

Executive Summary - Child and Infant Health and Mortality

As of mid-2000, children under age 15 accounted for 31 percent of the world's 6.1 billion people. Children under age 15 made up over one-third (34%) of the population in less developed countries in 1998, versus less than one-fifth (19%) in more developed countries.

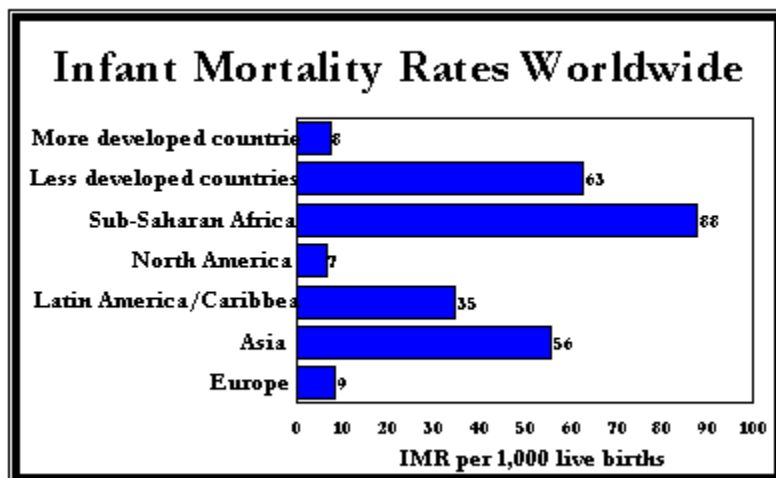
Each year, 3.2 million infants worldwide die during the first week of life. Each year in the 1990s, 12 million children under age five died in less developed countries.

Life expectancy at birth has greatly increased since the 1950s, due primarily to improved infant and child survival. Many children-focused international public health programs have been developed, including the World Health Organization's Expanded Programme on Immunization, Oral-rehydration Therapy and the Integrated Management of Childhood Illness. Breastfeeding and family planning are two other low-cost methods that are highly effective in improving child health and survival, as well as maternal health.

Child and Infant Health and Mortality – The Situation

The Infant Mortality Rate (IMR) is the number of infants out of 1,000 live births who die in their first year of life. The IMR differs greatly between the more developed (8 per 1,000) and the less developed (63 per 1,000) world. The IMR has declined across less developed regions, down from 178 deaths per 1,000 births in 1950. This decline has been slower in sub-Saharan Africa and South Central Asia.

The primary causes of child and infant deaths are respiratory infections, diarrhea, malaria and measles. These preventable and treatable diseases, which account for 70 percent of child deaths in developing countries, rarely kill children in developed countries. Malnutrition, which affects 200 million children worldwide, directly or indirectly affects over half of the deaths in children under five, often by exacerbating the impact of these diseases.



Source: Population Reference Bureau

What happens during the prenatal period and the earliest years of a child's life greatly impacts a child's future. Parental and other adult interactions influence a

child's brain development and overall health as much as personal factors such as good health and nutrition, and environmental conditions such as clean water.

Child and Infant Health and Mortality – The Factors

The physical environment, responsible for one-fourth of all preventable disease, encompasses all aspects of where people live, including water supply and sanitation and urban versus rural resources.

Over one billion people lacked access to safe drinking water in 2000. Inadequate sanitation, unsafe drinking water, air pollution and crowding cause malnutrition, diarrhea and acute respiratory infections, all of which affect and often kill children.

Urban residents have greater access to medical surveys as well as educational campaigns. Since large-scale campaigns have constituted the most recent child health initiatives, geographical location is extremely important. In Bolivia, for example, the child mortality rate in rural areas in 1998 was 134, versus 72 in urban areas.

Within the community and social environment, violence threatens the social networks which determine information about and access to health services

Due to armed conflicts over the past decade, two million children were killed, while six million were seriously injured or permanently disabled and 12 million were left homeless. Violence and war can cause post-traumatic stress syndrome in children, and permanently change the brain chemistry of children under three years old.

Within the family environment, income and family size play a large role in child health. The mother's health and education also greatly affects her children's health.

