

PN ABS-297
E-1757



U.S. AGENCY FOR
INTERNATIONAL
DEVELOPMENT

THE STATE OF
BREASTFEEDING
IN UGANDA:
*PRACTICES AND
PROMOTION*



MotherCare™

Final Report

February 1993



WELLSTART™

Prepared for the
U.S. Agency for International Development
by MotherCare, John Snow, Inc /Manoff Group Inc.
and The Expanded Promotion of Breastfeeding Program,
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THE STATE OF BREASTFEEDING IN UGANDA:
PRACTICES AND PROMOTION

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February 1993

This activity was supported by the U.S. Agency for International Development
under contact DPE-5966-Z-00-8083
and cooperative agreement DPE-5966-A-00-1045-00

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EXECUTIVE SUMMARY

The results of the Uganda Demographic and Health Survey (UDHS), conducted in 1988/89, shocked policy-makers who had believed for decades that Uganda did not have a significant problem in nutrition. The DHS revealed that 45 percent of Ugandan children born in the five years preceding the survey were stunted and that stunting begins in infancy. This realization revitalized the efforts being made by a small group of Ugandan breastfeeding advocates to promote optimal breastfeeding in Uganda. At the request of the MOH, and with support from USAID/Kampala and A I D , an assessment of the breastfeeding situation in Uganda was undertaken in August and September 1992. The breastfeeding assessment was organized and led by MotherCare in cooperation with the Wellstart's Expanded Promotion of Breastfeeding Project (EPB). This report discusses the findings of the breastfeeding assessment.

The breastfeeding assessment team of two international consultants and four Ugandan health professionals reviewed the existing literature on maternal and child health and nutrition. They interviewed and observed as part of their fieldwork

- health policy-makers,
- managers of relevant programs such as CDD, UNEPI, and HED;
- private and public health care facilities in both urban and rural areas;
- private and public maternity care facilities;
- NGOs involved in maternal and child health service delivery and public education;
- traditional birth attendants (TBAs), and
- mothers

FINDINGS

Demographic and socio-economic background

Uganda, a landlocked country of 17.5 million in East Africa, has an annual population growth rate of 3.6 percent. About 90 percent of its multi-ethnic population lives in rural areas, with most families subsisting on agriculture. After gaining independence from Britain in 1962, the country went through a 20 year period of civil unrest and political instability which shattered the educational, social, and health fabric of the country. The National Resistance Movement (NRM) that came to power in 1986 has launched an economic and social recovery program that is slowly rehabilitating the country. In 1991, the GDP grew at an estimated 4.1 percent. However, high inflation rates have so reduced real wages that government salaries (the government is the largest employer) have been below subsistence levels for over ten years (UNICEF, 1989). Uganda receives a lot of foreign aid from multi-lateral and bilateral donors and from many international NGOs.

The country is divided into 34 administrative districts, 149 counties, 750 sub-counties, and 3,721 parishes. The NRM encourages popular participation in government through a system of "Resistance Councils" and "Resistance Committees" at all administrative levels, including the community. This system potentially offers a channel for disseminating information to all communities throughout the country.

Status of women

According to a 1988 assessment of Ugandan women, carried out by Nalwanga-Sebina & Natukunda, rural Ugandan women work 12 to 18 hours a day. Their average 15 hour work day is spent farming, doing household chores, carrying water, and "seeking treatment for the frequent illnesses" of themselves and their children. They are reported to produce 70-80 percent of the food, but own only seven percent of the land (UNICEF, 1989). Men control the money. Only ten percent of the mothers surveyed in the UDHS worked outside their home (Jitta, 1992). Fifteen percent of households are headed by women. Thirty-seven percent of women have no formal education.

Women's health and nutritional levels reflect their general status in society. The total fertility rate is 7.4 and contraceptive prevalence is six percent among all women. Maternal mortality is estimated to be 500 deaths per 100,000 live births (Jitta et al., 1992), but is probably as high as 700 per 100,000 (Mmuro, personal communication). There is little information on women's nutritional status.

About 60 percent of babies were reported to have been delivered outside the formal health system, assisted by a relative (36 percent), a TBA (6.3 percent) or by no one (17 percent) (UDHS, 1989). Relatives are very likely TBAs who also deliver others in the community. TBAs are very supportive of breastfeeding and sometimes advise women when they have breastfeeding problems.

Uganda is one of several African countries devastated by the worldwide crisis caused by human immuno-deficiency virus infection (HIV). The ratio of HIV-positive young women aged 14 to 35 years, to men of the same age is reported to be about 5:1 or 1,363 HIV-positive women to 272 men (The New Vision, 2 September 1992). Even in 1990, among blood donors, the infection rate among women 21-25 years was reported to be 25-32 percent (U.S. HIV/AIDS Surveillance). The high infection rate among young women of child-bearing age has serious implications for their own morbidity and mortality and that of their babies. One reason younger women are said to be at greater risk of HIV infection is their lack of economic independence which pushes them, at young ages, into sexual activity with older men.

Health and nutritional status of children

Infant and child mortality rates are estimated at 101 and 88 per 1000 live births respectively for the five-year period 1983-1988. Among factors that appear to influence the infant

mortality rate, such as mother's education, place of residence, and birth order, birth interval is the strongest determinant of the risk of mortality for the immediate preceding child. The IMR is 142 per 1000 live births for birth intervals less than two years, 84 for birth intervals of two to three years, and 68 for birth intervals of four years or more. Diarrhea, malaria and respiratory infections are leading causes of death. Morbidity prevalence rates mirror the causes of death (UNICEF, 1989).

Malnutrition is listed as causing only two percent of under five mortality but it probably is a very strong contributory factor in the leading causes of death. The UDHS (1989) reported that 45 percent of children 0-60 months suffer chronic malnutrition and are stunted as measured by height-for-age below two standard deviations of the NCHS reference population mean. Even among infants under five months, six percent and ten percent of male and female infants, respectively, were reported to be stunted. The percentage of Ugandan children who are stunted continues to increase rapidly until 20-23 months of age when 57 percent and 49 percent of male and female toddlers are reported to be severely stunted (Jitta et al, 1992). After 24 months the percent of children classified as stunted (height-for-age) stabilizes at about 47 percent. Higher rates of stunting are found in the rural areas, among lower socioeconomic groups and among children of less educated mothers. The positive effect of maternal education appears greatest among the children of urban mothers.

When undernutrition is assessed using weight-for-age, 23 percent of the children are severely undernourished, falling below two standard deviations of the NCHS median, and 32 percent are mildly or moderately undernourished. On the other hand, the rate of severe wasting (weight-for-height) is low (1.9 percent), indicating that while short, the children's weights are proportional to their heights.

The factors that lead to the reported high rate of stunting probably include low birth weight (estimated at 20 percent nationally, though the weight of babies born at home is not known), high infection rates, quality of child care, and inadequate feeding practices. There is inadequate information to sort out the relative importance of any one factor relative to the others.

Information on micronutrient deficiency is limited. In four districts in the east and southwestern regions of Uganda, Kakitahi & Olico-Okui (1991) found that 40 percent of the primary school children had visible goiter. In 59 villages in the Eastern region, Kawuma and Sserunjogi (1992) reported a history of night blindness in three percent of 5,074 children and Bitot's spots in one percent of the children. Breast milk was reported as an important source of Vitamin A for these children since they are not routinely fed adequate amounts of Vitamin A-rich foods.

Breastfeeding practices

There is almost universal initiation of breastfeeding in Uganda. Most mothers appear to feed colostrum but the timing of initiation of breastfeeding is unclear and probably is not within an hour of the infant's birth. There is evidence that prelacteal feeding (or feeding along with breast milk) of water, water with table sugar or glucose is common both in the hospital and the community since most health workers and mothers believe that breast milk production during the first few days is inadequate. In all hospitals visited, when babies are delivered by cesarian section, breastfeeding is not initiated for some time after the mother regains consciousness. Once lactation is well established, many mothers seem to breastfeed exclusively. According to the UDHS (1989), 70 percent of infants less than four months are exclusively breastfed, while 24 percent receive breast milk with other liquid supplements.

Rooming-in and bedding-in are commonly practiced in the hospitals and maternity homes and are culturally acceptable. An exception is found in the management of low birth weight infants. If a hospital has a nursery, it is used for low birth weight babies and mothers are let in only on a three-hour schedule for breastfeeding. Hospitals encourage mothers to express the breast milk to feed low birth weight babies who cannot suck. The babies are fed by cup and spoon.

Many women give cow's milk as the first supplement and may give it very early in the first few weeks after birth, if the family owns cows. By six to nine months of age, two-thirds of the children receive complementary foods, five percent are still breastfed exclusively, and 25 percent receive other liquids but no mush or solids (Jitta et al., 1992). So in Uganda there are both extremes: early supplementation, before four months, and late supplementation, after six months.

At 24 months, 39 percent of babies are still breastfeeding (UDHS, 1989). The average duration of breastfeeding is 19 months. There appears to be little use of feeding bottles, except among educated mothers employed outside the home.

Both health workers and mothers believe that many women are unable to produce enough milk beyond two to three months postpartum and readily advise supplementation at that time. Health workers themselves commonly supplement before they are due back at work (after 45 days), in order to get their babies accustomed to food other than breast milk. Mothers do not express breast milk except when required to do so in the hospital. There is a general lack of information about breastfeeding techniques and issues such as frequency of feeding and quantity of milk.

Training

Although breastfeeding is mentioned in all the pre-service maternal-child health training, it is not emphasized and the information is often outdated and abbreviated. Even though the

current national trend is to move away from vertical maternal and child health programs, optimal breastfeeding training and management has not been incorporated into relevant programs such as UNEPI, growth monitoring or family planning. CDD is the only program where training in diarrhea *and* breastfeeding management is currently implemented and in this case only in Mulago Hospital. With this dearth of appropriate pre and in-service training, health workers tend to rely on their own experience in counselling mothers and thus breastfeeding messages are inconsistent and often incorrect. Even when breastfeeding is addressed, the training does not usually include practical skills, and consequently health workers cannot help mothers with everyday problems

Breastfeeding promotion activities

A small private organization, the Uganda Lactation Management Education Team (ULMET) has established a lactation management clinic in the Mulago Hospital Complex. The ULMET members are mainly health professionals, including Wellstart associates ULMET helped to produce the lactation management training curriculum that is now used by the CDD program. Members promote breastfeeding in the institutions where they work and regularly discuss optimal breastfeeding topics during a health program aired on radio. There are plans to implement the Baby Friendly Hospital Initiative (BFHI) in a number of hospitals in the country with UNICEF support. Apart from the activities of ULMET, a few posters or the mention of breastfeeding in a multi-topic group discussion guide, there are no educational materials for the community on breastfeeding

Community outreach activities

Primary health care workers, agricultural extension workers, home economists, community development workers, and sanitation workers are all personnel trained to provide families with health and nutrition education. In addition, there are many NGOs that work in maternal and child health with communities. Although the number of outreach workers may appear high, in practice community outreach programs are inadequate with one of the weaker points being the lack of or poor breastfeeding training that outreach workers receive

Policy and women support systems

There is no national breastfeeding policy or sector-specific policies for maternal and child health delivery services. Maternity leave is officially 45 days for women in the formal sector. However, for women in both formal and the informal sectors, the working environment (a farm in the rural areas, low wage or civil service jobs in the urban areas), is not conducive to proper child feeding and care.

Funding

Unlike CDD, family planning or EPI programs, breastfeeding has not been targeted for specific funding. There is now some interest in breastfeeding promotion, partly in response to the promotion of the BFHI launched by UNICEF

CONCLUSIONS

While the general atmosphere at both community and the health service levels is supportive of breastfeeding, there is limited knowledge and skills to support optimal breastfeeding. The use of infant formula and feeding bottles does not appear to be widespread, perhaps due to the current difficult economic situation, although when the economy was better, bottlefeeding was more widespread. At this time, major obstacles to optimal breastfeeding are: lack of recognition of the problem, absence of a policy, poor training of those expected to support mothers when they need help and a lack of understanding of mothers' perceptions, attitudes, and practices related to child feeding.

PRIORITY RECOMMENDATIONS

The policy level

1. The government should enact the Ugandan version of the International Code on the Marketing of Breast Milk Substitutes.
2. The MOH should write and approve a national policy on
 - maternal health and nutrition; and
 - infant and young child nutrition.

These policies should include the principles of optimal breastfeeding.

The operational level

1. The MOH should hold a workshop to present the results of the assessment on breastfeeding, refine the Breastfeeding Action Plan, and draft an implementation plan.
2. The MOH should identify a national coordinator for breastfeeding whose duties, among others, will include the integration of optimal breastfeeding into all relevant programs, such as family planning, diarrheal disease control, and growth monitoring within both the public and private sector health delivery programs.

3. The national coordinator should, through her activities with the district health teams and health services, identify interested infant feeding coordinators within each district health team level and at health facilities. These coordinators will ensure implementation of appropriate infant feeding policies and activities at their operational level.
4. Qualitative research is needed to better understand breastfeeding practices and the rationale behind them in order to better target program assistance and to develop appropriate educational and training programs.
5. ULMET should be given assistance and resources to design and conduct training of health workers initially to assist the Baby Friendly Hospital Initiative in selected sites, and eventually for national level support of optimal breastfeeding practices. ULMET also should work with training institutions to incorporate optimal breastfeeding in both pre-service and in-service curricula.
6. For the large number of mothers and children who are not reached regularly by the formal health services, training of community outreach persons such as agricultural extension officers, community development workers, TBAs, and home economists should include adequate training in optimal breastfeeding and weaning. ULMET representatives with the MOH breastfeeding coordinator should work with training institutions and NGO programs to make the necessary changes in their curricula.
7. The issue of maternal nutritional status related to breast milk production, particularly optimal breastfeeding, needs to be investigated.
8. Operational research should be conducted to determine how breastfeeding services can be promoted at the community level. Such options as organizing mothers' support groups, training interested community leaders, and training volunteers in understaffed hospital situations are examples of service delivery approaches to evaluate.

ACKNOWLEDGEMENTS

The assessment team would like to thank all the Ugandan people who took time from their busy schedules to talk to us. Our special thanks go to the MOH program managers; Dr. Dennis Lwamafa, who gave us his support and attended all our meetings; Dr. Ebanyat, who stayed late in her office to talk to us; Dr. Richard Othieno for cutting short his lunch break for us, the other DMOs who also welcomed us even though they did not have prior knowledge of our actual date and time of arrival, the health workers who accompanied us into the rural areas; and the very busy labor and maternity ward midwives who graciously welcomed us. Our gratitude also goes to the TBAs, private midwives, hospital matrons, doctors and all the other professionals who were willing to share their knowledge and opinions with us. We thank also Dr. Lemma, Dr. Ivone Rizzo, and the other UNICEF staff for their support. Our thanks also go to "Haji", our very capable UNICEF driver, who never complained about the irregular hours and late meals.

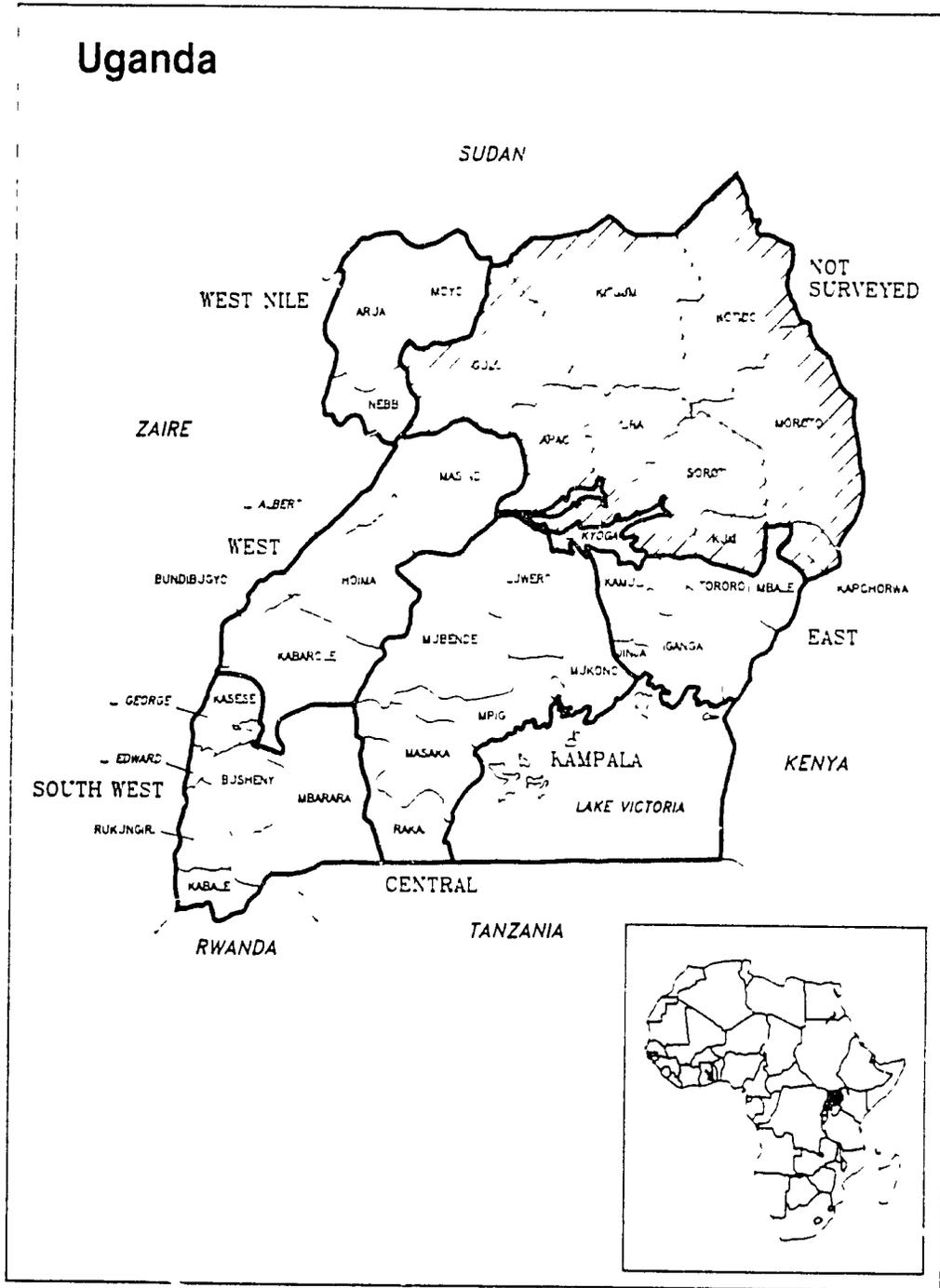
Finally, we thank Ms. Joan La Rosa of USAID without whose support, this breastfeeding assessment would not have been made.

ACRONYMS

ACNM	American College of Nurse Midwives
ACP	AIDS Control Programme
ADMS	Assistant Director for Medical Services
A.I.D.	Agency for International Development
AIDS	Acquired Immune Deficiency Syndrome
AMREF	African Medical & Research Foundation
ARI	acute respiratory tract infection
BF	breastfeeding
BFHI	Baby Friendly Hospital Initiative
CDD	Control of Diarrheal Disease
CHDC	Child Health and Development Centre
CHW	community health worker
CIDA	Canadian International Development Agency
DHS	Demographic Health Survey
DHT	district health team
EPI	Expanded Programme of Immunization
EPB	Expanded Promotion of Breastfeeding
GNP	Gross National Product
HED	Health Education Division
HIV	Human Immunodeficiency Virus
IBFAN	International Baby Food Action Network
IEC	Information, Education, and Communication
INTRAH	Program for International Training in Health
IVACG	International Vitamin A Consultative Group

IPPF	International Planned Parenthood Federation
KAP	knowledge, attitudes and practices
LBW	low birth weight
LME	Lactation Management Education
MCH	maternal and child health
MOH	Ministry of Health
NCW	National Council of Women
NGO	non-governmental organization
NRC	National Resistance Council
ORS	oral rehydration solution
ORT	oral rehydration therapy
PVO	private voluntary organization
RC	Resistance Council or Resistance Committees
SCF	Save the Children Fund
SEATS	Family Planning Expansion and Technical Support
SES	socio-economic status
SIDA	Swedish International Development Agency
SMP	Safe Motherhood Project
STD	sexually-transmitted diseases
SWIP	Southwest Integrated Project
TASO	The AIDS Support Organisation
TBA	traditional birth attendants
UFPA	Uganda Family Planning Association
UNICEF	United Nations Children's Fund
UNEPI	Uganda National Expanded Programme of Immunisation
UNFPA	United Nations Fund for Population Activities
USAID	The Ugandan Mission of the United States Agency for International Development
WHO	World Health Organisation

MAP OF UGANDA



MAP OF UGANDA INDICATING SURVEYED AND NON-SURVEYED AREAS FOR THE UDHS

INTRODUCTION

For decades, in spite of the importance of breastfeeding to maternal and child health, there has been minimal attention and few resources given to breastfeeding promotion, in contrast to programs for immunization, control of diarrheal disease and family planning. Following the Innocent1 Declaration and the formulation of guidelines on optimal breastfeeding, there is heightened interest in breastfeeding. In 1990, A.I.D. issued its Breastfeeding Strategy and requested its missions to work with host-country colleagues to assess current breastfeeding practices, policies, and programs and to promote the following optimal practices.

- Breastfeed within one hour of delivery
- Breastfeed exclusively from birth through four to six months of age
- Feed appropriate complementary foods in addition to breast milk by the end of six months of age;
- Breastfeed for one year or longer.

In support of this A.I.D. initiative, MotherCare, through The Manoff Group, with assistance from A.I.D. personnel and other A.I.D.-supported projects, produced the document entitled A Country Analysis of Activities and Practices Supporting Breastfeeding (Griffiths & Anderson, 1990). This guide has been used in six countries and served to orient the assessment in Uganda.

In Uganda, the training of 11 health professionals in 1988 and 1991 in the San Diego-based Wellstart Lactation Management Education Program stimulated interest and commitment to improve breastfeeding in the country. In addition, the results of the Ugandan Demographic and Health Survey (UDHS) conducted in 1988/89 showed that a high proportion of Ugandan infants and young children are stunted, which intensified the desire to improve infant and young child nutrition. To initiate discussion, the Uganda Lactation Management Team organized a workshop to draft a breastfeeding action plan. The workshop recommended a breastfeeding assessment to summarize the current situation, identify factors that are supportive or obstructive to breastfeeding, and areas requiring further investigation. At the request of USAID/Kampala, the breastfeeding assessment was conducted as part of an overall assessment of infant and young child feeding. The breastfeeding assessment activities were carried out from 24 August to 18 September 1992.

The MotherCare assessment team consisted of four Ugandan health professionals and a consultant experienced with the assessment methodology. In addition, Wellstart provided a consultant to assist with background research and field observations. MotherCare also provided for the review and production of the report. Prior to beginning field work, literature on Uganda and feeding practices was reviewed for the first part of the report and to provide guidance on what to look for in-country. In Uganda, the team interviewed and observed health policy-makers and managers of such programs as the Uganda Expanded Program of Immunization (UNEPI), Control of Diarrheal Diseases (CDD), Health

Education (HED); both private and public health care facilities; NGOs and their project sites; and health training institutes. In addition, interviews were conducted with mothers; TBAs; vendors in local markets, and shopkeepers. The objectives of these activities were to learn about current activities, knowledge and attitudes of the personnel regarding infant feeding, existing or potential integration of breastfeeding and weaning activities into current programs, and the available resources for any subsequent promotion of optimal infant feeding practices

The team visited the Kampala and Entebbe areas where policy-makers, many NGO headquarters, and the Mulago teaching hospital complex are located. Other districts visited were Mbale and Jinja in the Eastern and Central regions, and Mbarara in the Southwest. Mbarara town has a University of Science and Technology, and its district hospital is designated a teaching hospital for medical students and nurses. In each district, visits were made to rural areas surrounding the district capital to talk to and observe TBAs, private and public health facilities and maternity homes, mothers, training facilities, and NGO project sites. The places visited were chosen based on the following criteria: importance in training and health care delivery, existing infrastructure, accessibility, and the feasibility related to future programs in breastfeeding promotion.

I. REVIEW OF LITERATURE

COUNTRY BACKGROUND

Located in East Africa, Uganda is bordered by Sudan in the north, Kenya in the east, Tanzania and Rwanda in the south, and Zaire in the west. The country is 241,038 square kilometers, 13 percent of which is water, including some of the biggest lakes in the world. Uganda has a moderate climate, relatively high altitude and frequent rainfall. The soil is most fertile in the central, west, and south regions and less so in the east and north. There is a tropical rain forest in the south and savanna woodlands and semi-desert vegetation in the north (UDHS, 1989).

A former British colony, Uganda gained independence in 1962. Tragically, civil and political unrest shattered the economy and undermined the country's social infrastructure.

At independence in 1962 this former British protectorate was one of Africa's most prosperous states. But Uganda's decline started under the bloody rule of Idi Amin in the 1970s. Amin was ousted by invading Tanzanian troops in 1979, only to be followed by a bloodthirsty successor, Milton Obote. In 1986, guerrilla chief Yoweri Museveni took power and began trying to restore order. Chicago Tribune, January 1992

The 20-year period of intense civil and military unrest has had a tremendous negative impact on the economic, educational, and health situation of the population. The present government of the National Resistance Movement (NRM) began a recovery program in 1986 which has led to some economic growth.

Socio-Demographic Profile

Uganda has an estimated population of 17.5 million. With an annual population growth rate of 3.6 (UDHS, 1989), the population will double in 19 years (World Population Data Sheet, 1992). Migration contributes to the higher urban growth rate of five percent (1990), yet only 10.1 percent of the population is located in urban areas. In 1990, 47 percent of the population was estimated to be under 15 years of age. The crude birth and death rates are 52.5 and 16.3 per 1000, and the life expectancy is 50 years. Eighty percent of all children live in households with at least five people and 79 percent are in households with two children under five years of age (UDHS, 1989). Adult literacy is 57 percent.

There are many different ethno-linguistic groups that include Bantu, Nilotics, Nilo-Hamites and those of Sudanese origin. Before independence, Uganda was divided into kingdoms

based on ethnic groupings. The most widely spoken language is Luganda followed by Swahili and English, the official language of the country. In 1983, 60 percent of Ugandans were reported to be Christians, 30 percent to adhere to traditional religions, and ten percent to be Moslem (Chowdhury, 1983).

Currently the country is divided into 34 administrative districts which are divided into 149 counties, 750 sub-counties, and 3,721 parishes. The new government has increased community-level participation in government through a system of Resistance Committees which have representation in the National Resistance Council (NRC). The National Resistance Council is the law and policy-making body of the government. The NRC includes 278 members divided among elected representatives from each district, with at least one position per district set aside for a woman and some seats given to participants from the resistance war. The system of Resistance Committees effectively reaches to the village level. Each administrative level (district, county, sub-county, parish, and village) has both a Resistance Council and a Resistance Committee. All citizens over the age of 18 are members of the Village Resistance Council which elects members of the Village Executive Committee. These committees can be important sources of community mobilization for health-related activities (see Appendix B for the structure of National Resistance Councils and Committees).

