

Chapter Four

History Of Breastfeeding

Objectives

Identify three reasons breastfeeding was phased out of maternal infant care in the last century in America.

Describe and apply WHO's infant and young child feeding recommendations.

Describe the terms used for breastfeeding and complementary feeding.

State the aim of the WHO/UNICEF Global Strategy for Infant and Young Child Feeding.

List at least five dangers associated with feeding infants artificial formulas.

Describe the relationship between formula and certain health risks and SIDS.

Explain the role of formula politics and kickbacks in the medical community.

List all 10 statements of the WHO International Code of Conduct for the Marketing of Breastmilk Substitutes.

Identify which manufacturers are the worst violators of the WHO code according to IBFAN.

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Suggested Reading

Still Selling Out Mother and Babies, Marsha Walker found at www.naba-breastfeeding.org/resources.htm

Pure Milk by Joyce E Wessel found at <http://www.thebhc.org/publications/BEHprint/v013/p0150-p0158.pdf>

Low Breastfeeding Rates and Public Health in the United States By Jacqueline Wolf found at <http://www.ajph.org/cgi/reprint/93/12/2000.pdf>

CDC Breastfeeding Report Card 2011 found at <http://www.cdc.gov/breastfeeding/pdf/2011BreastfeedingReportCard.pdf>

Milk, Money and Madness by Naomi Baumslag and Dia Michels

A Look at Breastfeeding: Past, Present and Future by Nancy Wight, MD, FAAP, IBCLC

Historical Look at Breastfeeding

Introduction

Breastfeeding is the defining property of mammals. Breastfeeding advocate, Chris Mulford wrote, "Mammals are successful because, unlike birds, they are not limited to breeding only where they can find food nearby for their babies. Mammal mothers make their babies' food themselves, and the babies control production by the amount of milk they drink. I believe it is essential to protect this collaborative bodily link between a human adult and her young." [*It's Great to be a Mammal,* Copyright © 2009 by Chris Mulford. Part of the *This I Believe* Essay Collection found at www.thisibelieve.org, Copyright © 2005-2009, This I Believe, Inc.]

Through most of human history, breastmilk was the only available food for infants, and breastfeeding was inseparable from baby care. If a mother died or was

unable to breastfeed, another family or community member would nurse the baby, just as they would care for all of the baby's needs. In some cultures, sisters or other women with close relationships would nurse each other's babies (known as cross-nursing) in order to sustain their family, just as a modern woman might swap babysitting time with a friend, or rock and diaper a niece so her sister could nap. If the family had the funds necessary, a "wet-nurse" might be hired to care for and breastfeed the baby, a practice mentioned in ancient Egyptian and Biblical texts. Whether done for pay, familial love and nurturing, or community sustainability, breastfeeding was part and parcel of taking care of another woman's baby. These practices allowed babies to survive maternal absence, illness, or death, and helped societies cope with epidemics, famine, war, and natural disasters.

Industrialization and Urbanization

The industrial revolution and subsequent urbanization of western society meant that women were increasingly separated from their infants for factory work or other labor far from home, and also separated from their extended families. Wet nursing reached its height of popularity in the 18th and 19th century, partly due to these changes. European wet nursing in the 18th and 19th century involved sending infants from their homes in the city to wet nurses in the countryside. For wealthy women it was a status symbol, and for those women working in factories or doing manual labor, it was the only viable feeding alternative, as artificial feeding was considered dangerous and too costly.

Country wet nurses did not always breastfeed their charges, and instead often used dry nursing techniques. Dry nursing involved feeding the baby pap or panada, a mixture of grains, bread or flour with broth, water, or butter. Dry nursing resulted in the deaths of thousands of infants, and gradually wet nursing went out of favor as a dangerous method of feeding an infant. Wet nursing was found to be the dangerous culprit instead of the true problem – dry nursing.

Thus, the only alternative was artificial milk. Originally, each doctor had their own formula, which was written out on a prescription pad specifying the ingredients

that the mother would obtain and mix herself at home. Later, companies began to brand specific recipes and manufacture them for sale, and the name “formula” stuck. In the late 1800s to early 1900s, Thomas Morgan Rotch and other entrepreneurs espoused the benefits of their own “formulas” for infants as an alternative to breastmilk. During this time, there was such an emphasis on all things scientific that the public began to see formula as scientifically superior to breastmilk. These artificial milk formulas were only offered through physicians, and thus began the relationship between formula companies and the medical profession.

