TECHNICAL SUMMARY

Maternal Mortality and HIV

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Women and Health Initiative

Maternal Health Task Force

CDC
Centers for Disease Control and Prevention

▸ WHY IS THE ISSUE IMPORTANT?

- HIV and complications of childbearing are the leading causes of death among women of reproductive age around the world .[i]
- 17.7 million women globally are living with HIV. Most are of reproductive age and reside in sub-Saharan Africa.[ii]
- In sub-Saharan Africa, approximately a quarter of deaths among pregnant and postpartum women are due to HIV, and women living with HIV are six to eight times more likely to die during pregnancy and the postpartum period than their HIV-negative peers.[iii]
- While estimated global maternal mortality ratios have been cut almost in half over the past twenty years, maternal mortality increased during this period in eight countries in sub-Saharan Africa with high HIV prevalence.[iv]

Ending preventable maternal mortality cannot be achieved without preventing new HIV infections among women, promoting the health of women living with HIV and improving their care during pregnancy, childbirth and postpartum.

▸ WHAT IS THE PROBLEM?

Significant progress has been made towards expanding access to antenatal care and access to HIV testing and antiretroviral therapy (ART) for pregnant and postpartum women.

- However, in 2012, only 38% of pregnant women in low and middle income countries received HIV counseling and testing; in Africa 49% of pregnant women were tested for HIV during pregnancy.[v]
- About 40% of pregnant women living with HIV in low and middle income countries do not receive the ART they require for their own health.[vi]
- Coverage of interventions which can make large contributions to reducing maternal and neonatal mortality, such as malaria and tuberculosis screening and treatment, emergency obstetric care and access to contraceptives, are insufficient in sub-Saharan Africa.[vii]
- Women's lack of knowledge about the benefits of ART, limited autonomy and access to social support, HIV-related stigma, financial constraints, and geographic distance are barriers to uptake of and retention in care.[viii]

Addressing maternal morbidity and mortality among women with HIV requires further health system strengthening, integration of HIV and Maternal-Child Health (MCH) services, and transformation of the social context to ensure demand for and retention in care.

▸ IMPLICATIONS FOR PRACTICE: WHAT CAN WE DO?

- Continue to scale up HIV counseling and voluntary testing for pregnant women. Knowledge of HIV status is a precondition for providing ART for women's health and for preventing mother-to-child HIV transmission.
- Prevent and treat the leading causes of and contributors to maternal morbidity and mortality among women with HIV. These include puerperal sepsis, obstetric hemorrhage, hypertension, anemia, malaria, pneumonia and tuberculosis. Improved service delivery requires strengthening health system capacity to deliver high quality prenatal and postpartum care, as well as emergency obstetric and newborn care.
- Provide integrated HIV and MCH services to pregnant and postpartum women and their families. Integrating services and providing additional interventions tends to positively impact quality of care and coverage.[ix]
- Address and mitigate social factors that contribute to poor maternal health outcomes and are barriers to treatment and care, such as violence against women, disrespect and abuse in maternity care, and HIV-related stigma and discrimination.[x]
- Promote social support for pregnant and postpartum women and mobilize communities in favor of respectful, high-quality HIV and MCH services.[xi]

Improving maternal health in the context of the sub-Saharan African HIV epidemic requires greater understanding of the relationships between HIV disease and maternal morbidity and mortality, integrated and effective responses by the health system, and a social context which promotes quality care and encourages use of HIV and MCH services. Research and evaluation on maternal health and HIV can increase collaboration on these two global priorities and provide a powerful impetus that strengthens political constituencies and communities of practice, and accelerates progress toward achievement of goals in both areas. The investments being made to reduce maternal mortality and increase access to HIV treatment in sub-Saharan Africa are significant. The scope of these investments should be reflected in support for research and evaluation that fills priority knowledge gaps.

What do we need to know?

CLINICAL QUESTIONS ABOUT MATERNAL MORTALITY AND HIV

What is the relationship between HIV infection and rates and causes of maternal morbidity and mortality? How can increased maternal illness and death among women with HIV be prevented?

How will new treatment guidelines[xii] and increased availability of ART for women living with HIV affect maternal health outcomes?

▸ *Priority Actions to Improve the Evidence Base*

- Harmonize and enhance HIV and MCH program monitoring and evaluation frameworks to capture HIV status, length of time on ART, measures of immune status where available, incidence and causes of maternal death.
- Improve the quality of maternal death certificates and available data about cause of maternal death by standardizing coding[xiii], expanding maternal death audits, use of autopsy and minimally invasive autopsy, and improving and validating verbal autopsy tools.
- Conduct prospective observational research on the rates and distribution of causes of maternal morbidity and mortality in the context of ART scale-up.

INTEGRATING HEALTH SERVICE DELIVERY TO ADDRESS MATERNAL HEALTH AND HIV

What are the most effective models for integrating HIV testing, treatment and care with antenatal, intrapartum, postpartum and family planning services?

How can additional critical interventions—specifically screening and treatment for malaria and tuberculosis, postpartum family planning, and preconception counseling—be integrated into the continuum of HIV and MCH services while maintaining quality?

What levels of staffing and mix of skills are needed to safely and effectively deliver integrated services?

How does service integration influence coverage, quality, retention and satisfaction of users and providers, and health outcomes?

▸ *Priority Actions to Improve the Evidence Base*

- Ensure that the HIV status of women attending MCH services and pregnancy and postpartum status of women attending HIV services are known in order to monitor and evaluate coverage of key interventions (screening and preventive treatment for malaria and tuberculosis, family planning counseling, and contraceptive use).
- Use retrospective analysis and ecological models to evaluate the outcomes of integrated service delivery and identify good practices.
- After prioritizing interventions for integration based on the national epidemiological and policy context, conduct prospective implementation research allowing for flexibility and multiple models. Potential research designs include multi-arm studies which compare different models against each other or the standard of care and stepped-wedge designs.

TRANSFORMING THE SOCIAL CONTEXT TO IMPROVE MATERNAL HEALTH

What are the effects of programs which reduce HIV-related stigma and discrimination, disrespect and abuse in maternity care, and violence against women on uptake and retention in HIV and MCH services, adherence to antiretroviral treatment, disclosure of HIV status, and postpartum depression?

How does increasing social support for pregnant and postpartum women, including from male partners, and community mobilization to promote respectful, high-quality HIV and MCH services affect maternal health outcomes?

For more information consult the *Research and Evaluation Agenda for Maternal Health and HIV in sub-Saharan Africa* at www.mhtf.org.

▸ *Priority Actions to Improve the Evidence Base*

- Conduct retrospective or prospective evaluation to assess the impacts of interventions that have been successful at reducing stigma and discrimination, violence against women, and increasing social support on maternal health outcomes.
- Implement evaluation research to assess the effects of interventions that aim to transform the social environment to support women to enter into and remain in HIV and MCH services.

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