

Secret Mothers of Malawi

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Abstract

Secret mothers have been elected in the country of Malawi to help promote patient outcomes related to pregnancy. Many pregnant women in Malawi are reluctant to seek care from healthcare professionals. Due to this reluctance, Malawi has a high mortality rate for mothers and infants compared to the rest of the world. Secret Mothers act as a buffer between pregnant women and healthcare professionals to help respect customary traditions in Malawi while also helping to increase the quality of care for patients. The Secret Mothers initiative has so far been a step in the right direction to try to help reduce the mortality of women and infants by increasing access to healthcare.

Key words: Secret Mothers, Malawi, Pharmacist Interventions.

Maternal mortality rate in Malawi

The Republic of Malawi, a country located in southeastern Africa, is one of the least developed countries in the world. Most of Malawi's economy is driven by agriculture, which is not strong enough to support its education and health care needs. This lack of stability/funding has been demonstrated in Malawi's maternal health care, which places the country's maternal mortality rate (MMR) of 634 deaths per 100,000 births as the 13th highest in the world according to World Health Organization.^[1] This number is highly elevated compared to developed countries such as Greece, Iceland, Poland and Finland.^[2] Since the early 2010's, there have been many efforts to help curb the MMR in Malawi through bridging the gap between healthcare providers and expecting mothers through the use of Secret Mothers, selected women in villages that serve to help with prenatal care, delivery and post-natal care for women who otherwise would not seek out treatment from healthcare professionals. Maternal mortality itself is a problem that, although improved on in many developed countries in the past few decades (99% of all maternal deaths occur in developing countries), causes many children to be raised without their biological mother.^[3] Malawi's maternal mortality rate, as mentioned before, is high (an MMR of 634) when compared to both developed and developing regions' averages (12 and 239 respectively).^[3]

Contributing factors towards high maternal mortality rate in Malawi

Maternal deaths most often arise from preventable complications such as severe bleeding (during/post-childbirth), infections and other complications from delivery that are not adequately addressed without the help of a professional healthcare team.^[4] Most of these issues are addressed properly in healthcare settings in developed countries. Proper sterilization, good hygiene and recognition of an infection by experienced professionals are essential to preventing puerperal infections. Also, pharmacotherapeutic management of antiretroviral therapy by physicians and pharmacists during pregnancy is

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imperative to reducing vertical transmission of HIV both during pregnancy, during delivery and even post-delivery. In addition, timely carrying out of healthcare procedures during pregnancy/delivery is pertinent to curbing morbidity/mortality with respect to delivering mothers/infants. Without the guidance of a healthcare team throughout all of these processes, delivering mothers and their infants are predisposed to a multitude of problems.

A main factor contributing to the high rate of maternal deaths in Malawi is many births occur at home due to cultural taboos. Pregnancies in Malawi are largely carried out in secrecy due to beliefs that publicizing the pregnancy will somehow adversely affect the mother and child. As a result, proper equipment and healthcare professionals are generally not available to deal with emergencies during postpartum care. The secrecy involved in pregnancies and deliveries cause the help of a healthcare team generally to be not as readily available during delivery. This leads to mothers in Malawi not receiving the appropriate care needed during a delivery. To make matters worse, maternal mortality rate is generally positively correlated with infant mortality rates. For example, the global average infant mortality rate is 32 while Malawi's average infant mortality rate is 44.8 (per 1,000 live births).^[5] This is reflective of the lack of proper healthcare during the delivery of the child and the health complications that can arise in coming years due to said lack of healthcare. Complications related directly to pregnancy/delivery, as well as indirect obstetric deaths play a large role in maternal/infant mortality rate. Without proper interventions several complications can arise during pregnancy such as spontaneous abortion and ectopic pregnancy. Secondary infections are also less prevalent in patients who receive proper healthcare leading up to birth and also in postpartum care. The use of secret mothers can somewhat bridge the gap between tradition and safe healthcare practice through the buffering of professional help/advice to the patient.

