Behind Every Healthy Child Is a Healthy Mother

ABOUT THE SYMPOSIUM

Making the Linkages Between Maternal Health, Child Health, and Family Planning

Important linkages exist between maternal health, child health, and family planning. In an attempt to explore how best to bring these linkages to the attention of those reviewing the goals for children's survival set at the 1990 World's Summit for Children, Save the Children, with support from the Rockefeller Foundation, organized a day-long Symposium on the subject.

Representatives of some of the leading citizen-supported private voluntary organizations (PVOs)* gathered in Washington, DC on July 24th, to accomplish a four-part agenda:

- To review the latest data and analysis of the connections between maternal health and child survival improvement;
- To review the child survival PVO community's investments in maternal health as a component of child survival programming grants from the United States Agency for International Development (USAID);
- To share examples – successes *and* challenges – of integrating maternal health and family planning interventions into child survival programs in the field; and
- To define a key message for delegates preparing for the upcoming UN Special Session on Children.

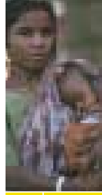
Presentations were made by:

- **Nancy Yinger**, PhD (Director of the MEASURE Communication Project, Population Reference Bureau) on the contribution of family planning to child survival programs;
- **Miriam Labbok**, MD, MPH (Division Chief, Nutrition and Maternal Health Division, Office of Health and Nutrition, USAID) on the contributions of maternal health interventions to child survival programs; and
- **Katherine Jones**, MSPH (Chief, Child Survival Division, Bureau of Humanitarian Relief/Private Voluntary Cooperation, USAID) on the investments that PVOs have made over the years in making these linkages work to the benefit of mothers, children, families, and communities as a whole.

In addition, PVO representatives presented examples of their own efforts.

This report pulls together some of the most salient information from the Symposium, gives concrete examples on how these linkages are working in the field, and points in the direction of future actions that need to be taken in order to complete the unfinished agenda for child survival.

*A complete list of organizations represented at the Symposium is provided on the back cover of this report.



Healthy Mothers, Healthy Children

THE NEED FOR CONNECTIONS

Too often, the maternal health factors that can have a lasting impact on child survival — nutrition, prenatal care, labor and delivery care, the management of obstetric complications, and postpartum care for mother and newborn — are overlooked and ignored. Similarly, family planning — the steps that couples can take to ensure that their children are born at the healthiest points in a mother's life — is often left off of the child health agenda. This report attempts to make clear the connections between maternal health interventions, family planning, and child survival; to consider the benefits and challenges of implementing an integrated approach to child survival; and to offer examples of what successful family planning and maternal health interventions in the context of a child health program look like in practice.

WHY NOW?

The picture that emerges from the data relating to child survival is not pretty:

- One out of every 12 children born today (almost 11 million children per year) dies before his or her fifth birthday;
- Of the 129 million children born each year, at least 4 million die within the first month of life and another 6 million die within the first five years; 98 percent of these deaths occur in developing countries;
- An estimated 16 million low-birth-weight babies are born each year;
- An estimated 174 million children under age five are malnourished; and
- The leading causes of child death – infectious diseases (including diarrhea, pneumonia, measles, and malaria) – are either preventable through vaccines or treatable through low-cost interventions.

But these statistics only tell part of the story. The facts and figures surrounding maternal mortality and morbidity paint an equally devastating picture:

- Each year, an estimated 515,000 women die from complications of pregnancy and childbirth (99 percent of these in developing countries), and 15-18 million women suffer long-term injuries and disabilities;
- A woman's lifetime risk of dying of pregnancy-related causes is as high as 1 in 16 in Africa and 1 in 65 in Asia, while it is only 1 in 3,700 in North America.[1]

WHAT'S THE CONNECTION?

Mothers' health represents children's best hope for survival. When a mother dies, is weakened by a disability, or is overwhelmed by the needs of many children, her children's lives are threatened — and too often lost. Conversely, if a mother's health and well-being are supported *in tandem with* child survival efforts, then mothers, children, and all of society benefit. Decision makers need to take in the whole picture, which clearly shows that when women survive and thrive, their children are likely to survive and thrive.

Accomplishing maternal health goals is not only good for women, it is good for children.

Operating in some of the poorest countries of the world, private voluntary organizations (PVOs) have long-recognized the essential linkage between maternal health and child survival. For the past 15 years, PVOs have integrated maternal health and family planning components into existing child survival programs. The stories of what PVOs are doing have, for the most part, not been told outside of their own community. Their many successes demonstrate the important role that community-based efforts play in maternal health and child survival. (*See PVO boxes throughout this report and chart on inside back cover.*)

1 Statistics are from World Health Organization (WHO) and United Nations Children's Fund (UNICEF) publications.

World Vision

Building with BRICS in India

The Ballia Rural Integration Child Survival Project (BRICS) in Uttar Pradesh, India, recognizes that when communities see their role as both providers and beneficiaries of good health, desired improvements in health can be achieved. With a maternal mortality ratio of 540 per 100,000 live births and an under-five mortality rate of 143 per 1,000, reducing child and maternal mortality was real cause for action.