Healthcare was changing and adopting new technologies in other ways as well. In the early 1900s, birth was being transitioned from the home with midwifery attendance to the hospital, overseen by nurses and doctors, who were enthusiastic about the new options for anesthesia and instrument-assisted delivery. Many women were highly medicated and unable to breastfeed for many days postpartum as their bodies recovered from the drugs and traumatic deliveries including high forceps birth. It was also standard practice to not feed infants for twenty-four hours in the nursery and then use artificial milk formulas. When mothers finally got home with their infants, sometimes two weeks after delivery, their milk supply was diminished and their babies often had developed a preference for the bottle nipple.

20th Century Public Health: Mixed Motives, Mixed Messages.

The late 1800s and early 1900s also brought new attention and advocacy to public health concerns, largely due to the Maternalist and eugenics movements. These philosophies were promoted as ways to address a host of health problems, many related to poverty and urbanization. Factory workers often lived in squalid conditions, were exposed to unsafe working conditions, and had inadequate food. Infant and maternal mortality were high. Many workers were immigrants, and racist views tainted almost all efforts to alleviate these problems.

In this context began the Maternalist movement - a variety of women’s groups, fronted by religious and social organizations, which became very active in political and social networking. Their concerns included, “Problems of consumption - such as the

need for pure milk and clean meat . . . [and] the need to clean up the urban environment (Skocpol, 1992).” The Maternalist effort started in a grassroots setting spreading to what was then known as Women’s Clubs. A sampling of these clubs grew to include the National Congress of Mothers (1897), General Federation of Women's Clubs (1890), the National Consumers' League (1899), and the National Women's Trade Union League (1903) (Larsen, 2007).

Maternalists, responding to the growth of manufacturing and increasingly common exploitation of factory workers, were also largely responsible for legislation regarding “Women's hour laws, minimum wage laws, Mothers' pensions, the establish [ment] of the Children's Bureau and the passing of the Sheppard-Towner Act (Larsen, 2007).” The Sheppard-Towner Act, approved in 1921, established the Children’s Bureau which administered the “Federal Act for the Promotion of Welfare and Hygiene of Maternity and Infancy”, the first major maternal & child public health initiative in the U.S. The Sheppard Towner Act made “public health nurses the mainstay of the program...[they] were the ones who gave hygienic advice, who encouraged breast-feeding, who gave routine care to expectant mothers, and who instructed the midwives (Skocpol, 192).”

For women in the lower class, factory work was a mainstay for economic security. This return to work did not allow for breastfeeding and as such the only alternative was cow’s milk or cow’s milk formulas (Wolf, 2003). In the late 1880’s many women switched from breastfeeding their babies to offering their newborns straight cow’s milk and cow’s milk formula. The terrible result of the switch from breastfeeding to cow’s milk in infants was known as “summer complaint,” the diarrhea epidemics caused by copious bacteria found in warm and improperly handled cow milk, and “winter complaint” the acute upper and lower respiratory disease common to bottle fed babies (Semba, 1999). Babies were also fed out of unsafe bottle known as “tube bottles” which were impossible to keep clean and bacteria free (Semba, 1999). The Maternalist campaign that stemmed from this tragedy “urged mother’s to breastfeed or to avoid feeding their babies, spoiled, unadulterated cow’s milk that pervaded US cities.” (Wolf,

2003) During this time period, breastfeeding was seen as an important means of keeping babies alive.

Simultaneously, the Maternalists also campaigned for better sanitation of cow's milk. Ultimately this campaign would prove more successful than their breastfeeding promotion, perhaps in part because others also took up the dairy cause. Between 1911 and 1913, several scientists and pediatricians went on a health campaign to encourage children and women to drink cow's milk. Cow's milk was believed to have "vital amines," later known as vitamins, the most significant thought to be vitamin A (Semba, 1999). Cow's milk was declared essential for growth, believed to contain high levels of "vitamine" A and "vitamine" B. Cow's milk actually does not have high levels of these vitamins, but at the time it was regarded as a reliable source. In 1926, *Milk the Indispensable Food* was written by Maternalist Dorothy Reed Medelsohn. In this document she stated that milk is a complete food and can be used as the sole nutrition of an infant to "sustain life and allow growth" (p. 4), something that is now known to be positively untrue. While cow's milk formula with specific additives and modifications can be a medical alternative to breastfeeding, cow's milk alone is not an adequate substitute for the complete nutrition of a human infant. In this document, milk was touted as a important fuel, a protective food, necessary for the pregnant and nursing mother. This document was an example of how quickly the Maternalists switched their focus from encouragement of breastfeeding and food purity issues, to the encouragement of cow's milk formulas.

