MOTHERS' ADHERENCE HELPS IDENTIFYING MORE INFANTS IN NEED OF EXTENDED PROPHYLAXIS

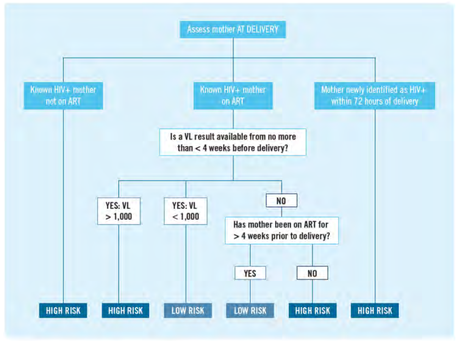
00787

Sara Domínguez-Rodríguez[1], Pablo Rojo[1], María-Grazia Laín[2], Afaaf Liberty[3], Shaun Barnabas[4], Elisa López-Varela[5], Kennedy Otwombe[3], Siva Danaviah[6], Eleni Nastuoli[7], Miquel Serna-Pascual[1], Viviana Gianuzzi[9], Carlo Giaquinto[9], Louise Kuhn[10], Alfredo Tagarro[1,11] on behalf of the EPIICAL Consortium EPIICAL Consortium.

1 Pediatric Infectious Diseases Unit, Fundación para la Investigación Biomédica del Hospital 12 de Octubre. Universidad Complutense. Madrid, Spain. 2 Fundaçao Ariel Glaser contra o SIDA Pediatrico. Maputo, Mozambique. 3 Perinatal HIV Research Unit, Chris Hani Baragwaneth Hospital, University of the Witwatersrand. Johannesburg, South Africa. 4 Tygerberg Children's Hospital, Stellenbosch University, Cape Town, South Africa 5 Centro de Investigaçao em Saude de Manhiça (CISM) and Barcelona Institute for Global Health. Barcelona, Spain. 6 Africa Health Research Institute. Durban, South Africa. 7 University College London. Great Ormond Street Institute of Child Health. Advanced Pathogen Diagnostic Unit, UCLH NHS trust. London, United Kingdom. 8 Fondazione per la Ricerca Farmacologica Gianni Benzi Onlus. Bari, Italy. 9 PENTA Foundation. Padova, Italy. 10 Gertrude H. Sergievsky Center, College of Physicians and Surgeons, Columbia University Irving Medical Center. New York, USA 11 Hospital Universitario Infanta Sofía. Universidad Europea de Madrid. Madrid, Spain.

BACKGROUND

- The WHO recommends extended HIV prophylaxis (ePCP) for infants at high-risk of PMTCT
- High risk infant is defined by maternal factors: a mother first identified as HIV-infected at delivery or postpartum
  - -HIV+ mother not on ART
  - -Mother's VL<1 month before birth >1000 copies/mL
  - -Mother's VL unavailable but ART<4weeks at delivery
- Well controlled cohorts showed that:
  - 10% of pregnancies are high risk and result in 57% of vertical infections
  - 90% of pregnancies are low risk and result in 43% of infections
- In practice, some of the high-risk infants are misclassified as low-risk, and treated with standard prophylaxis instead of ePCP.

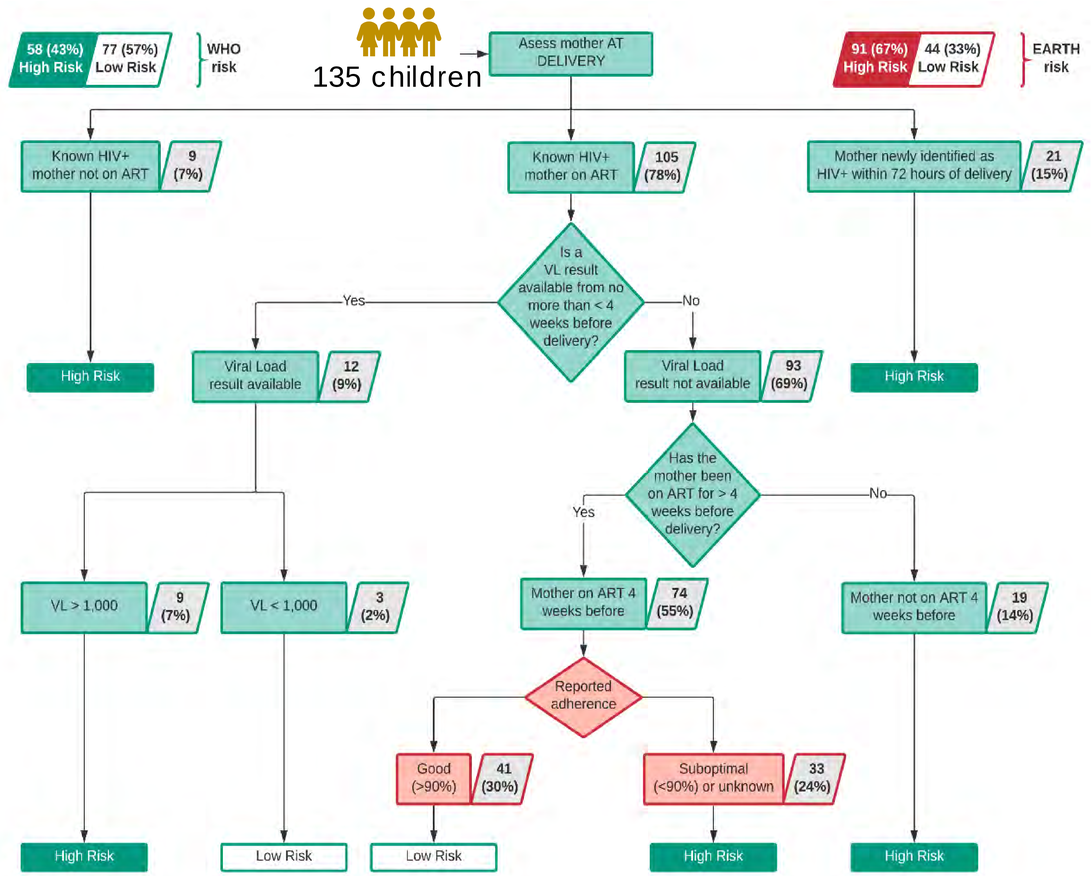


Algorithm for risk assessment. This algorithm was developed to support risk assessment at the time of delivery and to help identify infants at high and low risk

AIM

1. To evaluate the sensitivity of WHO algorithm to correctly identify high risk infants, based on the given outcome which is HIV infected infant
2. To assess the improvement of adding extra information to the algorithm.

ASKING MOTHERS ABOUT SELF-ADHERENCE CAN PREVENT MISCLASSIFICATION AND WRONG PMTCT IN 24% OF NEWBORNS



METHODS



- EARTH is a multicenter prospective cohort, part of the EPIICAL consortium
- EARTH enrolls infants with HIV diagnosed in the first 3 months of life and treated in the first 3 months after diagnosis, in Mozambique, South Africa and Mali.
- We categorized infants as high risk or low risk, based on WHO scheme
- After that, we introduced 1 change in the scheme and recategorized infants. Change was to ask the mother about adherence.

RESULTS

- 135 infants were analysed.
- After introducing the described modification, 67% of perinatally infected infants were categorized as high risk (instead of 43%), and 33% as low risk (instead of 57%).
- Up to 24% infants changed category from low risk to high risk, due to self-reported mothers' poor adherence

CONCLUSIONS

- In our cohort, 24% HIV infants were misclassified as low risk using the current WHO algorithm.
- Including a question related to self-reported adherence information might help to provide ePCP to all eligible infants.