“Africa needs intensive mobilization of people who have the power and means to reduce maternal and neonatal mortality on the continent.”

Madame Adame Bâ Konaré
Former First Lady of Mali

STATE OF THE WORLD’S NEWBORNS: MALI

Saving Newborn Lives

VALUING NEWBORNS IN MALI

In the West African country of Mali, children have an enormous social value for the family and the community as a whole. The social standing of a woman is largely based on her children. Yet newborn death is so frequent that it is often seen fatalistically, beyond the control of the family.

An estimated nine million inhabitants from some 20 ethnic groups make up Mali’s population, which is 70 percent rural and 80 percent Muslim. As in many poor countries, the difficulty of reaching rural inhabitants with health services—or of rural people reaching health services in town—is a major factor behind Mali’s grim health statistics. The government of Mali is working to change familial attitudes toward newborn health. The goal is to help families feel less burdened by the
SAVING NEWBORN LIVES: Recommendations for Improving Newborn Survival

CARE OF FUTURE MOTHERS

- Improve the status of women
- Improve women’s health and family planning services
- Improve the nutrition of girls
- Discourage early marriages and early childbearing
- Promote safer sexual practices
- Provide opportunities for female education

CARE DURING PREGNANCY

- Improve the nutrition of pregnant women
- Immunize against tetanus
- Screen and treat infections, especially syphilis and malaria
- Improve communication and counseling: birth preparedness, awareness of danger signs, and immediate and exclusive breastfeeding

SPECIAL ATTENTION

- Monitor and treat complications, such as anemia, preeclampsia, malpresentation, and bleeding
- Promote voluntary counseling and testing for HIV
- Reduce the risk of mother-to-child transmission (MTCT) of HIV

CARE AT TIME OF BIRTH

- Ensure skilled care at delivery
- Provide for clean delivery: clean hands, clean delivery surface, and clean cord care
- Keep the newborn warm: dry and wrap baby immediately, including covering the head; or put skin-to-skin with mother and cover
- Initiate immediate, exclusive breastfeeding, within one hour
- Give prophylactic eye care, as appropriate

SPECIAL ATTENTION

- Recognize danger signs/serious complications in both mother and baby and avoid delay in seeking care and referral
- Recognize and resuscitate asphyxiated babies immediately
- Pay special attention to warmth, feeding, and hygiene practices for preterm and LBW babies

CARE AFTER BIRTH

- Ensure early postnatal contact
- Promote continued exclusive breastfeeding
- Maintain hygiene to prevent infection: ensure clean cord care and counsel mother on general hygiene practices, such as hand-washing
- Provide immunizations such as BCG, OPV, and hepatitis B vaccines, as appropriate
- Promote birth spacing

SPECIAL ATTENTION

- Recognize danger signs/serious complications in both mother and newborn, particularly of infections, and avoid delay in seeking care and referral
- Support HIV positive mothers to make appropriate, sustainable choices about feeding
- Continue to pay special attention to warmth, feeding, and hygienic practices for LBW babies
inevitability of infant death and more capable of taking actions to protect their children.

There is an important historical context for these efforts: In 1987, Mali hosted an international conference that launched a worldwide movement to improve community health—The Bamako Initiative, named for Mali’s capital city. This initiative laid the foundation for Mali’s decentralized health system. At the community level, relais or animateurs provide volunteer health services. The Community Health Association (ASACO) in each zone establishes and manages a Community Health Center (CSCom), the first level of formal care. Referral services are at the district hospital or CSRef. This framework has been in place since 1990, and was enhanced in 1997 with a Ten-Year Plan for the Development of Health and Sanitation and the five-year implementation plan, PRODESS, the basis for all work currently carried out by the Ministry of Health.