A related philosophy of that era was eugenics. This movement is now remembered for its racism, hostility to the disabled, and promotion of sterilization for "defective" individuals. At the time, though, eugenics (a term from the Greek for "good beginning") encompassed a variety of ideas about how to produce healthy babies. Scientific understanding of genetics was in its infancy and DNA had not yet been discovered. "Genetic" at the time meant inborn, not necessarily hereditary. Many practices that were then described and promoted as eugenic, such as good nutrition and regular exercise during pregnancy, actually had nothing to do with genes and would now be seen simply as common-sense preventive health. Other "eugenic" concerns

included labor and economic conditions. A 1914 treatise titled "Science of Eugenics" proclaimed that "care of the body means proper food, proper housing conditions, and sufficient clothing . . . as well as enough leisure time to warrant a reasonable amount of exercise and relaxation. Depriv[ing] ... women workers of these fundamental rights can only lead to their own destruction and the ultimate weakening of the race. [Science of Eugenics, 1914, Eugenics Health Foundation Inc., USA]

Eugenics advocates generally promoted breastfeeding. One text stated "...more physicians are proving the importance of maternal nursing . . . Every effort should be made to give the baby that which is his birthright." [Science of Eugenics, 1914, Eugenics Health Foundation Inc., USA] However, this message was undermined by the concurrent emphasis on scheduling: "The baby should be nursed first at 6am, and then at three hour intervals to 6pm; the night hours are 10pm and 2am, though they may be somewhat elastic."

Maternalists also were enthusiastic about scheduling. A strong component of the Maternalist agenda was to encourage a woman to run her home in a moral, chaste, and compassionate way, so her family would be healthier. A clean and organized home was the necessary epicenter of health and morality. This emphasis on cleanliness and order sparked a significant rise in home cleaning technology, and also a passion for scheduling babies. Good mothering was considered to be scheduled mothering. Breastfeeding was only to occur during certain hours of the day, often with 4 hours between feedings, and not at all during the nighttime hours. This drastically affected mother's milk supply and did not allow those babies to thrive on their mother's own milk. Formula was seen as coming to the rescue.

Class and race prejudice also fed the decline of breastfeeding. Well-off women could take pride in providing the latest nutritional technology for their babies, while looking down on poorer women who could not afford formula. Breastfeeding was increasingly seen as a behavior of the uneducated and primitive, while formula was for the civilized and conscientious mother.

Maternalists and eugenics advocates together promoted a vision of a healthy society achieved through policy, technology, and individual virtue. These early public health movements recognized the need for breastfeeding and set out to promote it, but ultimately also contributed to its near disappearance from American culture.

Breastfeeding rates in America saw a deleterious decline from these and many other sociological, technological, and political reasons. Jan Riordan reports in *Breastfeeding and Human Lactation*, 2nd Ed., that breastfeeding rates went from 38% in 1946 to 21% in 1956 and reached a low of 18% in 1966.

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History of formula marketing and the WHO Code

Introduction

In the 1960s and 70s, aggressive formula promotion in developing countries led to widespread abandonment of breastfeeding. Formula was promoted as the modern, healthy, western way to feed. Hospitals, doctors, and healthcare professionals were enlisted to distribute formula samples and promote their use. Nurses - or actors dressed as nurses - were hired to give public demonstrations of formula preparation, further promoting the impression that commercial formula was the medically preferred way. Mothers with little education, little money, and no access to clean water were given free samples of formula - just enough to last until their own milk dried up, making them dependent on a continued supply of formula. Their babies (now lacking the immune protection of breastmilk) were fed formula mixed with disease-infested water. Few parents were literate enough to read the instructions, and therefore unable to correctly prepare the formula. Because the formula was too expensive for most families, often it was deliberately over-diluted to make it last longer. The direct result was vast numbers of infant deaths from malnutrition and infectious disease. In response to this disaster, the World Health Organization in 1981 adopted the resolution now known as the WHO Code - formally the International Code of Marketing of Breastmilk Substitutes. The WHO code declared that certain types of advertising/promotion of infant formula are unethical, cause harm to infants, and should be legally restricted in member countries.