Economic Factors

The majority of the current labor force is found in the agricultural sector. A 1983 World Bank document reported that 93 percent of the population earned their livelihood from agriculture (Chowdhury, 1983). Two thirds, 66.9 percent, of the GDP is from agriculture. By comparison to an average estimated per capita GNP of \$330 for both sub-Saharan African and other low income countries, Uganda's estimated per capita GNP of \$250 is low. With prolonged unrest, the GDP fell .2 percent annually from 1970 to 1978. In the 1980s, with relative stability and economic reform, positive economic growth returned to Uganda. However, even with a 4.5 percent GDP growth rate in 1986-87, the GDP was only 57 percent of the GDP level in 1972 (UNICEF, 1989). Preliminary data for 1991 show that the GDP growth rate was 4.1 percent with industry and services expanding at a greater rate than agriculture. The economy did not meet the targetted five percent growth rate because of several shocks that included a sharp fall in the price of coffee, a drought, and shortfall in donor budgetary support. Encouraging signs for the economy include the growth in industry (preliminary data show increases of 19.6 percent), and reduction of the overall deficit. However, inflation rates remained high, 60 to 70 percent (66.3 percent in Kampala). The goal of the government reform program is to stimulate and strengthen the economy, reduce inflation and reduce external debt. To do this, reform measures have been taken by many sectors, including the government. Government ministries have been consolidated from 28 to 19, eliminating thousands of jobs, including 50,000 ghost jobs. The government was the single largest employer in 1989 with 271,000 employees, of whom 11 percent were judged "ghost" employees (UNICEF, 1989).

Given the large number of Ugandans employed by the government, government salary levels are a good barometer of the economic situation in Uganda. According to UNICEF's 1989 Situation Analysis on Women and Children:

Government salaries have been below subsistence level for over ten years, and no public servant, however frugal, could survive on his salary alone.

For example, a midwife in public service is paid about 20,000 shillings per month (including all allowances) while in Kampala a loaf of bread costs 1,000 shillings, and a bunch of bananas, the most common staple, costs 5,000 shillings, enough for a family of five for three days.

Economic status of a household was estimated in the UDHS by determining the number of household amenities present (e.g. electricity, radio, T.V., charcoal stove, etc.) Using this proxy of wealth, 82 percent of children live in poor households. In Kampala, 64 percent of the children live in households above the "poor" classification, showing a marked difference between Kampala and rest of the country.

Agriculture is dominated by small and medium scale peasant farmers who produce food crops (banana, millet, beans, and maize), cash crops (coffee, cotton, and tea), and raise livestock. With the great abundance of lakes and rivers, fishing is an important source of food, supplying 50 percent of all animal protein in Uganda. With a favorable climate and fertile soil, Uganda has produced food surpluses even during the disturbances of the 1970s. Food distribution though is not efficient, and a high death toll in the Karajmoja district during the famine in 1980 was said to be mainly due to the government's inability to redistribute food (Chowdury, 1983). Despite the food surpluses,

There are, however regional imbalances and food availability to children is affected by season, purchasing power and the status of food marketing systems. (Kakita, 1990)

The UDHS examined what household items women have access to at home. Only seven percent of homes have electricity. Approximately one-third have a radio and women report listening to it on a weekly basis. Another third have bicycles and charcoal irons, while only one-fifth have charcoal stoves. There are large differences in the household amenities owned by urban and rural households, especially related to access to electricity, charcoal stoves, and radios (UDHS, 1989).

Migration Patterns

The majority of Ugandan people (90 percent) live in rural areas. Areas with good rain and soil (such as Mbale District in the East) have high and rising population densities. Other areas with poor soil and lower rainfall (most of Northern Uganda and Luwero) and with

the tsetse fly have lower population densities. Migration is a major factor in population redistribution both within and between districts. Urbanization is low. Kampala City is the largest city, with a population of just over 700,000.

Water and Sanitation

Uganda once boasted of one of the highest coverages of the population with safe water and sanitation in Africa. After 20 years of civil strife and limited financial resources, the water and sanitation infrastructure was almost in a state of total collapse. With the new development plans in the 1980s, coverage levels are increasing. Currently, 45 percent of the urban and 12 percent of the rural population have access to safe water (Center for Health Information, 1990). Most families (81 percent) have a pit latrine. However, 16 percent of children, mainly in rural areas, live in households with no toilet facility.

Transport and Communication

Recovery of communications systems began in the mid-1980s but coverage is still far below the pre-Amin era. Television coverage fell from 65 percent in the early 1970s to less than 15 percent in 1985. Booster stations in three regions have the potential to cover 60 percent of the population but lack of electricity and the high price of television sets restrict access to elites in Kampala and a few major rural towns. Radio coverage is better but is restricted by ownership and access to batteries. Approximately 26 percent of Ugandans owned radios in 1987. Most of the Government-owned Radio Uganda programs are broadcast in 22 languages and include news programs and features, including education and health programs. Newspaper circulation is limited to Kampala and major towns. There are a number of private, government, and religious presses.

No new roads have been built in the last 15 years and rehabilitation of roads is restricted to the south. Lack of motor vehicles makes public transport difficult in some districts. In 1987 there were 31,307 motor vehicles in Uganda compared to 50,419 in 1970 (UNICEF, 1989). Less than one-half of Uganda's districts are linked by telephone and phoning within Kampala is difficult. Mail service is irregular.

The Status of Women

The status of women in Uganda is defined by cultural constraints which are difficult to unravel and merit anthropological study. According to a survey of Ugandan women's needs conducted by Nalwanga-Sebina and Natukunda in 1988, rural Ugandan women work on average 15 hours/day (\pm 3 hours). Much of their time is spent farming, on household chores, carrying water, and "seeking treatment for the frequent illnesses of themselves and

their children". About 15 percent of the households are headed by women without a man present. In some urban areas, such as Masaka, female-headed households make up 26 percent of the total (UNICEF, 1989).

Women are isolated because rural families tend to live on isolated small plots. Work opportunities for women outside the home are extremely limited (except for agriculture): only ten percent of the mothers surveyed in the UDHS worked outside their home (Jitta, 1992). Rural women produce 70 to 80 percent of the country's food. Women have little time to socialize and only a small percentage belong to women's or religious groups. Although women are the principal farmers, men control the cash, marketing of products, and own the land. Only seven percent of Ugandan women own land.

Women's access to, attendance, and their level of achievement at school (especially to grade five) is much less than males. By the secondary level the "proportion of girls to boys is only half of the level found at the primary school." (UNICEF, 1989). Generally, the reason for girls leaving school is lack of school fees (Uganda Women's Needs Assessment Survey, 1988).

Thirty-eight percent of women in Uganda have received no education, an additional 43 percent have received some primary education, nine percent completed primary school, and the remaining ten percent have higher education. Illiteracy in rural areas is high since 41 percent of rural compared to 13.4 percent of urban women have not been educated (UDHS, 1989).

Polygamy is accepted traditionally but is declining with increasing educational levels of women. Among currently married women, 33 percent report that their husband has at least one other wife. Amongst younger, married women (15-19 years old), 21 percent are in polygamous unions compared to 40 percent of married women in their forties. Polygamy is lowest in the southwest, probably because 50 percent of the population is Christian and it is highest in the east where there is a high proportion of Moslems. Polygamy is also low in the Central Region and in Kampala where education and paid employment is highest (UDHS, 1988/89).

Another measure of women's status is their own health and their access to health care. Information about women's health status, maternal mortality, morbidity, nutritional status and nutritional deficiencies is scant. In the study by Nalwanga-Sebina & Natukunda (1988), 76 percent of the women reported that they had been sick in the previous two weeks. The majority of women had to walk long distances to get to the nearest health center and 50 percent of them went to institutions that required payment for services. Most of these women (67 percent) had to seek financial assistance from husbands or relatives since they lacked independent income to pay for themselves.

The Government moved towards improving the status of women by establishing the Ministry of Women's Affairs in 1988, (now a department in the Ministry of Women in

Development, Culture and Youth). Women have also been appointed to key decision-making positions as ministers, judges, managers, etc. (Sserunjogi, 1991). About 23 percent of the civil service work force is women.

HIV Infection

Just as civil strife ended in the 1980s, Uganda began another war against the Human Immunodeficiency Virus (HIV). The prevalence among the general population in 1989 was 0-33 percent depending on location and age group. Prevalence among pregnant women in Kampala in 1989 was 24.3 percent (U.S. Bureau of Census 1990). Among blood donors in six hospitals from 1986-89, the prevalence was 11 to 25 percent (U.S. Bureau of Census, 1990).

Table 1.1
Percentage prevalence of human immunodeficiency virus (HIV) for Uganda¹

Population Subgroup	Sex	Year	17-21 yrs	21-25 yrs	26-30 yrs	31-40 yrs				
Blood Donor - Family	F	1990	27	32	34	21				
Blood Donor - Volunteer	F	1990	9	25	26	15				
Blood Donor - Family	M	1990	11	23	27	20				
Blood Donor - Volunteer	M	1990	3	8	12	12				
Ugandan Army	M	1987	33	3	for all ages					

Population Subgroup	Sex	Year	15-19 yrs	20-24 yrs	25-29 yrs	30-34 yrs	35-39 yrs	40-44 yrs	45-49 yrs	50-54 yrs
General Population	F	87\88	16	26	17	12	11	13	6	9
General Population	M	87\88	7	15	24	17	13	8	11	11

As seen in Table 1.1, women appear to be infected earlier than men. In 1987/88, in the general population, the highest infection rate (26 percent) was among women in the age group 20 to 24 followed by 25 to 29 year old men (24 percent). The rate of infection among young women appears to continue to increase. Even among adolescent girls 15-19 years old, the infection rate was high (16 percent), while being only seven percent among men in the same age group. According to figures appearing in a news-article entitled

¹ U.S. Bureau of Census, Center for International Research, HIV/AIDS Surveillance Data Base

"Youth to be Change Agents" in the Ugandan daily newspaper New Vision on 2 September 1992, among persons aged 14 to 35 years, there are 1,363 HIV-positive females and 272 males. Among the reasons given for the high infection rates among young females are: lack of economic independence that leads young women to "succumb" to older men; polygamy, lack of control of their own lives, and sexual abuse. The high prevalence among young women and among urban, pregnant women will have a profound impact on HIV-related maternal and child morbidity and mortality.

The cumulative adult AIDS cases reported in December of 1990 was 21,719. Prevalence data for pediatric AIDS is unavailable, but in 1988, 441 cases among children less than five years old were reported. The UNICEF 1989 report predicted that AIDS may emerge as the number one cause of death among Ugandan children. Transmission in children is almost exclusively due to transmission in-utero and during parturition. Consequently, the AIDS death rate among children depends on the prevalence of AIDS among pregnant women. In Kampala where 24 percent of the pregnant women are HIV-positive, WHO models predict that the child death rate will increase by over 40 deaths per 1000 children due to AIDS. Rare case reports have suggested HIV transmission through breast milk, possibly occurs when women have a high viral load because of postpartum infection. (Larry Marrum, personal communication)

Nutritional and Health Status of Young Children

Nutritional status

Rates of wasting (children who are two standard deviations or more below the NCHS mean weight-for-height) are low. One and nine-tenths (1.9) percent of children 0 to 60 months are wasted (UDHS 1989) which closely corresponds to the expected norm of 2.3 percent in the NCHS reference population. Eleven percent of the children are moderately wasted ($\geq -1SD$ to $\leq -1.99SD$ of the NCHS mean). (See Table 1.2.)

Table 1.2
Percent of wasted (weight-for-height) children 0 to 60 months
by geographic area

	Wasted	Moderately wasted
Total Population	1.9%	11.2%
Rural	2.0%	11.4%
Urban	1.0%	9.4%

Source: (UDHS, 1988/89)

A different picture emerges when height-for-age is examined to determine the extent of chronic undernutrition or stunting. Forty-five (45) percent of the children 0 to 60 months of age are chronically undernourished or stunted ($\geq -2SD$ of the NCHS mean). There is a large urban/rural differential. (See Table 1.3.)

Table 1.3
Percent of stunted or chronically undernourished children
0 - 60 months as defined by height-for-age by geographic area

	stunted	moderately stunted
Total Population	44.5%	28.6%
Rural	46.3%	28.2%
Urban	25.6%	32.7%

Source: UDHS, 1989

One child in five (19.2 percent) as reported by the UDHS, is severely stunted (three or more standard deviations below the mean). Some questions have been raised about the high rates of stunting measured in the UDHS because a UNICEF study reported a rate for stunting in Mbarara District that was 20 percent lower. A household study being conducted by Department of Statistics, Ministry of Labor may provide additional information to corroborate the rate.

Table 1.4
Percent of stunted or undernourished (height-for-age)
children 0 - 60 months (height-for-age) by age

Age	stunted	Moderately stunted
0-11 Months	21.3%	35.8%
12-23 Months	53.3	26.2
24-35 Months	52.3	26.4
36-47 Months	50.5	26.9
48-60 Months	51.2	25.4

Source. UDHS, 1989

The most critical period of stunting occurs from four to 18 months of age. Even among the youngest infants, six percent and ten percent of male and female infants respectively were reported to be stunted. By 20-23 months of age 57 percent and 49 percent of male and female toddlers respectively were reported to be severely stunted (Jitta et al, 1992) (see Figure 1). The striking difference between sexes has not been explained. After 24 months, the stunting rates stabilize at about 47 percent. Higher rates of stunting are found among children of:

- rural families where the parents have less than a secondary education;
- residents in the Southwest (38.9 percent), Central (18.7 percent), and East (27.9);
- urban mothers with no education;
- low socio-economic status households,
- small farmers and rural service workers (MOH/CHDC, 1992).

The preliminary in-depth analysis of the UDHS data identified the following factors as being associated with stunting: inadequate weaning practices, recent diarrheal and respiratory illness, inadequate water and sanitation, lack of/or inadequate prenatal care, no radio, lower economic status in the rural area (MOH/CHDC). The final report of the analysis also found that low paternal education, women's work (women employed outside the home had *better* nourished children), lack of toilet facilities, and short birth intervals were significantly associated with stunting (Jitta et al, 1992).

When examining undernutrition as measured by weight-for-age, 23 percent of the children are undernourished ($\geq -2SD$ of NCHS mean) and 32 percent are moderately undernourished ($\geq -1SD$ to $\leq -1.99SD$ of the mean).

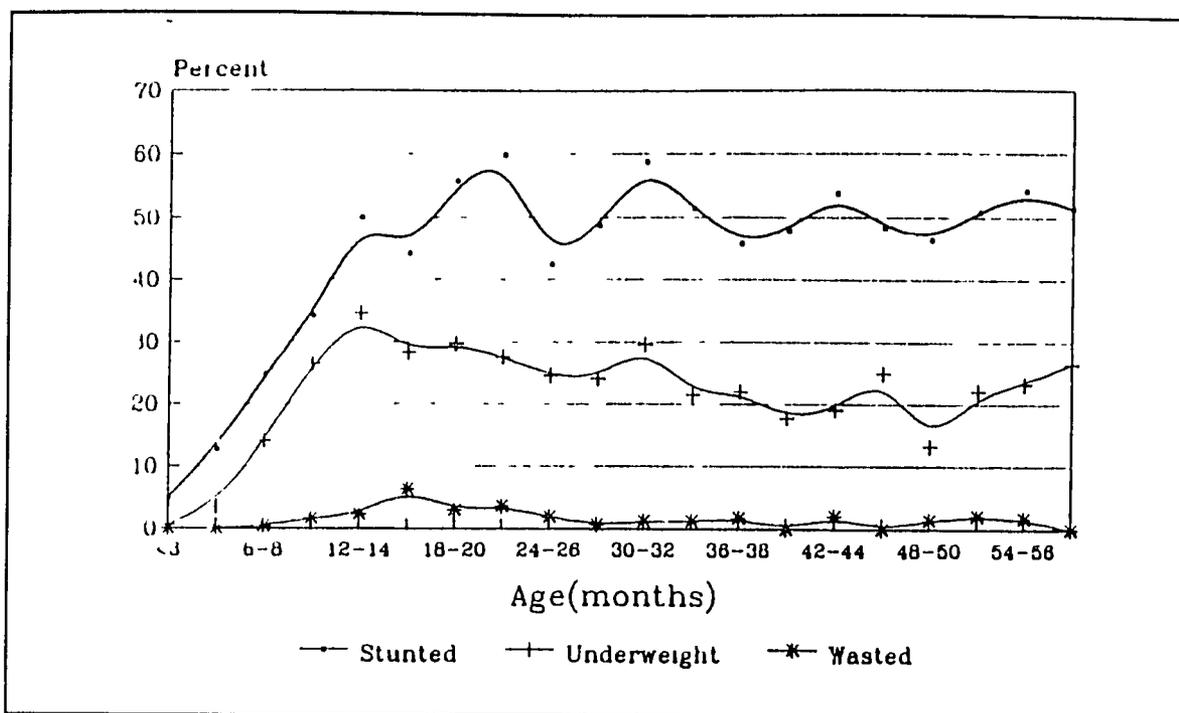


Figure 1 NUTRITIONAL STATUS OF UNDER 5 CHILDREN IN UGANDA

Low birthweight

In a study of predominantly poor residents of Kampala in 1983, 46.7 percent of newborns were classified as low birth weight (LBW) (Karamagi, 1983). The research team examined the delivery records in three hospitals and found a low birthweight rate of three to 23 percent. However, in the one hospital with the lowest rate, the quality of the weights was suspect. The official, national LBW rate is 20 percent though this figure does not include home deliveries (> 50 percent of all deliveries). Further documentation of birth weights is needed to help determine the extent of intrauterine growth retardation and its subsequent relation to stunting.

Mortality

Infant and child mortality trends in Uganda, as estimated by the 1989 UDHS, indicate increasing mortality since the 1973-77 period (Table 1.5). The severe civil unrest from 1973 to 1982, and the resulting destruction of health infrastructure are contributing factors. Improvements in health services in the mid to late 1980s, especially the child survival programs, have contributed to the 13 percent decline in infant mortality and the nine percent decline in child mortality during the 1983-88 period. It is estimated that half of all deaths in Uganda each year are in children under five years (UNICEF, 1989).

Table 1.5

Infant and child mortality rates (per 1000 live births)
by five-year periods, Uganda 1988/89

Period	Infant Mortality Rate	Child Mortality Rate	Under 5 Mortality Rate
1973-1977	92	97	180
1978-1982	114	97	200
1983-1988	101	88	180

Source. UDHS, 1989

Sex of the child, birth order, length of the birth interval, mother's age and education, and region of country appear to influence infant and child survival

Specifically higher mortality rates are found among:

- boys,
- children living in the West Nile region (lowest rates in Southwest);
- infants of mothers less than 20 and over 40 years of age;
- first born children and two to three subsequent children;
- children of mothers with no education,
- children born within two years of the preceding sibling.

Length of birth intervals is the strongest determinant of mortality among this list.

Mortality rates among infants are: 142 per 1000 live births for birth intervals less than two years, 84 per 1000 for intervals of two to three years, and 68 per 1000 for intervals of four years or more

The leading causes of childhood mortality from hospital data in Mbarara District in 1988 are similar to causes found in many parts of the country (UNICEF, 1989). Table 1.6 shows the causes of deaths for Mbarara District's population, for children under five and for deaths reported by hospitals.

Table 1.6

Causes of death, Mbarara district for the total population and under-fives, 1988, and hospital deaths all ages in 1987

Disease	Mbarara	Hospital	Disease	All
	Dist , 1988*	Deaths, 1987**		
Diarrhea	17%	16%	Malaria	10%
Malaria	16%	15%	Diarrhea	9%
Respiratory Infections	14%	14%	Tetanus	8%
Measles	13%	21%	Anaemia	8%
Accidents	4%	1%	Measles	7%
Vomiting	4%	4%	Respiratory Infection	6%
Malnutrition	2%	3%	Malnutrition	5%
Tetanus	1%	2%	Pneumonia	5%
Other	29%	24%	Fractures	4%
			Hernias	4%
			Other	35%

Source: UNICEF, 1989.

* MOH et al , Baseline survey for SWIP, 1989

** Belgian Survival Fund, et al., Report of the General Identification Mission, 1984, MOH Health Planning Unit, unpublished data, 1988.

Diarrhea and malaria are the major causes of mortality in children under five in Uganda. There are some differences in the causes of mortality between urban and rural children. Specifically, respiratory infections are much bigger killers in rural areas than in urban areas. Tetanus and anemia mortality rates are higher in the urban area. Malnutrition is said to cause only two percent of the deaths in under fives, but it very likely is a contributory factor in many deaths.

Morbidity²

The major causes of morbidity mirror the causes of mortality. In the Northeast and Arua, malaria and diarrhea are major causes of morbidity followed by respiratory infections. In Mbarara, more morbidity is caused by respiratory infections than diarrhea (UNICEF, 1989).

Diarrhea

In the UDHS, women were asked to report on the occurrence of diarrhea in their children in the past 24 hours and the two weeks prior to the survey. Among children under five years, 24 percent of their mothers reported that the children had an episode of diarrhea in the past two weeks and 14 percent in the last 24 hours. Prevalence of diarrhea was highest among children six to 11 months with 43.3 percent reporting diarrhea in the past two weeks. This is probably related, in part, to the introduction of other foods during these weaning months. Diarrhea is almost as prevalent (42.2 percent) in children 12-17 months. Prevalence is only slightly higher in rural areas and the differences associated with the child's sex and mother's education are weak except among the most highly educated, where reported prevalence for children under five years is 13.7 percent. Fifteen percent of the children with diarrhea in the past two weeks were taken to a medical facility and 15 percent were given some form of oral rehydration therapy (ORT). Half of all the mothers with children under five had heard about ORT.

Cough

Acute respiratory tract infection is one of the three main causes of morbidity and mortality among children under five in Uganda (UDHS, 1989). Twenty-two percent of children under five years were reported to have had a severe cough with rapid or difficult breathing in the past four weeks. About half of these children were reportedly taken to a health provider where half received antibiotic treatment and the rest got no treatment.

Fever

Questions related to fever in the UDHS (1989) were asked to estimate the extent of malaria among children less than five years old. Almost half (41 percent) of the children had a fever in the previous four weeks. Half of the children with fever (45 percent) were taken for medical treatment. Among those taken for treatment, 57 percent were reportedly treated with antimalarials.

² Unless noted, morbidity data are taken from the Uganda DHS Reports 1989.

Iodine deficiency

Data on iodine deficiency among primary school students in four districts found that 40 percent of the children had visible goiter (Kakitahi & Olico-Okui, 1991). The total goiter rate was 75 percent indicating severe deficiency in Kisoro (a far south western region), Bundibugyo, Hoima and Kapchorwa, districts that are located in eastern and western Uganda. The researchers speculate that with these high rates of goiter a significant number of school children are suffering different degrees of mental and physical retardation. Because the iodine deficiency begins early, it will affect the under five population, even though the effect may not be measurable.

Vitamin A deficiency

A vitamin A deficiency study of 59 villages and 5074 children in the eastern district of Kamuli was carried out during 1991. Clinical examination, history of night blindness, biochemical measures, anthropometry, and the IVACG dietary criteria were used. Three percent of the children had a history of night blindness and one percent had Bitot's spots. A very small percentage had corneal xerosis (0.2 percent), keratomalacia, (0.1 percent) or corneal scars (1.7 percent).

In addition to the clinical study, a dietary intake survey for 210 children below six years of age was undertaken in the same eastern district of Kamuli. The study found that 50 percent of the children were at risk for vitamin A deficiency due to low intakes within all age groups. Twenty-five percent of the 50 percent at risk were still being breastfed (Kawuma & Sserunjogi, 1992). Breast milk, green leafy vegetables and fruit (mainly papaya) were the chief sources of Vitamin A. Breast milk is a particularly important source of vitamin A since other foods are not eaten routinely by young children.

Immunization

Uganda launched their Expanded Programme of Immunisation (UNEP1) in October 1983 and has made steady progress in national immunization coverage of children under five. The UDHS reports that 44 percent of mothers with children under five have an immunization card for their child and 26 percent more say they have a card but could not find it. Among children with cards, 98 percent had received their BCG vaccination, 55 percent had received three doses of DPT, 55 percent had received three doses of polio, and 69 percent had been immunized against measles. Almost half of the children, 44 percent, had been fully immunized. As is true in many countries, the drop out rate is high between the first and third DPT vaccination (40 percent). Estimates of overall coverage for all children 12-23 months of age are 23.5 percent and 31 percent, depending on estimation assumptions. Uganda's immunization program avoids campaigns and encourages vaccination at routine maternal and child welfare clinics.

Contraception and Fertility

Cultural norms and attitudes related to marriage and childbirth profoundly impact fertility and contraceptive use. Ugandan women marry early and bear children early. The UDHS reports that the average age of marriage for rural women is 16.9 years and 18.4 for urban women. Women who have received more than a primary education get married in their twenties (*Studies in Family Planning*, 1991). In general, the trend is moving towards marrying at older ages since the youngest cohorts have a higher median age of marriage than older cohorts.

Table 1.7
Median age at first union among women aged 20-49 years,
by residence and education level, Uganda, 1988/89

Age	20-24	25-29	30-34	35-39	40-44	45-49	Total
Residence							
Urban	19.5	19.4	18.4	19.2	17.4	16.7	18.6
Rural	17.8	17.4	16.9	16.6	16.8	16.8	17.2
Education							
No education	16.9	17.1	16.7	16.5	16.4	16.7	16.7
Some primary	17.7	17.4	16.7	16.7	16.7	16.6	17.2
Primary comp	18.6	18.6	17.9	19.1	(18.0)	(20.5)	18.5
Middle	20.6	19.8	20.2	19.5	(20.0)	(18.5)	20.1
Higher	-	23.2	(22.7)	(22.6)	(25.2)	(25.5)	23.5
Total	18.1	17.7	17.1	17.1	16.7	16.8	17.5

Note: the numbers in parentheses are based on fewer than 20 unweighted cases
 Source: UDHS, 1988/89

The median age of women at their first birth is about 18 years. Eight percent of women gave birth before 15 years of age. As with age of marriage, age at first birth also increases with education. On average women with no education or some primary education give birth at 18 years while women with higher education give birth at 24 years.

Women's reported optimal family size is large and the mean ideal number of children reported in the UDHS was 6.5. The ideal number of children that women desired increased with the number of their own living children. This may show an effect of age or

that those women who want more children do, in fact, have them. The educational status of the woman greatly affects the ideal family size reported. Those women with no education reported that over seven children was ideal while women with the highest level of education reported the lowest number, 4.7

Fertility

The total fertility rate (TFR) is a useful estimate of current fertility among Ugandan women. Based on the UDHS data for the periods 1985-1988/89, women aged 15-49, would have a total number of 7.4 children in their lifetime. This TFR is the same as that estimated for the 1982-84 period. Fertility remained high throughout the 1980s. Urban TFR estimates are lower, 5.7 births, compared to 7.6 in rural areas. The TFR did decline in the urban areas from 6.1 births in 1982-84 to 5.7 births in 1985-89. Fourteen percent of all women have eight or more children and this has hardly changed since 1969 when 15 percent of all women had eight or more children.

Another indicator of current fertility is the number of women who are pregnant, although this tends to be an underestimate since a number of women may be pregnant without realizing it. The UDHS found that 11 percent of teenagers (15-19) and 20 percent of women 20-24 years were pregnant. The highest rate of fertility is in the latter age group and women 25-29 have the next highest rate with 16.9 percent currently pregnant. These data show a high degree of early childbearing in Uganda which has serious implications for maternal and infant health. Ntozi notes an interesting cultural constraint against having children at an older age. He writes

...the 'grandmother effect', which involves the first-born performing rituals that implore the mother to stop producing more children, and the rituals with sons-in-law...It appears, therefore, that traditionally, women are motivated to practice contraception when they become grandmothers. In the past, this used to be common practice in the society in order to avoid the embarrassment of 'old' women competing with their daughters and daughters-in-law. (Ntozi & Kabera, 1991)

Contraceptive prevalence rate

Three quarters of all women know of a modern contraceptive method and almost as many know where to obtain them. Ninety-four percent of urban women know of a method and 90 percent know of where they can obtain them. Knowledge of methods and sources of methods among educated women (those completing primary education or higher education) is almost equivalent to the urban rates of knowledge and source. Regionally, women in the West Nile have the least knowledge of modern methods with only 18 percent knowing a modern method and 12 percent knowing the source of the modern method. Reasons for

these low rates may be the small UDHS sample size in the West Nile, or the concentrations of Catholics and Moslems in that area who do not favor modern methods.

