HIV and maternity

BHIVA Clinical Audit 2004

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2003-4 Audit

- Survey of management for maternity care
- Case note review of pregnancies ending in live or still birth Oct 2002 – Sep 2003

Aims of maternity audit:

To enable BHIVA guidelines to be reviewed in the light of current practice and the most recent evidence.

Participation

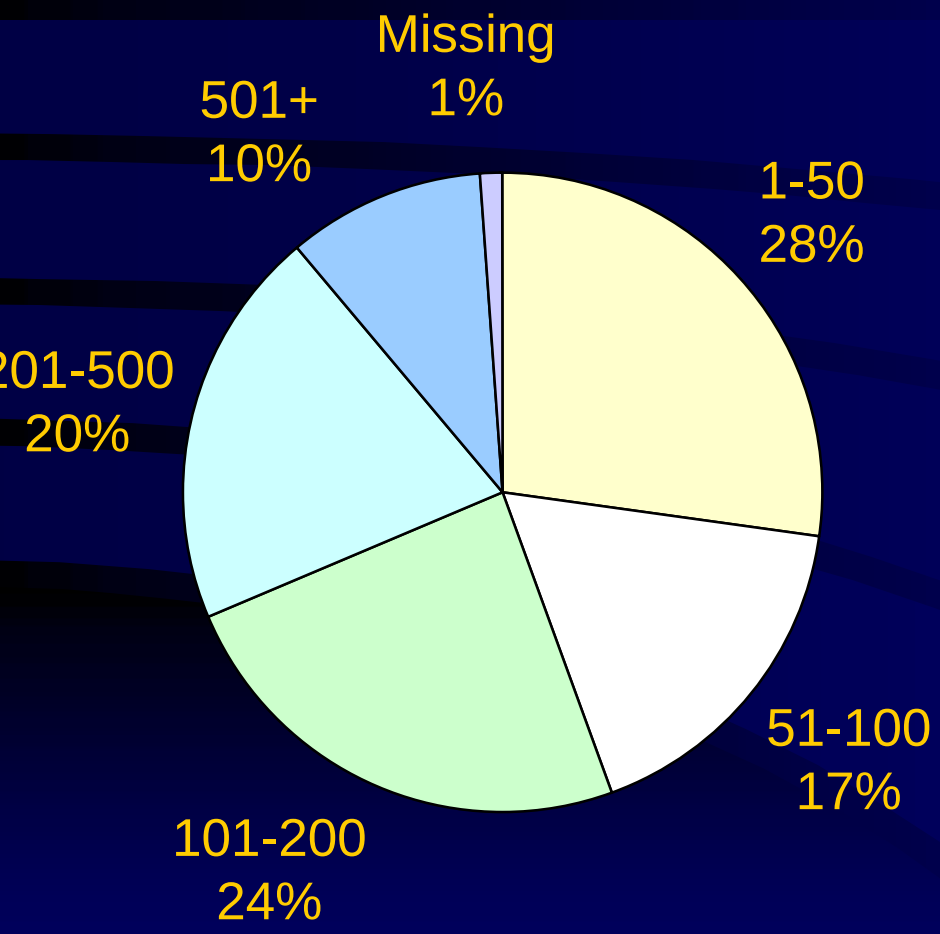
Completed questionnaires: 99 centres (19 London, 79 elsewhere, 1 unstated)

80 submitted data for 504 pregnancies.

4 excluded :

- 1maternal and foetal death: multi-organ failure at 24/40 due to TB drugs +/or NVP
- 2 termination of pregnancy
- 1 not delivered during audit period.

Centre HIV caseloads



Total reported HIV caseload for the 99 centres was 22652.

Management arrangements

87 centres work with a multi-disciplinary team when managing pregnancy and delivery, 2 do not, and for 10 the situation had not arisen.

- Most respondents (80) are satisfied with local availability of specialist expertise
- Of 9 not satisfied, 6 specifically mentioned lack of paediatric or other expertise relating to care of children.

Communication and confidentiality

81 respondents were satisfied with communication arrangements among professionals.

10 were not and 8 did not answer.

- 54 centres used patient-held records to share information, including details of ARV drugs at 49 centres
- 79 said post-natal ward midwives/nurses would ordinarily be informed of a woman's HIV status, 3 said they would not, and 17 were not sure or did not answer
- 8 said problems had occurred through relevant staff not being told of a woman's status, and 11 through staff using such information inappropriately.

