



## EDITORIAL

# Global Reduction in HIV-related Maternal Mortality: ART as a Key Strategy

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## ABSTRACT

Dr. Holtz and colleagues present a synthesis of evidence from published studies over the previous decade on the collective impact of HIV-targeted interventions on maternal mortality.

Amongst an assortment of interventions [that include antiretroviral therapy (ART), micronutrients (multivitamins, vitamin A and selenium), and antibiotics], only ART reduced maternal mortality among HIV-infected pregnant and post-partum mothers. These findings have fundamental and global strategic implications. They are also timely since they provide the evidence that ART reduces HIV-related maternal mortality, and by further enhancing access to ART in HIV-challenged and poor regions of the world, significant improvement in maternal morbidity and mortality indices could be attained. The paper bears good tidings and sound scientific proof that the financial investment made globally by government and non-governmental organizations and agencies to reduce the global burden of HIV/AIDS primarily by making ART more accessible to regions of the world most affected by the epidemic is beginning to show beneficial effects not only in terms of numerical reductions in the rates of new cases of HIV/AIDS among women, but also in maternal mortality levels.

**Key words:** Maternal mortality • HIV-related maternal mortality • Pregnant mothers • Post-partum mothers • HIV-targeted interventions • Anti-retroviral therapy • Systematic review

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In this edition of IJMA, Holtz et al. present a synthesis of evidence from published studies over the previous decade (2003 to 2014) on the collective impact of HIV-targeted interventions on maternal mortality.<sup>[1]</sup> Amongst an assortment of interventions [that include antiretroviral therapy (ART), micronutrients (multivitamins, vitamin A and selenium), and antibiotics], only ART reduced maternal mortality among HIV-infected pregnant

and post-partum mothers. These are important findings that have fundamental and global strategic implications.

Approximately 18 million women are living with HIV worldwide, and more than 90% of pregnant women living with HIV (WLWH) reside in sub-Saharan Africa.<sup>[2,3]</sup> Without timely antiretroviral therapy (ART), WLWH in sub-Saharan Africa are

about 8 times as likely to die during pregnancy or the postpartum period as HIV-negative women.<sup>[4,5,6]</sup> Before the advent and scaling-up of ART, about 25% of all deaths among pregnant and post-partum women in the sub-Saharan region were attributable to HIV/AIDS.<sup>[5]</sup> It is noteworthy that even among women who experience similar pregnancy-associated morbidity states, those women that are HIV-positive bear greater risks of dying from those complications than their HIV-negative counterparts.<sup>[7]</sup>

According to the World Health Organization (WHO), there were an estimated 289 000 maternal deaths worldwide in 2013, yielding a maternal mortality ratio (MMR) of 210 maternal deaths per 100 000 live births among the 183 countries and territories of developing and developed nations.<sup>[8]</sup> Globally, the MMR has fallen by 45% between 1990 and 2013, and all MDG (Millennium development goals) regions of the world have experienced considerable reductions in maternal mortality.<sup>[8]</sup> However, the relative stagnation of MMR in sub-Saharan Africa in comparison to other regions of the world is notable, and may be partially attributable to the equally intense HIV/AIDS epidemic still ravaging that part of the world. According to the WHO, the MMR for sub-Saharan Africa in 2008 was 640; if maternal deaths related to HIV/AIDS were excluded, this figure would be reduced to 580, which is still much higher compared to similar indices from Southern and Southeastern Asia (280 and 160, respectively).<sup>[9]</sup>

Given the afore-mentioned background, it is clear that the findings of Holtz et al. are timely since they provide the evidence that ART reduces HIV-related maternal mortality, and by further enhancing access to ART in HIV-challenged and poor regions of the world, significant improvement in maternal morbidity and mortality indices could be attained. A notable merit of the paper is that it bears good tidings and sound scientific proof that the financial investment made globally by government and non-governmental organizations and agencies to reduce the global burden of HIV/AIDS primarily by making ART more accessible to regions of the world most affected by the epidemic is beginning to show beneficial effects not only in terms of numerical reductions in the rates of new cases of HIV/AIDS

among women, but also in maternal mortality levels. A notable investment key player in the global HIV/AIDS combat is the US PEPFAR (President's Emergency Plan for AIDS Relief). PEPFAR is the largest healthcare initiative to be launched by one country to address one disease.<sup>[10,11]</sup> with billions of dollars pumped into HIV/AIDS collaborative planning and health systems strengthening activities to scale up access to ART. One will definitely not be wrong to suggest that the momentum gained in the declining trend of HIV and HIV-related maternal mortality is largely as a result of the global push and partnership frameworks catalyzed and financially promoted through the PEPFAR initiative.

Some implications of the findings in the study are worth mentioning. It is to be expected that this report will further galvanize the global resolve to end the epidemics of AIDS by the year 2030, which is one of the Sustainable Development Goals adopted by the United Nations Member States in September 2015.<sup>[12]</sup> About the same target date, it is encapsulated within this goal that significant progress will also be realized toward the reduction of global maternal mortality ratio to less than 70 per 100,000 live births. As lofty as the goal sounds, the evidence presented by Holtz et al. makes one feel optimistic that the goal is attainable as long as universal access to ART is assured and 90 percent of people with HIV diagnosed, 90 percent of them on ART and 90 percent of them virally suppressed by 2020 as proposed by the United Nations Programme on HIV/AIDS (UNAIDS).<sup>[13]</sup>

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