

functional, and efficient laboratory services for CD4 count testing, and these will not be universally available in Malawi and most other countries in Africa in the foreseeable future. The choice is to implement an impractical policy and accept low coverage of services, as Malawi did until mid-2011, or, on the basis of a “public health approach”,<sup>2</sup> simplify the guidelines and eliminate bottlenecks known to impede universal access.

We are aware of the risks involved. However, switching to Option B+ greatly improves prevention of mother-to-child transmission (figure)<sup>3</sup> and clearly outweighs the risks.<sup>4</sup> Moreover, the differences in duration on antiretroviral therapy over a lifetime between Option B+ and Option B are marginal in countries such as Malawi with a high total fertility rate (5-7) and a long duration of breastfeeding (mean 23 months).<sup>5</sup> In-depth assessment of the Option B+ programme is underway.

Malawi made its decision on the basis of implementation evidence and local circumstances, and we believe it would have been unethical not to choose Option B+. Several countries in similar situations, including Uganda, Zambia, and Rwanda, have shown great interest and have started planning for transition to Option B+. International agencies should support this approach.

We declare that we have no conflicts of interest.

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Anna Coutsoudis and colleagues<sup>1</sup> worry that international organisations have too hastily endorsed a strategy to provide lifelong triple antiretroviral therapy (ART), irrespective of CD4 count, to pregnant women with HIV in high-burden countries.

This strategy for preventing mother-to-child transmission is called Option B+. It was pioneered in Malawi,<sup>2</sup> where the lack of CD4 testing resources impeded effective rollout of WHO Options A or B. Without timely CD4 results, both WHO regimens risk withholding therapy from women who need it.

Other countries share this limitation. Yet even where all three regimens are feasible, Option B+ might be best. Option A involves a relatively complex drug regimen compared with daily fixed-dose ART and has been operationally “difficult to implement in many low-resource settings”, according to WHO.<sup>3</sup> Option B requires women to stop and restart ART with each pregnancy, risking increased morbidity and mortality,<sup>4</sup> especially where fertility is high.

Option B+ prioritises maternal health by providing ART for life irrespective of CD4. It follows the worldwide trend towards earlier treatment initiation and offers multiple collateral benefits, including decreased horizontal transmission.<sup>3</sup>

Coutsoudis and colleagues suggest that an early start for pregnant women is unfair, especially where WHO-eligible patients await treatment. Although treatment access is rarely zero-sum, we believe these

women are a legitimate priority, and leaders have resolved to eliminate paediatric HIV by 2015 while keeping mothers alive.<sup>5</sup>

A strong case exists for expanding research on Option B+, but not for impeding countries that pursue it on the basis of available evidence and programmatic experience.

We are employees of Management Sciences for Health—a non-profit global health organisation which serves as technical partner for health systems strengthening programmes, including prevention of mother-to-child transmission of HIV.

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### Authors' reply

With vertical HIV transmission rates plummeting even in settings with a high HIV prevalence, such as South Africa, we agree with Gottfried Hirschall and colleagues from WHO that this is a promising time in the global response to HIV. We are heartened that WHO's review process to assess the ethics, safety, cost, and feasibility of Option B+ is underway in preparation for the release of new, consolidated guidelines.

Until we have sufficient evidence, we concur with Eric Goosby that countries should make their own decisions about