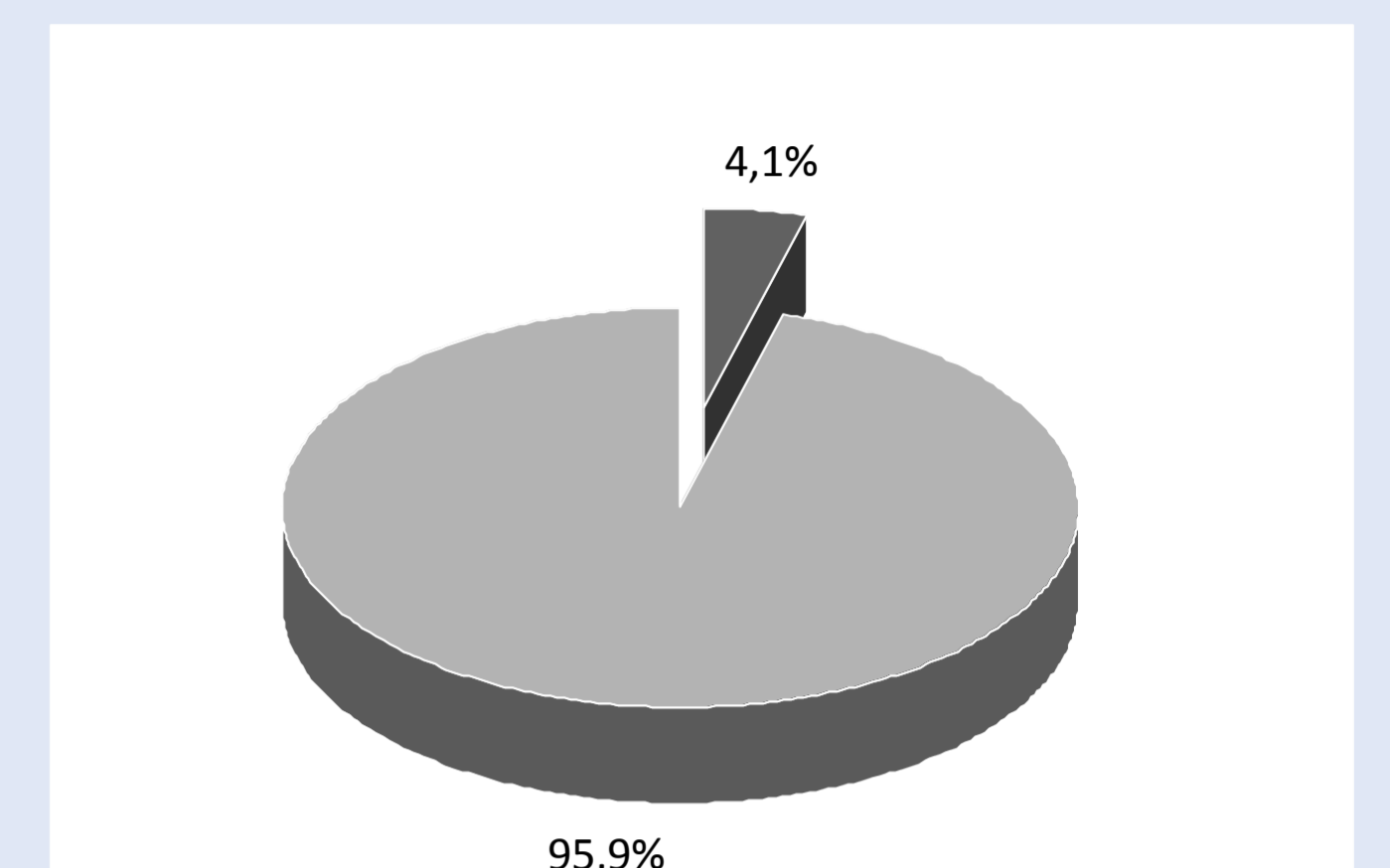
- 26/26 patients had a clear written plan in their case notes → 100%

### 5 - All HBV-positive patients should have their 'e' status checked

- 23/26 patients had "Ag e" tested → 88,4%
- 3/26 patients were vaccinated → 11,5%

### 6 - All HBV-positive patients should have the measurement of HBV DNA in the plasma

- 25/26 patients have been offered HBV DNA → 96,1%
- A single patient had not HBV DNA tested
- Patients with HBV DNA detectable: 5 (4,1%)
- HBV DNA < 100 IU/ml (n = 2)
- HBV DNA > 1000 IU/ml (n = 3)



### 7 - All HBV-positive patients should be tested for anti-hepatitis delta virus (HDV) antibody

- 5/26 patients have been tested → 19,2%
- 21/26 patients have NOT been tested → 80,7%
- HIV-HBV-HDV co-infected patients → 0

### 8 - All patients with chronic HBV should be offered an assessment of liver fibrosis by liver biopsy, hepatic elastography or other validated non-invasive fibrosis test

- NO documentation on non-invasive liver fibrosis assessment (liver biopsy, hepatic elastography or other validated non-invasive fibrosis test) was found

### 9 - All patients with cirrhosis should be jointly treated by a hepatologist and have regular assessments for HCC according to risk

- 5/8 (62,5%) cirrhotic patients → are jointly treated with a hepatologist
- 4/8 patients had regular screening with USS → 50%
- 1/8 patients had a regular screening with αFP → 12,5%
- 18/26 patients are not cirrhotic
- Among 18 not cirrhotic patients → 9 are at high risk (age and gender) → NOT jointly treated

### 10 - All patients with decompensated cirrhosis should be referred for liver transplantation assessment

- All patients in need were referred for liver transplantation assessment (n = 2)

### 11 - When HIV and HBV treatment is indicated, HAART regimen TDF/FTC-included should be started

- 23/26 patients were on HAART
- 21/23 patients were on optimal HAART (TDF/FTC or TDF/3TC) → 91,3%
- 2/23 patients were on LMV as only HBV active drug → 8,6%
- 80% of treated patients had HBV DNA undetectable

## Conclusion

93% of the cohort had been tested for HBV co-infection. One third of HAV non-immune patients did not receive HAV vaccine. Hepatitis delta virus antibody were infrequently checked (19,2% of patients). Reassessment of HBV disease progression and surveillance for HCC was very poor. Two patients were on HAART regimen including 3TC as the only HBV active drug. Strict adherence to current HBV management guidelines is very important to ensure high quality of clinical management to all co-infected patients. A dedicated HBV clinic for HIV/HBV co-infection may improve clinical care.