In 1998, 1.2 billion people, including over half a billion children, lived on less than \$1 a day. Children born in the developing world have a 4 in 10 chance of living in extreme poverty. Poverty increases the likelihood of malnutrition, lack of clean water, less education and decreased life expectancy.

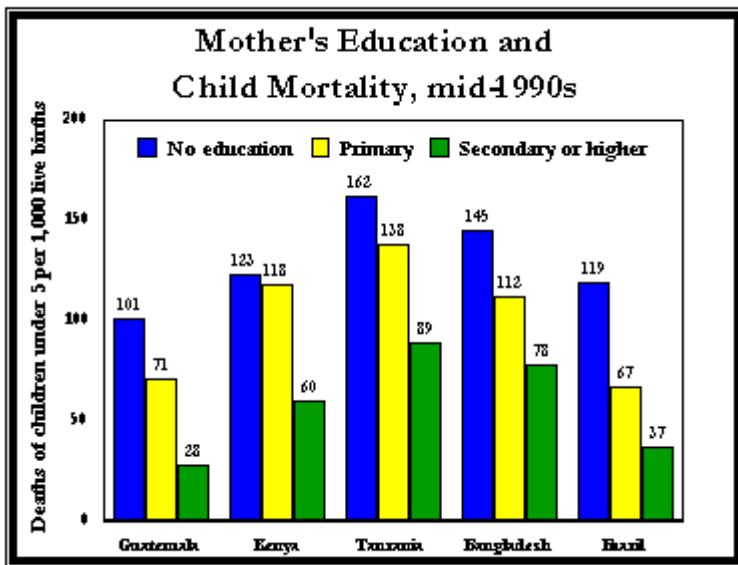
Each child in a large family receives a smaller share of family resources, including income and parental time and resources, especially those for educational purposes. Children from larger families are also more likely to be malnourished. Girls are often given fewer family resources, including medical care and food, and are made to perform forced labor at an earlier age than boys.

Mothers and Children

A mother's educational level greatly influences her children's health. In most countries, children whose mothers have some education are less likely to die than those with no education. In countries where the adult female literacy rate is higher, for example, the IMR is consistently lower. In Mozambique, where the female literacy rate is 23 percent, the IMR is 130 deaths per 1,000 live births. Tanzania's female literacy rate of 57 percent contributes to its IMR of 92.

A more educated woman is likely to marry, and therefore have her first child, at a later age. Babies born to women in their 20s and 30s have a lower risk of dying during infancy than those born to women younger than 20. Babies born to women over age 40 also have a greater risk of dying.

More educated women are more likely to use family planning and to have smaller families than other women. Women with some education are also more likely to obtain reproductive health care for themselves, and take better care of their children's health needs.



Source: Demographic and Health Surveys

Child and Infant Health and Mortality – The Impact of HIV/AIDS

HIV/AIDS is having an increasing impact on children. As of December 2000, 4.3 million children under age 15 had died of AIDS. In 2000, 1.4 million children under 15 years of age were living with HIV/AIDS, up from 830,000 in 1996. Over one million of the infected children live in sub-Saharan Africa, the region most seriously affected by the epidemic.

UNAIDS estimates that 1,600 children are infected with HIV each day. Mother-to-child transmission of HIV during pregnancy, birth, or breastfeeding accounts for more than 90 percent of all infections in children. About one-third of all infants born to HIV-infected mothers become infected.

More than 13 million children lost either their mother or both parents to AIDS by the end of 1999. Ninety percent of these orphans live in sub-Saharan Africa.

Children orphaned by AIDS are likely to be malnourished and unschooled. They are also more likely to engage in risky behavior and become infected with HIV themselves. Financially and emotionally vulnerable, these children often turn to prostitution for survival.

Children Under Age 15 Orphaned by AIDS*



Source:

UNAIDS

*Cumulative estimated total as of December, 1999

Child and Infant Health and Mortality – Intervention

Participants in the 1990 World Summit for Children set goals that included reducing infant and child mortality by one-third and maternal mortality by one-half. Expanded immunization coverage, improved nutrition and ensured access to safe drinking water contributed to accomplishing these goals. Nearly 60 percent of all countries had met or were likely to reach the goal of improved child survival in 1996.