HIV diagnosis

82 respondents reported “opt out” antenatal (AN) HIV testing, 11 reported “opt in” and 6 didn’t know/answer. Among patients, diagnosis was:

- 208 (42%) before pregnancy
- 249 (50%) in trimester 1-2
  - 233 (47%) by routine AN screening
- 37 (7%) in trimester 3 but >7 days pre-delivery
- 3 (0.6%) within 7 days pre-delivery
- 2 (0.4%) post-delivery.

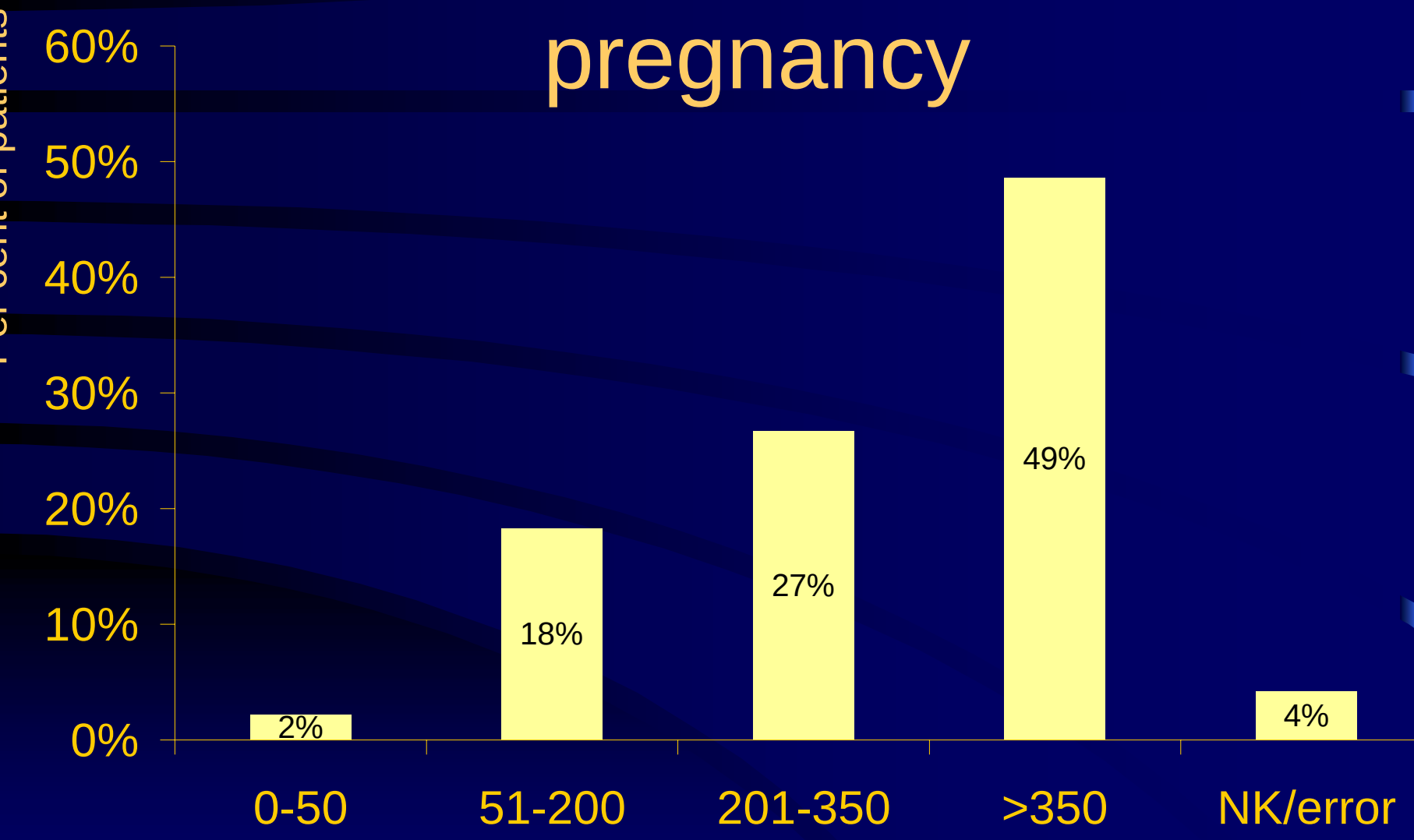
Patient demographics

Patients were:

- black-african n=390 (78%)
- white n=60 (12%)
- black-caribbean n=21 (4%)
- other n=20 (4%)
- not stated n=9 (2%).

