Breastfeeding Saves Lives

The Impact of Breastfeeding on Infant Survival

Second Edition

prepared by:

NURTURE
and
Institute for Reproductive Health

with photos by:
Bill Skees (cover)
Wellstart International, EPB (p. 7)
Noureddine El-Warari (p.8)
Prospero Madamba (p.11)

June 1996

The first edition of this publication was produced by Nurture/Center to Prevent Childhood Malnutrition and the Institute for Reproductive Health in 1991. Support for the second edition was provided by Wellstart International under Cooperative Agreement DPE-5966-A-00-1045-00 with the United States Agency for International Development (USAID), and the Institute for Reproductive Health, Department of Obstetrics and Gynecology, Georgetown University, under Cooperative Agreement DPE-3061-A-00-1029-00 with USAID. The views expressed by the authors do not necessarily reflect the views or policies of USAID, Wellstart International, or Georgetown University.

Introduction

Child survival programs around the world have waged a war against the most common infant killers—diarrhea and acute respiratory infections (ARI). The weapons used to combat these deadly diseases include oral rehydration therapy (ORT), which prevents deaths due to dehydration caused by diarrhea, treatment of ARI, and immunizations against the major childhood illnesses which often lead to diarrhea and ARI. These interventions have resulted in millions of children living to celebrate their fifth birthday. Recent data show that:

- ORT saves 1.1 million lives of children (ages 0-5 years), and potentially could save an additional 1.5 million children.[1]

- immunizations against the major childhood illnesses save at least 2.7 million lives of children with the potential of saving an additional 2 million lives.[2]

These figures represent a tremendous achievement and such efforts are clearly important in the struggle to save children from senseless death.

However, an even more powerful weapon against the millions of deaths due to pneumonia and diarrhea is ***breastfeeding***. Breastfeeding as a child survival intervention is not only cost-effective but also a culturally accepted practice around the world. Annually, in the fight against child mortality:

- ***breastfeeding*** saves about 6 million lives of infants alone.[3]

- ***breastfeeding*** has the potential to save an additional 1-2 million infant lives.[4]

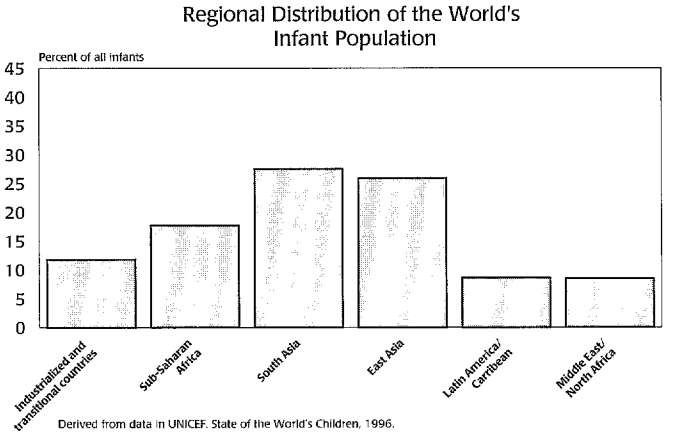
Breastfeeding's impact is felt at an earlier age and is greater than that of ORT. Unlike immunizations, breastfeeding does not necessitate links with health services. Because breastfeeding prevents illnesses, it reduces suffering and saves resources.

Optimal breastfeeding has a profound effect on infant health and survival throughout the world. We must continue to promote and support this natural, cost-effective, culturally appropriate, child survival intervention.

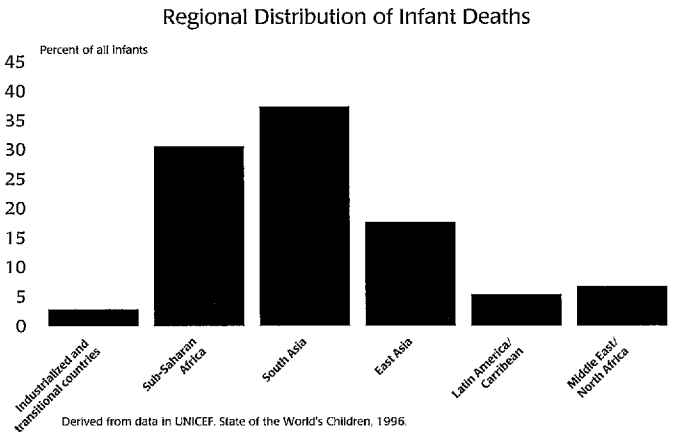
Breastfeeding saves lives!

