Implementation of dual maternal HIV-Syphilis testing: The devil is in the details

We read with interest the Article by Patricia Rodriguez and colleagues[1] published in *The Lancet Global Health* in which a rigorous and comprehensive model showed that dual testing for HIV and syphilis is cost-saving for use at the first antenatal care visit and cost-effective during late antenatal care.

In collaboration with multiple partners, we have supported the adoption and scale-up of dual HIV and syphilis testing for pregnant women through advocacy, workshops, webinars, and country-specific technical assistance. Our experience has shown that even with political will, WHO normative guidance, three WHO prequalified tests, a favourable funding environment, and evidence of cost-effectiveness and efficiency, implementation of the dual test has been hampered by five crucial operational challenges.

First, the need for a holistic approach between historically siloed HIV and sexually transmitted disease programmes with coordinated policies and funding streams so that pregnant women do not face user fees for HIV and syphilis testing.

Second, at the national level, use of the dual test in antenatal care necessitates development of two HIV testing algorithms (one for pregnant women and one for everyone else). The continued need for standalone HIV and syphilis rapid tests (for women already diagnosed with syphilis or HIV) mitigates potential supply chain simplification advantages of the dual test.

Third, because the dual test is not recommended for women with known HIV infection, separate clinical workflows are required based on HIV status at first antenatal care visit, which makes patient pathways more complicated for providers.

Fourth, data for HIV and syphilis testing and treatment are captured in separate systems, necessitating substantial revision of monitoring tools and processes. Finally, efforts to launch HIV self-testing and recency testing might supplant dual testing roll-out.

Countries recognise the benefits of dual testing and there is substantial interest to adopt the process. As countries move to adopt the 2019 WHO testing guidelines, it is an opportune time to address these dual test implementation issues. Global stakeholders should collaborate to support comprehensive and robust roll-out plans to expedite scale-up and mitigate operational hurdles.

WHO estimated 355 000 adverse pregnancy outcomes occur annually due to syphilis, two-thirds of which result in stillbirth or neonatal deaths. In 2016, we wrote about the need to use the dual HIV-syphilis test to prevent these tragic outcomes.[2] 4 years and the loss of more than 1 million babies later, inaction is not acceptable. We must now resolve these implementation issues to save lives.

We declare no competing interests.

Copyright © 2021 The Author(s). Published by Elsevier Ltd. This is an Open Access article under the CC BY-NC-ND 4.0 license.

*Laura N Broyles, Debrah Boeras, *Rosanna W Peeling*
rosanna.peeling@lshtm.ac.uk

Global Health Impact Group, Atlanta, Georgia, USA (LNB, DB); International Diagnostics Centre, London School of Hygiene and Tropical Medicine, London WC1E 7HT, UK (RWP)

1 Rodriguez PJ, Roberts DA, Meisner J, et al. Cost-effectiveness of dual maternal HIV and syphilis testing strategies in high and low HIV prevalence countries: a modelling study. *Lancet Glob Health* 2021; **9:** e61–71.

2 Peeling RW, Mabey D. Celebrating the decline in syphilis in pregnancy: a sobering reminder of what's left to do. *Lancet Glob Health* 2016; **4:** e503–04.