Cuba: defeating mother-to-child transmission of syphilis

The Lancet Editors (July 11, p104)[1] recently commented on successes in Cuba in elimination of mother-to-child transmission of HIV infection as a public health threat; however, this Editorial neglected to address the important point that this was a dual effort to validate the elimination of mother-to-child transmission of both HIV infection and syphilis. WHO certified that Cuba had eliminated mother-to-child transmission not only of HIV, but also of syphilis. We were not surprised that *The Lancet* would omit one of the most neglected, but still common, sexually transmitted infections. Syphilis affects more pregnancies worldwide than does HIV infection.[2] Maternal syphilis infections cause hundreds of thousands of adverse outcomes of pregnancy, including fetal loss or stillbirth, prematurity or low birthweight, neonatal death, and syphilis infection in the infant.[3] In women with HIV, syphilis infection during pregnancy is associated with more than a 2·7 times increased risk of mother-to-child HIV transmission.[4]

The similarities in screening recommendations for HIV infection and syphilis (ie, testing at first antenatal visit) provide an important opportunity to strengthen efforts to eliminate congenital syphilis together with prevention of mother-to-child transmission of HIV—both high-priority initiatives that can help countries to reach common goals of improved maternal health and decreased mortality of children aged younger than 5 years.[2] Rapid, dual point-of-care tests have been created that can detect antibodies to both HIV and *Treponema pallidum*, the organism that causes syphilis. Emergence of dual rapid tests for HIV infection and syphilis can result in earlier detection, reduced loss to follow-up, expanded case finding outside clinical settings, and enhanced global control of syphilis and HIV. Results of studies have shown that dual tests are accurate and reproducible in both field[5] and laboratory[6] settings. However, compared with no syphilis testing, even moderate performance is associated with enhanced detection and treatment of infections. With those findings, donors and national health programmes should feel confident that further investments in the implementation of dual testing would produce expected benefits through increased uptake of testing and streamlined procurement and implementation that can lead to improved maternal and newborn health outcomes. Cuba can be the first of many to eliminate mother-to-child transmission of syphilis and HIV infection, and dual rapid tests can make programme integration an achievable reality.

We declare no competing interests.

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1 The Lancet. Cuba: defeating AIDS and advancing global health. *Lancet* 2015; **386:** 104.
2 Klausner JD. The sound of silence: missing the opportunity to save lives at birth. *Bull World Health Organ* 2013; **91:** 158–A.
3 Newman L, Kamb M, Hawkes S, et al. Global estimates of syphilis in pregnancy and associated adverse outcomes: analysis of multinational antenatal surveillance data. *PLoS Med* 2013; **10:** e1001396.
4 Mwapasa V, Rogerson SJ, Kwiek JJ, et al. Maternal syphilis infection is associated with increased risk of mother-to-child transmission of HIV in Malawi. *AIDS* 2006; **20:** 1869–77.
5 Omoding D, Katawera V, Siedner M, Boum Y 2nd. Evaluation of the SD Bioline HIV/Syphilis Duo assay at a rural health center in Southwestern Uganda. *BMC Res Notes* 2014; **7:** 746.
6 Bristow CC, Adu-Sarkodie Y, Ondondo RO, et al. Multi-site laboratory evaluation of a dual HIV/syphilis point-of-care rapid test for simultaneous detection of HIV and syphilis. *Open Forum Infect Dis* 2014; **1:** ofu015.

Mortality risk with dual antiplatelet therapy?


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The dual antiplatelet therapy (DAPT) study[1] identified a significant reduction in ischaemic cardiovascular events with prolonged thienopyridine use on a background of aspirin therapy. An unexpectedly high mortality rate was seen among patients treated with drug-eluting stents who were randomly allocated to receive continued thienopyridine compared with placebo (2·0% *vs* 1·5%, p=0·05). Because of the crucial role that these medications have in treatment of cardiovascular disease, these findings prompted appropriate attention. Tullio Palmerini and colleagues (June 13, p 2371)[2] now report increased risk of mortality with continued therapy on the basis of a meta-analysis of ten randomised trials, mostly driven by results from the DAPT study.

Concurrently with publication of the DAPT study, we published a meta-analysis of 14 randomised trials of DAPT duration in patients with cardiac, vascular, or cerebrovascular disease (69 644 patients).[3] We identified no significant association, whether or not data from the DAPT study were included, or when the analysis was restricted to 42 616 patients with coronary artery disease. The results are unchanged after updating this analysis with two additional randomised trials that were completed since our study (figure).

By studying the relation of DAPT and mortality among only trials of patients treated with drug-eluting stents, Palmerini and colleagues essentially present a subgroup of our meta-analysis, resulting in the DAPT study contributing nearly one-third of patients. This selective strategy excluded six high-quality, blinded randomised trials of nearly 30 000 patients in total with at least 2 years average follow-up, most of whom had coronary artery