Why Are Infants Dying?

The number of infant deaths in developing nations is alarmingly high. The figures are even more startling when compared with the number of actual births in these regions.



About 17% of the world's infants are born in Africa. Tragically, 30% of all infant deaths occur in this region of the world.[5]

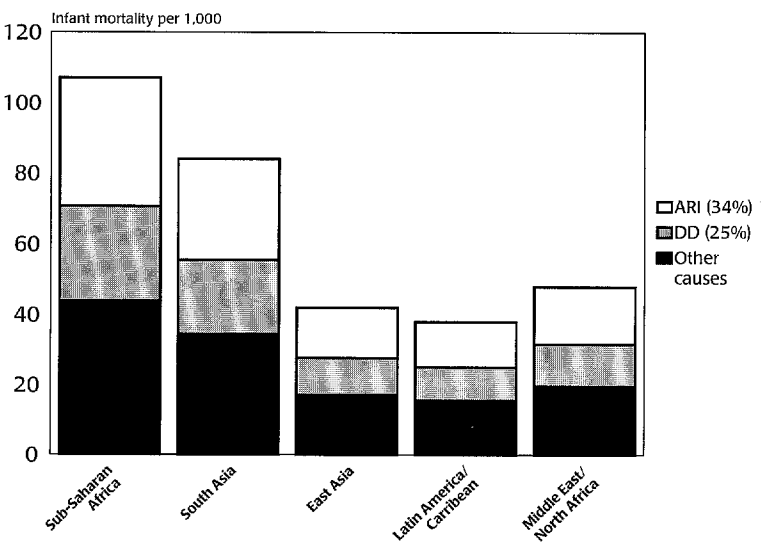


Another 12% of the world's infants live in industrialized and transitional countries, yet account for less than 3% of all infant deaths.[6]

Infectious diseases and malnutrition are the main causes of infant deaths in developing countries. Acute respiratory infections (ARI) and diarrheal disease (DD) are two of the most common infectious diseases in developing countries, accounting for almost 60% of infant deaths in these countries, on average.[7]

An infant who is malnourished is at an increased risk of dying from these illnesses.

Cause-Specific Infant Mortality Rate by Region



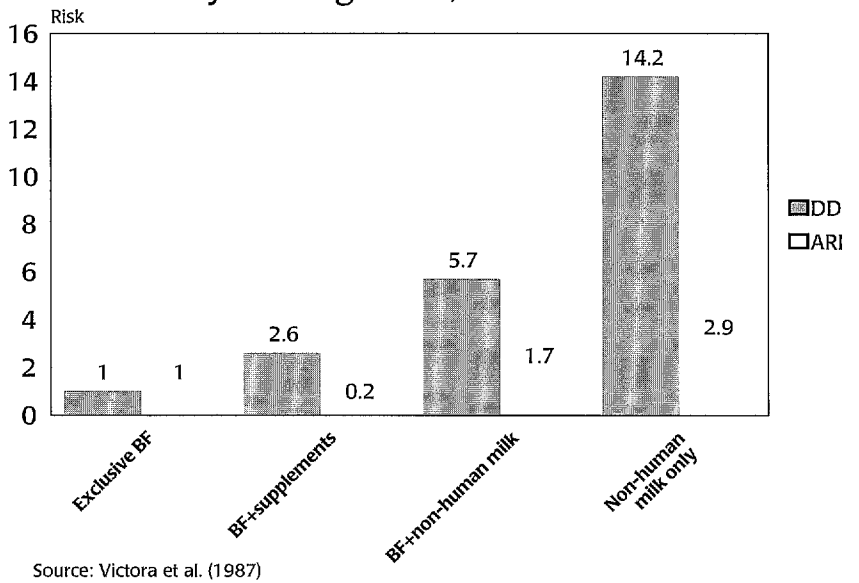
Derived from World Health Organization data, 1993.

Poor water quality and sanitation, overcrowding, poor access to health care, and malnutrition all are contributing factors to the much higher rates of infectious diseases in developing countries.

How Does Breastfeeding Save Lives?

Studies conducted around the world show that breastfeeding reduces both the risk of infection and the severity of diarrhea and acute respiratory infections. Breastfeeding also helps prevent malnutrition.