The Code in Historical and Political Context

The specific history of the Code began in the 1970's when these marketing practices, and the resulting infant deaths, finally made headlines across the world. During this period of time, many concerns were voiced at United Nations meetings urging action to be taken against formula companies, particularly Nestlé, then the world's largest manufacturer of formula. A UK-based charity named War on Want published a booklet in 1974 called *The Baby Killer*, which documented the marketing strategies of formula companies and the horrific results. The 1975 documentary, *Bottle Babies*, was also released around this same time, offering the world graphic images of malnourished and often starving formula fed infants and graveyards filled with treasured formula cans at the gravesite (as the most valued possession) (Baumslag, 1995). Public outrage grew, and grassroots efforts multiplied, including INFACT, Infant Formula Action Coalition, which initiated an international boycott of Nestle.

Policy makers in the West also were shocked into action. Edward Kennedy of the United States Congress, who was the chairman on the Subcommittee on Health and Scientific Research, launched an investigation in 1978 on the use and promotion of infant formula. At a public congressional hearing, physicians, aid workers, and infant health experts testified to the unethical and misleading marketing practices of the formula companies and their impact on mothers and babies. Executives from Nestle, Bristol-Meyers, and American Home Products testified also; all acknowledged promoting formula in developing countries, all acknowledged the damage being done, but all denied any corporate responsibility for the unsafe feeding practices that killed babies, and all declined to take any action to change their marketing practices. Senator Kennedy declared *"Can a product which requires clean water, good sanitation, adequate family income and a literate parent to follow printed instructions be properly and safely used in areas where water is contaminated, sewage runs in the streets, poverty is severe, and illiteracy is high?"* These hearings led to the formation of the International Baby Food Action Network, a cooperation of NGOs; to a widespread boycott of Nestle products; and to the convening of a 1979 meeting by WHO/UNICEF to discuss formula marketing.

At this meeting key representatives were in attendance; namely government leaders, industry leaders, UN agencies, and NGO's. The conclusion of this meeting

called for an international code addressing marketing of formula. Representatives from six NGO's founded IBFAN, the International Baby Food Action Network, to be corporate watchdogs for formula and baby food companies. Over the next year, four drafts of the Code were written.

Initially, the US was a leader in drafting an international code of ethics to restrict formula marketing practices. At the inception of the Code drafting, the Carter administration developed an "Interagency Task Force" on the Code and was considered to be pro-Code. But when the code was ultimately adopted by the World Health Assembly in 1981, the US cast the only vote against; the new Reagan administration had ordered the opposition, fearing that it might lead to other restrictions on American corporations. (Walker, 2001). Avoiding any acceptance of international law or WHO authority was the top priority, and the issue of infant feeding was a casualty.

Formula companies Nestlé and Bristol Meyers pursued a strategy of publicly stating their support for the Code, while simultaneously working within the drafting system to weaken it, and lobbying the U.S. government to reject it. Due to the lobbying from formula companies, the United States placed pressure on the WHA to downgrade the Code from a regulation to a resolution. The regulation would have made the Code an International Law; instead the resolution relied on each nation to implement the Code - or not.

In 1981 at the World Health Assembly, the International Code for Marketing of Breastmilk Substitutes was introduced with much opposition from the United States. 118 countries voted for adoption of the Code, three countries abstained, and one vote was cast against adoption. The United States was the only vote against the Code's adoption at that time and was cast by a reluctant Dr. John Bryant under orders from the State Department. (Baumslag, 1995).

The U.S. has continued to balk at any legally binding agreement, while promoting some aspects of the Code. In the U.S., the availability of clean water and antibiotics substantially mitigate the consequences of formula feeding, so domestic Code enforcement has not been seen as a life and death issue by American policy makers.

Since 1991, the United States has quietly supported all additional Resolutions of the Code (though has not voted), as the WHA requires a review of the Code every two years. By abstaining from voting, the United States avoids controversy at the WHA and does not have to officially support the Code through legislation. The Code has since been given status as an international standard through the 1991 and 2005 Innocenti Declarations, and also by the Convention on the Rights of the Child, the largest international treaty in history. UNICEF reports that the only two nations which have not ratified the Convention are Somalia and the United States. The U.S. currently stands alone as the one modern democracy that has not found a way to reconcile its financial, political, and philosophical concerns with commitment to these worldwide public health standards.

Requirements of the Code

The WHO code does NOT restrict the manufacture, sale, or use of formula. It is ONLY about marketing. Banned practices include: free samples of formula given to mothers or hospitals; misleading labels or promotional info suggesting that formula is healthier than breastmilk; marketing to or through healthcare workers that creates conflict of interest; and other types of direct advertising that inaccurately idealizes bottle feeding. The Code applies also to advertising of baby bottles and foods promoted for babies.