BRICS, which serves a population of 150,000 residents in 82 villages, creates partnerships between communities and government to facilitate the delivery of health services by community members. Among the services targeted by BRICS are birth spacing and family planning; prenatal, delivery, and newborn care; nutrition; and immunization.

By the end of its second full year of operation, BRICS was proving the power of the community to make health systems work by increasing:

- *the voluntary use of modern contraception methods, from 8% to 20%;*
- *the percent of pregnant women receiving a 3-month supply of iron folate, from 9% to 68%;*
- *the percent of pregnant women receiving tetanus toxoid immunization, from 5% to 76%;*
- *the percent of children (12 to 23 months old) being fully immunized, from 20% to 66%; and*
- *the percent of deliveries attended by a trained health provider, from 17% to 41%.*

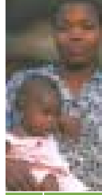
BRICS is successfully building a community health infrastructure.

Promises Made, Promises to Keep

In 1990, world leaders gathered at the United Nations for the first-ever World Summit for Children. Led by James Grant, the Chief Executive at UNICEF, delegates to the Summit developed a consensus document that set forth an aggressive agenda to meet the wide-ranging needs of children and to improve dramatically children's chances for survival and development. But the 1990 document went beyond the usual set of prescriptions for child survival and education. It acknowledged the inextricable links between maternal health, family planning, and child survival, and, to that end, included a series of maternal health and family planning goals that were seen as necessary to ensure child survival.

In preparing for the United Nations Special Session on Children in September of 2001 (the 10-year follow-up to the World Summit for Children), UNICEF drafted a report[2] detailing progress toward accomplishing the original goals and objectives. While there has been some improvement, especially in the areas of immunization and reducing child malnutrition, the gains have fallen far short of expectations, particularly in the area of women's health.

2 United Nations Children's Fund (UNICEF). *A World Fit for Children*. United Nations: New York.



Women's Health Balance Sheet

1990 World Summit of Children Goal	Gains Made	Unfinished Business
MATERNAL MORTALITY		
Reduce the maternal mortality ratio (MMR) by 50% by 2000.	There has been a heightened awareness of the causes leading to high MMR, but little tangible progress.	No evidence that maternal death rates have declined significantly over last decade. 515,000 women die every year as a result of pregnancy and childbirth (e.g., a woman in sub-Saharan Africa faces a 1 in 13 lifetime risk of dying during pregnancy and childbirth).
FAMILY PLANNING		
Provide access for all couples to information and services to prevent pregnancies that are too early, too closely spaced, too late, or too numerous.	Contraceptive prevalence rate increased by 10% globally and doubled in the least developed countries. The worldwide total fertility rate declined from 3.2 to 2.8.	Every year, adolescents give birth to 15 million infants. Only 23% of women (married or in union) in sub-Saharan Africa use contraceptives. Access to reproductive health education remains a challenge.
CHILDBIRTH CARE		
Provide access for all pregnant women to prenatal care, trained attendants during childbirth, and referral facilities for high-risk pregnancies and obstetric emergencies.	Modest gains made in both prenatal care and births assisted by a skilled health worker in all regions except sub-Saharan Africa.	Essential obstetric care services are lacking. Coverage of delivery care is only 29% in South Asia and 37% in sub-Saharan Africa.
ANEMIA		
Reduce iron deficiency anemia by one third.	Most developing countries have iron supplementation measures for pregnant women.	Little change during the 1990s in the prevalence of anemia among pregnant women.
BREASTFEEDING		
Empower women to breastfeed their children exclusively for four to six months and to continue breastfeeding, with complementary food, well into the second year of life.	Rates of exclusive breastfeeding increased by nearly 20%. Some gains in breastfeeding with complementary feeding into the second year of life.	Only about half of all infants are exclusively breastfed for the first four months of life.

Source: United Nations Children's Fund (UNICEF). *A World Fit for Children.* United Nations: New York, p. 49. For further information about the UN Special Session on Children, visit UNICEF's web site at www.unicef.org

Making the Connection Between Maternal Health and Child Survival

"Healthy mothers are children's first line of defense against death, malnutrition, and a cycle of poverty and disease."[3]

WHEN MOTHERS DIE...