About one-fifth of Ugandan women have ever used a contraceptive method. Periodic abstinence is the most popular method and the pill and withdrawal are the next most popular methods. Current contraception use is much lower. Only six percent of all women and five percent of married women reported current use of a contraceptive method and only half of these used a modern method. Periodic abstinence is the most popular method followed by the pill and female sterilization. Contraceptive use among urban women is much higher with 18 percent, compared to four percent of rural women currently using any method. Modern method use is also higher among urban women. Contraceptive use increases with a woman's education level and the number of living children that she has. Thirty-four percent of women with higher education use a method compared to two percent of women with no education. Seven percent of women with four or more children used a method while only one percent of women with no children used a method.

About 30 percent of the women in a survey conducted in Ankole had used a traditional method of contraception. The most popular traditional methods were prolonged breastfeeding (15.5 percent), withdrawal (9.5 percent), and mother wearing the umbilical cord of the last born child around her waist (7.2 percent). By contrast, ten percent of the women used a modern method, either the pill, rhythm, tubal ligation or another modern method (Ntozi & Kabera, 1991).

Half of the sexually active non-pregnant women who were not using contraceptives reported that they would be unhappy if they got pregnant. Reasons for non-use among these women were:

- lack of knowledge (33 percent)
- religion (20 percent)
- opposition from husband or others (nine percent)
- lack of accessibility (nine percent)
- and being postpartum, amenorrheic or breastfeeding (six percent).

Breastfeeding and contraception

The UDHS data showed a significant negative relationship between breastfeeding and contraceptive use. Specifically, non-contraceptors breastfed for 15.3 months while contraceptors breastfed for 13.5 months. This difference may be due to socio-economic differences among contraceptors and non-contraceptors and their decision to substitute contraception for breastfeeding or this may be related to the hormonal effect of the contraceptive (Sentongo, 1992).

Breastfeeding and duration of postpartum amenorrhea

In Uganda the duration of amenorrhoea follows a pattern similar to the duration of breastfeeding. In societies without much breastfeeding the average period of amenorrhoea is three months. In Uganda the duration of amenorrhoea is 13 months and the average duration of breastfeeding is 19 months. Postpartum abstinence is relatively short in comparison to breastfeeding since only 40 percent of the women are still abstaining two to three months after birth. Breastfeeding and associated postpartum amenorrhea must account for much of the existing birth spacing.

Regionally, the West Nile, Western, and South Western districts have significantly higher durations of breastfeeding and amenorrhea than the Kampala, Eastern, or Central regions. Higher rates of postpartum abstinence in the western regions and the great esteem for high fertility in the east or central regions reportedly impact the birth intervals in these respective regions (Helen Mateega, personal communication). As one would expect because of socio-economic changes, the urban region of Kampala and the two regions close to Kampala, East and Central, have lower durations of both breastfeeding and amenorrhea.

Ugandan women under 30 years tend to breastfeed for slightly shorter durations than older women. The effect of shorter breastfeeding durations on amenorrhea can be seen when comparing durations for different socio-demographic groups (Table 1.8)

Table 1.8
Duration of breastfeeding and amenorrhea by
residence and education level

RESIDENCE	AMENORRHEA average months	BREASTFEEDING average months
Urban	9.4	15.3
Rural	13.1	19.0
EDUCATION		
No education	14.8	19.8
Some primary	11.8	18.2
Primary completed	11.1	17.8
Middle	10.6	16.4
Higher	5.4	14.0

Source. Studies in Family Planning, "...results from DHS", May/June 1991, pg 201.

Shorter durations of breastfeeding are associated with urban residence, region, maternal age less than 30 years, greater education, and contraceptive use

The majority of birth intervals in Uganda (61 percent) are 24 months or greater. Sixteen percent of the births are first births. The great number of births that are two to four years apart is mainly due to high levels of breastfeeding. Birth spacing among urban women is not as strongly linked to breastfeeding as for rural women since urban women have a much shorter average duration of breastfeeding and amenorrhea. Greater use of modern family planning methods by urban women probably makes the difference. The most highly educated women have the shortest period of amenorrhea, at 5.4 months, with correspondingly shortest duration of breastfeeding. With the current very low levels of modern contraceptive use, it is imperative that family planning programs emphasize optimal breastfeeding practices

Conclusion

Uganda is characterized as a poor rural population where women are isolated and have an extremely difficult life. Low modern contraceptive use, poor environmental sanitation and other conditions lead to a high fertility rate, high prevalence of diarrhea and ARI, chronic malnutrition, high infant morbidity and mortality. All of these health indicators will be helped by optimal breastfeeding practices. The policies, training and public education should be oriented towards protecting existing appropriate breastfeeding practices and promoting improved breastfeeding behaviors to reach a state of optimal breastfeeding. As Uganda develops, it is possible that breastfeeding and its protective amenorrhea effect could erode further leading to higher fertility that will counter hard-won advances in the socio-economic sectors.

INFANT FEEDING PRACTICES IN UGANDA

This chapter continues a review of the literature focussing on current practices. It also reports briefly on the status of feeding practices observed during the assessment to set the stage for program priorities.

Breastfeeding Practices

Initiation of breastfeeding

The initiation of breastfeeding in Uganda is almost universal with 97.6 percent mothers having "ever breastfed" (UDHS, 1989)

There are no data available on the timing of initiation at the national level. However, it appears that it is far from the optimal immediate and exclusive initiation. Among 926 primarily urban poor women in Kampala, 18.3 percent of the babies were given prelacteal foods. The most common prelacteal feed was glucose (68 percent). Formula (15 percent) and cow's milk (11 percent) were also commonly used (Karamagi, 1983). In another small sample of women (n = 143) from two adjoining hospitals in Kampala, 41.3 percent of the mothers reported giving prelacteal or supplemental feeds during the first few days or weeks postpartum. A significant proportion (27 percent) initiated breastfeeding later than 12 hours postpartum. There were large differences between the two hospitals. Sixty-three (63) percent of mothers in one hospital compared to 21 percent in the other hospital initiated breastfeeding within three hours after delivery. This may be related to the different proportions of cesarean deliveries in the hospitals, since half of the deliveries at the latter hospital were cesarean births (Mukasa, 1991).

Length of breastfeeding

Extended breastfeeding at one and two years is common in Uganda. Eighty-six percent and 39 percent of the children continue to be breastfed at one and two years respectively. The median duration of breastfeeding for Uganda of 19 months indicates prolonged breastfeeding (UDHS, 1989).

Breastfeeding duration, however, as measured by continued breastfeeding at one and two years is quite different in urban and rural areas, the UDHS found. Eighty-one percent of the rural women compared to 69 percent of the urban women are still breastfeeding at one year. Even more striking is the fact that only 13 percent of the urban women compared to 42 percent of the rural women are still breastfeeding at two years, see Table 2.1 below. Shorter durations of breastfeeding among urban women is supported by Karamaji's 1983 study that reported an average length of breastfeeding of 12.5 months in Kampala--much

lower than the DHS national average of 19 months. Among the wealthy Kampala women, the mean duration of breastfeeding was only 8.5 months (Karamaji, 1983).

Table 2.1
Breastfeeding duration by locale, 1988

<u>WHO Indicator</u>	Urban percent	Rural percent
Continued Breastfeeding (at 1 year)	69.2	81.0
Continued Breastfeeding (at 2 years)	13.0	41.6

Source. UDHS, 1989

Exclusive breastfeeding and introduction of supplements

National pattern.

About 70 percent of Ugandan infants less than four months old are exclusively breastfed (UDHS, 1989). The only other African country, among 12 covered by DHS, with a higher rate of exclusive breastfeeding is Burundi, where the rate is 89 percent. Most of the 12 West African countries have exclusive breastfeeding rates of less than ten percent. (See Figure 2 below) In general, the low exclusive breastfeeding rates in West Africa have been attributed to the frequent use of water very early in the infant's life because mothers believe that babies need water in the heat and humidity. This does not appear to be the case in Uganda, although given the high rates of stunting, the use of and how much water may actually be given merits further investigation.

Exclusive Breastfeeding in Africa

infants 0-4 months

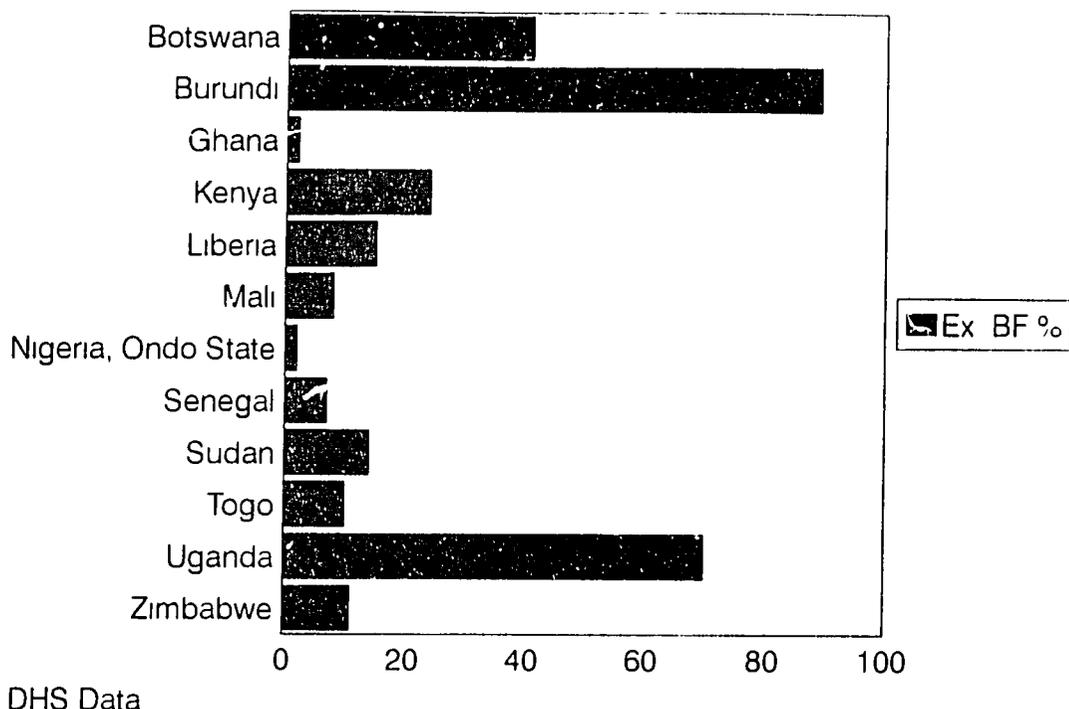


Figure 2 RATES OF EXCLUSIVE BREASTFEEDING IN AFRICAN COUNTRIES

Although the rates of exclusive breastfeeding are impressive by comparison and the UDHS found no infant exclusively bottlefed, still about one-third of infants are given other liquids and/or other foods before they reach four months of age. Interestingly, only six percent get other liquids, but not other foods. It seems that, if they are given any supplement, they are likely to receive solids (Table 2.2 below)

**Table 2.2
Feeding patterns for infants less than 4 months, UDHS, 1988**

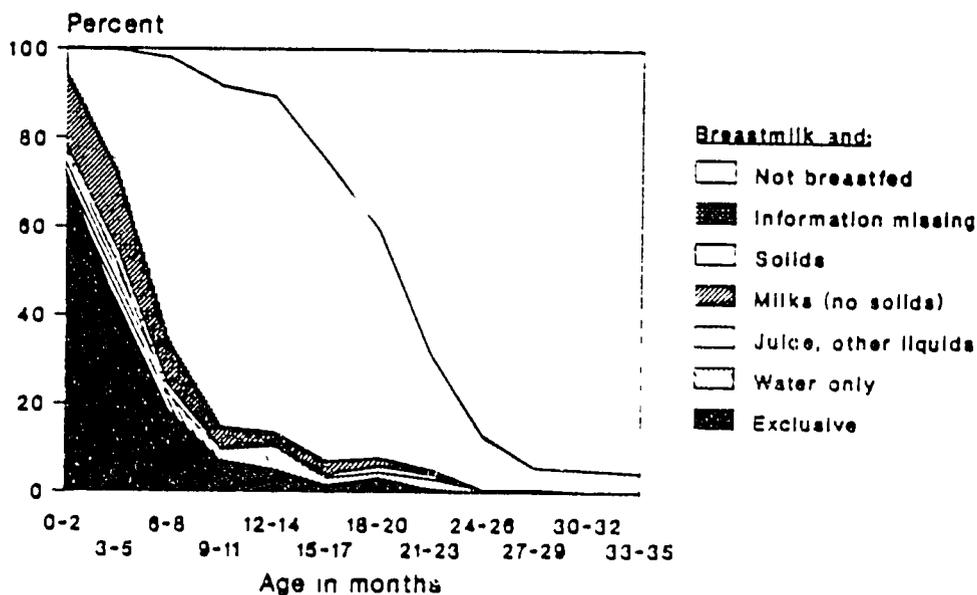
WHO Indicator

Exclusive breastfeeding (no other liquids)	69.7%
Predominant breastfeeding (other liquids, no solids)	6.2%
Breastfeeding plus supplements (liquids and solids or only solids)	24.1%
Bottlefed	0

According to the UDHS, two-thirds (66.8 percent) of the children receive foods, in addition to breast milk, at an appropriate time (when they are six to nine months old). Figure 3 depicts feeding practices by the child's age, in three-month groups (Sommerfelt, Boerma, Rutstein, 1991).

Figure 3

Feeding practices by child's age in 3-month groups (current status)



Number of children (0-35 months) 2800

Demographic and Health Surveys Phase I

Deviations from average pattern.

Feeding patterns for children under four months were not much different between urban and rural areas. The greatest difference appears to be that urban children are more frequently given other liquids and, consequently, a lower proportion are exclusively breastfed. Surprisingly, no urban children were exclusively bottlefed. The table below summarizes the WHO Indicators for infants less than four months by urban and rural residence.

Table 2.3
Feeding pattern for infants less than 4 months by urban/rural residence, and nation-wide percentages 1988

<u>WHO Indicator</u>	Urban %	Rural %	National %
Exclusive Breastfeeding (no other liquids)	62.5	70.7	69.7
Predominant Breastfeeding (other liquids, no solids)	12.5	5.3	6.2
Breastfeeding plus Supplements	25.0	24.0	24.1
Bottlefed	0.0	0.0	0.0
Source	UDHS, 1988/1989		

As with patterns for infants 0-4 months, there was little difference between urban and rural families related to the initiation of foods between six to nine months. Sixty-nine percent of urban families and 67 percent of rural families respectively initiated feeding between six and nine months.

Several smaller studies report patterns of supplementation in Kampala that should pattern toward earlier supplementation. In one study by Karamagi in 1983, a sample of 675 urban, Kampala children were studied. Eight percent were given supplements before four months. Seventy percent were given solids at four to six months. The majority received several local foods like bananas, potatoes, maize meal, beans, and groundnut. Only seven percent were given cereals, mainly maize porridge. The main reason given for starting solids was insufficient milk (42 percent). Two-thirds of the women who claimed they had insufficient milk were employed outside the home. With so many supplements, partial breastfeeding was common. Eight to nine percent of the infants were bottlefed with formula and many were given cow's milk with a cup (92 percent).

Similar results were found in a study (Kakitahi, 1990) of 226 urban Kampala children among lower and middle class homes. Sixty-six percent, almost the same as the DHS exclusive breastfeeding rate, of these poorer urban women exclusively breastfed until four months. However, 65 percent had started supplementing before six months. Of those who were supplemented, 34 percent started giving foods at four months and another 25 percent at five months. Middle class women were more likely to start supplementing earlier.

The indication of earlier supplementation (before four months) was found in a study of weaning practices in four districts (Sserunjogi, 1990). This study indicates that there are regional differences in supplementation patterns: a large proportion of women in Mukono

(51 percent) and Mbarara (27 percent) districts began supplementary foods before four months. Most infants in Arua and Kabale, by contrast, appear to be exclusively breastfed until the fourth month. Table 2.5 depicts these suggested regional differences in supplementation.

Table 2.4
Percentages of women introducing supplementary
foods in four districts of Uganda by age (months) of child

Districts	0-3 months	4-6	7-9	10-12	Over 12	Sample (N)
Arua (West Nile or North West)	-	69	25	4	4	48
Kabale (SW)	8	78	14	-	-	63
Mbarara (SW)	27	63	4	4	2	48
Mukono (Central)	51	37	11	2	-	53

The type of weaning food given as a first food also differs by region. In Arua most infants were started on millet or maize porridge or vegetable stew. In Mukono most got maize porridge or cow's milk. Almost all of the children in Mbarara got cow's milk. Sorghum porridge was most common in Kabale. In another small, rural household study in the Tororo district, two-thirds of the infants got cow's milk (Sserunjogi, 1992).

Mothers' Knowledge, Attitudes and Practices (KAP)

The KAP of mothers is poorly documented. What follows are impressions rather than reports from qualitative or quantitative studies. Therefore, conclusions from these impressions should not be drawn. Instead, the need to explore them more thoroughly should be pursued.

Prenatal care

Women are said to attend prenatal clinics in different health care facilities to ensure that they are registered for delivery. According to the anecdotal reports, mothers come for prenatal care because they fear being "rebuked" when they go to deliver in a hospital when they had not "booked". A TBA in a rural village at Kolonyi said women go to traditional birth midwives in order to monitor how far along they are in their pregnancies and in

order to receive herbal mixtures which they believe will help their babies to develop and "soften" the woman's bones.

Quality and quantity of a woman's diet

Many women say that they tend to both crave and dislike certain types of food when they are pregnant. A pregnant woman's diet does not differ much from the family diet. There are taboos that generally apply to women and not to pregnancy per se. These may include taboos against chicken, eggs, or fish.

There may be special foods served following delivery. A grandmother in Kikonu village, near Mbarara, reported that during the first five days after delivery, the mother is given a special diet of roast meat, heavily churned ghee that is mixed with boiled bananas (matooke). The mother is strictly not allowed any other food during these five days. Groundnuts are not allowed during this period because it is believed to cause diarrhea.

Initiation of breastfeeding

All of the women (mothers, health workers, TBAs, educators) visited during the assessment thought that breast milk is the best food for the baby. Women in Uganda are expected to initiate breastfeeding and generally do. Mothers sometimes breastfeed during the first few hours after birth, but allowing the mother to rest and giving prelacteal feeds is a well established practice. It appears from interviews, and certainly in the hospitals, that mothers do not feel the babies have to be washed before they can settle down with their mothers and feed.

Prelacteal and early supplemental feeds

There is wide use of prelacteal feeds and the continuation of these foods during the first few days after birth, resulting from a belief that mothers don't have enough breast milk to satisfy their newborns during the first two to three days. It seems that health workers have contributed to this widespread practice because almost every health worker interviewed gives glucose solution or warm water to their own children and many of them recommend it to their patients. Most maternity wards, especially in rural areas, and traditional birth attendants, provide boiled water to mothers who either add glucose powder or sugar and give it to their babies. They believe that the baby's loud cry indicates that the child is hungry because the mother may not have had enough to eat before delivery. A TBA said the sugared water puts the baby at peace. One grandmother and another TBA said that they introduce herbal solutions to the baby during the first few days in order to clean the digestive system and to manage disease that may have been contracted during pregnancy (the grandmother did not think this would work against AIDS).

Use of colostrum

Colostrum is given almost universally because of a belief that if breast milk drops on the ground it will cause the death of the baby and will cause the milk to disappear. This practice and belief is in sharp contrast to practices and beliefs in other areas in Africa and the world where colostrum is thought to be "bad" and is discarded. While this belief concerning loss of breast milk positively affects colostrum, it negatively affects women's willingness to express milk.

Night feeds

The Ugandan team members mentioned that some mothers limit or control breastfeeding during the day, hoping to store the breast milk for the night. This results in mothers breastfeeding less during the day and giving cow's milk to make up for the reduced breastfeeding.

Insufficient milk syndrome

Although almost all mothers are able to breastfeed successfully, insufficient breast milk production is the most common concern of mothers. Results from a review of case histories of 202 mother-infant pairs at the Lactation Clinic at Mulago Hospital in Kampala show that the most common complaint was "insufficient milk", described by 63 percent of the mothers (Mukasa, April, 1992). The study also found that three quarters of the women who had begun supplementation before four months of age did so because of "insufficient breast milk production". These clinic observations revealing a high degree of concern about insufficient milk was supported by assessment interviews with mothers and health workers. Team members found that the most common reason for starting other fluids was "I was not able to have enough breast milk".

Exclusive versus predominant breastfeeding

Exclusive breastfeeding often becomes predominant breastfeeding because of the use of water. Water or sugar water is given to children mainly during the first few days after delivery. As soon as the mother realizes she has enough milk she stops giving the water, although some mothers continue giving water. A mother of ten children in Mbale District said that by the age of two months her children are always thirsty and she gives them drinking water.

It appears that so long as mothers feel they have enough breast milk they are content to breastfeed exclusively. Many mothers said, "I gave only breast milk because I had enough". But others say that "as soon as I realize that my baby is not getting enough breast milk I start introducing cow's milk". Most mothers find cow's milk very expensive, so they try to breastfeed their children as long as possible until the children can eat a suitable, soft, family diet composed of the banana or some other staple. However, anecdotal accounts

suggest that if a family keeps cows, adding cow's milk to the baby's diet of breast milk may be done very early. It appears that mothers who give cow's milk as a first supplement tend to dilute it with water before they give it to the baby. They believe that the milk is too "rich" for the baby's fragile gut

Interviews with mothers working outside the home, such as nurses, revealed that they exclusively breastfeed their children for a much shorter period than rural mothers. Most working mothers introduce fluids during the second month of life. Maternity leave lasts for 45 days, and unless a mother can extend it with her annual leave of 30 days, she feels she cannot continue to breastfeed exclusively much longer than one month. Expressing breast milk to leave for the baby is not usually done

Introduction of semi-solid and solid foods

While town and working mothers who can afford cow's milk and other supplements introduce these early, many rural mothers say that they breastfeed up to six to seven months, until their child can manage the family food such as maize, soya, or millet porridge, although cow's milk was often preferred

Reasons for stopping breastfeeding

There was wide agreement among the Ugandan team members that women will stop breastfeeding if they are separated from their infants for more than a day because of a belief that returning to breastfeeding after a period of not breastfeeding makes the infant sick.

Also, women will stop breastfeeding after realizing they are pregnant, because they think the milk is bad for the nursing baby. This belief continues to be very strong despite health education messages encouraging women to continue to breastfeed when pregnant.

Reasons given for cessation of breastfeeding among wealthy women include baby's age (31 percent), sick baby (20 percent), pregnancy (17 percent), sick mother (13 percent), and working mother (two percent) (Karamagi, 1983). Sentongo's hypothesis about the shorter duration of breastfeeding among the urban and the wealthy is that it is due to the process of modernization and the opportunities that urban women find to work away from home in non-agricultural jobs. These women can also more easily substitute milk formula for breast milk and find it more socially acceptable to stop breastfeeding early than women in rural areas (Sentongo, 1992).

Use of bottles

Bottle feeding appears to be uncommon among Ugandan women. Many health center staff in the districts visited said that they discourage bottle feeding. All the health facilities also said that they do not allow bottles on the premises and some confiscate the bottles from

mothers and instruct them about using a cup and spoon. However, many mothers use the 200 ml cup with a lid with little holes in the spout which makes thorough cleaning difficult. Health workers and mothers did not recognize this problem with the cup.

Breastfeeding and HIV

HIV-positive mothers sometimes consult health workers as to whether they should continue to breastfeed their children. Health workers continue to recommend breastfeeding unless the mother has become very sick and weak and would not be able to sustain breastfeeding. There are anecdotes of mothers not wanting to breastfeed when they know or suspect themselves to be HIV-positive, because they want to conserve their own energy.

Role of Other Family Members

Breastfeeding and child feeding in general are seen as a woman's responsibility, although fathers sometimes instruct mothers on what they should feed the baby. For example, a mother in the lactation management clinic disregarded the advice of the health workers to exclusively breastfeed her three-week old twins and was giving cow's milk reportedly on the insistence of the father who wanted the babies to stop crying at night. Fathers might also bring home a few special foods for their wife for the first couple of days following birth. As a status symbol men may buy formula for their wife to give their child.

Traditionally mothers-in-law and aunts have a great influence on what the mother feeds her infant.

Conclusions

Generally, in Uganda the outlook on breastfeeding is positive, reflected in near universal initiation and prolonged breastfeeding. However, because of these practices there is no sense among policy-makers or health workers that breastfeeding could be improved. While it appears there is only a limited use of the bottle and virtually no formula use, it is possible that as urbanization increases and more women work outside the home, they will resort to bottlefeeding and/or the use of breast milk substitutes. Because of the high fertility rates and the low use of modern contraceptives, it is imperative that a program be put in place to halt any deterioration of the current situation and, in fact, to strengthen particular existing practices so women practice optimal breastfeeding, realizing its full contraceptive and health potential.

There are many factors that are supportive of breastfeeding. They are:

- Initiation of breastfeeding is close to 100 percent. While initiation may be delayed, there is not tremendous resistance to use of colostrum or early initiation.
- Rooming-in and bedding-in are widely accepted culturally.
- Once lactation is established, it appears that many mothers are comfortable with exclusive breastfeeding for varying periods of time.
- Prolonged (longer than six months) predominant breastfeeding seems to be more common in rural areas and is determined not only by cultural practices but also by the availability (or non-availability) of suitable alternative weaning foods.
- Breastfeeding is commonly practiced beyond one year.
- There is community and household support for breastfeeding. Elder relatives and traditional birth attendants appear to be a major resource for not only assisting at deliveries but also for counselling mothers on breastfeeding.
- There appear to be traditional beliefs and practices which are beneficial to breastfeeding, (e.g. improved feeding of the mother in the immediate postpartum period).

Practices that obstruct optimal breastfeeding include:

- Prelacteal feeding appears to be part of traditional breastfeeding practices. Plain water and water with either sugar or glucose powder added are the most common feeds given. Prelacteal feeding often extends into the first weeks of life.
- Among urban and higher educated women, supplementation tends to begin early between two and four months postpartum. There is a danger that other mothers will see these mothers as role models.
- Traditional beliefs and practices (e.g. breastfeeding that has been interrupted for more than 24 hours cannot be resumed, or that milk should not be expressed lest it spill on the ground and the baby dies).

II. POLICY AND PROGRAM REVIEW

BREASTFEEDING POLICY AND RESEARCH RELATED TO POLICY OR PROGRAM FORMULATION

National Breastfeeding Policy

A Food and Nutrition Policy and Strategy for Uganda was drafted in June 1992 by the Uganda National Food and Nutrition Council Subcommittee. For inclusion in the policy and strategy document, ULMET drafted a Uganda National Policy on Mother and Child Care that included elements of optimal breastfeeding (Appendix C). In spite of ULMET's contribution, the National Food and Nutrition Policy has only a third of a page on breastfeeding and weaning. It mentions the need for mothers to breastfeed exclusively for four to six months and cites a study conducted in the 1960s showing that Ugandan mothers do not produce adequate breast milk due to poor maternal malnutrition. For weaning, the policy urges the use of locally-available foods such as groundnut, soya beans, simsim, and milk, which are high in energy and protein.

The chairman of the subcommittee explained that the Food and Nutrition Policy is a guideline for any entity involved in food and nutrition. Implementation documents will come from each entity. Currently, the chairman is eliciting reactions to the policy statement and will include breastfeeding concepts in the final national policy, if they are made available to him.

Maternal and Child Health Policy

There is no written policy for maternal and child health. Also, there are no policies specific to service delivery for sections of maternal and child health, although there are procedure manuals. The Assistant Director of Medical Services (ADMS) for MCH/FP said a policy could be developed for breastfeeding.

Policy of Diarrheal Disease Control and Breastfeeding

There are written guidelines for the management of diarrhea and breastfeeding. ULMET has worked together with PRITECH (the A.I.D. project providing assistance to the national CDD program) on a training curriculum in optimal breastfeeding management for diarrheal disease control program managers. A workshop to test the training curriculum in breastfeeding and diarrhea control was held in July 1992 for Ugandan trainers. In September 1992, there will be two training sessions for operational level health workers and trainers.

