British HIV Association
Clinical Audit Report 2002–3

Registered Charity 1056354

October 2003

About the clinical audit committee

The BHIVA clinical audit committee began work in 2001. Its aims are:

- To promote practice in clinical audit in HIV, AIDS and related fields.
- To develop and implement a rolling programme of national clinical audit in HIV and AIDS.
- To facilitate sharing of relevant information and expertise via the BHIVA Clinical Audit Faculty.

More information about the committee's work is available at: http://www.bhiva-clinical-audit.org.uk

Members of the clinical audit committee

Chairperson: Dr Margaret Johnson, *BHIVA Chair Elect*

Deputy chairperson: Dr Gary Brook, *North Thames Regional Audit Group*

Audit co-ordinator: Dr Hilary Curtis

Dr Ray Brettle, *Edinburgh*
Mr Paul Bunting, *South Thames Regional Audit Group*
Dr David Daniels, *British Association for Sexual Health and HIV*
Dr Andrew Freedman, *Cardiff*
Professor Brian Gazzard, *BHIVA President*
Dr Eric Montiero, *Yorkshire Regional Audit Group*
Dr Dushyant Mital, *London*
Dr Fiona Mulcahy, *Dublin*
Dr Colm O'Mahony, *Chester*
Dr Anton Pozniak, *London*
Dr Caroline Sabin, *London*
Dr Ann Sullivan, *London*
Dr Alan Tang, *Reading*
Dr Jan Welch, *London*
Dr Ed Wilkins, *Manchester*

Expanding audit programme

THE British HIV Association (BHIVA) clinical audit committee expanded its work in 2002–3, by conducting two national audit projects. The first was a major audit covering two main topics:

- A survey of clinical practice on initiating antiretroviral treatment and review of case notes of patients who started from naive during April–September 2002.
- A preliminary survey of arrangements for HIV maternity care.

Results of this audit were presented at the BHIVA Spring conference in Manchester in April 2003 and are being prepared for journal publication.

The second audit was a case note review of new diagnoses of HIV infection. Intended to follow up on the 2001–2 audit finding that most patients starting treatment did so at CD4 counts <200 cells/µl, but that this largely reflected late diagnosis. Preliminary results were presented at BHIVA's Autumn 2003 Conference.

During the year the committee also worked to consolidate its role, by adopting terms of reference which have been approved by the BHIVA executive and by working to strengthen links with local clinicians and regional audit groups via the establishment of the BHIVA clinical audit faculty. The faculty operates through a fully interactive website at http://www.bhiva-clinical-audit.org.uk which enables clinicians to share information about their own projects and to access the committee's plans, audit results, draft questionnaires and other documents. Summary results of the three audits to date are available from this site in PowerPoint and Acrobat PDF formats. The site will be integrated into the main BHIVA website at: http://www.bhiva.org when this is re-developed.

Implications of the audit results

- Commissioners need to address the pressures that rapidly rising HIV caseloads are creating for services.
- Late diagnosis of HIV infection remains a significant problem in the UK, and contributes to avoidable disease. Routine screening accounted for fewer than half of diagnoses, and should be promoted further.
- GPs and hospital doctors need to be alert to the possibility of HIV infection, in view of some evidence of delayed diagnosis even after patients have presented with symptomatic disease.
- Black-African people are diagnosed later than whites. In some cases this may reflect the stage at their arrival in the UK, but it suggests a need to encourage testing within Black-African communities.
- Two-thirds of patients started treatment later than guidelines recommend, at CD4 counts <200 cells/µl. This is mostly due to late diagnosis. However, a significant minority of those who started treatment at CD4 <200 cells/µl had been diagnosed more than 6 months before doing so. Possible reasons include patient choice of non-attendance, raising the question of whether more could be done to encourage people with diagnosed HIV to attend for regular monitoring.
- It is of concern that a substantial proportion of patients started antiretroviral therapy without all relevant baseline tests being performed. This is being addressed in revised national guidelines.
- It appeared that most antenatal services had not reached the national target of 90% uptake for HIV screening, with a significant minority not offering such screening on an opt-out basis. This is being explored in more detail in the 2003–4 national audit.

Audit of patients starting HIV treatment

This audit comprised a survey of clinical practice in relation to starting treatment, and a case-note review of patients who started for the first time during April–September 2002. Its main aim was to assess adherence to the BHIVA guidelines applicable at the time.

Questionnaires were sent in October 2002 to centres previously identified as providing adult HIV care. Completed forms were received from 113 centres with data on 942 patients, of whom 56% were male and 55% Black-African. One striking finding concerned caseloads, with most centres reporting an increase of over 15% in the number of HIV patients under care over the preceding year.