The ten specific principles listed by the Code are:

- 1) No direct advertising of breastmilk substitutes to the public, such as TV commercials.
- 2) No free samples given to mothers.
- 3) No marketing of formula in hospitals, including free samples or logo-bearing gifts.
- 4) No company representatives acting as advisors to mothers.
- 5) No gifts given to healthcare providers.
- 6) No pictures of babies on labels.
- 7) Information given to healthcare workers about the products must be factual.

- 8) Information given to parents must not misrepresent the health benefits of breastmilk, or the risks of artificial feeding.
- 9) Foods not meant for infants must not be promoted for infant feeding.
- 10) Labels must meet standards of accuracy.

All of these restrictions were adopted in response to specific marketing practices that were commonplace at the time; most continue in less blatant forms today.

Current Status of the Code

Most nations (other than the U.S.) have legislation to enforce the Code, but violations still occur, particularly in developing countries. All major formula brand manufacturers claim to be Code compliant. According to the watchdog group IBFAN, none are.

Formula makers often get around the law and promote their brands by associating their logo with general infant health, and even breastfeeding promotion. Similac sponsors the website kidsgrowth.com, Enfamil is one sponsor of WebMD, and in India, Nestle has issued "World Breastfeeding Week" materials adorned with their logo.

Disasters such as earthquakes and floods often are exploited as brand-building opportunities by formula companies. UNICEF, WHO, and the Red Cross have warned against formula donations, because widespread indiscriminate distribution of formula, particularly powdered, results in more infant deaths, not less. Combined with myths about stress and lactation, formula distribution undermines breastfeeding right when it is most needed. The major international relief agencies have increasingly used special tent sites for new mothers to provide a protected space for mothers to breastfeed their babies and receive nutritional support, information about breastfeeding, and help with breastfeeding problems or re-lactation. Still, donations of free formula are common and rarely questioned during emergencies. See http://www.who.int/child_adolescent_health/documents/pdfs/iycf_emergencies.pdf for more information.

Formula promotion in The United States

Direct marketing, marketing through healthcare facilities, and free samples to mothers are still legal and common practices in the U.S. Some of these are traditional advertising. One can find ads for all of the products covered in the Code in parenting magazines, on television advertising, in hospital settings (such as on lanyards, sticky pads, pens), and by direct mail advertising. 1989 saw the first U.S. television commercial ad for infant formula, and since that time this has been an extremely effective means of targeting mothers (Greer, 1991). Additionally, samples of cases of infant formula are sent to mothers for filling out surveys on the web and for entering baby contests.

More sophisticated marketing - which is not readily identifiable as formula promotion - is becoming more common. The most recent type of direct marketing to new mothers is the formula company website that is designed to look like a mother's advice website. Similac has a website called StrongMoms™ (Similac, 2008). This website's tag line is "Everything we do is inspired by moms." On the website, mothers can find an interactive hospital packing list, a month by month guide for mom and baby, an online discussion forum, an email newsletter, and a "Breastfeeding is best" pdf. Glowing mothers and babies abound, along with cute graphics and eye-popping cute images. The Nestlé website is called Start Healthy Stay Healthy resource center (Nestlé, 2008). Companies are also turning to social media. Mothers who are not identified as company representatives agree to promote a company's brand, often in exchange for free products.

Hospital-based giveaways are another major component of formula marketing. Formula companies give free bags of formula to new mothers who breastfeed and who bottle feed at the hospital (USGAO, 2006). Many hospital bassinets bear stickers with a formula logo and a warning never to change formulas without asking a pediatrician. The implication is that if you feed your baby this brand of formula (either provided for free to the hospital, or directly to the mother in a "gift" bag) once, you must stick with

this brand indefinitely, unless you get specific approval from a doctor. The value of the brand loyalty created by this practice is obvious. Brand loyalty has been found to be up to 95% effective when begun at the hospital, according to Walker in *Still Selling Out Mothers and Babies* (Walker, 2007).

Research has demonstrated that mothers who receive free formula in the hospital are more likely to abandon breastfeeding. Moreover, these “free” samples aren’t free - the cost is paid by formula feeding parents, in the form of inflated prices. Parents could avoid part of this cost by purchasing unbranded (generic) formula, with exactly the same ingredients, but are often afraid to do so, thanks to the “don’t switch formula” warning in the hospital. While the hospital gift bag issue is often portrayed as breastfeeding activists vs. bottlefeeding parents, in fact bottlefeeding parents are also losing. By contrast, in countries where no formula marketing is permitted, parents who need or want to use formula can receive unbiased feeding from hospitals and doctors, and can purchase formula far more affordably. This underscores how the formula giveaways benefit only the manufacturers.