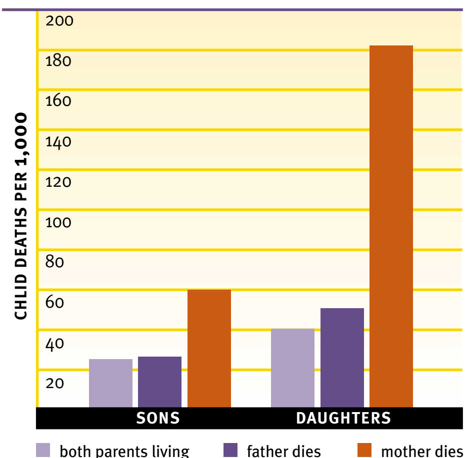
For most women, pregnancy and childbirth are events that are met with joy and expectation. New life heralds new possibilities. For many women, however, pregnancy and childbirth are events also fraught with other possibilities — disease, injury, and death. Some 515,000 women die each year from complications of pregnancy and childbirth, and more than 15 million more suffer long-term physical disabilities, injuries, infections, or infertility. Ninety-nine percent of these maternal deaths and disabilities occur in developing countries—countries where poverty, lack of education, infectious diseases, poorly-equipped health care facilities, and the lack of trained medical personnel conspire against the health and survival of women...and their children.

Pregnancy and childbirth are, in fact, among the leading causes of death and disability for women 15 to 49 years of age in developing countries, far ahead of such killers as cancer and heart disease. Moreover, a woman's lifetime risk of dying from pregnancy complications (which combines the risks associated with childbirth with the average number of pregnancies a woman has) is particularly high in the developing world. In Africa, for example, a woman's lifetime risk of dying in pregnancy and childbirth is 1 in 16, whereas in North America, her risk is only 1 in 3,700.

"In much of the world, every person has close relatives and friends who have died or will die from lack of maternity care."

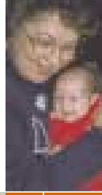
— Miriam Labbok, MD, MPH
Chief, Nutrition and Maternal Health Division, USAID

WHAT HAPPENS TO THE REMAINING CHILDREN WHEN THE MOTHER DIES?



Source: Office of Health and Nutrition, USAID

3 Nurture/Center to Prevent Childhood Malnutrition. *Maternal Health: Children's First Line of Defense.* Washington, DC: 1996, p. 1.
4 Nurture. *Maternal Health*, p. 5.
5 Adapted from UNICEF. *The State of the World's Children 2001*, using UNICEF and WHO data 1995-2001.



...CHILDREN DIE

Not surprisingly, the death of a mother has devastating consequences for the child she carries. When a woman dies during childbirth in the developing world, the child she is carrying *almost always* dies; when a woman dies in the postpartum period, her child *very often* dies.[4] The direct causes of death to newborns include infections (e.g., neonatal tetanus, pneumonia, and diarrhea), complications during pregnancy and delivery (e.g., premature birth, asphyxia, and birth injuries), and congenital anomalies. In addition, low birth weight (under 5.5 pounds) is the most important indirect cause of millions of newborn deaths. Together, these direct and indirect causes account for 4 million newborn deaths each year.

Many of these deaths to newborns — whether due to direct or indirect causes — are preventable if steps are taken to afford mothers access to basic health care services before and during pregnancy and in the important days and weeks after childbirth.

More than 30 percent of all children born in South Asia are low birth weight.[5]

...AND SURVIVING CHILDREN AND FAMILIES SUFFER

A mother's death also has a profound impact on her surviving children. In fact, one study in Bangladesh found that when a mother dies during delivery, her newborn child is almost certain to die. In another Bangladesh study, surviving children up to age 10 were 3 to 10 times more likely to die within two years of their mothers' death than children whose parents were both living.[6] Studies also show that a mother's death has detrimental effects on children's health and nutritional status and on school enrollment.[7] The prospects for these children and their families are grim, as they face increased workloads, diminished education, and economic pressures. Thus, attempts to improve child survival and development without attention to maternal survival are likely to fall far short of their goals.

Project HOPE

Grounds for Hope: Reproductive Health Services on a Coffee Plantation in Guatemala

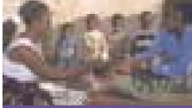
Migrant populations present unique challenges for the provision of primary and reproductive health services: the window of opportunity for providing those services is often limited to a few months or even weeks in which the migrants are residents of any given region; migrant populations often speak different languages; and their overall health status is poor. Among coffee workers in the Boca Costa region of southwestern Guatemala, these challenges are compounded by the isolation of the region and by cultural practices that constrain women's mobility and autonomy.