Relative Risk of Mortality due to Diarrhea and ARI by Feeding Mode, in Brazil



Source: Victora et al. (1987)

This graph compares the relative risk of dying from diarrheal disease and ARI depending on feeding mode. It is based on a study of infants, ages 0-12 months, in Brazil.

◆Infants who are not breastfed are up to ***14 times more likely to die*** from diarrhea compared to those who are exclusively breastfed (fed *only* breastmilk).[8]

◆The common practice of supplementing breastmilk with water, formula, other milks, or liquids increases an infant's risk of death due to diarrhea.

◆Infants who are not breastfed are nearly ***3 times more likely to die*** from acute respiratory infections than those who are exclusively breastfed.[9]

◆Breastfeeding continues to protect the infant from deaths due to diarrhea and ARI beyond the early months of life.

◆In addition, breastfeeding contributes significantly to child spacing which is associated with decreased child mortality.[10]

How Does Breastfeeding Enhance Child Spacing?

In many developing countries, breastfeeding accounts for a greater reduction in the total lifetime fertility rate than does the current use of modern family planning methods.

Women who breastfeed optimally will have longer natural child spacing. However, to ensure the recommended minimum of 3 years between births, women should begin using a family planning method which does not interfere with breastfeeding in a timely manner.

- Children born after an interval of less than 2 years are about ***2 times more likely to die before the age of 5***, compared to those born after an interval of 2 years or more.[11]

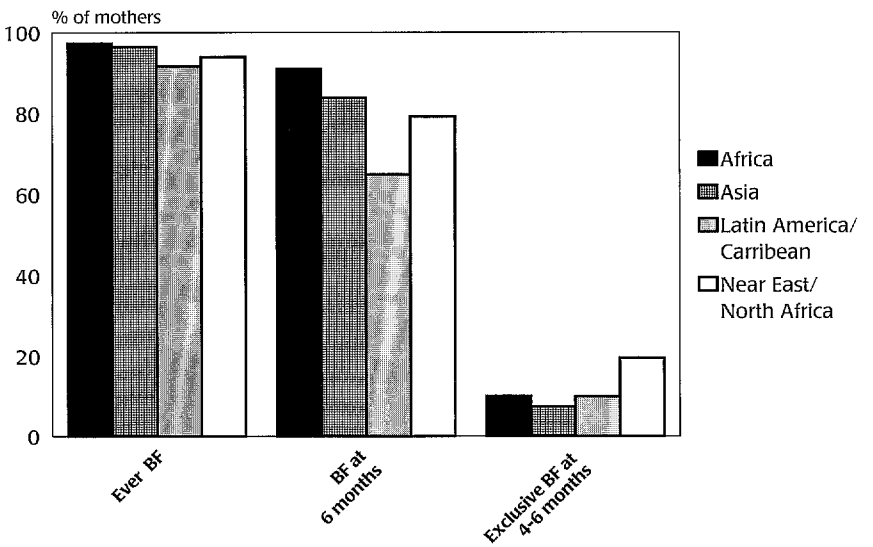
- Adequate child spacing also allows the older child to continue breastfeeding for a longer, healthier period of time.

- For the mother, more time between births gives her body more time to replenish maternal stores and vital nutrients. Breastfeeding also reduces her risk of ovarian cancer, premenopausal breast cancer and bone fractures later in life.[12]

What Are Current Breastfeeding Practices?

The vast majority of women in developing countries breastfeed their infants. However, **exclusive breastfeeding** (feeding the infant *only* breastmilk) is practiced by relatively few women and still fewer continue any breastfeeding throughout even the first year. Most women supplement their breastmilk with water or teas, frequently beginning in the first weeks of life.