Adherence to guidelines

The audit showed strong support for BHIVA guidelines, with 74% of centres saying their policy is to follow the guidelines and a further 13% reporting that they have their own guidelines which supplement the BHIVA ones. In addition, 34% have a local policy or guidelines on supporting adherence to treatment.

Timing of treatment

Most patients started treatment late, 66% at CD4 counts <200 cells/µl including 24% at <50 cells/µl. Most of these patients were diagnosed less than 3 months before starting treatment, indicating late diagnosis rather than delayed treatment. However, 10% of patients who started treatment at CD4 <50 cells/µl and 29% of those who started at CD4 >50 and <200 cells/µl had been diagnosed more than 6 months before doing so.

Reasons for treatment

The main reason for starting treatment was disease progression (85% of patients), followed by prevention of vertical transmission (12% of patients, including 10% for whom it was the sole reason). Patient choice and/or high viral load were given as the sole reason for starting treatment for a small number of patients, but in fact nearly all of these had CD4 counts justifying treatment according to the guidelines.

Choice of treatment

A very wide range of different drug combinations was reported, but the overwhelming majority of patients were started on treatment regimens recommended in guidelines applicable at the time: 64% on two nucleoside reverse transcriptase inhibitors (NRTIs) plus a non-nucleoside reverse transcriptase inhibitor, 10% on two NRTIs plus a protease inhibitor (single or boosted), 13% on three NRTIs and 3% on zidovudine monotherapy for prevention of vertical transmission. The most widely used specific combinations were Combivir®/efavirenz and Combivir®/nevirapine. Although tenofovir was not licensed for first-line use at the time of the audit, 42 patients (4%) were started on this drug.

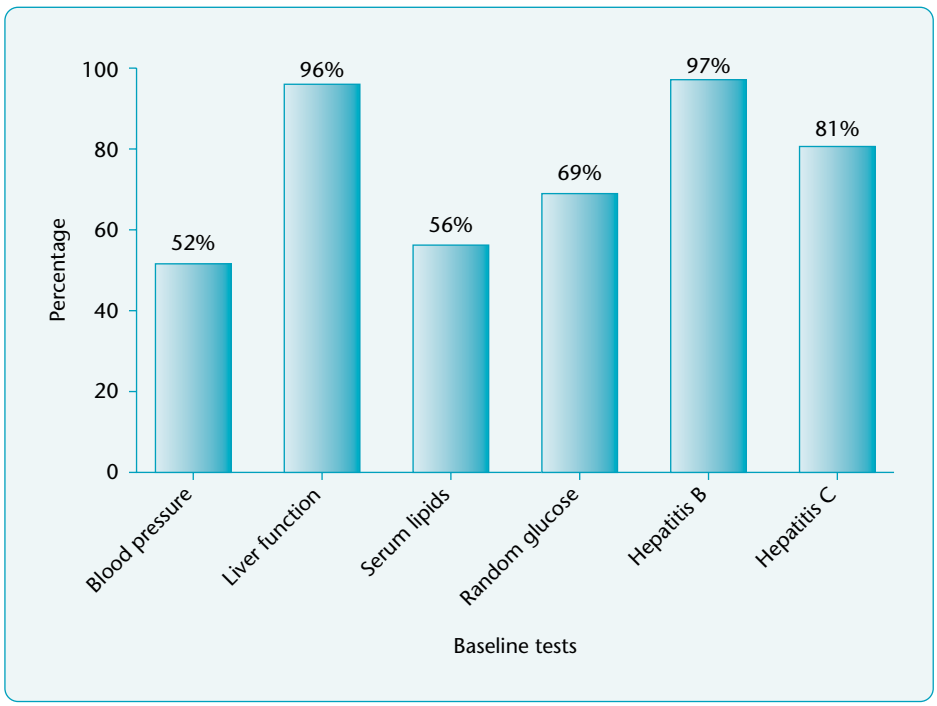

Figure 1: Proportion of patients recorded as undergoing baseline tests before starting treatment.

Other findings

Although not addressed in guidelines at the time, the case-note review included questions on baseline tests performed before starting treatment. The results are shown in Figure 1, and the low rates of testing recorded are of concern in view of the known adverse effects of HIV therapy.

The survey showed that most clinical centres review patients soon after starting treatment, within 1–2 weeks for 63% of centres. At two centres, however, patients were not reviewed until 4–8 weeks after starting treatment, while 36% of centres reported that they do not monitor the viral load until more than 6 weeks after starting. This is of concern in view of the need to support patients in adhering to treatment and in managing potential side effects.