Breastfeeding Policy for HIV+ Mothers

Breastfeeding does not appear to have provoked a big debate among AIDS policy-makers in Uganda. Policy-makers and researchers follow the WHO policy of encouraging optimal breastfeeding by all mothers because the health risks of not breastfeeding are greater for the child than the risk of HIV infection. Also, the probability is high that breast milk is of less importance than pre or perinatal vertical transmission of the HIV from mother to infant. In practice, very sick mothers are unable to breastfeed, and a team member said that HIV-positive mothers sometimes consult health workers as to whether they should continue to breastfeed their children. Health workers continue to recommend breastfeeding unless the mother has become very sick and weak and would not be able to sustain breastfeeding. There are anecdotes of mothers not wanting to breastfeed when they know or suspect themselves to be HIV-positive, because they want to conserve their own energy.

Family Planning Programs and Breastfeeding Policy

There is no policy to encourage breastfeeding in family planning programs. While representatives of family planning organizations are aware of the importance of breastfeeding in birth spacing, most do not emphasize breastfeeding as a family planning method, nor are they sure how to teach their clients about it.

Coordination and Implementation of Breastfeeding Policy

There is no national breastfeeding coordinator or committee. However, there are health personnel who are committed to breastfeeding. These persons, mostly within the Mulago Hospital complex and in Kampala, include Wellstart associates and belong to the Uganda Lactation Management and Education Team (ULMET). In spite of their experience, they are not always consulted when they could contribute to the formulation, coordination and implementation of breastfeeding policy. An example is the integration of breastfeeding in family planning programs. This omission could be because ULMET is not officially designated as the breastfeeding coordinator. Now, ULMET members communicate personally and informally on breastfeeding issues with policy-makers such as the ADMS for MCH/FP, and heads of obstetrics and pediatrics departments at the Mulago Hospital.

In terms of policy implementation, it is only since the results of the UDHS have been released that there has been any money for breastfeeding activities. What happens in the next few years will be critical to breastfeeding programming. Earlier, before ULMET was formed, the only organization that had promoted breastfeeding was the International Baby Food Action Network, which had organized a seminar in 1983 on the International Code on the Marketing of Breastfeeding Substitutes and training seminars for influential persons

such as teachers and health workers. NGOs such as CARE, SALEM (a German religious NGO), Save the Children Fund, and others conduct maternal and child health programs that teach or promote better nutrition practices. Unfortunately these programs often do not have personnel with the necessary knowledge or skills to promote optimal breastfeeding practices. Appendix D describes the activities of some of the NGOs interviewed by the team

Research Related to Breastfeeding Policy and Programs

Health information system

The existing national health information system for MCH/FP is designed to collect mostly numbers of services delivered such as immunizations given or the number of prenatal patients seen. Information on breastfeeding is not included in this system.

Research capabilities

Makerere University, ULMET, and the Child Health and Development Center (CHDC) at Makerere University are key research resources on breastfeeding and child feeding in Uganda. In addition, the Ministry of Health and the Department of Statistics within the Ministry of Planning are responsible for large nationally representative studies like the 1991 Population and Housing Census and the Uganda National Household Budget Survey. The Demographic and Health Survey carried out in 1989 is being further analyzed by the CHDC. Another UDHS is planned within the next five years to provide Uganda with comparative data including national breastfeeding practice data.

Currently the Department of Statistics, Ministry of Labor is carrying out an "Integrated Household Survey". This survey is collecting anthropometric data as well as data on the type and frequency of feeding for children. This survey should provide breastfeeding data that can be compared, reasonably well, to the UDHS data. Since there are some questions about the exclusive breastfeeding rate established by the UDHS, this survey may provide additional evidence to clarify the breastfeeding situation.

Smaller scale studies, either by size of sample or area of the country, which examine breastfeeding and infant weaning practices have been carried out by ULMET members in Kampala. These studies have documented practices at Mulago Hospital and in the Kampala area. Dr. Karamagi studied breastfeeding practices in the Kampala area in 1983 and, currently, Dr. Mukasa is carrying out a study examining breastfeeding initiation at Mulago and Mbarara Hospitals.

Finally, Makerere University and Case-Western University are carrying out several pediatrics AIDS research projects in Kampala. Specifically, these AIDS studies are looking at the determinants of vertical transmission from mother to child. However, this does not

include the transmission of HIV through breast milk, although they do have information on breastfeeding practices. Within their study, they recommend continued breastfeeding regardless of HIV status, consistent with the current WHO recommendation for developing countries.

Preliminary analysis of the data collected so far among their sample of 1200 mothers shows that 95 percent were still breastfeeding at nine months. The other five percent of mothers were extremely sick. At 12 months, 90 percent were still breastfeeding. It appears that one risk factor for post-natal transmission may be high risk behavior late in pregnancy, including multiple partners, which may cause an infection during lactation. Their data appear consistent with other case histories showing that a very high maternal viral load may contribute to HIV transmission through breast milk. One of the researchers thinks that more research is needed to rule out other possible modes of transmission. In his opinion, the type of bottle versus breast case-control study that is needed to unravel true rates of transmission via breast milk would be unethical in Uganda. He would like to pursue a case-control trial looking at HIV transmission via colostrum.

There are no operations research activities on delivery of breastfeeding services.

Conclusions

The lack of written policies on infant feeding make it difficult to move forward with programs. The recent interest in improving infant and child feeding provide a supportive environment for writing or improving needed policies on maternal and child health and nutrition. Ensuring a state-of-the-art breastfeeding policy under the National Food and Nutrition Policy is critical and would be fully in keeping with Uganda's commitment under the World Summit on Children and the International Nutrition Conference to improve the nutrition and health of Uganda's children.

LEGAL AND WORK ENVIRONMENT

Marketing of Breast Milk Substitutes

A draft of "The Food and Drug (Marketing of Infant and Child Foods) Regulations" was first written in 1984 and revised this year (1992). The Code (Appendix E) needs to be approved by the MOH and passed by the Justice Department. The revival of the Code after a long delay is related to renewed interest in breastfeeding after the UDHS results

There are a number of brands of infant formula and baby cereal available in Ugandan shops. The team was able to find infant formula in rural areas as well as in towns. However, there was a general consensus that formula use is limited to a small percentage of the population who can afford it. Fresh cow's milk is the most popular and affordable milk supplement used in Uganda. The infant formula, milk and infant feeding utensils seen in the shops and their prices are listed below

NAN (infant formula) 500 gm @ 4,500 shillings (US\$3.84)

Lactogen Full Protein 500 gm. recommended from five months @ 3,500 shs. (US\$3.00)

NIDO (powdered milk) 500 gm. @ 3,500 shs. (US\$3.00)

[NB: A can of infant formula would last a three-month old, non-breastfed infant, three to four days.]

Cerelac (cereal) 500 gm. @ 2,500 shs. (US\$2.14)

500 ml fresh cow's milk costs 200 shillings (\$0.17) in Kampala. Mothers are said to arrange with farmers to deliver the milk to them on a regular basis.

An 8 oz. feeding bottle is sold at 1,500 shs. in Kampala; a nipple costs 700 shs. (\$0.60)

An 8 oz. feeding cup with a cover costs 500 shs. in Kampala (a 5 oz cup is 400 shs.).

Glucose powder was widely available in packages and cans from 15 gm. sachets to 500 gm cans sold from 100 to 2000 shillings (\$0.08 - \$1.71). The instructions on the glucose package recommend it as an energy source for the whole family and, according to the shopkeepers, it is a fast-selling item.

All the products found in the shops were manufactured by Nestlé in Kenya and imported into Uganda.

Infant formula is not provided in the hospitals or maternity homes nor is it promoted by the mass media. Until recently cow milk is said to have been distributed in the Mulago Hospital supposedly for the mothers to drink. The milk is no longer available because of the poor economy. A matron of a Catholic hospital observed that the hospital rarely receives free samples of infant formula as they used to and added that she noticed that breastfeeding went down when the free milk was available. Donated milk (food aid) is distributed mostly to orphanages.

Women's Work and Support Systems

As described earlier, the majority of Ugandan women are farmers living in the rural areas. Their role is to produce food, manage the home, look after their husbands, fetch water and fuel, bear and raise children, treat illnesses and perform other social and cultural functions. There are inadequate provisions for any working mother to breastfeed optimally even in the first four to six months postpartum. The problem for those women in the rural area is that they work long hours on their farms each day, frequently with minimal food and fluid intake or sufficient time off to breastfeed adequately.

In the urban areas, some are small traders, day laborers, or housewives. A small percentage of professional women are found, mostly in the urban areas. In the UDHS, only ten percent of women surveyed worked outside their home.

The official length of paid maternity leave is 45 days. Women sometimes arrange to take their annual leave and gain 30 more days. Mothers in the private sector may be granted more or fewer days of maternity leave. At the end of their leave, the baby is often left with a maid while the mother is at work. Most mothers supplement the breast milk before the date to return to work in order to get the baby accustomed to food other than breast milk. In very rare instances, employers or supervisors allow mothers breastfeeding breaks. Mothers do not leave expressed breast milk for their babies.

The team learned that proposals have been made by the Ministry of Labor and the Department of Women's Affairs to extend maternity leave to 90 days. This proposal reportedly was not supported by employers and also by some women in decision-making positions, who felt the longer leave will mean less employment of women. The proposal reportedly was made without first educating policy-makers and employers about the benefits to them without building safeguards to secure women's employment.

While women in the informal sector have more flexibility, their work environments are far from convenient for child care and optimal breastfeeding. There are no protections for these women.

Creches are rare. In Kampala, there are a couple of privately-owned creches available for low-income mothers. These are reportedly well-patronized, indicating a need for them. The team visited one of these centers in a slum area of Kampala. The center, located in an ordinary house, had 52 children enrolled of whom nine were infants under one year old. It is close to the industrial area in Kampala, and according to an attendant, the breastfeeding mothers come in during their breaks to feed their babies.

It was interesting that the Ugandans in the assessment team were divided in their opinion as to the acceptability of creches in the work place. Some felt that the difficulties in transporting a baby to the office through the public transportation system were so daunting that many mothers would not welcome work place creches.

Women's groups

A Ministry of Women's Affairs was established in 1988. However, in 1991, the ministry was made a department of the Ministry of Women in Development, Culture, and Youth in a cost-saving move to reduce the number of government employees. The department's purpose is to help raise the status of women and advance policies that promote women's economic independence. The Department of Women in Development keeps in contact with women's organizations and groups through the National Council of Women (NCW), the umbrella organization for women's groups.

The non-governmental women's organizations include church-related, professional or occupational associations, and mother's clubs, etc. In most cases the groups are formed to address the welfare of its members or as social clubs. Approximately 20 percent of women belong to a women's group, usually in urban areas. These groups often organize activities to educate their members on family health, nutrition, and welfare. The NCW provides a means for locating and reaching these groups of women.

Breastfeeding mother's support groups

Traditionally mothers are supported by their mothers, the extended family and their communities in the care of their babies. This is still very much the case for most women in the rural areas. Even in Kampala, post-delivery women in the hospital wards are often helped by their female relatives, including helping them breastfeed or giving the babies prelacteal feeds. Nevertheless, migration into towns, breakdown of families resulting from civil strife, misinformation about breastfeeding, breastfeeding problems, and employment outside the home create a need for other support systems to help mothers successfully breastfeed. During the last year, more than two hundred women consulted the lactation clinic in Mulago Hospital for help with breastfeeding. Some of their concerns could have been handled within the context of easily accessible community-based mother's support systems.

The concept of breastfeeding mothers' support groups is new to Uganda and is being fostered by ULMET at two locales:

- At Kawempe Health Clinic just outside Kampala, there is a mother's club that is visited once a month by ULMET members to discuss lactation. The ULMET chairperson, a community medical officer with Save the Children Fund, works at the clinic. There is also a member of the club living in the community who has been trained to help mothers with common breastfeeding problems and refer other problems to the lactation center. The meetings are held on Sundays and this, reportedly, limits ULMET members participation.
- A new group has been proposed by a retired nurse who lives in Kansanga near Kampala. The nurse has been attending the lactation clinic in Mulago Hospital to upgrade her knowledge and skills. ULMET members reportedly have not had transportation to visit her premises.

Conclusions

The current status of laws and the work environment must be improved to offer more support for optimal breastfeeding. Generally, there are only obstacles related to women's status and work and optimal breastfeeding. They are:

- Infant formula is available even in some rural areas. It is only the cost that prevents it from being used more.
- A draft Code on the Marketing of Breast Milk Substitutes has been prepared since 1984 and revised this year, but has yet to be enacted so enforcement can begin.
- The draft Code of Marketing (and other policies) should contain strong prohibitions against infant feeding cups.
- The current allowable duration of maternity leave is inadequate for women working outside the home to be able to conveniently breastfeed their babies exclusively for four to six months.
- Employers' negative attitudes and women's fear of reprisals by employers have hampered attempts to extend maternity leave.
- The lack of adequate child care arrangements at the work place or in the community.
- Women's heavy workload suggests they might find it difficult to breastfeed optimally. There are inadequate provisions for any working mother to breastfeed optimally, even in the first four to six months postpartum.

FINANCIAL SUPPORT FOR BREASTFEEDING

To date, breastfeeding has been considered part and parcel of maternal and child health (MCH) services. No specific activities have, up to now, been carried out to promote breastfeeding. Therefore, program costs for breastfeeding are not available. Now that an Office of Nutrition will be established in the Ministry with responsibility for breastfeeding, costs can be monitored.

Recently, activities specific to breastfeeding have been organized mainly by the Uganda Lactation Management and Education Team (ULMET). These activities have included monthly and an annual meeting for members, up-date workshops, a scientific meeting, training seminars, a lactation clinic at Mulago and Mbarara, fostering the formation of mother-to-mother support groups, radio and TV broadcasts and a quarterly newsletter. For the day-to-day running of these activities, ULMET has relied heavily on members volunteering time plus a small annual subscription for each member. For the more costly activities, such as training, ULMET has relied on activity-specific grants from various funding agencies.

Since 1988, A I D., through Wellstart and PRITECH, has been responsible for funding the training of 11 Ugandans, including one Wellstart Senior Fellow at the Wellstart Lactation Management Program (LME) program in San Diego. A I D. also sponsored the Wellstart Fellow to present a paper at a conference in Atlanta, Georgia and to tour "kangaroo baby care"³ sites in Latin America.

Save the Children Fund (SCF/UK) provided funds for ULMET's scientific meeting of 1990 as well as a one-day update seminar in April, 1992. They have provided their facilities and stationery to ULMET to produce the quarterly newsletter and have given transport from time to time for various activities. SCF also sponsored one ULMET member to participate in an international conference in Nairobi, Kenya. Further, SCF contributed US \$100 to the financial costs of World Breastfeeding Week which ULMET organized in August 1992.

In the mid 1980s, International Baby Food Action Network (IBFAN), Africa Region, sponsored two two-week training workshops on breastfeeding. IBFAN sponsored one ULMET member to participate in their Tenth Anniversary Celebrations in Manila. More recently, IBFAN gave ULMET a grant of US\$1000 for a study plus other activities and also contributed US\$250 towards World Breastfeeding Week activities.

Recently, UNICEF has begun funding breastfeeding activities. UNICEF funded the workshop which developed the breastfeeding training modules, the pilot and the first training course in September 1992. They also funded the workshop which drafted both

³ Kangaroo care is the warming of an infant on the chest of the mother. It is being studied as an alternative to incubation for premature infants.

the National Action Plan and revised the Uganda version of the Code of Marketing of Breast Milk Substitutes in May 1992. UNICEF has provided most of the transport required for this assessment. They have also shown keen interest in the development of the Baby Friendly Hospital Initiative in Uganda. Further, UNICEF contributed \$ 200 towards World Breastfeeding Week activities this year. In the future it appears UNICEF will continue to promote breastfeeding with money made available by USAID/Kampala.

The World Health Organization (WHO) Uganda country office has given moral support over the years but has not provided financial support. WHO had agreed to provide a grant of US\$2,000 to ULMET for its activities during 1992. However, the Ministry of Health's Planning Committee decided that grant could not be given to ULMET.

Conclusions

The current situation regarding funding for breastfeeding, after years of neglect, is hopeful. The supportive factors are:

- Breastfeeding has been recognized as a special need and is receiving national and donor attention backed by financial commitments, albeit small, so far.
- Donor funding has helped establish an institutional capacity to carry out a comprehensive breastfeeding program by putting money into basic training at Wellstart.
- The NGO, ULMET has tremendous potential to do more, if funded.
- Obstacles to increased funding for breastfeeding activities include: The "competition": Uganda has many pressing young child health and nutrition needs.
- There is not a strong precedent among government departments or donor agencies to program resources directly for breastfeeding activities.
- Most of the breastfeeding promotional efforts have relied heavily on the voluntary efforts of a few committed individuals in ULMET. Possibly funders will think this should continue.

HEALTH SERVICES

Formal Health Services

Structure of the health services

There are many systems and levels of both formal and informal health care in Uganda. They range from government and NGO systems including religious organizations and private practitioners to traditional healers and traditional birth attendants, to pharmacists, shopkeepers and market vendors. The government health care system is structured in a hierarchy of the national referral hospital (Mulago), regional referral hospitals (eg Mbale Hospital), district hospitals (eg Kiboga Hospital), health centers, dispensaries, sub-dispensaries and aid posts at the most peripheral level. In a few areas, there are mobile clinics which reach the more remote areas from time to time. Generally, the government health care services cover Kampala, large towns, and the district level. Outside of this, coverage is left to the informal and community-based services of NGOs and the traditional and commercial sectors.

Patterns of prenatal care

According to the 1988/89 UDHS, approximately 87 percent of women who had delivered in the previous five years had received prenatal care from trained health workers in the formal health care services. Table 6.1 reveals that the majority of prenatal health care providers (76 percent) were nurse-midwives. Despite the high level of prenatal care, 12 percent of women did not receive any prenatal care, with the highest of non-receipt in the West Nile and Western Regions. There is a general feeling, however, in the Department of Obstetrics and Gynecology at Mulago Hospital that the UDHS figure of 13 percent of women receiving no antenatal care is an underestimate. In their experience, approximately 25 percent of women delivering in Mulago Hospital have received no prenatal care and it would be reasonable to assume that the proportion is even higher in the rural areas.

While only 0.6 percent of pregnant women were reported to have received prenatal care from traditional health care providers, it is important to note that even among women who attended the formal health services, a high proportion (though not quantified) also sought traditional care.

Fifty-six percent of the women received at least one tetanus toxoid injection.

Table 6.1
Percent distribution of births in last 5 years by type
of prenatal care and percentage of births where mother
received tetanus by locale

Locale	Doctor	Trained Nurse\ Midwife	Trad'l Attendant	None	Other or Missing	Percent with Tetanus	Number of Births
TOTAL	11.1	75.6	0.6	11.9	0.8	55.6	5004
Urban	29.1	66.2	0.1	3.7	0.9	74.9	487
Rural	9.1	76.6	0.7	12.7	0.8	53.5	4517
West Nile	12.0	54.5	2.4	30.5	0.6	57.5	274
East	7.0	88.0	0.6	4.1	0.3	68.9	1378
Central	20.0	70.6	0.2	8.6	0.5	47.9	1267
West	3.1	59.6	2.6	2.4	6.2	52.1	319
South West	4.7	78.3	0.4	16.4	0.2	45.9	1499
Kampala	34.6	61.2	0.0	3.2	1.5	79.7	267
Luwero Triangle	16.4	72.0	0.1	11.4	0.1	50.9	524

Source: UDHS, 1989

In a typical public health facility, the procedures at the antenatal (booking) clinic begin with the pregnant women assembling at the clinic site early in the morning, about eight o'clock. The women are registered, and a group health education session is conducted by either a health visitor (public health nurse) or a midwife. In some places, the health education precedes the registration. The health education talks at the prenatal clinics address a number of issues but tend to concentrate on the importance of prenatal care, personal hygiene, immunization and family planning. The feeding of the expected baby is rarely discussed.

Theoretically, the women receive an antenatal card on which the history, clinical, and the laboratory findings are recorded. In most instances, however, such cards are in short

supply and then the health workers generally advise the women to obtain their own small notebooks which are used in place of the card to record the information

On the antenatal card, the history required of the woman includes mostly obstetrical and gynecological, medical and surgical information with no space for a breastfeeding history. Similarly, the prenatal physical examination does not call for a breast exam. The exceptions are cards designed by particular programs or agencies such as the MotherCare Life Savings Skills Project cards and the Mbarara University of Science and Technology teaching hospital and the Old Mulago Hospital Cards. The physical examination section also requires that the woman's weight be recorded in order to monitor weight gain during pregnancy but the woman's nutritional status per se is not assessed. The women receive tetanus toxoid at the prenatal clinics. They are screened, and, when necessary, treated for ailments such as malaria, anemia, and intestinal worm infestations. They are then given appointments for the next visit. Commonly all the above procedures are carried out by nurse-midwives and public health nurses. In some rural health facilities, with a shortage of the higher cadre of trained staff, nursing aides (who are generally trained on the job), assume these responsibilities. Complicated cases are usually referred to the medical assistant or doctor in the same or referral health facility.

Patterns for hospital and clinic deliveries

Although most prenatal care is given by a trained nurse or midwife, only about 38 percent of all deliveries are attended by a trained health worker, 36 percent by a relative and six percent by a traditional birth attendant (UDHS, 1989). However, it is highly probable that many of the attendants described as relatives are also traditional birth attendants. There are wide discrepancies between localities and Table 6.2 shows deliveries by type of attendant and residence (urban/rural). The UDHS revealed that younger women, urban women, women in Kampala and better educated women are more likely to obtain assistance from a trained health care provider than are other women. The proportion of women with no education who are not assisted at delivery by any trained provider (26 percent) is about four times higher than it is for women who completed primary education or more.

Table 6.2
Type of birthing assistance by locale (1983-1988)

Type of assistance	Rural	Urban	Total
Doctor	1.8	12.2	2.8
Trained Nurse/Midwife	32.0	67.7	35.5
Traditional birth attendant	6.8	2.4	6.3
Relative	38.4	10.9	35.7
Other	1.8	1.2	1.8
No one	18.8	4.7	17.4
Missing	0.3	0.9	0.4
TOTAL	100	100	100

Source: UDHS, 1989

Nationally, the MOH estimates that approximately 20 percent of births are low birthweight (2.5 Kg or less). Table 6.3 shows the percentage of babies that had low birthweight as recorded in the labor room of three hospitals visited during the assessment. The table also shows the approximate proportions of deliveries by spontaneous vaginal delivery and by cesarian section. In all hospitals visited the initiation of breastfeeding was delayed for all babies delivered by cesarian section from several hours to days. The high proportion of cesarian section means a high proportion of babies receiving prelacteal feeds (mostly glucose solution) for an extended period in the hospital. These initial feeding practices may slow growth, and the possibility of intrauterine growth retardation causing the LBW babies may be related to the high rates of infant stunting. The proportion of the LBW newborns who are small for date is not known. The rate of LBW in the larger proportion of babies delivered at home (about 60 percent of all deliveries, UDHS, 1989) is unknown.

Table 6.3
Type of delivery and percentage of LBW in three hospitals

Hospital	Interval in 1992	Deliveries in interval	% SVD	% C/S	% LBW
New Mulago	6 months	5042	82.5	17.5	23.4
Mbale	1 month	272	92.6	7.4	7.4
Mbarara	1 month	208	95.2	4.8	2.9

Source: Labor ward records

NB: These figures may not necessarily be representative of deliveries in the hospitals concerned because of the short periods covered.

All the labor wards visited by the team routinely use ergometrine intra-muscularly to prevent postpartum hemorrhage. Usually only a single dose is given unless the mother is judged to bleed excessively.

The use of prelacteal feeds is almost universal, supported by health workers and most mothers. Newborns are given warm water with or without the addition of glucose or table sugar. The general belief is that the baby requires something to drink because the mother does not yet have any breast milk. In New Mulago Hospital, the team observed several mothers and grandmothers giving glucose water feeds by cup and spoon.

In most hospitals in Uganda, the vast majority of newly-delivered mothers not only room-in 24 hours with the baby, but actually bed-in with the babies. In many cases the mother is the one that washes the baby sometime after the delivery, usually after starting breastfeeding. Sometimes, however, there are variable periods of separation such as when the baby is delivered by cesarian section and the hospital protocol calls for keeping the baby in a nursery for the first 24 hours. The physical lay-out of most hospitals and maternity centers is supportive of bedding in, indeed in most there are no facilities to allow the separation of the mother and baby.

A survey of hospitals and other health facilities (Sserunjogi, 1992) revealed that no free infant formula samples are currently available to mothers either at the time of discharge or at any other time. Occasionally a mother will purchase her own infant formula, but these cases constitute less than one percent of newly-delivered mothers.

It is generally assumed that all mothers will breastfeed and most mothers are given their babies to hold shortly after the completion of the third stage of labor. But the time lapse between birth and initiation of breastfeeding is variable. Generally, it is only a small proportion of mothers who initiate breastfeeding during the first hour after delivery (four percent) in New Mulago Hospital and 21 percent in Old Mulago Hospital (Mukasa et al., 1991). Most mothers start breastfeeding several hours after delivery. In the case of cesarian deliveries, the delays are considerably longer and may exceed 24 hours.

Colostrum is generally given to babies when mothers initiate breastfeeding. None of the mothers interviewed expressed any misgivings about colostrum. A small proportion of women, especially in central Uganda, express a little of the initial colostrum to "unblock" and "flush out" the milk ducts before putting the baby on the breast.

Generally there are no restrictions on breastfeeding times, frequency or duration. However, a lot of mothers who have not received any information prenatally do not know that they need to initiate breastfeeding early and feed frequently thereafter. The mothers receive very little guidance, support and encouragement from the attendant health workers. Breast examination and breastfeeding counselling are generally lacking except in units where there is either a Wellstart associate or ULMET member, mostly in Kampala and Mbarara.

It is assumed, generally, that a mother who leaves the hospital breastfeeding will continue to do so for at least several months. The issue of when or how to introduce supplementary foods is not discussed in the immediate postpartum period.

In the hospitals and maternity units, the vast majority of low birthweight babies are fed on the breast if they are strong enough to suckle. Those who are too small or too weak are usually fed on expressed mother's milk either by cup, spoon, or feeding tube. (Among the facilities visited during the assessment, the only case of bottlefeeding was for an orphaned baby.) The breast milk is expressed by hand since breast pumps are not available. In some ethnic groups, there is superstition that breast milk should never spill or drop on the ground, lest evil befall the infant. Some mothers with this belief require convincing, but generally, they will express their milk.

While breast milk is the main diet for premature babies, it is not always their sole diet. For example, at one NGO health center, all premature babies are routinely fed a mixture of reconstituted milk, sugar and a cereal. The team was unable to ascertain which cereal was added but the mixture is given to the babies, who also breastfeed, until they attain a weight of 2.5 kg.

Several large hospitals and few health centers have separate nurseries for premature or sick babies. In contrast to the general pediatrics ward where mothers stay with their sick children 24 hours a day, these nurseries allow mothers only on a three hourly schedule to

feed their babies. In most peripheral health facilities these nurseries for sick and premature newborns are not available. In such situations, the very low birthweight infants are usually referred to a larger facility while the bigger premature infants are allowed to bed-in with their mothers with additional warm clothing. The kangaroo care method has not been implemented in Uganda although a few pediatricians advocate it.

Most hospital diets and supply of fluids for postpartum women are inadequate in quantity and quality. These women depend mainly on whatever their relatives and friends can afford to bring for them. In most cases, even this diet is inadequate.