In partnership with the Guatemalan Ministry of Health, local NGOs, Anacafé (the coffee growers association), and the plantation owners, Project HOPE is expanding its efforts to integrate maternal health and family planning into its child survival programs. Activities include the training of community workers in primary and reproductive health care and new outreach to adolescents. Project HOPE hopes to expand its network to reach migrant workers on 250 coffee plantations in the next four years.

6 Strong, M. A. "The health of adults in the developing world: The view from Bangladesh." *Health Transition Review* 2 (2): 1992: pp. 215-224.

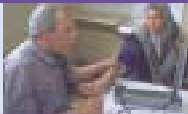
7 National Research Council. *The Consequences of Maternal Morbidity and Maternal Mortality: Report of a Workshop.* Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press, 2000.

A SAFE MOTHERHOOD TIMELINE



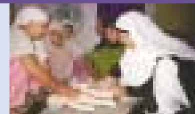
PLANNING FOR A HEALTHY PREGNANCY

Family planning • Improved maternal nutrition



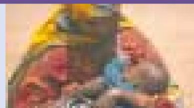
CARE DURING PREGNANCY

Nutritional supplementation • Tetanus immunization
Treatment of maternal infections • Birth preparedness



CARE DURING LABOR

Delivery by a skilled attendant
well-equipped health facilities



Making Childbirth Safer

A mother is typically the most important person in a new child's life. As such, maternal health and well-being must be taken into account in setting the agenda for child survival. By taking women into account, child survival can be influenced where it begins — in the years, months, and days before a child is born and in the critical hours, days, and months after birth.

At the most basic level, health behaviors in the home (including child feeding, care of the sick child, and basic hygiene) and access to primary health care services (including immunization and treatment for common infections) can save millions of lives, at low cost. In addition, women need access to a basic set of health care interventions before, during, and after pregnancy and childbirth in order that mother *and* child will have the best chance of survival (*see chart above*).

PLANNING FOR A HEALTHY PREGNANCY

Preparing for a healthy pregnancy with a successful outcome for mother and baby begins *before* pregnancy – with family planning and good maternal nutrition.

FAMILY PLANNING

Family planning – defined as contraceptive information and services allowing couples to plan the timing and spacing of pregnancies – protects and promotes the health of women, children, and communities.

Family planning...

- allows women to have children when it is safest and healthiest for them to bear children;
- helps young couples to delay childbirth until they are fully grown and able to take on the financial and emotional responsibilities of parenthood.

Young women under the age of 18 are three times more likely to die in childbirth than women between the ages of 20 and 29.[8]

- contributes to child survival by helping mothers space births at least two years apart, which has been associated with lower infant mortality (*see chart at right*);
- reduces a woman's exposure to the risks of death and injury associated with pregnancy and childbirth, and allows her time to recover between pregnancies;
- can protect women — and their partners — from sexually transmitted infections (STIs), including syphilis, gonorrhea, and HIV/AIDS; and
- can protect children from being infected with STIs, including HIV/AIDS and other diseases, which can be transmitted from mother to child.

Moreover, family planning interventions are easy to incorporate into broader health care services, including those for children's health needs, thereby saving valuable time and money.

8 Nurture, *Maternal Health*, p. 5.

AND DELIVERY

- *Clean delivery practices* • *Access to*
- *Management of obstetric emergencies*

CARE FOR MOTHER AND CHILD AFTER BIRTH

Immediate care for newborn • *Infection prevention and treatment*
Breastfeeding support

A HEALTHY MOTHER AND CHILD

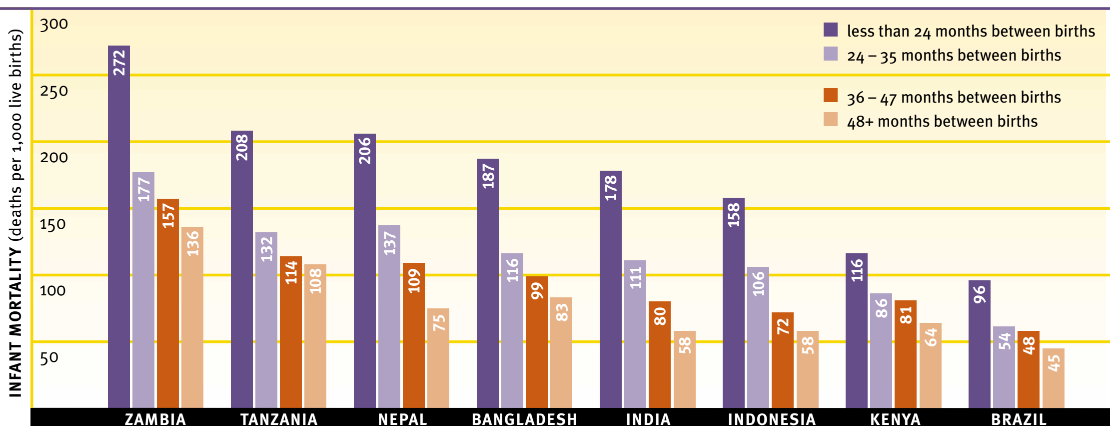
The Role of PVOs: Meeting the demand for family planning is the challenge now facing many communities in countries where the variety of contraceptive options and/or the number of sites where services are available is limited. PVOs alone and in partnerships with government and non-governmental organizations are playing an increasingly important and creative role in meeting this need, especially with hard-to-reach populations. Both through child survival programs and grants from the Office of Population and field missions of USAID, PVOs are integrating family planning efforts into ongoing programs (*see inside back cover)*.