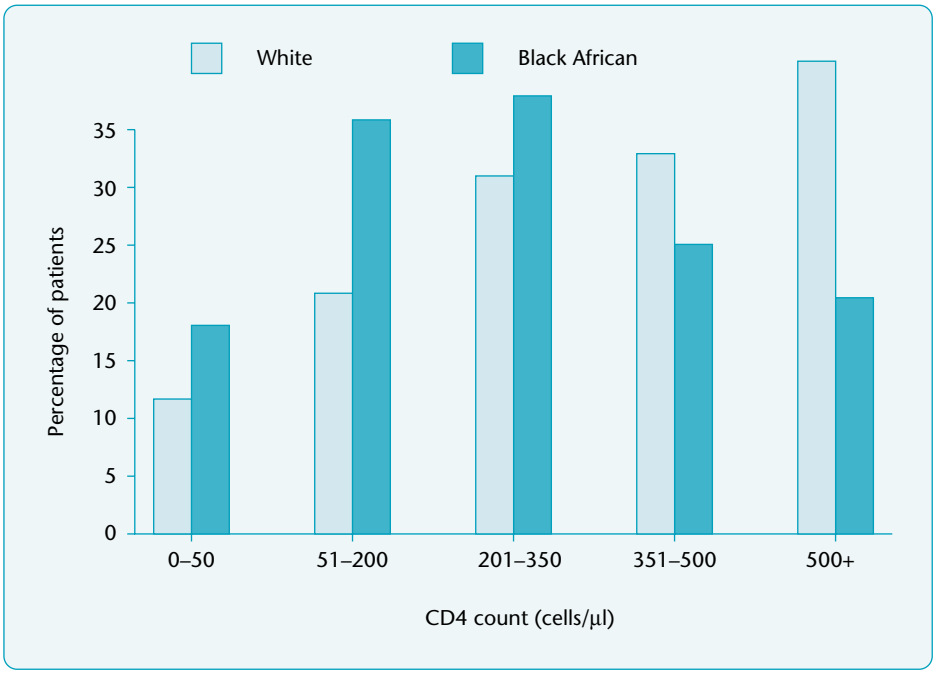

Figure 2: CD4 at diagnosis in cells/µl, by ethnicity.

Audit of new diagnoses of HIV infection

This project involved case-note review of patients who were first diagnosed with HIV during January–March 2003, or were first seen at participating centres during this period having been diagnosed elsewhere no more than 2 months earlier. The aim was to follow up on the results of the first audit conducted in 2001–2, by exploring possible reasons for late diagnosis. Data were analysed on 977 patients submitted from 98 centres, of whom 55% were male, 59% black African and 33% white.

Overall, 31% of diagnoses occurred late, at CD4 <200 cells/µl (11% at CD4 <50 cells/µl), and 15% of patients were classified as having CDC stage C disease at the time of diagnosis. Black-African patients were diagnosed significantly later than whites (P=0.0003, Figure 2).

The circumstances of diagnosis are shown in Figure 3. Routine screening accounted for fewer than half the diagnoses. Substantial morbidity occurred prior to diagnosis, with 162 (17%) of patients being hospitalised either at the time of diagnosis or during the preceding year. A further 13% had not been hospitalised but had had symptoms or conditions, which in retrospect, could have been related to their HIV infection. The course of events leading up to diagnosis was not always clear from the audit data, but a significant minority of patients were diagnosed through routine screening after having attended clinical services with symptomatic disease, suggesting earlier opportunities for diagnosis had been missed.

Although the audit was not intended to assess outcomes, five patients were reported to have died soon after diagnosis and nine to have been lost to follow-up.