Mulago Hospital, being the national referral center and the teaching institution for Makerere University Medical School, is looked upon as the "model" hospital for Uganda. Six Wellstart associates are based at this hospital and, in conjunction with the Uganda Lactation Management and Education Team (ULMET), they have established several breastfeeding promotional activities which include:

- antenatal classes
- assisting newly-delivered mothers to initiate breastfeeding
- counselling of mothers on postnatal wards
- a lactation clinic twice a week
- fostering the establishment of mother-to-mother support groups
- IEC activities which are mostly inter-personal but also include limited media programs and a quarterly newsletter
- research into nutrition and breastfeeding issues
- a limited amount of health worker training

Similar activities, but on a more limited scale, have been initiated at Mbarara Hospital (the teaching hospital for a newly-established medical school in Southwestern Uganda). There are three Wellstart associates based at that hospital.

Also, Uganda has three certified Baby Friendly Hospital Initiative international assessors/master trainers. Two of them work at Mulago Hospital while the third is employed by Save the Children Fund (UK) in Kampala. ULMET is currently working on an action plan which aims at converting at least 6 hospitals in Uganda to Baby-Friendly status by the end of 1993.

Patterns of immediate postpartum and infant care

All health units visited by the team discharge healthy mothers with normal deliveries within 24-36 hours while mothers delivered by cesarian section leave the hospital in seven to eight days. The infants receive BCG and polio vaccines before discharge. Mothers who deliver in health care facilities are usually given an appointment for a postpartum check-up at six weeks. It is not known what percentage of these mothers actually keep the postpartum appointment, but the experience of the obstetricians at Mulago Hospital

indicates that probably fewer than 50 percent of mothers return. Those who do are seen by the midwives and a small proportion are seen by a doctor. At this visit, the infants receive another polio vaccine as well as the triple vaccine (DPT) (These immunizations are subsequently repeated twice at four-week intervals). The infants are also supposed to be weighed at each visit but the comments of many people indicate that children are weighed irregularly. When the weights are taken, they are rarely plotted on the child's growth chart which every mother carries. Even more rarely is the mother counselled about the feeding of her baby. In the Kampala area, there is a limited home visitation service for postnatal visits, but this service is available to less than ten percent of mothers who deliver in the hospital.

The Ministry of Health procedure manual for the post natal assessment at six weeks after delivery requires health workers to check mothers' weight and look and enquire for any problems the mother and baby may be having. Breast examination, especially for cracked nipples and breast lumps, is also encouraged in addition to giving nutrition and breastfeeding counselling. The guideline for management of breastfeeding problems as outlined in the procedure manual could be strengthened (see Appendix F for the postnatal procedure).

At the postnatal visit, breast examination and maternal weight are supposed to be monitored but this appears to be done irregularly. Young child and immunization clinics take place at the same time as the postnatal clinic. Group health education is conducted at such clinics and may touch on nutrition advice for the mothers as well as breastfeeding and weaning. The breastfeeding message focusses on duration rather than the quality of breastfeeding.

One prominent observation the team made was the very high patient to nurse ratios found in the public hospitals, especially pronounced in Mulago. On both the maternity and pediatric services, the team encountered such ratios as one nurse to 40 postpartum patients or one nurse to 15 babies in the special nursery for premature and sick babies. In Mulago, one nurse said she was alone in two wards with 120 pediatric patients! The patient-nurse ratios were about three times higher in the NGO-run health facilities, even when the nurses were seconded from the MOH and were being paid the same basic salary as in the public service.

In the smaller public health facilities and private maternity units, the immediate postpartum routines are generally similar but there is not a consistent system of postnatal appointments. Women return only if they have a problem and want advice.

Health Workers' Knowledge, Attitudes, and Practices

Virtually all categories of health workers have received some information on breastfeeding in their pre-service training. All of them interviewed by the team knew that breastfeeding

is advantageous to both mothers and babies. There is a general tendency, however, to assume that mothers know when and how to breastfeed and therefore there is no need to advise, encourage or support the mothers to breastfeed. Most health workers, like the mothers, believe that there is no breast milk during the immediate postpartum period and thus encourage the use of prelacteal feeds. Traditionally, mothers have tended to use plain warm water but the younger generation and health workers commonly add either glucose powder or ordinary table sugar to the water. Many health workers said that they feed their own babies in the same way as they advise mothers.

The notion of exclusive breastfeeding appears to be vague in most health workers' minds. First the term is not understood. When the term is defined, a few of the health workers recommend exclusive breastfeeding for four to six months, but the majority advise exclusive breastfeeding for only three months because they believe that most mothers cannot produce adequate breast milk to nourish their infants for a longer period. Many of those interviewed expressed concern about the mothers' nutritional status and believe that this is one of the major reasons why mothers do not successfully breastfeed their children.

With regard to their own infants, most health workers who are mothers indicated that they usually start supplementation quite early, at about two months. The usual explanation is that they have to resume work after the official 45 days of maternity leave. Many of them, however, take their annual leave at the same time as the maternity leave, which then gives them 2½ months. Some health workers advise mothers on supplementation based on their own experience. A young nursing officer who educates mothers at a Young Child Clinic in Mbale district is an example of applying her personal experience to her education sessions. She teaches mothers that children who are two to three months old should be introduced to other liquids. She said that with her first child she delayed introduction of supplements until four months but then the child gave her a lot of problems when she tried to introduce supplements later. She then decided to supplement her other two subsequent children by two months of age. Now she emphasizes during health education that mothers introduce other supplements by three months so that the child will not refuse supplements later.

Health care workers say they start supplementation with cow's milk and give it by cup. A small proportion used feeding bottles. However, all health workers interviewed know that the feeding bottle is dangerous and they would not recommend it to other mothers. In fact, some health workers confiscate bottles and teats from the occasional mother who brings such utensils to the health facility.

Integration of Breastfeeding Promotion in Health Programs

(1) The assessment team found no written or even oral operational guidelines in maternity or newborn care services as regards breastfeeding, although the Ministry of Health had sent out an abbreviated guide to all DMOs early this year.

(2) Several family planning activities and training programs are currently going on in the country (e.g. SEATS) and many of them touch on breastfeeding and child spacing. When the team talked to managers and staff of Family Planning Clinics, it was clear that all of them knew that breastfeeding provides contraception. None of the people interviewed, however, could explain the relationship in any detail and there were no guidelines, either verbal or written, as to when mothers can continue relying on breastfeeding for protection against pregnancy. Only in a few specialized training programs, e.g., the SEATS midwives training in family planning, was the lactational amenorrhoea method explained. All health workers interviewed at Family Planning Clinics recommended either the progestin only pill or barrier methods for contraception by breastfeeding mothers.

(3) Managers and staff involved in the Uganda National Expanded Programme on Immunisation (UNEPI) have generally not considered breastfeeding as the first immunization and breastfeeding promotion is not in any way incorporated in their activities. The health workers involved do not therefore counsel mothers on the immunizing properties of breast milk.

(4) The most concrete integration of breastfeeding promotion has occurred with the Control of Diarrhoea Diseases Programme (CDD). Here, breastfeeding is emphasized as a key preventive strategy. Further, feeding during diarrheal episodes is of utmost importance and, for the breastfeeding child, breast milk is the first food to give, as it provides not only nutrients but also fluids which are so urgently required by the patient. A curriculum which combines diarrhea case management and lactation management has been developed (see the next section of this assessment). Control of acute respiratory tract infection (ARI) activities are just beginning under the same CDD programme and it is envisaged that the training unit at Mulago will be a multipurpose continuing education unit embracing diarrhoea, breastfeeding and ARI activities.

(5) At service delivery points there is increasingly a move to integrate MCH activities such as family planning, prenatal care, immunization, and postnatal care so that they take place under the same roof, on the same days, by a "combined" team. However, because breastfeeding has not been the subject of a previous vertical program, it is not emphasized in most of these "integrated" activities. But, integrated may be relative: as one health worker told the team, the manager of her "integrated" service delivery clinic had informed her to "concentrate" on family planning.

(6) The importance of supervision by program managers is widely recognized but problematic because of manpower and logistical difficulties. In principle, the central managers are to supervise the district level and the District Health Teams (DHTs) are to supervise the operational personnel in their respective jurisdictions. The team was unable to find supervisory checklists, much less anything pertaining to breastfeeding. Supervisory visits tend to be for delivery of supplies and information collection more than anything else.

Private Sector Formal Health Care

In the private sector, all staff interviewed appreciated the importance of breastfeeding and said they never encourage artificial feeding. Again, there is a general tendency to assume that mothers know about breastfeeding and therefore there is no need to actively promote it. One private obstetrician wondered why there is so much talk about breastfeeding, both in Uganda and in neighboring Kenya, when we know that all mothers breastfeed. The private maternity units visited do not separate mothers and babies and do not use dummies or pacifiers. However, none had any written guidelines on breastfeeding and the use of prelacteal feeds was as common as it is in the public sector.

Traditional Birth Attendants

The traditional health providers most closely associated with maternal and newborn care are the birth attendants (TBAs). According to the UDHS more than 60 percent of deliveries occurring the five years before the survey in 1988/89 were attended by either TBAs, relatives, or others (who may very well be TBAs).

The assessment team interviewed both trained and untrained TBAs in the Kampala, Mbale, and Mbarara areas. The TBAs, mostly middle-aged and older women, said they had originally acquired their skills and knowledge from their mothers or other older female relatives.

Some, but not all, have traditionally offered prenatal care in which they examine the abdomen and prescribe herbal preparations for women to either drink or smear on the abdomen, groin, and perineum or insert in the vagina to "correct fetal position". Some concoctions are meant to widen and "soften" the bones for easy delivery. In their training by the formal health system, they learn to identify high risk mothers for referral to the nearest health facilities. They do not routinely counsel on the feeding of the baby since the mother is expected to breastfeed.

Deliveries generally are conducted in the mother's home but occasionally take place in the TBA's home. One TBA in the Mbarara area said that because of the AIDS epidemic, she no longer encourages deliveries in her own home. In fact the Safe Motherhood Project reported in 1990 that some TBAs are reluctant to assist at deliveries because of fear of AIDS, or are requesting gloves for protection.

An untrained TBA said she uses drugs to hasten labor. Those who have been trained said they have been taught about the dangers of such drugs (ruptured uterus) and no longer use them. All the TBAs said they encourage breastfeeding soon after delivery if the mother is not tired and also give boiled water until the breast milk comes in. A couple of the TBAs interviewed said they give the babies sips of herbal medicine to promote a bowel movement to clear the gut of such "hereditary" diseases as syphilis and yaws. Some of the

TBAs said they encourage the mother to rest quietly after delivery to avoid postpartum hemorrhage. Colostrum is generally given. Breastfeeding is encouraged through maternal and child illness unless the mother is very ill and cannot breastfeed. If there is breast infection, the mother is advised against breastfeeding on the affected side

The TBAs may continue to care for the mother and baby four to five days after delivery until the cord falls off. The TBAs do not demand payment but the mothers thank them with such items as soap, chicken, or even a small amount of money. TBAs do advise mothers on their own nutrition and on child feeding. For example, one trained TBA said she had been trained to advise mothers to begin supplementation at four months of age and discourage the traditional six to seven months predominant breastfeeding. Also, she had been taught to advise mothers to feed "Irish potatoes" (not grown in the area)

There are current efforts by some TBAs to form local associations to address concerns of TBAs. There is a National Traditional Birth Attendants Association which is a member of the Safe Motherhood Coordinating Board. It is doubtful that many TBAs in their isolated villages are aware of the association's existence

Conclusions

Generally, health care facilities do not appear to pose great barriers to optimal breastfeeding and virtually all health workers have a positive attitude towards breastfeeding. The greatest hindrance to the practice of optimal breastfeeding within the health service appears to be the nearly universal giving of prelacteal feeds, the advice to supplement at three months, and the lack of skills to counsel and solve problems

There are many practices that are supportive of breastfeeding.

- Rooming-in and even bedding-in are common hospital practices.
- There is not a rigid routine of washing babies before they can be given to their mothers for breastfeeding
- There are many opportunities in MCH/FP services for the integration of breastfeeding education of which a few health workers have taken advantage.
- There is a trend away from vertical programs towards integrated health service delivery. This should facilitate the reinforcement of messages on appropriate infant feeding behaviors in all sectors of the maternal and child health care services.
- The MOH appears to collaborate well with NGOs in many places. Where it exists this collaboration facilitates the sharing of information and participation of NGO personnel in training activities.

Some health service factors hinder optimal breastfeeding:

- There is an infrastructure of MOH and NGO health care delivery facilities throughout the country. However, there are still some unreached and underserved areas. Good coverage poses a problem.
- Generally there tends to be a very high ratio of patients to health care providers in labor and maternity wards which is a constraint to personal counselling
- The early discharge policy for postpartum mothers lessens the chances for counselling and assistance to the mothers
- Scheduled feeding hours in special care nurseries do not allow enough contact between mother and baby, or breastfeeding on demand.
- Protocols which include instructions on how to promote optimal breastfeeding are needed
- Health workers view high initiation rates and long duration as indicators of successful breastfeeding and do not believe there is a problem.
- Health workers are misinformed about prelacteal feeds and ideal age for initiating supplementation
- Health workers rely solely on their own experience when counselling women as there are no counselling protocols or materials available.

TRAINING PROGRAMS FOR HEALTH CARE PROVIDERS

Formal Health Care Providers

Pre-service training of medical doctors

The health workers providing maternal and child health services are mainly obstetricians, pediatricians, nurses, nurse-midwives, midwives, public health nurses and medical assistants. They all receive formal training ranging from three to five years in duration.

The MBChB curriculum of the Faculty of Medicine at Makerere University is based on the philosophy that the Medical School needs to turn out graduates who are competent as doctors and as community leaders who can manage both human and material resources. The curriculum is, to a certain extent, community oriented so that the graduates will be ready to work in small communities and small health facilities. There are eight areas of competence in which the students are grounded over a five year period

1. Patient management
2. Research
3. Understanding the role of traditional medicine
4. Management and administration
5. Teaching and learning
6. Community leadership
7. Medico-legal duties
8. Health promotion and disease prevention

In the competence area "health promotion and disease prevention", the content includes the physiology of lactation. There is no other section of the curriculum which even mentions breastfeeding. This same field of competence has a section on "nutrition" but again breastfeeding is not mentioned. Moreover, there are no learning experiences or teaching and learning resources developed for the section on nutrition. However, during their clerkship in maternal and child health and social pediatrics, the medical students spend approximately two hours on a tutorial on breastfeeding. Apparently, there is no practical component.

Pre-service training of nurses and midwives

The training of nurses and midwives is the responsibility of the government through the Ministry of Health. There is a Training Division within the Ministry of Health responsible for the development of the curricula. The actual training is the responsibility of the various training schools. There is a Nursing Training Council which works in collaboration with the MOH Training Division.

The team reviewed the section on breastfeeding in the midwifery curriculum. This section instructs the students to teach mothers to "roll the nipple between the fingers" in the prenatal period and to "express the colostrum from 34 weeks" gestation (Appendix G) The tutors report that breastfeeding usually receives about two hours of lecture sessions. The breastfeeding section, obviously, needs to be updated.

There is a plan to change the current three-year nursing training to a four-year comprehensive course. It was difficult to assess how much attention will be given to breastfeeding in the proposed curriculum, since breastfeeding and other child survival interventions were mentioned without much detail given. It has been suggested that ULMET work together with the Nursing Training Division to incorporate the optimal breastfeeding management curriculum into their pre-service training.

In-service training

There are several specialized in-service courses, the most widely available being the operational level (OPL) training course. In 1982, the Manpower Development Center was established in Mbale with the help of AMREF for in-service training. The OPL course is targeted at district health team members and mid-level operational staff such as nurses and midwives in hospital and health centers, including private sector personnel. Trainees are expected to use the skills acquired in this course to train their operational staff. In most districts this training has not yet been done for community-level workers. The OPL training manual addresses all primary health care activities but is in fact more of an orientation and lacks practical components. The practical aspects are now being addressed by more specialized training courses in, for example, family planning, expanded program on immunization and the recently piloted combined curriculum on diarrhoea case management and lactation management. The section on "Breastfeeding and Weaning" included in the Manual for Operational Level Training is shown in Appendix H. It needs improvement.

Other opportunities for training in breastfeeding are found in the Mulago Teaching Hospital system. They offer:

- both pre- and in-service training at the nutrition rehabilitation center for nurses;
- training at the twice-weekly lactation clinic;
- a potential for practical training in breastfeeding management at maternal and child health service delivery clinics attended by both students and operational personnel. This potential, however, is not often realized.

The diarrhea/lactation management training course mentioned above commenced September 1992. The first group of participants was drawn from staff working at the

DTU and Lactation Centre in Mulago Hospital plus two persons from Mbarara Hospital. It is a ten-day course of which 3½ days are devoted to breastfeeding. The two breastfeeding modules are "Understanding Breastfeeding" which deals with the more physiological aspects of the subject and "Managing Breastfeeding" which deals more with the practical aspects. Most breastfeeding issues, including weaning, are adequately addressed in these two modules. Participants are given chances to work with pregnant women, assist newly delivered mothers to initiate breastfeeding, and counsel mothers who attend the Mulago Lactation Clinic with breastfeeding difficulties. The curriculum has a strong nutrition and growth monitoring component. It also includes a module on "Communications Skills" aimed at enabling participants to improve their communication and counselling techniques. The plan is to conduct four to six such courses every year with approximately 15 people at each course. Participants will initially be pediatricians, obstetricians, nurses, midwives and nurse midwives working in hospitals where training sub-centers are likely to be established in the future. The training team at the central level will follow up and supervise the trainees to see that they put into practice what they learn and eventually establish their own training programs. Considerable logistical support will be required in order to achieve this objective.

The country has 11 Wellstart associates and one Wellstart Senior Fellow in addition to a few IBFAN trainers. There is a general feeling, however, that in order to strengthen both the central and the sub-center training teams, a few more people need to be exposed to programs such as the one provided by Wellstart in San Diego, either by sending another team or having a Wellstart course in Uganda. Wellstart has been able to do only limited follow-up of the associates through an in-country visit by one of their faculty members.

The draft action plan for promotion of breastfeeding and weaning envisages that a training strategy will be developed at the national level. However, money which has been used for in-country training, sponsored largely by USAID and UNICEF, is cut out of the larger nutrition budget. To the team's knowledge, no separate budget line item has been allocated for either training or the promotion of breastfeeding.

A training needs assessment of the health workers has not been carried out. The lactation management course at this time is based on what the Ugandan trainers felt health workers should know and be able to do in order to promote breastfeeding. The workshop which drafted the national action plan for promotion of breastfeeding and weaning recommended that, in addition to this assessment, a training needs assessment and a health workers' KAP be carried out. The findings would be used to modify training activities.

Other Workers

The team identified other agents of change who could reach women, men and children at the community level with breastfeeding advice. Extension workers and home economists of the Ministry of Agriculture are in many villages and sub-parishes showing community

members what foods to grow and how best to utilize them. The nutrition component of their activities could be strengthened and expanded to include messages on breast milk as a vital natural resource.

Other workers include the "field educators" and "motivators" who are employed, after training, by family planning programs for work either in communities or in industries and agricultural estates. Community health workers trained by different NGOs through their umbrella organization of the Uganda Community Based Health Care Association (UCBHCA) are another cadre that could be trained better to provide breastfeeding services. Such community workers are currently estimated to be reaching at least 1½ million people in the villages and it is anticipated that these organizations will grow.

Traditional Birth Attendants

In recognition of TBAs' role in providing delivery assistance, the MOH and NGOs have, for more than a decade, had programs to train TBAs to deliver babies more safely. The programs have been scattered over the country. In 1990, the Safe Motherhood Project (SMP) reported, after preliminary visits to SMP project districts across the country, that there is no training in some areas and that in some cases the training is inadequate or inappropriate

The MOH in 1989 produced Uganda National TBA Curriculum and Traditional Birth Attendants Training of Trainers Curriculum, which standardizes the training provided by the MOH and NGOs. The training addresses a large number of topics including maternal and child care, family planning, sexually-transmitted diseases and others. The course is given over periods as short as one month or as long as three months. Breastfeeding and weaning are among the topics discussed.

From interviews with the TBAs, it appears that they do not always recall or retain the material they are exposed to, or maybe they find it difficult to let go of habits. In one interview in the presence of the trainer, the TBA said she gives boiled water prelacteally, and was gently reminded by the trainer that she was not taught to do so. The same TBA also said that since her training she advises the mothers to begin weaning at four months with "Irish potatoes" (something she was taught).

The TBAs are given delivery kits at the end of the training and are supposed to be visited periodically by the trainer but the supervision generally is poor. In one evaluation (unpublished) of a TBA training program conducted by the Save the Children Fund, the main differences between trained and untrained TBAs were their knowledge of cord care and of resuscitation of the newborn. Breastfeeding and weaning knowledge was not assessed. The evaluators concluded that the training needed to be simplified and more supervisory visits made after the training.

Conclusions

There are many opportunities to include breastfeeding in the training of health workers. Because of the activities of the ULMET members at Mulago Hospital, more nurses and midwives at that institution are aware that there is need for improvement in breastfeeding practices in Uganda and they have begun to do what they can to train others. However, more trained workers are needed. Thus, more resources are required to develop the needed systematic revision of both pre-service and in-service curricula.

Factors supportive of (or providing the potential for) training in optimal breastfeeding are:

- The combined diarrhea/lactation management training provides an example of how breastfeeding training can be integrated into other maternal and child health training programs
- There are many existing training programs that offer opportunities for integrating breastfeeding. These range from family planning training to those of UCBHCA
- Uganda has a well established training of TBAs and thus provides the opportunity to develop state-of-the-art TBA training in breastfeeding.
- The redesign of the nursing curriculum offers a chance to develop a new module on breastfeeding.

Training conditions that do not support breastfeeding includes:

- Existing pre-service training courses provide some didactic information on breastfeeding physiology but the information tends to be abbreviated. There are no practical components to help health care professionals acquire skills to support mothers.
- In principle there is a system for regular in-service training for mid-level and operational level health workers, but in practice the system is unable to meet the need.
- Post training supervision is inadequate to reinforce the training. This is especially true for traditional birth attendants who require on-the-job, rather than classroom, instruction.

INFORMATION, EDUCATION AND COMMUNICATION (IEC) ACTIVITIES

Overall Breastfeeding Communication Effort

Breastfeeding has not been the main theme of a communications program, unlike immunization, family planning or control of diarrheal diseases.

Breastfeeding has been integrated most successfully into the control of diarrheal diseases. Although this is primarily a training activity, there are plans to expand. Unlike earlier messages about breastfeeding and diarrhea which emphasized only the need to continue breastfeeding in cases of diarrhea, the recent approach stresses the health-promoting, nutritional and diarrheal preventive benefits of optimal breastfeeding.

The Health Education Division has produced a series of Basic Health Messages on poster board designed to be used by health workers. The messages are on AIDS, personal and environmental sanitation, maternal health and child survival. The charts have pictures on one side and on the other side instructions for their use by the health worker. Messages are written in five local languages. Three of the charts are on infant feeding and have the following messages.

- "Breastfeed for two years or for as long as possible."
- "At four months old give breast milk and soft food."
- "When baby has diarrhea:
 - (1) Continue to breastfeed
 - (2) Give ORS and other things to drink
 - (3) Take baby to clinic"

The most common print materials observed during the assessment were on family planning and AIDS. The materials were posters displayed mostly in offices of health personnel and in clinics on the walls generally above eye level (apparently to prevent their being stolen). The family planning posters urged limitation of family size. Although breastfeeding is recognized as a family planning method by program managers interviewed, it is not promoted in most family planning programs.

Collaboration by Health and Nutrition Programs in Planning IEC Breastfeeding Activities

Apart from the activities mentioned above, there are no other IEC breastfeeding activities. However, if the the integrated programming proposed by the MOH extends service delivery on the same day using a multi-purpose rather than a specialized worker, IEC would be a logical area for integration.

Because there has not been a concerted effort to promote optimal breastfeeding nationally, there are inconsistencies in the breastfeeding messages. Coordination of activities is required under a communication strategy for breastfeeding. There is a draft of a plan to promote breastfeeding in the country (Appendix I). The development of an IEC component is included in the plan although it does not mention the importance of undertaking some qualitative research related to practices prior to beginning.

There are no funds currently earmarked for breastfeeding promotion, although UNICEF and USAID are willing to help. Communications professionals available to help with an IEC program are in the Health Education Division of the MOH. Private companies with experience in marketing health-promoting behaviors could be identified in the future.

Needs Assessment

The breastfeeding education that has been done has not been based on a prior assessment of need, i.e. on any research conducted with the intended beneficiaries or health workers. There are plans to perform a needs assessment before any major promotion effort is mounted. This type of assessment is important to the IEC effort and to the design of other components, particularly training.

Communication Regulation and Policy

Education materials produced by the HED do not need to be approved by the Director of Medical Services.

The mass media has both centralized and decentralized components: radio is decentralized, television and press are not. There is no government policy against the discussion of breastfeeding in the mass media.

Specific IEC Activities

Since the training of Ugandan health workers at Wellstart in 1988, there have been limited efforts by them and ULMET to promote breastfeeding through radio. The audiences reached through their mass media activities is not known. But, in general, audiences reached through radio, TV, and newspapers are urban with enough resources and education to have access to the mass media. (However, the HED suspects that TV has a wider reach than just its immediate owners.)

The radio programs on breastfeeding that are prepared by ULMET are aired regularly twice a week, once late at night and once in the morning. Topics discussed include:

- Health messages for pregnancy and lactation;
- Maternal nutrition during pregnancy and lactation;
- Benefits of breastfeeding;
- How to increase milk supply

In August, during World Breastfeeding Week, ULMET produced 100 T-shirts to raise money printed with "Breast is Best" ULMET also has acquired materials from IBFAN and the La Leche League which include pamphlets and books. Lack of funds prevents ULMET from engaging in more elaborate activities During the recent Breastfeeding Week, a local musician composed a song about breastfeeding but this has not been produced because of lack of funds These communication attempts are not based on research or pretesting and there has been no evaluation of these limited efforts

Interpersonal or Face-to-Face Communication

Hospital or clinic-based counselling

The UDHS reported that 87 percent of pregnant women seek prenatal care from the health services and Health workers remark that more women seek prenatal care than deliver in the hospital. Postnatal attendance is very low and attendance at child care clinics falls rapidly with increasing age of the child Thus, the prenatal period offers one of the best opportunities for reaching women with health and nutrition information

The way in which health and nutrition education is conducted is described under "Health Services" and consists principally of group health education sessions. Breastfeeding and weaning are, sometimes, a topic. But, the information provided to mothers is not always correct because the health workers themselves do not necessarily have updated information In general, no special materials are used in the educational sessions For weaning, cooking demonstrations are rarely conducted now, though they apparently were more common in the past when there were more resources

The group health talks are supposed to be reinforced with one-on-one counselling. Unfortunately this is hardly ever done and at present could not be done effectively for breastfeeding because most health workers do not have the skills or time to counsel a mother appropriately.

Private maternity homes may offer a better environment than a large public hospital for proper counselling about breastfeeding. In the maternity homes, it is easier to establish personal trust between the mothers and midwife, since often the mother has deliberately chosen to deliver at a particular midwife's facility and the midwife can potentially spend more time with a mother In some of the private maternity homes visited, the midwife had mounted wall posters on family planning and AIDS.

Some midwives are being provided vaccines to vaccinate on their premises. This should provide an opportunity for the midwives to have continuing contact with the mothers and the children and to offer counselling on infant nutrition. Like their counterparts in public service, the private midwives will need more training to be effective breastfeeding counselors.

Women's groups

Women's groups, such as Mothers Clubs, sometimes organize activities in which they request a resource person to talk to them on a specified topic. They thus offer opportunities for interpersonal communication on infant nutrition issues.

NGO activities

Because of the intensity with which some NGOs work with the community, their health and nutrition programs offer a potential for good interpersonal and group communication activities. The NGO workers, however, have to acquire communication skills training in breastfeeding.