IMPROVED NUTRITION

Good maternal health and nutrition are essential cornerstones of safe motherhood and child survival. Women who enter their reproductive years nutritionally strong and free of disease and infection have a much better chance of being healthy throughout pregnancy and delivery and of passing that good health along to their children, than women who are malnourished. In fact, children born to mothers who are underweight going into pregnancy, or who do not gain a sufficient amount of weight during pregnancy, often suffer from low birth weight, with its accompanying health risks. Moreover, women of small stature, often the

SAVING CHILDREN'S LIVES THROUGH FAMILY PLANNING

Reductions in Infant Mortality with Birth Spacing



Source: DHS Surveys 1990-1995 (Calverton, MD: ORC Macro International) unpublished analysis

International Rescue Committee (IRC)

One-Stop Health Shopping in Southern Sudan

Since 1999, the IRC has been the sole agency implementing a reproductive health program in southern Sudan. Given the tense political environment and the skepticism of communities being served, components of the reproductive health program have been introduced in phases, starting with prenatal care and progressing through postnatal care, prevention and treatment of STIs, and now family planning.

In the first year of operation, the program met with only limited success. The IRC determined that this was due in part to the lack of primary health care. It made sense – people of southern Sudan needed basic services (including immunizations and treatment for diarrhea and infections) before they would utilize a reproductive health package. In September 2000, under a new partnership with UNICEF that made essential drugs and immunizations available, the tide turned. The reproductive health clinic became part of a primary health care unit, offering an array of services, ranging from immunization to family planning. The number of people attending the clinic dramatically increased: in the first quarter of 2001, there were 1,875 reproductive health clients and 4,568 primary health care clients.

Lesson learned? Integrated health programs can outperform specialized services. Mothers and their children travel together – why not provide their services together?

result of infection or undernourishment in childhood, are at high risk of having obstructed labor and low birth-weight babies.[9]

Good nutrition requires that women, especially those who intend to get pregnant, eat a diet high in calories, proteins, and micronutrients. While these requirements are hard to ensure, micronutrient supplementation can reduce some deficits. Micronutrient deficiencies, especially in the months immediately preceding pregnancy and in early pregnancy, increase the risks of disability and death for mother and child. This is particularly true for deficiencies in iron, iodine, Vitamin A, and folic acid. Appropriate supplementation before and during pregnancy is a low-cost intervention that can reduce infections and anemia, thus improving the chances of survival for mothers and, directly and indirectly, their infants.

Anemia affects 40 to 60 percent of all pregnant women in developing countries.[10]

CARE DURING PREGNANCY

While nutritional status continues to be of importance once a woman conceives, pregnancy signals the need for additional health interventions. Good outcomes for the mother and baby are more likely if pregnant women receive the following as part of a basic prenatal care package:

- screening and treatment for diseases and infections (e.g., malaria, hookworm, anemia, and sexually transmitted infections, including HIV/AIDS, syphilis, and gonorrhea);
- provision of nutritional supplements, especially iron folate, Vitamin A, and iodine, in areas where such deficiencies exist;
- vaccination against tetanus, to which mother and child can be exposed during childbirth, often with life-threatening consequences for one or both;
- contingency plans for complications in pregnancy or delivery, and identification of breech and multiple deliveries;

9 Nurture, *Maternal Health*, pp. 1 & 6.
10 United Nations Population Fund (UNFPA). *The State of the World's Population 2000: Lives Together, Worlds Apart.* United Nations: 2000, p. 4.
11 Accessed at www.who.int/vaccine-diseases/services/immschedule.htm

- identification of a skilled birth attendant to help with labor, delivery, and newborn care; and
- counseling on newborn and child nutrition, including the optimal breastfeeding protocol.

Neonatal tetanus causes more than 300,000 newborn deaths each year. The risk of children and mothers contracting tetanus during childbirth is virtually eliminated with two doses of tetanus toxoid vaccine given during pregnancy, at a cost of just over US $1.[11]

In 2000, an estimated 38 million women went through pregnancy without the benefit of *any* prenatal care.[12] In the same year, approximately 515,000 women died during pregnancy and childbirth and an estimated 4 million infants died in the first 28 days of life. Basic care during pregnancy can save the lives of millions of mothers and their children, while setting both on the road to better health.