Estimated Prevalence of Breastfeeding, 0-6 Months by Region

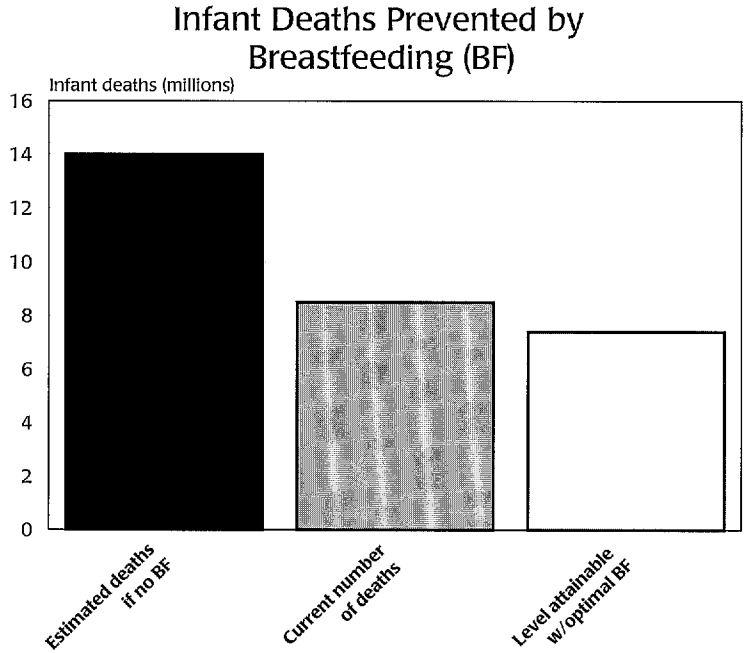


Source: DHS World Conference (1991)

The World Health Assembly of the World Health Organization recommends that mothers breastfeed their infants ***exclusively for about six months*** and continue breastfeeding, with appropriate complementary foods, from six months to two years or more.[13]

How Many Lives Are Saved by Breastfeeding?

The relative risks of mortality due to diarrhea and ARI (illustrated on page 6) allows us to estimate the number of infant lives currently saved and deaths potentially prevented by breastfeeding as shown in this graph. This estimate is conservative in that it does not include those additional deaths that are prevented by breastfeeding's impact on nutrition status and child spacing.



◆Currently, *more than 8 million infants die annually.*[14] Calculations indicate that an additional ***6 million deaths*** that would occur from infectious disease alone **are now prevented by breastfeeding.**[15]

◆If more women were enabled to practice optimal breastfeeding (exclusive for about 6 months and continued through the first year or more), an additional ***1-2 million infant deaths could be averted annually.***[16]

How Does Breastfeeding Compare to Other Child Survival Interventions?

Currently:

- ORT saves 1.1 million lives of children (0-5 years).[17]
- Immunizations prevent 2.7 million deaths of children annually.[18]
- **Breastfeeding saves about 6 million lives of infants (0-12 months)—more than ORT and immunizations combined.**[19]

Potentially:

- ORT could save up to 1.5 million more children's lives.[20]
- Immunizations could save up to 2 million more lives of children.[21]
- **Breastfeeding could save 1-2 million more infant lives.**[22]

It is crucial that breastfeeding receives the attention it deserves as a major child survival intervention. While we continue to expand other important child survival programs such as immunizations and ORT, we also must put equal or greater resources into maintaining and increasing breastfeeding. Support and promotion of this single intervention, which plays a major role in both child survival and child spacing worldwide, will be well worth the effort.

References

1. Derived from data in: UNICEF. (1994) *State of the World's Children 1994.* (Oxford University Press: Wellington).

2. Ibid.

3. Huffman S, Yeager BA, Levine R, Shelton J, Labbok M. (1991) "Breastfeeding Saves Lives: An Estimate of the Impact of Breastfeeding on Infant Mortality in Developing Countries." (Nurture/Center to Prevent Childhood Malnutrition: Washington, DC).

4. Ibid.

5. Derived from data in: UNICEF. (1996) *State of the World's Children 1996.* (Oxford University Press: Wellington).

6. Ibid.

7. Derived from World Health Organization data, 1993.

8. Victora CG et al. (1987) "Evidence for protection by breastfeeding against infant deaths from infectious diseases in Brazil." *Lancet*, 2:319-22.

9. Ibid.

10. Labbok M, Murphy E, Kooniz-Booher P. (1995) *Breastfeeding: Protecting a Natural Resource.* (Institute for Reproductive Health: Washington, DC).

11. Maine D. (1981) *Family Planning: Its Impact on the Health of Women and Children.* (Center for Population and Family Health/ Columbia University: New York).

12. Labbok et al. (1995).

13. World Health Organization/ World Health Assembly. (1994) "Infant and young child nutrition." Resolution WHA 47.5.

14. UNICEF. (1996).

15. Huffman S et al. (1991).

16. Ibid.

17. Derived from data in: UNICEF. (1994).

18. Ibid.

19. Huffman S et al. (1991).

20. Derived from data in: UNICEF. (1994).

21. Ibid.

22. Huffman S et al. (1991).