**Context:**

The Cameroon Government adopted Option B+ for its PMTCT program in 2012 with no strategy to guide its implementation. The CBCHS, supported by CDC/PEPFAR, designed and piloted Option B+ in 22 facilities in two health districts of the Northwest and Southwest regions in order to provide guidance for scale up.

**Methods:**

Trained nurses/midwives of the 22 facilities prospectively recruited ARV naïve HIV+ pregnant or breastfeeding women for enrolment into option B+ evaluation and monitored them till 18 months post-partum. The TDF/3TC/EFV regimen (TELE) was initiated for life at diagnosis following systematic individual post-test counseling and education on long term follow up schedule and modalities. A transport system was set to send DBS samples to laboratory for PCR testing and for results back to sites. Defaulters were tracked by phone and/or home visits. Longitudinal data collected monthly from sites were centralized into an electronic data base and analyzed using Epi Info and Stata.

**Outcomes**

- Of the 11,313 pregnant and breastfeeding women who attended MCH services in the 22 pilot facilities, a total of 680 were HIV-positive and ART naive.
- Of these 680 woman eligible for the evaluation and offered Option B+, 11 (2%) refused, 669 (98%) accepted and enrolled in the evaluation, including 3 who initially accepted ART only during pregnancy and breastfeeding (option B).
- Voluntary dropout rates were 1%, 3% and 8% respectively at 6, 12 and 24 months of ART initiation, while ART retention similarly declined to 90%, 79% and 61%.
- Maternal mortality 24 months after ART initiation was 3%.
- Of the 568 HIV exposed infants (HEIs) born to the 669 enrolled women, 538 (95%) were included in this evaluation.
- All 538 received Nevirapine prophylaxis from birth.
- At 6-8 weeks postpartum, 505 (94%) of enrolled HEIs were tested by PCR and 463 (86%) received Cotrimoxazole prophylaxis.
- At 24 months after maternal ART initiation 414 HEIs eligible for the 18 months HIV rapid test to determine their final HIV status were identified, and 360 of them effectively did the test.
- HIV positivity rate among enrolled HEIs who retained in care was 2.4% and 1.1% respectively at 6-8 weeks and 18 months postpartum.

**Lessons learned:**

Option B+ uptake is high among HIV+ pregnant/breastfeeding women in Cameroon but long term retention drops over time. MTCT rate was below 5% after cessation of breastfeeding, which falls within the eMTCT threshold, is attainable in Cameroon. Innovative strategies to improve retention of mother-baby pairs in care and on treatment are needed.

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