These efforts have contributed to lowering Mali’s infant and neonatal mortality rates. Yet Mali, one of the world’s poorest countries, still suffers from extremely high rates of newborn mortality. For every 1,000 babies born, 111 die in the first year of life and half of these (56 babies) die in the first month. These figures represent an improvement over 1996, when infant mortality was 123 per 1,000 and neonatal mortality was 61 per 1,000 live births (DHS II, 1996). Even so, Mali fares poorly compared with the overall neonatal mortality rate for Africa of 39 per 1,000 or for the developing world as a whole, estimated at 31 per 1,000 live births (WHO, 1999).

NEWBORN SURVIVAL

Despite the steps taken in Mali to improve health at the community level, no programs or policies specifically address newborn health care, either on the part of the government or of international organizations. Yet much can be done to improve conditions for newborn survival. Among the key factors positively associated with newborn survival, three stand out: prenatal consultation, attended delivery and postnatal care.

NATIONAL COMMITMENT TO IMPROVING NEWBORN HEALTH

In November 2001, the situation analysis that resulted in the Saving Newborn Lives program in Mali was presented in a workshop in Bamako. Mme Adame Bâ Konaré, President of Fondation Partage and wife of the former President of Mali, opened the workshop, placing the SNL Initiative in the context of the Bamako Declaration of 1987. At the West African Conference on Maternal and Neonatal Mortality-Vision 2001 Forum, when the first ladies of West Africa made a commitment to cut maternal mortality in half in the next decade, Mme Konaré also stated Mali’s determination to reduce neonatal and infant mortality in the next four years. The current government of President Amadou Toumani Toure continues to support these newborn health objectives.
Milk, and grains during pregnancy. Taboos—on eating eggs, red meat, nutritional deficiencies. For instance, anemia, vitamin A deficiency and other beliefs contribute to pregnant women's reducing workload. Many traditional or other health practices such as advice on nutrition during pregnancy and TBAs may or may not give good iodized salt, are also spotty. Matrones as providing iron supplements and cern. Other preventive activities, such as possible to protect the baby from evil spirits inhibits women from seeking early care. In addition, women tend to seek medical care only when they are sick; if they happen to be pregnant, they may then receive prenatal care along with treatment for their illness. In general, women are unaware of the benefits of prenatal care and are unlikely to seek it out, especially if earlier pregnancies seemed to go smoothly.

Inadequate tetanus toxoid immunization is a serious problem for pregnant women. Only 49.6 percent receive one dose of vaccine and fewer than 32 percent receive lifetime coverage. The figures are even lower in rural areas. Disturbingly, in all parts of the country, immunization rates are lower than rates of prenatal consultation, illustrating the important opportunities missed during prenatal visits. Mali’s burden of neonatal tetanus is among the highest in the world; reducing it is a key objective of the PRODESS plan (DHS III, 2002).

Inconsistency in both quality and scope of prenatal care can be a factor in newborn survival. Few pregnant women routinely take malarial prophylactics even though malaria is endemic. Some women received prescriptions but did not know what they were for or whether they related to the pregnancy or some other health concern. Other preventive activities, such as providing iron supplements and iodized salt, are also spotty. Matrones and TBAs may or may not give good advice on nutrition during pregnancy or other health practices such as reducing workload. Many traditional beliefs contribute to pregnant women’s anemia, vitamin A deficiency and other nutritional deficiencies. For instance, women must follow restrictions—even taboos—on eating eggs, red meat, milk, and grains during pregnancy.

Prenatal care is relatively rare in Mali—only 41 percent of pregnant women have one prenatal visit, usually late in pregnancy. A traditional belief in hiding pregnancy as long as possible to protect the baby from evil spirits inhibits women from seeking early care. In addition, women tend to seek medical care only when they are sick; if they happen to be pregnant, they may then receive prenatal care along with treatment for their illness. In general, women are unaware of the benefits of prenatal care and are unlikely to seek it out, especially if earlier pregnancies seemed to go smoothly.