- age < 15 n=2 (0.4%)
- age 15-20 n=23 (5%)
- age 20-30 n=239(48%)
- age 30-40 n=215 (43%)
- age > 40 n=8 (2%)
- unstated n=13 (3%).

CD4 nearest to start of pregnancy



Use of ARVs at start of pregnancy

104 (21%) patients were on ART at the start of pregnancy:

- 82 (79%) had VL <50
- 13 (13%) had VL 50-5000

Use of ARVs at start of pregnancy (cont)

The 104 patients took a wide variety of ARVs:

- 2 on dual therapy with undetectable VL
- 11 on EFV:
  - 2 had detectable VL (50-5000)
  - 5 were also on EFV at the end of pregnancy.
- 6 on DDI/D4T:
  - 2 had detectable VL: one 20-100,000 with high level resistance; one 50-5000
  - 4 were also on DDI/D4T at the end of pregnancy.

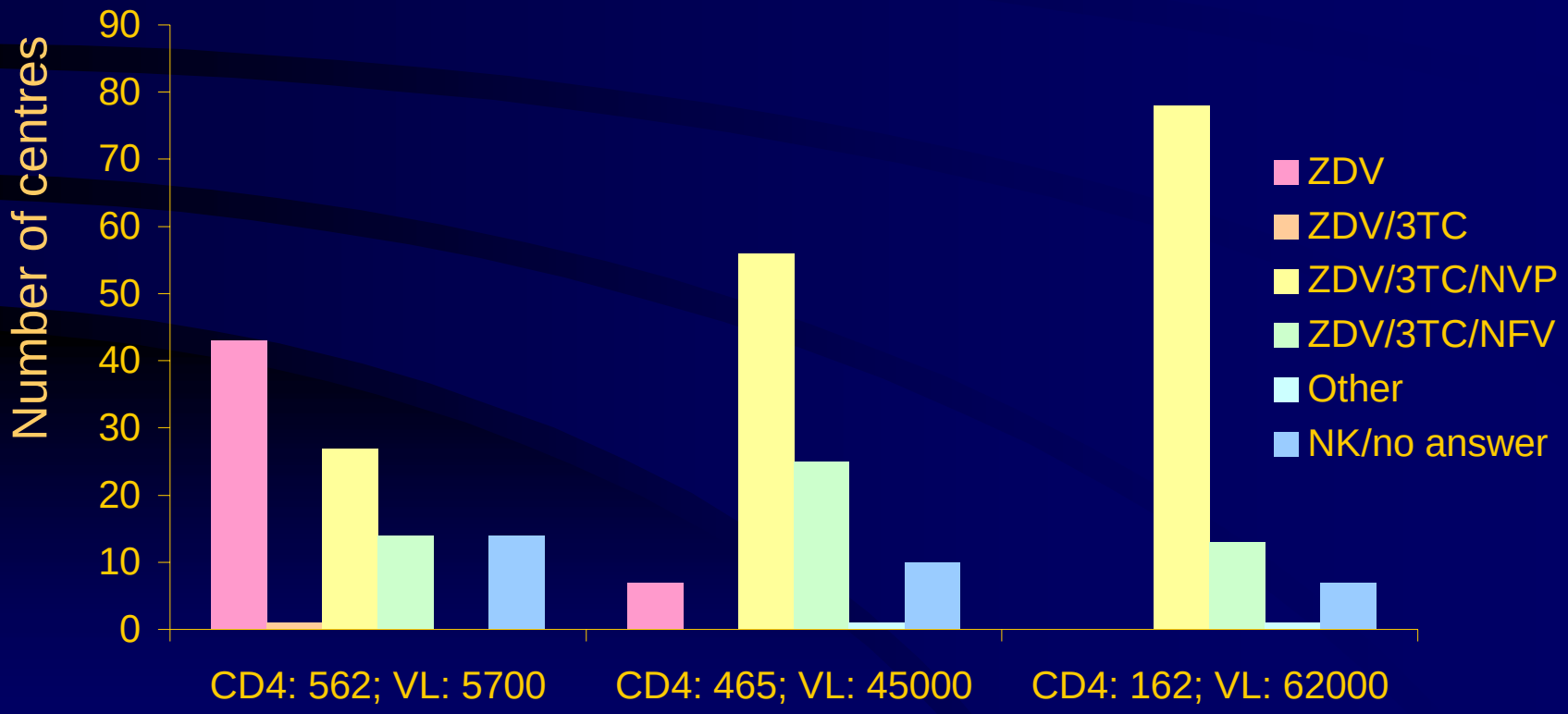
Preferred ART in pregnancy

484 patients were on ART at the end of pregnancy. Data unclear for 8.