The World Health Organization (WHO) started the Expanded Programme on Immunization (EPI) in 1973, with the goal of immunizing children against six diseases that had caused millions of child deaths – TB, measles, diphtheria, whooping cough, tetanus and polio. While only 20 percent of children were immunized against these six diseases in 1981, the proportion of children increased greatly over the next fourteen years, reaching 80 percent in 1995. In the late 1990s, EPI's coverage decreased, falling to 74 percent in 1998. In response to these stagnating rates and widening vaccine disparities, UNICEF, WHO, the World Bank Group and others partnered to form the Global Alliance for Vaccines and Immunization (GAVI) in 1999. GAVI's mission is to protect all children worldwide against vaccine-preventable diseases.

Oral-rehydration Therapy (ORT) is a low-cost, low-technology method to control diarrhea, which still accounts for two million deaths each year in children under age five. Although the use of ORT in 1980 was negligible, throughout the 1990s, it was used in 80 percent of all episodes.

The Integrated Management of Childhood Illness (IMCI) initiative was started by WHO and UNICEF in the mid-1990s. The program integrates the key factors in improving child health, including better nutrition, immunization, maternal health and other general health programs. While well-trained health staff are essential for comprehensive implementation, community participation is also important. By mid-1998, 51 countries in Central and Latin America, Africa and Southeast and Central Asia had introduced or implemented IMCI.

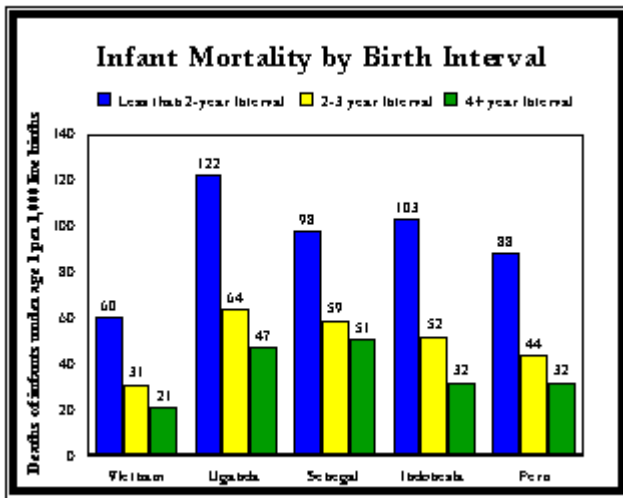
Breastfeeding is one of the most cost-effective interventions to improve infant and child health. It is estimated that breastfeeding saves the lives of six million infants every year. If a child is breastfed for six months, she is significantly less likely to contract or die from diarrhea and acute respiratory infections. If a child is breastfed only breastmilk for the first six months, and for at least one year, it could save one to two million lives.

Breastfeeding enables women to space births using the Lactational Amenorrhea Method (LAM), and also improves women's overall health.

Family planning could prevent one in four of the deaths in children under five by helping women to space births at least two years apart. Birthspacing of at least two years can also improve the survival of the next sibling.

Family planning also helps women to have children during their healthiest reproductive years, and enables couples to have their desired number of children.

The United States, through the U.S. Agency for International Development (USAID), provides voluntary family planning and reproductive health services in over 60 developing countries. According to USAID, 50 million couples in the developing world use family planning directly as a result of its efforts.



Source: Demographic and Health Surveys, 1995-1999

This executive summary was prepared by Angela Bayer of the Population Resource Center in February 2001 and reviewed by Dr. Charles Westoff of Princeton University. Sources include: *State of the World's Mothers 2000*, Save the Children; *Family Planning Saves Lives*, Population Reference Bureau, January 1997; *World Population Beyond Six Billion*, Population Reference Bureau, March 1999; *Attaining Global Health: Challenges and Opportunities*, Population Reference Bureau, March 2000; *State of the World's Children 2001*, UNICEF; and *From Commitment to Action: Meeting the Challenge of ICPD*, USAID, January 1999. For further information, please contact the Center at (202) 467-5030; 1725 K Street NW, Suite 1102 Washington, DC 20006.