Community leaders

Opinion leaders in the community, especially in small rural communities may be motivated through education to provide leadership for a desired behavior change. The type of opinion leader may be different by locality. The RC system with its resistance committees and councils could provide a means of communication to particular segments of the community. These channels have not been used to promote breastfeeding, but can be explored.

Clearinghouse for Information on Breastfeeding and Weaning

There are not many educational/informational materials available on breastfeeding and weaning in the country. The only two breastfeeding posters, rarely seen, are one that was provided by UNICEF about a decade ago and another donated by the Kenya Breastfeeding Information Group. The Health Education Division has the potential to produce and distribute information on maternal and young child nutrition, but this potential has not been tapped and there is no budget. To date ULMET has obtained materials from IBFAN, La Leche League and Wellstart but does not have the resources to disseminate relevant documents.

The Health Education Division

In response to the AIDS epidemic, the Health Education Division recently has been strengthened. Since 1988, the number of persons in the division country-wide has increased from three to 120. There are five regional health educators. In the districts the district health educators form part of the District Health Team. The Division has not addressed nutrition in its training curriculum and has not had nutrition or breastfeeding as a main focus of an educational program. For the future the HED is available to help develop a program, but they rely on funding for special efforts from the sponsoring division.

The HED also has regular programs: a half-hour TV program each night, and a quarterly newsletter for health educators and NGOs. They also have a page in the daily newspaper. They happily accept materials for these projects.

Conclusions

What has been done in the past in IEC is not supportive of breastfeeding. The future is promising. There are plans to conduct the qualitative research that is required to develop IEC plans. The HED has been strengthened and could provide support if money can be found. The multiple NGO organizations also provide a good infrastructure and useful experience. ULMET will be a critical technical resource to work with communicators.

BREASTFEEDING ANALYSIS SCORE SHEET

Instructions: Please score each component area in terms of either breastfeeding programs or mothers who breastfeed

Country background

A. Socio-demographic profile - no score

B. Nutritional status & morbidity/mortality high
① 2 3 4 5

C. Contraception and fertility low high
① 2 3 4 5

Nature and magnitude of problem

A. Breastfeeding practices poor optimal
1 2 ③ 4 5

not supportive at all very supportive

B. Mothers' KAP 1 2 3 ④ 5

C. Household/community KAP 1 2 3 ④ 5

Policy, legal and work environment

not supportive at all very supportive

A. Breastfeeding policy ① 2 3 4 5

B. Breast milk substitutes/infant foods 1 2 ③ 4 5

C. Women's work and maternity leave 1 ② 3 4 5

D. Support to women ① 2 3 4 5

Financial support for breastfeeding activities

	not supportive at all			very supportive	
A Local financing	1	2	3	4	5
B Donor assistance	1	2	3	4	5

AREA 5 Health services

	not supportive at all			very supportive	
Formal health services					
A. Prenatal care	(1)	2	3	4	5
B Hospital/clinic deliveries	1	2	(3)	4	5
C Immediate postpartum and infant care	1	(2)	3	4	5
D Health staff's KAP	1	(2)	3	4	5
E Integration of breastfeeding promotion in health programs	1	(2)	3	4	5

Traditional health services

	not supportive at all			very supportive	
A. Prenatal care	(1)	2	3	4	5
B Deliveries	1	(2)	3	4	5
C. Postpartum care	(1)	2	3	4	5
D. Professional association	1	(2)	3	4	5

AREA 6 Training programs

	not well developed			very well developed	
A. Formal health care providers	1	2	(3)	4	5
B. Traditional practitioners	1	(2)	3	4	5

AREA 7 Status of IEC activities

A.	Overall effort	①	2	3	4	5
		strict				lenient
B.	Regulation and policy	1	2	3	4	⑤
C.	Specific activity					
		not well developed				very well developed
	mass media	1	②	3	4	5
	interpersonal	1	②	3	4	5
	clearinghouse	①	2	3	4	5
TOTAL	ALL AREAS	56				

RECOMMENDATIONS

Uganda is fortunate to have a core group of well trained, dedicated professionals to protect and promote breastfeeding in the country. With this group and those they have trained, there is a basis to go forward with a strong program so the breastfeeding "culture" still in evidence is not further eroded but strengthened and made optimal. This will require a coordinated and concerted effort backed with financial resources.

The following recommendations are presented in two sections. The first section includes those requiring priority attention to get a program moving. The second set of recommendations are essential to a well-balanced and sustainable program of promotion of optimal breastfeeding practices, but require an established program.

PRIORITY RECOMMENDATIONS

I. Coordination of Infant Nutrition Activities

■ National Breastfeeding and Weaning Coordinator

In both the public and private sector, there are many programs such as family planning, immunization, control of diarrhea diseases, and growth monitoring, into which optimal breastfeeding management can be appropriately integrated to the benefit of mothers and children. There are also a number of different cadres of community level workers such as health inspectors, home economists, community health workers, and agriculture extension workers who educate mothers on infant and young child feeding. There is a need for coordination and a coordinator who will ensure harmony in such aspects as procedures, training and educational materials for the promotion of breastfeeding and proper weaning.

The MOH should identify a coordinator who will work with the newly-appointed Assistant Director of Medical Services, (Nutrition), and report to the Infant and Young Child Nutrition Subcommittee of the National Food and Nutrition Council. The infant feeding coordinator will:

- work with MOH, ULMET, UNICEF, and A.I.D. to develop and coordinate the strategy for enhancing breastfeeding and weaning practices;
- ensure that optimal breastfeeding and weaning issues are integrated with relevant maternal and child health services;
- work with training institutions to upgrade curricula on breastfeeding and weaning,

- collect program-relevant information from the district and community on breastfeeding and weaning;
- identify, train (or organize the training), and supervise appropriate interested persons as breastfeeding and weaning coordinators/ counselors at the district level and crucial health facilities
- District Breastfeeding and Weaning Coordinators

District coordinators will work with the District Health Team, staff of district health facilities, NGOs, and local Community Based Health Care committees to tailor the national strategy for local needs and programs in order to implement breastfeeding and weaning promotion activities. District level coordinators will work directly with community based health initiatives to enable community health workers to promote optimal breastfeeding and weaning in their work.

II. Policy formulation and implementation

- The MOH should conduct a planning workshop to present the results of the assessments on breastfeeding and child nutrition, refine the existing Breastfeeding Action Plan, and draw up a specific implementation plan
- The government should enact the Uganda Code of Marketing for Breast milk Substitutes to assure its passage before the end of this year and hasten its enforcement.
- A draft policy on breastfeeding should be approved by the MOH. This policy should provide the foundation for the development of written protocols on breastfeeding that are appropriate for dissemination in all relevant MCH/FP service delivery points.

III. Training

- A first step would be for ULMET and UNICEF to work together on designing and conducting the special training for the Baby Friendly Hospital Initiative. This training should be expanded upon and ULMET supported to provide the training to public and private sector health care professionals with a special focus on midwives
- The National and District breastfeeding and weaning coordinators, ULMET, and the MOH should work with training institutions to incorporate modules on optimal breastfeeding and weaning into existing curricula for community outreach persons such as agricultural extension officers, community health and development workers, TBAs, and home economists. Since TBAs are

often the most common health care providers for women, they are a particularly important group to train.

IV. Research

- Qualitative research is needed to help understand breastfeeding practices, the motivations for them and the barriers to changing them for mothers, families and change agents. The results of the research are critical to developing a responsive program and the particulars of the IEC activities
- The adequacy of breast milk production needs to be investigated. Research should be conducted, under conditions of optimal breastfeeding (with frequent and exclusive breastfeeding), to determine whether most Ugandan mothers are able to nourish their infants adequately for the first four to six months. Such research can be undertaken through collaboration between the CHDC, the Human Reproductive Health Unit at Mulago Hospital, and ULMET. It should look closely at the nutritional and health status of women.
- Operational research should be conducted to determine which mix of activities are most effective in supporting optimal breastfeeding at the community level. Activities such as breastfeeding mothers' support groups, training of community leaders, or the use of trained volunteers in understaffed hospital situations are examples of service delivery approaches that can be explored.

LONGER-TERM RECOMMENDATIONS

V. Women's support

- There is a need to extend the period of maternity leave from 45 days to at least 90 days.
- ULMET should draw up terms of reference for breastfeeding women's support groups. Existing women's groups should meet to determine if they are an appropriate venue to support breastfeeding women. Depending on the outcome, they will need adequate sensitization, training, and support to make this possible.
- The Department of Women in Development should work together with women's groups to explore the usefulness and to educate employers in both the public and private sectors about the benefits of having creches at work places.
- The managers of programs designed to help women should include men in appropriate activities in order to sensitize them to the needs of women and children

- The feasibility of addressing infant feeding issues through the women leaders of the RCs should be explored.

VI. Information, Education, and Communication

- There is need to develop consistent messages and appropriate materials for the education and communications tasks that face different cadres of health, extension, and community workers who teach mothers about infant nutrition

VII. Health services

- High level MOH officials, program managers and trainers of maternal and child health programs need to address infant and young child nutrition and integrate it appropriately in their programs.
- Policy-makers, program managers, and tutors themselves, need to be sensitized to the importance of optimal breastfeeding to the health of mother and child.
- At the community level, the national and district coordinators should work with the CBHCA and CBHC (at national and local levels) to design and implement a strategy for community health workers to support optimal breastfeeding within their existing activities.
- Private midwives are generally well-respected and trusted in their areas and some have started offering non-midwifery services such as immunization. Interested ones could be trained to offer counselling and to develop breastfeeding support networks among their clients.
- In view of the very high patient to nurse ratio in the Mulago Hospital maternity wards, and the high prevalence of prelacteal feeding the maternity services should consider allowing trained volunteers to help mothers with breastfeeding. These volunteers could relieve some of the pressure on the midwives as well as the anxieties of the mothers concerning the feeding of their babies in the first few days.

VIII. Monitoring

Breastfeeding performance should be monitored ideally through the Health Information System. However, where information is collected now the system does not appear to function well for obtaining information for program modification. Therefore, once program activities begin, a monitoring component should be put in place to document changes in practices and to test the feasibility of new breastfeeding monitoring activities. In the interim, an indicator will be selected, such as exclusive breastfeeding at six months and monitored at selected locations with community-based growth monitoring such as the Southwest Integrated Project where community-based growth monitoring is planned.

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APPENDIX A

List of Contacts

List of Contacts

Organization

Major Topic Discussed

Governmental Organizations

Dr. E. Muzira	MOH, Permanent Secretary/Director of Medical Services	MOH BF support, programs, polans, MOH manpower and research
Dr. Lwamafa Denis	MOH, Assistant Director of Medical Services for Nutrition	Nutrition commitment to BF, MOH structure, President's commitment to child health, nutrition, and BF
Mrs. Wangwe Ursula	MOH, Division of Nutrition	BF & weaning assessment overlap
Dr. F. Ebanyat	MOH, Assistant Director of Medical Services for MCH/FP	Discussed MOH MCH/FP programs & training, particularly INTRAH FP and breastfeeding
Dr. Fred Katumba	Deputy Administrator of MCH/FP	"
Ms. Tembi Matatu	INTRAH Representative	"
Ms. Mary Luyombya	MCH/FP Master Trainer	"
Dr. D. Musonge	MOH, Manager of CDD	CDD programs, breastfeeding content of CDD programs and training programs and ARI programs
Mr. John Barnezi	Manager of UNEPI (Expanded Programme for Immunisation)	MOH EPI program and growth monitoring and BF content
Mr. Katongole	MOH Planning Unit	Tried unsuccessfully to get research and data from World Bank Survey of Health Manpower in Uganda
Dr. Edward Kanyesigye	MOH, ADMS Health Education	Discussed National Health Education Program and health educators training and function

Ms. Betty Mbonye	Sr. Health Educator	
Mr. Christopher Oleke	Health Educator, Trainer	
Mr. David Mukama	MOH, Health Inspector	MOH Environmental Health Division structure
Mr. Zachary Bigirimana	Sr. Health Education Officer, AMREF	Coordination between MOH Health Inspectorate Program and Training and AMREF
Ms. Elizabeth Byahuka	AIDS Patient Care, MOH, AIDS Control Programme	Breastfeeding counselling within AIDS Control Programme
Mr. Samson Unencan	MOH, Training Officer	Pre-service and in-service training for MOH staff
Ms. Francis Ngabirano	Uganda AIDS Commission	
Ms. Enid Baryaruha	Deputy Commissioner for Women	
Dr. David Ogaram	Ag. Commissioner, Division of Occupational Health & Hygiene, Ministry of Labour	
Ms. Regina Mbabazi	Sr. Medical Officer, Division of Occupational Health & Hygiene	
Ms. William Musinguzi	National Bureau of Standards	
Ms. Sarah Kiyingi	Asst. Commissioner for Agriculture, Ministry of Agriculture	
Ms. Sarah Katayike	Assistant Agricultural Officer, Home Economics Division of MO Agriculture, Animal Industry & Fisheries	

Mulago Hospital & Makerere University

Prof. W. Mugerwa	Dean of Medical School	Discussed BF assessment goals and BF initiative
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Prof. Mmiro	Head of Ob/Gyn at Mulago Hospital	Obstetric practices, research in women's health and AIDS research
Dr. Larry Muram	Case Western/Makerere University AIDS Research Project	Talked to him about AIDS research and study design and possibility of AIDS transmission in breast milk
Prof. Christopher Ndugwa	Head of Paediatrics, Mulago Hospital	Discussed physician paediatrics training at Makerere University
Prof. John Kakitahi	Head, Nutrition Centre Mulago/Makerere	Discussed nutrition centers at Mulago and satellite units and nutrition research and nutrition in Uganda.
Ms. Rosemary Byenkya	Nursing Officer in Charge of Labor Unit at Mulago Hospital	Discussed labor and delivery practices at Mulago
Ms. Lilian Generous	Nurse Midwife at Mulago Hospital	"
Ms. Grace Aguti	"	"
Monic Bazibu	"	"
Alice Semwogerere	Nursing Officer	"
Perpetua Kirunda	"	Old Mulago Hospital
Betty Musanie	(Musanje) Nurse Midwife	Old Mulago Hospital
Ms. Enid Mwebaza	"	"
Ms. Catherine Babirye	"	"
Ms. Cissy Lubulwa	"	"
Ms. Joan Kalembe	"	"
Ms. Gladys Njuba	"	"
Dr. Zirembuzi G.	Director Diarrhea Training Unit	Discussed emphasis of BF within DTU services and training
Dr. Jessica Jitta	Director Child Health & Development Center (CHDC), Makerere	Discussed BF assessment goals and CHDC's desire and capacity for carrying

	University	out research related to breastfeeding
Dr. Tom Barton	CHDC, Technical Officer	Discussed relevant research to the assessment and many types of care available through the informal health care system
Ms. Imelda Zimbe	Mwanamugimu Nutrition Unit	Nutritionist on WINS-led weaning assessment team
Ms. Robinah Mbowa	Nursing Officer	Kawempe KCC Maternity Center
Ms. Robinah Mirembe	Enrolled Midwife & TBA	Trainer, Kawempe Maternity Center
Ms. Irene Nanjogo	Enrolled Midwife & TBA	Trainer, Kawempe Maternity Center
Ms. Halima Namuyaba	TBA on a training course at Kawempe	
<u>Mbale District</u>		
Dr. Richard Othieno	District Medical Officer	Mbale Health Units, programs and NGOs
Ms. Florence Gidudu	District Nursing Officer	
Dr. Charles Engoru	Medical Superintendent, Mbale Hospital	Hospital training and capacity
Ms. Robinah Mutonyi	Masaba Wing, Mbale Hospital	
Ms. Apophia Adikini	Nurse Midwife, Mbale Maternity Ward	Labor practices at Mbale
Ms. Perpetua Mulonda	Nursing Officer, Nutrition Unit, Mbale Hospital	Nutrition Unit protocols for feeding children
Mr. Damascus Walimbwa	Warden, Nutrition Unit	
Ms. Deborah Babirye	Nursing Aid, Mbale Hospital	Her own la... eding of practices of her newborn
Ms. Catherine Nagenda	Nursing Officer, Pediatrics, Mbale	

Dr. Nabongo	House Officer, Mbale Hospital	
Dr. Vincent Ojome	Director, MOH Health Manpower Development Training Center	MOH in-service training
Ms. ANnet Maynya	Muyembe Health Center	Rural MOH Health Center services in Mbale
 <i>International Organizations</i>		
Dr. Rizzo Ivone	UNICEF, Director of PHC	Briefly discussed UNICEF commitment to BF. Need to keep informed
Dr. Byarugaba L.	UNICEF	Logistics of BF assessment
Dr. Colin Glennie	UNICEF, Director of Health Programs	UNICEF commitment to BF and BFHI
Dr. Lemma A.	UNICEF, Uganda Representative	UNICEF interest in Assessment, Desire to Support BF and to follow up on assessment recommendations
Mr. Sjoerd Postma	PRITECH Representative	PRITECH's past and current support of breastfeeding activities
Joan La Rosa	USAID, Health & Population Officer	Discussed USAID's, current programs, interest/expectations in assessment and financial commitment to BF
Ms. Simon Manfield	SCF (UK)	Deputy Director
Ms. Carol Carolus	USAID Economics Officer	Talked about Ministry of Planning Survey looking at social household economic data, infant feeding, and anthropometry

Non-governmental Organizations

Major Topic Discussed

Ms. Sandy Buffington	MotherCare	Life Saving Skills Project with private midwives
Ms. Anne Otto	MotherCare	Trainer for Life Saving Skills Project with private midwives
Ms. Faith Bukenya	YWCA Project Coordinator	YWCA programs with mothers and young girls
Ms. Helen Gakwaya	YWCA Training Coordinator	
Ms. Florence Musoke	Treasurer	Uganda Private Midwives Association. Discussed purpose and association activities/interest in promoting breastfeeding
Ms. Rebecca Kakooza	Member	
Ms. Joyce Namutebi	Public Relations Officer	
Ms. Christa Werner	Matron in charge	Rubaga Hospital (private, Catholic). Discussed labor and hospital practices related to breastfeeding
Ms. Ruth Lukwago	Nurse midwife	
Ms. Monica Abesiga	Nurse midwife	
Dr. Charles Lwanga	Obstetrician	
Ms. Sylvia Kyeyune	Enrolled nurse	
Ms. Martita Veuger	Registered nurse	
Ms. Mwesigwa	Registered nurse	
Dr. Freisah	Paediatrician	
Ms. Consolata Namigadde	Nurse midwife	
<u>Mbale District</u>		
Mr. Joseph Ocheleme	Medical Asst. Kolonyi Health Center (private)	Health Center services
Ms. Jane Ocheleme	Nurse Midwife Kolonyi	Labor and delivery practices
Mr. Dennis Medeyi	Health Educator	Discussed CHW training at Kolonyi
Ms. Loy Otiba	Nursing Officer	Kolonyi Nutrition Unit Practices
Ms. Gerline Hafner	Nursing Officer	Kolonyi Health Center
Ms. Angela Tabone	Traditional Birth Attendant	Kolonyi Village, her TBA practices and training
Ms. Annet Mayuuy	Midwife	Muyembe Health Centre
Mr. Kefa Mukoota	UCBHCA Consultant and Manager of Mission: Moving Mountains	Discussed Community-Based Development Program

Ms. Jessica Mukoota Mr. Nathan Netuwa Mr. Michael Wetaya Mr. Steven Khaukha Ms. Jennifer Mabonga	Development Committee Members and Community Health Workers for Moving Mountains	Discussed their work as CHWs and Development committee members. Interview with mothers.
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Dr. E. Netuwa	Private Ob/Gyn	Mbale Town. Discussed his private practice.
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Ms. Helen Otim	Nursing Officer, Mbale Hospital	Interview/discussion
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Jinga District

Ms. Martha Coutinho	Private Midwife, Domiciliary Coutinho's Clinic	Labor practices and her services
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Mr. Martin Wakupita	Medical Assistant, Bugeme Health Center	Practices related to breastfeeding
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Ms. Edith Ndabirawo Ms. Jane Logose Ms. Mariam Babirye	Midwife, Bugembe Health Center Nursing Aid	"
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Ms. Ruth Mutesi Ms. Loy Awulire	Private Midwife, St. Mary Domiciliary Home	"
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Dr. Andrew Baryego	Ag. DMO	Jinga District
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Mbarara District

Dr. Zepher Karyabakaho	Deputy Director Medical Officer	Mbarara District Programs, NGOs, strategies, training, health information systems
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Ms. Mary Barugahare	District Health Visitor	"
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Ms. Jane Birungi	District Nursing Officer	"
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Ms. V.R. Kaija	Asst. Health Educator	CHW, TBA, Health Committee, & School District Health Education content
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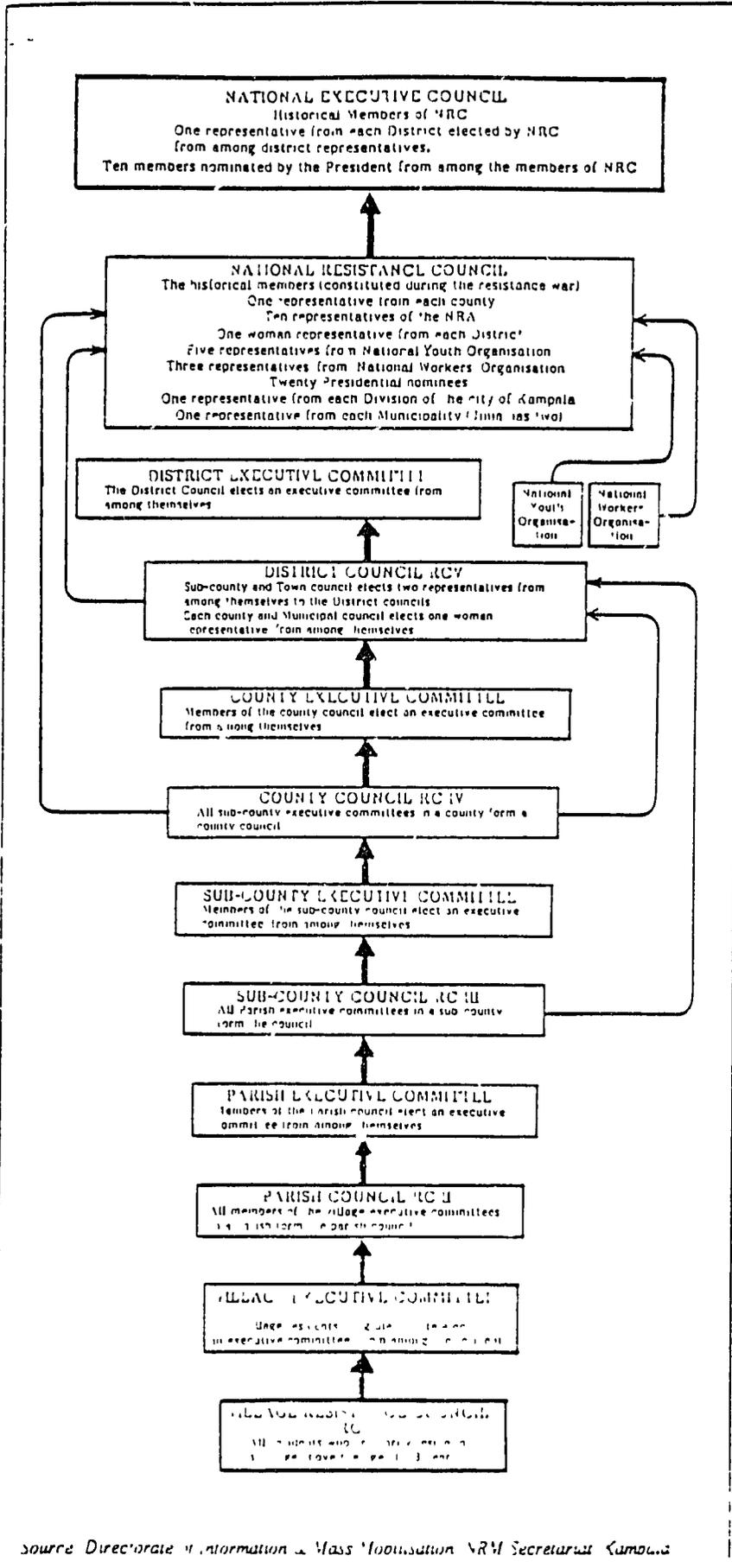
Dr. Hits Lukanika	SWIP Program	CBHC Project Activities in Region
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Ms. Jolly Barigye	Manager SWIP District Project	SWIP activities
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Dr. John Ndiku	Project Officer	
Ms. Susan Keirungi	Nurse midwife	Mbarara Regional Hospital
Ms Kevin		Maternity ward and labor
Bwongyezibwa	Nurse midwife	ward practices.
Ms. Lubega	Nurse midwife & TBA trainer	Interview with mothers. TBA training content & schedule
Ms. Erina Mpwerirwe	Asst. Health Visitor	Ruharo Health Center
Mr. Patrick Mpairwe	Medical Assistant	activities & Well Child
Ms. Perusi Mwesigwa	Nurse midwife	Clinic observations & interviews with mothers
Mr. George Rwabununga	Medical Assistant	Kinoni Health Center
Ms. Grace Arineitwe	Nurse Midwife	activities
Dr. Patrick Byaruhanga	DMO	Mbarara District Team Activities
Ms. Alice Mbangire	Nurse midwife	Mbarara Branch of Family Planning Association of Uganda
Ms. Irene Uwamaria	Taso manager	Mbarara Taso Activities
Ms. Mary Lubega	Enrolledd midwife	TBA trainer
Ms. Namatovu	TBA	TBA (not yet trained)
Ms. Kazenga	TBA	a trained TBA
Rev. Yorokamu Rabboni	Project Manager	Community Health Evangelism

APPENDIX B
Country Administrative Structure

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APPENDIX C

Ugandan National Policy on Mother and Child Care (draft)

NATIONAL POLICY ON MOTHER AND CHILD CARE

BACKGROUND

As a developing country, Uganda is pledged with fairly high infant and toddler mortality rates. The infant mortality rate was estimated at around 103 in 1988/89, although this figure may have dropped following intensified UNEPI efforts in addition to other health promotion programmes and activities. Conditions which predominantly contribute to the high infant mortality rate include low birth weight, acute respiratory infections, diarrhoea, malnutrition and malaria. It is particularly worrying to note that in a land of abundance such as Uganda, malnutrition is still rampant. According to the 1988/89 Uganda Demographic and Health Survey as many as 40 per cent of our children become stunted at some stage.

There is no doubt that the well-being of infants and children is largely dependant on the welfare of mothers. Yet both mothers and children remain very vulnerable groups in our society in spite of visible efforts by various governmental and non-governmental institutions and organizations to up-lift the standard of living and pride of women. They will remain vulnerable until we not only recognize their special needs but also put in place strategies and activities which can effectively resolve their dilemma. And these needs are many ranging from political to legal, social to economic, nutritional, educational to developmental et cetera, they need protection by the very virtue of their vulnerability. Without a healthy mother and healthy child, there can be no hope for a sound future generation.

In matters of health, maternal and child nutrition is of utmost importance. Yet we still find that women and children in our society are prone to consume not the first class foods in the homes, but those foods deemed neither good enough for the market nor desirable enough for the head of the household.

One of the crucial areas in mother and child care and nutrition is breastfeeding and weaning. And experts on child nutrition, health and development agree that breastfeeding is the single most effective way to provide a baby with care, complete food and protection against infection and disease. Yet breastfeeding is regarded by many as a familiar, natural and universal event in Uganda which does not require much promotion, protection and support. This complacency may at first sight appear justified in the light of the positive findings from the Uganda Demographic and Health Survey (UD & HS) of 1988/89 that 91 percent of babies under two months of age were breastfeeding and that the average duration of breastfeeding was 19.1 months. However, other available statistics indicate that the situation is far from ideal with breastfeeding mother-infant pairs. For instance, the exclusivity of breastfeeding is only of the order of 55 percent.

