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THE IMPACT OF THE HIV PANDEMIC ON MATERNAL AND CHILD MORTALITY IN MALAWI

BETH RACHLIS

SUMMARY

- HIV/AIDS prevalence among pregnant women in Malawi is a contributing factor to high maternal and child mortality rates.
- Malawi faces an uphill task in combating HIV/AIDS because of an inadequate health delivery system that is available to a small section of the population. A shortage of trained health personnel coupled with high HIV/AIDS prevalence rates have added additional strain on the country's health system, impacting negatively on maternal and child health care.
- Deaths from HIV/AIDS could be prevented with cost-effective maternal health care services that address the needs of mothers.

Over the last decade, HIV/AIDS has exacted a heavy toll, with significant impacts on maternal mortality in Malawi — a small land-locked country in southern Africa. Malawi has experienced a nearly ten-fold increase in HIV incidence among pregnant women and the risk of pregnancy-related mortality has doubled.

An estimated 930,000 people out of a total population of 15 million live with HIV/AIDS in Malawi (Joint United Nations Programme on HIV/AIDS, 2009). HIV constitutes a third of the total burden of disease (Geubbels and Bowie, 2009) and its prevalence among those aged 15–49 is estimated at 12 percent (Chan et al., 2010). Among pregnant women, HIV prevalence ranges from 15 to 19 percent (Kasenga et al., 2009). As a result of the HIV pandemic, life expectancy in Malawi is estimated at 51 years for women and 44 years for men (World Health Organization [WHO], 2010).

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A poor country with a predominantly rural population, Malawi faces numerous challenges in combating the spread of HIV/AIDS. In particular, a severe shortage of trained health personnel hampers the effective provision and delivery of health services and although more than 70 percent of the population lives in rural areas, medical facilities tend to be concentrated in urban settings. As a result, the rural population generally lacks access to basic and essential services, including maternal and child health care (Office of the President, 2007). These health delivery challenges are further compounded by the widespread problem of HIV/AIDS, which remains a national emergency in Malawi.

DEFINING MORTALITY

The World Health Organization (WHO) defines maternal mortality as the death of a woman during pregnancy or within 42 weeks of the termination of pregnancy from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes (WHO, 2010). The causes of maternal deaths can be generally categorized into two main groups: direct and indirect. Direct obstetric deaths include those that result from pregnancy complications related to medical interventions, omissions, and/or incorrect treatment. On the other hand, indirect obstetric deaths are attributable to either a pre-existing disease or a disease that developed during pregnancy that is subsequently aggravated during pregnancy¹ (Bicego et al., 2002). In many countries in sub-Saharan Africa, a high occurrence of HIV coexists with high levels of maternal mortality among women of child-bearing ages (Graham and Newell, 1999) and HIV has become a leading cause of death during pregnancy and the postpartum period.

THE STATE OF MATERNAL AND CHILD MORTALITY IN MALAWI

While estimates vary widely, maternal mortality continues to be unacceptably high in Malawi. Some estimates suggest that between 3,000–6,000 women die each year from pregnancy-related complications (The POLICY Project 2005; Maternal and Neonatal Program Effort Index; Geubbels, 2009). Earlier estimates suggested that maternal mortality increased dramatically

¹ For example, HIV progression.

as HIV prevalence rose during the 1990s. By 2008, it was estimated that approximately 32 percent of all maternal deaths in Malawi were due to HIV (Kasenga et al., 2009). Studies examining the relationship between pregnancy and HIV continue to show an increased maternal mortality rate among HIV-positive women in comparison to HIV-negative women.

Moreover, both early and late pregnancy complications have been reported to occur more often in women infected with HIV (WHO et al., 2010; Bicego, Boerma and Ronsmans, 2002). Specifically, HIV infection increases the number of deaths through puerperal infection, also known as childbed fever, which occurs shortly after birth. Indirectly, HIV can lead to obstetric death as a result of anaemia, tuberculosis (which is then exacerbated by pregnancy), and/or HIV progression worsening over time. Sepsis² has also become a leading cause of maternal deaths where HIV is prevalent ((Bicego, Boerma and Ronsmans, 2002; Ahmed, Mwabaand and Chintu, 2009).

In addition to the direct impact the HIV pandemic has had on maternal mortality, HIV has contributed to child mortality. HIV transmission from mothers to children can occur during pregnancy, labour and delivery, and breastfeeding. Without treatment, around 15–30 percent of babies born to HIV-positive mothers will contract HIV during delivery, whereas a further 5–20 percent will become infected through breastfeeding (Kasenga et al., 2009; De Cock et al., 2000; Newell, 2006). While efforts to prevent mother-to-child transmission (PMTCT) have been on the rise in recent years, HIV-positive babies are still born every year in Malawi due to the inadequacy of prevention programs. In 2006, the WHO estimated that Malawi's PMTCT programs had been delivered to only 27 percent of eligible women (WHO, 2007). Importantly, studies continue to show that children born to HIV-positive mothers are more likely to die, either directly from HIV infection or relevant complications, or indirectly from being orphaned (Geubbels and Bowie, 2009).