A grassroots organization called BanTheBags.org out of Massachusetts has designed a website and support organization to encourage hospital to remove infant formula bags freebies (Ban The Bags, 2008). They have met with some success. New Mexico’s Breastfeeding Task Force to date has encouraged over 10 hospitals in the state to remove formula bags (NMBFTF, 2008). The alternative is offering mothers research-based support packets that comply with the Code. This has been shown to increase both exclusive and partial duration of breastfeeding (Frank, 1987).

Another avenue that formula companies have used effectively for marketing is the Special Supplemental Nutrition Program for Women, Infants, and Children. This USDA program is meant to improve the nutritional status of low income families by providing healthy food and education about healthy eating. For babies under a year old, WIC offers infant formula as part of the food package. Formula companies have competed aggressively to be vendors for WIC, not only to secure WIC itself as a reliable customer, but to generate brand loyalty among WIC families. Putting the WIC logo - widely recognized and associated with health - on formula cans is a powerful health-

by-association advertising tactic. While WIC families are by definition low income, many end up putting a large fraction of their scarce wages, or food stamps, towards formula, making them attractive customers.

Breastfeeding rates among low income families have consistently been lower than the U.S. average for decades, and concerns have developed that the WIC program itself was inadvertently encouraging formula feeding by providing formula to mothers who might otherwise breastfeed, by allowing use of the WIC logo, and by implicitly sanctioning formula feeding. A 2006 report from the GAO concluded that these concerns were well-founded. WIC leadership has increasingly recognized that the WIC mission of good nutrition in the early years requires an active commitment to supporting breastfeeding, and has made a variety of policy changes (in some states) such as:

- Not having supermarket-style product displays of formula
- Not allowing formula companies to use the WIC logo on their packaging
- Not putting formula in food packages unless a mother has already stated she is not breastfeeding (breastfeeding mothers are given extra food for themselves instead)
- Having lactation consultants or counselors on staff to work with mothers
- Publicizing the availability of free breastfeeding help at WIC clinics

However, at this time WIC continues to provide branded formula, thus creating brand loyalty to expensive formula rather than generic equivalents, and creating conflict of interest when mothers seek feeding advice.

Infant formula companies also use the physician's offices and medical associations, as a means of advertising to mothers. They offer feeding education packets, coupons and reply cards for free cases of formula to physician's offices (Howard, 2000). When women see all of these offers and samples at their healthcare provider's place of business the message is that formula is not only safe but recommended. Moreover, the health advice parents receive may be compromised.

Formula companies often underwrite the cost of staff training, conferences, or the publication of educational materials. As noted in Walker's Still Selling Out Mothers

and Babies, the American Academy of Pediatrics (AAP) accepts large donations from formula companies, a form of industry sponsorship (Walker, 2007). The Honor Roll of Giving, a list of corporate sponsors for the AAP, as of July 2008 included Abbott Laboratories, Inc., Abbott Nutrition, and Gerber Products Company (Patrons for \$10,000), and Mead Johnson Nutritionals and Nestlé USA, Inc (Associates for \$5,000) (AAP Website, 2008). While the generic “Breast is Best” message is always prominent in conferences and literature, specific information about the risks of formula feeding is eliminated in order to avoid jeopardizing the funding. This leaves the healthcare providers themselves with biased information. When women make the decision on how to feed their baby by the third trimester, well before they consider breastfeeding or childbirth classes, this message, both explicit and implicit, that formula is safe and healthy is one that has a significant impact which can be seen in decreased breastfeeding rates. (Winikoff, 1980; Howard, 2000 and Howard 1993).

The Baby Friendly Hospital Initiative is a WHO/UNICEF backed effort to ensure that healthcare providers offer effective breastfeeding support and unbiased information to both breastfeeding and formula-feeding parents. Baby-Friendly designated hospitals volunteer to forgo formula sampling to new moms, along with following ten steps that support breastfeeding for the new mom and baby dyad (BFHI USA, 2008).

The United States only has only 70 Baby-Friendly Hospitals, as of October 2008 (BFHI USA, 2008). There are 5708 registered US hospital as of 2007 data, approximately 3100 providing maternity services, which means around 2.25% of all US hospital don't give away formula as per Baby-Friendly practices (AHA, 2008).

National Feeding Situation

Excerpted from WHO Initiative on Global Health

Facts on infant and young child feeding

It has been estimated that about 2 million child deaths could be averted every year through effective breastfeeding.