There are also environmental and socioeconomic factors contributing to the current state of outcomes with respect to MMR in Malawi. If an event were to occur that required immediate care, such as hemorrhage during delivery, the mother would require a health care team's help to stop blood loss and perfuse properly. A lack of transportation/bad roads can exacerbate an emergency situation and increase the possibility of mortality among mothers who choose to deliver at home.^[4] As mentioned before, management of HIV/AIDS is integral to reducing chances of an adverse event during pregnancy/delivery as well as reducing the possibility of vertical transmission of the virus to the infant. HIV/AIDS management must be monitored very closely by retroviral specialists and the utilization of a healthcare team dedicated to managing HIV/AIDS is essential to curbing the spread of disease. Although Secret Mothers can bridge the gap between mothers and health care professionals, in the future a discussion needs to be had to begin closing the communication gap and improving the morbidity/mortality outcomes among Malawian mothers and allowing them to be more open with the use of health care systems. Many Malawians are still reluctant even to speak with Secret Mothers about their pregnancies. In fact, there are some accounts of Malawians believing initially that their village's elected secret mother is simply a spy for the village chief, who can levy heavy fines for not following certain procedures during pregnancy through delivery.^[6] Even with laws put in place by the Malawian government to enhance the number of deliveries that happen in the care of healthcare professionals, women are still reluctant to utilize healthcare resources when progressing through their pregnancy. Another factor which plays into the expecting mother's decision to deliver at home is simply healthcare costs. Most people in Malawi live on less than \$2 USD per day and with healthcare costs throughout a pregnancy totaling in the neighborhood of \$8,000 USD many Malawians simply cannot afford the costs.

Secret Mothers

In response to a government ban passed in 2007 which disallows the occurrence of natural birth at home with the help only of traditional birth attendants and occasionally the birthing mother's own mother, a society of Secret Mothers now exists to help assist with proper care during pregnancy, delivery and those crucial times just after delivery. The ban was passed in hopes of improving mortality rates among birthing mothers and infants, but was not forceful enough to curb the culture of at-home birthing. The ban was lifted in 2010, after seeing that the ban did not stop the use of traditional birth attendants but rather sent them into the underground. These secretive practices caused for many births/deaths to go unnoticed and unrecorded by the government and ended up being a step in the wrong direction.^[7] Upon lifting the ban, the Malawian government's goal was primarily to use Secret Mothers and other birth attendants to act as a conduit between health care professionals and mothers who did not want to give up tradition for their pregnancies.

Secret Mothers are elder females within a village who are "elected" (more appropriately, selected) by their communities to seek out fellow villagers who are at risk for pregnancy or are expecting mothers. When a woman becomes pregnant, she is required by tribal and governmental law to report the pregnancy to her secret mother. The secret mother can help provide a safe and confidential environment for the expecting mother to speak freely about their pregnancy without fear of being marked as provocative or taboo. These secret mothers serve as intermediaries between the expecting mother and skilled healthcare providers and are present from around the time of contraception until approximately 42 days after birth. Secret Mothers themselves may not be healthcare professionals, but can help to communicate with healthcare professionals. Malawian women are reluctant to speak with anyone but their own mothers about their own pregnancy. Because of this many important monitoring protocols are not adhered to, due to a lack of communication between the expecting mothers and healthcare professionals. A lack of monitoring during the pregnancy can lead to problems occurring during/after delivery that could have been prevented given the right interventions. Secret Mothers are, as already stated, supposed to bridge the gap between expecting mothers and healthcare workers. Furthermore, Secret Mothers also take an active role in communicating with girls of childbearing age. They may provide education about safe-sex habits to these girls and this education is imperative. With a maternal-mortality rate as high as it is in Malawi and with upwards of 9% of the population being diagnosed as HIV-positive, many precautions need to be taken.^[8] Currently, most birthing assistants/Secret Mothers only receive 2-3 weeks of training before starting in their positions, but most health care clinics in Malawi recommend 3 entire months of training before they will be ready to spot early signs of complications in pregnancy.^[7] With vast improvements in the medical field over the past 30 years, healthcare professionals can help educate secret mothers on how to better intervene with mothers and reduce both maternal and infant mortality. Furthermore, pharmacists can help to enhance pharmacotherapeutic care to curb maternal mortality by providing palliative care, preventing spread of infectious disease and helping to reduce probability of emergency situations during/just after birth.