CARE DURING LABOR AND DELIVERY

Approximately 15 percent of *all* pregnant women will face a complication during pregnancy or delivery, requiring medical attention.[13]

For most women in developed countries, obstetric emergencies are addressed successfully by trained medical staff in well-equipped facilities. By contrast, in developing countries, obstetric emergencies result in disability or death for millions of women every year.

Of all the interventions that are essential to safe labor and delivery, the presence of **skilled birth attendants** is, perhaps, the most critical. In many developing countries, if pregnant women are attended at all, it is often by traditional birth attendants, who may have *some* training and experience in managing normal pregnancies and deliveries, but who often lack the ability and resources to manage complications. However, the vast majority of women in developing countries — an estimated

Plan International

Playing Games in Senegal

In a village square in rural Senegal, a group of women sit playing a board game. They are not idling their time away. They are taking part in a unique experiment that tries to help Senegalese women understand the risk factors of pregnancy and childbirth. The game was developed by Amadou Diallo, a public health nurse working with Plan International, out of a real sense of urgency: for every 100,000 live births, 1,200 Senegalese women die from complications of pregnancy and childbirth and many thousands more suffer long-term disabilities.

***Wure, Were, Werle** – also known as the **3W Safe Motherhood Game** – uses cultural images and proverbs depicted on a deck of 72 playing cards to reinforce life-saving information on pregnancy and childbirth. If, for example, a woman draws a card showing the goat, known to be a prolific animal, she will learn to identify the risks of spacing children too closely together. On the other hand, if she draws the elephant, which reproduces only once every five years, she will learn to understand the concept of healthy child spacing and the need for family planning.*

Follow-up research in 16 villages indicates that women who played the game have learned the danger signs of pregnancy, labor, delivery, and newborn health, as well as the appropriate behaviors needed to address them.

12 UNFPA. *State of the World's Population 2000*, p. 13.

13 Maine, Akalin, Ward, and Kamara. "The design and evaluation of maternal mortality programs," New York: Center for Population and Family Health, Columbia University School of Public Health, 1997.

Adventist Development and Relief Agency (ADRA)

Diplomas for Safe Motherhood in Yemen

Early in 2001, Barbara Bodine, U.S. Ambassador to Yemen, handed out diplomas to an unusual class of graduates – 23 Yemeni women who had completed 26 months of intensive midwifery training. High rates of infant and maternal mortality led ADRA to help make this happen. But it was not without its challenges. Numerous factors conspire against women's and children's health in Yemen, including low use of prenatal and delivery services, short birth intervals, and the fact that many Yemeni women will not go to male health providers. ADRA field staff recognized that the training of female health providers in pregnancy care and family planning was an essential step in implementing a successful child survival program.

After several years of laying the groundwork with community leaders and the women themselves, ADRA posed the idea of a midwife training program in one rural village. ADRA worked closely with family heads of household, community leaders, and the government at every stage of planning, including the selection of the first class of students. While many challenges remain in integrating the midwives into the workforce, the first important steps have been taken. Twenty-three women, with new skills and knowledge, are now fanning out into rural areas to help make motherhood safer for Yemeni women.

53 million — give birth at home without *any* trained assistance.[14] This puts them and their infants at high risk when problems arise.

Skilled birth attendants perform an essential function in the **recognition of complications.** They must know when to refer women to more highly-skilled health professionals in better-equipped facilities, and how to transport them to such facilities safely and quickly.

Infection prevention practices can also save lives during labor and delivery. These include proper hand washing, the cleaning of surfaces for labor and delivery, and especially clean cord cutting and early, exclusive breastfeeding. The use of an inexpensive "birthing kit," which normally includes soap, a plastic sheet on which to deliver the baby, and a new blade with which to cut the umbilical cord, can make a critical difference.

During **obstetric emergencies** (including uncontrolled bleeding, eclampsia, and prolonged or obstructed labor), health attendants need access to emergency medical supplies and equipment, often available only in hospitals or health clinics. In such cases, transportation plays a key role, as does the availability of safe blood supplies, medications, and trained personnel to perform emergency surgeries under safe conditions.

Of the estimated 4 to 9 million newborns who develop birth asphyxia each year after prolonged and/or obstructed labor, more than one quarter die and another one quarter suffer severe neurological damage and/or mental retardation.[15]

PVOs have encouraged safer deliveries by training community birth attendants to practice the "three cleans": clean hands, clean surface for delivery, and a clean device to tie and cut the cord. In addition, PVOs have helped set up emergency transport networks and are linking communities to the broader health system in order to provide access to improved care in the case of complications.