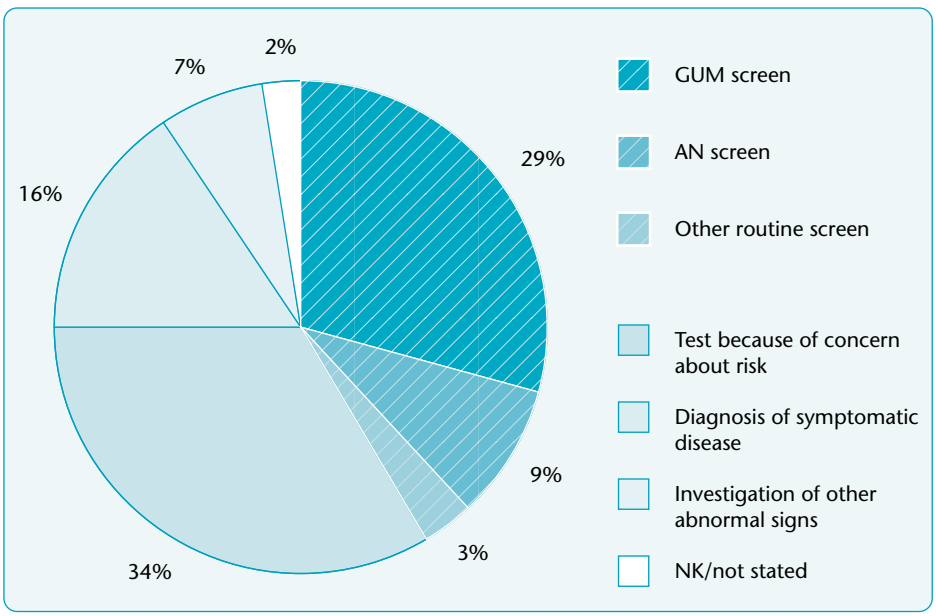

Figure 3: Circumstances of HIV diagnosis. AN, antenatal; GUM, genito-urinary medicine; NK, not known.

Future BHIVA events

10th Anniversary BHIVA Conference
15–17 April 2004
City Hall, Cardiff

BHIVA Autumn Conference
8–9 October 2004
London

Maternity care and HIV

The management of HIV and pregnancy will be the subject of the main audit project for 2003–4, but some preliminary questions on this were included in the 2002 survey. In terms of HIV testing policies at local maternity services, 88% of respondents reported an 'opt-out' approach, 10% 'opt-in' and 3% selective. Only a third of respondents reported uptake rates of 90% or above (the national target figure for December 2002), with 9% reporting figures below 60%. It should be noted, however, that these figures represent HIV clinicians' perceptions of what is happening rather than audited patient data.

Participation and coverage

One possible issue is that the number of centres taking part in the national audit programme has declined. A total of 148 centres responded to the first national audit in 2001–2 and 113 to the autumn 2002 audit of treatment initiation. The 2003 audit of new diagnosis elicited responses from 113 centres, but only 98 submitted patient data.

The audit committee is investigating the reasons for the declining number of participating centres. However, there is no denominator on which to base a participation rate. Anecdotally, some units combined to submit data jointly and some may not have taken part in the 2002–3 audits because they had no eligible patients. In addition, the configuration of clinical services may have changed in some areas. Hence, it is unclear whether there has been a real decline in willingness to participate.

The autumn 2002 audit of treatment initiation included an optional question on the centre's precise caseload, defined as the number of adult HIV patients seen for care within the preceding 6 months. The 90 centres that answered this question reported caring for a total of 21,791 patients. The committee plans to ask this question routinely in future audits as a way of monitoring coverage.

Financial details

As in 2001, all BHIVA's seven major sponsors (see below) generously supported the 2002 audit programme by equally contributing a further £50k.

Unlike 2001, this year BHIVA conducted two (one last year) national clinical audits. The budgeted total cost of running two audits is £44k. A printed audit report and a display poster is being prepared and will be sent to all participating centres and the full BHIVA membership.

During 2002, BHIVA also commissioned the set-up and management of a Clinical Audit Faculty, cost £1.3k.

Summary of expenditure	**£000**
Clinical audit coordinator	16
Project management and handling	17
Data reading, printing and postage	10
Audit committee expenses	1
Total	44

Surplus funds will be used towards future audits.

THANKS TO SPONSORS AND PARTICIPANTS

ROCHE PRODUCTS LTD

Abbott Laboratories Limited

Boehringer Ingelheim

BMS Virology™ Bristol-Myers Squibb Company

GILEAD

gsk GlaxoSmithKline

MSD Merck Sharp & Dohme Limited

Completing the audit cycle

Of the 113 centres that took part in the autumn 2002 audit, six reported changes in clinical practice as a result of BHIVA's first national audit in 2001–2. This many seem low, but reflects the generally positive results of the first audit, with most centres reporting no need for change.

It is too early yet for feedback on whether the audit of treatment initiation has led to changes in clinical practice. However, its results fed into the work of the writing committee, which recently revised BHIVA's treatment guidelines for adults with HIV. For example, these guidelines now include recommendations on routine tests and examinations, partly as a reflection of concern about the audit findings.

Contact details

BHIVA secretariat:

Mediscript Ltd
1 Mountview Court
310 Friern Barnet Lane
London N20 0LD

Tel: 020 8369 5380
Fax: 020 8446 9194

Email address:
bhiva@bhiva.org

Website:
http://www.bhiva.org

Clinical audit co-ordinator:

Dr Hilary Curtis
39 Esmond Road
London NW6 7HF

Tel: 020 7624 2148
Fax: 0870 0567 212

Email: hilary@regordane.net