In Malawi, there are an estimated one million orphans, making up one-fifth of all children under the age of 15. Maternal and double orphans make up half, with 80 percent of these children estimated to be orphaned as a result of HIV/AIDS (Geubbels and Bowie, 2009).

² Defined by the Canadian Oxford Dictionary as “the condition or syndrome caused by the presence of microorganisms or their toxins in the tissue or the bloodstream.”

IMPLICATIONS

The impact of HIV on maternal deaths presents a number of major policy implications. In addition to the concentration of health and maternal care services in urban settings, policies intended to curb HIV-related maternal deaths do not necessarily translate into quality services at the local and community level. Access remains a huge issue for most Malawians, particularly those living in rural and remote communities. For example, while voluntary counselling and testing remains a key strategy for the prevention of HIV, one study indicated that only 22 percent of Malawian women were being offered counselling and testing for HIV as a part of maternal services accessed through antenatal clinics (The POLICY Project, 2005). This has important implications as awareness of one's HIV status is important for taking the necessary steps to treat the infection and prevent new ones. For mothers with HIV, this may mean the prevention of HIV transmission to their unborn babies.

Indirectly, HIV has severely impacted the quality of health care delivery in Malawi. HIV-related illnesses have led to increased crowding in health facilities (Bicego, Boerma and Ronsmans, 2002) and the country continues to face a shortage of trained health workers. The WHO estimates that providing antiretroviral treatment to 1,000 people in resource-poor settings requires up to two doctors, up to seven nurses, three pharmacy staff, and a wide range of community health workers. However, WHO estimates suggest that there are two doctors and 59 nurses for every 100,000 people in Malawi (WHO, 2006).

In 2007, the government of Malawi announced a ban on the use of traditional birth attendants (TBAs) to help curb the high prevalence of maternal deaths arguing that inadequately skilled TBAs were unable to identify and react to complications occurring during pregnancy and delivery. The belief was that if TBAs were banned, more women would seek care at medical facilities (Women News Network, 2011). However, as the WHO reports, only 57 percent of women are accessing services at antenatal care clinics and many of them come at a late stage in their pregnancy and/or often never return (WHO, 2011), suggesting that almost 50 percent of births are still occurring outside health facilities. In a 2011 article discussing the ban, President Bingu wa Mutharika noted that instead of banning TBAs, better training was needed. He was quoted as saying: "We need to

train traditional birth attendants in safer delivery methods. We should not completely stop them, because their work is very important. We should train them to assist us in addressing the health challenges that we are facing” (Women News Network, 2011). Improved education and training of health providers is extremely critical in order to reduce mortality and morbidity. One study noted that while hands-on obstetric care has been developed and is improving, actual training is generally poor and weakest in the area of training for TBAs, midwives, and nurses. The ban on using TBAs was lifted by Malawian President Bingu wa Mutharika in October 2010.

NEED FOR RELIABLE AND ACCURATE DATA

There is a continued need to obtain reliable and accurate data on maternal mortality, with further study on how HIV affects pregnancy-related mortality rates. Related to this is the need for an improved measurement of maternal mortality and a way to distinguish HIV-related obstetric deaths from deaths from other causes (Bicego, Boerma and Ronsmans, 2002). There has been a push by health organizations for improved monitoring and research capabilities (The POLICY Project, 2005). Initiatives and health programs that work to address and reduce HIV infection and maternal mortality are crucial and should continue to be implemented and expanded in rural communities where most women continue to face problems with access to health care services.

Included in this is the need for greater access to improved delivery, skilled birth attendants, postpartum follow-ups and emergency obstetric care (The POLICY Project, 2005). Integrating services is one way to streamline delivery and ensure that women have appropriate access. Voluntary testing and counselling should be incorporated into all maternal programs in order to promote knowledge and acceptance of one’s HIV status. A recent study has also suggested that integrating HIV testing within antenatal care services increased HIV test acceptance significantly (Kasenga et al., 2009). Health promotion and education messages supported by the Ministry of Health and delivered through mass media and through the use of community-based organizations can also help mothers and families to identify the risks associated with pregnancy, particularly in the context of HIV (The POLICY Project, 2005).

While it is worth noting that Malawi's maternal mortality ratio has been decreasing over time, indicating country-wide progress in recent years (WHO, 2010), the maternal mortality rate continues to be unnecessarily high. The reality is that most of these deaths could be prevented with cost-effective maternal health care services that also address the needs of mothers and mothers-to-be living with HIV.

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