The UD & HS also unfolded a trend towards shorter duration of breastfeeding especially in urban populations.

In daily practice and at the lactation clinic at Mulago, large numbers of mothers are encountered with various breastfeeding difficulties, ranging from "insufficient breast milk" to breast infection and nipple trauma. The initiation of breastfeeding in the immediate postpartum period is frequently delayed and prelacteal/supplemental feeds are frequently given, sometimes even on the advice of health workers. In one New Mulago Hospital sample, 1/3 of mothers had not initiated breastfeeding by 24 hours after delivery while 1/4 of the babies were given prelacteal/supplemental feeds in the form of milk, glucose solution, plain water or tea. In another sample from Mbarara Hospital, 100 percent of babies received prelacteal/supplemental feeds in the form of glucose water.

It is a well established finding that the weaning period poses a hazard in terms of diarrhoeal morbidity and mortality. In order to maximise the benefits and protection afforded by breastfeeding, WHO and UNICEF recommend exclusive breastfeeding for the first 4-6 months. Yet in one clinic sample at Old Mulago 70 percent of mothers commenced supplementary feeds to their breastfed infants before 4 months of age. A household survey in Mukono District revealed that 50 percent of mothers interviewed commenced weaning during the first two months of the child's life and the weaning diets were inappropriate in many cases.

STATEMENT OF THE PROBLEM

Many malnourished mothers, often in poor health and overworked, produce low birth weight babies and both mother and baby have little reserves and are much less energetic at breastfeeding. The problem is further compounded by improper breastfeeding and weaning practices which jeopardise mother-infant welfare. Mothers receive little guidance and support and both mothers and health workers have little access to quality information concerning breastfeeding. There are no set guidelines. In such circumstances, a systematized approach to promotion of mother-child care becomes imperative.

JUSTIFICATION

Maternity units and all places or services where mothers deliver throughout the country have a special function in the promotion, protection and support of breastfeeding. All such facilities or services whether private, government or traditional require a clear and written mother-child care policy stressing and demanding correct breastfeeding and weaning practices. When such a policy is implemented, there would be maximization of the benefits and protection that accrue from breastfeeding.

And improved breastfeeding and weaning practices ought to contribute to a reduction in the prevalence of acute respiratory infection, diarrhoea and malnutrition which are leading causes of morbidity and mortality among our children.

OBJECTIVES

1. All cases of normal deliveries to initiate breastfeeding within 1/2 hour after deliver.
2. All mothers to have unrestricted access to their babies by either rooming-in or bedding-in
3. Demand breastfeeding to be promoted at all times, day and night
4. No prelacteal/supplemental feeds, whether modern or traditional, to be given to babies either in hospital or at home unless medically indicated.
5. All infants to be exclusively breastfed for 4-6 months from birth.
6. All babies to be started on supplemental/weaning foods only after 4-6 months.
7. All mothers to be taught to express breast milk in order to maintain lactation even when they are separated from their infants and to feed the expressed breast milk by cup or cup and soon.
8. All mothers to continue breastfeeding for at least 20 months from delivery.
9. All pregnant and lactating mothers to receive information concerning:-
 - (i) the benefits and management of breastfeeding, including weaning
 - (ii) the necessity for them to eat a little extra nutritious food
10. To foster the establishment of breastfeeding mother-to-mother support groups at the community level.
11. No feeding bottles and teats to be used in any maternity or child care facility. Cups or cups and spoons shall be used to feed babies.
12. All health care staff to be trained in lactation and weaning management.

13. No free or subsidized supplies of breast milk substitutes to be provided to maternity or child care facilities, whether private, traditional or government institution or services. Any such products genuinely required by health care institutions or programmes shall be obtained through the usual food procurement procedures.

STRATEGIES AND ACTIVITIES

1. All institutions, programmes and individuals providing maternity services and care of newborn infants should review their policies, practices and actual physical lay out of their places of work and bring them in line with these policy guidelines.
2. Managers of institutions and programmes should ensure that these policy guidelines and any other essential messages about breastfeeding and weaning are regularly communicated to all staff in their units.
3. The staff of maternity services and clinics for maternal and child health as well as family planning should receive appropriate basic and continuing training in lactation management, which includes weaning.
4. Women's predisposition to breastfeed should be strengthened through health workers' counselling and provision of educational and instructional materials to every expectant woman so that mothers will be ready to initiate and maintain lactation. The breastfeeding history of every woman should be explored ^{to} identify those with no experience and those with previous breastfeeding difficulties. These at risk groups should be given more assistance, guidance and encouragement. Mothers should be appropriately briefed about the physiology of lactation so that they are confident about breastfeeding. They should be urged to demand to breastfeed their newborns immediately after delivery.
5. All expectant mothers attending for antenatal care should have their breasts examined to exclude any variations which could interfere with breastfeeding. Any breast abnormalities should be referred to the doctor. In caring for their breasts, women should be encouraged to avoid strong soaps, detergents, creams and ointments applied to their nipples and areolar.
6. Adequate maternal diet should be ensured by various means, including appropriate health and nutrition information exchange with women. Expectant and lactating mothers should be discouraged from unnecessary medications and excess alcohol, tobacco and caffeine.

7. All institutions offering maternity services should endeavour to create an environment supportive of breastfeeding and making mothers physically and emotionally comfortable during labour and delivery. The use of sedatives, analgesics and anaesthetics should be carefully assessed on an individual basis, given the implications for both mother and baby.
8. Institutions, programmes, services and individuals responsible for deliveries should ensure that newly delivered mothers initiate breastfeeding within half an hour of delivery. Mothers should thereafter be encouraged to breastfeed on demand, day and night.
9. All maternity services should promote exclusive breastfeeding and ensure that infants are not provided with any other food or drink unless there is a special medical indication for such food or drink through 4 to 6 months.
10. Close contact between mother and infant should be maintained from delivery onwards. Where it is necessary to separate mothers and their infants, as in cases of very sick babies, health care staff must ensure that the mother continues to express her breast milk to maintain lactation. The expressed breast milk should be fed to her baby by cup or cup and spoon.
11. Managers of institutions and programmes rendering mother and child care services should ensure that no feeding bottles or teats are used to feed babies in their care.
12. Managers of institutions and programmes, whether government or private, as well as district health teams, should ensure the provision of training to all health care staff, including doctors, nurses, midwives, medical assistants, nutritionists, health visitors, health educators, community based health workers as well as traditional birth attendants in the skills necessary to implement this policy. The training should be conducted by adequately trained personnel, and never by personnel from infant food manufacturers and dealers.
13. Managers should ensure that employment policies, physical facilities and work schedules enable their own staff to breastfeed their infants, both for the benefit of the mother and children as well as a role model for others.
14. Health workers should promote our breastfeeding culture in society as a whole through stimulating and working closely with community leaders to achieve this end. Maternity units and services in particular should foster the establishment of social support groups to help mothers succeed in breastfeeding. On discharge, the mother-infant pairs can be referred to these mother-to-mother support groups for continued guidance, counselling and moral support.

15. During subsequent contact with mothers after discharge, health care staff should advise mothers to commence weaning only after 4 - 6 months of age. Emphasis should be laid on nutritious weaning foods, stored and prepared hygienically and fed by clean cups, spoons or fingers. But breastfeeding should continue until the child is at least 20 months old.
16. Health care institutions should actively discourage the use of free or subsidized breast milk substitutes or infant foods either by their staff as individuals or by the institutions as such. In the few cases where such breast milk substitutes or infant foods are necessary, they should be obtained through the normal food procurement procedures.
17. Managers of health care institutions should ensure that no posters or pictures originating from infant food manufacturers and dealers are displayed in their institutions, regardless of the message, unless specific and written approval has been granted by the Director of Medical Services of the Ministry of Health.
18. Health professional associations and non-governmental organizations concerned with maternal and child care should endeavour to encourage the development and implementation of socially responsible policies which support breastfeeding in all maternity and health care facilities and services. National authorities and Ministry of Health in particular, should support the involvement of these organizations and encourage constructive dialogue among all parties concerned.

MONITORING

1. Any Ugandan, lay or professional, who notices a disregard of these policy instructions has the responsibility to report such violations both to the head/manager of the institution, programme or unit concerned as well as to the Director of Medical Services of the Ministry of Health.
2. Managers of maternity and child care institutions, units or services should periodically evaluate their institutions in terms of breastfeeding support, using the above strategies and activities as check list and take remedial action whenever necessary.
3. The MCH/FP division of Ministry of Health shall be the focal point for coordinating, implementing and monitoring of this policy by government institutions, non-governmental organizations and health services in the private sector. They will periodically assess the various maternity and child care institutions and services using the above strategies and activities as check list and advise appropriately.

APPENDIX D

Selected NGOs and Their Activities

**SELECTED INSTITUTIONS AND NGOS WITH POTENTIAL IMPACT
ON PROMOTION OF OPTIMAL BREASTFEEDING**

UGANDA NATIONAL BUREAU OF STANDARDS

The Uganda National Bureau of Standards is a parastatal institution under the Ministry of Commerce and Industry. Among its many roles, the Bureau has the responsibility of setting and implementing codes for manufacturing, as well as monitoring the importation of commodities. For all commodities, the Bureau issues specifications for quality, labelling, microbiology, and shelf-life.

The Bureau certifies manufacturing and importation of baby foods and has a sub-committee for Baby Foods and Dairy Products under the Food and Agriculture Technical Committee.

The Bureau serves the public by taking appropriate action regarding commodities when these are consumer complaints. Importers who are not sure of the quality or micro-content of commodities use the Bureau to analyze samples. The Bureau has sometimes had to impound expired weaning foods imported for orphanages.

SAFE MOTHERHOOD PROJECT

The Safe Motherhood Project is funded by UNFPA and The World Bank. Established in 1988, it is a project of the Uganda Council of Women under the Ministry of Women, Culture and Youth.

The Council is governed by a board made up of representatives from several non-government women's groups registered with the National Council of Women. The organization cooperates with government ministries that share the same interests of improving and protecting women's reproductive health specifically to reducing maternal mortality and morbidity. Projects have begun in eight districts of the country.

The Council endeavors to sensitize communities about the prevailing maternal morbidity situation, through the RC system, church leaders, chiefs, and women's groups.

The program has trained and deployed pregnancy monitors at parish and village levels. The pregnancy monitor seeks out pregnant women for counselling and records the outcome of the pregnancies. Their training covers family planning, AIDS, sexually transmitted diseases, women's reproductive health, sanitation, general health and nutrition.

In Uganda in the 1980s, CARE mainly distributed food. More recently they have broadened their activities to rehabilitative and community development projects.

CARE

CARE is an international organization with funding from multiple countries and grants from large ad agencies. Currently in a few districts, they have agriculture projects which they are planning to and to include nutrition and water and sanitation activities.

1. CARE's health project in Nebbi, West Nile, is one that will have a nutrition component because of the identified high prevalence of malnutrition. This will also include agricultural extension services, environmental protection, and water and sanitation. The project will use the home economics workers of the Ministry of Agriculture to instruct the mothers about proper utilization of food and proper infant feeding practices. The program will integrate its activities with the Ministry of Health in the district.
2. In Kigezi-South West Uganda, CARE supports a training program for government health workers in clinical family planning skills. The training is coordinated through the District Health Visitor using the Ministry of Health "INTRAH" curriculum". The training will also address early infant feeding practices and birth spacing.

CARE works closely with other non-governmental organizations and has collaborated in activities with Safe Motherhood and the Family Planning Association of Uganda. In these projects, breastfeeding is strongly emphasized among the natural family planning methods. Because there is strong Catholic representation in one district, breastfeeding, as a natural method, takes preference.

UGANDA FAMILY PLANNING ASSOCIATION (UFPA)

The Family Planning Association of Uganda delivers services to women who wish to plan for their families through the use of contraceptives. Women are given education and thorough instructions on the various methods available from which they are free to choose the method they prefer. Women who know that they are likely to conceive while amenorrhoeic are advised to visit the clinic six weeks postpartum for appropriate advice on contraception. Mothers who are breastfeeding are advised to use the mini-pill (containing only progestin) or an injectable.

At UFPA, breastfeeding is appreciated as one of the methods of birth control, but mothers are advised to come as early as possible postpartum for other methods. There is a strong feeling

that people have not yet grasped the fact that breastfeeding is an important family planning method, although it is convenient and cheap.

The clients pay a minimal fee of shillings 200 for services and shillings 150 as an annual subscription.

Each Family Planning unit at the district level employs educators who organize talks and discussions for different members of the community. These gatherings could be organized through the church, women's groups, or local resistance committees (RCs). Their main objective is to sensitize communities about the family planning services available.

Eighty-six percent of UFPA funding is contributed by donor agencies, particularly IPPF (International Planned Parenthood Federation), Path Finder (UK), SEATS (USAID Family Planning Services Expansion and Technical Support, John Snow Inc.), and UNFPA (United Nations Fund for Population Activities). Local support from government is in-kind and from one sale of contraceptives.

TASO - THE AIDS SUPPORT ORGANIZATION

Branches for TASO have been opened in seven districts of Uganda: Mbale, Tororo, Jinja, Entebbe, Kampala, Masaka, and Mbarara. The main services offered to the clients are psychological, social, and medical support through a follow-up system whereby the clients are visited regularly in their homes when necessary. "Positive Living" is a major area of counselling where clients are encouraged in living positively within their surroundings by eating well, keeping themselves clean and socializing with other members of the community.

The TASO program is aware of the research findings that the HIV can be transmitted through breast milk. This factor has not diverted the organization from convincing mothers that breast milk is best for baby. Weighing the chances of developing malnutrition and the cost-effectiveness of breast milk, mothers are given the chance to choose the option they would consider best for their infants.

TASO notes that many mothers have been inquisitive as to whether or not the HIV is transmitted through breast milk, and TASO has emphasized the need for the best nutritional care of infants through breast milk.

UNICEF

UNICEF's five-year country program for 1990-1995 had no mention of nutrition or infant feeding. This contradicted the find of

the 1989/1990 DHS that nearly 50 percent of the children in Uganda under five are chronically malnourished.

UNICEF reconsidered this omission in 1991 when USAID provided funds through the Control of Diarrhoeal Diseases (CDD) Program where there was a request by USAID that \$500,000 be allocated for nutrition activities.

A regional UNICEF nutrition consultant who assessed the nutrition situation in Uganda found that the lack of a food and nutrition policy was a major constraint to progress. UNICEF has been more active and has achieved the following:

1. Given support and revived the National Food and Nutrition Council which has the mandate to formulate a food and nutrition policy for the country. A draft report was presented in July 1992. The major criticism of this draft was that it was oriented on the food and agricultural sector and did not address nutrition and nutrition problems of the vulnerable members of the population. The draft is not being revised.
2. A Vitamin A study has been conducted in one district of Uganda. The purpose of the study was to identify the risk factors associated with vitamin A deficiency. The report is pending.
3. Breastfeeding training is underway with the development of curriculum and training through the DTU (Diarrhoeal Training Unit) of the CDD (Control of Diarrhoeal Diseases) Program.

Since 1990, UNICEF has moved away from vertical program support because it created duplication of effort. Integrated efforts which minimize resources is encouraged. DTU/BF training and management is a good example of how two issues can be addressed together.

4. UNICEF is considering support for the Baby Friendly Initiative in Uganda hospitals, with the view that this is an entry point to guaranteeing the care of the baby in the hospital. The initiative will sensitize hospitals about a whole child survival package: immunization, clean environment, and birth weight.
5. A Plan of Action for Breastfeeding Promotion has been developed and it is awaiting endorsement by the Ministry of Health.
6. The Code for the Marketing of Breast Milk Substitutes has been revised and UNICEF has reminded the Ministry of Health to hasten the process of finalizing the document.

7. The School Health Program sponsored by UNICEF has addressed nutrition and breastfeeding in the primary and secondary school curriculum.

SEATS (FAMILY PLANNING SERVICE EXPANSION AND TECHNICAL SUPPORT

This is an A.I.D.-funded, five-year project which started in October 1991 and will end June 1994. SEATS was developed to assist different organizations in expanding family planning services in low contraceptive prevalence countries. SEATS works mainly with the private sector, but collaborates with the Ministry of Health through the MCH/FP (Maternal and Child Health/Family Planning Division). The project works closely with the private midwives association of Uganda, the Islamic Medical Association, private industries through the Ministry of Labor, and the Family Planning Association of Uganda (UFPA).

SEATS, in conjunction with the American College of Nurse-Midwives (ACNM), assists in the provision of family planning services, in training, and in equipping health care delivery sites with equipment and materials.

Midwives and nurses are given practical refresher in-service training courses. Nursing aids are trained as motivators for the area near their project sites using the RC system as an entry point to mobilize and hold group meetings.

Private industries, through the Ministry of Labor, are assisted by equipping their curative health units with family planning services. The health personnel within these industries are trained in family planning techniques. The private industry employees nominate ten members known as "family planning motivators". These motivators are then given appropriate training in counselling skills which enable them to conduct group talks about family planning issues.

Although the training program in family planning mentions breastfeeding as one of the natural methods, the SEATS resident advisor felt that the program could more thoroughly address infant feeding issues, breastfeeding in particular. The program has a built-in mechanism for reaching a large cross-section of women, especially the working class.

APPENDIX E

Ugandan Code of Marketing of Breast Milk Substitutes

THE FOOD AND DRUG (MARKETING OF INFANT AND CHILD FOODS)
REGULATIONS, 1992:

Cap. 271: -- IN EXERCISE: of the power conferred upon the
Ministry by section 42 of the Food and Drugs Act,
these Regulations are made
this.....day of
.....1992.

Interpre-
tation. I: 1. In these regulations, unless the context
otherwise requires;

"Advertisement": means a representation to the
public, by whatever means, for the purpose of
promoting directly or indirectly the sale or
disposal of a prescribed product, and includes
pictorial displays, discount coupons, premiums,
special sales and the like.

"Artificial feeding" means feeding of foods other
than breast milk to an infant or young child.

"Breast milk substitute" means food being marketed
or otherwise represented as a partial or total
replacement for breast milk

"Complementary food" means food whether
manufactured or locally prepared, suitable as a
complement to breast milk or to infant formula
when either becomes insufficient to satisfy the
nutritional requirements of the infant.

"Container" means any form of packaging of
prescribed products for distribution or sale as
a normal unit, including wrappers.

"Distributor" means a person, corporation or any
other entity in the public or private sector
engaged in the business (whether directly or
indirectly) of marketing at the wholesale or
retail level of a prescribed product.

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"Health Care System": means a government, or non-government or private hospital, clinic, institution, organisation or individual engaged directly or indirectly in providing health care to members of the public. For purposes of these regulations the health care system does not include established pharmacies and other normal sales outlets.

"Health Workers": means a person who works in any component of the health care system, whether government or non-government and whether paid or voluntary.

"Infant": means a baby of up to twelve months of age.

"Infant formula": means a breast-milk substitute formulated industrially in accordance with the applicable standards of the Codex Alimentarius: or home-prepared to satisfy the normal nutritional requirements of infants up to twelve months of age.

"Label" means a tag, brand, mark pictorial or other descriptive matter written, printed, stencilled, marked, embossed or impressed on, or attached to a container of a prescribed product.

"Manufacturer": means a person or body persons engaged in the preparation, treatment, packaging and labelling of infant foods, whether directly or through an agent.

"Marketing": means the promotion, distribution, sale, advertisement or provision of informational services of a prescribed product.

"Minister": means the Minister responsible for Health

"Prescribed product". means a product prescribed in Schedule I to these regulations.

"Publication": means the communication of matters by any means, by a person or his agent, the public or a section of the public.

"Sample": means single or small quantities of a prescribed product provided free of charge.

"Supplies": means quantities of a prescribed product provided for use over an extended period, free or at low cost for social purposes, including those provided to needy families or groups.

"Young child": means a child between the age of twelve months and sixty months.

Establishment
of infant and
child nutrition
Committee.

- 2.(1) There is established a committee to be known as the Infant and Child Nutrition Committee, consisting of persons appointed by the Minister as follows:
- a) A Chairman to be appointed from amongst the members of the committee.
 - b) Two officers from the Ministry of Health.
 - c) One officer from the Ministry of Local Government.
 - d) One officer from the Ministry of Commerce, Industry, Co-operatives and Marketing.
 - e) One officer from the Ministry of Women in Development, Culture and Youth.
 - f) One officer from the Ministry of Information.
 - g) One officer from the Ministry of Education and Sports.
 - h) One officer from the Ministry of Agriculture, Animal Industry and Fisheries.
 - i) Two officers from Ministry of Finance and Economic Planning.
 - j) One officer from Ministry of Justice.
 - k) One officer from Makerere University.
 - l) One officer from National Bureau of Standards.
 - m) Not more than four other persons representing organisations engaged in mother and child health care in Uganda.

- Meetings' and Functions of the Committee:
1. "The committee shall meet with a quorum of not less than a half of the members every 3 months or at such other times as the committee decides".
 2. The Committee may make rules governing its procedure in meeting and the carrying out of its functions under these regulations.
 3. The Minister may, subject to the provisions of these Regulations give directions of a general or specific nature relating to the functions of the committee, and the committee shall be bound to comply with such directions.
 4. The Infant and Child Nutrition Committee shall carry out the following functions -
 - a) Formulating infant and child nutrition policy and advising the Food and Nutrition Council.
 - b) Devising strategies to promote, encourage and protect breastfeeding and infant and child nutrition in Uganda.
 - c) Establishing programmes for the education of health workers and the community on all aspects of breastfeeding and infant and child nutrition.
 - d) monitoring and reporting on the development in breastfeeding and infant and child nutrition in Uganda.
 - e) publishing and censoring information relating to infant and child nutrition.
 - f) monitoring and controlling the marketing of breast-milk substitutes, and infant foods, including recommendation of issuing licences to baby food importers and exporters in Uganda.
 - g) Sanctioning of information, education and communication materials and equipment from manufacturers or distributors of prescribed products, for use within the Government health care system as defined above.

h) Promoting research on infant and child nutrition.

i) doing such other things as are necessary for the proper administration of these Regulations and the proper performance of their functions under these Regulations.

No marketing
without licence

4. (1) No person shall engage in the importation for purpose of marking or distribution, of any of the products prescribed schedule 1 to these Regulations, except under valid licenses issued by the Infant and Child Nutrition Committee.

(2) Applications prescribed in schedule II for the issue of a licence under this regulation shall be made to the Chairman of the committee, to be laid before the committee for consideration.

(3) Every year, the committee shall cause the names of all licencees under these Regulations to be published in the Gazette.

(4) A person who contravenes the provisions of this regulation commits an offence and shall on conviction be liable to a fine not exceeding three thousand shillings or to imprisonment for a term not exceeding three months or to both such fine and imprisonment.

Prohibition of
sample
distribution.

5. No manufacturer or distributor or any person whose functions involve the marketing of a prescribed product shall directly or indirectly

a) offer or provide to expectant mothers of mothers of infants and young children, articles or utensils that are likely to promote the buying of a prescribed product.

b) make any gifts to expectant mothers or mothers of infants and young children, of any samples of free and low cost supplies of a prescribed product.

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- Employment of manufacturer's agents 6. No health care system shall employ persons known as "mother craft nurses", or professional service personnel provided by manufacturers or distributors of a prescribed product, or whose services are paid for by such manufacturers or distributors.
- Prohibition of advertisement: 7. No person shall advertise to the public infant formula or food as being suitable with or without modification for use as a partial or total replacement for breast milk, or as a complementary food suitable for the feeding of infants and young children.
- Censoring of publications 8. All information and educational materials on infant nutrition and child feeding intended for use by families and those involved in the field of infant and young child nutrition, shall prior to publication be submitted to the infant and child Nutrition Committee for its approval.
- Display of information: 9. No prescribed product or information relating thereto, except such materials as have been approved by the committee under these Regulations, shall be displayed in any facility including hospitals, clinics, pharmacies and other sales outlets.
- Information to health workers: 10. Information on the use of prescribed products may be provided to health workers and the community by manufacturers or distributors of such products, but that information shall be restricted to scientific and factual matters and shall contain such other matters as the committee may prescribe in their policy. Such information shall emphasize the superiority of breast-milk compared with prescribed products.
- Education on Artificial feeding. 11. It is the duty of a health worker to give education of feeding with infants formula or complementary foods to mothers of infants and young children in respect of whom the infant formula or complementary food is prescribed by the health workers.

(2) The information shall include clear explanation on the hazards or improper or inappropriate preparation and use of the prescribed product in an appropriate language.

Inducement of workers

12. No manufacturer or distributor of a health financial benefit, sample of a prescribed product, free equipment or utensil for the preparation of such product; to a health worker in order to induce him; and no health worker may accept such inducement benefits, provided that where such samples, products or utensils meant for use within a Health Institution, the medical officer in-charge of the institution shall make an express request in writing to the manufacturer or distributor for these items and the Infant and Child Nutrition Committee may approve the request.

Labelling:

13. (1) No manufacturer shall label, package, treat, process or sell a prescribed product in a manner that is false, deceptive, misleading or is likely to create an erroneous impression against the character, value, quantity, composition, merit or safety of the product.

(2) the container of a prescribed product shall bear a clear and conspicuous label in readable print in English and in addition

a) the word "Important Notice" or their equivalent accompanied by a statement of the superiority of breastfeeding.

b) a statement that the product should be used only on the advice of a health worker.

c) instructions on the appropriate preparation and use of the product and a warning against the health hazards of improper preparation.

d) the ingredients used, the composition and analysis of the product.

e) the storage conditions required: and

f) the batch number and the date before which the product must have been consumed.

(3) Neither container nor label or a prescribed product may bear pictures of infants or other pictures idealizing the use of infant formula as superior to breast-feeding.

Minimum
standards.
Act 1 of 1983

14. Prescribed products when offered of sale or distribution, shall comply with the standards specified by National Bureau of Standards under section 14 of the Uganda National Bureau of Standards Act, 1983, and any other written law in Uganda.

Offences and
penalties

15. (1) A person who contravenes the provisions of regulations 5,6 and 12 hereof, commits an offence and shall on conviction be liable of a fine of three thousand shillings or to imprisonment for a term not exceeding three months or to both.

(2) A person who contravenes the provision of Regulations 7.9. 13 and 14 hereof commits an offence and shall on conviction be liable to a fine of three months or to both.

(3) The court convicting a person of an offence under these Regulations may in addition to the penalty prescribed, order the confiscation of all or part of the commodity or utensil which is the subject matter of the offence and such commodity or utensil shall be disposed of in such manner as the court may direct.

(4) Where an offence under these Regulations is committed by a servant in the course of his employment or an agent in the course of his agency, and it is proved that it was committed with the authority, consent, knowledge or connivance of the principal, the principal shall be guilty of the same offence and shall be liable to a similar penalty.

Defences

It shall be defence for a person charged with an offence relating to the nature, quality or quantity of a prescribed product to prove.

a) that he obtained the product from a reputable manufacturer, supplier or dealer with a written assurance that the same conformed with the relevant standards required by law, and

b) that at the time of the commission of the offence he had no reason to believe or suspect that the written assurance was inaccurate, and

c) that he took all reasonable steps to ensure that while in his possession, the product remained intact and in the same state as when he obtained it.

Commencement.

17. These Regulations shall come into force on such day as the Minister may by notice in the Gazette, appoint.

SCHEDULE I:

Prescribed Products

1. Infant formula
2. Complementary infant foods
3. Feeding bottles
4. Feeding teats
5. Pacifiers

SCHEDULE: II:

Prescribed Form

APPENDIX F
Postnatal Procedure Manual

MOTM

POST NATAL ASSESSMENT AT 6 WEEKS AFTER DELIVERY

OBJECTIVES:

1. To assess whether clients body has regained non-pregnant state. detect abnormalities and manage or refer.
2. To emphasize importance of: Nutrition, breast feeding, Personal hygiene and Family Planning. Immunization of the baby.
3. To assess the progress of the baby's growth and development.
4. To encourage women to accept Post natal care as a routine practice for mothers through satisfied clients' education of other mothers.

