

# Elimination of mother-to-child transmission of human immunodeficiency virus and syphilis in Cuba: A stepping stone toward acquired immune deficiency syndrome-free generation

Sir,

Worldwide, human immunodeficiency virus (HIV) continues to be a major public health concern, claiming in excess of 39 million lives till date with 1.5 million deaths in the year 2013 alone.<sup>[1]</sup> From the treatment perspective, only 67% of the pregnant HIV-positive women living in low and middle-income nations had received effective antiretroviral drugs to avoid transmission to their children.<sup>[1]</sup> Furthermore, almost 1 million pregnant women are infected with syphilis every year around the globe resulting in multiple fetal and neonatal complications.<sup>[2]</sup>

Mother-to-child transmission (MTCT) of HIV infection from an HIV-positive mother (in antenatal period or during labor, delivery or breastfeeding) can have serious consequences on the child's survival and the quality of life.<sup>[3]</sup> Although, in the absence of any interventions the rates of MTCT can be as high as 15-45%, nevertheless by administration of antiretroviral medicines to both mothers and children in high-risk period can reduce this rate to just over 1%.<sup>[4]</sup>

In fact, realizing the magnitude of the problem, its universal distribution, associated serious consequences, and presence of preventive measures to reduce the MTCT of HIV, the stakeholders around the world pledged to strengthen the MTCT activities with an aim to eliminate new pediatric HIV infections by 2015 and simultaneously improve maternal, newborn and child health and survival standards pertaining to HIV.<sup>[4,5]</sup> On a similar note, MTCT of syphilis can be prevented by implementation of quality assured screening and treatment options during pregnancy.<sup>[2]</sup>

On June 30, 2015, the World Health Organization validated that Cuba is the first nation across the world to eliminate successfully MTCT of HIV and syphilis.<sup>[5]</sup> This status was given to Cuba as they successfully achieved the impact indicators for 1-year and process indicators for 2 years.<sup>[2,5]</sup> Cuba was able to successfully eliminate MTCT of HIV and syphilis because of the implementation of measures like ensuring early access to antenatal care, advocating for HIV and syphilis testing for both pregnant females as well as their partners, providing effective treatment for women and children who are found positive.<sup>[3,5,6]</sup>

However, at the same time, it was ensured that all these services for HIV and sexually transmitted infections are integrated within the routine mother and child welfare programs, and delivered in an easily accessible and equitable manner to all pregnant women.<sup>[4,5]</sup> However, indirectly this accomplishment should be attributed to the initiation of global efforts for the elimination of syphilis and elimination of new HIV infections among children in 2007 and 2011, respectively.<sup>[2,6]</sup> These initiatives motivated policy makers to adopt innovative strategies to encourage active involvement of the community, and thus ensure that HIV/syphilis positive mothers live a healthy life and their children do not acquire the infection.<sup>[5]</sup>

In conclusion, the achievements of Cuba as a nation reflect the extent of commitment that the stakeholders have put-in to ensure successful elimination of HIV and syphilis. Also, it is a learning example and a source of inspiration for other nations to work in an integrated manner and thus move forward toward the goal of elimination of MTCT of HIV and syphilis.

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## Conflicts of interest

There are no conflicts of interest.

**Saurabh R. Shrivastava,**

**Prateek S. Shrivastava, Jegadeesh Ramasamy**

Department of Community Medicine,  
Shri Sathya Sai Medical College and Research Institute,  
Ammappettai, Chennai, Tamil Nadu, India

**Address for correspondence:** Dr. Saurabh R. Shrivastava,

Department of Community Medicine,  
Shri Sathya Sai Medical College and Research Institute,  
3<sup>rd</sup> Floor, Ammapettai Village,

Thirupurur - Guduvancherry Main Road,  
Sembakkam Post, Kancheepuram - 603 108,  
Tamil Nadu, India.

E-mail: drshrishri2008@gmail.com

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