FOUR-CENTRE PRELIMINARY ANALYSIS OF EARLY INFANT DIAGNOSIS OF HIV INFECTION FROM DRY BLOOD SPOT

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Background
Until recently, facilities for early infant diagnosis of HIV infection were not readily available. There was therefore, delay in commencement of therapy in affected infants. The situation has since changed with the development of a technique for PCR from a dry blood spot (DBS). In this preliminary report, we present our experience in four out of six demonstration centres for the National scale-up of early infant diagnosis.

Methods
Infants were recruited prospectively, February through July 2007, from four of the six designated centres in Lagos State where DBS for PCR is practised. The centres were Massey Street Children's Hospital, Lagos State University Teaching Hospital, General Hospital Isolo and General Hospital Suru-Lere. Testing was done between the ages of six weeks and 18 months.

Results
Of the 174 infants studied, 94 (34%) were males and 80 (46.0%), females. The main presenting features of infants were cough, fever, skin eruptions, vomiting and oral thrush. Forty three infants (24.7%) tested positive for HIV. None of the 31 babies born to mothers on HAART tested positive compared to 33(40.7%) of 81 babies whose mothers did not receive any chemoprophylaxis. For other drug combinations, the proportions of positive infants were 6.9% (AZT + SDNVP), 12.5% (Combivir + SDNVP) and 22.2% (AZT). Nineteen babies were exclusively breastfed, 125 received formula milk exclusively while 30 had mixed feeding. Also, 54 (31.0%) were receiving co-trimoxazole. Nine (9.5%) of 95 babies who received SDNVP and AZT (6 weeks) tested positive in contrast to 32 (46.4) of 69 who received no prophylaxis at all.

Conclusion
HAART is very effective in preventing vertical transmission of HIV and Nevirapine in combination with AZT was more successful than with Combivir.