14 UNFPA. *State of the World's Population 2000*, p. 13.
15 World Health Organization. *World Health Report 1998: Life in the 21st Century – A Vision for the All*. Geneva: WHO, 1998.

CARE FOR MOTHER AND CHILD AFTER BIRTH

Whether a child is full-term or premature, the first minutes, hours, and days of life are critical. Actions must be taken to ensure that mother and child are breathing and have no traumatic injuries from the birth ordeal. If no emergency measures are required, postpartum care begins with the simple practice of **drying and warming** the newborn. Wrapping the child in a clean cloth, covering the head, and allowing the infant skin-to-skin contact with the mother all serve to enhance both physical and emotional health.

A visit by a community health worker in the hours and days after birth permits **diagnosis and treatment of maternal complications**. It is also an opportunity to alert mothers to danger signs in newborns, including jaundice, diarrhea, fever, and the inability of the infant to suck or breathe properly.

Immediate and exclusive breastfeeding is strongly recommended for most infants.* Mothers' milk contains vital nutrition and protects newborns from two of the greatest causes of neonatal death – diarrhea and pneumonia. In fact, in the first two months of life, infants who are *not* exclusively breast-fed are 25 times more likely to die from diarrhea and three times more likely to die from acute respiratory infections than infants who are fed only breast milk.[16] Another advantage of exclusive breastfeeding is that it naturally inhibits fertility. A woman who breastfeeds exclusively and whose menstrual cycle has not yet resumed is often infertile for up to six months. Experts recommend exclusive breastfeeding for six months, followed by 30 months of breastfeeding with complementary feeding. This gives the mother time to gain back her strength and to attend to the needs of her new infant and the rest of her family.

*In situations where a new mother knows she is HIV positive, and when alternative feeding is safe, feasible, and affordable, exclusive breastfeeding may not be the optimal feeding option, as it might lead to mother-to-child transmission of HIV.

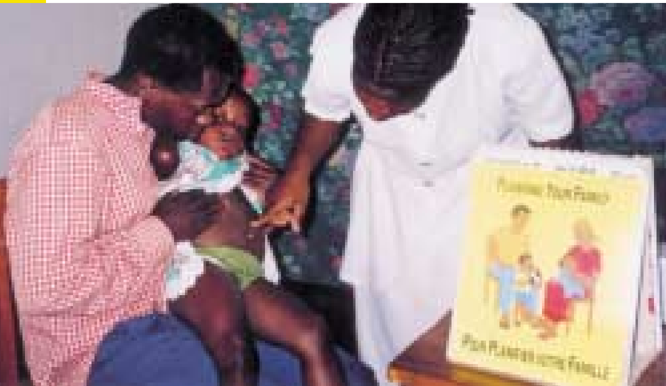
Save the Children

From the Household to the Hospital

Most births in Nepal take place at home, often without the assistance of trained attendants and under unhygienic conditions. A simple kit, containing basic items, including a bar of soap, a plastic sheet, a razor blade, and a string to tie the cord, is facilitating clean birth practices in Nepal. To help even women with limited reading skills, the kit also includes illustrations that guide birthing attendants – usually friends, relatives, or even the mother herself – more safely through the delivery. Developed by Save the Children with the support of the government of Nepal, PATH, USAID, UNFPA, and UNICEF, the Clean Home Delivery Kit sells for less than U.S. $.40 and is being widely distributed and used throughout Nepal.

Almost 2,000 miles from Nepal, Save the Children is working in Quang Xuong Province of Vietnam to improve women's survival at the other end of the continuum – with emergency obstetric care. With USAID assistance, Save the Children has worked with communities over the last two years to improve basic maternity care; to recognize danger signs of pregnancy, labor, and delivery; and to develop a telephone alarm and referral system. Now in a new partnership with Columbia University, assistance to government counterparts in two provinces seeks to improve the quality of care that women receive once they get to the hospital.

16 Nurture, *Healthy Mothers*, p. 3.



Project HOPE

A Play with Many Acts in Malawi

On a recent day on a tobacco estate in Kasungu, Malawi, a troupe of actors engaged a large and enthusiastic audience in problem-solving around the prevention of HIV/AIDS. Audience participation and subsequent discussions led by HOPE-trained estate outreach workers ensured that the information was understood and retained. Drama performances are one part of a highly successful child survival and maternal health program that Project HOPE has undertaken in partnership with Press Agriculture, Ltd. (Malawi's largest agricultural concern). The partnership seeks to reduce maternal and child mortality among 30,000 women and children living on and around 34 tobacco and coffee estates.