Exclusively breastfed infants have at least 2½ times fewer illness episodes than infants fed breast-milk substitutes.

Infants are as much as 25 times more likely to die from diarrhea in the first 6 months of life if not exclusively breastfed. Among children under one year, those who are not breastfed are 3 times more likely to die of respiratory infection than those who are exclusively breastfed.

From: Jones, 2003; Chandra, 1979; Feachem, 1984; and Victora, 1987.

Infants exclusively breastfed for 4 or more months have half the mean number of acute otitis media episodes of those not breastfed at all. In low-income communities, the cost of cow's milk or powdered milk, plus bottles, teats, and fuel for boiling water, can consume 25 to 50% of a family's income. Breastfeeding contributes to natural birth spacing, providing 30% more protection against pregnancy than all the organized family planning programs in the developing world.

From: Duncan et al, 1993; UNICEF/WHO/UNESCO/UNFPAA, 1993; and Kleinman, 1987.

The peak period of malnutrition is between 6 and 28 months of age. Malnutrition contributes to about half of under five mortality & a third of this is due to faulty feeding practices. Counseling on breastfeeding and complementary feeding leads to improved feeding practices, improved intakes and growth. Counseling on breastfeeding and complementary feeding contributes to lowering the incidence of diarrhea.

WHO's infant and young child feeding recommendations:

Initiate breastfeeding within one hour of birth.

Breastfeed exclusively for the first six months of age (180 days).

Thereafter give nutritionally adequate and safe complementary foods to all children.

Continue breastfeeding for up to two years of age or beyond.

Adapted from the Global Strategy.

Breastfeeding and complementary feeding terms and definitions

EXCLUSIVE BREASTFEEDING: the infant takes only breast milk and no additional food, water, or other fluids with the exception of medicines and vitamin or mineral drops.

PARTIAL BREASTFEEDING or MIXED FEEDING: the infant is given some breast feeds and some artificial feeds, either milk or cereal, or other food or water.

BOTTLE-FEEDING: the infant is feeding from a bottle, regardless of its contents, including expressed breast milk.

ARTIFICIAL FEEDING: the infant is given breast- milk substitutes and not breastfeeding at all.

REPLACEMENT FEEDING: the process of feeding a child of an HIV-positive mother who is not receiving any breastmilk with a diet that provides all the nutrients the child needs.

COMPLEMENTARY FEEDING: the process of giving an infant food in addition to breast milk or infant formula, when either becomes insufficient to satisfy the infant's nutritional requirements.

Key questions to compare the country situation with WHO infant and young child feeding recommendations.

- Percentage of babies breastfeeding exclusively for the first six months of life (180 days)
- Percentage of babies exclusively breastfeeding by month, up to 6 months
- Percentage of babies with appropriate complementary feeding
- Median duration of breastfeeding (in months)

Key questions to compare health facilities data with WHO recommendations.

- Early initiation : Percentage of babies who start breastfeeding within 1 hour of birth

- Rooming-in: Percentage of babies who “room- in” on a 24-hour basis with their mothers after delivery
- Exclusive breastfeeding : Percentage of babies who are exclusively breastfed from birth to discharge
- Bottle-feeding: Percentage of babies who are getting any feeds from bottles between birth and discharge

Healthy People 2020 Goals

Sadly, the Healthy People Goals of 2000 nor all of the 2010 goals were not met for the United States. In 2000, only 64% of all women initiated breastfeeding, when goal was set for 75% and no group of women met the goal for 50% duration to six months in 2000. Happily, we can report that many states met some of the the 2010 markers. To download the latest breastfeeding report card:

http://www.cdc.gov/breastfeeding/data/report_card.htm

The 2010 goals were:

- To eliminate disparities among different segments of the population
- 75% breastfeeding initiation (1998 64%), met this goal in 2010
- 50% breastfeeding duration until 6 months of age (1998 29%), at 43% in 2010
- 25% breastfeeding duration until 12 months of age (1998 16%), at 22.4% in 2010
- 60% EBB at 3 months (2002 43%), at 33% in 2010
- 25% EBB at 6 months (2002 13%), at 13.3% in 2010

The 2020 goals are as follows:

- Increase rate of ever breastfed infants to 82%

- Increase rate of exclusive breastfeeding at 3 months to 44.3%
- Increase rate of breastfeeding at 6 months to 61%
- Increase rate of exclusive breastfeeding at 6 months to 23.7%
- Increase rate of breastfeeding at 12 months to 34%
- Increase number of Baby Friendly Hospitals to 8.9% (currently 2.9%)
- Increase workplace accommodation to 38% (currently 25%, though workplace accommodation is now mandated by the US Healthcare Reform bill)
- Reduce in-hospital supplementation to 15.6% (currently 25.6%)