EQUIPMENT/MATERIALS

- . Baby weighing scale.
- . Equipment and Material for History taking.
- . Sphygmomanometer and stethoscope.
- . Adult weighing scale.
- . Tray for pelvic examination.
- . + Pap Smear taking equipment and materials.
- . Poster or Diagram with female reproductive system.
- . Flip Chart.
- . Poster with various Nutrition Foods.
- . Poster of Breast feeding mother.

STEP 1: CLIENT EDUCATION DURING POSTNATAL VISIT

Ask client if she has ever had a Post natal assessment before If yes
 Ask client to explain what happened during the visit. if not
 Explain the purposes and benefits of Post natal assessment e.g.

- To check on the reproductive organs whether returned to normal size and shape
- To discover any abnormality which may need treatment
- To check on progress of the baby and offer some advice.
- Assist the client to plan to space future Pregnancy

Review client's history and identify if client is in the following risk group:

- Having had another child within a period less than two years
- Having had her first pregnancy before age of 20 years.
- Having had 4 or more children.
- Aged 35 years or more.
- Having a Medical problem or had previous difficult or assisted delivery
- Discuss with client reasons why she is in the risk group
- Discuss with high risk clients the need to postpone and terminate childbearing.
- Dangers of another unplanned Pregnancy to Mother and Child.

Problem	Investigation Steps	Management
Inadequate Milk Supply	A. Is she eating and drinking adequate amounts of food and liquids?	<p>.Yes No - If no</p> <p>A. Advise the mother to drink at least 6 to 8 glasses of fluids every day and eat plenty of nutritious food, according to the local diet.</p>
	B. Is she getting inadequate amounts of sleep or rest, or is she currently under great stress?	<p>B. Advise the mother that she needs additional rest. When is this in relation to check up at 6 weeks i.e. end of puerperium.</p>
	C. Is she breastfeeding her baby too infrequently?	<p>C. Advise the mother to breastfeed her baby on demand from both breasts at least every 2-3 hours at first. Remind her that if she is using breast feeding as her sole method of contraception, breast feedings should be regular not more than 6 hours apart.</p>
Sore Nipples.	A. Are her nipples cracked?	<p>A. Examine the breasts for cracked nipples. (See Procedure on Breast examination). Advise the mother to:</p> <ul style="list-style-type: none"> . continue breastfeeding. Reassure her that the cracked nipples will heal: . Use clean water and no soap to clean her nipples before breastfeeding; . air dry her nipples after nursing; and . use vegetable oil or vaseline on her nipples for comfort between feedings.
	B. If she does not have cracked nipples, are the nipples sore only when she breastfeeds her baby?	<p>B. the baby may not be getting the areola completely in his mouth.</p> <p>Advise on proper breastfeeding technique and positioning.</p> <p>- to flatten the areola between the and forefinger, introduce areola with nipple.</p> <p>- break suction of baby before moving from breast</p> <p>- break suction slowly by pushing down on baby's chest when suction is broken.</p>

Problem	Investigation Steps	Management
Sore Breasts	<p>(C) A. Does she have a fever and feel tired: is/are her breast(s) red and tender?</p> <p>(D) B. If there are no signs of infection, ask if her breasts have localized tenderness or lumps, or are full, hard and tender.</p>	<p>A. Examine her breasts to confirm signs of infection. Treat with antibiotics according to local clinic procedures. Advise the mother to:</p> <ul style="list-style-type: none"> . continue breastfeeding frequently; . get additional rest; and . frequently put warm cloths on her infected breast(s). <p>B. These signs may indicate plugged milk ducts or engorgement, respectively Advise mother to:</p> <ul style="list-style-type: none"> . breastfeed frequer in different positions, including during the night; . get additional rest; . frequently put warm cloths on her breast(s); and . hand express some milk or massage her breast(s). <p>Explain signs of infection and tell her to return to the clinic if it develops.</p>

References

Botswana - MUH/INIRAH Family Planning Procedures Manual for Service Providers.

INIRAH Guidelines for Clinical Procedures in Family Planning and STD's. A Reference for Trainers.

. UNEPI Handbook.

. Myles Textbook for Midwives 11th Edition Churchill Livingstone. 1989.

APPENDIX G

Breastfeeding Section of the Midwifery Curriculum

MULAGO SCHOOL OF NURSING & MIDWIFERY

- Breastfeeding topics taught at the School of Nursing & Midwifery

- Definition of terminologies in breastfeeding
- Composition of breast milk compared to cow's milk
- Advantages of breastfeeding compared to artificial feeding
- Preparation for breastfeeding (promotion of lactation)
- Diet in pregnancy
- Psychological preparation of the mother from antenatal clinics
- Palpation of breasts to exclude any masses or lumps
- Rolling of nipple between fore finger and the index finger (nipple preparation)
- Expressing of colostrum after the 34th week to prevent engorgement of the breast
- Advice on good fitting brassiers with wide tapes

After birth of the child - (Infant)

- Fix the baby immediately after delivery of placenta
- Continue with good diets and plenty of fluids and protein
- Good hygiene of mother and breasts
- Preparation of mother for the actual feeding procedure

Maintenance of lactation

- To feed on demand
- Teaching working class mothers to express milk and to keep it in a clean covered container or fridge if possible to feed the baby during her absence
- Continue with good high protein diet and plenty of fluid
- Breastfeeding difficulties Breast lumps, abscess, engorgement and their management

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PROPOSED SYLLABUS - II Registered Midwifery

Obstetrical Anatomy and Physiology

1. Pelvis - Normal
2. Abnormal pelvic in relation to labour
3. Vulva, pelvic floor and damage
4. Vagina and vaginal examination
5. Uterus including change during pregnancy
6. Tubes and ovaries
7. Menstrual cycle
8. Fertilization and Embryology
9. Placenta - normal and abnormal
10. Bladder and rectum in relation to midwifery
11. Hormones and effect on body system
12. Breasts
13. Fetal head, moulding and diameters
14. Fetal circulation - changes that take place at birth
15. Urinary system

Normal Midwifery

1. Signs of pregnancy
2. Antenatal Care Aims
3. Physiology of labour and management
4. Puerperium
5. Care of the new born, including physiology

Abnormal Midwifery

- 1a. Bleeding before 28 weeks
- 1b. Bacteraemic shock
2. Vaginal discharges
3. Vomiting in pregnancy
4. Induction of labour
5. Pre eclampsia and eclampsia
6. Medical diseases
7. Ante partum haemorrhage
8. Prolonged labour
9. Malposition - occipito posterior
10. Malpresentation - breech, face, brow and shoulders
11. Hydramnios
12. Multiple pregnancy
13. Cord presentation and prolapse
14. Abnormal uterine action

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15. Disproportion and trial of labour
16. Obstructed labour and uterine rupture
- 17 Post partum hemmorrhage
- 18 Retained placenta - manual removal - Adherent Placenta
19. Inversion of uterus
20. Obstetric shock
- 21a. Puerperal Sepsia
- 21b. Puerperal Pyrexia
22. Psychiatric aspects of childbirth
23. Traumatic results of childbirth including
24. Obstetrical operations including
- 25 Post majority
- 26 Care and giving of Intra-venous infusion

Mothercare - Infant Care and Health Education

- 1 Mother and infant care should be incorporate into normal and abnormal
- 2 Midwifery
3. Health education as appliance to clinics, homes and wards
- 4 Drugs or midwives handbook
5. Drugs in midwives practice
6. Notification
- 7 Statistics - maternal death in Uganda

Paediatrics

- 1 Asphyxia neonatorum - classification
- 2 Birth injuries
- 3 Respiratory Distress Syndrome
- 4 Prematurity - emphasis on feeding and nursing care
- 5 Post maturity - emphasis on dangers
- 6 Congenital abnormalities
- 7 Infections of the newborn including prevention
- 8 Blood disorders - aemorrhagic disease
- 9 Immunization
- 10 Growth & development
- 11 Common childhood diseases - diarrhoea disease, measles and whooping cough

APPENDIX H

**Breastfeeding and Weaning Sections of the
Operational Level Worker Training**

BREAST FEEDING AND NUTRITION

OBJECTIVES

At the end of this session the participants should be able to:

1. List the advantages of breastfeeding
2. Describe some of the problems mothers may complain of during breastfeeding
3. Outline a proper weaning diet and advice the mother/parent/guardian accordingly
4. Outline the components of a balanced diet
5. Describe the cultural beliefs and practices of breastfeeding in your area of work
6. Explain the food taboos in your area of work during breastfeeding
7. Outline the dangers of bottle-feeding
8. Outline the indications and disadvantages of artificial feeding

A. IMPORTANCE OF BREAST FEEDING

Breast feeding is a natural pleasure of happy mother hood and babyhood.

- (a) It provides the child with
 - Breast milk the natural and most suitable food for any infant. It is enough for the needs of the baby up to 4-6 months, provides protection against most of the common infections, it is perfectly clean, hygienic and it is available whenever the child needs it and at the right temperature
 - Promotes social bonds with the mother and child mental development.
- (b) For the mother and the family:
 - The social bond between child and mother gives the mother esteem and comfort.
 - Regular and frequent breast feeding helps to delay pregnancies which promotes the health of the mother and other children.
 - Reduce the family expenditure burden on artificial feeds.
- (c) For the nation:
 - It reduces the nation's expenditure of scarce foreign exchange on imported infant formulas.

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necessary inputs to the successful breast feeding. Frequent and regular sucking on nipple is necessary for milk flow.

(a) A woman who has grown amongst breast feeders should have no problem in the flow of milk. The common causes of poor performance in breast feeding is the anxiety states which prevents the let down effect. Other problems include false information about breast feeding, cracked nipple, engorged breast and other general maternal illness. Contraceptives containing oestrogens tend to inhibit lactation.

(b) Adequate milk production requires a mother to be wellfed. A breast feeding mother should have about 20% more calories, proteins and other nutrients than a non-lactating, non-pregnant mother or woman. More greens, fruits and fluids are equally essential. It is noteworthy that the expenses and any activities involved in the extra-feeding of the lactating are less inconvenient than undergoing the artificial feeding.

(c) Strong spices should be avoided and taking of drugs should have a medical advice.

Breast Feeding after 4-6 months

After the 4th to 6th months (depending on the culture and rate of child's growth) breastmilk alone becomes insufficient for the child

Inadequate, no weight gain or even weight loss, lack of vigour and restlessness may mean that the child is not getting enough milk. Before the 4th-6th months however, any other kind of feeding should only be recommended after through checking the correctness or any fault with breastfeeding. May be the mother's needs should be attended to to ensure more breastmilk.

After the 4-6 months, the child requires extra-foods on top of the breast milk. Breast feeding should be continued and indeed mother should start with the breast milk and then the other foods.

It is recommended that breast feeding should be encouraged to continue up to a minimum of one year and probably up to 2 years or longer (depending on the cultural when the child is capable of taking a proper share of the family diet).

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ARTIFICIAL FEEDING AND BOTTLE FEEDING

Artificial feeding is when breast milk substitutes and cows milk are used instead of the natural breast milk. Breast milk substitutes are mainly other types of milk from other animals mainly cows, which is modified to have similar chemical quantities of breast milk. In developed countries where these substitutes originated, bottle-feeding is used. It is successful because they have the knowledge and the skill to mix them correctly. They also have the facilities to prepare them hygienically.

In our society, artificial feeding is recommended only when the mother is not available physically (usually because of illness or death). When done, it should be by use of cup and spoon. Fresh cows milk is recommended because it is more available and cheaper and easier for mothers/parents to use.

WEANING

What is Weaning ?

Weaning is the process of changing the diet of a child from one of milk alone (breastmilk or breastmilk substitute) to a diet that the family depends on. Breast feeding should continue up to when the child is capable of demanding for his share. Breast milk is an important nutritional contributor supplemented by the additional foods. Weaning also involves gradual change of child's dependence on the mother to its self reliance and to responsibility of other members of family and community. This is a social and psychological effect.

When to Start and Finish Weaning

Breast milk is by itself sufficient for the food needs of the child up to 4-6 months. At this time breast milk needs to be supplemented by other foods. The rate of growth of the child may also determine as how early to start weaning.

Too early introduction of foods may lead to malnutrition due to diarrhoea and other infections. Too late introduction means that nutritional requirements will not be met leading to further growth retardation and other health problems. Weaning period depends on the culture of the community in which you live. Weaning completed before 12-18 months of age should be discouraged while any period thereafter need to be encouraged. There is nothing wrong with breastfeeding up to 5 years of age (as it is in some cultures) as long as, the child takes his/her share of family diet enough for his needs.

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←
Should say
why it is
inferred to
BM

to Wean the Child

Key words in this process of weaning are:

GRADUAL

NUTRIENT DENSE FOODS

CONTINUE BREAST FEEDING

The initiation of any other foods should be done gradually to avoid social and psychological

Disturbances of the child.

To make the foods more acceptable, one type of food should be attempted at a time.

The foods should be started with once or twice a day in smaller quantities, gradually increasing the frequency 3-4 times a day and the quantity according to taste and need of the child.

The food can be given using a cup or spoon or one's hands.

It is important to remember that the food must be prepared and served in the most hygienic manner possible to avoid diarrhoea and other infections.

The initial feeds should be semi-liquid (or semi-solid), tasty, and be of high density in calories, proteins, minerals and vitamins. The child's stomach is small and it can hold little (100-300 mls) at a time hence the need for its high nutrient content (kitobero = multi-mixes).

Avoid hot spices as it will reduce the acceptability of the food.

Use the foods commonly available to the family.

Breast feeding must continue up to when the child can take in enough without the milk.

Bottle feeding is deadly. It should be avoided as much as possible.

Dangers to Watch for During Weaning

The weaning period is the age during which malnutrition and infections among children are most common

Usually the initial gruels or porridge tend to be very diluted reducing the nutrient density.

Preparation, storage, and feeding utensils and other tools are often dirty and inhygienic. This breeds bacteria leading to infection.

1.2

Cultural taboos, beliefs and practices can be harmful to nutrition of the baby at a time when the rate of growth is quite high.

The change from its usual food and its taste is a social psychological problem to the child and the mother.

CULTURAL BELIEFS

No culture is completely free of their taboos, beliefs and special practices concerning food production, preparation, serving and consumption. A number of superstitions exist in the community you work and they should be studied.

A taboo refers to a specific type of prohibition, the violation of which would bring bad results usually of a supernatural variety. They may apply to specific areas such as eating for example the kind of utensils and dishes used to prepare the meals, who prepares it, the time when one eats where one eats, with whom one eats, who eats first and who eats what part of the food etc. The beliefs and taboos also apply when the child gets sick. It is at this time that the child requires the best meal and to be given frequently.

Cultural beliefs, and practices or taboos can be:

- (a) Harmful
- (b) Harmless
- (c) Useful

Harmful beliefs like withholding food (even breast feeding) because child is sick, a taboo of young children not eating eggs should be discouraged. Prolonged breast feeding is only harmless but actually useful.

Every health worker should watch out for and try to understand these beliefs, practices and taboos within the community in order to be able to nutritionally educate the parents correctly. Cultural practices are acquired and therefore can be changed but the change takes a long time. The health worker has to be patient and persistent and confident.

B. BALANCED DIET

OBJECTIVES

1. Define balanced diet
2. State the importance of a balanced diet
3. Outline the components of a balanced diet
4. Enumerate proper feeding or eating habits

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APPENDIX I

Breastfeeding Plan of Action (draft)

INTRODUCTION

It is generally recognised that the GOBIF strategies have revolutionized child survival in most parts of the world. While immunisation, oral rehydration therapy and family planning have been the subject of intense campaigns and programmes, breastfeeding has up to now not received equivalent emphasis. Experts on child nutrition, health and development, however, agree that breastfeeding is the single most effective way to provide a baby with care, complete food and protection against infection and disease. Yet breast-feeding is regarded by many as a familiar, natural and universal event in Uganda which does not require much promotion, protection and support. It is such complacency which has led to the lack of emphasis on breastfeeding and it has become increasingly clear that all possible steps need to be taken to protect a practice which has been treasured by so many generations in all cultures. And indeed the World summit for children, one of the largest gatherings of Heads of state and Government in world history, deemed it appropriate to make one of its 27 goals to,

" EMPOWER ALL WOMEN TO BREAST FEED THEIR CHILDREN EXCLUSIVELY FOR FOUR TO SIX MONTHS AND TO CONTINUE BREASTFEEDING, WITH COMPLEMENTARY FOODS, WELL INTO THE SECOND YEAR"

Uganda's commitment to the summit goals is un-equivocal and this action plan aims at achieving the above objective.

SITUATION ANALYSIS

As a developing country Uganda still has a fairly high infant mortality rate of the order of 101 according to the Uganda demographic and health survey (UDHS) Conditions which contribute to this high infant mortality rate include low birth weight, acute respiratory infections, malnutrition, diarrhoea and malaria. The UDHS showed that 24 % of children under 5 years of age had a bout of diarrhoea in the previous 2 weeks with peak prevalence among children aged 6 - 17 months, which is the weaning period. And 22% of the children had a cough in the previous 4 weeks. Malnutrition was found to be highly prevalent in Uganda in spite of food abundance and widespread breastfeeding as many as 45% of the under fives showed appreciable height reduction for age while almost one in five exhibited severe stunting at 3 standard deviations below the mean. Some children commence exhibiting growth faltering as early as 2 - 6 months of age a period when exclusive breastfeeding should be adequate to

support normal growth and development. But according to available evidence appropriate breastfeeding and weaning can reduce malnutrition, acute respiratory infection, diarrhoea and other childhood illnesses.

While our country is a land of diversity in terms of ethnic subcultures, it remains a fortunate fact that all these subcultures do value and practice breastfeeding. The initiation of breastfeeding is virtually universal in the post partum period and by 2 months of age 90.0% of babies are breastfed. The mean duration of breastfeeding is 19 months. But the women's almost natural predisposition to breastfeeding requires to be enhanced and breastfeeding and weaning promotion activities need to come to the forefront.

Several disturbing findings have come to light both from UDHS and other studies which have so far been carried out with regard to breastfeeding and weaning. The UDHS, for instance, unearthed a trend towards shortened duration of breastfeeding particularly in urban populations, young mothers and the elite class. The quality of breastfeeding appears to be unsatisfactory and there are many factors which impede the success of breastfeeding. These include; lack of quality information for both lay and professional people, cultural beliefs, traditions and practices, women's work load either in the rural home setting or in urban settings of employment. Additional situational impacting issues include; insufficient breast milk syndrome, breast engorgement, nipple trauma, breast infection and several weaning difficulties. The initiation of breastfeeding in the immediate post-partum period seems to be haphazard. A few studies carried out at major hospitals indicate that there is usually substantial delay in commencing breast feeding and the un-necessary use of prelacteal feeds such as cow's milk, glucose solution, tea and ghee is highly prevalent. According to the joint statement by WHO and UNICEF mothers should be assisted to initiate breastfeeding within half an hour of delivery and there is no general need to give prelacteal feeds. In a study on weaning foods, it was found in one of the districts in central Uganda that 50% of mothers started weaning their infants by 2 months of age whereas WHO/UNICEF recommended exclusive breastfeeding for 4-6 months. In another case series study nearly 70 per cent of mothers commenced weaning before the children were aged 4 months old.

The baby food industry has been observed to exert a highly negative influence on breastfeeding behaviour in many countries and Uganda is only lucky in that these baby food pushers are not prominent in our midst. Nevertheless advertisements for infant formula and feeding bottles did appear in our mass media sometime ago and it was only after an alert breastfeeding promotion group

agitated about the issue that the advertisements were withdrawn. It is probable that as the country becomes more industrialized and affluent, infant food manufacturers will want to establish more powerful industries which are known to entice mothers into artificial feeding. To forestall such an eventuality, powerful regulations governing the marketing and distribution of breast milk substitutes must be put in place, enforced and monitored.

3. STATEMENT OF THE PROBLEM

In spite of widespread breastfeeding and food abundance, there is rampant malnutrition among children in Uganda. Many malnourished mothers, often in poor health and overworked, produce low birth weight infants and both mother and baby have little reserves and are much less energetic at breastfeeding. These mothers receive very little guidance and support in relationship to breastfeeding and weaning. The breastfeeding itself is of low quality and is compounded by improper breastfeeding and weaning practices thus jeopardising mother-infant welfare. Both mothers and health workers have little access to quality information concerning breastfeeding. There is generally low advocacy and there have been no set guidelines. There is still a thin data base on child nutrition in general and breastfeeding and weaning in particular in the Ugandan context. Regulations governing the marketing of breast-milk substitutes have not been emphasised or monitored.

4. JUSTIFICATION

Given the above situation analysis and statement of the problem, it becomes imperative to devise means of improving and sustaining both the quality and duration of breastfeeding, with emphasis on its exclusivity for the first four to six months. This can be achieved through increased advocacy, ensuring "baby friendly" hospitals and maternity units which implement the TEN STEPS TO SUCCESSFUL BREASTFEEDING, and enforcing powerful regulations of marketing of breast milk substitutes. Policy makers and implementers, health workers and the population at large require sensitisation towards breastfeeding issues and where possible training to enable them put in place and implement the necessary policies. With improved quality and duration of breastfeeding, there would be maximisation of the benefits and protection which accrue from breastfeeding. In turn, this would lead to reduced prevalence of malnutrition, acute respiratory infections, diarrhoea and other childhood illnesses with a consequent fall of infant morbidity and mortality.

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GROUP B,

Purpose, Goals and Objectives:

5.1 Purpose:

To promote, protect and support successful breast-feeding and weaning in the concept of appropriate mother and child care and nutrition throughout Uganda.

5.2 Goals:

5.2.1 Sustain and enhance Uganda's breast-feeding culture and devise means of eliminating harmful cultural practices.

5.2.2 Implement the principles of the ten steps to successful breast-feeding as promulgated by WHO/UNICEF.

5.2.3 Develop, implement and monitor National regulations's on Marketing of breast milk substitutes.

5.2.4 Promote and support appropriate weaning foods and practices.

5.3 Specific Objectives:

5.3.1 Carry out relevant research related to breastfeeding weaning, maternal and child nutrition.

5.3.2 To educate and or train women of child bearing age, health workers and other professionals decision makers, politicians and the public at large on matters related to breastfeeding.

5.3.3 Foster establishment of breastfeeding promotion and support groups at the community levels.

5.3.4 Maintain breastfeeding initiation at 100% and eliminate the prelacteal feeding by the year 2000.

5.3.5 Increase the number of mothers who exclusively breastfed on demand up to 4-6 months from 70-90% by the year 2000.

5.3.6 Increase the average age at which mothers stop breastfeeding from 15.6 months to 20 months.

5.3.6 Review and cause the legalisation and enforcement of the Uganda regulation of marketing of Breast Milk Substitute.

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5.3.8 To legalise the Uganda Regulations on marketing of breast milk substitute.

5.3.9 Develop, implement and monitor a national policy on breast feeding including the ten steps to successful breast feeding.

6.0 Strategies and activities

6.1 Capacity building

Activities:

6.1.1 Administration and coordination at National, district and health level. The activities will be co-ordinated by the National Co-ordinator and National Infant and young Child nutrition Committee. The Ministry of Health will identify an officer who will be answerable for all breastfeeding issues at National levels by June 1992.

At district level, there will be a district co-ordinator. An officer responsible for breastfeeding activities will be identified by October, 1992.

At Facility/Institutional level, there will be a co-ordinator in-charge of breastfeeding. An officer to be in charge at this level will be identified by December, 1992.

6.1.2 Review, legalize and enforce the Uganda Regulations on marketing of breast milk substitutes.

6.1.3 Develop a breastfeeding policy which can be implemented by all health care facilities providing maternity and paediatric service.

6.2 Strategy: Community involvement and participation.

Activities:

6.2.1 Organise and conduct a sensitisation workshop for policy makers and implementers through 1992-1993.

6.2.2 Propose appropriate legislative measures protecting the breastfeeding right of working mothers and their infants.

6.2.3 Liaise, through collaboration and constructive dialogue, with health professional association and NGO's concerned with mother and child care to continuously develop and implement socially responsible policies which support breastfeeding not only within the health care system, but also at the community level.

6.2.4 Liaise, with resistance councils in the identification of community coordinators and formation of community based promotion groups for breastfeeding.

6.3 Strategy: Training:

Activities:

6.3.1 Train all health care workers in lactation and weaning management.

6.3.2 Ensure that all health, food and nutrition related curricula have a strong breast feeding and weaning component.

6.3.3 Sensitize multisectoral extension workers on breast feeding and weaning issues.

6.3.4 Sensitize TBAs on the initiation and maintenance of breastfeeding.

6.4 Strategy: Nutrition, Information, Education and Communication:

Activities:

6.4.1 Inform all pregnant and lactating mothers about:

- a) the benefits and management of breastfeeding and weaning.
- b) the necessity for them to eat adequate nutritious foods.

6.4.2 Encourage mothers who come into contact with the health care facility to exclusively breastfeed for 4-6 months and thereafter continue breastfeeding until the child is at least 20 months.

6.4.3 Instruct all mothers whose infants are above 4-6 months of age in proper weaning diets and practices.

6.4.4 Develop appropriate Nutritional Education Materials by December, 1992.

6.4.5 Conduct weekly radio broadcasts on mother and child care in as many languages as possible by the end of 1992

- Publish weekly mother and child care articles in at least two local newspapers by December, 1992.

6.4.4 Develop, and broadcast a Television documentary and caption messages about breastfeeding and weaning.

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6.5 Strategy:

Clinical service in Breastfeeding and Weaning:

Activities:

6.5.1 Assist mothers of normal deliveries to initiate breastfeeding within half an hour of the mothers being able to respond to her infant.

6.5.2 Eliminate the use of feeding bottles, teats and pacifiers among breastfed babies. Cups or spoons shall be used to feed infants unable to breast feed.

6.5.3 Establish breastfeeding promotion and support networks both at the health facility and at the level of the communities within the catchment area of each facility.

6.5.4 Ensure that no free or subsidised supplies of breastmilk substitutes are provided either to the facility itself, or to individual employees.

6.5.5 Encourage all health care facilities providing maternity and paediatric services to become "Baby Friendly" through implementation of the policy.

The above activities will be accomplished in conjunction with other maternal and child health services e.g. growth monitoring, immunisation, diarrhoeal control and family planning.

6.6 Strategy: Research:

Activities:

6.6.1 Collaborate with Makerere University Lactation Centre and Uganda Lactation Management and Education Team (ULMET) and other interested organisations and individuals to carry out research related to breastfeeding, weaning, maternal and child nutrition. Collection of baseline data should be carried out by end of 1992. This covers -

- a) Country-wide situation analysis,
- b) Knowledge, attitudes and practices and training needs assessments of the health workers.

6.6.2 Establish an information centre to collect and disseminate information related to nutrition and breastfeeding and weaning.

6.7 Strategy: Monitoring and Evaluation:
Activities:

6.7.1 Establish by December 1992 a national monitoring task force which will annually assess the "baby friendliness" of health care facilities commencing in 1993.

6.7.2 Monitor the Marketing and distribution of breastmilk substitutes through checks on health facilities, shops and other sales outlets.

6.7.3 Evaluate the National breastfeeding activities through an annual workshop which will use the above strategies and activities as check list against actual achievements and make appropriate recommendations.

Recommendation:

The National Co-ordinator on Breastfeeding issues should take immediate action to see that the Breast Feeding Policy is formulated and disseminated by December, 1992.

Resources:

a) Man Power:

- National Co-ordinator
- District Co-ordinators
- Facility/Institutional co-ordinators

The people should be interested in the programme and should also get training in Lactation Management.

b) Materials:

- Office space
- Funds to carry out the activities.
- Transport - vehicles for the programme.