The Safe Motherhood Initiative started by Dorothy Ngoma, leader of Malawi's National Organization of Nurses and Midwives, in 2012 kickstarted the role that became Secret Mothers. Ngoma, along with Malawi's first female president Joyce Banda, made improving maternal outcomes a number one priority in the early 2010's.^[9] Ngoma and Banda both have fought for higher wages and better work environments for Malawian healthcare workers and Ngoma actually set up Malawi's first health workers union to help with

these improvements. It was thought that better treatment of workers would lead to improvements in maternal/infantile outcomes. However, as long as mothers are reluctant to receive help from healthcare workers, improvements in maternal outcomes will likely not be established. Being a rural nation with hospitals located upwards of 10-15 miles away from some villages, Secret Mothers and other healthcare professionals' attempts at working alongside each other and maximizing quality of care for mothers is essential for Malawi moving forward with respect to improving both maternal and infant mortality rates.^[9]

Role of Pharmacists

Pharmacists in particular can play a key role in helping secret mothers to communicate with expecting mothers and they can help provide therapy that will ultimately lead to more efficacious birthing outcomes. Pharmacists can provide medication therapy management (MTM) practices to help streamline the mother's medication regimen and make recommendations to a physician, who can either then relay the message on their own or allow the pharmacist to act and provide direct care to the patient. With this practice patients do not physically have to meet with the pharmacist as the secret mother can act as the intermediary, easing the stress on the patient to speak with healthcare providers while ensuring the patient is receiving proper care and nutrition. An important intervention commonly made during an MTM encounter for a pregnant patient in general is the introduction of a folic acid supplement of around 600 micrograms/day to the patient's daily medication regimen. This can help to prevent neural tube defects as well as serious spinal cord and brain defects for the fetus, such as spina bifida and anencephaly during the pregnancy.^[10] With poor access to health care, many patients tend to have chronic diseases such as cerebrovascular disease and ischemic heart disease which accounts for 12% of deaths in Malawi.^[11] With this in mind, patients who are lucky enough to receive health care may be started on teratogenic medications warfarin, which would be better substituted for heparin or a low-molecular weight heparin (LMWH) like enoxaparin. Many of these drugs also require specific dosing based on renal and hepatic function which can be done by a pharmacist and then relayed to the patient through the Secret Mother. Even through the buffering of a Secret Mother, pharmacotherapeutic advice can help to enhance outcomes of pregnancy.

Another area which is often overlooked throughout pregnancy is making sure patients are up to date on vaccinations. Several key vaccinations to receive during pregnancy to protect the mother and child are the seasonal influenza vaccine, Tdap (tetanus toxoid, reduced diphtheria toxoid and acellular pertussis) and the hepatitis B series as patients in Malawi are generally considered high risk patients for hepatitis B.^[12] Pharmacists can focus on specific pharmacotherapeutic interventions in ways that a physician or nurse may not. A pharmacist can pass on the information to a Secret Mother to then advocate for expecting mothers to receive immunizations, which can increase outcomes and help to decrease the risk of vertical transmission of infectious diseases.

CONCLUSION

It is not only going to take dedicated medical teams to decrease the MMR in Malawi, but there will also have to be continuing efforts to motivate patients to seek out their Secret Mothers. Secret Mothers' role as a buffer between the healthcare team and expecting mothers is pertinent to

decreasing adverse events in special populations as well as continuing to bridge the gap between tradition and Western healthcare practices that are necessary to decreasing morbidity/mortality in delivering mothers and infants. Hopefully in the future mothers in Malawi will have more access and less trepidation with regard to seeking out proper health care and will see the benefits of a health care team assisting in pregnancy. This can amount to better outcomes for the mother as well as the community around the and especially infants. For now, the use of Secret Mothers is a large step in the direction to enhance patient outcomes. There are still women who are reluctant to seek out the help of Secret Mothers. Once patients are able to do that, pharmacists and patient centered medical teams will be able to have a much greater impact upon the population's general well-being and ultimately provide better outcomes for patients.

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CONFLICT OF INTEREST

None.

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