Surgeon General's Call to Action for Breastfeeding Support

In March 2011, the Surgeon General posted a Call to Action for Breastfeeding Support in the United States. It is available at www.surgeongeneral.gov. It stated:

- Communities should expand and improve programs that provide mother-to-mother support and peer counseling.
- Health care systems should ensure that maternity care practices provide education and counseling on breastfeeding.
- Hospitals should become more "baby-friendly," by taking steps like those recommended by the UNICEF/WHO's Baby-Friendly Hospital Initiative.
- Clinicians should ensure that they are trained to properly care for breastfeeding mothers and babies. They should promote breastfeeding to their pregnant patients and make sure that mothers receive the best advice on how to breastfeed.
- Employers should work toward establishing paid maternity leave and high-quality lactation support programs.

- Employers should expand the use of programs that allow nursing mothers to have their babies close by so they can feed them during the day. They should also provide women with break time and private space to express breast milk.
- Families should give mothers the support and encouragement they need to breastfeed.

Obstacles

- Lack of experience by family members
- Not enough opportunities to communities with breastfeeding mothers
- Lack of up to date instruction for health care workers
- Difficult hospital practices
- Lack of work accommodation

Health Care Community

- Encourage baby-Friendly Hospital Initiative
- Provide education to health care providers
- Ensure access to IBCLCs

Breastmilk Substitutes

Breastmilk not only has all the nutrients a baby needs, but also all of the immunological factors necessary to strengthen a baby's immune system. There is no need for formula, unless it is recommended by a doctor or Certified Lactation Consultant for medically indicated reasons. Remember, the more a woman nurses the more milk she makes. In addition, if the baby gets full from formula or water, he will nurse less and the mother's breasts won't be stimulated to make as much milk. This can become a no win situation very quickly.

The first choice for infant feeding is always a baby being breastfed at the breast. The World Health Organization (WHO) states: "The second choice is the mother's own milk expressed and given to the infant in some way. The third choice is the milk of another human mother. The fourth and last choice is artificial baby milk."

The American Academy of Pediatrics endorses exclusive breastfeeding for six months and then breastfeeding twelve months and beyond. The WHO recommends breastfeeding for at least two years.

Match up the definitions with the organizations below.

IBFAN, WHO, UNICEF, Abbott Laboratories, WIC, ILCA, LLL, INFACT

1. One of the largest manufacturers of commercial infant formula.
2. An organization that fosters the development of professional standards and ethical practice for lactation consultants.
3. The International Baby-Food Action Network - consists of public interest groups working around the world to reduce infant and young child morbidity and mortality.
4. An organization that created the Code of Conduct for the Marketing of Breast-milk substitutes.
5. A non-profit, national membership organization building an active, aware public and a core of well-trained organizers to lead the grassroots challenge to unwarranted corporate influence. Instrumental in the Nestle Boycott.
6. United Nation's Children's Fund that is instrumental in the Baby Friendly Hospital Initiative (BFHI) that was created in 1991.

7. This organization serves to safeguard the health of low-income women, infants, & children up to age 5 who are at nutritional risk by providing nutritious foods to supplement diets, information on healthy eating, and referrals to health care.
8. Helps mothers worldwide to breastfeed through mother-to-mother support, encouragement, information, and education and to promote a better understanding of breastfeeding as an important element in the healthy development of the baby and mother.

Self Test Questions

Match the following definitions with their appropriate breastfeeding term (terms may only be used once):

TERMS: Exclusive Breastfeeding, Partial Breastfeeding, Bottle Feeding, Artificial Feeding, Complementary Feeding

1. An 8 month old baby nurses several times a day and has two feedings of mashed vegetables and fruits
2. A 2 month old baby never receives formula or water, only nurses and receives daily vitamin drops
3. An infant receives nothing but his own mother's pumped breastmilk
4. A 3 month old infant receives nothing but formula
5. A 4 month old breastfeeds throughout the day and is given a small amount of rice cereal at family meal time

Additional Questions

6. In your own words, describe why breastfeeding initially fell out of favor in the 19th century
7. Describe hospital delivery and newborn procedures in the early 1900s as they relate to breastfeeding.

8. Describe who the maternalists were and how they impacted breastfeeding in the United States
9. List all 10 statements of the WHO International Code of Conduct for the Marketing of Breastmilk Substitutes.

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