Recognizing that child survival can only be accomplished by also addressing the needs of women, the project includes prenatal and postnatal clinics operated on the estates; family planning services through trained estate providers and community-based distribution agents; training and supervision of traditional birth attendants; and mobilization of the communities around STIs, including HIV/AIDS.

Given the commitment of Press Agriculture and the involvement of estate workers as providers, prospects for long-term, sustained improvements are excellent.

The Whole Picture

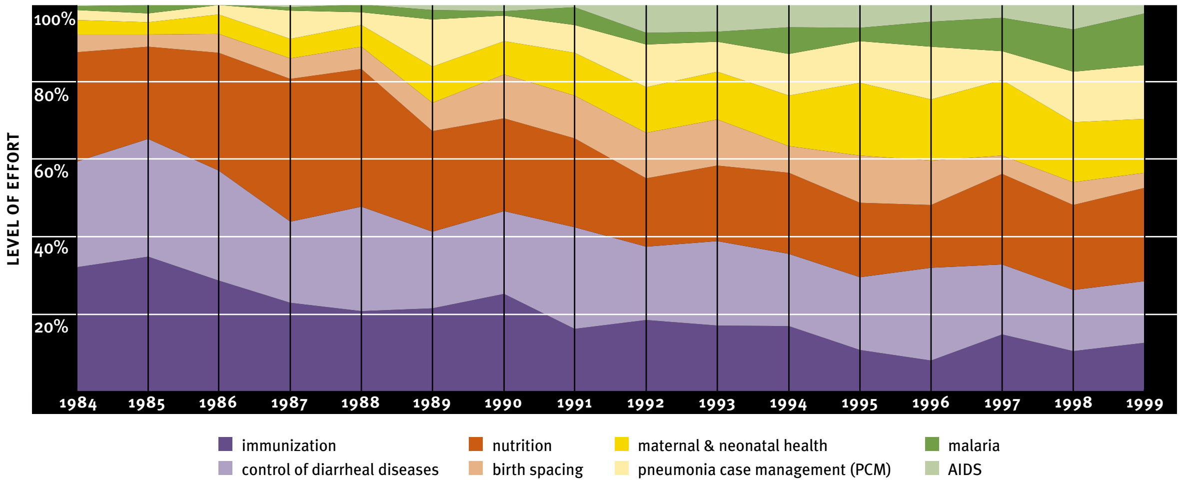
PVOs, with support from private citizens, foundations, corporations, and government donors (including USAID), have worked with local governments and companies, and with UNICEF and other technical agencies, to improve child survival programs and interventions.

Based on expert data and shared PVO experiences, it is clear that such child survival efforts benefit significantly from the addition of maternal health interventions, including family planning. One district at a time, these organizations have provided models for easily and effectively integrating low-cost, culturally appropriate maternal health practices and services into child survival programs.

It is time to replicate these PVO models more extensively throughout the developing world so that millions more children, mothers, fathers, and entire communities have the chance to survive and thrive.

PVO EFFORTS ON MATERNAL HEALTH AND FAMILY PLANNING

Since 1984, more than 30 American PVOs have received funding for child survival programs around the world from USAID's Bureau of Humanitarian Relief/Private Voluntary Cooperation. This graph shows the mix of interventions that have been included in these efforts: immunization, control of diarrheal diseases, nutrition, birth spacing, maternal and neonatal health, pneumonia case management (PCM), control of malaria, and control of AIDS. In the last decade, birth spacing and maternal/neonatal health efforts have been an important component of child survival efforts.



Source: Child Survival Technical Support Project of ORC Macro International, Calverton, MD

NETWORKS FOR HEALTH

In 1998, USAID's Center for Population, Health, and Nutrition initiated a new partnership with the PVO community – *Networks for Health*. This initiative recognizes the important role that PVOs and their local counterparts can play in reaching underserved communities with family planning, maternal health, child survival, and HIV/AIDS information and services.

The PVOs (including ADRA, CARE, Plan, Path, and Save the Children) and their local partners are expanding and improving these services in over 20 countries with USAID resources and with matching contributions from foundations, other donor governments, and individual supporters.

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Participants in the July 24th Symposium on the Linkages Between Maternal Health, Family Planning, and Child Survival:

Private Voluntary Organizations (PVOs)

- Adventist Development and Relief Agency (ADRA)
- Christian Children's Fund
- International Rescue Committee (IRC)
- Plan International
- Project HOPE
- Save the Children
- World Vision

Other Organizations Represented

- The Child Survival Collaborations and Resources Group (The CORE Group)
- Global Health Council
- Population Reference Bureau (PRB)
- United Nations Population Fund (UNFPA)
- United States Agency for International Development (USAID)
- U.S. Coalition for Child Survival

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