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ATTENDED DELIVERY
Forty percent of births are attended by medical personnel, in most cases, a nurse, midwife, or an auxiliary. Over 60 percent of Mali’s babies are born at home, and for most who die, the causes are not determined. At childbirth, 28 percent of women are assisted by friends or family, 20 percent by a TBA, and 12 percent deliver alone. Such fundamentals of newborn care as clean delivery, warming, drying, and immediate and exclusive breastfeeding are applied sporadically, at best. Complications affecting the health of mother or newborn can be aggravated by delays. Sometimes delays arise from the family’s needing to seek money from within the community before they can take the mother to a facility. In other cases, family members believe that suffering is a normal part of childbirth or they may not recognize the gravity of the situation. Finally, delays may occur in getting help upon arrival at a facility.

POSTNATAL CARE
Following birth, postnatal care practices can put the baby at risk. Babies are usually washed in cool water. Breastfeeding is delayed for several hours—often more than eight hours and even up to 24 hours. While the mother is cleaned and allowed to rest, the baby is given other liquids. The belief that the baby should not leave the home for anywhere from seven to 40 days after birth means that initial care is given through home visits, usually by TBAs. Vaccinations are thus delayed, and any problems that arise are first referred to traditional healers who visit the home, rather than to health service sites.

MOTHERS’ HEALTH
Not only does Mali lose more than its share of babies, it also loses more than its share of mothers. Maternal mortality in Mali stood at 577/100,000 live births in 1996 (DHS II), which is high even in comparison with other poor countries. Save the Children’s 2001 study, *The State of the World’s Mothers*, compared the situation of mothers in 94 countries, based on important criteria, including risk of maternal mortality over a woman’s life span, percentage of women using modern contraception, percentage of births assisted by qualified health personnel, percentage of anemic pregnant women, literacy rate, and women’s representation in national government. Mali ranked 91 out of the 94 countries studied. Malian women’s serious health problems are closely tied to the health outcomes of their newborns and infants.

Specific health problems affecting Malian women, and especially pregnant women, are:

- anemia, which affects at least 50-60 percent of women;
- malaria, which causes or exacerbates anemia (42 percent of anemia cases in Malian women are estimated to be malaria-induced); malaria is also a major factor in miscarriage, prematurity, low birth weight and other complications of pregnancy;
- tetanus and lack of immunization, which contributes to neonatal tetanus;
- sexually transmitted infections, which are very common and often not recognized as illness;
- female excision (94 percent of Malian women are excised), which is a factor in women’s health and in childbirth, and affects the length of labor and the use of forceps and episiotomy.

INSTITUTING BETTER CARE FOR MOTHERS AND BABIES
What can women and families do to improve their own wellbeing and survival as well as that of their babies? The first step is to identify those cultural influences and traditional practices that can hurt women’s and babies’ health and emphasize those that can help. Families then need to introduce a number of measures for pregnant women and their babies, including prenatal care, better nutrition, reduced heavy workload during pregnancy, safe delivery, exclusive breastfeeding for four to six months, and the involvement of fathers.

For the most part, a father’s role is limited to making financial decisions about the household and paying for (and thus deciding to seek) health care for his wife and children. If fathers are better informed about the value of
prenatal and postnatal care, nutrition, appropriate workload and, around delivery, appropriate care and awareness of danger signs, they will be more likely to take a role in assuring good care for their wives and babies.

Many governmental, nongovernmental, and advocacy organizations and international assistance groups are striving both to improve prenatal services and safe delivery practices and to persuade women and their influential family members of the importance of good prenatal and newborn care.

SAVING NEWBORN LIVES IN MALI

In light of the many measures required to improve newborn health and survival, Save the Children has established a highly focused program, the Saving Newborn Lives (SNL) initiative.

Programs. In Mali, SNL will support essential newborn care (ENC) services in the districts of Bougouni, Kolondieba and Yanfolila in the Sikasso Region, which will strengthen the continuum of newborn health care in both the home and community. SNL’s focus will be on behavior change to encourage people to institute practices that promote healthier mothers and newborns and save lives. People will learn what they can do to protect the health of mother and child at every stage—during pregnancy, at delivery, and after delivery.