- 50% on ZDV/3TC/NVP
- 14% on ZDV
- 10% on ZDV/3TC/NFV
- 2% on ABC/ZDV/3TC
- 2% on ZDV/3TC/LPVr
- 2% on no ARVs, including 1 with HIV2 and 4 very late presenters (2 post-natal diagnoses).

Stated preference re ART

The previous data is consistent with respondents' stated choice of ART in different scenarios:



ARVs in subsequent pregnancies

When asked what ART they would use in a subsequent pregnancy in a woman who had previously used ARV but did not require treatment for her own health:

- 37% respondents would base ART on a resistance test +/- evidence of adherence/ VL on previous ART.
- 20% respondents would offer standard therapy or the same therapy as in the previous pregnancy.

Preferred mode of delivery

When asked about mode of delivery in women with sustained undetectable VL on HAART:

- 55% of respondents favoured Caesarean section (CS)
- 9% favoured trial of labour in women with previous uncomplicated deliveries
- 7% would also favour trial of labour in primips
- 16% were neutral
- The remainder had no policy or did not answer.

Planned mode of delivery

422 (85%) were planned for CS.

In 43 (9%) CS was not thought indicated:

- 38 with pre-delivery VL <50, 3 with VL <1000, 2 NK/not tested in last 4 weeks (gestation 40/40)
- 2 on ZDV monotherapy, 1 on ZDV/3TC dual, remainder on HAART.

9 (2%) vaginal delivery planned as the mother declined CS.

2 had no delivery plan

22 data missing .

Actual mode of delivery

Actual modes of delivery were as follows:

- 335 (67%) elective CS
- 70 (14%) CS in labour
- 54 (11%) vaginally
- 41(8%) not known.

Of those planned for CS:

- 58 (14%) had a CS after onset of labour
- 8 (2%) delivered vaginally.

Deliveries in women planned for CS

Actual mode of delivery	Completed weeks of gestation						Total
	36 or less	37	38	39	40 or more	Not known	
CS pre-labour	17	22	205	49	9	23	325
CS in labour	23	15	11	5	2	2	58
Vaginal	4	1	3				8
Not known	6	2	9	4		10	31
Total	50	40	228	58	11	35	422

Pregnancy outcomes

Timing of delivery

- 11% of deliveries were at or before 36/40
- 9% were at 37/40.
- 48% were at 38/40 (reflecting elective CS)

There were 10 still births:

- 9 at 36/40 or earlier and 1 at 37/40.

Foetal abnormality screening

4 had amniocentesis:

- 3 had HIV diagnosed on routine AN screening in trimester 1-2 (no serum or nuchal fold screening reported).
- 1 had HIV diagnosed in trimester 3 (also had serum screening).

1 had chorionic villus sampling:

- HIV diagnosed on routine AN screening in trimester 1-2 (also had serum and nuchal fold screening).

1 baby was born with trisomy 21. The mother had serum screening.

Foetal and neonatal abnormalities

15 abnormalities reported:

- 2 babies known to have HIV
- 2 (one a twin) died of neonatal TB
- 1 spina bifida, possible sacral myelomeningocele
- 1 trisomy 21 & AV canal defect
- 1 congenital jejunal atresia
- 1 cleft palate
- 1 diaphragmatic hernia
- 1 clicky hip, absent red reflex, later found normal
- 1 intra-uterine growth retardation
- 1 “small with infection”
- 1 “flat” baby intubated in neonatal intensive care
- 2 unclear

Breast feeding

Centres varied greatly in the support offered for bottle-feeding.

When asked their (hypothetical) approach to a woman declining advice not to breast feed:

- 7 participants said this was for the patient to choose
- 14 mentioned child protection
- 21 referred to use of ARV or maintaining VL <50
- 15 mentioned exclusive breast feeding
- 4 mentioned continuing ARV for the baby
- 3 suggested pasteurising/boiling expressed milk.

Conclusions

While broadly positive, this audit has shown a number of areas where clearer guidance may be needed, including:

- ART in pregnancy, eg appropriate use and stopping of NVP, avoidance of DDI/D4T
- Circumstances in which planned vaginal delivery may be appropriate
- Timing of elective CS
- Support for breast-feeding and management of women who decline advice to formula-feed
- Management of subsequent pregnancies.