Through a partnership with Helen Keller International, SNL will support a program to better understand household behaviors and to implement a birth preparedness program for community and household caregivers.

Training in ENC will help close the critical gaps in Mali’s normal care practices, particularly at birth and through postpartum care, which will incorporate domiciliary visits within the first week of life. SNL will support the Ministry of Health and appropriate training institutions to review current curricula and training strategies, and help put in place an appropriate ENC training package. The training will focus on the management of the normal newborn in the community and emphasize a few simple messages: clean delivery, skin-to-skin immediate contact, clean cord care, and early and exclusive breastfeeding.

SNL will continue to partner with the Ministry of Health, UNICEF, WHO, and BASICS to combat maternal and neonatal tetanus. This program aims to vaccinate over two million women in high-risk areas over four years. Formative research has been conducted to better understand the factors determining women’s demand for services as well as operational constraints. An innovative strategy has been established that involves the use of community health workers, Uniject syringes, targeted behavior change communications, and mobilized local and national leaders.

Research. Malaria is highly endemic in Mali and a contributing factor to maternal and neonatal morbidity and mortality. Complications from malaria can be reduced by providing intermittent presumptive treatment during antenatal visits. SNL will conduct operations research to explore the feasibility of piloting presumptive intermittent treatment for malaria, as well as examining community-based models for providing treatment. Other opportunities for operations research will examine the feasibility of verbal autopsy as a tool to assign causes for newborn death in a community. Use of traditional birth attendants, generally considered ineffectual in reducing maternal mortality compared to skilled attendance at delivery, may prove that good results in neonatal mortality and morbidity are achievable with appropriate training and support. Research will help determine the essential interventions and skills that TBAs should have.

Advocacy. One of SNL’s most important goals is to make newborn health care a priority for Mali’s policymakers. SNL began its advocacy campaign for newborn health and position through support for the First Ladies of West Africa Conference on Maternal and Neonatal Mortality in May 2001. At that conference, West Africa’s First Ladies put the issues of newborn care before public and professional communities. Since that landmark event, SNL has been invited by the MOH to join the ministry’s Task Force to Reduce Maternal and Neonatal Mortality in Mali and to help develop the Action Plan to Reduce Maternal and Neonatal Mortality.
SNL—MALI USES SOCIAL MOBILIZATION IN NATIONWIDE MNT CAMPAIGN

In 2002, the Ministry of Health, UNICEF, WHO, BASICS, and Save the Children (US) joined forces to launch an innovative anti-tetanus program. SNL laid the groundwork for the vaccination campaign by staging widespread public awareness and education activities targeting six of Mali’s neediest districts.

The public information campaign—shaping messages about tetanus, the importance of vaccinations, and where and how to become vaccinated—was carried out following careful market research, media planning, and training. Prior to the development of any promotional or educational materials SNL and its partner, the National Center for Information, Education, and Communication (CNIECS), conducted formative research on attitudes, beliefs and household practices among the targeted districts’ different ethnic groups.

During two month-long campaigns, 1809 villages and community leaders, families, and women were reached with messages about the importance of protecting women of childbearing age against tetanus. Fifteen hundred village-based volunteer educators were selected and trained to get the message out through community meetings and the distribution of posters and other publicity materials—efforts that were reinforced through local and national radio broadcasts.

The effectiveness of SNL’s public information strategy was reflected in the high percentage of the women who chose to be vaccinated. In the first round of immunizations, the estimated coverage was 86 percent of all 389,000 women of child bearing age, followed by an estimated 76 percent in the 343,500 second round.

Mali’s tetanus toxoid campaign included a noteworthy public health innovation. Some 99,000 women were vaccinated using Unject preloaded, disposable syringes—making Mali the first country in the world to use this new technology. They allow for a more simple vaccination supply chain and disposal as well as administration by less highly qualified agents, giving the potential to greatly expand vaccination coverage in hard-to-reach communities.